

MEETING OF THE BOARD OF TRUSTEES
OF THE
UNIVERSITY OF ILLINOIS

January 22, 2014

This meeting of the Board of Trustees of the University of Illinois was held in the Michèle M. Thompson Rooms A, B, and C, UIC Student Center West, 828 South Wolcott Avenue, Chicago campus, Chicago, Illinois, on Wednesday, January 22, 2014, beginning at 10:07 a.m.

Chair Christopher G. Kennedy called the meeting to order and asked the secretary to call the roll. The following members of the Board were present:

Mr. Ricardo Estrada, Mr. Patrick J. Fitzgerald, Ms. Karen Hasara, Mr. Christopher G. Kennedy, Dr. Timothy N. Koritz, Mr. Edward L. McMillan, Mr. James D. Montgomery¹, Ms. Pamela B. Strobel. Ms. Patricia Brown Holmes and Governor Pat Quinn were absent. Mr. Michael A. Cunningham, voting student trustee from the Urbana campus, was present. The following nonvoting student trustees were present: Mr. Jamaal E. Hollins, Springfield campus; Ms. Danielle M. Leibowitz¹, Chicago campus. President Robert A. Easter was present.

¹ Mr. Montgomery arrived at 10:12 a.m.; Ms. Leibowitz arrived at 10:36 a.m.

Also present were the officers of the Board: Mr. Lester H. McKeever, Jr., treasurer; Mr. Walter K. Knorr, comptroller (and vice president/chief financial officer); Mr. Thomas R. Bearrows, University counsel; and Dr. Susan M. Kies, secretary. The following vice presidents of the University were in attendance: Dr. Phyllis M. Wise, chancellor, Urbana campus, and vice president, University of Illinois; Dr. Paula Allen-Meares, chancellor, Chicago campus, and vice president, University of Illinois; Dr. Susan J. Koch, chancellor, Springfield campus, and vice president, University of Illinois; Dr. Christophe Pierre, vice president for academic affairs; Dr. Lawrence B. Schook, vice president for research; and Dr. Jerry L. Bauman, interim vice president for health affairs. In addition, the following persons were also in attendance: Ms. Marna K. Fuesting and Ms. C. Ellen Foran, assistant secretaries; and Ms. Eileen B. Cable, special assistant to the secretary.

OPENING REMARKS

Mr. Kennedy welcomed everyone to the retreat and acknowledged Dr. Brian Fabes, chief executive officer of Civic Consulting Alliance, for his thoughtful work with Cook County and the City of Chicago. Mr. Kennedy then invited Ms. Strobel to comment.

Ms. Strobel stated that the topic of discussion for the day's retreat would focus on the needs of the State of Illinois, especially as it relates to the medical enterprise of the University, and how the University can work to meet those needs and fulfill its land-grant mission. Ms. Strobel then discussed the format of the retreat and welcomed the speakers: Dr. Fabes and Dr. Frank Prendergast, director of the Mayo Clinic for

Individualized Medicine. She thanked Dr. Schook, Dr. Pierre, and Dr. Kies for their work preparing for the retreat and stated that this is an opportunity to learn and engage in thoughtful discussion. Ms. Strobel thanked all in attendance for their presence and for being engaged.

Ms. Strobel asked President Easter to provide remarks and to introduce the day's presenters. President Easter said it is an important time at the University to define its response to challenges and opportunities. He referred to shifting financial paradigms and the need to be nimble, and he provided examples of the University's preeminence in areas related to health-care delivery. President Easter then presented the questions for the day's discussion:

1. What are the most fundamental trends in changing health-care and medical needs, particularly in the State of Illinois, that we must plan to address in our educational and research programs in order to ensure workforce training, community support, and economic development in these crucially important areas?
2. What areas of potential thematic collaboration, integrating education, research, and outreach, and cutting across interdisciplinary lines and administrative structures, are likely to emerge as most crucial in the next two decades?
3. How well or poorly are we organized now to promote this kind of collaborative work – reaching across disciplinary lines and academic structures, and creating a continuum from basic science through technological innovation to medical and health-care practice?
4. How do we adapt or transform our structural arrangements to meet emerging needs as effectively and nimbly as possible?

5. List the most important questions that need to be answered by the administration. Each group should list between three and five questions and these should be presented during the summary.

President Easter then introduced Dr. Fabes and Dr. Prendergast. President Easter provided some information about their backgrounds and experiences and thanked them for participating in the retreat. He then introduced the faculty members participating in the panel discussion: Dr. Amelia M. Bartholomew, associate professor of surgery and chief of translational research, Chicago; Dr. Barbara Fiese, professor of human development and family studies and director of the Family Resiliency Center, Urbana; Dr. Martha U. Gillette, professor of cellular and structural biology, Urbana; Dr. Jerry Krishnan, associate vice president for health affairs, population health sciences, and professor of medicine and public health, Chicago; Dr. Robin J. Mermelstein, professor of psychology and director of the Institute for Health Research and Policy, Chicago; Dr. Stephen A. Boppart, professor of bioengineering and head of the Biophotonics Imaging Laboratory, Urbana; Dr. Robert A. Winn, associate vice president for community based practice, Chicago.

PRESENTATIONS

The Changing State of Our State

Mr. Kennedy asked Dr. Fabes to discuss the future needs of the State of Illinois. Dr. Fabes stated that he was born in Illinois, and he described his background. He said his

work at the Civic Consulting Alliance allows him to work with leaders to tackle urban problems, and he expressed a deep appreciation for the role of universities, especially those with a land-grant mission. Dr. Fabes thanked members of his team for their hard work. He then discussed five trends that he said he believes will influence the future of the State, and he commented on the challenges and opportunities provided by each: urbanization, technological innovation, globalization, changing demographics and an increase in diversity, and the nature of job growth in Illinois. Dr. Fabes discussed the impact of these trends on universities and said they must be sources of innovation. He commented on the need to develop new ways of understanding and the importance of combining fields of study with faculty working across disciplines. He stated that it will be necessary to find new structures, processes, and ways of being to solve urban problems. He emphasized the importance of multidisciplinary work and the need to engage communities. Dr. Fabes referred to numerous and difficult societal challenges and said that with a mission to serve society by putting knowledge to work on a large scale, the University should strive to solve some of these problems. He read the following quote: “Every system is perfectly designed to get the results it gets.” Dr. Fabes advocated that universities are integral parts of the systems that produce and protect the status quo, and he referred to one of the core questions faced by trustees: how to retain what is working well while recognizing the University’s role in undesirable outcomes. He advocated that the University strive to change what it must to improve outcomes for

everyone. Dr. Fabes thanked the trustees and administrators at the University for their service and wished them good luck.

Looking to the Future: Defining Health Needs and Opportunities

At 10:57 a.m., Mr. Kennedy invited Dr. Prendergast to discuss future health needs (materials on file with the secretary). Dr. Prendergast expressed appreciation for the invitation to speak at the retreat and stated that he is not speaking on behalf of the Mayo Clinic. He discussed two megatrends in medicine – personalized medicine and health-care economics – and he recommended two books, *The Creative Destruction of Medicine: How the Digital Revolution Will Create Better Health Care* by Dr. Eric Topol and *The Innovator's Prescription* by Mr. Clayton M. Christensen, Dr. Jerome H. Grossman, and Dr. Jason Hwang. Dr. Prendergast defined individualized medicine and discussed the causes of human variation. He provided information regarding patient and disease stratification and said that there is a trend in medicine toward more precise diagnoses. He then discussed health-care economics and showed a graph of a model of disruptive innovation from *The Innovator's Prescription*. He referred to a trend in health care away from hospitals and discussed the success of MinuteClinic, which he said demonstrates that a simpler paradigm can be used to treat the majority of illnesses. Dr. Prendergast discussed primary care and the role of technology in increasing the usefulness of non-physician care providers and making available specialized diagnostics for personalized medicine. He provided examples of exemplary technologies used in

decentralizing diagnostics and described the impact of these technologies on health-care delivery. He then presented impediments to the development and implementation of these and commented on disruptive medical transformation through informatics. Dr. Prendergast emphasized the role of bioengineering in the future of medicine and discussed starting points for change, and he stated that adaptation is necessary in order for the field of medicine to survive.

These presentations were followed by a round of applause.

At 11:44 a.m., Mr. Kennedy suggested that the Board take a short break. The meeting resumed at 11:59 a.m., with all Board members previously recorded as being present in attendance.

Faculty Leaders Panel

Mr. Kennedy asked Dr. Pierre and Dr. Schook, moderators of the faculty leaders panel, to introduce the faculty panelists. Dr. Pierre discussed the format of the panel and introduced Dr. Bartholomew. Dr. Bartholomew discussed the stem-cell regeneration program, which she said involves multiple scientists across disciplines and campuses. She listed many collaborators and stated that geographic barriers were transcended because all were willing to share a collaborative vision of trying to address regenerative medicine problems. Dr. Bartholomew stated that this group shares their discoveries and students, and she discussed their growing reputation. She stated that those involved in the program are highly motivated and that multiple perspectives are provided through

collaboration. Dr. Bartholomew referred to the development of working groups and emphasized the importance of clinical perspective and a regulatory counterpoint. She then described the work of the Contract Research Organization, which she said is largely unknown among researchers, and she described her experience as a young investigator who lost funding because of a lack of regulatory support. Dr. Bartholomew noted that this type of situation could be avoided if greater education was provided to primary investigators, and she discussed quality assurance program requirements from some agencies. She provided an example of the benefits of future use of stem-cell therapies on patients with diabetes. Dr. Bartholomew concluded her remarks by commenting on the future of medical education and the role of the University in addressing the health-care needs of the community.

Next, Dr. Schook introduced Dr. Fiese. Dr. Fiese stated that she is a psychologist and a professor in the department of human development and family studies, and that she researches methods for getting children to eat healthy food and to be physically active. She said that her work in the Family Resiliency Center is aimed at reducing obesity and childhood hunger, and she referred to the high cost of treating obesity in the United States. Dr. Fiese described the collaborative work of the Strong Kids program and discussed its partners and funding, and she provided details about a program that researched early nutrition habits and level of physical activity in children to determine if unhealthy weight gain could be predicted. She then discussed an interdisciplinary birth cohort study in collaboration with Carle Foundation Hospital in

Urbana that studies multiple factors and dietary habits from conception until three years of age. Dr. Fiese discussed sponsors and funding for the project and said this example of collaboration between federal and private partnerships is the way of the future. She stated that 22 faculty members across the campus collaborate with one another and with those at other institutions. Dr. Fiese said that interdisciplinary education begins at the undergraduate level, and she provided examples of the engagement of students in the childhood obesity class, noting that this program was recently recognized by the United States Department of Agriculture. She then discussed collaboration with faculty at Chicago and efforts to translate research to the public, and she referred to public service announcements that were sponsored by Pampered Chef, Ltd., and reached 43.8 million homes. Dr. Fiese referred to the challenges of collaborative work and stated that she chose to come to Illinois five years ago because of the opportunity to collaborate with top scholars. She described her experiences at the University, said she could not think of a better place to be, and thanked President Easter, who was previously the dean of the College of Agricultural, Consumer, and Environmental Sciences, for hiring her.

Next, Dr. Pierre introduced Dr. Gillette. Dr. Gillette stated that she is a neuroscientist with appointments in several departments and said she studies how brain cells work dynamically. She reported that she was invited to work on a collaborative study funded by an innovation grant from the W.M. Keck Foundation, which she said led to an collaborative award from the National Institute on Drug Abuse in neuroproteomics. Dr. Gillette discussed neuroproteomics and possibilities for the ways in which disorders

of the nervous system can be treated. She listed the collaborative partners for the project, which includes researchers in other colleges, campuses, universities, and institutions. Dr. Gillette discussed additional research and funding opportunities and described some of the applications of these projects. She stated that research funded by the National Science Foundation has a strong outreach component, and she described these activities. Dr. Gillette stated she is currently training graduate students from four departments. She referred to a talk she gave at the Office of Technology Management's Share the Vision conference, which she said generated interest from Merck and a venture capital company. She described additional grant funded research and applications for their findings. Dr. Gillette reiterated the comments of the previous speakers regarding opportunities for collaborative research and said that the future is very exciting.

Next, Dr. Krishnan was introduced. Dr. Krishnan expressed appreciation for the invitation to participate on the panel. He referred to a paradox in health care and said that while the United States leads the world in biomedical research and discovery, little attention is paid to health-care delivery. Dr. Krishnan stated that he teaches a course in India and that the United States has much to learn about health-care delivery. He commented on the role of engineering in medicine and said embracing and learning from disciplines such as engineering presents an opportunity for change and improvement. Dr. Krishnan then discussed the Office of the Vice President for Health Affairs, which he said is undergoing a transformation, and referred to the need to recognize and respond to change. He stated the University is well positioned to meet new challenges and needs to

be willing to change and collaborate. Dr. Krishnan advocated thinking big to realize potential. He concluded his remarks by providing examples of collaborative programs he led or co-led over the past two years, including the Emergency Patient Interdisciplinary Care Coordination for Frequent ER Visitors (EPIC) initiative and grant-funded research related to innovative approaches to reducing hospital readmissions; promoting care coordination in children with uncontrolled asthma; building of a clinical data research network that is part of a national program to promote health-care delivery and clinical research.

Dr. Pierre then introduced Dr. Mermelstein. Dr. Mermelstein referred to her background as a clinical health psychologist and said that as the director for the Institute for Health Research and Policy she has the opportunity to bring people together and build teams. She stated that the institute deals with issues that that cause death and disability and referred to risk behaviors, such as tobacco use and obesity. Dr. Mermelstein stated that her research led to opportunities to collaborate, and she described a project funded by the Centers for Disease Control (CDC) in which she assembled a team of investigators from 13 universities. She stated that the project initiated when she approached the CDC to inquire about a report that showed a decrease in smoking among African-American girls. Dr. Mermelstein then described a research project that studied children who smoked and explained that she assembled a multidisciplinary team to investigate why some children continue smoking into adulthood and others do not. She commented on multidisciplinary and collaborative research and emphasized the need to

think big, find a compelling question, and build a team. Dr. Mermelstein said that people are intrinsically motivated. She indicated that greater infrastructure and administrative support would be an asset in pursuing interdisciplinary and collaborative work, and she stated that those involved need to be flexible and responsive.

Next, Dr. Boppart was introduced. Dr. Boppart described his background and stated that he chose to come to the University because it is forward thinking, and he referred to an opportunity to establish the University as a leader for reengineering how the next generation of physicians is educated and how international strengths in engineering and technology are leveraged to transform the field of medicine. Dr. Boppart stated that he is the director of imaging at Illinois and head of the Biophotonics Imaging Laboratory, which he said is staffed by interdisciplinary researchers. He discussed funding and stated that the lab develops optical biomedical imaging technologies and translates these to clinical applications. He discussed uses for this technology and described the use of optical coherence tomography (OCT) in surgery for treating breast cancer. Dr. Boppart referred to the importance of partners in industry and stated that he co-founded Diagnostic Photonics with initial funding from Illinois VENTURES to disseminate this technology. He then discussed uses of OCT to provide diagnostic technology and transform primary care. Dr. Boppart commented on the ability to bring new technologies to the public and said that he stays at the University because of the ability to have this type of impact.

Dr. Pierre then introduced Dr. Winn. Dr. Winn stated that the model of medicine from the last 25 years is changing, and he commented on opportunities provided through places like the Mile Square Clinic. He stated that Mile Square is a partnership that combines the voice of the community with the resources and wisdom of the University, and he commented on the tripartite mission of an academic medical center. Dr. Winn advocated thinking big and said that the University is well positioned to deliver care in this post-Affordable Care Act society.

Dr. Schook stated that while today's problems are complex, the University has significant successes on which to build. He commended the faculty panelists for their accomplishments and thanked them for providing their comments and discussing their experiences. Ms. Strobel thanked Dr. Pierre and Dr. Schook for selecting the panel.

Breakout Group Discussions

Ms. Strobel directed participants to break into the afternoon groups for discussion. The Board then recessed at 1:16 p.m.

The Board meeting resumed at 3:00 p.m., with all Board members previously recorded as present in attendance, with the exception of Ms. Strobel. Mr. Kennedy explained that one member of each group would now report on the discussions held during the breakout sessions. These summaries were also added to slides that were projected throughout the session (materials on file with the secretary).

Mr. Estrada, Mr. Fitzgerald, Ms. Hasara, Mr. Montgomery, Mr. Kennedy, Dr. Koritz, and Mr. McMillan facilitated group discussions that took place during the breakout sessions based on the questions listed above. They provided summaries of these. Ms. Strobel also acted as a facilitator, and Dr. Sara L. Rusch, regional dean, College of Medicine at Peoria, provided the summary on Ms. Strobel's behalf.

Chancellors' Panel

At 3:51 p.m., Mr. Kennedy asked Dr. Wise to provide summary remarks. Dr. Wise stated that she was inspired by the presenters and faculty panelists, and she said that the panelists showed that they were able to identify a critical problem and work collaboratively toward solving it. She referred to the complexity of the health-care arena and stated that the University can be a leader in this area, noting that this will require that the University be nimble, agile, and willing to take risks and embrace change. Dr. Wise stated that the discussions that took place throughout the day highlighted the importance of biotechnology, bioengineering, and big data, and she said the University is well positioned to have a large impact on health care in other areas.

Mr. Kennedy then asked Dr. Koch to provide summary remarks. Dr. Koch stated that the day's discussions were provocative and mentioned the reading *The Engaged University* by Shiri M. Breznitz and Maryann P. Feldman, which was recommended in preparation for the retreat. She referred to the Springfield campus retreat and universities' roles as stewards of place. Dr. Koch then commented on a

medical district in Springfield and the role of the Springfield campus in health care, and she referred to the importance of collaborating with the community. She mentioned Dr. Krishnan's comments and the need to connect the intellectual capital at the three campuses and stated that there is much talent at the University. Dr. Koch then referred to comments made by Mr. Kennedy regarding his own experiences and said that the most powerful force in any activity is inertia.

Next, Mr. Kennedy asked Dr. Allen-Meares to provide summary remarks. Dr. Allen-Meares thanked the presenters and faculty panelists for their remarks, and Ms. Strobel and Dr. Kies for their work on the retreat. Dr. Allen-Meares discussed new initiatives and programs at Chicago and stated that the campus has much to contribute. She referred to the article *Arise II: Unleashing America's Research and Innovation Enterprise* from the American Academy of Arts and Sciences, and commented on transdisciplinary research and partnerships between industry and faculty members. Dr. Allen-Meares stated that challenges include culture, structure, and finances, and she stated that it is necessary to take risks.

Mr. Kennedy thanked the chancellors for their comments. He stated that it is a great challenge to release the potential of the University and, as a result, release the potential of the people of Illinois.

MOTION TO ADJOURN

With no additional questions or comments, Mr. Kennedy asked for a motion to adjourn the meeting. On motion of Dr. Koritz, seconded by Mr. Estrada, the meeting adjourned at 4:05 p.m. There were no “nay” votes.

SUSAN M. KIES
Secretary

CHRISTOPHER G. KENNEDY
Chair