science and technology programs in Urbana-Champaign” (page 33 of the report). Firstly, this statement is in direct opposition to the facts that integrated training of MD/PhD students with a focus in Engineering or Biomedical Engineering is already in existence at UIC and UIUC. Secondly, the implication that the current model of medical education in the University of Illinois is stagnating is contradicted by the tremendous effort made (especially in the last five years) through the actions of the Department of Medical Education at UIC and the combined four campuses (Chicago, Rockford, Peoria and Champaign-Urbana) to modernize and coordinate the delivery of medical education.

Of great concern is the argument supporting the formation of the Carle/UIUC COM that is inherent in Key Finding #3: Carle Health System and the University of Illinois at Urbana-Champaign must move quickly to capitalize on the benefit of this revolutionary college of medicine model. The urgency expressed for the establishment of a new medical education enterprise by Tripp Umbach is not well supported by the facts. After noting that the University of Illinois at Champaign-Urbana has one of the country’s premier engineering faculty and a School of Engineering that is one of, if not the top school in the nation, Tripp Umbach states “The window for the University of Illinois at Urbana-Champaign will not remain open for long, as top-tier expertise in engineering, the key link in this transformation, can be purchased by all top-tier medical schools and hospital systems.” (page 32 of the report, bolding added). It is inconceivable that the talent the University of Illinois as assembled over decades could be accurately emulated through wholesale purchase. This statement should be insulting to the superb faculty at UIUC. In addition, it is unclear what “threats” would occur over time to undermine the benefits of the new college of medicine to the citizens of the State of Illinois. On the other hand, a rush to create a new public-private medical education entity at UIUC could undermine existing structures and could threaten the fiscal well-being of the citizens of Illinois. It should be noted that the new Dell Medical School (cited as a threat to the new medical enterprise in the TU report) will be funded from a variety of sources:

“An extraordinary commitment of resources has already been made to enable the development and success of the Dell Medical School. Seton Healthcare expects to invest $250 million towards the establishment of the teaching hospital. Central Health will leverage a recent publicly approved real estate levy with federal matching funds to provide $35 million in annual revenues to the project. The University of Texas System Board of Regents has pledged at least $25 million annually plus an additional $5 million per year for eight years, for faculty recruitment and support. Finally, the Michael & Susan Dell Foundation recently announced a $50 million gift to the school.”

(http://www.wittkieffer.com/file/Dell%20Medical%20School%20Dean.pdf) (bolding added)

As noted in the UIUC Tripp Umbach report, the Dell Medical School plans to accept its first class in 2016. If an urgent threat exists, then the delay necessitated by the logistics of the plan proposed by TU would put this enterprise at additional imminent risk. A more efficient plan would include additional efforts to support collaborations between the UIC College of Medicine and the College of Engineering at UIUC.

Recommendation #5

With respect to the relationship of the new college with the UIC College of Medicine, little that is of benefit to UIUC and the State of Illinois would be provided by the new medical enterprise that is not already available within the current structure. Elsewhere in this document (above in section 1), the numerous interactions of the UIC College of Medicine with the other campuses of the University of Illinois are detailed. The report suggests that interaction with the new medical enterprise would help the UIC College of Medicine “establish itself as a national leader in for addressing issues related to diversity in the health care industry and the delivery of urban health care services with an emphasis on addressing the needs of minority populations”, a position that the current UIC College of Medicine already holds. The current College of Medicine is already leveraging numerous new technologies, including those developed internally in Chicago and at UIUC, so this recommendation by Tripp Umbach, while stamping a seal of approval on the current system, does not support the development of a new medical school.

Please refer to section 1 above for elaboration on the relationship of the UIC College of Medicine with the rest of the University of Illinois system and the delivery of healthcare and health education across the State of Illinois.
Recommendation #4

The report recommends that the new medical college enterprise proposed by Tripp Umbach have flexibility to develop and expand multiple relationships with other health care, education, and industry partners. Under the current system, UIUC is already collaborating with the Mayo Clinic and numerous other established health care entities. No advantage of the proposed medical school entity is offered by the report. What is not stated is the potential impact of a formalized enterprise between UIUC and the Carle Heath System on these outside interactions with esteemed health systems across the country, as redirection of effort and resources may detrimentally affect the ability of faculty of UIUC to maintain ongoing collaborations.

The report proclaims a need for a new medical school to foster collaborations among the faculty of the new school, the existing UIUC faculty, and investigators throughout the nation. The report accurately notes that, “The Illinois Medical District (IMD), University of Chicago, Northwestern University, UIC College of Medicine, and Loyola University, along with Chicago-based investments in technology infrastructure, have created the foundation for the state to become the national leader in medical innovation and technology” (page 25) but then suggests that “The new college of medicine in Urbana-Champaign will further solidify Illinois’ position” (page 25) without recognizing that Chicago contains a unique concentration of medical centers in the state that promotes innovation and synergy. A new college of medicine 140 miles away is unlikely to participate in this synergy without the mechanisms that currently allow faculty at the University of Illinois to interact with any medical center throughout the nation.

As the report states, “Academic medical centers are currently collaborating with the University of Illinois at Urbana-Champaign because of its engineering and technology expertise” (page 25). As the report states, “Colleges of Medicine at Stanford University, Johns Hopkins University, Washington University, Duke University, and Vanderbilt University—all top 10 medical schools as ranked by the National Institutes of Health (NIH) funding—have developed ongoing research collaborations with University of Illinois at Urbana-Champaign engineering and/or science faculty” (page 25). Because of current collaborations ongoing with world-class medical centers, UIUC has no need for an additional medical school to enable local collaborations; Recommendation 4, therefore, does not credibly justify a new college of medicine entity in Champaign-Urbana.

Recommendation #1 and #3

These recommendations together suggest that a new college of medicine that is a joint enterprise between Carle Heath Systems and UIUC be created, be focused on collaborative medicine and engineering, and suggest the staffing needed to initiate such a school. Because of the flaws, misrepresentations and lack of information described above, the fundamental assumptions underlying these recommendations are difficult to evaluate positively. The report states, “This unique public-private medical school, organized as a private entity, has the advantage of shared governance and risk, as well as the flexibility to add multiple partners and adapt to rapid changes in health care, education, and science.” What part of the risk will be taken on by the University and what portion of the advantage will be taken by Carle is left undefined. Few impediments restrict the ability of the faculty at UIUC to collaborate widely. The governance is envisioned by Tripp Umbach as a private Board of Directors with inclusion of University of Illinois administrators as a minority; it is unclear the influence that will be able to be exerted by the University of Illinois in defining the direction of this new medical enterprise. It is telling that while numerous individuals from The University of Illinois Champaign-Urbana and Carle Health Systems were interviewed in the preparation of this report, only 2 regional Deans (Peoria and Chicago) were interviewed (Appendix A of the report).

The involvement of Carle is problematic, as Carle does not currently have a working relationship with the University of Illinois Hospital; “The care that the Carle Health System cannot provide is transferred to top health care centers regionally, such as Mayo Rochester, Washington University in St. Louis, and Northwestern in Chicago” (page 45). If there really were a commitment of Carle to increasing the quality of medical care and medical education in the State of Illinois, why has Carle failed to involve the Chicago campus at UIC in its medical mission?

Part of the underlying rational for creation of additional medical schools is the need for more physicians in the US. As described below in section 4, the key to increasing the physicians is not increasing the
enrollment for undergraduate medical education, but increasing residency positions. These positions are limited as the underwriting of GME slots has been restricted by the US Congress. The bottleneck is not in undergraduate medical education, but in graduate medical education because of loss of congressional funding.
3. A BIOMEDICAL ENGINEERING INSTITUTE FOR THE UI SYSTEM

The Tripp Umbach (TU) report emphasizes the urgent need for immediate and greater emphasis in the area of biomedical engineering research and physician-engineer training. We absolutely agree with the report that strengthening ties between Medicine and Engineering can bring substantial benefits to the University of Illinois and Illinois in general. We also agree that additional federal funding can be tapped, especially from NIH, by fostering further collaboration between Health Sciences and Engineering. However, we strongly disagree with the premise of the TU report that the best option to do so is to establish a new medical school in Urbana as this ignores three critical facts:

1. In the same way that Engineering at UIUC is top ranked nationally, UIC is a national leader in Health Sciences. Starting with Colleges of Nursing and Pharmacy and the School of Public Health that are all ranked in the top 20, having access to a large and diverse patient base, being a national leader in minority health research, to being one of the world’s leading sites for training in and applications of robotic surgery, UIC Health is the logical partner in any further expansion of biomedical engineering training and research. Especially since biomedical engineering research cannot be confined to the College of Medicine and needs to include other Health Science colleges.

2. Historically, biomedical engineering research programs are located on the medical campus, not the engineering campus, since clinical practice severely limits time availability of physicians and other medical professionals. This means that the logical site of any such possible expansion is Chicago, especially since it offers easy access to additional medical campuses at the University of Chicago, Northwestern, Loyola and Rush.

3. The TU report does not mention that a vibrant and NIH supported physician-engineer training program exists at UIC, and it fails to note significant successes of the UIC College of Engineering in biomedical engineering research as well as its many links to UI Health. Biomedical Engineering research and training of physician-scientists and physician-engineers has been an integral part of the UIC College of Medicine (COM) for the past half century. These activities have been strengthened over the past 3 years with the formal realignment of the Department of Bioengineering at UIC to be jointly operated by both the Colleges of Engineering and Medicine, which actually brings the department back to its roots, as it was originally founded in 1965 as a graduate program jointly operated between the UI College of Medicine and the UIC College of Engineering. UIC Engineering also has established partnerships and in some cases existing NIH funding with Nursing, Public Health, and Dentistry.

Given the facts above, we believe that the best way to achieve the goals stated in the TU report is to establish a new entity in Chicago that can foster integration of Health Sciences and Engineering. Initiated in 2009 at the same time as realignment of Bioengineering, a plan was established to create a cross-departmental and cross-college “Biomedical Engineering Institute (BEI)” at UIC, that would facilitate and grow biomedical engineering research and teaching collaborations that already exist at UIC between faculty working in several different colleges. This was to be established at the same time that the Department of Bioengineering was realigned in 2011; but limited resources have delayed that implementation. Specifically, in early drafts of the plan to realign Bioengineering, it was stated that: “The Department of Bioengineering will be realigned to be a joint effort under both Engineering and Medicine, and concurrently a new interdisciplinary Biomedical Engineering Institute will be created to stimulate bioengineering and related research between Engineering, Medicine, Pharmacy, Dentistry and Public Health.” In later drafts, due to limited resources, it was stated that: “Although not proposed at this time, in the future we may revisit the idea of a campus center or institute in the area of Biomedical Engineering.”

The TU report mentions the new Digital Manufacturing and Design Innovation Institute (DMDII), awarded to UI Labs. DMDII is indeed an important potential driver for technology development and economic growth as well as possible resource for further integration of technology into health sciences. UI Labs, and DMDII, are located on the Goose Island in Chicago, and are a model for public-private partnership. A Biomedical Engineering Institute (BEI) located in Chicago could potentially follow a similar model and leverage the know-how and the significant investment of the University of Illinois into the UI Labs.
The TU report can also serve as one of multiple reference sources as we formulate the structure of the Institute at UIC. We can also look at best practices at other top universities that have developed Biomedical Engineering institutes, centers and programs. One such best practice for the University of Illinois would be for the proposed BEI to encompass faculty at both UIC and UIUC. A precedent for such activity was the joint campus research program operated under the Vice President for Research from 2000-2005, but again cancelled due to limited resources. This might leverage engineering, biomedical, veterinary and medical faculty on both campuses.

One possible embodiment for the BEI could include – like the Beckman Institute in Urbana – a new research facility in Chicago on the medical campus, or at least in the Illinois Medical District, where approved projects could be begun and proof of concept and translational studies could be initiated. This new Chicago-based institute could collaborate closely with or even be an extension of the Beckman Institute. It could be a UI system-wide institute dedicated to the convergence of engineering and medicine in both research and education. Its exact organizational structure could follow best practices of similar institutes at other top-ranked medical schools, which are described below. Its initial membership may be comprised of faculty at UIC or UIUC that have active collaborations spanning Health Sciences and Engineering or Applied Sciences. A diagram indicating the relative participation of faculty at UIC and outside UIC in collaborations with the Bioengineering faculty is illustrated in Figure 4 below.

Summary

- Biomedical engineering research and physician-engineer training should be priorities for the UI System due to their large potential economic impact. A new Biomedical Engineering Institute in Chicago is the best way to leverage UI strengths towards this goal.
- While UIUC has a nationally ranked Engineering school, UIC has nationally ranked programs in Health Sciences, and a rich history of cross-campus collaborations between Health Sciences and UIC Engineering. The realigned UIC Bioengineering Department which is jointly operated by Colleges of Medicine and Engineering is the most recent and highly successful manifestation of such a collaboration.
- UIC has a prominent and visible NIH funded physician-engineer training program which should be a model used for any future expansion.
- The organizational structure of the new Biomedical Engineering Institute should be chosen to break the barriers for collaborations between campuses and between disciplines.

![Figure 4: UIC Bioengineering: Jointly in the Colleges of Medicine and Engineering](image-url)
4. ESTABLISHING A SUCCESSFUL MD/PHD PROGRAM

As The Tripp Umbach report justified the proposed new medical enterprise on the basis of an imminent nationwide physician shortage and a desire to attract additional federal biomedical research funding, an analysis was performed on the requirements for additional physicians and the availability of federal research funds. In addition, training of physicians for implementation of cutting-edge current and future technology is addressed by outlining the training opportunities currently available within the UIC College of Medicine, which could be expanded more efficiently than creating a new medical school entity.

The physician shortfall

The United States is currently experiencing a significant shortage of physicians. This shortage is projected to worsen in the coming years because millions of Americans will now have access to health insurance via the Affordable Care Act (ACA) and can afford to regularly see physicians for general health maintenance as well as treatment of acute and chronic diseases that were previously untreated. A recent article published by the leadership of the Association of American Medical Colleges [1] estimates that by 2020, the U.S. will face a shortfall of 45,400 primary care doctors and 46,100 medical specialists unless special measures are taken to ensure additional training of physicians in the US. One of the solutions is to build new medical schools, but as Kirch and colleagues point out [1], an even more effective measure would be to increase opportunities for medical school graduates to enter residency programs because the lack of post-graduate training positions is the most significant bottleneck. Successful completion of a post-graduate residency program is a requirement for certification to practice medicine.

During the past year, 40,394 medical school graduates (those who graduated from US medical schools as well as those who had completed their medical school training in other countries) registered with the NRMP (National Resident Matching Program), but only 25,687 applicants successfully matched into the training programs (http://www.nrmp.org/wp-content/uploads/2014/03/2014-National-Resident-Matching-Program-NRMP-Main-Residency-Match-Results-Press-Release.pdf). This means that thousands of physicians who had either completed their medical school in the U.S. or graduates from international medical schools who completed all U.S. eligibility requirements were left without a residency slot. Without completing a U.S. residency, these physicians will not be able to practice medicine and thus cannot contribute to the physician workforce. The main reason for the high number of unmatched applicants is that American residency programs are funded by Medicare and the U.S. Congress enacted a "freeze" on the size of residency training programs in 1997[2]. It is unlikely that building more U.S. medical schools is going to solve the problem of physician shortfall, because once the students graduate from medical school, they will still have to compete for the same number of residency slots.

The most efficient route to addressing the physician shortfall is to increase funding for post-graduate medical training opportunities. Since it is unlikely that Congress will reverse the Medicare "freeze" on residency slots in the near future, sponsorship for such slots by either academic hospitals, foundation or private industry is necessary to pay for the stipends of the trainees. Examples of privately funded training opportunities are already commonplace for advanced training of physicians such as clinical subspecialty fellowships or research fellowships, but private funding of basic residency training is still comparatively rare and offers a great opportunity to rapidly alleviate the severe physician shortfall in the US.

Reduced federal funding for biomedical research

The lack of adequate U.S. government funding for medical residency training is not the only funding crisis in the biomedical enterprise. An equally devastating problem is the diminishing government support for biomedical research. The White House budget for 2015 has not restored the pre-sequester funding levels for the National Institutes of Health (NIH). In fact, current NIH funding is so tight that only 10-20% of biomedical research grant applications are being funded. Researchers now spend an inordinate amount of time re-writing and resubmitting grant applications, hoping that revised grant applications might be funded during subsequent
submission cycles [3]. Since many universities nowadays require faculty and research staff to pay for their salaries from research grants, receiving grant funding has become essential for researchers to ensure a steady paycheck.

Physician scientists are especially vulnerable to diminishing NIH support, because they have to compete for NIH funding with non-physician scientists who can fully devote all their efforts to submitting and re-submitting grant applications. Physician scientists, on the other hand, have to juggle the demands of their clinical work and patient care with the necessity of extensive grant writing. This is a major problem for MD/PhD graduates who were not offered appropriate post-graduate mentoring in their residency and fellowship training that would help them maximize their success for receiving NIH funding. Therefore, the low levels of NIH funding have forced many physician scientists to shut down their research laboratories because they can no longer afford to pay their research staff.

**Personalized medicine in the 21st century**

One of the central themes of medical advancement in the 21st century is the emergence of personalized and contextualized medicine. Novel technologies such as the increasingly affordable sequencing of an individual's genome and the engineering of high throughput drug testing platforms have provided an unprecedented insight into the biological diversity between humans and how differences in the genome, proteome or even microbiome can affect how distinct patients respond to medical therapies. We are only witnessing the beginning of a medical revolution spear-headed by cutting edge science and engineering, but we are already struggling to understand how we can translate the enormous amount of personalized biomedical data into clinical practice.

While advances in biomedical technology are one key pillar of personalized medicine, we have also become aware of the fact that the socioeconomic and cultural context of an individual patient can have a significant bearing on the prevention, development and treatment of diseases. The American society of the future is projected to become even more urban and more diverse which means that the physicians of the future need to be trained in a manner that allows them to seamlessly treat patients hailing from varied cultural and socioeconomic contexts. Hispanic Americans will undergo the biggest demographic shift in the near future. The US Census bureau estimates that 17% of Americans were of Hispanic origin in 2012, and that by 2060, 31% of Americans will have Hispanic roots. Personalized medicine of the future needs to take this increasing diversity into account, and therefore the development and implementation of novel biomedical technologies should ideally take place in an environment that represents the demographic future of the US. It is noteworthy that the city of Chicago with its diverse urban population represents the ideal environment to train physicians of the future.

**Meeting the challenge: Personalized medical education and patient care at UIC**

We need to ensure that physicians-in-training learn how to seamlessly transition between delivering high-quality personalized care and also participate in the development or implementation of novel biomedical technologies. At UIC, we believe that the key to this is personalizing medical education to the needs of our medical students and trainees. If we expect the physicians of the future to deliver personalized care, then we need to tailor their medical training in a fashion that allows them to maximally utilize their potential. One such approach is the creation of “pathways” that allow individual trainees to choose how they can best participate in the advancement of patient care.

1. **Investigator Pathway**

The “Investigator Pathway” is ideally suited for physician scientists who want to dedicate most of their future career to biomedical research and developing novel technologies. Most trainees entering this pathway will likely opt for a 7 -8 year combined MD/PhD degree in which they will acquire the basic medical and scientific skills to embark on a physician scientist career. UIC has a successful NIH-funded Medical Scientist Training Program (MSTP) in place that provides students with the support and resources to earn a MD/PhD in a variety of subject areas through collaborative interactions with the Colleges of Medicine, Pharmacy, Public Health, and Engineering. However, their long-term success as physician scientists will strongly depend on their ability to develop post-graduate expertise in niche areas of biomedical research and technology, either in an academic
laboratory or in the biotechnology and pharmaceutical industry. Trainees in the postgraduate “Investigator Pathway” will complete all the requirements of postgraduate clinical training to qualify for specialty or subspecialty certification, but will also work closely with established investigators for at least 2-3 years in a research setting. The individualized mentoring by established investigators will help the trainees not only acquire advanced scientific expertise but also learn key grant writing skills (academic investigator track) or marketability of developed products (industry investigator track) so that they will be highly competitive when they graduate. Such individualized mentoring will ensure long-term success even in an environment of limited research funding. Some departments or sections at the UIC COM such as the Department of Medicine already offer such mentored Investigator Pathways, but this program could potentially be expanded to all departments.

2. Translational Pathway

We recognize that many physicians are highly talented in terms of understanding and using biomedical technology but do not want to invest the extraordinary amount of time required to become a successful independent investigator (7-8 years for initial MD/PHD degree and 5-7- years of postgraduate training in an “Investigator Pathway” = 12-15 years of medical and scientific training).

We propose the development of shorter 1-2 year tracks which allow medical students, residents, fellows or even senior physicians to acquire focused biomedical technology skills so that they can easily translate novel biomedical technologies into clinical practice. Examples of such tracks could include training in how to optimally apply personalized genomics or microbiome testing in a clinically meaningful manner or how to develop focused software apps and social media platform to improve communication with patients, training in engineering innovation, user-driven design of medical products, and related engineering design tools, such as 3D printing, and intellectual property issues.

UIC and UIUC already offer a number of combined degree programs allowing medical students to enroll in Masters programs or Masters certificates for such focused training. However, the existing training opportunities could be readily expanded to better integrate cutting-edge science and engineering research into postgraduate medical education (residency/fellowship). Few institutions in the US have recognized the critical importance of post-graduate science and engineering training for physicians. The fact that UIC and UIUC have a proven track record of offering combined degrees, and that UIC has already developed selected post-graduate physician-scientist training programs suggests that a comprehensive University of Illinois physician training program covering the basic sciences, clinical sciences and engineering application is feasible. The comprehensive nature of such a program that provides individualized graduate and post-graduate training of physician-scientists and physician-engineers would be unique in the United States; but it would guarantee that physicians trained at the University of Illinois will continue to be at the forefront of developing and implementing novel biomedical technologies which are likely to have a major impact on patient care in the near future.

References
Phyllis,

Great! and I now have Paul's coordinates from the email above.
I spoke with Christophe today and he is completely on board. He thinks that Bob is slowly making the journey. Bob challenged Paula and co in their last meeting to go find out a real win-win situation for Urbana, or else it is going to be difficult to stop us! I understand that Paula was not happy. Christophe told him also that Dimitry may be getting tired of the whole situation and that he did mention that if Urban got a COM, then UIC has to be compensated! Christophe believes that UIC is just afraid of competition and cannot seem to imagine the future without complaining about Urbana. Any way we need to keep moving ahead.
I will call Paul.
Ade

On Thu, Jul 10, 2014 at 12:32 PM, Phyllis Wise wrote:
Here you go.

Sent from my iPad

Begin forwarded message:
From: Paul Umbach <PUMbach@trippumbach.com>
Date: July 10, 2014 at 2:39:34 PM GMT+2
To: 'Phyllis Wise'
Subject: RE: Be careful

Thank you! I typically try to remember using your [mailto: and Normand's personal emails. So sorry! I will send a retraction as you suggested. I was just excited about the call and wasn't thinking in your world buy mine. See you for coffee on Tuesday. Paul

Paul O. Umbach
Founder and President
Tripp Umbach
2359 Railroad St. #3701
Pittsburgh, PA 15222
Corporate Headquarters: 412.281.2313
Cell Number: [hidden]
Fax Number: 412.281.9946
www.trippumbach.com

"Turning ideas into action for 25 years"

-----Original Message-----
From: Phyllis Wise

Sent: Thursday, July 10, 2014 4:33 AM  
To: Paul Umbach  
Subject: Be careful

Dear Paul,

You may not be used to the "FOIA-everything" atmosphere that we are working in at Illinois. One person, who is clearly crazy and doesn't have real work to do, sent 60+ FOIA's in one day! I am worried about your last email to all of us which states that Christophe is supportive and Bob Easter is secretly supportive. I really don't want Christophe to be put into a compromised position. He is the one person in the University Administration who is thoughtful, intelligent, and has the highest of ethics. I would really recommend that you "recall" your email. I believe that makes it un-FOIAble. We can talk more bout this when we have breakfast next week.

Phyllis

Sent from my iPad
Thanks. Tse-tse!

On Thu, Jul 10, 2014 at 3:57 PM, Phyllis M Wise wrote:
Ade,

His email is pumbach@trippumbach.com

His cell phone number is [redacted]

Phyllis

Sent from my iPhone

On Jul 10, 2014, at 10:54 PM, Ilesanmi Adesida wrote:

Phyllis,

I don't have Paul's coordinates. Happy to receive them from you.

Ade

On Thu, Jul 10, 2014 at 12:31 PM, Phyllis Wise wrote:
Ade,

You and I are on one page relative to the UIC academic senate report. I agree with everything you said in your second paragraph. It's ridiculous and for us to try to respond to it without saying "what are you smoking" would be really difficult. Although Nick and Joyce may want to respond, I am not sure even their back and forth will do any good. If people ask us about specific aspects we/they can respond.

Paul is supposed to meet in person with [redacted] when he visits. I think it would be good for you to call him and tell him about the bee's nest and jealousies in Peoria. It will be hard to satisfy everyone. Do you have his phone number and email?

Phyllis

PS I will forward an email I sent him earlier today about his last email and his response - he withdrew his email.

Sent from my iPad
> On Jul 10, 2014, at 7:08 PM, Ilesanmi Adesida <person> wrote:
> > Phyllis,
> > I am replying your email on the UIC Senate's take on the Tripp Umbach Report. I do not support that we (you and I) should be making any official comments or write anything in response to that report. It is an open document that everybody has access to. If our Senate would like to engage their Senate on a "civilized" dialog, I will not object to that. It cannot be adversarial but the Senate can stand its ground with respect to arguments on what is best for the campus. We have to keep it at that level.
> > I have gone through the report and it is all about UIC. Everything has to be in Chicago since IMD is there and the new BEI, they propose has to be there also. Their claims for the present College of Medicine are outlandish and their view of Carle is jaundiced. I just hope that the Manatt Report will actually state the condition and reputation of Carle objectively.
> > On another issue, has Paul Umbach talked to [REDACTED]? If he has, I hope that he was able to ask some fundamental question about the nature of wanting to be a full partner. What does it mean? And how will the Regional COM there take it? Sarah is mortified about [REDACTED] partnering with us at all not to mention of being a full partner. I am asking this question because it will filter out that we have all these committees working with Carle and not consulting at all with [REDACTED]. This is a dilemma!
> > Ade
I am around can you talk today?

On Jul 10, 2014, at 10:59 AM, Joyce Tolliver wrote:

> Matt, just got this this morning. Perhaps you've seen it.
> > Are you in town?
> > I think we may need another Friday soirée.
> --
> Joyce Tolliver
> >
> <UIC Senate Task Force Response Tripp Umbach Report on UIUC medical School 7_8_14-1 copy.pdf>
Hi Jorge,

I'm so glad you drove to Urbana for the meeting--it was a bonus to get to have a little social time with you and some other friends. You are so dedicated to spend the extra hours driving back and forth!

Here's the report. I hope there is only one!

cheers
Joyce

On Fri, Jul 11, 2014 at 7:32 PM, Jorge Villegas <jvillegas@utexas.edu> wrote:
Hi Joyce

I'm back in beautiful Springfield!

First of all, thanks for treating us our drinks and snack.

Would you mind sending me the UIC report? I want to make sure we have the same document.

Thanks.

Jorge Villegas

--

Joyce Tolliver
UIC FACULTY SENATE TASK FORCE:

TRIPP-UMBACH REPORT ON UIUC MEDICAL SCHOOL

The Senate of the University of Illinois at Chicago
UIC FACULTY SENATE TASK FORCE: TRIPP-UMBACH REPORT ON UIUC MEDICAL SCHOOL

Co-Chairs:
George Kondos gtkondos@uic.edu
Professor and Vice Chair for Clinical Affairs; Chief, Clinical Cardiology, Department of Medicine, COM
Mary Jo LaDu mladu@uic.edu
Professor, Department of Anatomy and Cell Biology, COM

Administrative Assistance: Elizabeth Dooley edooley@uic.edu and Lisa Stigger lpalma@uic.edu

Active Members:
Simon Alford sta@uic.edu
Professor, Department of Biological Sciences; Co-Director of Interdisciplinary Neuroscience, LAS

Jonathan Art jart@uic.edu
Associate Dean of the Graduate College; Associate Professor, Department of Anatomy and Cell Biology, COM

Andrew Boyd boyda@uic.edu
Assistant Professor, Department of Biomedical and Health Information Sciences, College of Applied Health Sciences

Mark Brodie mbrodie@uic.edu
Professor, Department of Biophysics and Physiology, COM

Don Chambers donc@uic.edu, Professor of Physiology and Biophysics, Professor of Biochemistry and Molecular Genetics, Professor of Biological Psychiatry, Professor of Medical Education and, Director of the GPPA Program, COM

Larry Danziger danziger@uic.edu
Professor, Department of Pharmacy Practice, COP

Sandy De Groote sgroote@uic.edu
Associate Professor and Scholarly Communication Librarian, Library

Mike Federle mfederle@uic.edu
Assistant Professor, Department of Medicinal Chemistry and Pharmacognosy, COP

Nancy Freitag nfreitag@uic.edu
Professor, Department of Microbiology and Immunology, Associate Director MSTP program, COM

Eileen Hacker ehacker@uic.edu
Associate Professor, Department of Biobehavioral Health Science, CON

Linda Kaste kaste@uic.edu
Associate Professor, Department of Pediatric Dentistry, COD

Vicky Persky vwpersky@uic.edu
Professor of Epidemiology, SPH

Mark Rasenick raz@uic.edu
UIC Distinguished Professor, Department of Biophysics and Physiology, COM

Jalees Rehman jalees@uic.edu
Associate Professor, Department of Medicine-Cardiology, COM

Tom Royston troyston@uic.edu
Professor and Head Richard and Loan Hill Department of Bioengineering, College of Engineering, COM

John Shuler alfred@uic.edu
Documents Librarian and Associate Professor, Library

Milos Zefran mzefran@uic.edu
Professor, Department of Electrical and Computer Engineering
Executive summary

The University of Illinois College of Medicine at Chicago (UIC College of Medicine) is the largest medical school in the nation, and education of medical students through the UIC College of Medicine takes place at four campuses of the University of Illinois (Chicago, Rockford, Peoria and Champaign-Urbana). A study commissioned by Carle Health System and The University of Illinois Foundation resulted in the recommendation of the creation of a new medical school entity to be developed in Champaign-Urbana as a joint public-private venture between Carle Health Systems and the University of Illinois at Champaign-Urbana (UIUC). The scope of the current UIC College of Medicine and its associated Health Sciences Schools (Pharmacy, Dentistry, Nursing, Public Health, Social Work, and Applied Health sciences) is comprehensive and provides a tremendous scope of medical education and healthcare delivery throughout the State of Illinois, a fact which questions the need for, or wisdom of, creating a new medical school entity at UIUC. The Tripp Umbach report on the UIUC proposed medical college provides little concrete financial information regarding the funding to support this initiative. A cursory analysis of the numbers that are provided indicate unsupported and unsubstantiated assumptions that appear to be wholly unrealistic. In the absence of a careful and unbiased analysis, the contribution of the proposed new college of medicine to the local and state economies is overly optimistic, and the actual costs to the State of Illinois are trivialized. Rather than building on the strengths of the current College of Medicine (which includes participation from Chicago, Champaign-Urbana, Peoria and Rockford campuses), the new college, as proposed, will provide little in the way of novelty or synergy, and threatens to undermine the relationships among the campuses that exists under the current structure. The report fails to recognize the current state of the medical education at UIUC as well as the other 3 campuses that comprise the UIC College of Medicine. The focus of the report on the creation of a unique engineering based medical curriculum does not recognize that such a curriculum is possible currently and, in fact, has been implemented within the current UIC College of Medicine structure. If expansion of this engineering-based medical education is truly a need for the people of the State of Illinois, there should be investment in additional development of the University of Illinois (UIC and UIUC) Bioengineering Departments partnerships with the UIC College of Medicine. The rationale put forth by Tripp Umbach to justify the new medical school entity as a means to relieve a projected shortage of physicians indicates a lack of understanding of the current bottleneck in medical education, namely clinical residency positions, which are restricted by limited support from Medicare. In short, the recommendation of Tripp Umbach for a new public-private medical school enterprise is detrimental to the University of Illinois, despite possible benefits to Carle Health System, and resources would be better expended in efforts to strengthen the current Engineering-Medicine relationship to achieve greater benefits for the people of the State of Illinois.
INTRODUCTION

On June 1, 2014 an ad hoc Senate Committee Co-chaired by Mary Jo LaDu, PhD and George T. Kondos, MD was charged with: Soliciting, organizing and generating a response from the University of Illinois faculty to the Tripp Umbach report that focuses on the possible impact on academic, research and clinical efforts. The Tripp Umbach Report evaluates the feasibility of a new college of medicine in Urbana-Champaign. To accomplish the committee’s charge the composition of the committee reflected the breadth of the Health Science Colleges (Medicine, Pharmacy, Dentistry, Nursing, Applied Health Sciences, Social Work and Public Health), as well as the College of Engineering and the Library.

The Senate Committee was divided into four task forces:

1. **Integration of Health Sciences, Engineering, and Library Programs**
   Documenting the active, long-standing educational, clinical and research collaborations among the University of Illinois at Chicago’s combined Health Science programs, institutions, centers, cores, community organizations and industry partners.

2. **Feasibility of the Tripp Umbach Study**
   Analysis of the statements and conclusions in the Tripp Umbach Report to UIUC Carle Heath System April 17, 2014.

3. **Creating a Bioengineering Institute**
   Enhancing engineering-medicine research and physician-engineer training at the University of Illinois.

4. **Establishing a Successful MD/PhD Program**
   Enhancing the MD/PhD Training Program with Cutting-Edge Science and Technology to Advance Patient Care.
1. INTEGRATION OF HEALTH SCIENCE, ENGINEERING AND LIBRARY PROGRAMS

In addressing the Tripp Umbach report, it is important to have a clearer understanding of the diverse components of the current University of Illinois College of Medicine, the other Health Science Colleges, and the vast network of affiliations throughout the State of Illinois and the world.

As the University of Illinois increases its institutional capacity and strategic investment in medical education, bioengineering and related health biotechnologies, the University of Illinois at Chicago (UIC) is the key to the University’s success and innovation in the rapidly changing fields of health care practice, service, research and education. UIC’s health-related research staff, institutional clinical experience, curricular success, and programmatic cooperation between the engineering and health science departments thrives from nearly 30 years of collaborative initiatives. Once the current resources provided by the UIC College of Medicine are examined, it becomes clear that this investment does not need to be recreated through a proposed medical school/private hospital partnership in Urbana-Champaign. It is more appropriate to suggest that the University can seek ways to effectively leverage UIC’s current partnerships, collaborations, and education opportunities through the existing partnership with colleagues and colleges at the University of Illinois at Champaign-Urbana (UIUC).

Figure 1. UIC Health Science Colleges. Six of the seven Health Science Colleges at UIC with lists of degree-granting programs within and across colleges. This figure is representative, not all-inclusive. For example, College of Social Work is not included.

UIC is the premiere public university in Illinois for health science education, graduate programs, clinics and centers that support health-related practice and research initiatives. It is part of an extensive regional...
complex of hospitals and community clinics. Building on goals established through state legislation, as well as public investments begun in the late 1960s, the University and Illinois Board of Higher Education recognized UIC’s central role in meeting the critical need to address the distribution and access to health care and professional education throughout the state. UIC’s health science colleges (Applied Health Sciences, Dentistry, Medicine, Nursing, Pharmacy, Public Health, and Social Work) actively support research, education programs, and centers for deliberative clinical and community practice in Peoria, Rockford, Urbana and the Quad Cities (Figure 1). These core UIC regional programs collaborate with other specialized centers/programs across the state. This multiplicity of outreach efforts throughout Illinois complements many of the University of Illinois at Springfield’s academic departments and programs that focus on the policy, administration, and the legal structure of health care. These University-based regional partnerships are also best appreciated when placed in context with other state university health science programs (Figure 2). For instance, Southern Illinois University’s programs and practice in many areas of health care and science offers local clinics and extensive education programs throughout the central and southern counties in Illinois. The two main locations for SIU’s efforts are in Edwardsville and Springfield.

UIC is also part of the largest medical complex/administrative unit in the United States: the Illinois Medical District. This strengthens UIC’s clear leadership in statewide communities of collaboration. The District’s legislative goals create institutional structures that foster considerable opportunities for UIC health science programs to invest in critical areas of primary health care delivery and research with diverse patient communities. UIC’s several long-standing commitments to interdisciplinary research among the seven colleges of the health sciences and engineering foster discoveries in health related technologies that materially improve future health care delivery mechanisms and practices. Comparable collaborative efforts with communities throughout the greater Chicago Metropolitan area can be found in clinics, offices, and centers that serve populations with limited social, economic or educational resources. Along with UIC’s School of Public Health and School of Social work, many clinical practitioners, students, and researchers gain practical experience on how to build healthy communities in many neighborhoods and local areas where access to health care is a challenge. The College of Nursing supports the Institute for Health Care Innovation (IHCI) that actively supports the integration of teaching, practice and research. It is a model entrepre-
neural business unit within the College that seeks to build partnerships with health care centers through putting into place the best practices of healthcare and financial management, delivered through structured programs of consulting services and educational opportunities.

Additional strengths are drawn from interactions across more than a dozen UIC colleges and centers of research, three other University of Illinois campuses (Rockford, Peoria and Champaign-Urbana), other public and private universities throughout the Chicago region, as well as across the state and the region. This extensive cooperative social and intellectual investment, along with decades of experience, includes recognized international programs that offer health science and engineering students, as well as researchers, many opportunities to combine their education and innovations that focus in particular on the cutting edge of biotechnological developments throughout the Chicago metropolitan area, the state, region, nation and around the world (Figure 3). As an example, the College of Medicine offers it's students a wide variety of training options, including an NIH-funded MSTP program to support MD/PhD students, as well as programs focusing on rural-, urban- and global-medicine.

![World Map](image)

**Figure 3. World Map.** Clinical, educational or research sites with formal relationships with the UIC Health Science Colleges have been represented by a marker for each college, illustrating the extended reach of their respective collaborative efforts. This map is representative.

UIC offers other unique advantages and opportunities to serve as the University of Illinois' primary center for health science research, education and practice. Considerable investments have been made to directly support research and learning by combining biotechnology and the health sciences. Current and future UIC medical and engineering students can take an active role within a diverse community of health science scholars and practitioners. These opportunities support many long-standing examples of collaborative work with several global pharmaceutical and biotechnology companies, philanthropic foundations and community health organizations, as well as opportunities to work with other political and thought leaders throughout the state, region, nation and the world. Chicago's dynamic and multicultural environment includes the opportunity to work in dozens of countries though research and practice in areas of medicine, nursing, public health, and
pharmacy. For instance, the World Health Organization recognizes the College of Nursing as a Collaborating Centre for International Nursing Development in Primary Health Care. This is one of four designated WHO Collaborations. The others include the Great Lakes Center for Occupational and Environmental Health, Center for Traditional Medicine, and the Center on the Economics of Tobacco Control. UIC currently partnerships has over 260 different active partnerships with agencies of the federal government, industry and private foundations (see Table 1 below).

**UIC recognizes the strengths of interprofessional education** (IPE) among its several health science colleges, the University’s office of diversity and the University Library’s Library of Health Sciences. In 2008, the Collaborative for Excellence in Interprofessional Education (CEIPE) was created to directly support collaborative research and teaching that reaches outside disciplines, embrace other languages, recognize the importance of cultural contexts, and foster a deliberative context of mutual support, research and education. Comparable programs can be found in individual colleges. This is but one example of an opportunity to deepen the educational experience for Urbana colleagues and students is a possibility the University should consider.

**UIC further strengthens its integrated health science research and education through several dynamic University Library programs.** With locations in Chicago, Rockford, Peoria, and Urbana, the Library of the Health Sciences (LHS) — one of the largest health sciences libraries in the nation — offers a vast multidisciplinary collection. It directly supports the education, research, and clinical practice of the UIC Health Sciences Colleges; the UIC Medical Center Hospital and Outpatient Care Center, and other affiliated health care institutions. LHS provides access to more than 725,000 volumes, 5,200 journals, over 40 clinical tools and biomedical databases; along with such distinguished collections as the History of Nursing and Pharmacy Collection, the Kiefer Collection (urology), the Percival Bailey Library (neurology) and the Nyhus Collection (gastroenterology). The library also integrates its teaching into the curriculum of several of the health science colleges by providing essential information literacy skills for research, clinical practice, and life-long learning. Library faculty offer instructional sessions on how to search and build information management expertise, as well as consultation and advice tailored to the needs of researchers, clinicians, and students. The University Library provides access to an expansive collection of materials in other disciplines through its support of other colleges including Architecture, Design, and the Arts, Business Administration, CUPPA, Education, Engineering, Liberal Arts & Sciences, and Social Work. The multi-disciplinary nature of the University Library facilitates the interdisciplinary research both within and between the UIC colleges. In 1979, the University Library’s LHS joined the National Network of Libraries of Medicine (NN/LM) as a Regional Medical Library. It serves the ten-state Greater Midwest Region.

**Through its nearly half-century partnership with the Regional College at UIUC, UIC represents the University's best investment for advancing the goal to boost the technological transformation of health care research, practice and education in Illinois.** The University of Illinois can take clear advantage of UIC’s robust convergence of technological innovations, clinical practice, and industry partnerships among its colleges of medicine, health science and engineering. Long a leader in establishing the standards and practices that materially improve the lives of patients, and the communities they live in, UIC can work with colleagues and students at UIUC to build on the existing investments in these areas.
<table>
<thead>
<tr>
<th>Table 1: UIC Industry Partnerships</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Astellas Biopharmaceuticals Inc</strong></td>
</tr>
<tr>
<td><strong>Abbott Laboratories</strong></td>
</tr>
<tr>
<td><strong>Astellas Inc</strong></td>
</tr>
<tr>
<td><strong>Access Community Health Network</strong></td>
</tr>
<tr>
<td><strong>Actelion Pharmaceuticals Ltd</strong></td>
</tr>
<tr>
<td><strong>AutoGenX</strong></td>
</tr>
<tr>
<td><strong>Advanced Neuronodulation Systems Inc</strong></td>
</tr>
<tr>
<td><strong>Advocate Christ Medical Ctr</strong></td>
</tr>
<tr>
<td><strong>Alcon Laboratories Inc</strong></td>
</tr>
<tr>
<td><strong>Align Technology</strong></td>
</tr>
<tr>
<td><strong>Allegiance Inc</strong></td>
</tr>
<tr>
<td><strong>Altos Therapeutics Inc</strong></td>
</tr>
<tr>
<td><strong>Amgen Inc</strong></td>
</tr>
<tr>
<td><strong>Aquilion Therapeutics</strong></td>
</tr>
<tr>
<td><strong>Argus Therapeutics</strong></td>
</tr>
<tr>
<td><strong>ARRAI Pharmaceuticals Inc</strong></td>
</tr>
<tr>
<td><strong>Arrowhead Madison Inc</strong></td>
</tr>
<tr>
<td><strong>AstraZeneca</strong></td>
</tr>
<tr>
<td><strong>Australis Pharmaceuticals Inc</strong></td>
</tr>
<tr>
<td><strong>AstraZeneca</strong></td>
</tr>
<tr>
<td><strong>Biogen</strong></td>
</tr>
<tr>
<td><strong>BIS Systems</strong></td>
</tr>
<tr>
<td><strong>Bank of America</strong></td>
</tr>
<tr>
<td><strong>Biocon &amp; GMS Pharmaceutical</strong></td>
</tr>
<tr>
<td><strong>Baxter Healthcare Corp</strong></td>
</tr>
<tr>
<td><strong>Biogen Idec</strong></td>
</tr>
<tr>
<td><strong>BioInvent</strong></td>
</tr>
<tr>
<td><strong>Biotherans</strong></td>
</tr>
<tr>
<td><strong>Blue Cross &amp; Blue Shield of IL</strong></td>
</tr>
<tr>
<td><strong>Boehringer Ingelheim</strong></td>
</tr>
<tr>
<td><strong>Bionetics</strong></td>
</tr>
<tr>
<td><strong>Bombardier Transit Corp</strong></td>
</tr>
<tr>
<td><strong>Boston Scientific Corp</strong></td>
</tr>
<tr>
<td><strong>Brown &amp; Women Hospital Inc</strong></td>
</tr>
<tr>
<td><strong>Bristol-Myers Squibb</strong></td>
</tr>
<tr>
<td><strong>Brookfield Zoo (Chicago Zoological Soc)</strong></td>
</tr>
<tr>
<td><strong>B-Vita</strong></td>
</tr>
<tr>
<td><strong>CDS Pharma AS</strong></td>
</tr>
<tr>
<td><strong>Cambridge Systematics Inc</strong></td>
</tr>
<tr>
<td><strong>Canyon Pharmaceuticals Group</strong></td>
</tr>
<tr>
<td><strong>Cater Consulting Inc</strong></td>
</tr>
<tr>
<td><strong>CDG Therapeutics Inc</strong></td>
</tr>
<tr>
<td><strong>Cell Genesys</strong></td>
</tr>
<tr>
<td><strong>Cell Reports</strong></td>
</tr>
<tr>
<td><strong>Cellerent Therapeutics</strong></td>
</tr>
<tr>
<td><strong>Celltech Biotechnologies Co Ltd</strong></td>
</tr>
<tr>
<td><strong>Cental Society of Clinical Research (CSCR)</strong></td>
</tr>
<tr>
<td><strong>Centre for Addiction and Mental Health</strong></td>
</tr>
<tr>
<td><strong>Cepharos Inc</strong></td>
</tr>
<tr>
<td><strong>Cerep</strong></td>
</tr>
<tr>
<td><strong>Chemajr Corp</strong></td>
</tr>
<tr>
<td><strong>Chemomix Ext Inc</strong></td>
</tr>
<tr>
<td><strong>Chevron Phillips Chemical Co LLC</strong></td>
</tr>
<tr>
<td><strong>Circuit Corp</strong></td>
</tr>
<tr>
<td><strong>Cleveland BioLabs Inc</strong></td>
</tr>
<tr>
<td><strong>Cognis Corporation</strong></td>
</tr>
<tr>
<td><strong>Cubist Pharmaceuticals</strong></td>
</tr>
<tr>
<td><strong>Cerus Corp</strong></td>
</tr>
<tr>
<td><strong>Cerion Inc</strong></td>
</tr>
<tr>
<td><strong>Civic Associates Inc</strong></td>
</tr>
<tr>
<td><strong>CSL Behring</strong></td>
</tr>
<tr>
<td><strong>CTI Clinical Trials and Consulting Services</strong></td>
</tr>
<tr>
<td><strong>Cir for Biomedical Testing (CBT)</strong></td>
</tr>
<tr>
<td><strong>Citr for Construction Research &amp; Training (CPWR)</strong></td>
</tr>
<tr>
<td><strong>Cubist Pharmaceuticals</strong></td>
</tr>
<tr>
<td><strong>dCODE Genomics</strong></td>
</tr>
<tr>
<td><strong>Dell Inc</strong></td>
</tr>
<tr>
<td><strong>Devani Medical I II</strong></td>
</tr>
<tr>
<td><strong>DeuPuy Orthopaedics Inc</strong></td>
</tr>
<tr>
<td><strong>DeuPuy Synthes Spine</strong></td>
</tr>
<tr>
<td><strong>DeuPuy Synthes Spine</strong></td>
</tr>
<tr>
<td><strong>Dr Falk Pharma GmbH</strong></td>
</tr>
<tr>
<td><strong>Dräger (Charles Stark) Laboratory Inc</strong></td>
</tr>
<tr>
<td><strong>DHS Technologies</strong></td>
</tr>
<tr>
<td><strong>Eastern Research Group (ERG)</strong></td>
</tr>
<tr>
<td><strong>Eidos Inc</strong></td>
</tr>
<tr>
<td><strong>Eli Lilly &amp; Co</strong></td>
</tr>
<tr>
<td><strong>Eli Lilly &amp; Co</strong></td>
</tr>
<tr>
<td><strong>Emmene Medical Inc</strong></td>
</tr>
<tr>
<td><strong>EMMES Corp</strong></td>
</tr>
<tr>
<td><strong>Emory Neurology Surgery Inc</strong></td>
</tr>
<tr>
<td><strong>Exact Sciences Corp</strong></td>
</tr>
<tr>
<td><strong>Exelixis</strong></td>
</tr>
<tr>
<td><strong>Fisher Resources Inc</strong></td>
</tr>
<tr>
<td><strong>FivePrime Therapeutics</strong></td>
</tr>
<tr>
<td><strong>Galatea Inc</strong></td>
</tr>
<tr>
<td><strong>Genentech</strong></td>
</tr>
<tr>
<td><strong>Genentech</strong></td>
</tr>
<tr>
<td><strong>Genentech</strong></td>
</tr>
</tbody>
</table>
2. FEASIBILITY OF THE TRIPP-UMBACH STUDY

The Tripp Umbach (TU) report recommending establishing a specialized, private engineering–focused medical school in Urban Champaign deserves serious consideration. The proposal of a new medical school requires a critical analysis of how the functions of an additional specialized medical school might best be integrated into the state healthcare system, with consideration of its impact on regional healthcare providers, schools of medicine and the population as a whole.

Universities historically have been a home to ‘disruptive innovation,’ a fact that makes them a natural setting for the analysis and implementation of the healthcare needs of the future. The University of Illinois at Chicago (UIC), is ideally suited to undertake such an analysis since it is a regional, state, and national leader in the training of healthcare professionals. UIC has over 80 degree and certificate programs across seven health colleges that provide undergraduate, graduate, and professional training (see above).

As presented, the TU report departs from the conventional academic discourse in that it states the conclusion and makes its recommendations without much of the supporting evidence, methods of analysis and discussion that would be required of even a modest formal analysis. In short, without considering the data, the business plan, memoranda of understanding (MOUs), and the methods of analysis that include more than just UIUC and the region, it is difficult to determine whether the recommendation is in the best interests of not only Carle/UIUC, but the other state medical schools, healthcare providers, and citizens of the region and the state.

**Tripp Umbach core competencies and recommendations**

It should be noted that the recommendation to build an new medical school, rather than augmenting and supplementing current arrangements, is proposed by a firm that markets itself to Academic Medical Centers as a comprehensive consulting firm that will assist

“From initial studies to legislative hearings and final plans, our team of consultants are [sic] fully engaged with our clients through every step of the process. Tripp Umbach’s senior consultants are nationally recognized medical school deans and administrators, as well as leading architectural and land planning experts who provide accreditation and operational consultation.”


So while Tripp Umbach is an independent consultant in the sense that it is not formally affiliated with either UIUC or Carle Health Sciences, it cannot be called impartial.

**Recommendations and Key Findings of the Tripp Umbach report**

The TU report includes six recommendations: 1) to develop a private, independently–accredited college of medicine (COM); 2) to build on the strengths of the two partners, the COM will focus on translational engineering research, and a diverse team–centered curriculum in a new facility; 3) to expand the capacity of the two partners to ensure sustainability of the COM; 4) to ensure that they have the flexibility to develop and expand multiple external relations to strengthen the founding partners, and to increase the economic impact to the state of Illinois; 5) to ensure that the specialized COM does not duplicate the UIC COM, but instead allows for extensive collaboration; 6) to develop a detailed business plan that includes sustainable funding that does not require General Revenue Funding (GRF) appropriations for medical education. These recommendations are supported by five key findings: 1) The State of Illinois lags behind other states in academic medicine, 2) A new college could attract more federal funding, 3) There is urgency for creation of a new medical entity, 4) the new college would require accreditation and should have an innovative curriculum, 5) a new college would have substantial impact on the region and the State of Illinois.

Each of the recommendations are addressed below in a perceived order of importance, rather than the original order of presentation.
Recommendation #6 (most closely linked to Key Finding #5)

We begin with Recommendation #6 and associated Key Finding #5, which is to develop a detailed business plan, and by extension an analysis of the economic impact on UIUC, Carle, and the region. The University of Illinois system has an established structure in the Institute of Government & Public Affairs (IGPA) that provides research-based assessment of issues raised by state and local officials as well as private citizens. The IGPA is staffed by faculty holding academic appointments from all three campuses, and has offices in Champaign and Chicago. For a proposal of this magnitude, a conventional approach would have been to solicit an analysis from the IGPA, since by design it would be a more comprehensive state–wide analysis, without potentials for conflicts of interest.

ECONOMIC IMPACT: In general, for assessment of the economic impact of a second medical school in Urbana there are well-established models such as the REMI model or the IMPLAN model. These models can be applied at various geographic levels. Evaluation of local effects of a new medical school on Champaign and surrounding counties would require estimates for the next 10 years of all the funds that would be invested in buildings and infrastructure, along with new operating funds for the medical school and the surrounding area. That data could then be applied to an analysis of primary industry–specific economic impacts as well as impacts on secondary employment sectors.

It is important to separate new funds originating outside the region from redirected funds currently spent in the region. The latter includes all funds transferred within UIUC. The former would consist of private, state and federal funds not currently spent in the region. Evaluation of net state effects should proceed at a higher level of aggregation. Diversion of funds from other areas of the state (for example through new taxes or decreased support of UIC or other institutions of higher education), the effect on other sectors and the larger impact on those geographic areas must be traced and included as costs at the state–level impact study.

Similarly when private funds applied to this initiative are diverted from other uses in the state they must be included as costs in the statewide analysis. A net balance throughout the state should be calculated. At the state level the only real effects arise from funds coming from out of state or funds that would have gone out of state. It is plausible that what might be a net benefit to the region would be a net loss to the state.

Without making explicit the underlying assumptions, the TU report asserts that the economic impact of the existing COM and Medical Center as well as the Proposed COM are as given in table #9 of the TU report, reproduced and augmented with percentage growth in each period here:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UIC College of Medicine</td>
<td>1,480.00</td>
<td>1,780.00</td>
<td>2,340.00</td>
</tr>
<tr>
<td></td>
<td>2.05%</td>
<td>1.64%</td>
<td></td>
</tr>
<tr>
<td>University of Illinois Medical Center</td>
<td>1,220</td>
<td>1,470</td>
<td>1,900</td>
</tr>
<tr>
<td></td>
<td>1.33%</td>
<td>1.83%</td>
<td></td>
</tr>
<tr>
<td>New Carle/UIUC College of Medicine</td>
<td>160</td>
<td>1,400</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>15.49%</td>
<td></td>
</tr>
</tbody>
</table>

The most striking element of the table is that the extant COM and Medical Center are projected to grow at rates of 2% or less over the period 2012 to 2035, while the proposed new COM has an annual growth rate of 15.49% in the period from 2021 when the COM is fully established, to 2035 when it is reckoned to be mature. To understand the phenomenal rate of annual growth, it is necessary to refer to table #7 that is again reproduced and augmented with an additional break–out of percentage growth for the different periods considered:
Table #7 ($ are expressed in Millions)

<table>
<thead>
<tr>
<th>Category of Impact</th>
<th>Existing COM at UIUC (2014)</th>
<th>New COM - 2021 (after start-up)</th>
<th>2030</th>
<th>2035 (Maturity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM Program Impacts</td>
<td>$26.40</td>
<td>$83.20</td>
<td>$210.50</td>
<td>$390</td>
</tr>
<tr>
<td></td>
<td>16.40%</td>
<td>10.31%</td>
<td>12.33%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11.03%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12.82%</td>
<td></td>
</tr>
<tr>
<td>Research Program (inc in COM Program Impacts (A))</td>
<td>$1.80</td>
<td>$28.40</td>
<td>$162</td>
<td>$270</td>
</tr>
<tr>
<td></td>
<td>39.41%</td>
<td>19.35%</td>
<td>10.22%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>16.09%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>23.86%</td>
<td></td>
</tr>
<tr>
<td>A-B COM (Non-research)</td>
<td>$24.60</td>
<td>$54.80</td>
<td>$48.50</td>
<td>$120</td>
</tr>
<tr>
<td></td>
<td>11.44%</td>
<td>-1.36%</td>
<td>18.12%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5.60%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7.55%</td>
<td></td>
</tr>
<tr>
<td>Clinical Program Impacts</td>
<td>$5.30</td>
<td>$16.80</td>
<td>$60.50</td>
<td>$120</td>
</tr>
<tr>
<td></td>
<td>16.48%</td>
<td>14.24%</td>
<td>13.70%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>14.04%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>14.86%</td>
<td></td>
</tr>
<tr>
<td>Commercialization Impacts</td>
<td>$7.30</td>
<td>$60</td>
<td>$480</td>
<td>$900.00</td>
</tr>
<tr>
<td></td>
<td>30.09%</td>
<td>23.10%</td>
<td>12.57%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>19.34%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>22.93%</td>
<td></td>
</tr>
<tr>
<td>Total Economic Impact</td>
<td>$39.00</td>
<td>$160.40</td>
<td>$750.50</td>
<td>$1,400</td>
</tr>
<tr>
<td></td>
<td>20.20%</td>
<td>17.15%</td>
<td>12.47%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15.48%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>17.05%</td>
<td></td>
</tr>
</tbody>
</table>

The combined program in the proposed college (section A) is shown to grow by 12.8% between now and 2035, and 11% between 2021 and 2035 (maturity). This includes a non-research component (A-B) growing by 7.6% between 2014 and 2035, and 5.6% between 2021 and 2035. The majority of the growth in the
COM is projected to arise from an increase in research dollars (B), specifically an annual growth of 23.9% over the extended period, and growth of 16.1% over the 2021 – 2035 period. Most remarkable is the initial growth of 39.4% in the seven–year period between 2014 and 2021. It is unclear whether the growth is due to the relative research activities of the primary faculty in the current UIUC UIC–COM compared to those of primary faculty in the proposed Carle/UIUC COM [five full professors, five assistant professors, 20 clinical research professors], or the rapid growth includes a percentage of revenue based on faculty with primary appointments in the UIUC COE and secondary appointments in the Carle/UIUC COM. Clarity is needed because with the modest number of ten basic science faculty that will be responsible for instructing 150 M1, 50 M2, 50 M3, and 50 M4 medical students by 2021 (300 students total), it is unclear how such a modest number of faculty would be also able to manage a research portfolio with a gross of $28.4M without including research dollars from associated clinical faculty as well as those in other UIUC colleges. A full 19% of the projected growth to $1.4B by 2035 is contributed by the growth in research dollars to the new entity, though it remains unclear what percentage of this growth is to be claimed solely by the newly formed Carle/UIUC college, and what fraction should rightly be assigned to the UIUC College of Engineering and other colleges.

Two other categories, Clinical Program (section C), and Commercialization Impacts (section D), are both seen to grow relatively aggressively over the 2014 – 2035 period at rates of 15% and 23% respectively. As all of the assets needed to achieve this theoretical growth rate are currently in place, the report does not explain why the projected growth in these two areas would not be achieved under the current UIC–COM structure. The UIC–COM participates actively with the Office of Technology Management (OTM) to commercialize inventions of the UIC–COM faculty. We mention this because 73% of the growth to $1.4B is contributed by these two categories, and yet it is still not clear why the creation of a new Carle/UIUC medical school is necessary to achieve this growth.

Based on this analysis, we find that only the non–research component of the Carle/UIUC which contributes $95.4M, or ~7% of the growth to $1.4B might be a direct result of creation of a new COM. The other components of growth, if achievable, would be possible under the current structure. Indeed, no compelling case has been given as to why these goals would not be more effectively met by the University of Illinois system through a more aggressive coordination of the extant structure.

A major feature of recommendation #6 is that the business plan is to be developed so that the proposed COM and medical education is achieved without use of General Revenue Funds (GRF). It is unclear how a collaborative effort between Carle and UIUC would completely avoid the use of GRF given that its use is imbedded in virtually every aspect of UIUC function. Consider three examples:

The first example is the university library system that is necessary for accreditation of the proposed Carle/UIUC COM. Does the consortium plan create a parallel library to cover both engineering and medicine, or do they plan to fairly compensate the taxpayers (GRF) for the subscriptions to both physical and electronic access to engineering and medical books and journals, as well as the physical infrastructure and employees of the UIUC library system?

Second, given the F&A rate of 55% that was implicit in section B of table 7 (in their notes about actual expenses), how does the proposed COM intend to make up the revenue necessary to support a gross portfolio of $270M by 2035? Research with F&A of less than 95 – 100% generally requires supplemental support from the institution; the shortfall inherent in a low F & A rate can be made up in one of four ways: increased tuition, increased traffic to the medical center, licensing of intellectual property generated by the faculty, and development activities (fund raising). For the individual faculty with RO1 research grants, the money can only be recovered if they capitalize on the initial funding, and aggregate these to leverage training grants or program project grants. Any shortfalls not made up in one of these six areas are, in practice, covered by the state appropriation i.e. the GRF. Since the report does not speak to how these options will be used to cover the short–fall generated by the increased NIH revenue, the default solution would require use of GRFs.

As a third example, costs will be accrued in expanding the engineering–focused MSP component, which is proposed to be increased from 25 to 50 positions/year over the course of six years, while continuing to train 100 M1 students from the UIC–COM. Of concern is that for the Carle/UIUC COM to provide training to the UIC–COM M1 cohort (that will be distributed to Peoria and Rockford for the M2 – M4 years), they will have to comply with the components and objectives of the UIC–COM curriculum as licensed by the LCME. Education
of the UIC–COM will necessitate use of shared resources funded by the State of Illinois GRF, and we assume that they are asserting the training of the final cohort of 50 M1 MSP would not require GRF, which would depart from the current support of 25 M1 MSP students through the UIUC/UIC–COM that is partially funded by the GRF.

In summary, the lack of a business plan, cloudy information regarding financial sustainability and unsubstantiated assumptions throughout the report make it difficult to accept the financial feasibility of the medical school proposed in the Tripp Umbach report.

**Recommendation #2 (most closely linked to Key Finding #3)**

Consideration of **Recommendation #2**, to build on the strengths of the two partners, the COM will focus on translational engineering research and a diverse team–centered curriculum in a new facility.

Consideration of **Recommendation #2** and **Key Finding #3**, to build on the strengths of the two partners, the COM will focus on translational engineering research and a diverse team–centered curriculum in a new facility. We concern ourselves primarily with UIUC and its relationship with the UIC–COM. Since 1971 the UIUC colleges have had an integrated Medical Scholars Program (MSP) with the UIC–COM. This extensive joint history makes the recommendation for Carle/UIUC unlike the context for the de novo partnership that Tripp Umbach recommended for the Carillion Health System and Virginia Tech (cited in the TU UIUC report).

Currently the MSP admits 25 M1s, and has 113 students enrolled in graduate departments across the university. Typically these students have an initial year in their graduate programs, and the medical curriculum is interspersed in a decompressed fashion over the course of subsequent years, mixing both graduate and medical curricula. Program distribution of the current students is given in the table, 100 of whom are in STEM disciplines.

Two points should be noted. The first is that the TU report claims a revolutionary approach of combining engineering with medicine. When one compares their recommendation to the current MSP distribution, the whitepaper is actually recommending a rather modest increase in the proportion of students matriculating into the engineering components of the STEM disciplines. But they admit that in future years as the program matures there will be admission into fields not dissimilar from those in which the current students are enrolled. One imagines that to the extent that great benefit will accrue by increased collaboration between the UIUC engineering faculty and the UIC–COM, we whole–heartedly support the recommendation that the university system capitalize on the strengths currently found on all campuses.

In addition, Tripp Umbach suggests that a new medical college is needed to advance medical education. Specifically, the report states, “Tripp Umbach does not believe that developing a LCME-approved “track” of the existing state–supported UIUC College of Medicine program can effectively accomplish what a separately accredited program could achieve, especially as the new program will have a high degree of integration with

<table>
<thead>
<tr>
<th>MSP Graduate Programs</th>
<th>#</th>
<th>Program</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Economics</td>
<td>1</td>
<td>Electrical &amp; Computer Engineering 1</td>
<td></td>
</tr>
<tr>
<td>Anthropology</td>
<td>1</td>
<td>Entomology 1</td>
<td></td>
</tr>
<tr>
<td>Biochemistry</td>
<td>12</td>
<td>Fellow 2</td>
<td></td>
</tr>
<tr>
<td>Bioengineering</td>
<td>17</td>
<td>History 1</td>
<td></td>
</tr>
<tr>
<td>Biophysics</td>
<td>2</td>
<td>Human &amp; Community Development 3</td>
<td></td>
</tr>
<tr>
<td>Cell &amp; Developmental Biology</td>
<td>4</td>
<td>Kinesiology 1</td>
<td></td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>2</td>
<td>Law 1</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>5</td>
<td>Microbiology 10</td>
<td></td>
</tr>
<tr>
<td>Communications Research</td>
<td>1</td>
<td>Molecular &amp; Integrative Physiology 10</td>
<td></td>
</tr>
<tr>
<td>Community Health</td>
<td>1</td>
<td>Neuroscience 25</td>
<td></td>
</tr>
<tr>
<td>Comparative Biosciences</td>
<td>1</td>
<td>Nutritional Sciences 3</td>
<td></td>
</tr>
<tr>
<td>Comparative Literature</td>
<td>1</td>
<td>Physics 2</td>
<td></td>
</tr>
<tr>
<td>East Asian Languages and Cultures</td>
<td>1</td>
<td>Sociology 4</td>
<td></td>
</tr>
</tbody>
</table>
science and technology programs in Urbana-Champaign” (page 33 of the report). Firstly, this statement is in direct opposition to the facts that integrated training of MD/PhD students with a focus in Engineering or Biomedical Engineering is already in existence at UIC and UIUC. Secondly, the implication that the current model of medical education in the University of Illinois is stagnating is contradicted by the tremendous effort made (especially in the last five years) through the actions of the Department of Medical Education at UIC and the combined four campuses (Chicago, Rockford, Peoria and Champaign-Urbana) to modernize and coordinate the delivery of medical education.

Of great concern is the argument supporting the formation of the Carle/UIUC COM that is inherent in **Key Finding #3: Carle Health System and the University of Illinois at Urbana-Champaign must move quickly to capitalize on the benefit of this revolutionary college of medicine model**. The urgency expressed for the establishment of a new medical education enterprise by Tripp Umbach is not well supported by the facts. After noting that the University of Illinois at Champaign-Urbana has one of the country’s premier engineering faculty and a School of Engineering that is one of, if not the top school in the nation, Tripp Umbach states “The window for the University of Illinois at Urbana-Champaign will not remain open for long, as **top-tier expertise in engineering**, the key link in this transformation, can be purchased by all **top-tier medical schools and hospital systems**.” (page 32 of the report, bolding added). It is inconceivable that the talent the University of Illinois as assembled over decades could be accurately emulated through wholesale purchase. This statement should be insulting to the superb faculty at UIUC. In addition, it is unclear what “threats” would occur over time to undermine the benefits of the new college of medicine to the citizens of the State of Illinois. On the other hand, a rush to create a new public-private medical education entity at UIUC could undermine existing structures and could threaten the fiscal well-being of the citizens of Illinois. It should be noted that the new Dell Medical School (cited as a threat to the new medical enterprise in the TU report) will be funded from a variety of sources:

“An extraordinary commitment of resources has already been made to enable the development and success of the Dell Medical School. Seton Healthcare expects to invest **$250 million** towards the establishment of the teaching hospital. Central Health will leverage a recent publicly approved real estate levy with federal matching funds to provide **$35 million in annual revenues** to the project. The **University of Texas System Board of Regents** has pledged at least **$25 million annually** plus an **additional $5 million per year** for eight years, for faculty recruitment and support. Finally, the **Michael & Susan Dell Foundation recently announced a $50 million gift to the school**.”
(http://www.wittkieffer.com/file/Dell%20Medical%20School%20Dean.pdf) (bolding added)

As noted in the UIUC Tripp Umbach report, the Dell Medical School plans to accept its first class in 2016. If an urgent threat exists, then the delay necessitated by the logistics of the plan proposed by TU would put this enterprise at additional imminent risk. A more efficient plan would include additional efforts to support collaborations between the UIC College of Medicine and the College of Engineering at UIUC.

**Recommendation #5**

With respect to the relationship of the new college with the UIC College of Medicine, little that is of benefit to UIUC and the State of Illinois would be provided by the new medical enterprise that is not already available within the current structure. Elsewhere in this document (above in section 1), the numerous interactions of the UIC College of Medicine with the other campuses of the University of Illinois are detailed. The report suggests that interaction with the new medical enterprise would help the UIUC College of Medicine “establish itself as a national leader in for addressing issues related to diversity in the health care industry and the delivery of urban health care services with an emphasis on addressing the needs of minority populations”, a position that the current UIUC College of Medicine already holds. The current College of Medicine is already leveraging numerous new technologies, including those developed internally in Chicago and at UIUC, so this recommendation by Tripp Umbach, while stamping a seal of approval on the current system, does not support the development of a new medical school.

Please refer to section 1 above for elaboration on the relationship of the UIC College of Medicine with the rest of the University of Illinois system and the delivery of healthcare and health education across the State of Illinois.
Recommendation #4

The report recommends that the new medical college enterprise proposed by Tripp Umbach have flexibility to develop and expand multiple relationships with other health care, education, and industry partners. Under the current system, UIUC is already collaborating with the Mayo Clinic and numerous other established health care entities. No advantage of the proposed medical school entity is offered by the report. What is not stated is the potential impact of a formalized enterprise between UIUC and the Carle Health System on these outside interactions with esteemed heath systems across the country, as re-direction of effort and resources may detrimentally affect the ability of faculty of UIUC to maintain ongoing collaborations.

The report proclaims a need for a new medical school to foster collaborations among the faculty of the new school, the existing UIUC faculty, and investigators throughout the nation. The report accurately notes that, “The Illinois Medical District (IMD), University of Chicago, Northwestern University, UIC College of Medicine, and Loyola University, along with Chicago-based investments in technology infrastructure, have created the foundation for the state to become the national leader in medical innovation and technology” (page 25) but then suggests that “The new college of medicine in Urbana-Champaign will further solidify Illinois’ position” (page 25) without recognizing that Chicago contains a unique concentration of medical centers in the state that promotes innovation and synergy. A new college of medicine 140 miles away is unlikely to participate in this synergy without the mechanisms that currently allow faculty at the University of Illinois to interact with any medical center throughout the nation.

As the report states, “Academic medical centers are currently collaborating with the University of Illinois at Urbana-Champaign because of its engineering and technology expertise” (page 25). As the report states, “Colleges of Medicine at Stanford University, Johns Hopkins University, Washington University, Duke University, and Vanderbilt University—all top 10 medical schools as ranked by the National Institutes of Health (NIH) funding—have developed ongoing research collaborations with University of Illinois at Urbana-Champaign engineering and/or science faculty” (page 25). Because of current collaborations ongoing with world-class medical centers, UIUC has no need for an additional medical school to enable local collaborations; Recommendation 4, therefore, does not credibly justify a new college of medicine entity in Champaign-Urbana.

Recommendation #1 and #3

These recommendations together suggest that a new college of medicine that is a joint enterprise between Carle Health Systems and UIUC be created, be focused on collaborative medicine and engineering, and suggest the staffing needed to initiate such a school. Because of the flaws, misrepresentations and lack of information described above, the fundamental assumptions underlying these recommendations are difficult to evaluate positively. The report states, “This unique public-private medical school, organized as a private entity, has the advantage of shared governance and risk, as well as the flexibility to add multiple partners and adapt to rapid changes in health care, education, and science.” What part of the risk will be taken on by the University and what portion of the advantage will be taken by Carle is left undefined. Few impediments restrict the ability of the faculty at UIUC to collaborate widely. The governance is envisioned by Tripp Umbach as a private Board of Directors with inclusion of University of Illinois administrators as a minority; it is unclear the influence that will be able to be exerted by the University of Illinois in defining the direction of this new medical enterprise. It is telling that while numerous individuals from The University of Illinois Champaign-Urbana and Carle Health Systems were interviewed in the preparation of this report, only 2 regional Deans (Peoria and Chicago) were interviewed (Appendix A of the report).

The involvement of Carle is problematic, as Carle does not currently have a working relationship with the University of Illinois Hospital; “The care that the Carle Health System cannot provide is transferred to top health care centers regionally, such as Mayo Rochester, Washington University in St. Louis, and Northwestern in Chicago” (page 45). If there really were a commitment of Carle to increasing the quality of medical care and medical education in the State of Illinois, why has Carle failed to involve the Chicago campus at UIC in its medical mission?

Part of the underlying rational for creation of additional medical schools is the need for more physicians in the US. As described below in section 4, the key to increasing the physicians is not increasing the
enrollment for undergraduate medical education, but increasing residency positions. These positions are limited as the underwriting of GME slots has been restricted by the US Congress. The bottleneck is not in undergraduate medical education, but in graduate medical education because of loss of congressional funding.
3. A BIOMEDICAL ENGINEERING INSTITUTE FOR THE UI SYSTEM

The Tripp Umbach (TU) report emphasizes the urgent need for immediate and greater emphasis in the area of biomedical engineering research and physician-engineer training. We absolutely agree with the report that strengthening ties between Medicine and Engineering can bring substantial benefits to the University of Illinois and Illinois in general. We also agree that additional federal funding can be tapped, especially from NIH, by fostering further collaboration between Health Sciences and Engineering. However, we strongly disagree with the premise of the TU report that the best option to do so is to establish a new medical school in Urbana as this ignores three critical facts:

1. In the same way that Engineering at UIUC is top ranked nationally, UIC is a national leader in Health Sciences. Starting with Colleges of Nursing and Pharmacy and the School of Public Health that are all ranked in the top 20, having access to a large and diverse patient base, being a national leader in minority health research, to being one of the world’s leading sites for training in and applications of robotic surgery, UIC Health is the logical partner in any further expansion of biomedical engineering training and research. Especially since biomedical engineering research cannot be confined to the College of Medicine and needs to include other Health Science colleges.

2. Historically, biomedical engineering research programs are located on the medical campus, not the engineering campus, since clinical practice severely limits time availability of physicians and other medical professionals. This means that the logical site of any such possible expansion is Chicago, especially since it offers easy access to additional medical campuses at the University of Chicago, Northwestern, Loyola and Rush.

3. The TU report does not mention that a vibrant and NIH supported physician-engineer training program exists at UIC, and it fails to note significant successes of the UIC College of Engineering in biomedical engineering research as well as its many links to UI Health. Biomedical Engineering research and training of physician-scientists and physician-engineers has been an integral part of the UIC College of Medicine (COM) for the past half century. These activities have been strengthened over the past 3 years with the formal realignment of the Department of Bioengineering at UIC to be jointly operated by both the Colleges of Engineering and Medicine, which actually brings the department back to its roots, as it was originally founded in 1965 as a graduate program jointly operated between the UI College of Medicine and the UICC College of Engineering. UIC Engineering also has established partnerships and in some cases existing NIH funding with Nursing, Public Health, and Dentistry.

Given the facts above, we believe that the best way to achieve the goals stated in the TU report is to establish a new entity in Chicago that can foster integration of Health Sciences and Engineering. Initiated in 2009 at the same time as realignment of Bioengineering, a plan was established to create a cross-departmental and cross-college “Biomedical Engineering Institute (BEI)” at UIC, that would facilitate and grow biomedical engineering research and teaching collaborations that already exist at UIC between faculty working in several different colleges. This was to be established at the same time that the Department of Bioengineering was realigned in 2011; but limited resources have delayed that implementation. Specifically, in early drafts of the plan to realign Bioengineering, it was stated that: “The Department of Bioengineering will be realigned to be a joint effort under both Engineering and Medicine, and concurrently a new interdisciplinary Biomedical Engineering Institute will be created to stimulate bioengineering and related research between Engineering, Medicine, Pharmacy, Dentistry and Public Health.” In later drafts, due to limited resources, it was stated that: “Although not proposed at this time, in the future we may revisit the idea of a campus center or institute in the area of Biomedical Engineering.”

The TU report mentions the new Digital Manufacturing and Design Innovation Institute (DMDII), awarded to UI Labs. DMDII is indeed an important potential driver for technology development and economic growth as well as possible resource for further integration of technology into health sciences. UI Labs, and DMDII, are located on the Goose Island in Chicago, and are a model for public-private partnership. A Biomedical Engineering Institute (BEI) located in Chicago could potentially follow a similar model and leverage the know-how and the significant investment of the University of Illinois into the UI Labs.
The TU report can also serve as one of multiple reference sources as we formulate the structure of the Institute at UIC. We can also look at best practices at other top universities that have developed Biomedical Engineering institutes, centers and programs. One such best practice for the University of Illinois would be for the proposed BEI to encompass faculty at both UIC and UIUC. A precedent for such activity was the joint campus research program operated under the Vice President for Research from 2000-2005, but again cancelled due to limited resources. This might leverage engineering, biomedical, veterinary and medical faculty on both campuses.

One possible embodiment for the BEI could include – like the Beckman Institute in Urbana – a new research facility in Chicago on the medical campus, or at least in the Illinois Medical District, where approved projects could be begun and proof of concept and translational studies could be initiated. This new Chicago-based institute could collaborate closely with or even be an extension of the Beckman Institute. It could be a UI system-wide institute dedicated to the convergence of engineering and medicine in both research and education. Its exact organizational structure could follow best practices of similar institutes at other top-ranked medical schools, which are described below. Its initial membership may be comprised of faculty at UIC or UIUC that have active collaborations spanning Health Sciences and Engineering or Applied Sciences. A diagram indicating the relative participation of faculty at UIC and outside UIC in collaborations with the Bioengineering faculty is illustrated in Figure 4 below.

Summary

- Biomedical engineering research and physician-engineer training should be priorities for the UI System due to their large potential economic impact. A new Biomedical Engineering Institute in Chicago is the best way to leverage UI strengths towards this goal.
- While UIUC has a nationally ranked Engineering school, UIC has nationally ranked programs in Health Sciences, and a rich history of cross-campus collaborations between Health Sciences and UIC Engineering. The realigned UIC Bioengineering Department which is jointly operated by Colleges of Medicine and Engineering is the most recent and highly successful manifestation of such a collaboration.
- UIC has a prominent and visible NIH funded physician-engineer training program which should be a model used for any future expansion.
- The organizational structure of the new Biomedical Engineering Institute should be chosen to break the barriers for collaborations between campuses and between disciplines.

Figure 4: UIC Bioengineering: Jointly in the Colleges of Medicine and Engineering
4. ESTABLISHING A SUCCESSFUL MD/PHD PROGRAM

As The Tripp Umbach report justified the proposed new medical enterprise on the basis of an imminent nationwide physician shortage and a desire to attract additional federal biomedical research funding, an analysis was performed on the requirements for additional physicians and the availability of federal research funds. In addition, training of physicians for implementation of cutting-edge current and future technology is addressed by outlining the training opportunities currently available within the UIC College of Medicine, which could be expanded more efficiently than creating a new medical school entity.

The physician shortfall

The United States is currently experiencing a significant shortage of physicians. This shortage is projected to worsen in the coming years because millions of Americans will now have access to health insurance via the Affordable Care Act (ACA) and can afford to regularly see physicians for general health maintenance as well as treatment of acute and chronic diseases that were previously untreated. A recent article published by the leadership of the Association of American Medical Colleges [1] estimates that by 2020, the U.S. will face a shortfall of 45,400 primary care doctors and 46,100 medical specialists unless special measures are taken to ensure additional training of physicians in the US. One of the solutions is to build new medical schools, but as Kirch and colleagues point out [1], an even more effective measure would be to increase opportunities for medical school graduates to enter residency programs because the lack of post-graduate training positions is the most significant bottleneck. Successful completion of a post-graduate residency program is a requirement for certification to practice medicine.

During the past year, 40,394 medical school graduates (those who graduated from US medical schools as well as those who had completed their medical school training in other countries) registered with the NRMP (National Resident Matching Program), but only 25,687 applicants successfully matched into the training programs (http://www.nrmp.org/wp-content/uploads/2014/03/2014-National-Resident-Matching-Program-NRMP-Main-Residency-Match-Results-Press-Release.pdf). This means that thousands of physicians who had either completed their medical school in the U.S. or graduates from international medical schools who completed all U.S. eligibility requirements were left without a residency slot. Without completing a U.S. residency, these physicians will not be able to practice medicine and thus cannot contribute to the physician workforce. The main reason for the high number of unmatched applicants is that American residency programs are funded by Medicare and the U.S. Congress enacted a “freeze” on the size of residency training programs in 1997[2]. It is unlikely that building more U.S. medical schools is going to solve the problem of physician shortfall, because once the students graduate from medical school, they will still have to compete for the same number of residency slots.

The most efficient route to addressing the physician short-fall is to increase funding for post-graduate medical training opportunities. Since it is unlikely that Congress will reverse the Medicare “freeze” on residency slots in the near future, sponsorship for such slots by either academic hospitals, foundation or private industry is necessary to pay for the stipends of the trainees. Examples of privately funded training opportunities are already commonplace for advanced training of physicians such as clinical subspecialty fellowships or research fellowships, but private funding of basic residency training is still comparatively rare and offers a great opportunity to rapidly alleviate the severe physician shortfall in the US.

Reduced federal funding for biomedical research

The lack of adequate U.S. government funding for medical residency training is not the only funding crisis in the biomedical enterprise. An equally devastating problem is the diminishing government support for biomedical research. The White House budget for 2015 has not restored the pre-sequester funding levels for the National Institutes of Health (NIH). In fact, current NIH funding is so tight that only 10-20% of biomedical research grant applications are being funded. Researchers now spend an inordinate amount of time rewriting and resubmitting grant applications, hoping that revised grant applications might be funded during subsequent
submission cycles [3]. Since many universities nowadays require faculty and research staff to pay for their salaries from research grants, receiving grant funding has become essential for researchers to ensure a steady paycheck.

Physician scientists are especially vulnerable to diminishing NIH support, because they have to compete for NIH funding with non-physician scientists who can fully devote all their efforts to submitting and re-submitting grant applications. Physician scientists, on the other hand, have to juggle the demands of their clinical work and patient care with the necessity of extensive grant writing. This is a major problem for MD/PhD graduates who were not offered appropriate post-graduate mentoring in their residency and fellowship training that would help them maximize their success for receiving NIH funding. Therefore, the low levels of NIH funding have forced many physician scientists to shut down their research laboratories because they can no longer afford to pay their research staff.

Personalized medicine in the 21st century

One of the central themes of medical advancement in the 21st century is the emergence of personalized and contextualized medicine. Novel technologies such as the increasingly affordable sequencing of an individual’s genome and the engineering of high throughput drug testing platforms have provided an unprecedented insight into the biological diversity between humans and how differences in the genome, proteome or even microbiome can affect how distinct patients respond to medical therapies. We are only witnessing the beginning of a medical revolution spear-headed by cutting edge science and engineering, but we are already struggling to understand how we can translate the enormous amount of personalized biomedical data into clinical practice.

While advances in biomedical technology are one key pillar of personalized medicine, we have also become aware of the fact that the socioeconomic and cultural context of an individual patient can have a significant bearing on the prevention, development and treatment of diseases. The American society of the future is projected to become even more urban and more diverse which means that the physicians of the future need to be trained in a manner that allows them to seamlessly treat patients hailing from varied cultural and socioeconomic contexts. Hispanic Americans will undergo the biggest demographic shift in the near future. The US Census bureau estimates that 17% of Americans were of Hispanic origin in 2012, and that by 2060, 31% of Americans will have Hispanic roots. Personalized medicine of the future needs to take this increasing diversity into account, and therefore the development and implementation of novel biomedical technologies should ideally take place in an environment that represents the demographic future of the US. It is noteworthy that the city of Chicago with its diverse urban population represents the ideal environment to train physicians of the future.

Meeting the challenge: Personalized medical education and patient care at UIC

We need to ensure that physicians-in-training learn how to seamlessly transition between delivering high-quality personalized care and also participate in the development or implementation of novel biomedical technologies. At UIC, we believe that the key to this is personalizing medical education to the needs of our medical students and trainees. If we expect the physicians of the future to deliver personalized care, then we need to tailor their medical training in a fashion that allows them to maximally utilize their potential. One such approach is the creation of “pathways” that allow individual trainees to choose how they can best participate in the advancement of patient care.

1. Investigator Pathway

The “Investigator Pathway” is ideally suited for physician scientists who want to dedicate most of their future career to biomedical research and developing novel technologies. Most trainees entering this pathway will likely opt for a 7-8 year combined MD/PhD degree in which they will acquire the basic medical and scientific skills to embark on a physician scientist career. UIC has a successful NIH-funded Medical Scientist Training Program (MSTP) in place that provides students with the support and resources to earn a MD/PhD in a variety of subject areas through collaborative interactions with the Colleges of Medicine, Pharmacy, Public Health, and Engineering. However, their long-term success as physician scientists will strongly depend on their ability to develop post-graduate expertise in niche areas of biomedical research and technology, either in an academic
laboratory or in the biotechnology and pharmaceutical industry. Trainees in the postgraduate “**Investigator Pathway**” will complete all the requirements of postgraduate clinical training to qualify for specialty or subspecialty certification, but will also work closely with established investigators for at least 2-3 years in a research setting. The individualized mentoring by established investigators will help the trainees not only acquire advanced scientific expertise but also learn key grant writing skills (*academic investigator track*) or marketability of developed products (*industry investigator track*) so that they will be highly competitive when they graduate. Such individualized mentoring will ensure long-term success even in an environment of limited research funding. Some departments or sections at the UIC COM such as the Department of Medicine already offer such mentored Investigator Pathways, but this program could potentially be expanded to all departments.

2. **Translational Pathway**

We recognize that many physicians are highly talented in terms of understanding and using biomedical technology but do not want to invest the extraordinary amount of time required to become a successful independent investigator (7-8 years for initial MD/PHD degree and 5-7- years of postgraduate training in an **“Investigator Pathway”** = 12-15 years of medical and scientific training).

We propose the development of shorter 1-2 year tracks which allow medical students, residents, fellows or even senior physicians to acquire focused biomedical technology skills so that they can easily translate novel biomedical technologies into clinical practice. Examples of such tracks could include training in how to optimally apply personalized genomics or microbiome testing in a clinically meaningful manner or how to develop focused software apps and social media platform to improve communication with patients, training in engineering innovation, user-driven design of medical products, and related engineering design tools, such as 3D printing, and intellectual property issues.

UIC and UIUC already offer a number of combined degree programs allowing medical students to enroll in Masters programs or Masters certificates for such focused training. However, the existing training opportunities could be readily expanded to better integrate cutting-edge science and engineering research into postgraduate medical education (residency/fellowship). Few institutions in the US have recognized the critical importance of postgraduate science and engineering training for physicians. The fact that UIC and UIUC have a proven track record of offering combined degrees, and that UIC has already developed selected postgraduate physician-scientist training programs suggests that a comprehensive University of Illinois physician training program covering the basic sciences, clinical sciences and engineering application is feasible. The comprehensive nature of such a program that provides individualized graduate and post-graduate training of physician-scientists and physician-engineers would be unique in the United States; but it would guarantee that physicians trained at the University of Illinois will continue to be at the forefront of developing and implementing novel biomedical technologies which are likely to have a major impact on patient care in the near future.

References

I was surprised to see that this was what they circulated, since it obviously had not been proofread.

Hope you have a chance to relax this weekend and enjoy your family.

hugs
Joyce

Joyce Tolliver

On Jul 11, 2014, at 23:14, Jorge Villegas <jvillegas@utexas.edu> wrote:

Hi Joyce

It's always a pleasure to drive to Urbana and see again the great people that live there.

Thanks for the report. I just wanted to make sure that I didn't have an earlier draft but it's the same one.

Thanks

Jorge

Jorge Villegas

On Jul 11, 2014, at 9:39 PM, Joyce Tolliver <jtomliver@uiuc.edu> wrote:

Hi Jorge,

I'm so glad you drove to Urbana for the meeting--it was a bonus to get to have a little social time with you and some other friends. You are so dedicated to spend the extra hours driving back and forth!

Here's the report. I hope there is only one!

cheers
Joyce

On Fri, Jul 11, 2014 at 7:32 PM, Jorge Villegas <jvillegas@utexas.edu> wrote:

Hi Joyce

I'm back in beautiful Springfield!
First of all, thanks for treating us our drinks and snack.

Would you mind sending me the UIC report? I want to make sure we have the same document.

Thanks.

Jorge Villegas

--

Joyce Tolliver

<UIC Senate Task Force Response Tripp Umbach Report on UIUC medical School 7_8_14-1 copy.pdf>
Phyllis, thanks for sharing this information. I think it's wonderful that Phil Sharp was one of the leaders of this program, and I trust he will be a great ally and resource.

I think it may be helpful to Urbana faculty to know about the Harvard-MIT program and how what we will be doing will be different from it. If there is any data easily available about where their grads are now, it will build a stronger case, I think.

Fingers crossed that all goes well tomorrow.

Joyce

On Sun, Jul 20, 2014 at 10:19 PM, Phyllis Wise wrote:
Dear Joyce,

We are very familiar with this program since one of the leaders is our own Phil Sharp, a graduate of our Department of Chemistry and winner of a Nobel Prize. You may remember we gave him an honorary degree this year. When he was here for graduation, we asked him to meet with a small group of faculty who have been working on our COM to give his opinion of what we were trying to do and give us advice. He described the MD/PhD program shared by Harvard and MIT. He never mentioned that graduates were unable to get jobs and I have never heard of this problem with any other MD/PhD program. I will have to learn more.

I have invited Phil to serve on my Strategic Advisory Board and am supposed to talk with him tomorrow to try to convince him to join this small group of advisors. So your email is very timely. I will ask him about the issue.

Thanks again for alerting me to this,
Phyllis

Sent from my iPad

> On Jul 20, 2014, at 3:23 PM, Joyce Tolliver wrote:
> Hi Phyllis,
> This weekend, a colleague mentioned to me the program in Health Sciences and Technology sponsored by Harvard & MIT. He stated that they graduate 25 students a year that they cannot place, and the clear implication is that there is no perceived need for such programs.
> It occurs to me that it would be worthwhile to find out more about this program and to investigate what their graduates end up doing, if possible. I think it would help us to better contextualize our own plans. If appropriate, a comparison to this program might strengthen the proposal.
>
> Hope you've had a chance to breathe this weekend!
> Joyce
> --
> Joyce Tolliver
>
>

--
Joyce Tolliver
Paul,

This is great. I am sure it will make him feel totally in the loop.

See you tomorrow.
Phyllis

Sent from my iPad

On Jul 27, 2014, at 11:02 PM, Paul Umbach <Pumbach@trippumbach.com> wrote:

Thanks for being a GREAT teammate and friend. 😊

Paul O. Umbach
Founder and President
Tripp Umbach
2359 Railroad St. #3701
Pittsburgh, PA 15222
Corporate Headquarters: 412.281.2313
Cell Number: [redacted]
Fax Number: 412.281.9946
www.trippumbach.com

“Turning ideas into action for 25 years”

From: Paul Umbach
Sent: Sunday, July 27, 2014 11:14 PM
To: James.Leonard@Carle.com
Subject: Project Update -- a few things I want you to know
Importance: High

Dear Jim:

I look forward to seeing you tomorrow at the project executive meeting. Now that the draft business plan has been completed we are beginning the important process of gathering input from all of the working groups and finalizing the plan.

Here are a few updates:

1. I have a phone call scheduled with [redacted] on Friday the 11th – because of vacation schedules on his end this is the earliest that he was available. I plan on emailing him before the phone call with the following points: 1) We see [redacted] as an important partner in research and education activities, 2) However, politically it is difficult (if not dangerous) to reference involvement in the official documents while planning of this new school as it will sound off
alarms with UIC supporters, and 3) After we gain approval in September, there will be more proactive engagement with Carle and the University of Illinois Urbana-Champaign. I believe that an email with key points and a follow-up phone call is the best to reinforce our points.

2. I want to reassure you about a few things with the status of the governance – 1) Our feasibility study was clear that a separate 501 c 3 model would be the best way to move forward. I had great success with this model at Commonwealth Medical College in Scranton and also recently with a Medical School in Las Cruces, New Mexico. Here are three issue that cause my feasibility study recommendation to morph into what we have currently: 1) The university had a “MUST HAVE” to issue the degree – the universities in Scranton were fine with creating a new school (founding authority) to give a brand new degree from a grand new school – The Commonwealth Medical College – not the University of Scranton. 2) The time and effort to create a new school pushes the timetable back up to an year and 3) Folks we interviewed from Carillion in Roanoke, VA said that they had a hard time getting a new “partnership school” up and running.

3. While I liked the original idea of a separate organization, the multiple committee and work group members and the multiple lawyers believe all of the control and partnership needs for Carle can be addressed in the MOU between Carle and University. I continue to want the name of the school to be the University of Illinois Carle School of Medicine – regardless of who gives the degree. The bottom line is that the control of clinical education, research, hiring the dean and developing the curriculum will be a true partnership between the university and Carle.

I will be more closely connected over the next two months am scheduled for all of the upcoming meetings (including tomorrow) and am always available to meet one on one if you want to talk more in person – or anytime by phone. I hope this email helps as we move forward. Thanks for your confidence.

Sincerely,

Paul

Paul O. Umbach
Founder and President
Tripp Umbach
2359 Railroad St. #3701
Pittsburgh, PA 15222
Corporate Headquarters: 412.281.2313
Cell Number: 412.281.2313
Fax Number: 412.281.9946
www.trippumbach.com

“Turning ideas into action for 25 years”
Thanks for outlining this. Good solutions. Trying to pack right now...see you tomorrow.

Sent from my iPad

On Jul 28, 2014, at 10:02 PM, Paul Umbach <PUmback@trippmumbach.com> wrote:

Hi friend. I was waiting to hear from you before sending him an invitation – so I agree that he should be invited to future private meetings. Here are three key things that I want to discuss tomorrow morning:

1. Need to have the university rules followed with faculty committees in an advisory capacity to the partnership with the Dean reporting to the two partners and having input and advisement from a faculty committee (with faculty coming from both parties – with Dr. like Jim being represented on the faculty committee). I’ll explain more.

2. I want the class size to grow from 25 to 50 as FAST as possible – which will require the phase out of the scholars program with a concomitant increase in students from the new school. SO, Carle will be training 50 students all along – with the numbers for the new school growing from 25, 35, 40, 50 as the number of UIC students degreasers over the same years. Major breakthrough with Carle today on this topic.

3. We need to NEVER show a budget with red for every year. Solution? Have Carle and the University pledge ongoing operating money – Carle at $2.5 million and University at $1 million. Or whatever! We just need to have money in the budget to make the numbers turn from red to black.

See you tomorrow. Don’t worry!!!

Paul

Paul O. Umbach
Founder and President
Tripp Umbach
2359 Railroad St. #3701
Pittsburgh, PA 15222
Corporate Headquarters: 412.281.2313
Cell Number: [redacted]
Fax Number: 412.281.9946
www.trippumbach.com

“Turning ideas into action for 25 years”

From: Phyllis Wise [mailto: [redacted]]
Sent: Monday, July 28, 2014 10:37 PM
To: Paul Umbach
Subject: Re: now for the rest of the story...
Thanks Paul for the explanation. I am just now getting around to emails so I hope you went ahead and invited Jim. If not, we can invite him to our next coffee. See you at 7.

Phyllis

On Monday, July 28, 2014 9:48 AM, Paul Umbach <PUmbach@trippumbach.com> wrote:

Hi Phyllis:

I had a long talk this morning with my team (remember that Ha and Beth have both been my sisters and teammates for more than 22 years so there are no secrets and complete trust). Here are two points that are important to keep in mind: 1) ________ 2) Do you want to invite Jim to our private coffee time? It might be good to bring him under our tent if I is available. The invitation from you (or me) would be powerful in its own right if or if not he is available.

I so appreciate your help in helping clarify this with your team. Thanks again my friend.

Paul O. Umbach
Founder and President
Tripp Umbach
2359 Railroad St. #3701
Pittsburgh, PA 15222
Corporate Headquarters: 412.281.2313
Cell Number: _______________________
Fax Number: 412.281.9946
www.trippumbach.com

“Turning ideas into action for 25 years”
From: Phyllis Wise
Sent: Monday, July 28, 2014 10:17 PM
To: Lykins, Greg
Subject: Re: Thank you!

Thank you so much, Greg, for forwarding Bob's email. I'd really like to talk with you to learn more about your sense of where he is. Peter told me that Bob really could not articulate the essence of what we are trying to do, and neither could he. I am trying to write a simple 2-pager with key FAQs and will send it to all of you as soon as it is ready.

I am going to Princeton tomorrow for the Robert Wood Johnson board meeting. I'll try to call you on my way to the airport or during my layover in Chicago. Today was just crazy...

I just wrote to Paul and [redacted] to see whether there are any weekends when they will be in town later this summer or in the fall that might work for dinner for them, you and [redacted] and the Stephen's and us. Let's keep our fingers crossed that all the stars will align.

Thanks again for everything,
Phyllis

Sent from my iPad

On Jul 28, 2014, at 9:47 PM, "Lykins, Greg" <Gregory.Lykins@busey.com> wrote:

fyi...

Sent from my iPad

Begin forwarded message:

From: "Easter, Robert A" <reaster@uillinois.edu>
Date: July 28, 2014 at 8:55:00 PM CDT
To: "Lykins, Greg" <Gregory.Lykins@busey.com>
Cc: "Meyer, Chris" <emeyer@oktocom.com>, Rick Stephens <rick@investres.net>, Peter Fox <peterf@fox-companies.com>, James Leonard <James.Leonard@Carle.com>, "Clements, Vicki" <vclement@uillinois.edu>
Subject: Re: Thank you!

Greg, thanks to you and your colleagues for taking time to meet with me. I know that you each are incredibly busy and would not have made the commitment were you not supportive of the proposal. You have each made very real and often unheralded contributions to Champaign-Urbana.

I appreciate your willingness to have a frank and open discussion. I am committed to a decision that will be in the best interest of our University. The outcome, whatever form it may take, must address the needs of the UIUC faculty and facilitate local economic development.
Bob

Sent from my iPad
Robert A. Easter, Ph.D.
President, University of Illinois

506 S. Wright Street 1737 West Polk Street
Urbana, Illinois 61801 Chicago, Illinois 60612
(217)333-3070 (312)413-8301
FAX (217)333-3072 FAX (312)413-8301
E-mail: reaster@uillinois.edu

On Jul 26, 2014, at 12:11 PM, "Lykins, Greg" <Gregory.Lykins@busey.com>
wrote:

Good Morning President Easter,

I know I speak for our small group, we greatly appreciate the
special time and attention you granted to us yesterday
afternoon. You are a very talented and effective leader. The U of
I, community and all of the constituencies are very fortunate you
have been willing to serve our great institution.

We especially appreciate your candor and wisdom as you and
others develop the appropriate course for the special dream of a
remarkable medical school. Certainly, we are passionate
supporters of the U of I and the C-U communities, but most
importantly, this "project" needs to be designed for long term
success. We now appreciate more than before the many facets of
the decision process to develop this concept.

Please feel free to call on or involve us in any way throughout the
process.

All the best,

Greg

Sent from my iPad
The information contained in this e-mail is privileged and
confidential. Unless otherwise indicated or obvious from the
message, this is intended only for the individual(s) listed above.
The information contained in this e-mail is privileged and confidential. Unless otherwise indicated or obvious from the message, this is intended only for the individual(s) listed above. Please see our Privacy Notices at http://www.busey.com.
Dear Senators:

I hope you are enjoying the summer. It is turning out to be somewhat eventful for the Senate Executive Committee (SEC.) As chair, I report that at the 7/22 SEC meeting Chancellor Phyllis Wise and Provost Ilesanmi Adesida presented a Concept Proposal for an Autonomous College of Medicine on the Urbana Champaign Campus in Partnership with Carle Health System. The Concept Proposal is outlined below. The SEC briefly discussed the proposal and the meeting finished with the following motion:

Motion from the 7/22 SEC meeting.

Aminmansour made a motion that the SEC offer its enthusiastic support to the Chancellor and Provost to further explore the possibility of the establishment of a separately accredited College of Medicine at the University of Illinois at Urbana-Champaign, and encourage the Chancellor and Provost to move forward with the process of review and present a proposal to the Senate as expeditiously as possible. The motion was seconded and approved unanimously.

I am looking forward with interest to the discussions of this proposal in the Senate this fall!
Roy

As Chancellor and Provost, we propose to establish a Liaison Committee on Medical Education (LCME)-accredited College of Medicine (COM) at the University of Illinois at Urbana-Champaign in partnership with Carle Health System. It will be the first COM in the world expressly focused at the intersection of engineering, technology, big data and healthcare. One of society's greatest challenges is to provide more people with greater
access to better healthcare at lower cost. The U.S. healthcare system is undergoing historic changes driven by an aging population with more chronic conditions, an influx of millions of new people into the healthcare system due to the Affordable Care Act, and a severe physician shortage.

The University of Illinois at Urbana-Champaign is uniquely positioned to leverage our strengths in engineering, technology, and big data and apply these to healthcare. We will leverage these strengths to lead the transformation of health care research, education, practice, and delivery. The proposed COM will allow us to provide unparalleled medical education that will train physician-scientists, physician-discoverers, physician-inventors, and practicing physicians who will produce innovations in preventive care, diagnosis, treatment, therapies, and cures.

In partnership with Carle Health System, we propose to:

- Develop an independently-accredited College of Medicine in full partnership with the Carle Health System.
- Ensure that the College of Medicine has the flexibility to develop and expand multiple relationships with other health care, education and industry partners.
- Ensure that the new College of Medicine complements, synergizes, and creates new opportunities for collaboration with the UIC College of Medicine.
- Establish a COM that will confer a degree from the University of Illinois at Urbana-Champaign.

While it is clear that the College of Engineering will benefit from having a fully accredited COM, other colleges that teach and perform research in biomedical-related areas (LAS, CVM, AHS, ACES, SSW) will also benefit. In addition, we believe that a COM will increase the impact, visibility, respect, and rankings for our campus. This in turn will enhance our ability to attract and retain outstanding faculty, staff, and students across the campus with expertise and interests in all disciplines.

Next steps: We have working committees consisting of faculty and staff who are currently working on the governance structure, a financial model that ensures that we will not request additional general revenue funding from the state or redistribution of funds within the campus, and a curriculum that infuses principles of engineering, technology, and big data into all years of medical education. We are seeking input from all campus deans and unit executive officers who can benefit from the proposed College of Medicine; our preliminary investigations suggest broad campus support for this endeavor. Members of the Academic Senate are participating in all of the committees. We will present a proposal for approval to the Academic Senate, Educational Policy Committee, the University of Illinois Board of Trustees, the Illinois Board of Higher Education, and the Carle Board of Trustees. We will seek accreditation
from the Liaison Committee on Medical Education (LCME). Our goal is to accept the first class in 2017.

The window of opportunity to be leaders in this arena will not last long. We must act now since other institutions are attempting to bring together engineering and medicine. Our advantage is that we can leverage our unique deep and broad strengths in engineering and apply them to the medical enterprise.

Roy Campbell
Sohaib and Sara Abbasi Professor of Computer Science
Siebel Center
201 N Goodwin Av, Urbana, IL 61801-2302
Tel 217-333-0215 Email rhc@illinois.edu
Title: Concept Proposal for an Autonomous College of Medicine on the Urbana-Champaign Campus in Partnership with Carle Health System

To: Senate Executive Committee (SEC) of the Academic Senate at the University of Illinois at Urbana-Champaign

From: Chancellor Phyllis Wise and Provost Ileansmi Adesida

Date: July 22, 2014

As Chancellor and Provost, we propose to establish a Liaison Committee on Medical Education (LCME)-accredited College of Medicine (COM) at the University of Illinois at Urbana-Champaign in partnership with Carle Health System. It will be the first COM in the world expressly focused at the intersection of engineering, technology, big data and healthcare.

One of society’s greatest challenges is to provide more people with greater access to better healthcare at lower cost. The U.S. healthcare system is undergoing historic changes driven by an aging population with more chronic conditions, an influx of millions of new people into the healthcare system due to the Affordable Care Act, and a severe physician shortage.

The University of Illinois at Urbana-Champaign is uniquely positioned to leverage our strengths in engineering, technology, and big data and apply these to healthcare. We will leverage these strengths to lead the transformation of health care research, education, practice, and delivery. The proposed COM will allow us to provide unparalleled medical education that will train physician-scientists, physician-discoverers, physician-inventors, and practicing physicians who will produce innovations in preventive care, diagnosis, treatment, therapies, and cures.

In partnership with Carle Health System, we propose to:

- Develop an independently-accredited College of Medicine in full partnership with the Carle Health System.
- Ensure that the College of Medicine has the flexibility to develop and expand multiple relationships with other health care, education and industry partners.
- Ensure that the new College of Medicine complements, synergizes, and creates new opportunities for collaboration with the UIC College of Medicine.
- Establish a COM that will confer a degree from the University of Illinois at Urbana-Champaign.

While it is clear that the College of Engineering will benefit from having a fully accredited COM, other colleges that teach and perform research in biomedical-related areas (LAS, CVM, AHS, ACES, SSW) will also benefit. In addition, we believe that a COM will increase the impact, visibility, respect, and rankings for our campus. This in turn will enhance our ability to attract and retain outstanding faculty, staff, and students across the campus with expertise and interests in all disciplines.

Next steps: We have working committees consisting of faculty and staff who are currently working on the governance structure, a financial model that ensures that we will not request additional general
revenue funding from the state or redistribution of funds within the campus, and a curriculum that infuses principles of engineering, technology, and big data into all years of medical education. We are seeking input from all campus deans and unit executive officers who can benefit from the proposed College of Medicine; our preliminary investigations suggest broad campus support for this endeavor. Members of the Academic Senate are participating in all of the committees. We will present a proposal for approval to the Academic Senate, Educational Policy Committee, the University of Illinois Board of Trustees, the Illinois Board of Higher Education, and the Carle Board of Trustees. We will seek accreditation from the Liaison Committee on Medical Education (LCME). Our goal is to accept the first class in 2017.

The window of opportunity to be leaders in this arena will not last long. We must act now since other institutions are attempting to bring together engineering and medicine. Our advantage is that we can leverage our unique deep and broad strengths in engineering and apply them to the medical enterprise.
Phyllis,

We will need to unbutton our fighting gloves also. They are fighting for the future of UIC; we are fighting for the future of UIUC. Trying to constrain one for the other is no use! It will really hamper the growth and eminence of COE and UIUC. We need to line up our Senate members to get in the ring if Don decides to unbar his fangs as the USC Chair! Please talk to Tim.

I will talk to Jennifer Woodard about our Law School. What she can help us with is to drum up high profile candidates. I will talk to her.

Thanks.

Ade

On Thu, Jul 31, 2014 at 9:00 AM, Phyllis Wise wrote:

Ade,

I had a very disturbing phone conversation with Jennifer Woodard last night. I'll tell you more when we have a chance to talk over the phone or in person. But the essence is that he believes that I am evil and that Dimitri will save all of us. I am sure he is talking with CK. He plans on using his platform at the USC to veto our COM. I/we need to figure out what I need to do, if anything, to get another audience with CK. I am going to warn Tim Koritz about what could happen at the BoT if Dimitri comes out fighting and lines up people behind him.

I never thought it would get this ugly.

Phyllis

PS Jennifer also reminded me that she wants to help with the Law School. I hope you will confer with her when you get home. She is knowledgable in this area and we need to show her that we recognize her value.

Sent from my iPad
From: Nick Burbules <[REDACTED]>
Sent: Friday, August 01, 2014 7:48 AM
To: Phyllis M Wise
Cc: Jtolliver; Ilesanmi Adesida
Subject: Re: time to get together to talk?

Ok with me. Thanks!

On Fri, Aug 1, 2014 at 7:34 AM, Phyllis M Wise <[REDACTED]> wrote:

Joyce, Nick, and Ade,

We'll find another time after Aug 13. I'll check with Ade's calendar and get back to you.

Enjoy your vacation, Joyce. I'm visiting [REDACTED] next week. Summer is going quickly!

Phyllis

Sent from my iPhone

On Aug 1, 2014, at 6:41 AM, Jtolliver <[REDACTED]> wrote:

Good morning, all,

I'm more than happy to meet, but I'm afraid Aug. 12 won't work for me--I'll be on vacation with [REDACTED] (leaving Aug. 6). I return the evening of Aug. 13. If there is any time we can all meet either before about 10AM on Aug. 6 or after Aug. 13, great; but I will understand if you go ahead without me.

best
Joyce

Joyce Tolliver

On Aug 1, 2014, at 6:27, Nick Burbules <[REDACTED]> wrote:

Thanks Phyllis,

No problem.

On Fri, Aug 1, 2014 at 6:16 AM, Phyllis Wise <[REDACTED]> wrote:

Nick,

Please hold this time on your calendar until we hear from Joyce. Thanks so much. I hadn't heard the term ABC - that's a great marketing acronym!
Phyllis

Sent from my iPad

On Aug 1, 2014, at 6:04 AM, Nick Burbules wrote:

Hi Phyllis, Ade,

I can meet that morning. ABC is fine with me.

Nick

On Thu, Jul 31, 2014 at 11:13 PM, Phyllis Wise wrote:

Dear Nick and Joyce,

Ade and I wonder whether you have time to get together to talk about a few important issues so that we can seek your advice. We would like to propose breakfast and one morning that we are both free is Tuesday, August 12 from 7:30-9am. We thought about the I Hotel, but I don't think they serve breakfast any longer. So I thought about the Atlantic Bread Company on Neil Street - but we are open to ideas. If this date does not work for you, we'll check further on our calendars and get back to you with other alternatives.

Thanks so much,
Phyllis

P.S. Joyce, I promised that I would not invade your time during this semester/year when you are supposed to be allowed to concentrate on your scholarship. And we promptly put you on COM committees and continue to ask you to meet with us at additional times...Not very fair. Truly, we would understand if you don't have time for this. We cannot continue to count on just a few faculty!
I appreciate this, Phyllis.

I hope you also have a chance to unwind a bit with family next week, and recharge. As you say, the academic year is almost upon us!

By the way, I'm really grateful for your sensitivity to my research needs at this moment. I've turned down quite a few committee requests in the past months to protect my time, but I will always make time for you and for the truly crucial governance issues, like the C of M.

On Fri, Aug 1, 2014 at 7:34 AM, Phyllis M Wise wrote:

Joyce, Nick, and Ade,

We'll find another time after Aug 13. I'll check with Ade's calendar and get back to you.

Enjoy your vacation, Joyce. I'm visiting [redacted] next week. Summer is going quickly!

Phyllis

Sent from my iPhone

On Aug 1, 2014, at 6:41 AM, Jtolliver wrote:

Good morning, all,

I'm more than happy to meet, but I'm afraid Aug. 12 won't work for me--I'll be on vacation with [redacted] (leaving Aug. 6). I return the evening of Aug. 13. If there is any time we can all meet either before about 10AM on Aug. 6 or after Aug. 13, great; but I will understand if you go ahead without me.

best

Joyce

Joyce Tolliver

On Aug 1, 2014, at 6:27, Nick Burbules wrote:

Thanks Phyllis,

No problem.
On Fri, Aug 1, 2014 at 6:16 AM, Phyllis Wise wrote:

Nick,

Please hold this time on your calendar until we hear from Joyce. Thanks so much. I hadn't heard the term ABC - that's a great marketing acronym!

Phyllis

Sent from my iPad

On Aug 1, 2014, at 6:04 AM, Nick Burbules wrote:

Hi Phyllis, Ade,

I can meet that morning. ABC is fine with me.

Nick

On Thu, Jul 31, 2014 at 11:13 PM, Phyllis Wise wrote:

Dear Nick and Joyce,

Ade and I wonder whether you have time to get together to talk about a few important issues so that we can seek your advice. We would like to propose breakfast and one morning that we are both free is Tuesday, August 12 from 7:30-9am. We thought about the I Hotel, but I don't think they serve breakfast any longer. So I thought about the Atlantic Bread Company on Neil Street - but we are open to ideas. If this date does not work for you, we'll check further on our calendars and get back to you with other alternatives.

Thanks so much,
Phyllis

P.S. Joyce, I promised that I would not invade your time during this semester/year when you are supposed to be allowed to concentrate on your scholarship. And we promptly put you on COM committees and continue to ask you to meet with us at additional times... Not very fair. Truly, we would understand if you don't have time for this. We cannot continue to count on just a few faculty!
--
Joyce Tolliver
Dear Phyllis,

This is so helpful! Honestly, our conversations always remind me how much fun it is to work on something important with a leader (you) who has both a vision and the will to move it forward!

I will work on the section about Chicago and the underserved. It will be essential for some of our constituents - as we have discussed. I will try to get language to you by Saturday. I am jammed today.

Will keep you posted re developments with Terry/Ed.

Warmest regards,

Jennifer

On Thu, Jul 31, 2014 at 10:29 PM, Phyllis Wise wrote:

Dear Jennifer,

I should have given you some context to the FAQs that I sent to you. Rick Stephens, Greg Lykins, Chris Meyer, Peter Fox, and Jim Leonard met with Bob Easter last week and they came away thinking that Bob was supportive, and that he appreciated hearing support from people who were outside the university. Bob said that he thought it would be good for them to talk with the Huron consultants, who he has recruited, to help him to articulate how to present this to the BOT. They all said that they really needed talking points for that meeting - only 1-2 pages. I wrote the FAQs based upon a very dated version that Robin Kaler had written.

As I mentioned it does not call out the issue of serving the underserved. I would love you to add something on that if you have time - perhaps in the section on how Chicago and the state would benefit.

I forgot to mention on the phone that Ade said that he would call you about the Law School. He'll value your input.

It's always wonderful to talk with you - valuable, incredibly frank and open, and actually fun.

Thanks again,
Phyllis
I'll edit the draft and let you see it in tracked mode later this evening.

Normand

On Aug 3, 2014 3:13 PM, "Phyllis Wise" wrote:

Normand,

Let me try to give sketchy answers now and hope that we have time to talk about this in a couple of hours.

Thanks for asking for my advice.
Phyllis

Sent from my iPad

On Aug 3, 2014, at 11:36 AM, Normand Paquin wrote:

Phyllis,
samizdat-startups.org
I received this email from Paul Umbach with recommendations on how to close out a number of issues. I certainly welcome your input and guidance on with whom you’d like me to share this email to assist in the discussions.

Normand

Normand Paquin, PhD, MBA
Associate Director for Research
243 Coordinated Science Laboratory, MC-228
1308 West Main Street
Urbana, IL 61801
Tel: 217-244-6813
Fax: 217-244-1764
Email: paquin@illinois.edu

From: Paul Umbach [mailto:PUmbach@trippumbach.com]
Sent: Sunday, August 03, 2014 11:00 AM
To: Stephanie.Beever (Stephanie.Beever@carle.com); Paquin, Normand
Cc: Beth Paul; Ha Pham
Subject: Draft Recommendations for the Partnership -- for Discussion by Leadership at both Institutions
Importance: High

Dear Stephanie and Normand:

We are very close to having a winning plan for establishing a truly transformational medical school through a partnership with your two organizations. As we discussed earlier last week, the following email reflects my recommendations on four critical issues (doors that need to be closed) to insure that the final business plan has the best chance for success and support from multiple internal and external audiences.
The four key issues are: 1) Role of Faculty Executive Committee within the governance structure, 2) Class size, 3) Funding commitments from both organizations, and 4) Naming. Here are our recommendations for discussion with the leadership from both of your teams:
I hope that this is helpful at this critical point in the project. Thank you for reviewing our recommendation with your teams and giving me your input. After I receive your input (hopefully by Tuesday morning) – I will send an updated memo with formal recommendations to Phyllis and Jim and schedule a conference call. The plan is to have closure on all four of these points prior to the second draft of the business plan and prior to our face to face meetings on the 11th of August.

Thanks again for your support of our team as we move forward.

Paul

Paul O. Umbach
Founder and President
Tripp Umbach
2359 Railroad St. #3701
Pittsburgh, PA 15222
Corporate Headquarters: 412.281.2313
Cell Number: 
Fax Number: 412.281.9946
www.trippumbach.com

“Turning ideas into action for 25 years”
Phyllis,

Please find attached email text for Paul to consider. I have edited the text in tracked mode and the changes are relatively modest in scale.

I hope you will have the time to review and make further edits as you see fit. If you would like to consult others, please feel free to do so.

Ideally, I would like to respond to Paul's email as soon as possible and copy Stephanie on it so she can use the modified text in her discussion with Jim.

Normand

Dr. Normand Paquin
Skype: normand_paquin
Tel: [number]

On Sun, Aug 3, 2014 at 3:13 PM, Phyllis Wise <[redacted]> wrote:

Normand,

Let me try to give sketchy answers now and hope that we have time to talk about this in a couple of hours.
Thanks for asking for my advice.
Phyllis

Sent from my iPad


Phyllis,

I received this email from Paul Umbach with recommendations on how to close out a number of issues. I certainly welcome your input and guidance on with whom you’d like me to share this email to assist in the discussions.

Normand

Normand Paquin, PhD, MBA
Associate Director for Research
243 Coordinated Science Laboratory, MC-228
1308 West Main Street
Urbana, IL 61801
Tel: 217-244-6813
Fax: 217-244-1764
Email: paquin@illinois.edu

From: Paul Umbach [mailto:PUmbach@trippumbach.com]
Sent: Sunday, August 03, 2014 11:00 AM
To: Stephanie.Beever (Stephanie.Beever@carle.com); Paquin, Normand
Cc: Beth Paul; Ha Pham
Subject: Draft Recommendations for the Partnership – for Discussion by Leadership at both Institutions
Importance: High

Dear Stephanie and Normand:
We are very close to having a winning plan for establishing a truly transformational medical school through a partnership with your two organizations. As we discussed earlier last week, the following email reflects my recommendations on four critical issues (doors that need to be closed) to insure that the final business plan has the best chance for success and support from multiple internal and external audiences.

The four key issues are: 1) Role of Faculty Executive Committee within the governance structure, 2) Class size, 3) Funding commitments from both organizations, and 4) Naming. Here are our recommendations for discussion with the leadership from both of your teams:
I hope that this is helpful at this critical point in the project. Thank you for reviewing our recommendation with your teams and giving me your input. After I receive your input (hopefully by Tuesday morning) – I will send an updated memo with formal recommendations to Phyllis and Jim and schedule a conference call. The plan is to have closure on all four of these points prior to the second draft of the business plan and prior to our face to face meetings on the 11th of August.

Thanks again for your support of our team as we move forward.

Paul

---

**Paul O. Umbach**  
*Founder and President*  
Tripp Umbach  
2359 Railroad St. #3701  
Pittsburgh, PA 15222  
Corporate Headquarters: 412.281.2313  
Cell Number: [Redacted]  
Fax Number: 412.281.9946  
www.trippumbach.com

“Turning ideas into action for 25 years”
On Sunday, August 3, 2014 10:14 PM, Normand Paquin wrote:

Phyllis,

Please find attached email text for Paul to consider. I have edited the text in tracked mode and the changes are relatively modest in scale.

I hope you will have the time to review and make further edits as you see fit. If you would like to consult others, please feel free to do so.

Ideally, I would like to respond to Paul's email as soon as possible and copy Stephanie on it so she can use the modified text in her discussion with Jim.

Normand

On Sun, Aug 3, 2014 at 3:13 PM, Phyllis Wise wrote:
Normand
Let me try to give sketchy answers now and hope that we have time to talk about this in a couple of hours.

Thanks for asking for my advice.
Phyllis

Sent from my iPad


Phyllis,

I received this email from Paul Umbach with recommendations on how to close out a number of issues. I certainly welcome your input and guidance on with whom you’d like me to share this email to assist in the discussions.

Normand
Dear Stephanie and Normand:

We are very close to having a winning plan for establishing a truly transformational medical school through a partnership with your two organizations. As we discussed earlier last week, the following email reflects my recommendations on four critical issues (doors that need to be closed) to insure that the final business plan has the best chance for success and support from multiple internal and external audiences.

The four key issues are: 1) Role of Faculty Executive Committee within the governance structure, 2) Class size, 3) Funding commitments from both organizations, and 4) Naming. Here are our recommendations for discussion with the leadership from both of your teams:
I hope that this is helpful at this critical point in the project. Thank you for reviewing our recommendation with your teams and giving me your input. After I receive your input (hopefully by Tuesday morning) – I will send an updated memo with formal recommendations to Phyllis and Jim and schedule a conference call. The plan is to have closure on all four of these points prior to the second draft of the business plan and prior to our face to face meetings on the 11th of August.

Thanks again for your support of our team as we move forward.

Paul

Paul O. Umbach
Founder and President
Tripp Umbach
2359 Railroad St. #3701
Pittsburgh, PA 15222
Corporate Headquarters: 412.281.2313
Cell Number: [redacted]
Fax Number: 412.281.9946
www.trippumbach.com

“Turning ideas into action for 25 years”
Phyllis,

I made it so that all edits and comments are coming from me. I also added a comment to better explain smoothing of approach on class size ramp up.

Thank you,
Normand

Dr. Normand Paquin
Skype: normand_paquin
Tel.

---------- Forwarded message ----------

From: Normand Paquin <normand_paquin@samizdat-startups.org>
Date: Mon, Aug 4, 2014 at 8:47 AM
Subject: Draft email suggestions
To: Paul Umbach <pumbach@trippumbach.com>
Cc: Stephanie Beever <Stephanie.Beever@carle.com>, "Ha T. Pham" <hpham@trippumbach.com>, Beth Paul <BPaul@trippumbach.com>

Paul,

Please find attached suggested edits and comments on the draft email you sent yesterday (I ported to word so I could use the tracking function). I'm copying Stephanie so she is right up to date with my thinking. I kept comments to a minimum but I am happy to discuss further if need be. I would look the group telecon in any case.

Thank you for putting the original draft together.

Normand

Dr. Normand Paquin
Skype: normand_paquin
Tel.
From: Phyllis M Wise <phyllis_m_wise@uiuc.edu>
Sent: Thursday, August 07, 2014 3:19 PM
To: Normand Paquin
Subject: Re: Important topic for discussion and clarification

If you can give me about 15 minutes to get home and out of this car with other people, I can call you.

Sent from my iPhone

On Aug 7, 2014, at 4:10 PM, Normand Paquin < phyllis_m_wise@uiuc.edu > wrote:

I'm free now and in my office.

Normand

Dr. Normand Paquin
Skype: normand_pquin
Tel: 773-273-7730

On Thu, Aug 7, 2014 at 3:05 PM, Phyllis M Wise < phyllis_m_wise@uiuc.edu > wrote:

When are you free for a phone call? I am free until about 6PM eastern time.

Sent from my iPhone

On Aug 7, 2014, at 3:58 PM, Normand Paquin < phyllis_m_wise@uiuc.edu > wrote:

Phyllis,

Mike D. and I just found out that you will be talking to Jim Leonard tomorrow. We agreed that it was worth alerting you to the fact that it became evident to us last Tuesday that the Carle financial leads have been looking at the budget and our respective contributions very differently than we had assumed. I have already set up a meeting with you Tuesday morning to fully brief you on this matter with Vicky and Molly. The implications are significant.

We think it would be important to simply indicate to Jim when you speak to him tomorrow that our team have indicated there may be an important issue to resolve here and that you will be more fully briefed on Tuesday next week. Both of you should plan on discussing this when you get together on the 20th.

Happy to discuss this over the phone if you think you need more information ahead of your call to Jim.

Normand

samizdat-startups.org [UIUC release of "supplemental" COM emails] PAGE 273 OF 773.
work is 217-244-6813
Cell is [redacted]
Home is 217-351-7899

Dr. Normand Paquin
Skype: normand_paquin
Tel [redacted]
Perfect timing! I have a call with him (rescheduled by his office a million times) for 12:30 tomorrow. I will be in Chicago when I place the call. I went ahead and sent him an email which I will forward to you as I was so stressed about not being able to set a phone call. I am sorry for the delay as I know it is important to you and Jim that [redacted] and I talk. Call tonight if you want to catch up my dear.

Bye for now.

Paul

Paul O. Umbach
Founder and President
Tripp Umbach
2359 Railroad St. #3701
Pittsburgh, PA 15222
Corporate Headquarters: 412.281.2313
Cell Number: [redacted]
Fax Number: 412.281.9946
www.trippumbach.com

"Turning ideas into action for 25 years"

-----Original Message-----
From: Phyllis Wise [mailto:]
Sent: Sunday, August 10, 2014 10:06 AM
To: Paul Umbach
Subject: How did your meeting with [redacted] go?

Paul,

I am meeting with [redacted] tomorrow afternoon. Would you please let me know how your meeting with him went so that I am prepared for mine.

Thanks,
Phyllis

Sent from my iPad
Dear Jim and Phyllis:

Here is an email that I sent last week to [redacted]. We have been going back and forth for two weeks about a time to talk as his office keeps cancelling - so I went ahead with this pro-active email. I am planning to talk with him tomorrow at 12:30 pm. I will give both of you a full update on my call (wish I had Laura with me to take perfect notes, but I will do my best 😊).

Thanks.

Paul O. Umbach  
Founder and President  
Tripp Umbach  
2359 Railroad St. #3701  
Pittsburgh, PA 15222  
Corporate Headquarters: 412.281.2313  
Cell Number: [redacted]  
Fax Number: 412.281.9946  
www.trippumbach.com

"Turning ideas into action for 25 years"

From: Paul Umbach  
Sent: Wednesday, August 06, 2014 10:33 PM  
To: [redacted]  
Subject: Looking forward to our call on Friday about new medical school at UIUC / Carle  
Importance: High

Dear [redacted],

I am looking forward to talking with you on Friday to share important information on how [redacted] can be an important partner in the development of a highly specialized medical school.

I am very sorry that I have not contacted you over the past six months as ANY outreach from my firm to your hospital (outside of the tour we received of [redacted]) would have compromised our position as “not doing any harm” to the existing University of Illinois School of Medicine at Chicago. I am reaching out to you on my Tripp Umbach email as the freedom of information act applies to all emails that include representatives from the university.

Sadly, UIC leadership is strongly opposed to a new separately accredited medical school at Urbana Champaign. The existing medical school views your hospital system as a CRITICAL clinical partner. Attached for your review is the feasibility study that my firm conducted earlier this year. For political reasons, we were unable to recommend a more formal relationship with [redacted] and recommended that initially the partnership be with Carle – a much less threatening
This being said, we plan on engaging your hospital as soon as the political smoke clears – specifically after the board of trustees of the university provides approval in November. I know of your hospital, as we complete a small physician engagement survey about 15 years ago. Our firm serves approximately 1,000 hospital and university clients in every state – in fact, I have used your hospital for benchmarking on many occasions and see you as a model regionally focused exceptionally strong comprehensive healthcare provider. I can also share that the leadership at both the University in Urbana and Carle Health System are interested in your participation – especially on the research side as you have made significant contributions which I toured.

I hope this email is helpful as we prepare for our call on Friday morning.

Sincerely,

Paul

Paul O. Umbach
Founder and President
Tripp Umbach
2359 Railroad St. #3701
Pittsburgh, PA 15222
Corporate Headquarters: 412.281.2313
Cell Number: [blank]
Fax Number: 412.281.9946
www.trippumbach.com

“Turning ideas into action for 25 years”
Evaluating the Feasibility of a New College of Medicine in Urbana-Champaign

Analysis and Recommendations

Final Report

Prepared By:

TrippUmbach

Research • Strategy • Impact
# Table of Contents

INTRODUCTION .............................................................................................................................................. 3

PROJECT OVERVIEW ....................................................................................................................................... 3

CONSULTANT SUMMARY ............................................................................................................................... 6

RECOMMENDATION #1 ........................................................................................................................................ 6

RECOMMENDATION #2 ........................................................................................................................................ 11

RECOMMENDATION #3 ....................................................................................................................................... 14

RECOMMENDATION #4 ....................................................................................................................................... 16

RECOMMENDATION #5 ....................................................................................................................................... 17

RECOMMENDATION #6 ....................................................................................................................................... 18

VALUE OF A NEW ENGINEERING- AND TECHNOLOGY-BASED COLLEGE OF MEDICINE FOR THE STATE OF ILLINOIS.. .................................................................................................................................................................... 20

SUPPORT FOR RECOMMENDATIONS .................................................................................................................. 26

KEY FINDING #1 ............................................................................................................................................... 26

KEY FINDING #2 ............................................................................................................................................... 30

KEY FINDING #3 ............................................................................................................................................... 31

KEY FINDING #4 ............................................................................................................................................... 33

KEY FINDING #5 ............................................................................................................................................... 35

CONSIDERATION OF OTHER OPTIONS ........................................................................................................... 44

CONCLUSIONS .................................................................................................................................................. 48

APPENDIX A: INTERVIEWEE LIST ....................................................................................................................... 51

APPENDIX B: EXAMPLES OF BIOTECHNOLOGY SPINOFFS .................................................................................. 56

APPENDIX C: TRIPP UMBACH QUALIFICATIONS ................................................................................................. 58
I. INTRODUCTION

In January 2014, Tripp Umbach was retained jointly by the Carle Health System and the University of Illinois Foundation to conduct a feasibility assessment to identify the costs, opportunities, and benefits of establishing a four-year medical education program at the University of Illinois at Urbana-Champaign.

This report includes key findings and recommendations for the most feasible college of medicine program. This study allows leaders at the Carle Health System and the University of Illinois at Urbana-Champaign, as well as regional and state government, education, health care, industry, and economic development partners, to better understand the costs and benefits associated with the development of a four-year college of medicine on the flagship campus of the state’s largest public research university.

II. PROJECT OVERVIEW

This study was developed by Tripp Umbach, with active engagement by the Carle Health System and the University of Illinois at Urbana-Champaign, to meet the following objectives:

- Explore the advantages and disadvantages, as well as the cost and benefits of developing various medical school models.

- Conduct an analysis of the clinical and educational capacity of the Carle Health System and the University of Illinois at Urbana-Champaign, as well as other institutions statewide, to develop a new medical school.

- Develop a feasibility study report document to allow the Carle Health System and the University of Illinois to make an informed decision regarding the implementation of a medical education and research program in Urbana-Champaign.
potential college of medicine in Urbana-Champaign and the associated fundraising implications.

- Develop an assessment of the potential economic impact of the “most feasible” college of medicine, profiling the multiple economic benefits associated with the operations of a new college of medicine, as well as clinical, research, and commercial spinoff activities on the Urbana-Champaign region and the state of Illinois.

The health care industry is undergoing transformative change due to many factors, including unsustainable increases in costs, an aging patient and physician population, a primary care provider shortage, and the need to shift from a medical education and health care delivery system focused on providing episodic care to one designed to prevent and manage disease. The future of health care requires that patients, providers, academic institutions, community organizations, and industry work together in innovative ways to provide high-quality care with better outcomes at lower costs.

The community of Urbana-Champaign is unique in its ability to address these challenges. It contains not only a leading research-based university, but also a high-quality, fully integrated health care delivery and financing system. The University of Illinois at Urbana-Champaign and the Carle Health System recognize the potential to leverage this advantage to shape the future of health care through the development of a medical education enterprise.

To determine the feasibility of various options for this development, these organizations retained the services of Tripp Umbach, a Pittsburgh-based consulting firm. Tripp Umbach is the national leader in conducting feasibility analysis and economic impact studies for academic medical campuses and for new or expanded medical schools. Tripp Umbach has provided consultation and analysis services to almost every new or expanded medical school over the past 10 years, and has completed individual studies for more than 75 academic medical centers. Since 1995, Tripp Umbach has completed national studies measuring the economic impact of 130 medical schools and more than 400 teaching hospitals for the Association of American Medical Colleges (AAMC). Tripp Umbach’s extensive experience makes the firm the most qualified to assess the feasibility and economic impact of a new college of medicine.

To determine the feasibility of a new medical enterprise in Urbana-Champaign, Tripp Umbach conducted interviews with leaders throughout Illinois, including stakeholders representing higher education, health care, industry, and government. More than 40 individuals from over a dozen entities were engaged. Interviews were conducted not only in Urbana-Champaign, but also in Peoria and Chicago. Detailed listings of the individuals and organizations are listed in Appendix A.
Incorporating findings from these interviews, Tripp Umbach analyzed the feasibility of three specific models of medical education development, including the development of a specialized engineering-based college of medicine in Urbana-Champaign through a corporate structure created by the Carle Health System and the University of Illinois at Urbana-Champaign, the development of a new college of medicine through stronger alignment with UIC College of Medicine, and the development of a larger regional college of medicine with partner hospital systems in both Urbana-Champaign and Peoria. These models are described in greater detail in Section V of this report.

The most critical success factor in the development of a new college of medicine is the presence of motivated project leaders who believe that the new college of medicine will benefit existing academic institutions, health care providers, community residents, and the economic development of the region. Additional factors necessary for successful development include engaged faculty and clinicians interested in teaching and research, facilities and resources to provide education and scholarship opportunities, the ability to provide the appropriate breadth and depth of clinical experiences to students, and the financial support to start the new school and sustain operations in a manner which satisfies the accrediting body of allopathic medical schools in the United States, the Liaison Committee on Medical Education (LCME).

During the 1980s and 1990s, no new medical schools were developed in the United States. In 2006, growing concern over physician shortages led the Association of American Medical Colleges (AAMC) to issue a policy statement calling for a 30 percent increase in medical school enrollment. Since then, 15 new medical schools have been established, and more are in development. Notably, four new medical schools (Hofstra North Shore-LIJ, Oakland William Beaumont, Virginia Tech Carilion, and University of South Carolina-Greenville) have recently been established as a result of a partnership between an existing university and a major health system. Each of the health systems already had extensive experience providing both undergraduate and graduate medical education. This factor helped address one of the most difficult challenges faced by new medical schools—the ability to provide the appropriate breadth and depth of clinical experiences.

Based upon Tripp Umbach’s extensive experience with the development of new medical schools, its feasibility analysis of a new college of medicine enterprise in Urbana-Champaign, and the recognition of universal support among key stakeholders, Tripp Umbach believes that the model outlined in the following report provides the best opportunity to change the way health care is delivered throughout Illinois and the nation. Most importantly, the existing strengths of the University of Illinois at Urbana-Champaign and the Carle Health System, as well as the two partners’ collaborative energy and dedication to the transformation of health care, are significant indicators of the long-term success of the proposed medical enterprise.
CONSULTANT SUMMARY

Tripp Umbach recommends the development of a specialized engineering-based college of medicine in Urbana-Champaign through a corporate structure created by the Carle Health System and the University of Illinois at Urbana-Champaign. This specialized engineering-based college of medicine would ideally admit its first students in the fall of 2017, and would aim to revolutionize the delivery of health care through the integration of advanced technology, transform the quality and efficiency of regional health care delivery, strengthen the university statewide, grow statewide bioscience economic development, and serve as an international magnet for innovation, research, and scholarship. Tripp Umbach cautions that the institutions must move quickly to implement this recommended program to advance Carle Health System as a premier national health care leader and to allow the University of Illinois to maintain its position as an international leader in engineering and other technology-based research.

Recommendation #1: Develop an independently-accredited college of medicine through a private governance structure.

After completing a comprehensive review of options outlined below in this report, Tripp Umbach recommends that the Carle Health System and the University of Illinois at Urbana-Champaign form a private organization to serve as the foundation for an independently-accredited research, technology, and engineering-focused four-year college of medicine at the University of Illinois at Urbana-Champaign, with the Carle Health System and the University of Illinois at Urbana-Champaign serving as equal partners in teaching, research, clinical education, and commercialization of new discoveries. Students of the new school will graduate with a degree awarded by the University of Illinois at Urbana-Champaign, but governance of the school will be achieved through a partnership between Carle Health System and the University of Illinois at Urbana-Champaign.

Tripp Umbach recognizes that these two organizations already partner on multiple levels and have exceptional opportunities to expand clinical translational research and to continue their strong partnership in medical education through a joint college of medicine. Tripp Umbach recommends that a name that incorporates both partners be established immediately to avoid confusion with the current UIC College of Medicine. This new school will replace the existing regional campus structure in which the University of Illinois Urbana-Champaign campus trains 125 M1, 25 M2, 25 M3, and 25 M4 students who receive a medical degree from the UIC College of Medicine. Tripp Umbach recommends that the new college of medicine, through a contractual relationship with the UIC College of Medicine, continue to train 100 M1 students who will complete M2 through M4 at regional
campuses in Peoria and Rockford and who will receive a medical degree from the UIC College of Medicine when they graduate.

Tripp Umbach recognizes the following strengths of the two founding partners as critical to the development of the groundbreaking new college of medicine:

- **Carle Health System** – Carle’s integrated health care system is already a model for effective and efficient health care delivery, focusing on the patient while incorporating teaching and research in its daily operations. Comprised of a 345-bed tertiary care hospital, a critical access hospital, a 380-member employed physician group practice, and a 325,000-member health plan, the Carle integrated system is designed to deliver high-quality affordable health care focused on improving health outcomes in a fiscally responsible manner for 1.5 million residents. As a fully-integrated health system, Carle has the capacity, data, and provider base to transform health care delivery. Carle’s model ensures that the continuum of primary and specialty care, whether delivered in an outpatient or inpatient setting, is built upon utilization of a system-wide electronic medical record, application of evidence-based medicine, and focus on patient safety and satisfaction and continuous quality improvement.

  - Health care systems are being developed across the country as the preferred delivery model for patient care. Utilizing a health system model that partners physicians and patients across the continuum of care improves care coordination, reduces redundant testing and increases patient satisfaction. A critical component of care coordination is optimizing the use of technology through electronic health records (EHRs) that are accessible to all providers and patients. Carle has deployed the use of an EHR system across multiple locations and services, and its patients are encouraged to engage in “e-health” services. Developing an engineering-based medical school with a partner that is a leader in implementing and using technology to coordinate care and empower patients is a unique opportunity that Carle can provide.

  - A common theme in discussions of how to improve the current health care system is maximizing data. Data fragmentation frequently occurs in health care delivery because information about patient care cost and utilization is often housed on a payor’s system and is not accessible to providers for the evaluation of cost-effective care models. By owning a robust insurance company, Carle is able to achieve what most other providers cannot – access to utilization and cost of care data. Carle’s ability to teach future physicians about data-driven decision-making and innovation based on big data will be a key asset for the new engineering-based medical program.
Because Carle Health System has a provider-owned insurance company, all components of delivering care are merged. This allows physician training to occur in an environment where physician, patient, and payors’ incentives are aligned to provide appropriate care in a manner that is efficient and cost-effective. Carle’s fully integrated health system, including the insurance company, enables flexibility across all aspects of the organization to develop compensation models that align goals for improved health outcomes, patient satisfaction, appropriate use of resources, and a full continuum of care. Furthermore, Carle’s insurance company data can be used to support the cost-effectiveness of evidence-based team patient care.

Complementing Carle’s approach to the delivery of medical care is Carle’s long-term commitment to medical education and research. Through its residency programs in Family Medicine, Oral and Maxillofacial Surgery, and General Surgery, and its partnership with the University of Illinois’ Internal Medicine residency program, Carle trains physicians in an integrated health care delivery system that prepares physicians for practicing medicine in a quality-driven, technologically-advanced, innovative, and efficient environment. Supporting this commitment is a robust Continuing Medical Education (CME) program for physicians, nursing education programs, and training programs for ancillary technicians.

The Carle Research Institute is focused on translating medical knowledge into practical applications for patients. Carle physicians, nurses, residents, and scientific research partners from other entities, including the University of Illinois at Urbana-Champaign, are currently engaged in 107 research studies and are working together to support numerous clinical trials to translate lab discoveries into practical applications for better patient care. Current research projects include optical medical imaging, traumatic brain injury, and genomic diagnostics in cancer. Carle’s integrated model, including clinical care teams, electronic health records, data analytics, and a health insurance company, provides a laboratory where research, education, and quality patient care combine to transform health care.

- University of Illinois at Urbana-Champaign – The University of Illinois at Urbana-Champaign is consistently ranked among the top five universities in National Science Foundation (NSF) funding. A new engineering-focused college of medicine based in Urbana-Champaign will immediately be positioned to bring new federal, corporate and foundation support into the region for innovative multidisciplinary research involving patients, scientific research, and advanced technology-driven solutions.

  The College of Engineering is among the highest ranked Colleges of Engineering in the nation and is actively engaged in engineering innovations for medicine. It is highly sought after as a
partner for pursuing the integration of engineering and medicine. For example, the Mayo Clinic has chosen the University of Illinois at Urbana-Champaign College of Engineering as its primary technology and genomics partner after a rigorous evaluation of other top engineering schools. Additionally, the top 10 United States medical schools as ranked by total federal funding from the National Institutes of Health (NIH) also have ongoing research collaborations with engineering and science faculty at the University of Illinois at Urbana-Champaign.

- The University of Illinois at Urbana-Champaign is a comprehensive research-intensive university. Thus, while the new college of medicine would be engineering-based, it will draw on new and extraordinary opportunities for collaboration with other colleges to infuse technology-based medicine in their educational and research missions. For example, the new college of medicine could partner with Applied Health Sciences to develop technology-based solutions for health care delivery for the growing elderly population. Additional partnerships could include quantitative biology and biotechnology-based collaborations with Liberal Arts and Sciences, as well as novel partnerships with Veterinary Medicine, Agriculture and Consumer and Environmental Sciences, the Division of Nutritional Sciences, and Social Work.

- The University of Illinois at Urbana-Champaign has the elements necessary not only to pursue discoveries and innovations, but also to facilitate their adoption and commercialization. Many colleges and faculty members can support the design, applied health assessments, and behavioral and social elements related to adoption of medical innovations. The University has a faculty determined to develop an innovative engineering-centric and team-centric curriculum that will transform innovation among students. The University will also be able to leverage its research park and startup ecosystem to create pipelines of biotech companies and to partner these companies with an extensive industrial biosciences network of state and national enterprises.

- The University of Illinois at Urbana-Champaign will be able to leverage excellent facilities, including the Blue Waters supercomputer and the extensive imaging facilities available at the Beckman Institute, as well as robotic, data visualization, and cybersecurity test beds found in different multidisciplinary units of the University and the College of Engineering. In addition, a major Electrical and Computer Engineering building will be completed in late 2014, and Everitt Laboratory will become fully renovated space for the Department of Bioengineering in 2015-2016. The current facilities housing the existing college of medicine are also undergoing major renovations. Finally, land exists for a future medical research campus to be created.
The University of Illinois Urbana-Champaign already has well established connections with Carle. This includes bridges established through the Division of Biomedical Sciences, the Mills Breast Cancer Institute, the Carle Neuroscience Institute, and departments with faculty affiliates with well-established connections with colleagues at Carle. These provide a strong foundation for the partnership’s success.

This unique public-private medical school, organized as a private entity, has the advantage of shared governance and risk, as well as the flexibility to add multiple partners and adapt to rapid changes in health care, education, and science. The model also allows partners to avoid conflicts with the UIC College of Medicine, the state’s publicly supported college of medicine that currently trains more physicians (largely primary care physicians) than any other medical education program in the United States. As outlined in greater detail in this report, medical education and research in the State of Illinois, which has lost ground to other states over the past 15 years, will be strengthened by multiple collaborations with the new highly specialized independent college of medicine at the University of Illinois at Urbana-Champaign.

While Tripp Umbach recommends that the majority of the Board of Directors for the new college of medicine represent health care, education, civic, business, and industry leaders from the Urbana-Champaign community, in order to facilitate collaboration and coordination between the UIC College of Medicine and the new college of medicine, Tripp Umbach also recommends that the Board of Directors for the new independent college of medicine include the Vice Chancellor for Health Affairs and Dean of Medicine of the University of Illinois at Chicago College of Medicine. Other Director positions should include a dean of an existing “aspirational peer” medical school and a representative from the Chicago business community.
Recommendation #2: Ensure that the new college of medicine is built on an innovative engineering- and diverse team-centered curriculum and housed within a unique educational and translational science facility that leverages the collective strengths of the founding partner institutions.

Tripp Umbach recommends that the new college opens in the fall of 2017 with 25 students in the initial class and grows to 50 students per class within the first six years of operations. Many of these medical students are expected to also be enrolled in PhD programs in majors such as bioengineering, material science engineering, electrical and computer engineering, computer science, molecular and cellular biology, biochemistry, and other quantitative life sciences. Numerous opportunities for additional joint degrees will be possible. The new college of medicine will be the first in the nation to differentiate itself based upon collaboration between medicine, engineering, technology, and quantitative sciences, providing it with an immediate competitive advantage over existing national and international schools of medicine. While similar university and health system models are being developed in Austin, Texas, Roanoke, Virginia, and Greenville, South Carolina, none of these new medical school projects have the degree of integration that is possible in the recommended model. Further, the University of Illinois at Urbana-Champaign, a member of the American Association of Universities (AAU), is a stronger research university than either the University of South Carolina or Virginia Tech, and Carle provides an integrated health care delivery model that is not available in any of the aforementioned markets.

Tripp Umbach believes that a small, highly specialized medical school, developed through a public-private partnership between the University of Illinois at Urbana-Champaign and the Carle Health System, is preferable to a traditional, clinically-focused, multi-hospital distributed training model focused on meeting physician workforce needs. The development of a highly innovative curriculum, which prepares physicians trained in critical thinking, analytical approaches, and the ability to deliver appropriate care in an inter-professional, patient-centered environment with ready access to the next generation of sensors, data mining tools, materials, imaging, genomics, and robotics, will produce physician-scientist and physician-engineer leaders who will train future community-based-physicians who graduate from other medical schools, including the UIC College of Medicine, throughout the United States and internationally.

Tripp Umbach recommends that the curriculum for the new college of medicine build upon the University of Illinois at Urbana-Champaign campus’ top-rated engineering- and science-based research programs to train physician-engineers and physician-scientists engaged in biomedical research that fully integrates state-of-the-art and future technological innovations in the curriculum to ultimately improve care and outcomes. The curriculum will include inter-professional training and practice interfaces with colleges and schools on Urbana-Champaign campus and with multiple partner educational institutions throughout the region, state and nation. It is
recommended that this new college of medicine be a leader in team-based education and service delivery. The commercialization of the college of medicine’s innovations will be an economic development engine for the state of Illinois as faculty and graduates of this new program will be likely to start locally based biotechnology companies which provide jobs and other economic benefits. Additionally, the new school should benefit from its investment in intellectual property developed by faculty at the new college of medicine. A portion of new revenue generated through school and faculty contracts with third-parties, licensing, and consulting will be reinvested to strengthen the new college of medicine.

The University of Illinois at Urbana-Champaign College of Engineering has already contributed major advances in biomedical engineering. Current research poised to revolutionize primary and surgical care includes:

- Flexible silicon semiconductors to monitor body functions
- Biodegradable electronics technology for use in medical implants
- Mobile phone-based portable diagnostics
- Advanced real-time high resolution imaging during surgery
- Handheld systems for detection of infections
- Biological soft micro-robotics for drug screening and chemical analysis

The new college of medicine will leverage these existing strengths to train physicians with clinical experience to collaborate effectively with engineers, computer scientists, lawyers, business leaders and other professions. This collaboration will enable effective research and facilitate the application of trans-disciplinary theory to attack diseases that have the greatest impact on health status and cost of care, including cancer, cardiovascular disease, and neurodevelopmental and neurodegenerative diseases.

Physicians graduating from the new school will launch their future residencies, research, and clinical careers with new strengths in quantitative methods, engineering, and technological platforms, as well as strong biological and clinical backgrounds.

Tripp Umbach recommends that the new college of medicine evolve over time as the anchor of an interdisciplinary, research-intensive medical campus, with medical students engaged in self-directed dual-degree programs in engineering and other programs that may be developed or expanded in the future. A medical education facility, including advanced technology, rich inter-disciplinary research labs, incubation space for start-up companies, and a state-of-the-art simulation center, will be needed eventually. While built to accommodate 50 medical students in each class, this science and engineering-based facility will have spaces that promote inter-disciplinary and inter-professional education, research translation, and commercial application – within a unique, industry-changing facility.

_Evaluation of a New College of Medicine Prepared by Tripp Umbach on behalf of Carle Health System and University of Illinois at Urbana-Champaign_
New Model of Medical Education:
- New curriculum incorporating engineering principles & technologies
- Doctors trained in data synthesis techniques & new technologies
- Doctors involved in medical innovations

Key Outcomes:
- Higher quality care
- Personalized medicine
- Better care decisions
- Patient-empowered care
- More efficient health care delivery

Core Capabilities
- Comprehensive basic and health sciences
- Leading biomedical research
- National leader in supercomputing
- Top-ranked Engineering College

Key Differentiator & Foundation

Telemedicine Health Care
Precision medicine
Recommendation #3: Expand the capacity within the two partners to ensure long-term sustainability of the new medical school.

Medical Education Enhancements

While a business plan will be developed in 2014 and application for accreditation by the Liaison Committee on Medical Education (LCME) will be finalized in 2015, Tripp Umbach recommends the following hiring plan for the new college of medicine:

- The new college of medicine should begin in 2015 with the recruitment of a founding dean, who must be a nationally recognized leader in engineering and science-driven medicine.
- In 2016, the founding dean will lead efforts to recruit and/or retain five assistant professors, five full professors, 20 clinical research faculty, and 20 clinical teaching faculty, to teach students and conduct research in collaboration with clinical partners at the Carle Health System and educational partners throughout the University of Illinois at Urbana-Champaign, especially the College of Engineering. In addition, Tripp Umbach recommends that the new college of medicine secure 12 additional staff members to provide accreditation, fundraising, administrative, and student support, as well as services related to finances and student admissions.

Clinical Education Enhancements

Planning for a successful new college of medicine in Urbana-Champaign will require the development of new training sites and a commitment to the highest quality clerkships and residencies for students. In addition to Carle Health System’s four high-quality residency programs, Tripp Umbach recommends that the new college of medicine expand clinical training capacity for undergraduate and graduate medical students, residents, and fellows through the development of funds and effort policies to support Carle Health System physicians for increased commitments to research and teaching. Currently, Carle Health System provides approximately 63 percent of all clerkships to Urbana-Champaign-based medical students, as indicated below, and it is recommended that the new college of medicine continue to have an open faculty model to encourage physicians and health care providers from other facilities and groups to participate in the teaching of medical students: (Table 1)
Table 1: Clerkship Experiences 2008 to 2013

<table>
<thead>
<tr>
<th>Site</th>
<th>Number Clerkship Experiences</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carle Foundation Hospital</td>
<td>738</td>
<td>0.57</td>
</tr>
<tr>
<td>Presence Urbana</td>
<td>198</td>
<td>0.15</td>
</tr>
<tr>
<td>Presence Urbana/VA</td>
<td>51</td>
<td>0.04</td>
</tr>
<tr>
<td>Carle/VA</td>
<td>40</td>
<td>0.03</td>
</tr>
<tr>
<td>Christie (all sites)</td>
<td>24</td>
<td>0.02</td>
</tr>
<tr>
<td>VA</td>
<td>23</td>
<td>0.02</td>
</tr>
<tr>
<td>Carle/Presence Urbana</td>
<td>20</td>
<td>0.02</td>
</tr>
<tr>
<td>Private Offices C-U</td>
<td>17</td>
<td>0.01</td>
</tr>
<tr>
<td>Carle/Christie</td>
<td>11</td>
<td>0.01</td>
</tr>
<tr>
<td>Bloomington Bromenn/Carle</td>
<td>7</td>
<td>0.01</td>
</tr>
<tr>
<td>Danville Presence</td>
<td>7</td>
<td>0.01</td>
</tr>
<tr>
<td>Pavilion</td>
<td>6</td>
<td>0.00</td>
</tr>
<tr>
<td>Carle/Danville Presence</td>
<td>5</td>
<td>0.00</td>
</tr>
<tr>
<td>Bloomington Bromenn</td>
<td>4</td>
<td>0.00</td>
</tr>
<tr>
<td>Philo Clinic private</td>
<td>4</td>
<td>0.00</td>
</tr>
<tr>
<td>Frances Nelson</td>
<td>4</td>
<td>0.00</td>
</tr>
<tr>
<td>Christie/Presence Urbana</td>
<td>3</td>
<td>0.00</td>
</tr>
<tr>
<td>Bloomington Bromenn/Christie</td>
<td>2</td>
<td>0.00</td>
</tr>
<tr>
<td>Danville/Bloomington Bromenn</td>
<td>2</td>
<td>0.00</td>
</tr>
<tr>
<td>Gibson City</td>
<td>2</td>
<td>0.00</td>
</tr>
<tr>
<td>Carle/Frances Nelson</td>
<td>1</td>
<td>0.00</td>
</tr>
<tr>
<td>Monticello Kirby</td>
<td>1</td>
<td>0.00</td>
</tr>
<tr>
<td>Paxton</td>
<td>1</td>
<td>0.00</td>
</tr>
<tr>
<td>Other Medical Schools</td>
<td>134</td>
<td>0.10</td>
</tr>
</tbody>
</table>

Tripp Umbach also recommends that a compensation and effort deployment model be developed at the Carle Health System to recognize and reward physician faculty for their increased efforts in teaching and new research collaborations anticipated with the creation of the new medical school. The development of methods to support physicians in their academic efforts through dedicated time for research and training is imperative for the college of medicine model to be successful. In return for this investment, the new college of medicine will attract high-quality physicians seeking clinical and/or research positions at the University of Illinois at Urbana-Champaign and the Carle Health System. It is also important that faculty from the University of Illinois at Urbana-Champaign be encouraged and supported as they engage in joint research with physicians and other providers at Carle Health System.
Graduate Medical Education Expansion

The new college of medicine’s ultimate success is related to its ability to develop a regional Graduate Medical Education Consortium that would augment the Carle Health System by engaging additional hospitals and community physician and provider groups statewide, to expand the residency training opportunities available in the Urbana-Champaign region for college of medicine graduates. It is important to note that the overall goal of the new college of medicine is to produce practicing physician-scientists, and each graduate of the new college of medicine will need to complete an accredited graduate medical education (residency) program. Partnerships with other large established teaching hospitals in the State of Illinois are imperative for clinical education, as support for expanded GME offerings may require resources outside the current Carle Health System. Therefore, the final business plan must include a plan to address the need for additional graduate medical education opportunities for graduates of the new medical school.

Recommendation #4: Ensure that the new college of medicine has the flexibility to develop and expand multiple relationships with other health care, education, and industry partners nationally and internationally for the benefit of strengthening the founding partners and the economic impact to the state of Illinois.

The model recommended within this report identifies two founding partners. However, successful schools of medicine nationwide have capitalized on relationships with external health care and industry organizations to ensure their teaching, research, and patient care goals are met. Therefore, in addition to the University of Illinois at Urbana-Champaign and the Carle Health System, Tripp Umbach recommends a focused effort on engaging others in the community, region, and nation (such as the Mayo Clinic) to be involved in meeting the goals of the college. An example of a current relationship that demonstrates the interest external organizations have in each of the founding partners is the partnership between the Mayo Clinic and the University of Illinois at Urbana-Champaign. The Mayo Clinic designated the University of Illinois at Urbana-Champaign as its primary technology and genomics partner after a rigorous evaluation of other top engineering schools. Likewise, Carle Health System has demonstrated its ability to provide care and training for niche patient populations through its clinical care and teaching relationships with the Children’s Hospital of Illinois. Further, the collaborative model of medical education and leveraging relationships outlined in this report will have the greatest potential to attract research revenue from the National Institutes of Health (NIH), other federal agencies, corporations, and foundations, especially in light of recent prioritization of team-based research. The University of Illinois at Urbana-Champaign is consistently among the top five universities in National Science Foundation (NSF) funding,
but ranks in the mid-70s in NIH funding. A new engineering-focused, collaborative college of medicine based in Urbana-Champaign will bring new federal dollars into the region and the state.

**Recommendation #5:** Ensure that the new highly-specialized college of medicine does not duplicate the existing UIC College of Medicine, but instead allows for extensive collaboration with the existing college of medicine.

As mentioned above, the development of an engineering-based school of medicine provides opportunities for complementary rather than competitive learning experiences for future physicians in the State of Illinois and provides opportunities to collaborate and expand Illinois presence in medical education and research. A key element in ensuring the success of the new school of medicine in support of the ongoing success of the existing UIC College of Medicine is to engage the University’s Vice Chancellor for Health Affairs and Dean of Medicine as members of the Board of Directors for the new medical school. Involving University of Illinois leaders across medical school programs will ensure maximum collaboration and the greatest potential to increase NIH funding opportunities for the University of Illinois.

Tripp Umbach also believes that the development of a new private college of medicine in Urbana-Champaign provides an opportunity to enhance the existing College of Medicine in Chicago. As the new school is created, the UIC College of Medicine, already training the most diversified body of future practitioners in the nation, has the opportunity to leverage new technologies, through collaborations with the proposed new college of medicine in Urbana-Campaign, to establish itself as the national leader for addressing issues related to diversity in the health care industry and the delivery of urban health care services with an emphasis on addressing the needs of minority populations.

Tripp Umbach believes that by not requesting support from state General Revenue Funds (GRF) for the new college of medicine in Urbana-Champaign, more financial support will be available for the existing UIC College of Medicine. This support will allow the existing College of Medicine to take advantage of the emerging revolution in medicine, driven in large part by engineering innovations which are already transforming the ability to deliver drugs and develop health protocols targeting specific populations. Tripp Umbach believes that the Dean and staff at the existing UIC College of Medicine are in an ideal position to develop a strong partnership with the proposed independent college of medicine to:

- Conduct clinical trials that must address the diversity of physicians and their patients.
- Adapt and tailor bioengineering innovations to urban health care needs and conditions.
○ Conduct clinical trials involving diverse populations in partnership with biotechnology start-up companies emerging from the new College of Medicine and based both in the Urbana-Champaign area and in the Chicago region.

In summary, the new independent college of medicine provides an opportunity for the existing University of Illinois Chicago College of Medicine to develop areas of strength and distinction while it pursues a broad education mandate spanning issues related to urban health, rural health, multiple locations and academic tracks, comprehensive research, and economic development both in Chicago and statewide. The partnership between the established public College of Medicine and a new engineering- and technology-focused college of medicine will allow each school to improve recruitment efforts for top students and faculty, as well as enhance philanthropic initiatives that are aligned with each school’s distinct character.

**Recommendation #6: Develop a detailed business plan that includes a sustainable funding model that does not require General Revenue Fund appropriations for medical education.**

A detailed financial model and fund development strategy is required before the college of medicine program can be implemented. Detailed analysis of income and expenses will be required in a full business plan and financial model. Tripp Umbach recommends that such a business plan and financial model be completed on or before September 2014 to meet the timetable to open the new college of medicine in the fall of 2017.

Based upon Tripp Umbach’s expertise as well as available data related to financial models for current and planned medical schools, Tripp Umbach recommends using the following broad parameters associated with a feasible new medical school:

- $75 million over five years to cover start-up costs for the new school.
- $25 million for initial facility upgrades during the start-up phase.
- A 200,000-square foot, highly-specialized college of medicine facility, costing approximately $100 million, depending on configuration and equipment, to open in 2025.
- $22 million in annual revenue to cover annual operating expenses when the school admits its first students in 2017, and $47 million in annual revenue to cover annual operating expenses when the school is fully operational in 2021.

Tripp Umbach recommends that significant resources from private sources be secured to start and grow a successful venture. In addition to the $100 million required for the start-up phase, an endowment with a corpus
of approximately $200 million to ensure the long-term viability of the enterprise is necessary, as the school will need operational funding support each year to cover a funding gap between expenses and tuition, grants, contracts, and clinical revenue. While public medical schools have taxpayers to cover funding gaps, the new college of medicine will need to develop a foundation to address the lack of public funding. It is estimated that the new school, with small class sizes and an associated PhD program, must generate approximately $8 million in additional funding annually before revenue from expanded clinical growth, expanded research, and reinvestment from commercial applications is fully realized. Additional funding will be needed from the Carle Health System, the University of Illinois at Urbana-Champaign, and external private donors to support the college of medicine program between 2021 and 2035.

Tripp Umbach recommends that the new college of medicine obtain revenue from the following sources:

- Tuition
- Grants and Contracts
- Clinical Revenue Sharing
- Philanthropy
- Commercial Revenue

It is also recommended that the financial plan include the development of a bioscience reinvestment fund created through income from a portion of earnings from the licensing of commercial applications of discoveries and the generation of incremental research revenue. These funds could be used for strategic program growth in key areas that support the mission of the new college of medicine. Recognizing that the new college of medicine is intended to enhance the national and international reputations of founding partners, external research awards and philanthropic contributions will be reported in such a way as to maximize reputational growth for each partner.
III. VALUE OF A NEW ENGINEERING- AND TECHNOLOGY-BASED COLLEGE OF MEDICINE
SCHOOL

Value to the Carle Health System and the Community it serves:

The new college of medicine will further Carle Health System’s mission of serving people through high-quality care, medical research, and education, and provides Carle with the opportunity to be the leader in transforming teaching, further integrating technology and medical research, providing team-based clinical education, and supporting its mission through commercialization of discovery. The new college of medicine will strengthen Carle’s ability to serve as a tertiary clinical provider and advance the health of the population in the region.

- A new college of medicine located in Urbana-Champaign will provide Carle Health System with significant benefits related to new expertise of providers who will deliver care to patients of the health care system. Most importantly, the new school will create an environment to train and facilitate the development of physician leaders who will drive the necessary transformation from volume-driven, reimbursement-based care to value-driven care delivered through advanced technology and collaborative teams of providers.
  - This transformation, and its impact on cost and quality, will be especially important to Carle Health System as it manages all aspects of patient care within its delivery system, including its own health insurance company.
  - The partnership between Carle Health System and the University of Illinois at Urbana-Champaign will enable the new college of medicine to integrate education, innovation and patient care to address changes in health care delivery as a result of advances in technology and societal financial constraints.

- Carle’s physician and research teams will partner with engineering experts to develop technologies that are critical for delivering high-quality and effective health care in the future. These technologies are anticipated to enhance Carle’s current practice of evidence-based medicine for improving health, and to increase access to information to improve population health through ambulatory-based preventive medicine.
  - In addition to graduating physicians who will remain in Illinois to practice, the new college of medicine will attract and retain high quality clinicians who are interested in research as well as clinical care and choose to practice in an academic health center setting that allows them to do
both. This physician workforce impact is especially important in light of projected physician shortages due to the impact of the Affordable Care Act and the aging physician and patient population.

- Working in collaboration with nurses, allied health professionals, surgical technicians, and community colleges, the new college of medicine will also have a direct impact on the creation of a multi-layered workforce.

- Carle Health System, along with the University of Illinois at Urbana-Champaign, will become a destination for health care, offering primary and specialty care similar to the type of care found in premier medical communities nationally.

- Clinical trials conducted by the new college of medicine, in addition to Carle’s existing clinical trials, will provide value to the Urbana-Champaign community, as well as an advantage to Carle Health System. These trials will position the health system as a destination for care by providing patients with access to cutting-edge treatments typically not available at non-academic health centers.

- Connection to engineering research provides opportunities for breakthrough research in medical devices, technology, clinical trials, and patient care models. The health system will offer innovative state-of-the-art care that draws national attention and enhances its reputation. Through this connection, Carle Health System will create new national best practices in clinical care and develop better preventive medicine protocols and population health management capabilities.

- Carle Health System will develop new technologies and teaching methods based on a team-based fully integrated health care model with a medical school, clinics, hospitals, and provider-owned insurance company (the only one in the state of Illinois).

- Carle Health System, along with its research partners, will be the springboard for future economic development in Urbana-Champaign and throughout the State of Illinois. These partnerships have the opportunity to launch new industries and add value to existing industries, creating high-paying jobs in health care, higher education, and related industries.

  - As a major employer in the Urbana-Champaign community, it is critical that Carle Health System maintains its ability to be a national leader in health care and to remain fiscally viable. The new college of medicine will allow Carle to continue its commitment to diversify, adapt to change, and be a strong community partner.
Value to University of Illinois at Urbana-Champaign:

- A core mission for the University is economic development. The new college of medicine is seen as important to the University’s ability to contribute to the economic development of not only the Urbana-Champaign area, but also Central Illinois, Chicagoland, and the State of Illinois. The new college of medicine will enhance the University’s ability to attract and retain faculty, research funding and conduct translational research to transform knowledge and creativity into economic growth for the state.

- The well-being and quality of life of the University will be improved through the development of the new college of medicine. A wider array of health services and cutting-edge clinical trials will improve the health care options of our employees and the larger community. Economic growth and job creation will inevitably lead to greater opportunities for dual-career couples, better transportation infrastructure, improved services, and other quality of life measures.

- A core mission of the University is education. Creating an independent college of medicine based on engineering and technology in Urbana-Champaign will provide the region with a quality academic physician training program which will address the current and future health care issues of the region and beyond.
  
  o The integration and development of innovative and cutting-edge technology will be embedded in the future of medicine through the preparation of new physician-engineers and physician scientists. It is projected that these new physicians will elevate the image and the profile of the University of Illinois on a grander scale.

  o Newly graduated physicians will be trained to understand technology and its interaction and implications within medicine. Physicians from the new college of medicine will help shape new standards of patient care and treatment methods. They will also be trained to work in multidisciplinary teams utilizing team-centric approaches that are optimized to deliver better health care in a more efficient manner to patients both locally and nationwide.

- Engineering and computational pre-eminence represents a 150-year mark of excellence for the University of Illinois at Urbana-Champaign, and the convergence of engineering and medicine dictates that the future of engineering schools will be tied to their integration with health care research and development. Co-locating the new college of medicine and the College of Engineering on the same campus will ensure the integration of engineering and technology-based health sciences and will provide the College of Engineering with a competitive advantage relative to cutting-edge research and
superior educational experiences. The location of the new college of medicine on the same campus as the College of Engineering will also attract funding resources and leverage the assets of both schools. In particular, the University will be able to capture significant research funding currently going to the top College of Medicines who are partnering with the College of Engineering.

- Close engagement with Carle physicians in integrated teams and clinical settings will expose the faculty and students to critical health care issues. This exposure will guide research and innovation toward objectives that will have maximum impact and benefit to society. Furthermore, the partnership will enable access to Carle’s comprehensive and integrated financial and clinical data, allowing extensive data analytics, knowledge management, and computational science discovery with specific application to transforming health care delivery and outcomes.

- The new college of medicine will provide an immediate competitive advantage. The private partnership with a partner equally committed to the delivery of better health care at lower costs will be unique and distinct from the start. Furthermore, the proposed partnership will provide the flexibility and nimbleness required for the partnership to respond quickly to changes to stay ahead of its academic peers.

- The new college of medicine will allow the University of Illinois at Urbana-Champaign to strengthen its competitive position among its aspirational peers. Among the University’s top 10 ranked public research university peers, UC Berkeley and the University of Texas at Austin are the only other institutions that do not have colleges of medicine. The University of Texas at Austin is in the process of acquiring a college of medicine, and UC Berkeley has strong connections to the nearby UC San Francisco and Stanford Colleges of Medicine, as well as a large and established School of Public Health, which competes effectively for NIH funding, on its campus.

**Value to UIC College of Medicine:**

- The delivery of medicine has been significantly transformed by engineering innovations and the ability to develop health protocols targeting specific populations. The UIC College of Medicine will be in an ideal position to:
  - Become the new school’s partner for clinical trials involving diverse populations and conducted by biotechnology start-up companies based in Urbana-Champaign and Chicago. These clinical trials will address the diversity of physicians and their patients.
  - Become the new school’s partner in adapting innovations to urban health care needs and conditions.
Become the new school’s partner, through its Peoria and Rockford campuses, in adapting innovations to rural health care needs and conditions.

- Increased partnership and collaborative opportunities will allow for additional NIH funding potential for the school and the state overall.

- The new college of medicine provides an opportunity to transform the state’s medical education system into two strongly defined schools, each with its own unique focus and purpose.

- The new partnership will allow for improved recruitment of top faculty and students and an associated improvement in philanthropic activities. Both efforts will contribute to the University’s mission and strategic objectives.

**Value to State of Illinois**

- The new college of medicine will provide additional federal research opportunities and development funds for the state of Illinois.

  - The new college of medicine will attract federal funding for the state of Illinois, which currently ranks 17th in the nation for the amount of federal research and development dollars received annually ($2.6 billion in 2010 according to a study by the Rand Corporation), as well as for the University of Illinois, which currently ranks 8th in the nation ($1.2 billion in 2010).

- The new college of medicine will build on the foundation established by the University of Illinois Research Park and the newly created Digital Manufacturing and Design Innovation Institute, and will therefore strengthen the development of a vital Urbana-Champaign-Chicago corridor of technology innovation as an economic development driver for the State of Illinois.

- The new college of medicine and the recently announced ARCHES partnership between OSF Healthcare and the College of Engineering at the University of Illinois at Urbana-Champaign will initiate the creation of an I-74 Medical Innovation Corridor through collaboration with health care systems in Urbana, Peoria, Champaign, Bloomington, Normal, and Danville.

  - The Corridor will be an incubator to help create high-paying jobs and make the entire region more attractive to major companies and medical technology industries.

  - The location of the new college of medicine in this Corridor offers an opportunity to apply engineering-driven innovation to transform rural health care services.
• The new college of medicine will establish itself and the State of Illinois as the national leader in medical innovation and technology.
  o The Illinois Medical District (IMD), University of Chicago, Northwestern University, UIC College of Medicine, and Loyola University, along with Chicago-based investments in technology infrastructure, have created the foundation for the state to become the national leader in medical innovation and technology. The new college of medicine in Urbana-Champaign will further solidify Illinois’ position.

• Academic medical centers are currently collaborating with the University of Illinois at Urbana-Champaign because of its engineering and technology expertise. A new college of medicine in Urbana-Champaign will allow talent and expertise to remain in Illinois.
  o Colleges of Medicine at Stanford University, Johns Hopkins University, Washington University, Duke University, and Vanderbilt University—all top 10 medical schools as ranked by the National Institutes of Health (NIH) funding—have developed ongoing research collaborations with University of Illinois at Urbana-Champaign engineering and/or science faculty. A new college of medicine will create partnerships on the same campus with University of Illinois at Urbana-Champaign faculty, keeping faculty talent and expertise in the state of Illinois.
IV. SUPPORT FOR RECOMMENDATIONS

Key Finding #1: The state of Illinois lags behind other states in academic medicine and bioscience economic development.

As part of the feasibility study, Tripp Umbach conducted an assessment of the strength of the academic medical industry, both statewide and in Chicago, compared with other states and metropolitan areas. The analysis was conducted using two national databases, both developed by Tripp Umbach on behalf of the Association of American Medical Colleges (AAMC). The two national databases include: 1) The total economic impact of all U.S. allopathic medical schools (2012) and 2) The total economic impact associated with federal biomedical research on all 50 states (2011).

These databases and comparative reports, which have been maintained and updated by Tripp Umbach and the AAMC since 1995, provide the most accurate data available for making comparisons on the size of the academic medical industry as a whole and specifically on federally-sponsored biomedical research.

State by State Academic Medical Industry Impact Rankings

While the state of Illinois ranks 7th among all states relative to the total economic impact of academic medicine, generating $28.7 billion in total economic impact in 2012 (AAMC), other states with similar populations generate a significantly higher economic impact. For example, Pennsylvania generates an annual impact of $47 billion, a 50 percent greater impact than Illinois. The economic impact of academic medicine in the smaller state of Massachusetts was $38.8 billion in 2012. The table below depicts the economic impact of academic medicine for the top 10 states. (Table 2)

Table 2: Economic, Employment, and Government Revenue Impact for AAMC Members (2012)

<table>
<thead>
<tr>
<th>States</th>
<th>Rank</th>
<th>Total Economic Impact</th>
<th>Total Employment Impact</th>
<th>Total Government Revenue Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>1</td>
<td>$74,151,538,606</td>
<td>430,743</td>
<td>$4,819,032,979</td>
</tr>
<tr>
<td>California</td>
<td>2</td>
<td>$49,201,512,761</td>
<td>264,046</td>
<td>$2,921,073,540</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>3</td>
<td>$47,033,121,373</td>
<td>272,640</td>
<td>$2,882,702,406</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>4</td>
<td>$38,760,110,682</td>
<td>195,154</td>
<td>$2,234,308,702</td>
</tr>
<tr>
<td>Texas</td>
<td>5</td>
<td>$35,825,649,773</td>
<td>228,513</td>
<td>$1,327,689,312</td>
</tr>
<tr>
<td>Ohio</td>
<td>6</td>
<td>$32,314,079,590</td>
<td>209,047</td>
<td>$1,884,550,734</td>
</tr>
<tr>
<td>Illinois</td>
<td>7</td>
<td>$28,732,944,479</td>
<td>155,233</td>
<td>$1,478,370,705</td>
</tr>
<tr>
<td>Florida</td>
<td>8</td>
<td>$24,490,233,642</td>
<td>166,676</td>
<td>$1,211,629,554</td>
</tr>
<tr>
<td>Michigan</td>
<td>9</td>
<td>$23,051,327,122</td>
<td>133,120</td>
<td>$1,585,794,455</td>
</tr>
<tr>
<td>North Carolina</td>
<td>10</td>
<td>$17,330,838,088</td>
<td>120,578</td>
<td>$942,220,251</td>
</tr>
</tbody>
</table>

Note: Since 1995, the states of Texas and Ohio have surpassed Illinois in total economic impact.

Evaluation of a New College of Medicine Prepared by Tripp Umbach on behalf of Carle Health System and University of Illinois at Urbana-Champaign samizdat-startups.org [UIUC release of "supplemental" COM emails] PAGE 303 OF 773.
Academic Medical Industry Rankings by Metropolitan Area

Tripp Umbach also compared the economic impact of academic medicine at the metropolitan level and found that Chicago had the 6th largest academic medical center industry cluster in 2012, as measured by the combined economic impact of all medical schools and teaching hospitals on the regional economy. In 1995, Chicago was the 4th largest metro area; Houston and Los Angeles surpassed Chicago over the past 15 years. In 2012, AAMC estimated the total economic impact of all academic medicine in metropolitan Chicago at $8.2 billion. The largest markets, as measured by the total economic impact of academic medicine, are New York ($23.7 billion), Philadelphia ($15.6 billion) Boston ($14.6 billion), Los Angeles ($10.3 billion) and Houston ($9.1 billion). (Chart 1)

Chart 1: Top 10 Academic Health Markets

<table>
<thead>
<tr>
<th>Top 10 Academic Health Markets (in billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
</tr>
<tr>
<td>Philadelphia</td>
</tr>
<tr>
<td>Boston</td>
</tr>
<tr>
<td>Los Angeles</td>
</tr>
<tr>
<td>Houston/Galveston</td>
</tr>
<tr>
<td>Chicago</td>
</tr>
<tr>
<td>Pittsburgh</td>
</tr>
<tr>
<td>Baltimore</td>
</tr>
<tr>
<td>Cleveland</td>
</tr>
<tr>
<td>San Francisco</td>
</tr>
</tbody>
</table>

While the size of the economic impact associated with academic medicine in Chicago is larger than the impact of smaller metropolitan areas such as Pittsburgh ($6.2 billion), Baltimore ($5 billion), and Cleveland ($4.3 billion), the economic impact of academic health is significantly larger on a per capita basis in these smaller markets. Perhaps most telling in terms of the need to add a new research-intensive college of medicine at the University of Illinois at Urbana-Champaign is that the State of Illinois ranks 10th among all states relative to the economic impact associated with federally-sponsored research. (Chart 2)
Illinois ranked lower than several smaller states such as Massachusetts, North Carolina, Washington, and Maryland. On a per capita basis, only Texas has a lower per capita economic impact of federal research than Illinois, and the state of Massachusetts has nearly five times the economic impact from all federal sources. (Table 3)

**Table 3: Per Capita Impact of Federal Research Funding**

<table>
<thead>
<tr>
<th>State</th>
<th>Federal Research Impact (in billions)</th>
<th>Impact Population (in millions)</th>
<th>Dollars per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts</td>
<td>$3.90</td>
<td>6.7</td>
<td>$582.00</td>
</tr>
<tr>
<td>Maryland</td>
<td>$1.40</td>
<td>5.9</td>
<td>$237.28</td>
</tr>
<tr>
<td>Washington</td>
<td>$1.40</td>
<td>7</td>
<td>$200.00</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>$2.40</td>
<td>12.8</td>
<td>$187.50</td>
</tr>
<tr>
<td>New York</td>
<td>$3.30</td>
<td>19.6</td>
<td>$168.40</td>
</tr>
<tr>
<td>North Carolina</td>
<td>$1.60</td>
<td>9.9</td>
<td>$161.61</td>
</tr>
<tr>
<td>Ohio</td>
<td>$1.50</td>
<td>11.6</td>
<td>$129.30</td>
</tr>
<tr>
<td>California</td>
<td>$4.50</td>
<td>38.3</td>
<td>$117.50</td>
</tr>
<tr>
<td>Illinois</td>
<td>$1.36</td>
<td>12.9</td>
<td>$105.42</td>
</tr>
<tr>
<td>Texas</td>
<td>$1.90</td>
<td>26.5</td>
<td>$71.70</td>
</tr>
</tbody>
</table>
Finally, underscoring the close relationship between science and economic development, a recent landmark report, "The Geography of the American Dream", ranked all 50 states and metropolitan areas on economic opportunity as measured by the upward mobility of its residents. Although southern states and metropolitan areas ranked the lowest, the State of Illinois and traditional Rust Belt cities in the Midwest ranked below the Western United States and the Northeast relative to the ability for young people to move into higher income brackets. (Map 1)

Map 1: Relative Mobility

Researchers from Harvard University and UC Berkeley also ranked metropolitan regions according to “intergenerational upward mobility” to identify cities where children are able to move ahead and do better than their parents. Salt Lake City, Pittsburgh, San Jose, Boston and San Francisco, all places with significant bioscience economic development, were identified as “capitals of the land of opportunity.” (Table 4)

Children living in Chicago in a family in the bottom fifth of national income have a 6.5 percent chance of moving to the top fifth, according to the study. Chicago was ranked 36 out of 50 markets in terms of intergenerational upward mobility. Tripp Umbach believes that transformational projects, such as the one contemplated by Carle
Health System and the University of Illinois at Urbana-Champaign, will serve to improve upward mobility in the State of Illinois as a whole.

**Table 4: Metropolitan Regions Ranked by Intergenerational Upward Mobility**

<table>
<thead>
<tr>
<th>Rank</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Salt Lake City</td>
</tr>
<tr>
<td>2</td>
<td>Pittsburgh</td>
</tr>
<tr>
<td>3</td>
<td>San Jose</td>
</tr>
<tr>
<td>4</td>
<td>Boston</td>
</tr>
<tr>
<td>5</td>
<td>San Francisco</td>
</tr>
<tr>
<td>6</td>
<td>San Diego</td>
</tr>
<tr>
<td>7</td>
<td>Manchester, NH</td>
</tr>
<tr>
<td>8</td>
<td>Minneapolis</td>
</tr>
<tr>
<td>36</td>
<td>Chicago</td>
</tr>
</tbody>
</table>

**Key Finding #2: The new independent college of medicine has the opportunity to attract new federal funding into the state of Illinois.**

Building on the first key finding, Tripp Umbach believes that a new independent college of medicine provides the University of Illinois as a whole, and specifically the Urbana-Champaign campus, with the opportunity to tap into a larger federal research funding pool. Tripp Umbach’s review found that the University of Illinois at Urbana-Champaign campus is consistently among the top five university recipients of National Science Foundation (NSF) funding, but ranks in the middle (77th out of all recipients) for National Institutes of Health (NIH) funding.

Tripp Umbach reviewed the success of the University of Illinois at Urbana-Champaign in capturing NSF funding, as well as the amount of NIH funding that is currently going to other U.S. medical schools that have relationships within these grants with the Urbana-Campaign campus. Tripp Umbach assumes that if a new, independent, engineering and technology-based four-year college of medicine was located on the Urbana-Champaign campus, a significant increase in the percentage of total NIH funding would be realized by the University of Illinois, based upon the millions of dollars a month in NIH funding that is going to other college of medicine collaborators.

NIH funding to universities in Fiscal Year 2012 equaled $18.3 billion, of which the University of Illinois at Urbana-Champaign received less than one-half of one percent ($71 million). Within the much smaller NSF funding pool provided to universities, equaling $4.4 billion in 2012, the University of Illinois at Urbana-Champaign received a full 3 percent ($126 million).
NIH recently prioritized the need to change the way clinician scientists are educated by creating the National Center for Advancing Translational Sciences (NCATS) as the newest of its 27 Institutes and Centers. The NCATS was created to transform the translational science process so that new treatments and cures for disease can be delivered to patients faster. As students at the new independent college of medicine will be trained by active clinician-researchers working in engineering and basic and behavioral science departments, the opportunity to attract significant NCATS funding will exist from the onset of the new program. This model of medical education will teach students how to translate advances in technology and science into the clinical environment, precisely the transformation that the NIH is demanding.

Key Finding #3: Carle Health System and the University of Illinois at Urbana-Champaign must move quickly to capitalize on the benefit of this revolutionary college of medicine model.

Tripp Umbach’s analysis of U.S. medical schools indicates that the recommended independent college of medicine will be among the first engineering and technology-based medical school. Such a unique program will be designed to take advantage of the revolutionary advances in engineering, technology, and quantitative sciences to further biomedical research and education. The recommended college of medicine model has the opportunity to tie innovations in technology to improvements in human health in a way that has never been done before by a new program. Therefore, the new program must be viewed from the start as much more than a medical education training program.

Tripp Umbach has identified the following benefits to both the Carle Health System and the University of Illinois as they move forward with plans to develop an independent medical school:

University of Illinois at Urbana-Champaign

A principal benefit of a new college of medicine program is that such a program can be focused on the challenges and realities of 21st century medicine, and not constrained by historical models of education, patient care, and research. The University of Illinois, through this new independent partnership program, must quickly establish itself as one of the leading players in what will become the future of academic medicine. While there have been many new medical schools established in the United States since 2005, only the partnership program in Virginia between Carillion Health System and Virginia Tech has a mission similar to the recommended model included in this report. The University of Texas at Austin, one of the institutions that the University of Illinois’ Board of Trustees identifies as a “dashboard peer,” has announced that the first class of its Dell Medical School will be accepted in 2016. Of top 50 NIH-funded medical schools, only Michigan, Stanford and Purdue are located
at universities that also have top 10 engineering programs. While all three of these institutions are currently organized around a traditional college of medicine program, all three are in transition to be positioned for the next generation of teaching, training, discovery, and healing to meet future needs. The new model of medical school will enhance opportunities for external funding.

The window for the University of Illinois at Urbana-Champaign will not remain open for long, as top-tier expertise in engineering, the key link in this transformation, can be purchased by all top-tier medical schools and hospital systems. Tripp Umbach believes that poorly performing colleges of medicine will have a difficult time attracting top engineering talent. The top 10 medical schools in the United States already have relationships with the University of Illinois at Urbana-Champaign. Therefore, it is important that the University of Illinois recognize the need to develop a program that has exceptionally strong integration between medicine and advanced science, as there are multiple examples nationally where proximate universities have strong partnerships.

**Carle Health System**

Tripp Umbach cautions that the window of opportunity for partnership between the Carle Health System and the University of Illinois at Urbana-Champaign is exceptionally time-limited. The Mayo Clinic and the Cleveland Clinic have strategies in place to maintain leadership positions in research-driven personalized medicine. While Mayo and Cleveland do not have a world-class engineering school within their institutions, they have already overcome this deficiency by partnering with strong engineering programs. For example, in the case of Mayo Clinic, they have partnered with the University of Illinois at Urbana-Campaign (www.mayoillinois.org). The Mayo Clinic has also partnered with the University of Minnesota for nearly 15 years through the Minnesota Biotechnology Partnership, and the Cleveland Clinic has a similar relationship with Case Western Reserve University. It must also be noted that other emerging health systems throughout the United States, such as Greenville Health System, Lehigh Valley Health Network, INOVA, and Geisinger Health System, are developing similar college of medicine partnerships to achieve national prominence in personalized medicine.

While the new Dell Medical School in Austin is anticipated to have a strong focus on computational science, the proposed college of medicine outlined in this report will pair engineering, technology, and computational science with Carle Health System’s fully integrated health care delivery system. Tripp Umbach believes that the

---

1 Notable partnerships between medical schools and universities include: Harvard University and Massachusetts Institute of Technology, University of Pittsburgh and Carnegie Mellon University, and Emory University and Georgia Tech.
Carle Health System must capitalize immediately on the opportunity to partner with the University of Illinois to develop technology, engineering, and computation solutions to meet the demands of a new paradigm of health care delivery. Since governmental units at all levels, employers, payors, and patients are demanding outcomes-based medicine and health care delivery which incorporates behavioral influence on patient wellness through technology, the Carle Health System and the University of Illinois will have exceptional support for this program locally, regionally, statewide, and nationally.

**Key Finding #4: A separately accredited, independent college of medicine with an innovative curriculum is critical to ensure the long-term viability of the new medical school.**

An important consideration in Tripp Umbach’s recommendation for a highly specialized independent college of medicine with a class size appropriate for a fully integrated health system is the need for a revolutionary curriculum where all teachers, learners, trainees, researchers, scientists, and innovators (entrepreneurs) are under the institutional infrastructure. Therefore, the development of an innovative curriculum which responds to the changes that have occurred in health care over the past decade and also addresses established and ever-changing LCME requirements will be challenging in the short term, but vital to the success of medical education in the long term. As referenced in Section V, Consideration of Other Options, Tripp Umbach does not believe that developing a LCME-approved “track” of the existing state-supported UIC College of Medicine program can effectively accomplish what a separately accredited program could achieve, especially as the new program will have a high degree of integration with science and technology programs in Urbana-Champaign.

Tripp Umbach recommends that the University of Illinois at Urbana-Champaign continue to gather curriculum input from key stakeholders throughout the region, state, and nation as the development of the new school continues. The traditional college of medicine curriculum educates physicians through an outdated approach for addressing disease progression and symptoms (examination, diagnostics, and treatment) and emphasizes memorization versus self-directed discovery. The new school’s curriculum must be rooted in the convergence of medicine and engineering, computer sciences, quantitative sciences, and technology to teach the human body as an integrated system. This understanding of the human body as an integrated system is critical to the analytical, problem-solving skills needed to be a successful physician. Engineering technologies and approaches should be incorporated throughout the curriculum. Examples include:

- In microbiology, the curriculum can provide an understanding of microbes and engineering approaches to the alteration of genomes and biological circuits.
o In clinical training, the curriculum can incorporate bioreactor use, 3D printing, and advanced analysis techniques.

o In computer sciences, the curriculum can include data mining techniques to create patient care guidelines.

o Student experiences can include interactions not only with physicians and patients, but also with engineers and new innovations for advancing medical care.

The curriculum will have immediate societal and economic impacts as students at the new independent college of medicine gain an understanding of how to influence behavioral change relative to the use of technologies such as wearable sensors to address issues such as obesity. The new curriculum will teach students how to use tools, such as electronic health records and wearable technology, to track patient behavior and outcomes, including cost of care. Students will also learn to work in team environments with other clinicians, such as physician assistants and nurses, so that health care can be delivered by the right provider in the right setting.

The unique nature of a partnership between the Carle Health System and the University of Illinois at Urbana-Champaign will allow the new independent college of medicine to impact outcomes in a way that organizations without an integrated delivery and financing system cannot. This integrated system will provide all of the components necessary to address the changes in health care delivery required by technology advances, patient-driven care, and the Affordable Care Act, and these components will allow the new independent college of medicine to transform medical care from volume-driven to value-driven care. The Urbana-Champaign community can serve as a pilot for the rest of the country by training physicians to provide the most appropriate care in the most appropriate setting.

Physicians who graduate from the new independent college of medicine will be trained to incorporate analytical techniques and innovations into a human systems approach to delivering health care. It is recommended that the curriculum allow physicians to:

o Practice problem-solving and analytical thinking critical to understanding disease etiology and developing a new foundation for health management.

o Leverage computational science, analytics, and personalized therapeutics.

o Be experts in the use of data synthesis techniques and new technologies.

o Adopt and develop innovations through collaboration with interdisciplinary teams comprised of bioscientists, engineers, and clinicians. Despite the growth in inter-professional training in
recent years, the vast majority of health professionals are never exposed to collaborative care until they enter the workforce. The result is that hospitals, clinics, and other practice sites have to retrain individuals to work in teams. Tripp Umbach believes inter-professional education takes significant commitment from all levels of academic leadership in medical, nursing, and other health professional schools to make it successful. Tripp Umbach acknowledges that the recommendation to develop a medical and science education and research campus will not be without logistical challenges as schools have different calendars, and different professions take varying approaches to teaching the same material. However, the goal is to improve the health of the public by preparing professionals to work in more effective ways. Studies have shown that inter-disciplinary collaboration has the capacity to impact both health care providers and patients. The Joint Commission currently reports that almost 70 percent of patient adverse events are related to the lack of collaboration and communication between providers. Interdisciplinary collaboration plays an important role in the elimination of errors and duplications in care, and in the clarification of roles. When collaboration takes place among nurses, physicians, and patients, each person understands the goals and the processes through which to attain the goals. Avoidable re-hospitalizations are frequent, costly, burdensome for patients and families, and fortunately, actionable for improvement. Many re-hospitalizations within 30 days of discharge are considered potentially avoidable if communication was more effective and care better coordinated. Accreditation agencies such as the Joint Commission have now put collaboration practice guidelines into place for health care organizations, and are requiring their implementation for accreditation.

- Understand the capabilities of virtual learning environments and computational modeling and analytics. Graduates will leverage these in designing the “ICU of the future” and the “Operating Room of the future”, evaluating new medical delivery systems, and delivering care to patients in remote locations.

**Key Finding #5: Building on the existing economic impact of the University of Illinois and the Carle Health System, the new independent college of medicine will have substantial economic impact on the region and state of Illinois.**

Medical education is a major driver of the U.S. economy, as medical schools and teaching hospitals generated nearly $600 billion in economic impacts, supported more than 3.3 million jobs, and generated $22 billion in state
government revenue in 2012\textsuperscript{2}. As outlined earlier in this report, the academic medical industry in Illinois generated more than $28.7 billion in the state’s economy in 2012, and supported more than 155,000 jobs directly and indirectly.

Expanding medical education through the model outlined above represents an important step in the economic development in Northeast Illinois, the Chicago region, the state of Illinois, and neighboring states. The project sponsors, the Carle Health System and the University of Illinois at Urbana-Campaign, already provide a significant source of economic, employment, and government revenue impact to the region and to the state of Illinois. Tripp Umbach estimates, based on national standards for hospitals and universities, that the Carle Health System and the University of Illinois at Urbana-Champaign add more than $3 billion to the regional economy annually and support more than 20,000 jobs directly and indirectly in the region\textsuperscript{3}.

It is also important to recognize in this feasibility study that UIC College of Medicine and University of Illinois Hospital in Chicago are important economic engines for the city of Chicago and the state of Illinois.

In 2012, according to the AAMC, the total economic impact of UIC College of Medicine was $1.48 billion. AAMC data indicates that the UIC College of Medicine supported 8,682 jobs statewide. The following data illustrates the economic impact of UIC College of Medicine and Medical Center in Chicago in 2012. (Table 5)

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|}
\hline
\hline
UIC College of Medicine & $1.48 billion & 8,682 \\
University of Illinois Medical Center & $1.22 billion & 5,044 \\
Total & $2.7 billion & 13,728 \\
\hline
\end{tabular}
\end{table}

\textsuperscript{2} Association of American Medical Colleges, “The Economic Impact of Medical Schools and Teaching Hospitals, 2012.

\textsuperscript{3} Tripp Umbach estimates that total employment on the University of Illinois at Urbana-Campaign campus and Carle Foundation Hospital equals approximately 13,500 full or part-time jobs.

\textsuperscript{4} Source: Association of American Medical Colleges, 2012.
Impacts Associated with the New College of Medicine

Tripp Umbach estimates that the total economic impact of the new college of medicine enterprise will exceed $1 billion annually by 2035 when the school is at full maturity. The new school is expected to sustain more than 7,600 jobs statewide by 2035. This impact will stem from the spending by the medical school, the Carle Health System, and related research institutes on capital improvements, goods and services, the spending of staff and faculty, the spending of medical trainees, and the spending (external to the institution) of visitors to the proposed school. This impact is conservative in its projected spending related to capital expenditures needed to operate a medical school, such as equipment, clinical supplies, and non-salary related expenditures for the medical school.

The economic benefits generated by the development of a new research-intensive college of medicine extend beyond the direct impact of its operations. The number of benefits generated in the region as a result of the college of medicine will include newly constructed neighborhoods and schools to support the anticipated increase in families relocating to the region, and communities championing the expansion of dedicated education, greater choices for entertainment, and improved transportation from Urbana-Champaign to Chicago, the east and west coasts. In addition to the construction of new homes and schools to support projected population increases, the need for new retail, banking, and commercial opportunities will serve as additional economic benefits for the region.

The proposed project will enhance the economic environment of the Urbana-Champaign metropolitan area because the quality of health care resources has a favorable impact upon the decisions made by business owners who are looking to locate or relocate companies. An economic impact analysis completed by Tripp Umbach for the Association of American Medical Colleges (AAMC) shows that states with strong medical schools and teaching hospitals stimulate research and biomedical industry business development outside of the medical college. Economic impact studies completed by Tripp Umbach for the AAMC since 1995 show a direct correlation between the presence of medical schools and a growing economy. Data presented in other sections of this report show that states with research-intensive medical schools have the strongest economies on a per capita basis. The new research-intensive college of medicine will be attractive to medical-related companies who are likely to establish a greater focus within the area, seeking the competitive advantage of proximity to a major academic medical center.

Tripp Umbach agrees with the conclusions of a recent Business Development Cluster report indicating that a new college of medicine at the University of Illinois at Urbana-Champaign campus would accelerate economic development and job creation in Central Illinois and the state as a whole through the emergence of a vibrant
biomedical and bioengineering business cluster. Although the college of medicine will be designed to graduate a relatively small number of physicians each year, graduates will make significant impacts in the development of medical innovations. It is important to point out that many of the graduates will move to other cities, including Chicago, where job opportunities exist and where quality of life options are varied and numerous. Because of their unique knowledge base, they will impact organizations in Chicago, all of Illinois, and the entire nation, bringing recognition for the state of Illinois' leadership in innovation. The proposed new college of medicine will have multiple economic and social benefits as it leverages revolutionary advances in engineering, technology, and quantitative sciences to further biomedical research and education.

The convergence of medicine and engineering in Urbana-Champaign is already resulting in significant startup company formation, and this type of activity will be enhanced through the presence of additional physician scientists, research integration with clinical sites, and increased clinical trials. Examples of startup companies formed in the last five years by faculty from the University of Illinois at Urbana-Champaign are included in Table 6, and details for these and additional companies launched in this time period can be found in Appendix B. Many of these companies have already secured significant venture capital and are collaborating with a number of medical institutions, including Carle, to conduct clinical trials. (Table 6)
Table 6: Examples of Startup Companies Formed by Faculty in Past Five Years

<table>
<thead>
<tr>
<th>Company</th>
<th>Core Technology</th>
<th>Origin</th>
<th>Additional Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnostic Photonics</td>
<td>Tissue Microfracture Imaging</td>
<td>Electrical &amp; Computer Engineering</td>
<td>Clinical trials completed at Carle &amp; John Hopkins</td>
</tr>
<tr>
<td>MC10</td>
<td>Wearable systems, home diagnostics, remote monitoring</td>
<td>Material Science and Engineering</td>
<td>Major venture capital backing</td>
</tr>
<tr>
<td>Daktari</td>
<td>CD4 counting technology of point-of-care tools</td>
<td>Bioengineering</td>
<td>Major venture capital backing</td>
</tr>
<tr>
<td>Metabolomx</td>
<td>Colorimetric sensor array for detection of lung cancer from breadth</td>
<td>Chemistry and the Beckman Institute</td>
<td>Has partnered with Cleveland Clinic</td>
</tr>
<tr>
<td>Paxent LLC</td>
<td>Data analytics</td>
<td>Computer Science</td>
<td>Has partnered with Carle</td>
</tr>
<tr>
<td>Vitruvian Biotech</td>
<td>Image-guided nanoparticle drug delivery</td>
<td>Bioengineering</td>
<td>Initial research completed at the Carle Biomedical Research Center</td>
</tr>
</tbody>
</table>

The proposed development of the new college of medicine represents a “rock hitting the pond” (see Image 2 below) as it creates significant additional economic and social benefits for the Urbana-Champaign region, Chicagoland, and the state of Illinois over the next 20 years. (Image 2)
The new college of medicine and its partnerships with the Carle Hospital Foundation, the University of Illinois, and other regional health care organizations, private businesses, and research-related organizations are the springboard for future economic development in Urbana-Champaign and throughout the state of Illinois. These partnerships have the opportunity to launch new industries and add value to existing industries, creating new high-paying jobs in health care, higher education, and related industries.
Detailed Economic Impact Findings:

Additional impacts created by the construction and operations of the recommended new medical education research enterprise will further stimulate the economic growth of the region via increased economic activity, as well as the unique impacts of an expanded medical college, such as increased research activities and funding from sources outside the region. Tripp Umbach estimates that the impact of the recommended college of medicine option has the potential to grow from $39 million annually, the current level of impact, to more than $1 billion in annual economic impact when the program is at full maturity in 2035. (Table 7)

### Table 7: Economic Impact of the New College of Medicine (in millions)

<table>
<thead>
<tr>
<th>Category of Impact</th>
<th>Existing COM at Urbana campus (2014)</th>
<th>New COM - 2021 (after start-up)</th>
<th>2030</th>
<th>2035 (Maturity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Medicine Program Impacts</td>
<td>$26.4</td>
<td>$83.2</td>
<td>$210.5</td>
<td>$390</td>
</tr>
<tr>
<td>Research Program Impacts (included in College of Medicine Program Impacts Listed Above)*</td>
<td>$1.8 ($1 million in expenditures)</td>
<td>$28.4 ($15 million in expenditures)</td>
<td>$162 ($90 million in expenditures)</td>
<td>$270 ($150 million in expenditures)</td>
</tr>
<tr>
<td>Clinical Program Impacts</td>
<td>$5.3</td>
<td>$16.8</td>
<td>$60.5</td>
<td>$120</td>
</tr>
<tr>
<td>Commercialization Impacts**</td>
<td>$7.3</td>
<td>$60</td>
<td>$480</td>
<td>$900</td>
</tr>
<tr>
<td><strong>Total Economic Impact</strong></td>
<td><strong>$39.0</strong></td>
<td><strong>$160.4</strong></td>
<td><strong>$750.5</strong></td>
<td><strong>$1.4 billion</strong></td>
</tr>
</tbody>
</table>

*Research Program Impacts are included in College of Medicine Program Impact Totals.

**Commercial impacts include direct, indirect, and induced jobs from the college of medicine as well as bioscience industry cluster growth.

***Impacts do not include the significant economic and employment impacts that will result from the construction of facilities related to the new college of medicine.

In addition to the business volume impact the proposed college of medicine and research campus is expected to generate, the proposed campus will also create a substantial number of jobs throughout the region. The employment impact of the proposed campus will also be comprised of direct and indirect impacts. Direct employment impact represents full-time equivalent positions created directly by the proposed college. The positions included in the direct employment for this analysis include the faculty, support staff, and residents who will be employed in the region specifically due to the development and operation of the regional college of
medicine campus. Indirect employment impact represents full-time equivalent positions created as a result of the proposed college’s spending and the spending of faculty, staff, students, and visitors.\(^5\)

While the current University of Illinois Chicago College of Medicine at Urbana campus supports approximately 215 jobs in the region, the new college of medicine is expected to increase employment in the region dramatically over the next 20 years. The employment impact of the proposed enterprise will be over 5,600 jobs by 2035 when the program is at full maturity. (Table 8)

**Table 8: Employment Impact of the New College of Medicine (total Jobs created directly and indirectly in the state’s economy)**

<table>
<thead>
<tr>
<th>Category of Impact</th>
<th>Existing COM at Urbana campus (2014)</th>
<th>New COM 2021 (after start-up)</th>
<th>2030</th>
<th>2035 (Maturity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Medicine Program Impacts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>145</td>
<td>460</td>
<td>1,290</td>
</tr>
<tr>
<td>Research Program Impacts (included in College of Medicine Program Impacts Listed Above)</td>
<td></td>
<td>10</td>
<td>160</td>
<td>900</td>
</tr>
<tr>
<td>Clinical Program Impacts</td>
<td></td>
<td>30</td>
<td>95</td>
<td>340</td>
</tr>
<tr>
<td>Commercialization Impacts**</td>
<td></td>
<td>40</td>
<td>335</td>
<td>2,750</td>
</tr>
<tr>
<td>Total Economic Impact*</td>
<td></td>
<td>205</td>
<td>795</td>
<td>3,480</td>
</tr>
</tbody>
</table>

*Research Program Impacts are included in College of Medicine Program Impact Totals.
** Commercial impacts include direct, indirect, and induced jobs from the college of medicine as well as bioscience industry cluster growth.
***Impacts do not include the significant economic and employment impacts that will result from the construction of facilities related to the new college of medicine.

Tripp Umbach believes that the economic impact of the new college of medicine presented below will add to the current economic impact of the Chicago-based hospital and University of Illinois Chicago College of Medicine in Chicago. Furthermore, Tripp Umbach projects that the economic impact of the University of Illinois Chicago College of Medicine and hospital in Chicago will grow over the next several years. (Table 9)

\(^5\) Examples of indirect jobs created in support of the proposed college of medicine include teachers at schools attended by the children of employees, affiliated researchers, and financial service professionals.
Table 9: Total Projected Economic Impact of UIC College of Medicine and the New College of Medicine (2021 and 2035)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UIC College of Medicine</td>
<td>$1.48 billion(^6)</td>
<td>$1.78 billion(^7)</td>
<td>$2.34 billion(^8)</td>
</tr>
<tr>
<td>University of Illinois Medical Center</td>
<td>$1.22 billion</td>
<td>$1.47 billion</td>
<td>$1.92 billion</td>
</tr>
<tr>
<td>New College of Medicine</td>
<td>$160 million</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$2.7 billion</td>
<td>$3.3 billion</td>
<td>$5.6 billion</td>
</tr>
</tbody>
</table>

Social Impacts related to the recommended program:

At a time when severe physician shortages have been predicted and the Affordable Care Act is increasing health care access to over 30 million citizens, it is imperative to improve the health care delivery system and develop a means to provide services at lower costs. States across the U.S. are evaluating their health care systems and the opportunity for new education, which has led to the development of 15 new medical schools since 2006, after none had opened in the previous two decades. Our proposed recommendations present an opportunity for the state of Illinois to be at the forefront of the health care industry for the 21st Century by:

- Reinventing health care around revolutionary advances in engineering and technology to further biomedical research, biomedical practices, and education, and therefore modernizing the education of physicians from wellness through treatment with an integrated system which transforms and improves outcomes of care while expanding the economy.

---

\(^6\) Includes impact of the Urbana campus.
\(^7\) Based on 2 percent growth rate for the UI College of Medicine over the period.
\(^8\) Based on 2 percent growth rate for the UI College of Medicine over the period.
V. CONSIDERATION OF OTHER OPTIONS

Tripp Umbach conducted interviews with leaders representing higher education, health care, industry, and government over an intensive two-month period to develop and test various medical school development models. The recommended model, outlined in greater detail in the first section of this report, calls for the development of a specialized engineering-based college of medicine in Urbana-Champaign through a corporate structure created by the Carle Health System and the University of Illinois at Urbana-Champaign.

Two other models analyzed within the feasibility study are presented below, including 1) developing a new college of medicine through stronger alignment with UIC College of Medicine, specifically expanding the current Urbana-Champaign campus to capitalize on the opportunities outlined in other sections of this feasibility study – health care and economic transformation, and 2) developing a larger regional college of medicine with partner hospital systems in both Urbana-Champaign and Peoria (1-74 Corridor Program).

Campus Expansion of University of Illinois College of Medicine at Urbana-Champaign Regional Campus:

Under this option, the University of Illinois at Urbana-Champaign would not pursue a separately accredited college of medicine in Urbana-Champaign, nor enter into a partnership with the Carle Health System, but would continue to host the University of Illinois Chicago College of Medicine regional campus on the Urbana-Champaign campus and work with that entity to make this campus more aligned with the needs and strengths of the Urbana-Champaign campus.

Tripp Umbach acknowledges the following advantages and challenges associated with this option:

- **State Support** – This model ensures that UIC College of Medicine remains the largest allopathic college of medicine in the U.S. and continues its mission of training physicians statewide. However, being a large college of medicine is not a goal shared equally among campuses, as the size of the student body is less important in a science and technology-focused program. Also, since 2005, there has been a 34 percent increase in the number of medical students educated in the United States and only a 2 percent growth in training sites for graduate medical education. The challenge in 2014 and beyond will be the development of more residency positions—not more medical students. Tripp Umbach’s recommended model does include the provision that 125 first-year students continue to receive their education at the Urbana-Champaign campus.

  Statewide college of medicine models with multiple regional campuses are not as critical today as in the past when most patients were taken to big cities for care. There are very limited clinical or educational
benefits of a network of college of medicine campuses when 95 percent of all care in the region can be supported by a hospital such as the Carle Hospital Foundation. The old model of needing a college of medicine and an associated large specialized urban teaching hospital to support education and clinical care is not a reality in 2014. The care that the Carle Health System cannot provide is transferred to top health care centers regionally, such as Mayo Rochester, Washington University in St. Louis, and Northwestern in Chicago.

- **Culture** – While acknowledging the difficulty to retrofit a 19th/20th century medical education model and training program into such a unique research and technology model geared for the 21st century, Tripp Umbach believes that having a single “floating” college of medicine that can be claimed by both campuses as “their” college of medicine has merits. Such a model, with a dual-reporting structure to Chicago and Urbana-Champaign and a Dean’s office in both locations, is more desirable than a model to expand the four-year college of medicine out of the University of Illinois at Urbana-Champaign College of Medicine within the current structure, where the Chicago campus has control of regional campuses. However, changes would be required in areas ranging from accreditation, institutional culture, and significantly increasing state support for public medical education.

UIC College of Medicine has one of the lowest per-pupil NIH funding of any college of medicine in the country, and as such will have difficulty aligning with the University of Illinois at Urbana-Champaign, which seeks to have a heavily research-focused program with a small class size and one of the highest research per-pupil populations in the country.

Tripp Umbach also questions the ability to generate needed philanthropic support in the Urbana-Champaign region for what will be perceived as a Chicago-based college of medicine due to the significant distance and differences in key donor populations between the two regions.

Finally, Tripp Umbach questions how a “common campus” college of medicine model could be sustainable, when years of little or no collaboration suggest that UIC College of Medicine leadership will not embrace a new focus for the Urbana-Champaign campus that builds on the strengths of the University of Illinois at Urbana-Champaign. More importantly, the flow of funds between campuses and executive decision-making functions (requirements of the LCME) do not suggest to Tripp Umbach a single college of medicine will be able to fulfill two substantially different missions with excellence and national leadership. We do believe that both the Chicago and Urbana-Champaign campuses can achieve national leadership through two separately focused colleges of medicine.
• **Ensuring Two Strong Colleges of Medicine** – Tripp Umbach believes that a new engineering-focused college of medicine at the Urbana-Champaign campus through an independent partnership with the Carle Health System will result in more funding opportunities for new capital investment in Chicago in areas of drug discovery, disparities/population health management, and biotech economic development. UIC College of Medicine already trains the most diversified body of future practitioners in the nation. It now has the opportunity to establish itself as the national leader in addressing diversity in the health care industry and focus on addressing urban health care services, including alignment with the Illinois Medical District (IMD) strategic plan that specifically sets out clinical trials leveraging the diverse patient population of the IMD.

Tripp Umbach concludes that expansion of the University of Illinois at Urbana-Champaign College of Medicine, as discussed above, is more costly to the state of Illinois than a new independent college of medicine organized as a private non-for-profit corporation. Expanding the Urbana campus through the current state-supported medical education model will cost taxpayers in initial capital and ongoing operational support, while at the same time limiting the amount of new research funding in core areas such as Engineering, Biotechnology, and Computational Science that is likely to flow into a new medical college.

Independent State-Supported New College of Medicine with Campuses in Urbana-Champaign and Peoria:

Tripp Umbach evaluated the option for the University of Illinois to develop a separately accredited public four-year college of medicine with a larger class size (150+ students per class) with educational and clinical campuses in both Urbana-Champaign and Peoria, involving multiple health systems as affiliates.

Tripp Umbach acknowledges the following advantages and challenges associated with this option:

• **Capacity** – Tripp Umbach’s financial analysis found that a regional college of medicine with larger class size would enable a new college of medicine to have greater immediate, but not necessarily long term financial stability. However, this model assumes that the new college would have a medical education/physician workforce focus, with less resources being directed to research. Peoria, a larger regionally-based health system and more fully developed college of medicine infrastructure, has the opportunity with Carle Health System and other systems to become a national leader in medical education, remote health care delivery, simulation, and population health management – due to the larger scale with more than 1.5 million residents along the I-74 corridor. Tripp Umbach believes that a
regional delivery system with partnership campuses in Peoria and Urbana-Champaign has the opportunity to integrate new medical training that focuses on population health management and remote care with telepresence and other technologies such as bioinformatics and biomarkers that impact care delivery.

- **Mission and Cultural Alignment** – Tripp Umbach acknowledges the strengths that a newly formed regional college of medicine could bring to the region and its institutions. However, findings from interviews suggest that the distance between Peoria and Urbana-Champaign would provide challenges for collaboration. Additionally, the most significant concern expressed by stakeholders is the negative financial and educational impact that such a model would present to the University of Illinois at Chicago College of Medicine.

- **Regional Economic Development** – While collaborative opportunities with hospitals and medical centers in Peoria, Urbana-Champaign, and Danville open up the possibility of an I-74 Medical Innovation Corridor, Tripp Umbach believes that regional economic development partnerships can occur within the context of the recommended independent new medical college.

- **Timing** – Due to the complexity of multiple state institutions, the development of such a model would require several additional years of planning, which would compromise the potential economic impact. Partnering with a community health care organization maximizes the flexibility of the program and allows for expedient decision making. The years of additional planning could also result in foregoing the immediate uniqueness and competitive advantage that will be secured if Carle Health System and the University of Illinois at Urbana-Champaign moved quickly as recommended by Tripp Umbach.
VI. CONCLUSIONS

Tripp Umbach believes that sufficient human and financial resources can be developed over the next three years to ensure the successful launch of a specialized college of medicine through an equal partnership with the Carle Health System and the University of Illinois at Urbana-Champaign. Ideally, the new college of medicine will enroll students by the fall of 2017, and become fully operational with all classes and programs by 2021.

Tripp Umbach developed this conclusion based upon the following factors:

1. **Independent Program with Strong Partners:** An independent private structure builds upon the strengths of two strong organizations without taking funding away from an established state-supported medical college. The Carle Health System’s structure, as a financially strong, fully integrated health system with a teaching hospital, outpatient clinics, and an insurance company, as well as high quality of care scores, provides a strong foundation upon which to build a successful independent medical college. As the only fully integrated health care system in Illinois, the Carle Health System has the integrated medical records system and data analytics capability to improve health outcomes of individual patients and larger patient populations. It is important to highlight the need to develop and maintain strong partnerships between Carle Health System and the University of Illinois at Urbana-Champaign, a key factor to success. The University of Illinois at Urbana-Champaign is consistently among the top five universities in National Science Foundation (NSF) funding, and a new engineering-focused college of medicine based in Urbana-Champaign will immediately be positioned to bring new federal dollars into the region and the state of Illinois for innovative multidisciplinary research integrating patients, scientific research, and advanced technology-driven programs on the University of Illinois Urbana-Champaign campus.

2. **Opportunity for Federal Funding:** Tripp Umbach reviewed the success of the University of Illinois at Urbana-Champaign in capturing National Science Foundation (NSF) funding, as well as the amount of National Institutes of Health (NIH) funding that is currently going to other U.S. medical schools that have relationships within these grants with the Urbana-Campaign campus. Based upon the millions of dollars of NIH funding that are provided each month to medical schools that have collaborations with the University of Illinois at Urbana-Champaign, Tripp Umbach assumes that if a new independent engineering and technology-based four-year college of medicine were located on the Urbana-Champaign campus, a significant increase in the percentage of total NIH funding would be realized by the University of Illinois. As students at the new independent college of medicine will be trained by
active clinician-researchers working in engineering and basic and behavioral science departments, the opportunity to attract significant National Center for Advancing Translational Sciences (NCATS) funding will exist from the onset of the new program. This model of medical education will teach students how to translate advances in technology and science into the clinical environment, precisely the transformation that the NIH is demanding.

3. **Revolutionary Curriculum:** The new college will be among the first nationally to differentiate itself through the fully integrated development of a revolutionary curriculum based upon collaboration between medicine, engineering, technology, and quantitative sciences. This differentiation provides the college with an immediate competitive advantage over existing national and international medical schools. Tripp Umbach believes that a smaller, highly specialized medical college, developed through a private-public partnership between the University of Illinois at Urbana-Champaign and the Carle Health System, is preferable to a traditional clinically-focused multi-hospital distributed training model which is better suited to meet physician workforce needs. The development of an innovative curriculum which prepares physicians to deliver appropriate care in an inter-professional, patient-centered environment along with ready access to the next generation of sensors, materials, imaging, and robotics will produce physician scientist leaders who will train other community-based physicians who graduate from the University of Illinois and other medical schools throughout the United States and internationally.

4. **Economic Impact Growth Statewide:** The new college of medicine and its multiple partnerships with the Carle Health System, the University of Illinois, and other regional health care organizations, private businesses, and research-related organizations, is the springboard for future economic development in Urbana-Champaign and throughout the state of Illinois. These partnerships have the opportunity to launch new industries and add value to existing industries, creating new high-paying jobs in health care, higher education, and related industries. Tripp Umbach believes that the economic impact of the new college of medicine will add to the current economic impact of the University’s Chicago-based hospital and medical college. Furthermore, Tripp Umbach projects that the economic impact of the Chicago-based College of Medicine and hospital will grow over the next several years through partnerships with the new medical college, resulting in the combined economic impact of all entities growing from $2.7 billion currently to $5.6 billion in 2035.

5. **The new college of medicine will strengthen the UIC College of Medicine:** The Chicago-based public college of medicine will be supported and strengthened as it advances its important mission during the development of the new independent private medical college. A key element to strengthening the
current UIC College of Medicine is to engage the University’s Vice Chancellor for Health Affairs and Dean of Medicine on the Board of Directors for the new medical college. This will ensure maximum collaboration, especially important as a collaborative approach has the most potential to increase NIH funding for the University Illinois. Tripp Umbach believes that by not requesting state General Revenue Funds support for the new college of medicine, more financial support will be provided for UIC College of Medicine to take advantage of the emerging revolution in medicine, driven in large part by engineering innovations. This revolution is already transforming the ability to deliver medicine and develop health protocols targeting specific populations.
APPENDIX A: INTERVIEWEE LIST

Tripp Umbach completed in-depth interviews with community leaders in health care, higher education, industry, government, and economic development organizations. The following table provides a listing of the organizations and the title of the individuals that were engaged. The next table lists the individuals in alphabetical order by last name. Interviews with business leaders and health care leaders are an important part of the feasibility study process, as strong community support is essential in assessing a project of this magnitude.

Table A. Titles of individuals grouped by organization.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carle Health System</td>
<td>CEO</td>
</tr>
<tr>
<td></td>
<td>EVP and Chief Medical Officer</td>
</tr>
<tr>
<td></td>
<td>VP of Research and Medical Education</td>
</tr>
<tr>
<td></td>
<td>Executive Director, Research Institute</td>
</tr>
<tr>
<td></td>
<td>Surgery/Surgical Oncology Carle Foundation Hospital, Founder Oracle Bioscience</td>
</tr>
<tr>
<td></td>
<td>Surgical Oncologist, Biomedical Research Center</td>
</tr>
<tr>
<td></td>
<td>Medical Director, Diagnostic Services and Strategic Development</td>
</tr>
<tr>
<td></td>
<td>Senior Vice President, System Strategic Development</td>
</tr>
<tr>
<td></td>
<td>Business Development</td>
</tr>
<tr>
<td>Horizon Hobby</td>
<td>Chairman of the Board</td>
</tr>
<tr>
<td>Illinois Innovation Council</td>
<td>Member</td>
</tr>
<tr>
<td>Illinois Medical District Commission</td>
<td>Executive Director</td>
</tr>
<tr>
<td></td>
<td>President and Director of Strategic Engagement</td>
</tr>
<tr>
<td>Immuven</td>
<td>CEO</td>
</tr>
<tr>
<td>Jump Trading Simulation &amp; Education Center</td>
<td>Chief Medical Officer</td>
</tr>
<tr>
<td>Naurex</td>
<td>President and CEO</td>
</tr>
<tr>
<td>Northwestern Feinberg School of Medicine</td>
<td>Assistant Professor of Medicine and Associate Director of the Medical Informatics Program,</td>
</tr>
<tr>
<td>OSF Healthcare</td>
<td>Chief Medical Officer for Simulation</td>
</tr>
<tr>
<td>Serra Ventures, LLC</td>
<td>CEO</td>
</tr>
<tr>
<td>Organization</td>
<td>Title</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>University of Illinois</td>
<td>Interim Vice President for Health Affairs</td>
</tr>
<tr>
<td></td>
<td>President</td>
</tr>
<tr>
<td>University of Illinois Foundation</td>
<td>Vice Chancellor for Institutional Advancement and Senior Vice President</td>
</tr>
<tr>
<td>University of Illinois at Urbana-Champaign</td>
<td>Chancellor</td>
</tr>
<tr>
<td></td>
<td>Associate Chancellor for Public Affairs</td>
</tr>
<tr>
<td></td>
<td>Associate Chancellor for Corporate and International Relations</td>
</tr>
<tr>
<td></td>
<td>Associate Vice Chancellor for Institutional Advancement</td>
</tr>
<tr>
<td></td>
<td>Director of Strategic Communications, Office of Public Affairs</td>
</tr>
<tr>
<td></td>
<td>Vice Chancellor for Academic Affairs and Provost</td>
</tr>
<tr>
<td></td>
<td>Associate Chancellor &amp; Vice Provost, Budgets and Resource Planning</td>
</tr>
<tr>
<td></td>
<td>Associate Vice Chancellor for Research, Interim</td>
</tr>
<tr>
<td></td>
<td>Director of the Division of Biomedical Sciences</td>
</tr>
<tr>
<td></td>
<td>Director, Research Park</td>
</tr>
<tr>
<td></td>
<td>Associate Provost for Strategic Planning and Assessment</td>
</tr>
<tr>
<td></td>
<td>Former Associate Dean of Clinical Affairs</td>
</tr>
<tr>
<td></td>
<td>Associate Director for Research, Coordinated Science Laboratory</td>
</tr>
<tr>
<td></td>
<td>Vice Chancellor for Research</td>
</tr>
<tr>
<td></td>
<td>Associate Chancellor</td>
</tr>
<tr>
<td>University of Illinois College of Medicine</td>
<td>Dean, College of Medicine</td>
</tr>
<tr>
<td>University of Illinois College of Medicine at Peoria</td>
<td>Regional Dean, College of Medicine</td>
</tr>
</tbody>
</table>
### Table B. Individuals engaged listed in alphabetical order by last name.

<table>
<thead>
<tr>
<th>Interviewees</th>
<th>Organization</th>
</tr>
</thead>
</table>
| Ilesanmi Adesida, PhD | Vice Chancellor for Academic Affairs and Provost  
University of Illinois at Urbana-Champaign |
| Michael Andrechak  | Associate Chancellor & Vice Provost, Budgets and Resource Planning,  
University of Illinois at Urbana-Champaign |
| Dimitri T. Azar, MD | Dean College of Medicine  
University of Illinois College of Medicine |
| Joseph Barkmeier, MD | Medical Director, Diagnostic Services & Strategic Development  
Carle Foundation Hospital |
| Jerry Bauman, PhD   | Interim Vice President for Health Affairs  
University of Illinois |
| Bryan Becker, MD    | CEO  
University of Illinois Hospital and Health Sciences System |
| Stephanie Beever    | Senior Vice President, System Strategic Development |
| Rohit Bhargava, PhD | Professor  
Beckman Institute for Advanced Science and Technology |
| Stephen Boppart, MD, PhD | Professor  
Beckman Institute for Advanced Science and Technology |
| Mike DeLorenzo, PhD | Associate Chancellor  
University of Illinois at Urbana-Champaign |
<table>
<thead>
<tr>
<th>Interviewees</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>James Dougherty, MD</td>
<td>Vice President of Research and Medical Education</td>
</tr>
<tr>
<td></td>
<td>Carle Foundation Hospital</td>
</tr>
<tr>
<td>Bob Easter, PhD</td>
<td>President</td>
</tr>
<tr>
<td></td>
<td>University of Illinois</td>
</tr>
<tr>
<td>Jennifer Eardley, PhD</td>
<td>Associate Vice Chancellor for Research, Interim Director of the Division of</td>
</tr>
<tr>
<td></td>
<td>Biomedical Sciences</td>
</tr>
<tr>
<td></td>
<td>University of Illinois at Urbana-Champaign</td>
</tr>
<tr>
<td>Laura Frerichs</td>
<td>Director, Research Park</td>
</tr>
<tr>
<td></td>
<td>University of Illinois at Urbana-Champaign</td>
</tr>
<tr>
<td>Matt Gibb, MD</td>
<td>EVP and Chief Medical Officer, Carle Physician Group</td>
</tr>
<tr>
<td>James Hall</td>
<td>Associate Dean for Student Affairs &amp; Medical Scholars Program</td>
</tr>
<tr>
<td></td>
<td>University of Illinois College of Medicine at Urbana-Champaign</td>
</tr>
<tr>
<td>Chris Harris</td>
<td>Director of Strategic Communications, Office of Public Affairs</td>
</tr>
<tr>
<td></td>
<td>University of Illinois at Urbana Champaign</td>
</tr>
<tr>
<td>Tim Hoerr</td>
<td>CEO</td>
</tr>
<tr>
<td></td>
<td>Serra Ventures, LLC</td>
</tr>
<tr>
<td>Robin Kaler</td>
<td>Associate Chancellor for Public Affairs</td>
</tr>
<tr>
<td></td>
<td>University of Illinois at Urbana Champaign</td>
</tr>
<tr>
<td>Anna Keck, MD</td>
<td>Executive Director, Research Institute</td>
</tr>
<tr>
<td></td>
<td>Carle Foundation Hospital</td>
</tr>
<tr>
<td>Pradeep Khanna</td>
<td>Associate Chancellor for Corporate and International Relations</td>
</tr>
<tr>
<td></td>
<td>University of Illinois at Urbana Champaign</td>
</tr>
<tr>
<td>Abel Kho, MD</td>
<td>Assistant Professor of Medicine and Associate Director of the Medical</td>
</tr>
<tr>
<td></td>
<td>Informatics Program, Northwestern Feinberg School of Medicine</td>
</tr>
<tr>
<td>David Krantz PhD</td>
<td>Professor Biochemistry</td>
</tr>
<tr>
<td></td>
<td>CEO Immuven</td>
</tr>
<tr>
<td>Jerry A. Krishnan, MD, PhD</td>
<td>Associate Vice President for Population Health and</td>
</tr>
<tr>
<td></td>
<td>Professor of Medicine and Public Health University of Illinois Hospital and</td>
</tr>
<tr>
<td></td>
<td>Health Sciences System</td>
</tr>
<tr>
<td>Stig Lanesskog</td>
<td>Associate Provost for Strategic Planning and Assessment</td>
</tr>
<tr>
<td></td>
<td>University of Illinois at Urbana-Champaign</td>
</tr>
<tr>
<td>James Leonard, MD</td>
<td>CEO</td>
</tr>
<tr>
<td></td>
<td>Carle Foundation Hospital</td>
</tr>
<tr>
<td>William Marshall</td>
<td>Associate Dean for Clinical Affairs and G/CME,</td>
</tr>
<tr>
<td></td>
<td>University of Illinois College of Medicine at Urbana-Champaign</td>
</tr>
<tr>
<td>Normand Paquin, PhD</td>
<td>Associate Director for Research, Coordinated Science Laboratory</td>
</tr>
<tr>
<td></td>
<td>University of Illinois at Urbana-Champaign</td>
</tr>
</tbody>
</table>

*Evaluation of a New College of Medicine Prepared by Tripp Umbach on behalf of Carle Health System and University of Illinois at Urbana-Champaign*
<table>
<thead>
<tr>
<th>Interviewees</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dan Peterson, JD</td>
<td>Vice Chancellor for Institutional Advancement and Senior Vice President</td>
</tr>
<tr>
<td></td>
<td>University of Illinois Foundation</td>
</tr>
<tr>
<td>Partha Ray, MD</td>
<td>Surgery/Surgical Oncology Carle Foundation Hospital, Founder Oracle</td>
</tr>
<tr>
<td></td>
<td>Bioscience</td>
</tr>
<tr>
<td></td>
<td>Carle Foundation Hospital</td>
</tr>
<tr>
<td>Norbert Riedel, PhD</td>
<td>President and CEO of Naurex, Illinois Innovation Council</td>
</tr>
<tr>
<td>Warren Ribley</td>
<td>Executive Director,</td>
</tr>
<tr>
<td></td>
<td>Illinois Medical District Commission</td>
</tr>
<tr>
<td>Sara L. Rusch, MD</td>
<td>Regional Dean, College of Medicine</td>
</tr>
<tr>
<td></td>
<td>University of Illinois College of Medicine at Peoria</td>
</tr>
<tr>
<td>Peter Schiffer, PhD</td>
<td>Vice Chancellor for Research</td>
</tr>
<tr>
<td></td>
<td>University of Illinois at Urbana-Champaign</td>
</tr>
<tr>
<td>James Slaugh</td>
<td>Professor and Director, Medical Scholars Program,</td>
</tr>
<tr>
<td></td>
<td>University of Illinois at Urbana-Champaign</td>
</tr>
<tr>
<td>Rick Stephens</td>
<td>Chairman of Horizon Hobby</td>
</tr>
<tr>
<td></td>
<td>Community Relations Lead for the College of Medicine</td>
</tr>
<tr>
<td>Magesh Sundaram, MD</td>
<td>Surgical Oncologist, Biomedical Research Center</td>
</tr>
<tr>
<td></td>
<td>Carle Foundation Hospital</td>
</tr>
<tr>
<td>Rich Tapping, PhD</td>
<td>Associate Dean for Research</td>
</tr>
<tr>
<td></td>
<td>UIC College of Medicine at Urbana</td>
</tr>
<tr>
<td>Molly Tracy</td>
<td>Associate Vice Chancellor for Institutional Advancement</td>
</tr>
<tr>
<td></td>
<td>University of Illinois at Urbana-Champaign</td>
</tr>
<tr>
<td>John Vozenilek, MD</td>
<td>Chief Medical Officer, Jump Trading Simulation &amp; Education Center</td>
</tr>
<tr>
<td></td>
<td>Chief Medical Officer for Simulation, OSF Healthcare</td>
</tr>
<tr>
<td>Phyllis Wise, PhD</td>
<td>Chancellor</td>
</tr>
<tr>
<td></td>
<td>University of Illinois at Urbana-Champaign</td>
</tr>
<tr>
<td>Jennifer Woodard, JD</td>
<td>President and Director of Strategic Engagement</td>
</tr>
<tr>
<td></td>
<td>Illinois Medical District Commission</td>
</tr>
</tbody>
</table>
APPENDIX B: EXAMPLES OF BIOTECHNOLOGY SPINOFFS

The following provide more details on examples of biotechnology spinoffs generated by faculty at the University of Illinois at Urbana-Champaign.

- Diagnostic Photonics, a company founded by two University of Illinois at Urbana-Champaign Electrical and Computer Engineering Professors, developed an imaging technology that generates diffraction-corrected images of tissue microstructure by solving the mathematical equations governing the physics of light at high speed and transforming defocused images into in-focus ones. This approach brings imaging to the point of care and places the power of optical imaging in the hand of the physician. Clinical trials with breast cancer patients have been completed with Carle and Johns Hopkins University.

- MC10 is commercializing products in wearable systems, home diagnosis and remote monitoring, and medical devices based on the pioneering inventions of stretchable and flexible silicon-based electronics developed by a University of Illinois at Urbana-Champaign Professor. MC10 is producing interventional catheters with ultra-low profile, nanometer-thin sensors that deliver real-time feedback to physicians during procedures. MC10 is backed by investors such as North Bridge, Braemar Energy Ventures, Aberdare Ventures, Windham Venture Partners, TERAWATT Ventures, and Medtronic Ventures.

- Daktari, which utilizes technology developed by a University of Illinois at Urbana-Champaign Bioengineering Professor, employs CD4 counting technology for point of care diagnosis and treatment of HIV and Hepatitis C. The company has raised $30 million in venture capital and employs 55 people.

- Metabolomx, co-founded by faculty at the University of Illinois at Urbana-Champaign, has developed technology enabling the identification of lung cancer from a patient’s breath. The technology, based on a breath analysis system, is a novel, proprietary colorimetric sensor array. The company has partnered with the Cleveland Clinic.

- Glucosentient, founded by a University of Illinois at Urbana-Champaign Chemistry Professor, developed a technology that transforms personal glucose meters into devices that quantitatively and conveniently detect non-glucose targets.

- Oracle Biosciences is developing a single gene-based clinical assay for diagnosis and prognosis for basal-like breast cancer for use in clinical diagnostics and subtyping. Research is being completed at Carle.

- Phi Optics, Inc., founded by a University of Illinois at Urbana-Champaign Electrical and Computer Engineering Professor, is an optical microscopy company that developed a disruptive technology –
Quantitative Phase Imaging (QPI) – that provides highly accurate, fast, and inexpensive imaging of live cells and tissues.

- Exalt Diagnostics, founded by a University of Illinois at Urbana-Champaign Bioengineering, Electrical and Computer Engineering Professor, developed FluoroBoost, a technology that measures the presence and concentration of dozens of proteins circulating inside the human body. The technology utilizes a nanostructured photonic crystal surface to increase the output of any surface-based fluorescence assay by more than 500 times.

- Accelerated Genomics, founded by researchers from the University of Illinois at Urbana-Champaign’s National Center for Supercomputing Applications, Institute for Genomic Biology, and the Department of Computer Science, accelerates the performance of gene alignment and sequencing through algorithms and the use of graphics processing units (GPUs). The technology enables the processing of genomic data at a rate four to six times faster than previous technology.

- Paxent LLC, founded by a University of Illinois at Urbana-Champaign Computer Science Professor, is collaborating with Carle on health care data analytics based on outcomes of the Strategic Health IT Advanced Research in Security (SHARPS) and related projects in health information technology.

- Phonticare, founded by an MD/PhD Electrical and Computer Engineering Professor at the Beckman Institute, is developing a line of portable biomedical optical imaging products using optical coherence tomography (OCT), a non-invasive optical imaging technique capable of providing high-resolution three-dimensional images of tissue structure in real-time.

- Vitruvian Biotech, founded by a University of Illinois at Urbana-Champaign Bioengineering faculty member, is developing image-guided targeted nanoparticle drug delivery. The initial research was completed at the Carle Biomedical Research Center, a collaboration between Carle and the University of Illinois at the Mills Breast Cancer Institute.
APPENDIX C: TRIPP UMBACH QUALIFICATIONS

Tripp Umbach is a national leader in feasibility analysis, economic impact studies, and consultation services for universities, hospitals, academic medical centers, and biomedical organizations. Tripp Umbach has provided consultation and economic impact analysis services for more than 50 medical education expansion clients, and for virtually every college of medicine that has been created or expanded during the past 10 years. Since 1995, Tripp Umbach has completed national studies measuring the economic impact of all allopathic medical schools and more than 400 teaching hospitals for the Association of American Medical Colleges (AAMC), making Tripp Umbach the most qualified firm to assess the feasibility and economic impact of a new or expanded college of medicine or hospital campus. In 2013, 50 of the top 100 academic medical centers ranked by U.S. News & World Report were active clients of Tripp Umbach. Tripp Umbach has completed individual studies for more than 75 established academic medical centers, 500 hospitals, and more than 200 universities since 1990.

Company Information

Address: 2359 Railroad St. #3701, Pittsburgh, PA 15222

Telephone: 412.281.2313

Fax: 412.281.9946

Website: www.trippumbach.com
From: Phyllis Wise
Sent: Sunday, August 10, 2014 12:56 PM
To: Paul Umbach
Subject: Re: How did your meeting with [ redacted ] go?

Thanks so much Paul. For both your emails. I'll let you know about my meeting with [ redacted ] It's great that you have emailed Jim. We had a short conversation this week. He's dealing with doubting physicians who have been treated like second class citizens in the University's previous efforts to partner with them and are worried that the new governance structure putting the NewCOM directly under UIUC will allow us to have too much power. He's also dealing with his board of directors who want to be sure that every penny invested will go toward the NewCOM and not be siphoned off to pay for other functions of the university unrelated to the COM.

In the meantime, we are dealing with faculty who are only familiar with academic organizational structures that are completely in the university and have never dealt with a partnership like this one. Our statutes do not deal with this. In addition, we are having issues related to how to balance the bottom line for the financial plan.

I am not worried yet...

Looking forward to talking with you soon.

Phyllis

Sent from my iPad

> On Aug 10, 2014, at 10:32 AM, Paul Umbach <PUBbach@trippumbach.com> wrote:
> 
> Hey friend -- you will see that I also sent an update to JIM at the same time. I am learning! :)  
> 
> Paul O. Umbach
> Founder and President
> Tripp Umbach
> 2359 Railroad St. #3701
> Pittsburgh, PA 15222
> Corporate Headquarters: 412.281.2313
> Cell Number: [ redacted ]
> Fax Number: 412.281.9946
> www.trippumbach.com
> 
> "Turning ideas into action for 25 years"
> 
> 
> ---- Original Message ------
> From: Phyllis Wise [mailto: [ redacted ]]
> Sent: Sunday, August 10, 2014 10:06 AM
> To: Paul Umbach
> Subject: How did your meeting with [ redacted ] go?
> 
> Paul,
> I am meeting with [redacted] tomorrow afternoon. Would you please let me know how your meeting with him went so that I am prepared for mine.
>
> > Thanks,
> > Phyllis
> >
> > Sent from my iPad
Subject: Samizdat startups

From: Jennifer Woodard
Sent: Sunday, August 10, 2014 8:19 PM
To: Phyllis Wise

I think that I have developed the capacity to "cheer pick" the talent and circumvent the idiots. Not the optimal situation - but necessary in the current environment. I do so hope that the next 6-12 months brings relief in the form of more talented leadership for both our President and for the key leadership roles at UIC - that would mean to the benefit of the U of I as a whole.

Meanwhile, THANK YOU for your support.

On Sun, Aug 10, 2014 at 1:21 PM, Phyllis Wise wrote:
And I, who is singularly focused on my duties, didn't even think to offer the same for you. But please know, if there is anything I can do, you must let me know. You have told me that UIC has been hard to work with. With all that is going on, I would think that you will have to go about your important business without their input. Interference delay tactics. Imagine if you had [redacted] as one of your commissioners, as [redacted] had recommended...or actually don't get a headache thinking about that!

Sent from my iPad

On Aug 10, 2014, at 2:05 PM, Jennifer Woodard wrote:
Ugh!! I just want you to avoid the land mines, and I will do all I can to help.

Sent from my iPhone

On Aug 10, 2014, at 12:40 PM, Phyllis Wise wrote:
I didn't even think about the impact on the IMD. What a mess all around.

Sent from my iPad

On Aug 10, 2014, at 11:28 AM, Jennifer Woodard wrote:
I have kept [redacted] apprised, and he is thus far interested in the potential for transformation...but who knows?!

Yes, the land mines in Chicago you do not need. The mess is also affecting our IMD programmatic efforts, and that makes me angry. Just trying to support the [redacted] yet all who represent future potential if we can keep them through this ugliness.

Sent from my iPhone

On Aug 10, 2014, at 8:27 AM, Phyllis Wise wrote:
I worry about losing stars too and even whether people like [redacted] will be willing to put their toes, much less their heart and mind, in this cesspool - health sciences enterprise is a very large part of UIC - potentially a jewel in its crown. I figures out all the politics and that decisions are made based on politics, bordering on unethical politics, I'm afraid. I do not think that this is the next great step in his career path.

Selfishly, I wonder whether all of this will impact our proposal to establish a COM in U-C. Personally, I want to get us disassociated with this mess as soon as we can. We need to not have our campus associated in any way with what is going on in Chicago.

Sent from my iPad

On Aug 10, 2014, at 9:11 AM, Jennifer Woodard wrote:
From a conversation I had with Chambers on Tuesday - who had spoken with Bob, it appears that Bob is taking a hands-off "this is a campus matter" approach. Do not know exactly what is going on. When I spoke with Ed on Monday, he said the BOT told PAM that Bob felt [redacted] to not know about new appointments. Just a colossal mess. Worry more about losing stars.

Sent from my iPhone

On Aug 10, 2014, at 7:23 AM, Phyllis Wise wrote:
But do you think that...

Sent from my iPad

On Aug 10, 2014, at 8:18 AM, Jennifer Woodard wrote:
No.
I have never seen nor experienced the leadership disaster that is UIC today.

Sent from my iPhone
On Aug 10, 2014, at 5:41 AM Phyllis Wise wrote:

I missed this announcement sent to me from Meena Rao, who is the chair of the search for the chancellor at UIC and a friend of mine. It sounds really crazy: Ajit as Head of the hospital (a geographer and former dean of the COB and now Lon as the VP Corporate and Community Relations for the VP Health Affairs. What is going on????

Sent from my iPad
Begin forwarded message:

Here is the announcement:

Lon Kaufman, who will step down August 15 from his administrative position as Vice Chancellor for Academic Affairs and Provost, will assume a new role as Assistant Vice President for Corporate and Community Relations in the Office of the Vice President for Health Affairs. His appointment will be effective August 16.

In this new position, Dr. Kaufman will provide assistance and consultation and pursue strategic relationships with Illinois healthcare economic development organizations. He will report to the Interim Vice President for Health Affairs.
Dr. Kaufman has considerable familiarity with the greater health communities and can integrate perspectives to enhance the corporate and community relations for the Office of the Vice President for Health Affairs. His distinguished 30-year career at the University has been marked by his dedication to UIC’s urban mission and his efforts on behalf of the University’s diverse students, faculty and staff. We look forward to working with him in his new role.

Dr. Kaufman has served in a variety of leadership positions as UIC evolved into a leading urban public research university. In collaboration with the Chancellor, as Provost he focused on supporting student success, diversity, academic excellence, faculty development and institutional advancement.

As Vice Provost for Planning and Programs from 2008 to 2011, he led the development of UIC College Prep, a health-science charter school within the Chicago Public School system. He also guided strategic planning initiatives, including the Diversity Strategic Thinking Document, the Diversity Strategic Plan, and the Learning Outcomes Assessment Program.

A plant biologist whose research focuses on the regulation of gene expression, signal transduction and crop productivity, Dr. Kaufman has received continuous federal funding since his arrival at UIC in 1985. His recent work also received support from the Illinois Soybean Growers Association.
He served as Director of Graduate Studies for the Department of Biological Sciences from 1993 to 1996 and as Department Head from 1998 to 2003. That year he became the founding Vice Provost for Undergraduate Affairs and Dean of the Honors College, a position he held for five years.

A graduate of Queens College of the City University of New York, Dr. Kaufman earned his Ph.D. from the State University of New York at Stony Brook. He was a postdoctoral fellow at the Carnegie Institution of Washington.

Please join us in congratulating Dr. Kaufman on his new position.

Sincerely,

Jerry L. Bauman
Interim President for Health Affairs

Paula Allen-Meares
Chancellor
John Corbally
Presidential Professor
Dear Paul,

[Redacted] was supposed to come to Champaign to meet with me this afternoon. But after his phone call with you, he called my office and said that he did not feel we needed to have the meeting. I still called him back and he said basically the same thing he said to you: he wants to be kept informed and really wants to be part of this. He feels left out, but your conversation convinced him that it was not intentional.

You did a great job and I think we are back on track with [Redacted].

Best,
Phyllis

On Monday, August 11, 2014 1:37 PM, Paul Umbach <PUMBACH@TRIPPUMBACH.COM> wrote:

Dear Team:

My call with [Redacted] was successful. I spent the first half of the call explaining why we were not formally in touch during the feasibility study and business planning phases. He understands and was appreciative of my open and honest reasons that I also spelled out in my recent email to him. His only concern is that he and [Redacted] are now far “behind” and will need to play a lot of catch up to be considered as full partners on the research side. I assured him that our work has been focused on developing the medical school program and that the research program is “wide open” for their involvement at the right time. He has agreed to stay on the sidelines until the parties in Urban engage him formally. It will be very important, however, to keep him in the loop after we gain approvals as he is nervous that the engineering and medicine research program will move forward without his hospital system – something that he wants badly to have his hospital engaged as a full partner. I hope this is helpful as we move forward. Sincerely, Paul

Paul O. Umbach
Founder and President
Tripp Umbach
2359 Railroad St. #3701
Pittsburgh, PA 15222
Corporate Headquarters: 412.281.2313
Cell Number: [Redacted]
Fax Number: 412.281.9946
www.trippumbach.com

"Turning ideas into action for 25 years"

samizdat-startups.org [UIUC release of "supplemental" COM emails]
From: Rashid Bashir
Sent: Friday, August 15, 2014 9:01 AM
To: 
Subject: 
Attachments: Letter for President Easter for COM Final.docx

From: Bashir, Rashid
Sent: Thursday, August 14, 2014 10:09 AM
To: Basar, M Tamer; Warnow, Tandy; Zhi-pei Liang; Rutenbar, Rob; Sanders, William H; Cahill, David G; Ferreira, Placid Mathew; Van Harlingen, Dale J; Nagi, Rakesh; Georgiadis, John G; Wang, Ning; Iyer, Ravishankar K; Hwu, Wen-Mei W; O’Brien, William D; Hsia, K Jimmy; White, Scott R; Sottos, Nancy R; Goldenfeld, Nigel D; Boppart, Stephen Allen; Taher Saif (saif@uiuc.edu); Insana, Michael; Bhargava, Rohit; Leckband, Deborah E; Kenis, Paul J A; Rutenbar, Rob; Goldenfeld, Nigel D; Nahrstedt, Klara; Song, Jun; Ha, Taekjip; Campbell, R H; Cunningham, Brian T; Rogers, John A; Gunter, Carl; Eden, James Gary; Sauer, Peter W; Katzenellenbogen, John A; Gillette, Martha L; Delucia, Evan H; Robinson, Gene E; Steven Sligar (s-sligar@uiuc.edu); Cohen, Neal J; Bryan White; Kramer, Arthur F; Miller, Gay Y; Martinis, Susan A; Destefano, Lizanne
Cc: Johnson, Erin E
Subject: Letter in Support for the Proposed College of Medicine

Dear Colleagues,

As all of you know, our campus is proposing the establishment of a new College of Medicine in partnership with Carle Foundation Hospital. Chancellor Wise is presenting the case for this new college to the BOT health committee on Sept 3rd and to the Board of Trustees on Sept 11th.

A few of us thought of putting a letter together in support of this effort that could help Chancellor Wise while she makes the case. We know that she will have letters from a few nationally prominent individuals in support of her case that have been sent to her and to President Easter.

Our plan would be to send the letter to President Easter (with cc to Chancellor Wise) to transmit to the Board of Trustees.

Please see the attached letter.

We want to know whether we can include your name in the signatories in support of this effort and the letter?
If so, please send us your approval and also your exact title you would like us to use when we include your name. Please send this information to Erin Johnson (siems1@illinois.edu) and myself, and we will collect all the information.

We would appreciate a response before Aug 22nd so we can compile and send shortly after.

Please let us know if you have any questions, advice or comments.
Regards

Rashid Bashir
Steve Boppart
Nigel Goldenfeld
Gene Robinson

--------------------------------------------------------------------------------
Rashid Bashir, Ph.D.
Abel Bliss Professor of Engineering and Head
Department of Bioengineering, 1270 Digital Computer Lab, M/C 278
1304 W. Springfield Ave. Urbana, IL 61801
Co-Director, Center for Nanoscale Science and Technology, www.cnst.illinois.edu
Dept.: 217-333-1867; Fax: 217-265-0246; Cell: 217 722 4250
Department Web Page: http://bioengineering.illinois.edu/
Research Group Page: http://libna.mntl.illinois.edu/
--------------------------------------------------------------------------------
Visit http://engineering.illinois.edu/grainger/grainger-engineering-breakthroughs-initiative
Also Visit http://graingerinitiative.engineering.illinois.edu/frontiersinbioengineering/
And http://mnm.embs.org/2014/
Aug 13th, 2014

Robert Easter, Ph.D.
President, University of Illinois
Urbana, IL

Dear President Easter,

We, the undersigned, unequivocally support the bold and far reaching plans of Chancellor Wise and Provost Adesida for a new Engineering-based College of Medicine on the UIUC campus. We believe that this new college is a compelling opportunity for our campus to continue its proud tradition of breakthroughs in the service of progress, fulfilling its mission as the pre-eminent Land Grant University. Since medicine, our healthcare systems, and global health are some of the next most important progress frontiers for mankind, our unique strength as the vanguard of disruptive innovation through interdisciplinary research and education compels us to take the lead again in defining and pioneering the future for engineering-based medicine. In doing so, our Campus would likely have a profound impact on the University of Illinois, our community, our state, our nation and the world. In the following, we highlight specific reasons that fuel our enthusiasm and galvanize our support for this ambitious undertaking at the present time.

- The last century’s breakthroughs in electronics, imaging, materials, and computing, have put the convergence of medicine, biology, and engineering on the fast track to conquering the world’s pressing medical and healthcare challenges. Through our internationally-renowned, interdisciplinary research culture and our top-ranked College of Engineering, we enjoy the enviable position of being able to pioneer the technologies and create and teach the knowledge and processes to understand, manage, prevent and cure disease, and to significantly improve our quality of life. With the advances in genomics and low cost sequencing, stem cell engineering, advanced imaging, pervasive and low-cost point-of-care sensors, supercomputing, and other advances – there is no better time to tackle the challenges in health care and medicine through scholarly advances in engineering and technology.

- The democratization of healthcare delivery, both within the U.S. and around the world, and the containment of its rising costs are conflicting challenges. We have faced such a conflict before. Just over sixty years ago, the size of vacuum tube electronics was standing as an insurmountable hurdle to the dream of computing power at our fingertips. Illinois led the world in overcoming this conflict through major contributions to semiconductor electronics and photonics research, computer engineering breakthroughs, and the pioneering of the curricula that educated and inspired the workforce behind today’s miracle of information technology. Our world-renowned interdisciplinary culture, built upon the bedrock of the Beckman Institute, the Institute for Genomic Biology, the Micro and Nanotechnology Laboratory, the Coordinated Science Laboratory, the Materials Research Laboratory, and the National Center for Supercomputing Applications positions us for success in this bold endeavor.
• The promise of this frontier of engineering-based healthcare depends on the development of a new paradigm in the education and training of the health care providers of tomorrow. Tomorrow’s Physicians must be empowered with the scientific knowledge, engineering expertise and quantitative skills they will need for putting to good use the means and engineering sciences available to them to diagnose, treat, prevent and cure disease. A new medical curriculum is the next educational frontier—the nexus of engineering, medicine, and biology, one we can, and should, be the first to develop and deliver. Our claim to fame as the birthplace of the first microelectronics curriculum and the first computer science and engineering curriculum, demands nothing less of us. To bypass this opportunity is tantamount to saying we will step to the sidelines and let others exploit our engineering expertise and innovations to their advantage. For us, this is not an option. We do not follow trends, we set them.

• Leading with a new medical curriculum will help us to further attract to Illinois the diverse student talent that wants to make a difference in the well-being of others. It will help us and the Carle Foundation Hospital – our committed and capable partner in this new endeavor – to attract the bold and daring physicians and medical researchers, engineering scholars and entrepreneurs who want to ride the wave of change in technology-enabled medicine. Their presence here will expedite the growth of the translational research enterprise, thus nucleating an ecosystem that will complement the vibrancy and strength of Chicago’s excellent healthcare and business sector. Moreover, these efforts will drive novel solutions to healthcare, addressing one of the critical problems of the day and help our state towards becoming the “Medical Prairie” of the 21st century.

We have done it before and we can do it again. We are proud to be part of a land grant institution that – faithful to its mission – educates and innovates in the service of progress that touches and influences everyone. We know how to leverage the incredible breadth of our educational fabric to contribute to the new ideas, new opportunities and new technologies that our faculty and our students bring to life.

The time is now to tackle the challenges in health care and medicine with biologically informed engineering and technology, and we are one of the handful of academic institutions in the world that possess the culture, drive, and momentum to lead this new frontier. Our support of the proposed new College of Medicine on the Urbana campus is bolstered by our Campus’ can-do attitude and relies upon the power of our autonomy as a campus to pursue those endeavors that will maintain our preeminence in the twin pursuits of labor and learning. Our preeminence hinges on our ability to lead this next frontier of innovation. Engineering-based medicine is our mandate.

With respects

Names –
Excellent point my friend! YES – doing any agreement between an independent private health system and a public university is painful, difficult and takes YEARS – so don’t forget that your work with Carle (in comparison) has gone fast and easy. For example, I am helping Florida State University who after 15 years does not yet have a clinical partnership or a faculty practice plan! FIU and other new schools also have struggled to get the best deal with health systems – thus my advise to “stick with the program” and reel Carle in in the short-term as a break in the relationship at this point would add years putting things back together or fixing a bad deal. Thanks! Paul

**Paul O. Umbach**

*Founder and President*

Tripp Umbach  
2359 Railroad St. #3701  
Pittsburgh, PA 15222  
Corporate Headquarters: 412.281.2313  
Cell Number: [telephone number]  
Fax Number: 412.281.9946  
www.trippumbach.com

“Turning ideas into action for 25 years”

**From:** Phyllis Wise  
**Sent:** Saturday, August 16, 2014 12:27 PM  
**To:** Paul Umbach; Normand Paquin  
**Subject:** Re: Email that I sent this morning to my Tripp Umbach team about how to deal with Carle's shortsighted view of the partnership

Thanks, Paul, for the advice. I just spoke with [name], who is [position], hired by the UT system to enable UT-A to have its own medical school. He was very helpful with advice. But one of the things that he said was that they had just (after over three years) come to an agreement with their major clinical partner, Seton. I sure hope it doesn't take us this long!

Phyllis

On Saturday, August 16, 2014 11:06 AM, Paul Umbach <pumbach@trippumbach.com> wrote:

Hey friends. I am taking you both “under the tent” and letting you see my thinking I shared with my team this morning on the issue of Carle undervaluing the impact that your institution will have on their bottom line each and every year once this school opens. Remember that you both have a “bottom line” that is not reflected in the medical school budgets, but must be kept in mind and on the table as you negotiate your “deal”. My email was in response to a question that I believe is important (should tuition revenue be “counted” as a contribution from the University?) as students in the future – as well as faculty and donors will be far less interested in a the Carle no one has every heard of Health System than a nationally know educational brand. The question is
how do you say this politely? The answer is -- YOU DON'T -- they don't when they are making their points -- so my advise is to bring up the the economic benefit to Carle of association with the University brand and see where it goes. 😊

I hope this is helpful to both of you as you move things forward.

Paul

Paul O. Umbach
Founder and President
Tripp Umbach
2359 Railroad St. #3701
Pittsburgh, PA 15222
Corporate Headquarters: 412.281.2313
Cell Number: [redacted]
Fax Number: 412.281.9946
www.trippumbach.com

"Turning ideas into action for 25 years"

From: Paul Umbach
Sent: Saturday, August 16, 2014 11:57 AM
To: Beth Paul; 'Ryan, Kenneth J. - (kryan)'; 'pstgermain@cox.net'; Ha Pham
Subject: RE: UT Austin Dean description

Dear Team:

The issue is that Carle is taking a very narrow view of the world and are (purposely?) being blind to the extra downstream revenue. Here is are some much bigger questions that needs to be answered: 1) What will it mean to Carle Health System (an organization that I had never heard of until this year after working for 800 hospitals over a 25 year period! Seriously!) to have their name FIRST in the most innovative forward thinking medical school in the US? 2) How much will it be worth for Carle to be mentioned in the same breath with the University of Illinois Urbana Champaign (or is it the other way - still confused on campus branding out there) for the rest of its life? Let's say that the reputation "bump" from Carle having a medical school in association with the University of Illinois U-C provides only 2% more net revenue after expenses annually with no additional service line growth - the system would pocket $4 million. Let's say that new service lines at the hospital expand as a result of academic medicine (which we estimate at 15% of total community hospital revenue in our AAMC reports), the net annual profit back to Carle as a result of the medical school will be about $18 million. Add the two "what ifs" and divide by two and you have more than $10 million annually in likely profit to the health system from the association with a medical school at the University of Illinois.

WOW! Let's find a polite way to communicate this to Carle without pissing them off with the "reputation mismatch" that gets their backs up.

Thanks for asking the hard questions and providing my thoughts as gently as possible.

Paul

Paul O. Umbach
Founder and President
Tripp Umbach
2359 Railroad St. #3701
Pittsburgh, PA 15222
Corporate Headquarters: 412.281.2313

IUIC release of "supplemental" COM emails
“Turning ideas into action for 25 years”

From: Beth Paul
Sent: Saturday, August 16, 2014 11:25 AM
To: Paul Umbach; 'Ryan, Kenneth J - (kjryan)'; 'pstgermain@cox.net'; Ha Pham
Subject: FW: UT Austin Dean description

Hi, guys, I am forwarding a question from Normand at University of Illinois about allocation of tuition revenue to the University when thinking about partner financial contributions. I don’t think Carle Health System is going for this concept at this point, and Normand is wondering if we have any input to help strengthen the argument for the university. Any thoughts?

Hope you all are having a great weekend!

Beth

From: Normand Paquin
Sent: Saturday, August 16, 2014 9:05 AM
To: Beth Paul
Cc: Paul Umbach; Ha Pham
Subject: Re: UT Austin Dean description

Thank you Beth. My sense is that we are making good progress. Having a smaller group helped yesterday.
I will be looking at revised budget to see where changes have left us today. On a related note, I know the university gets credit for tuition and fees in Greenville. I also know this is the traditional perspective. But my counterparts don’t like the latter as an argument. Can you comment on whether UT-Austin is structured this way and name a few more, especially amongst partnerships Carle has looked at via legal team? Is there an example that flies in the face of this?
Thank you for all your help, Normand.
On Aug 15, 2014 10:33 AM, "Beth Paul" <BPaul@trippumbach.com> wrote:
Hi, Normand, wasn’t sure if this will be helpful, but attached is the Dean description used by the recruitment firm for new med school at UT Austin.

Beth Paul
Tripp Umbach
2359 Railroad St. #3701
Pittsburgh, PA 15222
Corporate Headquarters: 412.281.2313
Cell Number: [redacted]
Fax Number: 412.281.9946
www.trippumbach.com

“Turning ideas into action for 25 years”
FYI -- Input from my senior consultant Ken Ryan...

Paul O. Umbach
Founder and President
Tripp Umbach
2359 Railroad St. #3701
Pittsburgh, PA 15222
Corporate Headquarters: 412.281.2313
Cell Number: 412.281.9946
Fax Number: 412.281.9946
www.trippumbach.com

“Turning ideas into action for 25 years”

From: Ryan, Kenneth J - (kjryan) [mailto:kjryan@email.arizona.edu]
Sent: Saturday, August 16, 2014 12:53 PM
To: Paul Umbach; Beth Paul; 'pstgermain@cox.net'; Ha Pham
Subject: RE: UT Austin Dean description

Hey Team,

I did not see an attachment or link in BP’s email so will not comment on UT-Austin. BUT if Carle is fussing about who gets credit for tuition $$ it just adds to the concerns I have raised in emails over the past 2-3 weeks. The point is, tuition comes from the students not Carle. To me, this appears to be just another effort to disguise the fact that Carle is not willing to commit to a significant and ongoing contribution to the operating budget of this medical school. I agree completely with Paul. That Carle can even be mentioned in the same breath with a big and creative program with UIUC is of huge financial value to them. Engineering is one of the top programs at this AAU member university. Compared to the partner models we investigated, CWR/CC Lerner & USC/Greenville, Carle is nothing. The BIG, BIG, thing here is they are on a course toward failure. The LCME will not grant provisional accreditation with the revenue budget (Tables 5 & 6) shown in the financial plan. Carle needs to fill in that gap. Carle’s leaders need to demonstrate the vision that this would be a fantastic deal for them in financial terms alone (Paul’s point). As I stated earlier, I worry that their board has already capped their commitment.

Ken

Kenneth J. Ryan, M.D.
Emeritus Professor of Pathology & Microbiology
UA College of Medicine
4621 N. Camino Real
Tucson, AZ 85718
From: Paul Umbach [mailto:PUMbach@trippumbach.com]
Sent: Saturday, August 16, 2014 8:57 AM
To: Beth Paul; Ryan, Kenneth J - (kjryan); 'pstgermain@cox.net'; Ha Pham
Subject: RE: UT Austin Dean description

Dear Team:

The issue is that Carle is taking a very narrow view of the world and are (purposely?) being blind to the extra downstream revenue. Here are some much bigger questions that needs to be answered: 1) What will it mean to Carle Health System (an organization that I had never heard of until this year after working for 800 hospitals over a 25 year period! Seriously!) to have their name FIRST in the most innovative forward thinking medical school in the US? 2) How much will it be worth for Carle to be mentioned in the same breath with the University of Illinois Urbana Champaign (or is it the other way - still confused on campus branding out there) for the rest of its life? Let's say that the reputation “bump” from Carle having a medical school in association with the University of Illinois U-C provides only 2% more net revenue after expenses annually with no additional service line growth – the system would pocket $4 million. Let's say that new service lines at the hospital expand as a result of academic medicine (which we estimate at 15% of total community hospital revenue in our AAMC reports), the net annual profit back to Carle as a result of the medical school will be about $18 million. Add the two “what ifs” and divide by two and you have more than $10 million annually in likely profit to the health system from the association with a medical school at the University of Illinois.

WOW! Let's find a polite way to communicate this to Carle without pissing them off with the “reputation mismatch” that gets their backs up.

Thanks for asking the hard questions and providing my thoughts as gently as possible.

Paul

Paul O. Umbach
Founder and President
Tripp Umbach
2359 Railroad St. #3701
Pittsburgh, PA 15222
Corporate Headquarters: 412.281.2313
Cell Number: [REDACTED]
Fax Number: 412.281.9946
www.trippumbach.com

“Turning ideas into action for 25 years”

From: Beth Paul
Sent: Saturday, August 16, 2014 11:25 AM
To: Paul Umbach; 'Ryan, Kenneth J - (kjryan)'; 'pstgermain@cox.net'; Ha Pham
Subject: FW: UT Austin Dean description

Hi, guys, I am forwarding a question from Normand at University of Illinois about allocation of tuition revenue to the University when thinking about partner financial contributions. I don't think Carle Health System is going for this concept at this point, and Normand is wondering if we have any input to help strengthen the argument for the university. Any thoughts?

Hope you all are having a great weekend!

Beth

samizdat-startups.org
Thank you Beth. My sense is that we are making good progress. Having a smaller group helped yesterday.

I will be looking at revised budget to see where changes have left us today. On a related note, I know the university gets credit for tuition and fees in Greenville. I also know this is the traditional perspective. But my counterparts don't like the latter as an argument. Can you comment on whether UT-Austin is structured this way and name a few more, especially amongst partnerships Carle has looked at via legal team? Is there an example that flies in the face of this?

Thank you for all your help, Normand.

On Aug 15, 2014 10:33 AM, "Beth Paul" <BPaul@trippumbach.com> wrote:

Hi, Normand, wasn’t sure if this will be helpful, but attached is the Dean description used by the recruitment firm for new med school at UT Austin.

---

**Beth Paul**

Tripp Umbach

2359 Railroad St. #3701

Pittsburgh, PA 15222

Corporate Headquarters: 412.281.2313

Cell Number: [Redacted]

Fax Number: 412.281.9946

www.trippumbach.com

"Turning ideas into action for 25 years"
Jim,

I met with the group yesterday and I think we have things straightened out. But I need to know what your folks tell you after that meeting. We need to meet to be sure that we both feel comfortable with everything.

Welcome back. I hope you had a good break.

Phyllis

Sent from my iPad

> On Aug 16, 2014, at 4:28 PM, James.Leonard <James.Leonard@Carle.com> wrote:
> 
> > Phyllis
> > Appreciated the notes and slides- I have not seen any for Carle yet but will review asap when i see them. This note is not copied to the rest of the group because i wanted to keep you up on the feedback i have received - legal folks reported prior to meeting on Friday that MOU intent had been significantly changed. The structure that is in your report is correct but legal view was that there was no true/sustainable shared governance or accountability short of wind down option and that we were effectively in a position of buying branding not partnership (their words). I have not had an update from that meeting yet as to any changes/decisions. I thought we had got some checks and balances that might give the Carle board some comfort but I am quite concerned that the internal rules or interpretations will strangle the project.
> > I travel back tomorrow and will f/u as soon as i have summary of the meeting.
> > Jim
> > 
> > Sent from my iPad
Jim,

We are supposed to meet on Aug 20 from 9-10. I would be happy to extend that meeting so that we have more time. Please let me know.

Phyllis

Sent from my iPad

> On Aug 16, 2014, at 4:28 PM, James.Leonard <James.Leonard@Carle.com> wrote:
> 
> > Phyllis
> > Appreciated the notes and slides- I have not seen any for Carle yet but will review asap when i see them. This note is not copied to the rest of the group because i wanted to keep you up on the feedback i have received - legal folks reported prior to meeting on Friday that MOU intent had been significantly changed. The structure that is in your report is correct but legal view was that there was no true/sustainable shared governance or accountability short of wind down option and that we were effectively in a position of buying branding not partnership (their words). I have not had an update from that meeting yet as to any changes/decisions. I thought we had got some checks and balances that might give the Carle board some comfort but I am quite concerned that the internal rules or interpretations will strangle the project.
> > I travel back tomorrow and will f/u as soon as i have summary of the meeting.
> > Jim
> > 
> > > Sent from my iPad
Good on all fronts. I look forward to our meeting tomorrow.

One more thing: since we are dealing with a partnership reporting of the dean to the Provost on our side and the CEO of Carle, I wonder whether we need to put some statement in the document about the CEO of Carle will consult with the Chancellor of UIUC on a strategic directions and vision of the College of Medicine.

Phyllis

Sent from my iPad

On Aug 17, 2014, at 11:42 AM, Normand Paquin <[redacted]> wrote:

Phyllis, Ade,

I insert comment within Phyllis’ email. I am in Chicago and expect to be back in Champaign around 9:00 PM at the latest.

I’m actually working away. ???s at a workshop.

Normand

Dr. Normand Paquin
Skype: normand_paquin
Tel: [redacted]

On Sun, Aug 17, 2014 at 10:48 AM, Phyllis Wise <[redacted]> wrote:

Normand and Ade,

I am forwarding this email to you only! I responded to Jim that I thought that the meetings on Friday went well and that his people felt reassured that we have work out MOU language that conveys that this is a true partnership and not just branding. I also told him that I would be happy to extend the time of our meeting on August 20 beyond the 9-10am time to make sure that we cover all topics that we need to. I have not heard from Jim, but if he accepts, it will mean that I won’t be at the COD meeting. Ade this is an important meeting for many reasons, so I am sorry that I might be late or not there at all.

A few more points that are important.
1. Normand, I think it may be important for you to attend the August 20 meeting to help with the budget presentation to Jim, if I don't think I can handle it after our meeting tomorrow. But it is also important for you to leave right after that so that I can have a 1:1 conversation with Jim to reassure him that Carle is an equal partner.

That is my understanding. I will have slides for our discussion tomorrow. We can decide if this is a good framework for discussion.

2. Normand, The budget allocations of revenues and our calculations of other revenues may be a hard pill for him/them to swallow, no matter what Paul and his colleagues say. When will you be discussing this with the whole finance working group?

I have been weary of discussing this with the Carle financial leads. If Steph and Joe were in town, I could meet with them but they will be out until Thursday. Let's discuss on Monday. I can see a scenario where Vicky and I meet with the Carle CFO and his key report ahead of your meeting with Jim. But I see August 20 as an opportunity to equip Jim with arguments he can use to convince his board and his key financial staff. The final budget corrected some errors and was not cut quite as much. So the financial investment needs are higher.

3. Normand, do you know what time the Carle special board meeting is going to be? If Jim wants me to attend, I need to figure out what other meetings I need to move around.

I do not. I suspect the evening because this is a special one. I have asked Joe and Steph.

4. Ade, I know you are meeting with Normand on August 19. I will be driving to Chicago with Dan and so cannot be there. If I need to be on the phone while you meet, I need to know when you are meeting. I have meetings in Chicago from 11-1 and 1:30-2:30. Times before and after that I will be on the road.

We picked the meeting time for you to be able to listen in while driving. It is from 9:30 to 10:30 AM. Molly and Mike Delorenzo will be there as well.

5. Normand, you suggested that having the oversight committee report to the CEO of Carle and the Provost instead of to the dean would help to allay their feelings of not being able to have input at the highest level. I think this is a good idea. You should propose it and I will discuss it with Jim.

Glad you are open to the idea. I preemptively have ask our legal folks whether we can make this work within our statutes. I reread the Greenville agreement and I am even more convinced we should make this work with a similar functionality. I will forward you email I sent our legal folks. I hope to discuss with you tomorrow as well. I actually think this will be the key to getting the Carle Board to agree. If I can propose this before LJ (legal counsel) meets with Jim, it could really make the difference as to whether things go well when you meet Jim. I think he will need this to get his board on board.

6. Normand, you said that it might be difficult for Carle to have input in the selection of the dean because of our statutes. This would be a show stopper. I think we need to get Jim an appointment on our campus (he may already have one at UIC). We need to make sure that anyone who serves on the search committee from Carle has an appointment in some college on our campus. Having them on the search committee is an absolute must if this partnership is going to succeed!

Seeing how this can be done is an action item that we have given to our legal team. One option might be to recognize that the provost assigns his search committee for the Dean position while the CEO of Carle needs to have a committee to evaluate whether this same person can become his Chief Academic Officer. The Provost and Carle CEO could then concur that the separate search committees should logically be merged as one.

samizdat-startups.org
7. I spoke with [redacted] on Friday. He's the [redacted] who was hired in 2003 by the UT system to help with the health sciences and has driven the establishment of the UT Austin College of Medicine. He told me that they had just received their first $35m from the health district. But more importantly, he told me that they just signed their agreement with their primary clinical partner, Seton, after many years of negotiations. So our partnership with Carle has been at warp speed compared to them.

Sorry for the long email.

Phyllis

Sent from my iPad

Begin forwarded message:

From: James.Leonard@Carle.com
Date: August 16, 2014 at 4:28:11 PM CDT
To: Phyllis Wise [redacted]
Subject: Tomorrow/Update

Phyllis

Appreciated the notes and slides- I have not seen any for Carle yet but will review asap when I see them. This note is not copied to the rest of the group because I wanted to keep you up on the feedback I have received - legal folks reported prior to meeting on Friday that MOU intent had been significantly changed. The structure that is in your report is correct but legal view was that there was no true/sustainable shared governance or accountability short of wind down option and that we were effectively in a position of buying branding not partnership (their words). I have not had an update from that meeting yet as to any changes/decisions. I thought we had got some checks and balances that might give the Carle board some comfort but I am quite concerned that the internal rules or interpretations will strangle the project.

I travel back tomorrow and will follow as soon as I have summary of the meeting.

Jim

Sent from my iPad
Normand Paquin
Dr. Normand Paquin
Skype: normand_paquin
Tel: 

On Sun, Aug 17, 2014 at 2:55 PM, Phyllis Wise wrote:

Normand,

Who does Greg Pemberton work for, us or Carle? Wh was the woman who did most of the talking at the end of my side of the table when we met on Friday?

Phyllis

Sent from my iPad
Yes, I would take out the at least.

Sent from my iPad

On Aug 20, 2014, at 6:26 AM, Normand Paquin wrote:

Phyllis,

My schedule is tight ahead of our 9:00 AM meeting so I thought it best to communicate this way.

Slide 5 begins with the following:

I am concerned about the "[black]".

Your thoughts?

I will have both versions on hand but will monitor for your response.

Normand

Dr. Normand Paquin
Skype: normand_paquin
Tel: [redacted]

<DRAFT – For discussion purposes only budget and MOU V4.pptx>
Phyllis,

As I indicated, I gave Paul a call to get his perspective on this notion of "us taking this College and simply running away with it."

Paul agreed with me that there is the basic premise that we need their clinicians, their internships, their space. It is not as though we can go down the street and partner with someone else. So you would think we could argue there is a need for us to listen to them. BUT you and I heard Jim talk about the perceived [redacted] argument is not going to carry much water.

But then we got into a discussion that I think is important to think about that reflects the different cultures and worlds of our respective institutions.

It started with me talking about how we must have the ability to allow a dean to pursue a goal even up to the BOT as unlikely as this is. Paul noted that is not the issue. What Paul said is that in academia, the dean can go to the Provost and when the Provost says, "No, I can't fund this," the dean has the option of simply fundraising to get the money and then do what he wants. In academia, we applaud this and love the initiative and drive this represents.

In the Health world, if a bunch of physicians want a new visualization center, they don't get to go off and fundraise for their goal - the administrators dictate the priorities and would not be amused if the physicians went off on their own. They have control.

Paul added that one of the things that goes wrong with academic health centers is that they become donor-driven as they chase gifts and endowments. They start doing anything and everything as long as someone has paid for it. From Carle's perspective, this is potentially a horrible scenario where the college starts running off in different directions that doesn't fit the original vision and mission of the College and stops being focused on items Carle seems as vital. I guess you could see this as "running away with it." Stephanie even brought this up at the Ed Pol Committee meeting today. She talked about all those health colleges crumbling under the weight of offering dozens and dozens of different residencies and diluting resources to address any and all diseases they can get funding for. So focus is definitely an issue for them.

I noted that our MOU draft states that [redacted] Paul suggests stating that the Joint Liaison Committee be the body that would make the decision as to whether such an expenditure/investment was aligned with the vision and objectives of the COM would be helpful. It would provide a forum for discussion to develop understanding and a means to keep the college focused.

Paul thinks acknowledging the different perspective can get us a long way towards a solution based on trust and understanding.
Hope this helps, Normand

Dr. Normand Paquin
Skype: normand_paquin
Tel: +1-217-819-8964
Dear Jim,

First, thanks for your note of support. You and I often times have tough decisions to make. But I honestly have never experienced this much loud blow back from a minority. I value your opinion so much, so thanks.

Second, I am so pleased/relieved to hear that your board meeting went well. Our histories/cultures/rules may be different, but I remain convinced that this is a game changer for both of us. I think we saw that well before your board or my academic senate or Board of Trustees appreciated it. So pulling/pushing/leading/managing at the right pace is key.

Thanks so much for your incredible leadership.

Best wishes,
Phyllis

Sent from my iPad

On Aug 27, 2014, at 9:52 AM, James.Leonard <James.Leonard@Carle.com> wrote:

Phyllis,
Just wanted you to know that I appreciate all you have done for the University and the Community. I support you and think you are exactly the right person for the job.
Second- last night our Board Education/Meeting went well. All of the effort, discussions and negotiations between our two enterprises paid dividends because their questions hit on every difficult topic, fear and rumor that we have spent the summer working on. The end result is that they (without a formal vote) remain committed to the vision of a separate medical school here and appreciate that we are both working on not just governance and finance but also history and culture. Our pace with them seems about right as we nail down the "must haves" for their fiduciary and governance concerns as we create a partnership around the COM.

Jim

James C. Leonard, MD
President & Chief Executive Officer

<image002.png>We will be a world class innovator providing exceptional patient care and research
Phyllis,

Did Dan ever get back to you about possible anticipation accounts for fundraising or for covering shortfalls while Carla pays steady amount? Carla knows we built AHS building extension ahead of [redacted] money coming in. They are wondering why we are telling them we can't do this for them. Jennifer Earley shared this with Paul and I this evening.

Normand
Phyllis,
I did talk with Christy Devocelle at UIF about this. She said it is actually UA that we need to seek gap funding from. This is because all of the expendable funds that are generated from endowments are transferred monthly to university accounts in the Banner system. This is different practice from what we did at OSUF.

Dan

On Aug 27, 2014, at 9:56 PM, "Phyllis M Wise <[REDACTED]" wrote:

Would you like to respond to Normand

Sent from my iPhone

Begin forwarded message:

From: Normand Paquin <[REDACTED]>
Date: August 27, 2014 at 8:23:20 PM MDT
To: Phyllis Wise <[REDACTED]>
Subject: Answer on anticipation accounts from foundation

Phyllis,

Did Dan ever get back to you about possible anticipation accounts for fundraising or for covering shortfalls while Carle pays steady amount? Carle knows we built AHS building extension ahead of our money coming in. They are wondering why we are telling them we can't do this for them. Jennifer Earley shared this with Paul and I this evening.

Normand
To: [Redacted]
From: [Redacted]
Subject: Support
Sent: Thu Aug 28 08:25:56 2014
Importance: Normal

Phyllis--
I got your contact info from Greg Lykins so I could send this. Incidentally, having Greg as a friend will serve you well. We have been close friends since 1970 and our relationship is a blessing in my life. I was hoping your and my paths would cross sometime after we spoke briefly after the Carle board meeting but since that has not happened I decided to send this note.

I continue to be supportive of the attempt to create a new college of medicine at UIUC and have encouraged and supported the work being done by Jim Leonard, Stephanie Beever and others from Carle who have been part of the team working with university staff. My sense of this is that it is a "heavy lift" but what isn't that is challenging and new. A COM venture between Carle and the university could be a "game changer" for both. Few opportunities like this come along in ones time in leadership and your seizing the moment is a real credit to you as a strategic thinker.

On another note, I applaud your decision with respect to Salaita. We need to be proud of the conduct of our faculty and it would be very difficult to be proud of a person who is intemperate and disrespectful. I recognize universities are different organizations but it only seems reasonable to me that the CEO (you) has the ultimate power to foreclose a faculty appointment. That might only happen one in a thousand or more times, but it should be a power that exists. You used it courageously and thoughtfully and I believe it reflects the values of the greater community and Illinois alumni. In the end, we expect our leaders to do the right thing and you have done so.

Continued best wishes in your most challenging position. I'm sure your schedule is unbelievably difficult to manage, but I'd enjoy the chance to spend a few minutes with you over coffee sometime and get to know you better. If I can ever do anything to assist you in my small sphere, don't hesitate to call upon me. Other than my ongoing service on the boards of [Redacted] and [Redacted] I'm retired so time is my most valuable resource.

Sent from my iPad
Sorry, I should have said Wednesday's meeting, not Tuesday's. Know that we will be cheering for you!

Joyce Tolliver

On Aug 31, 2014, at 0:04, Jtolliver wrote:

Phyllis, thanks, I just read the cover letter and started reading through the report but had to take a break. It is beyond comprehension what standing they think they have to present an "alternative" to our proposal for an academic program on our campus.

I am not sure what to think of Don's comment to JW. I do know that there is an established procedure for dealing with academic proposals from the campuses in USC, and it does not involve debating the merits of alternative proposals.

I am planning to watch the live video of Tuesday's meeting if I'm not able to get to NCSA in time. Fingers crossed.

Joyce

Joyce Tolliver

On Aug 30, 2014, at 22:08, Phyllis Wise wrote:

Dear Joyce,

I heard from Jennifer Woodard, who spoke with Don Chambers recently. He told her that he agrees with me on the Saleita issue but he is going to "have to do battle with Phyllis on the COM issue". He considers the Manatt report as the final word on what we should do. Do you have a copy of this report, which comes from their consultant? I would be happy to send it to you if you do not have it. Dimitri sent it out to all faculty, students and staff in a mass mail and Dean Mariscalco sent it to all the faculty, staff and students on our campus. I will forward you that email.

Phyllis
I think you put it well, Ade - we need to argue that these AREN'T threats (though I expect UIC to press that they are).

On Sun, Aug 31, 2014 at 4:33 PM, Ilesanmi Adesida [redacted] wrote:
The wording of the 4th item on the USC resolution may present an issue for us

"........ collaborative solutions when one proposed campus initiative is thought to present potential impediments to the pursuit of excellence on the part of any of the other campuses".

The critical issues which UIC seems to be harping on are that the medical space is theirs only and allowing us to have a medical school will present potential impediments to their pursuit of excellence; the other issue is that we will take money from the State which should go to their Medical School. Of course to both items, we can make cogent arguments. We have to be ready to make them assertively!

Ade

On Sun, Aug 31, 2014 at 12:37 AM, Nick Burbules [redacted] wrote:
Thanks Phyllis,

Don is my colleague and I respect him, but he doesn't have nearly the influence he thinks he does, even with the Board.

And the USC's latest resolution on this (which he supported) says quite clearly that one campus shouldn't be able to veto what another campus wants to do:

Fourth, that the Conference does not believe that it is within the jurisdiction of the faculty or administration of any one campus to curtail the academic planning of any other campus. Rather, the Conference urges administrative and faculty leaders across the campuses to pursue constructive, collaborative solutions when one proposed campus initiative is thought to present potential impediments to the pursuit of excellence on the part of any of the other campuses.

On Sat, Aug 30, 2014 at 10:08 PM, Phyllis Wise [redacted] wrote:
Dear Joyce,

I heard from Jennifer Woodard, who spoke with Don Chambers recently. He told her that he agrees with me on the Saleita issue but he is going to "have to do battle with Phyllis on the COM issue". He considers the Manett report as the final word on what we should do. Do you have a copy of this report, which comes from their consultant? I would be happy to send it to you if you do not have
it. Dimitri sent it out to all faculty students and staff in a mass mail and Dean Mariscalco sent it to all the faculty, staff and students on our campus. I will forward you that email.

Phyllis
I appreciate the good close reading of the USC statement, Ade.

But I think those "collaborative solutions" have already been taken into account in our proposal. And, importantly, it is up to the proposer of the initiative to take into account the well-being of the other campuses and to align the proposal appropriately--something that has already been done and that in fact is reflected in the T-U feasibility study.

I think you have put your finger on an important logical flaw in the UIC response: they want it both ways. On the one hand, they want to claim that the College of Medicine is a university-wide entity; and on the other hand they want to assert control over it as if it were, as you say, "theirs only."

On Sun, Aug 31, 2014 at 4:33 PM, Ilesanmi Adesida wrote:
The wording of the 4th item on the USC resolution may present an issue for us

"........ collaborative solutions when one proposed campus initiative is thought to present potential impediments to the pursuit of excellence on the part of any of the other campuses."

The critical issues which UIC seems to be harping on are that the medical space is theirs only and allowing us to have a medical school will present potential impediments to their pursuit of excellence; the other issue is that we will take money from the State which should go to their Medical School. Of course to both items, we can make cogent arguments. We have to be ready to make them assertively!

Ade

On Sun, Aug 31, 2014 at 12:37 AM, Nick Burbules wrote:
Thanks Phyllis,

Don is my colleague and I respect him, but he doesn't have nearly the influence he thinks he does, even with the Board.

And the USC's latest resolution on this (which he supported) says quite clearly that one campus shouldn't be able to veto what another campus wants to do:
Fourth, that the Conference does not believe that it is within the jurisdiction of the faculty or administration of any one campus to curtail the academic planning of any other campus. Rather, the Conference urges administrative and faculty leaders across the campuses to pursue constructive, collaborative solutions when one proposed campus initiative is thought to present potential impediments to the pursuit of excellence on the part of any of the other campuses.

On Sat, Aug 30, 2014 at 10:08 PM, Phyllis Wise wrote:

Dear Joyce,

I heard from Jennifer Woodard, who spoke with Don Chambers recently. He told her that he agrees with me on the Saleita issue but he is going to "have to do battle with Phyllis on the COM issue". He considers the Manatt report as the final word on what we should do. Do you have a copy of this report, which comes from their consultant? I would be happy to send it to you if you do not have it. Dimitri sent it out to all faculty students and staff in a mass mail and Dean Mariscalco sent it to all the faculty, staff and students on our campus. I will forward you that email.

Phyllis

--
Joyce Tolliver
Hello all,

This is worth a longer discussion, but in this context "unit autonomy" means - we get to hire who we want, and no one can overrule us.

The problem is, as we've seen here, that five faculty can make a bad decision that make 2000 faculty suffer.

Nick

On Sun, Aug 31, 2014 at 6:34 PM, Ilesanmi Adesida wrote:
Yes indeed. I am not sure that they understand what VONC stands for. I have told some Deans and will tell the others that VONC has dire implications!

One thing that I am wondering about is this thing that people are so concerned about called "Unit Autonomy". What does it exactly mean in our statutes? Does it mean that any unit can well do anything they choose to do without any oversight? Does a unit with 6 tenure track faculty have that autonomy? What is the magnitude? I know that California and Rhode Island have the same votes in the Senate but we do know that California carries more weight in many other relevant spheres! When is a unit autonomy subservient to the authority of the BoT in our system? This may require a thesis to define this accurately.

On Sun, Aug 31, 2014 at 6:25 PM, Nick Burbules wrote:
Another thing. I was talking with a colleague who knows something about the Phil Dept. and he said, "They don't know what a "Vote of No Confidence" is. They are angry and they want to vote that they disagree with the chancellor and want her to change her mind. They think that a "VONC" is the way to do that." (Or they are being TOLD that.)

They don't realize (all of them) that a VONC is a very specific vote tantamount to calling for someone's resignation - and that may not be what they intend. If they want to vote "I'm angry and I disagree with the chancellor and I want her to change her mind." they should vote THAT.

I wonder Ade if something should be said to the deans, and through them the dept heads, that their faculty ought to realize what a VONC means before they take these votes. Whatever units choose to vote, they ought to realize what they are committing to.

On Sun, Aug 31, 2014 at 6:18 PM, Nick Burbules wrote:
I agree with all of this. And a related issue is that one of our stars here once said, "I am all for collaboration. But when I collaborate, my cutting edge peers are at Stanford, MIT etc. They aren't in Chicago. There's no benefit to me in being forced to collaborate with UIC."

I don't know if or how it's possible to say this. But somehow we need to communicate that you can say there's "Bioengineering at Urbana, and there's Bioengineering at UIC" - but they aren't playing the same game, at the same level. Just because the depts have the same name doesn't mean they fit. Our engineers reinvent the world. That's what we want to do here.

On Sun, Aug 31, 2014 at 6:08 PM, Ilesanmi Adesida wrote:
The sort of COM that we want will not thrive under a COM that is behemoth! Being big is great if that is what you want. Being the best and being innovative are our hallmark! We will not attract the sort or level of people that we want and need to distinguish us from others! Our aim is to look for National Academy Members (with excellent collaborative reputation) to come here for this new initiative and we have some identified already. We have had tremendous responses from leaders in biomedicine around the country who have given their support and mentioned that we are uniquely positioned to do this NewCOM. Nobody in their elements will come here to be a Regional Dean being dictated to from Chicago. It is is road to nowhere, and worse, to mediocrity!

On Sun, Aug 31, 2014 at 5:27 PM, Nick Burbule wrote:

On Sun, Aug 31, 2014 at 5:18 PM, Joyce Tolliver wrote:

I think you have put your finger on an important logical flaw in the UIC response; they want it both ways. On the one hand, they want to claim that the College of Medicine is a university-wide entity; and on the other hand they want to assert control over it as if it were, as you say, "theirs only."

Brilliant Joyce, So, if it is "one university," then Urbana and Springfield and Peoria and Rockford should have a vote in deciding who the dean of the COM is - maybe even someone from one of those locations.

Either the COM belongs to Chicago, or it belongs to EVERYONE.

On Sun, Aug 31, 2014 at 4:33 PM, Ilesanmi Adesida wrote:
The wording of the 4th item on the USC resolution may present an issue for us...
impediments to the pursuit of excellence on the part of any of the other campuses".

The critical issues which UIC seems to be harping on are that the medical space is theirs only and allowing us to have a medical school will present potential impediments to their pursuit of excellence; the other issue is that we will take money from the State which should go to their Medical School. Of course to both items, we can make cogent arguments. We have to be ready to make them assertively!

Ade

On Sun, Aug 31, 2014 at 12:37 AM, Nick Burbules wrote:

Thanks Phyllis,

Don is my colleague and I respect him, but he doesn't have nearly the influence he thinks he does, even with the Board.

And the USC's latest resolution on this (which he supported) says quite clearly that one campus shouldn't be able to veto what another campus wants to do:

Fourth, that the Conference does not believe that it is within the jurisdiction of the faculty or administration of any one campus to curtail the academic planning of any other campus. Rather, the Conference urges administrative and faculty leaders across the campuses to pursue constructive, collaborative solutions when one proposed campus initiative is thought to present potential impediments to the pursuit of excellence on the part of any of the other campuses.

On Sat, Aug 30, 2014 at 10:08 PM, Phyllis Wise wrote:

Dear Joyce,

I heard from Jennifer Woodard, who spoke with Don Chambers recently. He told her that he agrees with me on the Saleita issue but he is going to "have to do battle with Phyllis on the COM issue". He considers the Manatt report as the final word on what we should do. Do you have a copy of this report, which comes from their consultant? I would be happy to send it to you if you do not have it. Dimitri sent it out to all faculty students and staff in a mass mail and Dean Mariscalco sent it to all the faculty, staff and students on our campus. I will forward you that email.

Phyllis

--
Joyce Tolliver
I hear that UIS wants to start a small nursing program - and I guess it will be UIC too.

On Sun, Aug 31, 2014 at 9:28 PM, Phyllis Wise wrote:
There's real inconsistency throughout the report. Sometimes they call this the UI COM and other times the UIC COM. We will be at the ribbon cutting for the new space of the College of Nursing in Urbana. They have large banners outside the building calling themselves the UIC College of Nursing.

On Sunday, August 31, 2014 5:27 PM, Nick Burbules wrote:

On Sun, Aug 31, 2014 at 5:18 PM, Joyce Tolliver wrote:

I think you have put your finger on an important logical flaw in the UIC response; they want it both ways. On the one hand, they want to claim that the College of Medicine is a university-wide entity; and on the other hand they want to assert control over it as if it were, as you say, "theirs only."

Brilliant Joyce, So, if it is "one university," then Urbana and Springfield and Peoria and Rockford should have a vote in deciding who the dean of the COM is - maybe even someone from one of those locations.

Either the COM belongs to Chicago, or it belongs to EVERYONE.
On Sun, Aug 31, 2014 at 4:33 PM, Ilesanmi Adesida wrote:
The wording of the 4th item on the USC resolution may present an issue for us

"......... collaborative solutions when one proposed campus initiative is thought to present potential impediments to the pursuit of excellence on the part of any of the other campuses".

The critical issues which UIC seems to be harping on are that the medical space is theirs only and allowing us to have a medical school will present potential impediments to their pursuit of excellence; the other issue is that we will take money from the State which should go to their Medical School. Of course to both items, we can make cogent arguments. We have to be ready to make them assertively!

Ade

On Sun, Aug 31, 2014 at 12:37 AM, Nick Burbules wrote:
Thanks Phylllis,

Don is my colleague and I respect him, but he doesn’t have nearly the influence he thinks he does, even with the Board.

And the USC’s latest resolution on this (which he supported) says quite clearly that one campus shouldn’t be able to veto what another campus wants to do:

Fourth, that the Conference does not believe that it is within the jurisdiction of the faculty or administration of any one campus to curtail the academic planning of any other campus. Rather, the Conference urges administrative and faculty leaders across the campuses to pursue constructive, collaborative solutions when one proposed campus initiative is thought to present potential impediments to the pursuit of excellence on the part of any of the other campuses.

On Sat, Aug 30, 2014 at 10:08 PM, Phyllis Wise wrote:
Dear Joyce,

I heard from Jennifer Woodard, who spoke with Don Chambers recently. He told her that he agrees with me on the Saleita issue but he is going to "have to do battle with Phyllis on the COM issue". He considers the Manatt report as the final word on what we should do. Do you have a copy of this report, which comes from their consultant? I would be happy to send it to you if you do not have it. Dimitri sent it out to all faculty students and staff in a mass mail and Dean Mariscalco sent it to all the faculty, staff and students on our campus. I will forward you that email.

Phyllis
In the main, they call it UIC-COM. In their communications with me, it is UIC-COM. When it is convenient, especially for the BoT, they call it UI-COM. Well, we know it is UIC-COM because they banned the folks here never to use column I logo on anything -- not on their presentations and not on their badges. In the report, they could not make up their mind! Let's say it is bat -- neither a mouse nor a bird!

On Sun, Aug 31, 2014 at 9:28 PM, Phyllis Wise wrote:
There's real inconsistency throughout the report. Sometimes they call this the UI COM and other times the UIC COM. We will be at the ribbon cutting for the new space of the College of Nursing in Urbana. They have large banners outside the building calling themselves the UIC College of Nursing.

On Sunday, August 31, 2014 5:27 PM, Nick Burbules wrote:

On Sun, Aug 31, 2014 at 5:18 PM, Joyce Tolliver wrote:

I think you have put your finger on an important logical flaw in the UIC response: they want it both ways. On the one hand, they want to claim that the College of Medicine is a university-wide entity; and on the other hand they want to assert control over it as if it were, as you say, "theirs only."

Brilliant Joyce, So, if it is "one university," then Urbana and Springfield and Peoria and Rockford should have a vote in deciding who the dean of the COM is - maybe even someone from one of those locations.

Either the COM belongs to Chicago, or it belongs to EVERYONE.
On Sun, Aug 31, 2014 at 4:33 PM, Ilesanmi Adesida wrote:
The wording of the 4th item on the USC resolution may present an issue for us

" .......... collaborative solutions when one proposed campus initiative is thought to present potential impediments to the pursuit of excellence on the part of any of the other campuses".

The critical issues which UIC seems to be harping on are that the medical space is theirs only and allowing us to have a medical school will present potential impediments to their pursuit of excellence; the other issue is that we will take money from the State which should go to their Medical School. Of course to both items, we can make cogent arguments. We have to be ready to make them assertively!

Ade

On Sun, Aug 31, 2014 at 12:37 AM, Nick Burbules wrote:
Thanks Phyllis,

Don is my colleague and I respect him, but he doesn't have nearly the influence he thinks he does, even with the Board.

And the USC's latest resolution on this (which he supported) says quite clearly that one campus shouldn't be able to veto what another campus wants to do:

Fourth, that the Conference does not believe that it is within the jurisdiction of the faculty or administration of any one campus to curtail the academic planning of any other campus. Rather, the Conference urges administrative and faculty leaders across the campuses to pursue constructive, collaborative solutions when one proposed campus initiative is thought to present potential impediments to the pursuit of excellence on the part of any of the other campuses.

On Sat, Aug 30, 2014 at 10:08 PM, Phyllis Wise wrote:
Dear Joyce,

I heard from Jennifer Woodard, who spoke with Don Chambers recently. He told her that he agrees with me on the Saleita issue but he is going to "have to do battle with Phyllis on the COM issue". He considers the Manatt report as the final word on what we should do. Do you have a copy of this report, which comes from their consultant? I would be happy to send it to you if you do not have it. Dimitri sent it out to all faculty students and staff in a mass mail and Dean Mariscalco sent it to all the faculty, staff and students on our campus. I will forward you that email.

Phyllis

--
Joyce Tolliver
Fantastic. What we are proposing is simply what is best for the university and the state.

On Sep 1, 2014 8:48 PM, "Phyllis Wise" wrote:
Normand,

I talked with Jim just now and we are totally on one page. I told him that I thought that the Manatt paper was a propaganda piece, a whitewash and he said that those were the nicest way to characterize it. I told him that it would be important for him to say that the partnership with us was critical and not replaceable by a partnership with UIC, and that if this did not work he had other areas he would invest in and it wasn't UIC. He is in total agreement.

Phyllis

On Monday, September 1, 2014 3:09 PM, Normand Paquin wrote:
Phyllis,

Stehanie will aim to catch Jim first thing in the morning so she can convey to us when we meet later that morning what Jim might be willing to say. She thought that Jim would be willing to say how important in his view it was for a successful college of medicine to have close connectivity between education, research, clinical and community service missions and as such how important he viewed considered the ability to have decision-making here in Urbana-Champaign. Along similar lines, she will confirm with him as to his willingness to indicate that Carle feels so strongly about this that any significant investment in a new College of Medicine is predicated on such a local partnership and decision-making authority.

I did not go negative in my conversation with her, i.e. the history of working with a dean 150 miles away.

Normand

Dr. Normand Paquin
Skype: normand_paquin
Tel: [redacted]
On Thursday, September 4, 2014 12:16 PM, James. Leonard <James.Leonard@Carle.com> wrote:

This was sent out and is posted on our internal newsletter today.

Jim

James C. Leonard, MD
President & Chief Executive Officer

We will be a world class innovator providing exceptional patient care and research

Sent: Thursday, September 04, 2014 11:54 AM
To: ALLCARLE; ALLDOCS
Cc: Gayle Huber
Subject: Civility, Respect and the Carle Behavior Standards

“Don’t discount the power of your words. The thought that they might cause unnecessary hurt or discomfort should inform every conversation.” -- Dr. P.M. Forni, Director of The Civility Initiative at Johns Hopkins.

I thought it was appropriate to share the words of Dr. Forni in light of the ongoing headlines about controversies at our own prestigious university. I recently joined a number of local community and business leaders in signing an open letter expressing support of Chancellor Wise’s leadership and track record of advocating for human rights, diversity, and inclusion. It also made me reflect on Carle’s longstanding commitment to be an environment of accountability, trust and respect.

We have spent the past year focusing on Standards of Behavior, and this summer we initiated a process for behavioral assessments (HSL/SL) as part of improving the Carle Experience for our patients and ourselves. Why did we do that?

We did it to create a better environment so all of you can be more personally and professionally successful. It is with ongoing constructive feedback that we can learn and grow as individuals and develop as colleagues. As a leader, I seek to create and sustain an environment at Carle and Health Alliance that is respectful and team oriented. We don’t always agree with each other. In fact, sharing differing opinions is healthy and encouraged. Doing so challenges all of us to be our best. From
Rounding to Safe Stop we have programs in place that encourage healthy dialogue and that challenge all of us to make sure we are always doing what’s right for the patient, our customers and each other. We also have mechanisms in place and policies that support individuals to share with their leadership team and/or Human Resources any concerns they may have about their work environment. It is with this information that any necessary interventions can be made for respectful resolutions.

What’s not okay is to get angry, yell, or to be disrespectful. It’s not ok to demean or intimidate others. Doing so shows a lack of judgment and a lack of respect. That type of discourse is not meant to solve a problem—it’s reactive, reckless, and demonstrates a blatant disregard for proper interactions, particularly if those occur in the workplace. It is when we have the healthy, tactful, and professional dialogues with one another that we will continue to excel as an organization.

Dr. Forni frequently talks about the rewards of fostering a culture of civility in today’s workplace. He says: “Civility means a great deal more than just being nice to one another. It is complex and encompasses learning how to connect successfully and live well with others, developing thoughtfulness, and fostering effective self-expression and communication. Civility includes courtesy, politeness, mutual respect, fairness, good manners, as well as a matter of good health. Taking an active interest in the well-being of our community and concern for the health of our society is also involved in civility.”

As a health care leader, I am proud of the steps the Carle enterprise has taken over the years to promote civility and inclusive work environments. Further, our efforts under The Carle Experience continue to illustrate the commitment each of you has personally made and for that I am appreciative. I often receive thank you notes from our patients and customers, not necessarily touting innovative or cutting edge technologies, but rather they are almost always thanking me for the people who work for our organization and the exceptional compassion and service they give to our patients, families, customers, and communities. This type of recognition is possible because of our ongoing commitment to mutual respect and teamwork, in a professional and positive work environment. Thank you for your willingness to engage and be part of a very special culture here at Carle, one based on respect and civility.

I encourage you to continue to find ways to live the Behavior Standards in your interactions with one another and think about how they apply to your workplace and what you can do to advance a culture of accountability, respect and civility. In the end, we will have a healthier workplace, a healthier community and a healthier you.

James C. Leonard, MD
President & Chief Executive Officer

This e-mail transmission may contain information that is proprietary, privileged and/or confidential. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or use of the information contained in or attached to this message is strictly prohibited. Please notify the sender of the delivery error by replying to this message, and then delete it from your system.
Ade,

It was a wonderful evening and it is always great to see you. I love your positive attitude, your ever present smile, your humility and your humor! Also should add the fact that you are very very smart!!

I know there is a lot on your mind right now, but the evening seemed to add a little magic that was sorely needed!

Thanks again,

Donna

Sent from my iPad

On Sep 4, 2014, at 3:34 PM, "Ilesanmi Adesida" wrote:

Thanks, Donna. What a beautiful picture! May the sun radiate this much good into our lives. Great seeing you yesterday at the College of Medicine hearing. I am counting that we will be successful in this effort; that will mean a great deal to this community over the long term. Again, thanks. Ade

On Tue, Sep 2, 2014 at 7:20 PM, Greene, Donna <Donna.Greene@busey.com> wrote:

The information contained in this e-mail is privileged and confidential. Unless otherwise indicated or obvious from the message, this is intended only for the individual(s) listed above. Please see our Privacy Notices at http://www.busey.com.
To: Phyllis Wise
From: Joyce Tolliver
Subject: Re: today
Sent: Thu Sep 04 21:50:37 2014
Importance: Normal

Phyllis, I am attaching the statement in case the students have not posted it on the ISS website.

best wishes
Joyce

On Thu, Sep 4, 2014 at 5:14 PM, Phyllis Wise wrote:

Joyce,

I actually have not seen the statement. I will look for it on their website.

Thanks for your continuing and unswerving support!
Phyllis

On Thursday, September 4, 2014 2:59 PM, Joyce Tolliver wrote:

Phyllis, last night as I was relaxing into an evening at home with some good books and a simple dinner, I thought of you and hoped that you were able to do the same, finally, after your triumph yesterday.

Of course I should have known that you would instead be with the students, talking but mostly listening, once again putting into action the notions of tolerance and dialogue that you have worked so hard to imprint into our campus culture.

I've just read the statement that the study body president wrote and shared at last night's meeting. It is a source of inspiration and hope, and I also take it as a tribute to you and your work here.

Joyce

On Wed, Sep 3, 2014 at 10:27 PM, Phyllis Wise wrote:

Dear dear Joyce,

You are really so kind to write. I agree that Jim and I made a great team today and looked good in part because Dimitri looked so bad. We got what we needed today: tacit approval to go ahead with the business plan and the governance plan, even if they did not want to use the term "endorse". We'll have to finalize the finance plan and the MOU in time for the November meeting.
Apparently Julie Worth asked Jim and he said he had permission from his board to contribute $100M and that he was unwilling to put that toward the UIC COM. I wonder whether that will be headline tomorrow.

I spent the evening at the Student Senate meeting and there were students both for and against Saleita. I really hope that either the BOT will vote or we get some kind of settlement so that we can put that behind us. It is such a polarizing issue.

Thank you for all the work that you have put into the COM MOU. It will be more aight because of all your efforts.

Best,
Phyllis.

On Wednesday, September 3, 2014 5:45 PM, Joyce Tolliver wrote:

Phyllis, you made us look SO good today! You projected confidence, energy, clarity, and vision. I was impressed and happy to see that you directly addressed a couple of the UIC "counter-proposal" points, and very convincingly.

Not that I'm biased or anything, but I thought you and Dr. Lennard presented an airtight case. In fact, the weird committee befuddlement about process was probably because telling you not to go ahead was not even on their radar, after that presentation.

We are so very lucky to have you as our leader.

Joyce

--
Joyce Tolliver

--
Joyce Tolliver
--

Joyce Tolliver
Peers and Colleagues,

Over the past month, my colleagues, friends, students, and I, have watched the debate and the following polarization engulf our campus and the media around the decision our administration made over the hiring process of Steven Salaita. I have watched my friends and peers split on the issue and make respectable arguments for and against the decision. But as the Student Body President at the University of Illinois at Urbana-Champaign and as a representative of the “Official Voice of the Student Body,” it is my duty and charge to advocate for the entirety of the Student Body. This means making our campus the best it can possibly be for my peers in the present and my peers in the future—as new Illini join our ranks.

The decision has deeply and rightfully angered members of our campus, especially my peers in the American Indian Studies Program who were left with no recourse. Those members of our community have every right to be upset, as a potential faculty member and his family had shared meals with them, were invited into their homes, and were welcomed to Illinois as we welcome everyone who steps foot on our campus. So of course when this decision was made under the circumstances that is was, our friends, peers, and colleagues became irate. It was unprecedented, surprising, and distressing.

In talking with a multitude of my fellow students about this, I heard complaints that they did not feel welcome at Illinois, and that their opinions on a controversial conflict had been marginalized and neglected. As a campus devoted to the principles of inclusivity, we must make it our top priority to make sure every students on our campus feels welcome, respected, and safe to engage in discourse. In the same note, as a campus, committed to the ideals of inclusivity and bound by the principles of shared governance, we must realize and respect the decision that Chancellor Wise has made as being from the same grounds of inclusivity.

At the absolute foundation of this University and campus community is the core principle of inclusivity. In my position as the Student Body President, but more importantly as a student and member of this campus community, I have joined thousands of my fellow students, faculty, staff, and administrators in committing to these five statements outlined in our Inclusive Illinois initiative:

I will encourage the expression of different voices, perspectives, and ideas.
I will challenge my own beliefs, opinions, and viewpoints.
I will advocate for an accessible, safe, and respectful environment to enhance the living, learning, and working community at Illinois.
I will acknowledge and respect the multiple identities represented in each individual.
I will demonstrate my commitment through my voice and my conduct.
These statements and the sheer amount of time, energy, and resources, our campus has put into developing a welcoming and inclusive community is a simple testament to the seriousness and amount of respect we give this fundamental principle.

In addressing the polarity on our campus in this present time, I think it most critical to reflect upon these statements. If a professor plainly states intolerance towards others, can we really say he will ‘acknowledge and respect the multiple identities represented in each individual’? When a professor allegedly announces that he wishes almost certain death to civilians who live in a disputed land, can we really say that same professor can create an ‘accessible, safe, and respectful environment to enhance the living, learning, and working community at Illinois’? In our day and age with digital communication, we must always be cognizant of our perception despite the intentions of a mere 140 characters.

At stake here is not the academic freedom and right to free speech of any individual, Chancellor Wise has already stated and recommitted to those fundamental principles of our education system. What is at stake is the integrity of our University, what is at stake is the community of our campus. When tension and anger are allowed to flourish and thrive, our campus becomes unstable, our relationships begin to polarize, and our inclusive community becomes the exact thing we were against in the first place.

So while I continue to encourage this discussion of differing opinions, and while I will continue to challenge my own beliefs, opinions, and viewpoints, I will also advocate creating an accessible, safe, and respectful environment to enhance the living, learning, and working community at Illinois. I will acknowledge and respect the multiple identities represented in each individual, as I continue to demonstrate my commitment to these principles through my voice and my conduct, as I have done in this letter and I will in all future endeavors. I do this because I believe in an inclusive Illinois, and I believe in a welcoming Illinois, and because I believe in this place I call home.

Sincerely,

Mitch Dickey
Student Body President
University of Illinois at Urbana-Champaign
To: Phyllis Wise  
From: Joyce Tolliver  
Subject: Re: today  
Sent: Fri Sep 05 07:07:12 2014  
Importance: Normal

Glad to help.

On Fri, Sep 5, 2014 at 5:21 AM, Phyllis Wise wrote:

Joyce,

Thanks for saving me the time! What lovely service, on top of all the support, you give me.

Best,
Phyllis

On Thursday, September 4, 2014 9:51 PM, Joyce Tolliver wrote:

Phyllis, I am attaching the statement in case the students have not posted it on the ISS website.

best wishes
Joyce

On Thu, Sep 4, 2014 at 5:14 PM, Phyllis Wise wrote:

Joyce,

I actually have not seen the statement. I will look for it on their website.

Thanks for your continuing and unswerving support!
Phyllis

On Thursday, September 4, 2014 2:59 PM, Joyce Tolliver wrote:

Phyllis, last night as I was relaxing into an evening at home with some good books and a simple
dinner, I thought of you and hoped that you were able to do the same, finally, after your triumph yesterday.

Of course I should have known that you would instead be with the students, talking but mostly listening, once again putting into action the notions of tolerance and dialogue that you have worked so hard to imprint into our campus culture.

I've just read the statement that the study body president wrote and shared at last night's meeting. It is a source of inspiration and hope, and I also take it as a tribute to you and your work here.

Joyce

On Wed, Sep 3, 2014 at 10:27 PM, Phyllis Wise- wrote:

Dear dear Joyce,

You are really so kind to write. I agree that Jim and I made a great team today and looked good in part because Dimitri looked so bad. We got what we needed today: tacit approval to go ahead with the business plan and the governance plan, even if they did not want to use the term "endorse". We'll have to finalize the finance plan and the MOU in time for the November meeting.

Apparently Julie Worth asked Jim and he said he had permission from his board to contribute $100M and that he was unwilling to put that toward the UIC COM. I wonder whether that will be headline tomorrow.

I spent the evening at the Student Senate meeting and there were students both for and against Saleita. I really hope that either the BOT will vote or we get some kind of settlement so that we can put that behind us. It is such a polarizing issue.

Thank you for all the work that you have put into the COM MOU. It will be more airtight because of all your efforts.

Best,
Phyllis.

Phyllis, you made us look SO good today! You projected confidence, energy, clarity, and vision. I was impressed and happy to see that you directly addressed a couple of the UIC "counter-proposal" points, and very convincingly.

Not that I'm biased or anything, but I thought you and Dr. Lennard presented an airtight case. In fact, the weird committee befuddlement about process was probably because telling you not to go ahead was not even on their radar, after that presentation.

We are so very lucky to have you as our leader.

Joyce
--

Joyce Tolliver

--

Joyce Tolliver

--

Joyce Tolliver

--

Joyce Tolliver
Paul,

I have another phone conference call at 7:30-8:30. I will try to call you when we are done - assuming it does not go on and on....

Thanks for all the additional info. All good!

Phyllis

On Saturday, September 6, 2014 8:00 AM, Paul Umbach <PUmbach@trippumbach.com> wrote:

Great! I have been living “behind the scenes” at Carle and have some insights and recommendation. Surely there is a three way game of “good cop / bad cops” being played with Jim, his CFO and his board related to forcing the university to put some money on the table. Yesterday on the finance call (I invited myself as I am never on these calls) I played “hard ball” with the CFO and finally accomplished an important step in the “cat and mouse game” – Carle has agreed to put their cards on the table in a document that will show the total (maximum) amount that they wish to contribute each year during a ten year period – with this total equaling the $135 million fund raising goal established by the University. Only by playing the game with cards facing up, can the University know how much of a funding gap might exist in year “2” or “3” – a gap the I recommend should be covered by your foundation if funds cannot be raised at that time. Also – important – the Carle folks got the wrong idea that once you (the university at UC) reached $135 million you would stop fundraising and thereby leaving a gap forever that Carle would need to cover. The REALITY is the CHILD (the medical school itself in close partnership with the two parents) will continue forever to raise funds with the goal of someday having an endowment of $400 million. The Carle CEO finally “got it” when I said, that no one is putting a lid on fund raising and no one has the vision that the medical school will always have a funding gap – so stop stalling and give us a spreadsheet showing the money you are pledging year by year.

So, I want to go over this with you my friend so that we together can push this to the finished line.

One other topic—at my private lunch with Jim and Stephanie they mentioned great discomfort with the university’s idea (I don’t know where this is coming from) to hire a “pre-dean” or “planning dean” to provide guidance between the completion of the business plan and the hiring of the dean. They want Tripp Umbach and specifically our senior consultant Dr. Ken Ryan to play this role as we have the most experience with starting new medical schools – so they love Tripp Umbach afterall! I found this topic very interesting at multiple levels – so lets grab an extra glass of wine and add this to the agenda.

I will call around 7:30 your time.

Thanks.

Paul

Paul O. Umbach
From: Phyllis Wise [mailto:______________________]
Sent: Friday, September 05, 2014 11:13 PM
To: Paul Umbach
Subject: Re: Hi. I will be around all weekend for a call if you have time

Paul,

I am free tomorrow evening after about 7pm and would love to talk.

Phyllis

On Friday, September 5, 2014 3:21 PM, Paul Umbach <PUmbach@trippumbach.com> wrote:

Dear friend. I was able to have an important private lunch meeting with Jim and Stephanie on Wednesday and would like to give you some important insights on Carie’s perspective. Thanks for letting me know when you might be able to chat. 😊
From: Paul Umbach <PUmbach@trippumbach.com>
Sent: Saturday, September 06, 2014 7:18 PM
To: [Redacted]
Subject: FW: Presentation

FYI – I have been in touch with Tim casually behind the scenes. 😊

Paul O. Umbach
Founder and President
Tripp Umbach
2359 Railroad St. #3701
Pittsburgh, PA 15222
Corporate Headquarters: 412.281.2313
Cell Number: [Redacted]
Fax Number: 412.281.9946
www.trippumbach.com

“Turning ideas into action for 25 years”

From: Tim Koritz [mailto: [Redacted]]
Sent: Saturday, September 06, 2014 8:14 PM
To: Paul Umbach
Subject: RE: Presentation

Hi Paul,

I think they did a great job and I agree. 🎉
Looking forward to watch the project progress.
Thanks for all your help!

tk

From: PUmbach@trippumbach.com
To: [Redacted]
Subject: RE: Presentation
Date: Sun, 7 Sep 2014 00:01:16 +0000

Thanks Tim! It was nice to be there to watch my team. I think we were all amazed by the “profound silence” after IUC’s dean did a combo presentation / dissertation on Ophthalmology and an impossible vision for UIC’s transformation that will not receive a penny of support from either Carle, OSF, or the private sector. I am looking forward to presenting the final business plan to you and others on your committee at the right time – as you will find it to be most feasible plan that has the focus and scale to be successful now and in the future. I am writing on your home email and I am the only person with access to my exceptionally private Tripp Umbach email – so please don’t be shy about responding with any questions or comments – as would enjoy a follow-up conversation as we prepare for November. Thanks. Paul

Paul O. Umbach

samizdat-startups.org [UIUC release of “supplemental” COM emails]
To

Tr

www.t

From:

Umbach;

(Stephanie.Beever@carle.com);

www.trippumbach.com

“Turning ideas into action for 25 years”

From: Tim Koritz [mailto:       ]
Sent: Thursday, September 04, 2014 6:53 AM
To: Peter B. Fox; Phyllis Wise; Adesida, Ilesanmi; Jim Leonard (James.Leonard@carle.com); Stephanie Beever (Stephanie.Beever@carle.com); Paquin, Normand; Dan Peterson (Kaler, Robin Neal; Paul Umbach; Eardley, Jennifer J; Woodard, Jennifer L; Frerics, Laura Appenzeller; Delorenzo, Michael T; Schiffer, Peter E; Mike Billimack (Mike.Billimack@carle.com); Joe Barkmeier (Joseph.Barkmeier@carle.com); 'Lykins, Greg'; Rick Stephens (rick@investres.net); Chris Meyer (cmeyer@oktocom.com); Habeeb Habeeb; Miller, Gay Y; Alston, Reginald J
Subject: RE: Presentation

Dr. Wise and Leonard did a superb job with their presentations.
Glad I could be there to hear them and pleased to be able to serve the University of Illinois.

tk

From: peterf@fox-companies.com
To: pmwise@illinois.edu; jadesida@illinois.edu; James.Leonard@Carle.com; Stephanie.Beever@carle.com; paquin@illinois.edu; rkaler@illinois.edu; PUmbach@trippumbach.com; jearldley@illinois.edu; jwoodard@uillinois.edu; lfrerich@illinois.edu; michaeld@illinois.edu; pschiffe@illinois.edu; Mike.Billimack@carle.com; Joseph.Barkmeier@carle.com; Gregory.Lykins@busey.com; rick@investres.net; cmeyer@oktocom.com; habeeb@bpcinc.com; gymiller@illinois.edu; alston@illinois.edu
CC: [REDACTED]
Subject: RE: Presentation
Date: Thu, 4 Sep 2014 09:35:55 +0000
Thank you and thank you Tim

From: Wise, Phyllis M [mailto:pmwise@illinois.edu]
Sent: Thursday, September 04, 2014 12:01 AM
To: Adesida, Ilesanmi; Jim Leonard (James.Leonard@Carle.com); Stephanie Beever (Stephanie.Beever@carle.com); Paquin, Normand; Dan Peterson (Kaler, Robin Neal; Paul Umbach; Eardley, Jennifer J; Woodard, Jennifer L; Frerics, Laura Appenzeller; Delorenzo, Michael T; Schiffer, Peter E; Mike Billimack (Mike.Billimack@carle.com); Joe Barkmeier (Joseph.Barkmeier@carle.com); 'Lykins, Greg'; Peter B. Fox; Rick Stephens (rick@investres.net); Chris Meyer (cmeyer@oktocom.com); Habeeb Habeeb; Miller, Gay Y; Alston, Reginald J
Cc: Koritz Tim
Subject: FW: Presentation

Dear All,
I am sure I have forgotten some people, so please pass this message on to others on the team. Please see the email from Bob below. I believe we made some progress today. Many thanks for all your efforts!

Best,
Phyllis

P.S. For some of you who may not know, Jim and I made a presentation to the University Health Systems Committee of the Board of Trustees. Dr. Tim Koritz chairs that committee and really helped us to get this on the agenda of his committee today; I have copied him.

---

From: Wise, Phyllis M
Sent: Wednesday, September 03, 2014 11:17 PM
To: Easter, Robert A
Cc: Clements, Vicki; Jim Leonard (James.Leonard@Carle.com)
Subject: RE: Presentation

Thanks for your support, Bob. Our team is going to put together key points that demonstrate that the current organizational structure and the one that Dimitri outlined just does not allow us to build what we envision we must have through a separate COM.

Phyllis

---

From: Easter, Robert A
Sent: Wednesday, September 03, 2014 8:37 PM
To: Wise, Phyllis M
Cc: Clements, Vicki
Subject: Presentation

Phyllis,

Great job with the presentation today. Now that this first step has been taken, I need to sit down with Secretary Kies and think through the process and decision points.

Bob

Robert A. Easter, Ph.D.
President, University of Illinois
364 Henry Administration Building
506 South Wright Street
Urbana, Illinois 61801
Phone: (217) 333-3070
FAX: (217) 333-3072
E-Mail: reaster@uillinois.edu
www.uillinois.edu
Are you free on Thursday evening?

On Monday, September 8, 2014 2:18 PM, Paul Umbach <PUmbach@trippumbach.com> wrote:

Hi busy lady! I am in Washington DC for meetings today and tomorrow before traveling for meetings in Philly on Wednesday and Thursday. As of now, I am completely free on Wednesday evening. So just name a time and I will call you. Or – call me anytime on my cell and I will step out of whatever I am doing to go over things quickly. 😊

Paul O. Umbach
Founder and President
Tripp Umbach
2359 Railroad St. #3701
Pittsburgh, PA 15222

Corporate Headquarters: 412.281.2313
Cell Number: [REDACTED]
Fax Number: 412.281.9946
http://www.trippumbach.com/

“Turning ideas into action for 25 years”

Paul,

I am free tomorrow evening after about 7pm and would love to talk.

Phyllis

On Friday, September 5, 2014 3:21 PM, Paul Umbach <PUmbach@trippumbach.com> wrote:

Dear friend. I was able to have an important private lunch meeting with Jim and Stephanie on Wednesday and would like to give you some important insights on Carle’s perspective. Thanks for letting me know when you might be able to chat. 😊
Paul O. Umbach  
Founder and President  
Tripp Umbach  
2359 Railroad St. #3701  
Pittsburgh, PA 15222  

Corporate Headquarters: 412.281.2313  

Cell Number:  

Fax Number: 412.281.9946  
http://www.trippumbach.com/  

“Turning ideas into action for 25 years”
Dear Paul,

I have been totally incommunicado of the past couple of weeks as I/we worked our way through some pretty ugly stuff - and we are not done yet. But I am relatively free this weekend. Am home most of this afternoon and almost all day tomorrow with the exception of a meeting with Normand at 2 pm. Would love to talk. Give me a couple of alternative times and I will call you.

Phyllis
Yes, indeed!

On Tue, Sep 16, 2014 at 6:58 PM, Andreas Cangellaris <[redacted]> wrote:
I am mobilizing our senators. We will need AHS, Business, Law, Social Work, and ACES senators on our side on Monday.

Sent from my iPhone

On Sep 16, 2014, at 6:33 PM, Ilesanmi Adesida <[redacted]> wrote:
I don't know the reason and the units. Nick sent me an email to this effect.
Ade

On Tue, Sep 16, 2014 at 4:50 PM, Andreas Cangellaris <[redacted]> wrote:
Do we know the reason(s) why? Which are the units mobilizing?

Sent from my iPhone

> On Sep 16, 2014, at 2:04 PM, Ilesanmi Adesida <[redacted]> wrote:
> > Andreas,
> > > Please round up all engineering senate members; they need to attend the senate over the next few meetings especially this coming Monday. The rumor is that some are mobilizing to oppose the COM. It cannot fail before we get out of the gate!
> > > Ade
Dear Steph,

I got your text and just wanted to thank you for sending it. I had been thinking about writing you to apologize for the faculty who embarrassed the university by their speech and their behavior. I am glad that you know me better than to believe some of the things I was accused of.

The statement that you made today about Carie’s role in the College of Medicine was strong and convincing. Thank you for being so forceful. And the wonderful part about today was that the COM took another important step forward.

All the best,
Phyllis