

## Entrepreneurship at Princeton

*A statement by President Christopher L. Eisgruber and Provost David S. Lee*

Recently, an advisory committee on Princeton entrepreneurship submitted a report to us that described a vision of “Entrepreneurship the Princeton Way” and outlined a set of recommendations designed to help support and achieve that vision. We are pleased to offer some responses to the report and outline some initial steps that the University will be taking, even as other aspects of the report will receive continuing consideration as part of the University’s overall strategic planning process.

We begin by agreeing with the report’s recognition that the term “entrepreneurship” should be very broadly defined. Entrepreneurs can be engineers or humanists. They can work in the private sector or the public sphere, driving positive change in all kinds of industries and in organizations of all shapes and sizes. Entrepreneurs challenge themselves to ask hard questions, think critically, develop innovative solutions, and create organizations that effect meaningful change.

There are obvious synergies between entrepreneurship and the University’s commitments to liberal arts education, basic research, and public service. Eric Schmidt ’76, the executive chairman of Google, Inc. and one of the most transformative entrepreneurs of our time, has repeatedly highlighted these connections. He emphasizes the central role that Princeton and other great research universities have to play in educating “knowledge workers,” and he calls on us to encourage and support entrepreneurship to help create jobs and advance the nation’s economy.

In recent years, we have seen rapidly growing interest in entrepreneurship among our faculty, students and alumni. This interest has been accompanied by a surge in entrepreneurship-related activities on campus, including a broad range of entrepreneurship courses, student internships, entrepreneurship competitions, an accelerator/incubator program, and numerous events.

The explosion of interest in entrepreneurship is not unique to Princeton—it is taking place on campuses across the nation. Many of our peers are significantly expanding their entrepreneurship programs.

Of course, entrepreneurship as a concept and as an activity is not new, nor is it without precedent among Princeton faculty, students and alumni. Princeton has produced several of today’s most famous and successful entrepreneurs, and a wide range of important social and commercial initiatives have sprung from the work of Princeton students and faculty. What is unprecedented is the level of interest in entrepreneurship on campus; the expanding application of entrepreneurial thinking to all disciplines and all types of endeavors; the extraordinary impact of the technological revolution; and the growing importance of collaborations between universities and private sector entrepreneurs.

As we plan for the future of the University, we have an opportunity to increase support for our student, faculty and alumni entrepreneurs -- to help them make this world a better place. A vibrant entrepreneurial environment may also enhance our ability to attract the best students and faculty, especially in computer science, engineering and certain scientific fields. For these reasons and others, in conjunction with the ongoing University-wide strategic planning process we convened the Princeton Entrepreneurship Advisory Committee (PEAC) and asked it to develop a vision for entrepreneurship that builds on Princeton's distinctive strengths and amplifies the impact of our core missions of teaching and research.

We are grateful to the faculty, staff, students and alumni who served on the advisory committee, chaired by Professor Mung Chiang, for creating a broad and ambitious vision. In their words, "Entrepreneurship the Princeton way should achieve the highest standard of excellence of entrepreneurial activities as a service to the nation and all nations, and enhance the liberal arts education environment through the entrepreneurial mindset."

We embrace this holistic vision, which simultaneously builds on Princeton's historic strengths and challenges us to evolve as an institution, and we enthusiastically adopt this lens for viewing entrepreneurship as a mindset, as a particular way of thinking critically about what the world needs and how to meet those needs. The broad definition of entrepreneurship proposed by PEAC -- "the initiation of transformations through risk-taking actions and value-creating organizations" -- resonates with this vision.

### **Guiding Principles**

In articulating a vision for entrepreneurship the Princeton way, the PEAC recommendations build upon three guiding principles that will shape the University's entrepreneurship strategy.

- **Entrepreneurship the Princeton way should build on the University's distinctive strengths as a liberal arts institution.** PEAC emphasized that entrepreneurship should complement and enhance Princeton's unique strengths and distinctive model of education. "Our proposal is not that entrepreneurship should become the dominant frame in a liberal arts education. We propose that a liberal arts education can best frame the problems budding entrepreneurs try to solve, and best provide many of the skills they need to do so." This point resonates with what we have heard from a number of our alumni entrepreneurs, who point to the broad education they received at Princeton – whether through courses in ancient Greek democracy, the Victorian novel, or the history of the Industrial Revolution – as helping to fire their imaginations and provide them with wide-ranging and often unexpected insights into the world around them.
- **Entrepreneurship the Princeton way should amplify the University's core missions of teaching and research.** PEAC identified a variety of ways that successful implementation of entrepreneurship the Princeton way would complement and enhance teaching and research activity on campus, including: "train[ing] the mind in the areas of

creativity, innovation, and discovery of pathways from ideas to at-scale impact;” “training character in the areas of taking risk, thriving under uncertainty, and persisting through failure;” “promot[ing] interdisciplinary research across campus, resulting in translational impact;” and “enhance[ing] faculty recruiting and retention in many disciplines.”

- **Entrepreneurship the Princeton way should serve the common good and encompass social initiatives as well as commercial ones.** PEAC’s members highlighted the connection to service and the way in which “learning entrepreneurship and associated disciplines ‘the Princeton way’ will orient students’ entrepreneurial skills and mindset to the recognition and creation of genuine value in order to serve the common good.” Indeed, they convincingly argued that “entrepreneurial spirit and capability” are increasingly required for societal service and global leadership.

### **Advancing the vision for entrepreneurship the Princeton way**

The Advisory Committee proposed a number of compelling and interconnected recommendations to encourage and enable entrepreneurship activity on campus and among members of the University community.

The Committee’s recommendations will serve as valuable inputs to the ongoing strategic and campus planning processes. In putting forth its proposals, PEAC was careful to note that the recommendations are intended to serve as “pathfinders” and to provide a “blueprint” for regular updating—they are, by design, intended to be neither comprehensive nor static. We are grateful to PEAC for establishing this blueprint, which will be developed more fully in the months and years ahead. Now and in the future, we will be mindful of the Committee’s insistence that the University must be entrepreneurial about entrepreneurship—willing to take risks, try new things, and learn from experience.

In the meantime, it is critical to harness the entrepreneurial momentum. Among the PEAC recommendations are proposals for initiatives that would enhance entrepreneurship without requiring significant investments of new resources. The University will begin to implement these proposals immediately. Thanks to the extraordinary generosity of three alumni, we already have in place one exciting new initiative to support the University’s entrepreneurial ecosystem – the Alumni Entrepreneurs Fund that was created last fall and recently identified its first recipients -- and we are ready to launch a second new initiative, the Tiger Challenge, which we describe in the sections that follow along with our responses to several other recommendations that we will begin to implement in the very near future.

We will also begin fundraising now for additional resources to support entrepreneurship, including funds to enhance administrative capacity and enable programmatic growth. Certain PEAC proposals, particularly those related to buildings and physical space, will need to await further planning before we decide how to respond to them.

### **Establishing the Princeton Entrepreneurship Council and enhancing existing support**

Given the ambitious agenda put forth by PEAC and the high priority we place on entrepreneurship, one of the most important first steps will be to establish an effective body to steer and coordinate entrepreneurship-related programs across campus. We will establish the Princeton Entrepreneurship Council to address the organizational needs identified in the PEAC report in a way that strikes a “balance between bottom-up execution and campus-wide coordination.”

The Council will be led by a faculty executive committee (representing all four divisions), which will: 1) advise University leadership on the strategic direction of Princeton’s support of entrepreneurship; 2) articulate the evolving vision of entrepreneurship at Princeton; 3) develop, evaluate, and refine any curricular aspects of entrepreneurship; and 4) continually assess the alignment between the vision of the Council and implementation across campus.

The Council will also be assisted by an administrative committee comprising representatives from the offices of the Provost, Dean of the College, Dean of the Graduate School, Career Services, Corporate and Foundation Relations, Development, and Technology Licensing as well as the Keller Center for Innovation in Engineering Education and the Pace Center for Civic Engagement; students will also be represented on this committee. To ensure maximal coordination, this committee will provide important updates, feedback, and input on the status of entrepreneurship within each of the entities’ respective areas as well as across campus.

The chair of the Council, supported by an executive director, will oversee the Council’s functions through these committees and also oversee the implementation of specific initiatives to support entrepreneurship that otherwise are not naturally part of the functions and missions of existing units across campus.

PEAC also recommended the creation of a new position within the Office of Technology Licensing (OTL) to advise and support entrepreneurial faculty who are interested in establishing new ventures that will help bring discoveries made on campus out into the world for societal benefit. The establishment of this new ventures associate position will help to meet a pressing need. We have accordingly directed that the position be created and filled immediately.

### **Establishing an undergraduate entrepreneurship certificate and scaling up co-curricular programs and opportunities.**

We are enthusiastic and wholly supportive of the conceptual proposal to establish an undergraduate certificate program in “Innovation, Entrepreneurship and Design” that will leverage the University’s unique across-the-board strength in the humanities, social sciences, natural sciences, and engineering. This certificate program will “enhance our core mission of spurring creativity and help students build the character they will need for taking risks, following their passions, and persisting through the inevitable failures that are necessary parts of entrepreneurial activity.”

This proposal will, of course, require review and approval by the University bodies that oversee the undergraduate curriculum: the Academic Planning Group, the Committee on Course of Study, and the full faculty. The certificate program may also require us to raise new resources to support an expansion of the University's curricular and co-curricular entrepreneurial programs on a permanent basis.

To complement the curricular experience, PEAC recommended scaling up a number of successful entrepreneurship-related co-curricular programs, including increasing the number of opportunities for student internships and shadowing experiences as well as expanding support for the highly successful eLab accelerator program. Student demand for these opportunities already far outpaces supply, and interest will only continue to grow. The University will need new resources to expand existing programs and pilot new ones.

While we understand and appreciate PEAC's goal to connect classroom learning with hands-on, real-world experience, we do not endorse the recommendation to consider granting credit for entrepreneurial activities pursued during time away from campus.

### **Cultivating the entrepreneurial ecosystem.**

University-based entrepreneurial activity cannot exist in a vacuum—a vibrant ecosystem that includes and engages numerous stakeholders is critical. PEAC strongly encouraged the University to create “a triangle of ecosystems” by focusing on the alumni ecosystem, the funding ecosystem, and the local ecosystem. We endorse this multi-faceted approach and agree that a thriving entrepreneurial ecosystem will be critical to the successful realization of the University's vision for entrepreneurship.

#### *Alumni ecosystem*

PEAC challenged the University to enable “the most effective entrepreneurial alumni engagement with students and faculty.” We appreciate and value the spirit of this recommendation, which is intended to establish important and meaningful connections across University constituencies and connect alumni with the core teaching and research missions of the University.

It is very important to engage alumni in the University's entrepreneurship initiatives and there are a variety of ways to meaningfully grow the entrepreneurial alumni network and involve more alumni in entrepreneurship-related events on campus. We expect, however, that these networks and events should differ significantly from the alumni conferences that are mentioned in the report, such as “Many Minds, Many Stripes” or “Coming Back, Looking Forward.” Those staff-intensive conferences, organized by the Office of Alumni Affairs, serve a different purpose and are limited in number by their very nature.

We ask the Princeton Entrepreneurship Council to partner with the offices of Alumni Affairs, Career Services and Development, among others, to develop a variety of ways to cultivate the

entrepreneurial alumni ecosystem and leverage the wide variety of successful alumni initiatives at the University.

### *Funding ecosystem*

PEAC rightfully emphasized that “funding is not just about the financial resources provided, but also about the people and endeavors that such resources enable.” Our peer institutions have implemented a variety of funding models to support entrepreneurship. After careful consideration of which models would fit Princeton's distinctive culture and help to amplify the University's core strengths and mission, PEAC proposed four funding mechanisms: the Alumni Entrepreneurs Fund (AEF); Tiger Challenge; the Princeton Start-Up Assistance Fund; and the Princeton Alumni Band of Angels.

We are deeply grateful to the three alumni who provided us with incredibly generous support to pilot the AEF and Tiger Challenge programs. The initial phase of AEF in fall 2014 was a tremendous success and four teams of entrepreneurs have received funding from AEF to support their entrepreneurial ventures. Alumni who receive AEF support will serve as mentors to current students, and in this way further help to nurture and enhance the University's entrepreneurial ecosystem. A second phase of the AEF pilot is currently underway. The offices of the Provost, Finance & Treasury and Development will work with the Princeton Entrepreneurship Council to evaluate the pilot and determine the future of the fund.

We look forward to the launch of the Tiger Challenge, which is "designed to encourage Princeton students to step off the treadmill of their individual achievements and work in diverse teams to develop solutions to unanswered challenges." This initiative resonates deeply with the University's distinctive liberal arts model and commitment to service.

Additional funding mechanisms will be explored and piloted by the administration, informed by experience with the pilot programs, resource availability, and stakeholder interest.

### *Local ecosystem*

The University has a strong interest in enhancing the entrepreneurial infrastructure in central New Jersey. Enhanced regional entrepreneurial activity would benefit not only Princeton students, faculty and alumni but also our neighboring communities and the broader geographic and economic area. There are many complex questions that need to be answered to determine the best way to develop and cultivate an entrepreneurial ecosystem that leverages and reinforces Princeton's distinctive strengths and attributes. Given the complexity of this initiative, University leadership will dedicate special attention to further analysis of this recommendation in the coming months, engaging expertise and advice from within and beyond the University.

As part of this exploration, the University will continue conversations about how Princeton can most productively interact with New York City entrepreneurs. A careful analysis will be necessary to assess challenges and opportunities and to determine how best to advance the University's goals regarding entrepreneurship and other priorities.

### **Providing physical space for entrepreneurship on and near campus.**

PEAC rightly identified a pressing need for space on campus to “create a community of entrepreneurship and run vibrant programs” and proposed a building that would serve as an “anchor space” for entrepreneurship on campus. PEAC also recommended the establishment of different types of incubator spaces. As the Committee noted, “the long-term solutions to those needs will have to tie in with the University’s overall, long-term space planning.”

We have asked the Campus Planning Steering Committee to take these recommendations into account as part of the ongoing campus planning process that will create a framework to guide the University's physical development for the next ten years and beyond. To optimize impact and most effectively realize the vision for entrepreneurship the Princeton way, any decisions about whether and when to create new facilities to support Princeton’s entrepreneurship efforts will have to be made in connection with the University’s overall strategic planning process, its comprehensive campus planning framework, and an assessment of fundraising possibilities. The specific question about off-campus wet-lab-based incubator space will be explored by University leadership in connection with efforts to enhance the local entrepreneurial infrastructure.

To address the immediate need for incubator space for faculty, students, and alumni, we are pleased that the Princeton Entrepreneurship Hub will open in summer 2015 in space that the University has leased at 34 Chambers Street.

### **Conclusion**

We are deeply grateful to the faculty, students, alumni and staff who dedicated tremendous time, energy and expertise to develop a compelling vision for entrepreneurship the Princeton way. PEAC’s vision is ambitious, as it should be, and realizing it will challenge and push the University in exciting, meaningful, and necessary ways.