

University of Illinois at Urbana-Champaign

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TRANSFORMING A LARGER, COMPLEX RESEARCH UNIVERSITY INTO A MORE ENTREPRENEURIAL ORGANIZATION: THE UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN IN COLLABORATION WITH THE EWING MARION KAUFFMAN FOUNDATION

The process of transforming a large institution into a more entrepreneurial organization is no small feat. Our major multinational corporations have discovered this, even as they struggle to become more nimble, more competitive, and more responsive to customer demands and rapidly changing economic realities. So it is with a tier-one research university, which faces unique challenges attributable to its distinct mission, its multiple interested constituencies, and its traditional mode of operation.

Nor is it something which can be accomplished in five years. And so while we are exceedingly pleased with the progress of institutional transformation we have seen, our efforts continue and evolve. Just as the success of any startup depends upon the ability of its founders to critically and honestly assess whether they are meeting their goals, so too must we be relentless in our own self-assessment, and adapt to meet the changing needs of our students and our many other stakeholders. Each passing year sheds light on the impact of the initiatives we have already launched, as well as the places where much work remains to be done. At the same time, we have become aware of new opportunities we did not anticipate, and it is an exciting challenge to pursue those and incorporate them into our core mission and our expectations for our faculty, staff, and students.

In that spirit, we would like to draw your attention to just a few of the ways in which the University of Illinois is a very different place than it was in 2003. We hope that these insights will be helpful to you as you consider the future of the Foundation and its support for entrepreneurship education at institutions of higher learning.

Background

Perhaps unlike some of the other applicants for the KCI grants, the University of Illinois was no stranger to the entrepreneurial spirit that both inspires innovation and capitalizes on it. In the 136 years that preceded our application for the KCI grant, Illinois' faculty, students, and alumni had produced some of the world's most revolutionary inventions and innovations, including the first antitoxin for botulism, sound on film, ILLIAC mainframe computers, the MRI, the theory of superconductivity, the transistor, synthetic rubber, the integrated circuit, the light-emitting diode, the MOSAIC web browser, and YouTube.¹ Our university had also educated some of the modern era's best-known and most successful entrepreneurs and entrepreneurial business leaders (Marc Andreessen, Steve Chen, Doris Christopher, Michael Tokarz, Roger Ebert, Larry Ellison, Hugh Hefner, Jawed Karim, Ang Lee, Max Levchin, Suze Orman, Tom Siebel, and Jack Welch, to name just a few).

However, across the campus there was widespread shared sentiment that much of the entrepreneurship and innovation which had come from the University was *ad hoc;* there was no cohesive and institution-wide approach to entrepreneurship and entrepreneurial thinking per se, nor was there an explicit recognition of the role that innovation and entrepreneurship play in economic development. There was also a strong feeling that the University of Illinois had not been as effective at *communicating* its contributions to innovation and entrepreneurship as have some of our peer institutions like Stanford, MIT, and CalTech.

These perceptions were echoed at the level of state government, and the Illinois General Assembly modified the University of Illinois' charter in 2000 to add "economic development" to the three traditional missions of teaching, research, and service. This change was accompanied by hundreds of millions of dollars in state appropriations to provide new faculty, facilities, and equipment to accelerate discovery in advanced genomics, microelectronics, nanotechnology, petascale computing and the bio-medical sciences.

¹ A fact which is reflected, in some part, by the 23 Nobel Prize winners among the University's faculty and alumni. See http://illinois.edu/about/overview/facts/nobel.html

Between 2000 and 2004, as more fully appears in our 2009 Report, the University of Illinois created the Office of the Vice President for Technology and Economic Development/ restructured the Office of Technology Management, built its own Research Park and incubator, EnterpriseWorks; established IllinoisVENTURES, a semi-captive venture fund; and launched units with explicit curricular missions in innovation, entrepreneurship and the study thereof: the Technology Entrepreneur Center in the College of Engineering, the Hoeft Technology and Management Program (jointly managed by the colleges of Engineering and Business), and the Cline Center for the Study of Democracy in the College of Liberal Arts and Sciences.

The Academy for Entrepreneurial Leadership

It was against this backdrop of unprecedented institutional activity that the University was inspired to compete for a grant from the Kauffman Foundation to create a new organization with a radical mission: to infuse entrepreneurship and entrepreneurial thinking across *every* academic discipline of the University of Illinois, in curriculum development, in research, and in economic development and public engagement. The objective of this new unit would be to create a truly entrepreneurial university. That new unit was to be the Academy for Entrepreneurial Leadership.³

Dr. Paul Magelli, Ph.D., from the College of Business, drafted the original proposal. He was assisted in this effort by Dr. Cynthia Kehoe, Ph.D., who provided months of extensive historical research and benchmarking from other entrepreneurship programs around the United States, and Laura Hollis, JD, from the College of Engineering, who contributed the frameworks for both the Faculty Fellows program and the interdisciplinary curricula.

From the first day that the grant was announced, Illinois was determined to do everything differently in the launch and operation of the Academy: preliminary research was conducted to

 $^{^{2}}$ This office was fused with the office of the Vice Chancellor for Research in 2010 and became the Office of the Vice President for Research.

³ The selection of the word "Academy" was not only evocative of the enlightened educational methods of ancient Greece, but had the added practical benefit of being without procedural precedent at Illinois, and thus without any of the bureaucracy associated with the creation of a "center," "institute," or "department." (See page 7 of the 2009 Report, provided as Appendix A.) Thus, our efforts to be more internally entrepreneurial were there from its inception!

obtain benchmarks; key administrative and faculty stakeholders were identified and their commitment secured; and a cross-campus advisory board consisting of college deans and representative faculty-internal operational structure which continues to this day - was established.⁴

As we noted in 2009, that foundational research produced not only gratifyingly high levels of participation, but also surprising results.⁵ Respondents identified and articulated with amazing clarity the attributes of those whom they characterized as exemplaly entrepreneurial faculty, and gave common examples of what would be entrepreneurial behavior in a university setting⁶ 70 percent of faculty participants responded *favorably* to the concept of "entrepreneurship," and many key administrators described themselves as "entrepreneurial" and "receptive to entrepreneurship," while simultaneously assuming (erroneously, as it turned out) that their colleagues were not. These responses demonstrated a powerful consensus about the importance of entrepreneurial thinking at Illinois, and the need to change the unspoken conversation about entrepreneurship on campus. It also prompted the conclusion that campus leadership and administration needed to serve as visible role models of entrepreneurship, and to provide a top-down message of support for it.

Institutional Goals

One of the most valuable initial activities was the identification of the components of this large state university's *institutional culture*. Changing the culture would therefore mean affecting each one of these components in turn, and this shaped the Academy's ultimate goals. We established twelve major goals and objectives for the Academy around these components.⁷ Through these goals we sought to directly impact:

- a) our faculty;
- b) research conducted at the University;

⁴ The University of Illinois was the only one of the 23 Kauffman Campuses that conducted research this extensive. 11,000 graduate students (5,500 masters, 5,500 doctoral students) were polled, along with 1,996 tenured and tenure-eligible faculty, 7,800 freshmen, and 125 administrative stakeholders.

 $^{^{5}}$ The University retained a professional organization to construct and conduct the surveys. 27% of all faculty responded, as did 25% of graduate students, and 30% of freshmen. (See pp. 4-5 of the 2009 Report.). The results of the surveys were aggregated and analyzed by Professor Leigh Estabrook, former Dean of the Graduate School of Library and Information Science.

⁶ See p. 4 of the 2009 Report.

⁷ 2009 Report, p. 6.

- c) University leadership and administration;
- d) management and operation of the University;
- e) curriculum and extra-curricular activities for undergraduate and graduate students, and;
- f) the conversion of theoretical research into vehicles for economic growth (enterprise creation).

Additionally, we sought to leverage the University's national and international reputation as a premier research institution to spread the principles and practices of entrepreneurial leadership to much wider audiences than those on our campus alone, to increase awareness of Illinois' status as a hotbed of innovation, and to provide a template for similar efforts at institutions around the world.⁸ As we developed these goals and plans to implement them, those plans also contemplated the expiration of the KCI grant, and the need for financial sustainability thereafter.

Successes 2003-2012: What worked

Internal governance

Perhaps the most precedent-setting decision, in terms of the internal operation of the Academy, was the creation of its Advisory Board. The Academy's Advisory Board consists of nine to 12 individuals-primarily deans, with two representative faculty members- from colleges and schools across campus. Deans from the following colleges have served on the advisory board: Business, Engineering, Fine and Applied Arts, Education, Liberal Arts and Sciences, Library and Information Science, Applied Health Sciences, Social Work, Agricultural, Consumer and Environmental Sciences, the Graduate College, Media, and Veterinary Medicine.

This Board has facilitated cross-campus buy-in, as deans both helped identify potential early adopters among their most entrepreneurially-minded faculty, and sent the message to *all* faculty within their units that entrepreneurial activities are meritorious, and worthy of their participation. More recently, some of the colleges whose deans have served on the Advisory Board have contributed financially to the Academy's initiatives, and provided access to accomplished alumni

⁸ In the nine years since the Academy was founded, the University of Illinois has hosted representatives from dozens of universities seeking guidance on cross-campus entrepreneurship initiatives. Among these were the University of Iowa, Michigan State University, Central Michigan University and Purdue University.

entrepreneurs, all of which adds depth and impact to the Academy's programs, and assists with their long-term viability.⁹

The Academy's Advisory Board has also served as campus leadership: Dr. Robert Easter, former dean of the College of Agricultural, Consumer and Environmental Sciences and who recently served as interim Chancellor of the Urbana-Champaign campus, and Dr. Richard Wheeler, dean of the Graduate School who is currently serving as interim Provost. Both are past chairs of the Advisory Board, and bring their commitment to entrepreneurial operation to their current positions, in addition to elevating the visibility of the Academy and its mission, and strengthening the credibility of that mission among the most stalwart adherents to more traditional modes of institutional governance.

Faculty Fellows

Without question, the Academy's Faculty Fellows in Entrepreneurship Program has been its flagship initiative-the most impactful and widely emulated program launched as part of the KCI grant.¹⁰ The brainchild of former Academy Associate Director and Clinical Professor Laura L. Hollis,¹¹ the Faculty Fellows program was an integral part of Illinois' original proposal to the Kauffman Foundation in 2003,¹² driven in large part by entrepreneurial faculty on this campus who were restless and dissatisfied with administrative bureaucracy and backlog, who were already collaborating across disciplines with colleagues to develop novel approaches to research and education, as well as enterprises to commercialize new technologies, and who were demanding that these creative impulses be acknowledged and rewarded as part of the promotion and tenure process.

⁹ Specifically, since 2009, the colleges of Engineering, and Applied Health Sciences.

¹⁰ Since the University of Illinois launched its groundbreaking Faculty Fellows program, numerous schools have followed suit. Among these are the <u>University of Washington</u> (2011); <u>Oklahoma State University</u> (2009); Milliken University, <u>Wichita State University</u>, <u>Florida State University</u>, and <u>Metropolitan State College of Denver</u> (2006).

¹¹ Professor Hollis now holds faculty positions in the Mendoza College of Business and the Law School at the University of Notre Dame.

¹² Sec The Academy for Entrepreneurial Leadership Development: A Proposal to the E. Marion Kauffman Foundation, pp. 6,8,9,17,21 (Dec. 2003), provided as Appendix B.

The Faculty Fellows Program was part of Illinois' novel and non-traditional approach to crosscampus engagement and curriculum development in entrepreneurship. With the assistance of the Advisory Board, the Academy hosted workshops for targeted faculty from every college and school on campus who could apply to be Fellows, develop discipline-specific entrepreneurship courses and programs, initiate new research proposals, collaborate across disciplines, recruit, inspire and mentor colleagues and students in their fields, and champion entrepreneurial institutional change in their departments and units.

Response to the creation of the Faculty Fellows program demonstrates the depth and breadth of interest. In the nine years since Illinois received the KCI grant, 59 faculty members ¹³ representing 12 colleges and schools, and 34 departments have become Faculty Fellows in Entrepreneurship. ¹⁴ As a direct result of this initiative, the number of courses with entrepreneurship content offered across campus has more than doubled, as has the number of faculty teaching entrepreneurship, the undergraduate enrollment in entrepreneurship courses, and the graduate enrollment in entrepreneurship courses. ¹⁵

Most notable about the Faculty Fellows program is the extent to which impact has been driven by faculty whose expertise is *outside* of the more traditional bastions of entrepreneurship education.

The School of Social Work, for example, has been not only a beneficiary of the entrepreneurial awareness fostered by the Academy, but also a champion for it. Dean Wynne Korr has served on the Academy's Advisory Board. Two faculty members-Steve Andersen and Lissette Piedra-have developed courses incorporating an entrepreneurial, customer-centered approach to the delivery of social services and the perspectives of diverse populations. Those courses, and the entrepreneurial content they contain, have become a critical part of both the MSW (Masters of Social Work) and new BSW (Bachelors in Social Work) programs offered by the school.

¹³ Including six from nearby Parkland College, established through an inter-institutional partnership.

¹⁴ See Appendix C. Complete information about each Fellow can be found at

http://business.illinois.edu/aellfaculty/facultyfellows.html

¹⁵ See Faculty Fellows Initiative Background Document 12-2011, attached as Appendix D.

Similarly, the College of Education has had four Faculty Fellows, from the departments of Special Education, Educational Policy Studies, and Curriculum and Instruction.¹⁶ Professor Liora Bresler, from Curriculum and Instruction, has developed a course in "The Social Entrepreneurship of Academia," which has resulted in her being invited to speak to entrepreneurially-minded academics in education programs all over the world.¹⁷ Professor Bresler's work is now the centerpiece of a larger proposal to create a new cross-campus initiative, "Educational Entrepreneurship Across Disciplines," in collaboration with faculty from Engineering, Social Work, Business, Library and Information Science, and Fine and Applied Arts.¹⁸

These are but two examples which are multiplied many times over when one looks at the Fellows from disciplines as varied as Art and Design, Advertising, Labor and Employment Relations, English, Landscape Architecture, Kinesiology, and Urban Planning-not to mention those from within Business and Engineering.

In addition to the enormous influence these Fellows have had on their colleagues here at the University of Illinois, we cannot overlook the influence they have as "viral agents" of change, operating in the way that faculty do: as attendees of conferences for scholars and teachers, as authors of white papers and articles published in peer-reviewed journals within their disciplines, as guests at other universities for speaking engagements. This is where Illinois' reputation as a school that is home to some of the greatest minds in fields *outside* of entrepreneurship spills over *into* entrepreneurship, and in the most historically unlikely disciplines *for* entrepreneurship. ¹⁹ Few schools can make this claim.

¹⁶ See, e.g., http://business.illinois.edu/ael/faeulty/fellows/education.html

¹⁷ See http://business.illinois.edu/ael/faeulty/fellows/profiles/bresler.html.

¹⁸ Professor Bresler's characterization and study of the academic as *entrepreneur* has catalyzed an entirely new perspective on the work of academics. Within the past three years, she has been invited to speak to academic audiences in music instruction, curriculum development, and the social entrepreneurship of academia in Norway, Sweden, Hong Kong and mainland China, Finland, Korea, Turkey, Lithuania, England, Slovenia, and her native Israel.

¹⁹Just within the past year, Illinois' Fellows have spoken and presented papers on entrepreneurship as it applies to marketing, K-12 teacher education, music instruction, food sciences and human nutrition, finance, economics, strategy and management, and community college education all across the United States and in Korea, Turkey, China, Scotland, England, Canada, and India.

Even that which could be seen as a loss for Illinois-our faculty's departure to other institutions-- carries the Illinois vision and method to those schools, where the practices developed here can be adopted, modified, and further implemented elsewhere.²⁰

Research

As we noted in our proposal to the Foundation,²¹ the greatest challenge facing entrepreneurship as it emerges as a field of study is the absence of a well-developed canon of knowledge, generally accepted and identifiable by scholars from traditional disciplines. While there have certainly been those who have studied entrepreneurship, especially in management and economics, research tended to be isolated and diffused, buried within work the primary focus of which was elsewhere (such as sociology, operations management, or strategy).

The University of Illinois, with funding provided by the Kauffman Foundation, has made substantial contributions to the body of knowledge that is entrepreneurship, both through the research conducted by its Faculty Fellows and Affiliates, and by aggregating the existing research literature to make it accessible to scholars nationally and internationally.

The sheer number of articles related to entrepreneurship published by University of Illinois faculty and doctoral candidates is noteworthy. Since 2004, over 120 Illinois researchers, representing every degree-granting unit on campus, have produced dissertations (33), book chapters, conference papers and especially scholarly journal articles indexed in **ISI**- in total nearly 200 publications with an entrepreneurship and innovation focus.²² These research

²⁰ Faculty Fellows who have left for other institutions and who are engaged in entrepreneurship education there are: <u>Darcy Lear</u> (Spanish, FF Class of 2005) now at the University of North Carolina at Chapel Hill); <u>Hamish Gow</u> (Agribusiness; FF Class of 2005; now Director of the Center for Agribusiness Policy and Strategy, Massey University, New Zealand); <u>Laura Hollis</u> (Business, Law, Engineering; FF Class of 2006) left to become Director of the Gigot Center for Entrepreneurial Leadership in the Mendoza College of Business at the University of Notre Dame; <u>Rajshrec Agarwal</u> (Management/Strategy; FF Class of 2006) now a Chaired Professor of Strategy and Entrepreneurship at the R.H. Smith College of Business at the University of Maryland at College Park; Glenn <u>Hoetker</u> (Management/Strategy, FF Class of 2008) now teaches innovation at Arizona State University; <u>Jim Frost</u> (English/Technical Writing, FF Class of 2007) is now at the University of Texas, Brownsville; <u>Steve Anderson</u> (Social Work, FF Class of 2005) is the new Director of the School of Social Work at ASU.

²¹ See The Academy for Entrepreneurial Leadership Development: A Proposal to the E. Marion Kauffman Foundation, pp. 1,2,5,6,7,11.

²² See Appendix E

publications often represent collaborations with scholars from other institutions in the US and internationally.

But it is essential to the world of scholarly inquiry that publications revealing groundbreaking research be accessible. Therefore, a team of scholars here the University of Illinois, led by Dr. Cynthia Kehoe, the Academy's Director of Information and Research Services, identified, aggregated, and cataloged all of the existing research literature on entrepreneurship. Over a period of three years, the team identified thousands of published pieces and made this compilation available to scholars across the world through Kauffman's Research Portal. This work represents one of the University of Illinois' farthest-reaching and enduring contributions to entrepreneurship education.

And if the high water mark of professional recognition at a research institution is publication, grants are the lifeblood of its professoriate. Since 2005, the University of Illinois has been the recipient of over 120 grants totaling more than \$18,000,000 awarded for entrepreneurship, innovation, and/or small business related research, outreach and education. A more extensive description of the nature and impact of this work is beyond the scope of this essay, but a complete list of these grants has been provided as an appendix.²³

Administration

As noted earlier in this narrative, preliminary research suggested that while the entrepreneurship initiatives themselves needed to emerge in a decentralized fashion "from the bottom up," administration had to play a key role by providing a consistent "top down" message of institutional support and commitment. These commitments have been critical to the Academy's successes. Much of what the Academy sought to accomplish could not have been done without the support of the University's administration. University and campus leadership have taken active, visible roles in promoting the application for the Kauffman grant, the initiatives of the Academy, and other entrepreneurship programs on campus, as well as expressing strong support for their overarching objectives.²⁴

²³ See Appendix F.

²⁴ It is noteworthy in this context that we have witnessed some of the same upward mobility among the entrepreneurial administrators as has been observed among the faculty. Specifically, Professor <u>Larry Schook</u>

Since the University of Illinois submitted its proposal in 2003, the University's Board of Trustees, its Presidents, its Chancellors, and its Provosts have been consistent and diligent in their efforts to promote and recognize students, faculty and alumni involved in entrepreneurship efforts, and to drive home the correlation between those individuals' efforts and the long-term viability and economic strength of this institution, the surrounding community, the State of Illinois, and the country. Campus leadership makes frequent references to entrepreneurial members of the University of Illinois community in their public speeches, including events as visible as the IBIO (Illinois Biotechnology Industry Organization) Conference, and as significant as Commencement in 2008 and 2009, when an honorary doctorate was awarded to former Kauffman Foundation President and CEO, Dr. Carl J. Schramm. This was the first commencement address since the University of Illinois' founding in 1867 to address the role of entrepreneurship in American economic history. The Office of the Chancellor launched the Innovation Celebration in 2005 to recognize individuals and companies from the University and the broader community whose entrepreneurship and innovation have had remarkable impact.

Former Urbana-Champaign Provost, Dr. Linda P.B. Katehi was one of the most vocal and effective champions for entrepreneurship, tapping faculty identified as "entrepreneurial" to be Associate Provost Fellows, working closely with her for outreach efforts from the Office of the Provost, allocating funds for an associate provost to act as an "ombudsman" for entrepreneurship efforts on campus, and committing \$100,000 in campus funds for the nascent cross-campus undergraduate minor in entrepreneurship.

Inspired by the Academy's successes with cross-campus engagement, Dr. Katehi convened the first Ad Hoc Committee on Institutional Entrepreneurship @ Illinois, a dynamic group of campus leaders which inventoried all of the entrepreneurship initiatives on campus, to identify best practices, to target policies and procedures impeding the creation and development of

⁽Animal Sciences, FF class of 2005), is now Vice President for Research at the University of Illinois; <u>Nancy Cantor</u> (former Illinois Chancellor) is now Chancellor at Syracuse University; former Illinois Provost <u>Linda Katehi</u> is now Chancellor of the University of California, Davis and has created a new center for entrepreneurship there; and former Associate Provost, Civil Engineering Professor and Ad Hoc Committee Co-chair <u>Feniosky Pefia-Mora</u> is now Dean of the Fu Foundation School of Engineering and Applied Science at Columbia University.

innovative programs across campus, and to provide a comprehensive list of recommendations to make the University of Illinois a more entrepreneurial institution.²⁵

Perhaps most importantly, Dr. Katehi also successfully championed efforts to revise the campus rules on promotion and tenure, to explicitly provide for recognition for work that transcends traditional disciplinary boundaries. The impact of this change on existing and future faculty working in entrepreneurship cannot be overstated, as this research tends by its nature to be cross-disciplinary and translational in character, and scholars in the field have suffered under the perception that their meaningful and groundbreaking work might nevertheless not meet the standards for promotion and tenure. For a university of Illinois' stature to take such a public stance in support of entrepreneurship research changes the entire conversation—on campus and off—about this field, and Illinois' faculty devoting their professional careers to its study will add new luster in the form of heightened intellectual legitimacy.

Curriculum

The standard model of entrepreneurship education has been a program contained within one college or school at an institution (typically, the business school). According to this model, the entire entrepreneurship curriculum is typically confined to that program, and housed within its home unit. Students from other programs may be able to take entrepreneurship courses (subject to availability), and some do offer their courses in other units. This model has rarely resulted in entrepreneurship across the curriculum.

The Illinois vision of entrepreneurship education was different from its inception - grounded in the belief that the only way the culture of a major university could be transformed was if faculty from the *entire university* were actively engaged in the creation of the course content. In the original proposal, Illinois envisioned its entire student body as being able to take at least one course in entrepreneurship, regardless of their chosen field of study, and its faculty as "a community of scholars" who would develop new courses (or refine existing ones) with

 $^{^{25}}$ A complete list of these recommendations can be found in the 2009 Report at pp. 14 – 16. This popular committee has been revived under the leadership of Vice President for Research Larry Schook, interim Provost Richard Wheeler, and Electrical Engineering Professor and Technology Entrepreneur Center Director Andrew Singer.

entrepreneurship content, and expand the students' understanding of entrepreneurship by infusing it with fresh perspectives provided by the faculty's expertise in their respective disciplines. In that respect, our Faculty Fellows program has been the lynchpin of curriculum development here at Illinois.

As can be seen in Appendix G, in 2010-2011, the University of Illinois offered 153 courses with significant entrepreneurship content (378 when one counts multiple sections and multiple semesters). Of these 378 classes offered in fall 2010 and spring and summer of 2011, 14% were offered in the College of Agricultural, Consumer and Environmental Sciences; 20% in the College of Business; 14% in the School of Engineering; and 32% in the College of Liberal Arts and Sciences; the remaining 20% were distributed among applied health sciences, education, fine and applied arts, law, library and information science, labor and employment relations, social work and veterinary medicine- truly a cross-campus enterprise. Overall, students from more than 129 undergraduate majors and 61 graduate and professional majors, and every degree-granting college, have taken entrepreneurship and cognate courses, with enrollment in 2010–2011 exceeding 13,000.

A significant number of the courses offered are at the graduate and professional level. Of the 24 Faculty Fellows who offered entrepreneurship courses in fall2010 and spring 2011, 16 offered graduate level courses. Graduate students served as teaching assistants or instructors in many of the undergraduate courses. This is an important indicator, given the emphasis in the Academy's original Proposal on impacting the future professoriate.

Some of the courses have attracted national attention. One example is "Product and Market Development for Subsistence Marketplaces," developed by Marketing professor and Faculty Fellow Madhu Viswanathan, which was selected by *Inc.* magazine as one of the "Best Courses" of 2011.²⁶

²⁶ See <u>http://www.inc.com/magazine/201 I 0401/what-the-students-say-sustainable-product-and-rnarket-development-for-subsistence-marketplaces-at-the-university-of-illinois. html.</u>

In addition to the individual courses, entire programs with entrepreneurship content have been launched since 2004, including the Master of Science degree in Technology Management,²⁷ the Certificate of Entrepreneurship and Management in the Life Sciences,⁸ and the "Business 101"²⁹ modules for freshmen.

Finally, the support of dedicated alumni has provided professorships in entrepreneurship, including the Diane and Steven N. Miller Endowed Professor of Entrepreneurship within the Marketing department, and the four floating Fox Family Professorships, which rotate between departments at the University teaching entrepreneurship, innovation and small business creation.

Enterprise development

For many involved with entrepreneurship education, the ultimate test of a program's success is the number of companies launched by those participating. Indeed, the University of Illinois has a long history of producing some of the world's most successful entrepreneurs, many of whom are engaged in high-technology ventures, as one might expect from an institution with world-class programs in engineering and the sciences.³⁰ As was noted above, hundreds of millions of dollars have been channeled into creating an ecosystem and an infrastructure that will encourage the creation and growth of more of these companies, as well as the ability to stay in the region and contribute to economic growth here.

Twelve years after the General Assembly of the state of Illinois modified the University's charter to add "economic development" as a fourth core mission, the fruits of the corresponding investment are beginning to be seen in earnest.

In the past five years, the University of Illinois' Office of Technology Management has handled over 1000 disclosures, filed for 734 patents, had 194 patents issued, and has itself issued 213

²⁷ 2009 Report, p. 18.

²⁸ Id., at 19.

²⁹ Id, at 19-20.

³⁰ A substantial number of Illinois' entrepreneurial alumni received their education in our College of Engineering, which launched a new Hall of Fame to honor its innovators, inventors and entrepreneurs in 2010. See <u>http://engineeiing.illinois.edu/alumnilhalloffame/2011.</u>

licenses and options, including those to 29 startups based on University technologies. These activities have generated over \$25M in royalty revenues.

The Research Park is growing, and EnterpriseWorks, the University's start-up incubator there, is a hub of entrepreneurial activity.

EnterpriseWorks has graduated more than 128 firms,³¹ and now houses 39 companies, 20 of which entered the incubator just in 20 II. The Research Park is also home to branch offices of larger companies, many of which expanded their operations there in the past three years in order to capitalize on the proximity to the university and enhance their own corporate innovation and R&D. These include Abbott Laboratories, John Deere, Yahoo, and Sony. The Research Park and EnterpriseWorks are responsible for the creation of over 2000 new jobs in the past ten years.

Illinois' Research Park won the Association of University Research Parks' "Outstanding Research Park" award in 2011. EnterpriseWorks is also garnering attention off campus. *Inc.* magazine listed it among the "Top Ten Incubators to Watch."³²

The quality of the research being conducted by the firms in the Research Park, including EnterpriseWorks, is second to none. As proof, 11% of *all* SBIR and STTR grants - totaling more than \$28M - awarded in the state of Illinois between 2004 and 2010 went to companies in the Research Park.

Risk capital is also flowing into the companies housed here. Nearly \$110M in venture capital and angel investment went into companies between 2005 and 2011.

EnterpriseWorks is partnering with the state of Illinois' Department of Commerce and Economic Opportunity to launch the new "!-Start" program, which will provide a suite of services to startups based upon technologies developed at the University of Illinois. Several Illinois researchers from Materials Science, Electrical and Computer Engineering, Chemistry, Medicine, the Institute

³¹ 56% of which are based upon University-generated technologies.

³² <u>http://www.inc.com/ss/lO-staJ1-up-incubators-to-watch#9</u>

for Genomic Biology, and Mathematics have already received !-Start grants to launch their companies.

The Research Park is also expanding student opportunities for interaction with startups through the creation of "shared service" teams, and now has five Entrepreneurs-in-Residence in EnterpriseWorks, along with a law firm *in situ* which specializes in legal issues distinct to startups, to accommodate the increased demand for professional advice associated with greater occupancy in the incubator.

The activity in enterprise creation on Illinois' campus is not limited to the Research Park.

Founded by Dr. Paul Magelli, Senior Director, Illinois Business Consulting (IBC) is the nation's largest university-based student-led consulting firm under the guidance of a highly experienced staff. Since its inception, each year, over 500 different students from the University's 13 degreegranting units volunteer thousands of hours to assist enterprises survive and grow. These students of IBC have served over 1,000 clients worldwide ranging from Fortune 500 firms to entrepreneurial start-ups and high profile not-for-profit organizations. Clients have included such successful start-ups as Geomagic; AnalyzeDirect.com; Apertio; Pervasive Health; Illinois Food Bank; Illinois Department of Public Aid; Women in Transition; Habitat for Humanity; Mayo Clinic; Lockheed Martin; NASA, and Whirlpool.

The Technology Entrepreneur Center³³ in the College of Engineering was the University of Illinois' first foray into entrepreneurship education, and continues to expand its influence and impact, within the College, and across campus. TEC now offers nearly 20 interdisciplinary courses, in which approximately 800 graduate and undergraduate students enroll each year. TEC continues to host the successful V. Dale Cozad New Venture Competition (now in its twelfth year), the annual \$30,000 Lemelson Prize for Student Creativity, the Idea2Product and Discarded to Precious competitions, and its new PitchFest, in addition to workshops on the Urbana-Champaign campus, in Chicago, and in Silicon Valley each year. In 2010, TEC launched Innovation LLC, a dedicated residential community where all of the participating undergraduate

³³ http://tec.illinois.edu/

students share an interest and take courses in innovation, entrepreneurship and technology commercialization. Over the past nine years, approximately nearly 100 student businesses have launched on campus. Many of these have participated in one or more of TEC's business plan competitions.

But in working with student entrepreneurs, it became clear that what was needed on the Illinois campus was not a "bigger, better" business plan competition. To the contrary, what was needed most was a concerted effort to get more students involved earlier in the venture creation process, in advance of their competing in business plan competitions, and a process of shepherding those student ventures *after* they have competed, to move them to the next level of growth, to make them aware of the resources available for their companies, and to help them take advantage of those resources.

The Academy, in collaboration with the Technology Entrepreneur Center, EnterpriseWorks and IllinoisVENTURES, and aided by a \$500,000 gift from alumni brothers and serial entrepreneurs Albert and Alexander Goldstein, created "Illinois Launch" as part of a campus-wide effort to establish a "pipeline" of programs that support and foster student entrepreneurship and new business creation, and to help connect student ventures with the support that Illinois alumni can provide.

Illinois Launch is administered by Academy Executive Director John Clarke, MBA, Ph.D., who also serves as an Assistant Dean for the College of Business. The cross-campus Illinois Launch team helps Illinois student entrepreneurs helps Illinois student entrepreneurs navigate the often confusing process of accessing the many resources on- and off-campus, including workshops and courses, grants and other seed funding, Midwest angel groups and early-stage VCs, support from government organizations, office space, networks of serial entrepreneurs, and the invaluable mentoring and coaching they can provide on everything from seeking capital to business etiquette and social networking.

In just its first 18 months, Illinois Launch has successfully helped to support over 50 new ventures; 34 of which have received over \$1.3M in aggregate funding through Illinois Launch

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grants, venture capital and angel investments. Twelve companies are already generating revenue.

Especially in the space for which Illinois is justly renowned-the creation of ground-breaking technologies and technology companies—we are mindful of the research which shows that the average age of a 1st time entrepreneur is the upper 30s. Our goal is to move that figure earlier somewhat; to enable Illinois graduates to identify opportunities and be able to capitalize on them *earlier* in their professional careers, to better ensure the success of those ventures, to keep more of them in Illinois and in the Midwest as part of our role as a driver of regional economic development; to be a national and world leader in the quest for models of political freedom and economic growth that improve the quality of human life across the planet.

Social entrepreneurship

Our efforts in enterprise development and impact are not limited to the for-profit sphere. The College of Business now hosts the Social Entrepreneurship Institute (SEI)- one of the more serendipitous opportunities that has arisen in recent years.³⁴ SEI developed from a series of very popular summer workshops created by College of Business Assistant Dean Collette Niland. Teaming up with strategic partners including Illinois Business Consulting, the Academy for Entrepreneurial Leadership, the United Way of Champaign County, the Hanley Foundation and the Much Shelist law firm, SEI provides a way for students, community members and faculty to learn about social entrepreneurship, civic engagement, and societal needs through service, learning, consulting projects, workshops, lectures and international experiences.

Interested students apply to become Social Entrepreneurship Fellows. If accepted as a fellow, they become part of a consulting team assigned to a project with a non-profit. SEI trains these student consulting teams which, under the supervision of SEI faculty and staff, provide advice on basic business operations to not-for-profits in the region, to help strengthen these organizations and improve their ability to deliver needed services to their target populations. This assistance has become even more critical during the current economic and state budget crisis. In the past

³⁴ http://business.illinois.edu/undergrad/current-students/social-entrepreneurship-institute.aspx

five years, SEI teams have consulted for organizations such as Crisis Nursery, Girls Scouts of Central Illinois, Hope Community Health Center, SmileHealthy, Illinois Green Business Association, Don Moyer Boys & Girls Club, Center for Women in Transition, and A Woman's Fund.

SEI charges nothing for the consulting services it provides. It was established, in part, to invest the intellectual capital of the University of Illinois—particularly the strategic, managerial, and operational acumen for which the College of Business is well-known—back into the communities within the state of Illinois by identifying new channels and targeting new audiences which have not, heretofore, been considered targets for "business advising." The transformational capacity of this outreach, and the goodwill it generates for the College of Business and the University more broadly speaking, are immeasurable.

In keeping with the University's ongoing efforts in global education, 13 SEI fellows will be traveling to London and Cambridge University in March of this year to study social enterprises in the British context.

Sustainability

The Kauffinan Campus I grant of \$4.5M was matched by \$8.9M of direct campus support, \$0.9M of additional grants, and \$1.6M in gift dollars, and supported the creation, build out, and programmatic and operational expenses of the Academy for Entrepreneurial Leadership from planning in 2004 through 2009. Since the expiration of the KCI grant, the administration of the University continues to invest a multiple of the initial grant monies *annually*.

Even so, sustainability of even our most successful program has become a challenge in the present fiscal climate nationally, and within the state of Illinois in particular. The expiration of the KCI grant has affected the University of Illinois' ability to continue to fund new Faculty Fellowships—a source of concern, given the profound success of this program, and its impact both on and off the University of Illinois campus. Although we cannot expand the program at the moment, the Faculty Fellowship program remains vibrant for this cadre of 50+ Fellows, who

continue to teach the courses they have created, meet regularly at Academy-sponsored themed events, and share their ongoing learning about entrepreneurship through the lens of their respective disciplines. One of our most immediate objectives is to obtain financial support specifically for the Faculty Fellows Program, both to encourage the growth of the group, and to support the development of new courses and research in entrepreneurship.

Regrouping: Looking to 2013 and beyond

Undergraduate Minor in Entrepreneurship

While there has been enormous enthusiasm among the faculty for creating and teaching new courses, as well as administrative support by deans and department heads for incorporating these courses into the faculty's contractual responsibilities, packaging these courses into a cohesive curricular whole has presented something of a larger challenge. This has been the case in particular with the proposed cross-campus undergraduate minor in entrepreneurship.

The team of faculty and academic professionals that developed the minor reviewed numerous programs at other colleges and universities. In the traditional structure and operation of most minors, all courses are offered within a single department or unit. Our original vision was of an expressly *interdisciplinary* program, with some core courses taught in the College of Business, and the remainder of both core and elective courses being taught by faculty located across campus in multiple colleges and departments.³⁵

The structure of the proposed minor is therefore novel and distinctive. It has also been among the most challenging to implement, because it must be housed and administered by one unit, but operate across multiple disciplines, requiring each unit to approve one or more courses within the program, and commit to providing the instructor for the course.

³⁵ See 2009 Report, pp. 20-21.

We assumed that the "home unit" would be the College of Business. However, we ran into pushback from some members of the Business faculty who felt that the *entrepreneurship* minor should look much more like a *business* minor (with micro- and macroeconomics, statistics, management, finance, accounting, etc.). As a result, we could not obtain consensus about the core components of the minor (there was not disagreement about the elective content), and without this consensus, could not take the program to the University's Faculty Senate for approval.

Beyond the conceptual differences, other more practical concerns were also raised, and have yet to be satisfactorily addressed. Among these are the challenges of dealing with expected high student demand, finding adequate classroom space, ensuring the continuity of instruction and instructors (particularly when the courses are taught in multiple colleges) and funding.

Consequently, the formal minor has yet to launch. This is regrettable, and the strongest proof of the work that still needs to be done to infuse a more entrepreneurial spirit into the process of faculty governance and curriculum development. We are committed to executing on the original vision we expressed for this program, which is currently being reviewed and examined anew. New leadership in the department of Business Administration should enable us to resolve the internal differences over curriculum, and provide the course content for which there is already such great student demand.

Certificate in Management and the Life Sciences

Launched in 2007, this popular certificate program went dormant following the departure of two of the key faculty behind its operation (the mobility of faculty is not without its down side). Now this program has been revived under the leadership of Dr. Raj Echambadi, Associate Dean in charge of AEL, and Dr. Jay Kesan, ³⁶ a professor with joint appointments in the colleges of Engineering and Law. CEM is offered in the spring semester and involves a hands-on practicum in entrepreneurship following the famed Kauffman's Fasttrac curriculum. Prior to this practicum, CEM is preceded by a 10-week certificate in Business course (CiB) course available to all interested faculty, staff, and graduate students across the campus. The goal of an integrated CiB – CEM curriculum is to teach both the theoretical and practical aspects of becoming an entrepreneur.

³⁶ Professor Kesan has a Ph.D. in Electrical Engineering and his legal expertise is in intellectual property, with particular emphasis on patents.

EntreCORPS

EntreCORPS will be launched in 2013. The brainchild of Dr. Paul Magelli, EntreCORPS is envisioned as a student-managed consulting organization created for the purpose of providing business strategy advice to entrepreneurial start-ups. It will be housed within the Academy for Entrepreneurial Leadership (AEL) at the University of Illinois. The AEL will develop financial resources to underwrite the expenses for EntreCORPS. The consulting organization will be staffed by undergraduate and graduate students from all disciplines.

Entrepreneurial start-ups are unique enterprises. They are usually resource-constrained and hence call for creative and innovative solutions. Moreover, the paucity of resources prevents them from securing external consulting help that is available to large organizations.

Start-ups seeking advice range from profit to non-profit companies. Consulting often covers a wide gamut: (1) advice on commercializing technologies; (2) identifying potential markets; (3) developing business plans, (4) scaling operations; and/or (5) looking for newer ways and means of creating social impact. The objective is for students to assist start-ups navigate unique situations, problems, and opportunities. Working for, and consulting with, start-ups enable students to think differently and possibly learn to do more with less.

AEL will provide faculty oversight to EntreCORPS to ensure that consulting advice provided by student teams is rigorous and appropriate. The AEL also will ensure that student consultants are properly trained and AEL will provide adequate opportunities for professional growth and networking through entrepreneurial events and activities.

In the longer-run, we envision that EntreCORPS will provide a resource-rich platform to create more entrepreneurs, strengthen the hand-in glove relationship between basic research and commercialization, improve survival rates of start-ups, ensure that start-ups can scale successfully to become larger players, and create social welfare. In short, we envision that EntreCORPS contributes to the economic growth and dynamics to the Chicago region and to the state of Illinois.

Entrepreneurs Without Borders (EWOB®)

Illinois created and trademarked this student organization in 2008.³⁷ EWOB's mission focuses on using entrepreneurship as a means to address problems in subsistence marketplaces as well as

enabling entrepreneurship within these communities. Now under the leadership of Raj Echambadi and Dr. Madhu Viswanathan, EWOB will be distinctive in the degree to which the student experience is designed from research and educational experiences in the academic domain. Specifically, the EWOB experience will include systematic learning of current knowledge about subsistence marketplaces as well as methods for gaining insights through an online learning experience, careful design of international immersion experiences to both understand subsistence contexts and design solutions, and use of curriculum based on marketplace literacy education to teach entrepreneurship in impoverished communities. These three elements draw from relevant work through the Subsistence Marketplaces Initiative, University of Illinois, which has pioneered research, education, and social initiatives, and created unique synergies between them. In the next year, EWOB will pilot its first chapter in India and utilize university students from both Illinois and India to teach entrepreneurship in underserved communities in India. Longer-term plans include chapters world-wide that adopt the curriculum and practices of the founding EWOB chapter at the University of Illinois.

Illinois Launch

Started in 2009, Illinois Launch, a new venture accelerator program in the College of Business at the University of Illinois, helps entrepreneurs develop their ideas into high-growth, sustainable businesses. The Illinois Launch program was funded through a generous gift from Albert and Alexander Goldstein. The program provides startups with access to curriculum, mentors, community, and an enormous network of alumni, investors, and successful entrepreneurs. Through a partnership with Entreprise WORKS, Illinois Launch startups also gain access to one of the top incubators in the nation.

Kola Foundation

In addition, Illinois MBA students launched the Kola Foundation, a non-profit organization comprised of MBA students who volunteer their time to work on projects to improve the lives of the Oglala Lakota residents of the Pine Ridge Indian Reservation in South Dakota.³⁸ Activities over the past year have included pro bono business consulting on the Reservation, sponsoring a high school business plan competition there, sponsoring two Pine Ridge students to attend summer educational programs at the University of Illinois, and distributing over \$80,000 in winter coats and blankets. Enormously popular, the South Dakota service trips have waitlists, and the administrative teams are working valiantly to expand capacity to meet student demand.

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MBA International Entrepreneurship Opportunities

In conjunction with the MBA program, Illinois Business Consulting (IBC) launched the first of its kind international consulting initiative during the fall semester of 2011. Based on the successful IBC model and administered by experienced IBC student managers, this MBA-only program provides opportunities for students to gain valuable work, business, and cultural experiences in one of four emerging markets. Unlike a traditional study abroad experience, teams of 5 to 6 MBAs are assigned to work on semester-long projects with international business clients through regular weekly calls and video conferences and then deliver value-added results during face-to-face meetings at the client's home location.

During the fall semester, 19 MBAs completed two client projects and arranged three alumni networking events in South Africa. During the 10-day country visit during Winter Break, the students also met with government officials, local business leaders, and small business entrepreneurs in Johannesburg, Durban, and Cape Town to gain first-hand knowledge of the market and business climate of the "gateway to Africa".

One of the local clients is a 115-employee consulting engineering firm with an innovative "smart" power metering technology currently being deployed through the national electrical utility, Eskom. Our team provided a U.S. market assessment and penetration roadmap resulting in introductions to two potential distribution partners with the potential of doubling or tripling their sales. According to our client, they would not have been able to expand into this significant international business growth opportunity without the expertise of our project team.

This spring, we are conducting 9 more emerging markets GCP projects including 3 in China and 6 in Brazil. We will add India to the fall 2012 slate along with another expanded round of projects in South Africa. Each year, we expect over 100 students—virtually the entire MBA class to complete a GCP project experience each year.

³⁷ http://www.entrepreneurswoborders.org/

³⁸ http://www.kolafoundation.org/

Illinois students have also enjoyed the benefit of numerous international immersion trips abroad: Students visited Israel in spring 2011, on a trip focused upon that country's prominent startup initiatives. Our students also attended the C40 International Business Plan Competitions in Seoul, South Korea in 2008, and in Sao Paulo, Brazil in 2011, where they formed interdisciplinary teams with students from other universities to address pressing problems of climate change, and create appropriate business solutions, mindful of local cultural norms.³⁹

Finally, the Academy also sponsored a "Chindia" trip-two weeks in China and India over the 2011-2012 semester break.

Sesquicentennial of the University of Illinois - 2017

This event is still five years out, but the planning is well underway. The Office of the Provost is responsible for the event, and has solicited input for incorporating primary themes of Innovation and Entrepreneurship throughout the University of Illinois history.

Conclusion

Nearly ten years after the first ideas were put to paper, it is a good time to take stock. The aspirations of the original proposal to the Kauffman Foundation were lofty. Nothing less than a complete commitment from the campus would suffice, and nothing less than campus-wide engagement would succeed.

Aspirants to an "entrepreneurial university" often point to MIT and Stanford as paragons. And they *do* reflect innovative institutional mindsets. But these universities have had the benefits of such uniquely entrepreneurial environments for so long that is it reasonable to ask how useful they are as models for the rest of us.

³⁹ <u>http://business.illinois.edn/ael/news/2011</u>/Sao%20Paoloi%20C40%20Competiton.html

In this respect, Illinois' experience over the past decade offers something distinctive, and valuable: a roadmap for other, similarly-situated peer institutions facing the need and the desire to innovate, adapt, and reinvent themselves. In particular, Illinois' peerless foundational research, its keen identification of the core components of an educational institution's culture, its demonstrated ability to engage the key stakeholders invested in that culture in the process of adaptation, and its successes in making each core component more entrepreneurial in operation and in output, will be perhaps our most enduring contributions to the ongoing efforts in this space.

Nine years after our receipt of the Kauffman grant, students in virtually every discipline can enroll in at least one course in entrepreneurship over the course of their academic careers. The interest generated by one course in entrepreneurship can prompt a student to pursue a certificate, a minor, a major, a master's degree, or even a doctorate. Graduate students have ventured forth to begin their careers as professors in myriad disciplines at institutions all over the world, distinctively and beneficially impacted by the infusion of entrepreneurship principles, practices and philosophies into their Illinois education. Faculty in business, engineering, life sciences, law, fine arts, education, agriculture, veterinary medicine, and the humanities have adopted an entrepreneurial mindset, and are entrepreneurship instructors, researchers, champions, advocates, and ambassadors, not to mention innovators, inventors, and company founders. University and campus administrators have led by example, adopting entrepreneurial approaches to operational issues, rewarding and promoting entrepreneurial faculty, and even changing the University's promotion and tenure criteria to recognize entrepreneurship and other novel forms of academic innovation and creativity. Resources so essential to the launch and growth of new business, and the creation of new jobs are present, growing, and obtaining national recognition as models of innovation.

The culture of the University of Illinois, in short, has been dramatically altered. And there is no going backwards. It is critical to note, however, that while the process of making the University a more entrepreneurial place is underway, it is not finished - nor, indeed, will it likely ever be. But even if one assumes that a culture can be transformed such that the reputation and identity of that institution is indelibly marked by a spirit of innovation in substance and in process, we are not there yet.

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There are good reasons for this.

Although a public research university may be the size of a major corporation, it is *not* a corporation. The education we provide is not merely a consumer product. Our students and their families are more than just "customers" to us. Most importantly, universities are characterized by *faculty governance;* they are not places where a new president sweeps in with a bold vision and forces that vision on the underlings, as can and does happen with corporations.

As such, the transformation of a university's internal culture and external reputation has to be one of persuasion, not compulsion. In our case, those who must be persuaded of the value of these initiatives are the faculty, who are charged with the governance of the university- particularly on matters involving curriculum. It is for this reason that our Advisory Board was so critical, and it is why so much of our initial effort was geared toward outreach to and engagement of faculty across the entire campus. We have touched every college, and nearly every department. We have identified champions and established strategic partnerships. We have laid the groundwork for the ongoing adoption, translation and transmission of the entrepreneurial mindset across the entire campus. And while there has, at times, been confusion, there has been no conflict. Most significantly, our faculty have taken ownership of these efforts in entrepreneurship education, curriculum development, research and technology commercialization; they have not had their participation forced upon them.

In this, we are very like the most disruptive innovators who must convince the buying public one person at a time—that there is a need and a reason for the completely new thing they have developed. The most successful businesses are those whose customers continue to purchase their products or use their services out of love of the product, loyalty to the company, and a sense of shared vision—even that of community—with everyone associated with that company. This is a powerful motivation and one to which we aspire.

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Serial entrepreneur and best-selling author Guy Kawasaki refers to this sentiment as "Enchantment."⁴⁰ Without being hyperbolic, what we are seeking is nothing less than this: a pervasive feeling throughout our campus that the University of Illinois is a marvelous place to be, and be from; a place where students are encouraged to ideate, develop, create, invent, launch, improve, and profit; where faculty expertise manifests itself in the most innovative and dynamic ways, unfettered and un-siloed, in curriculum, in meaningful solitary and interdisciplinary research, in visions that might decades to achieve, and in transformational innovations that take hold immediately; where those charged with administrative responsibilities see themselves as facilitators of dreams and ambitions of the grandest sort, those for whom an understanding of policies and process is an engine, not an obstacle; where alumni remember with fondness and gratitude the epiphanic qualities of the education they received here, and look for every reason and opportunity to re-engage and give back.

When we get where we are heading, "the University of Illinois" will be synonymous in the public's mind not just with steadfast educational quality and groundbreaking research, but with inspiration, innovation, imagination, opportunity, possibility, and impact.

We are not there yet. But we are leading the way.

The timing of the Kauffman Foundation's support for these initiatives could not have been more auspicious, and Kauffman's support played a pivotal role in the achievements described at length in this document. The entire University of Illinois community is grateful for the Kauffman Foundation's confidence in the Illinois vision, and its support for the implementation of that vision of entrepreneurial transformation.

40 http://www.guykawasaki.com/enchantment/