



## **Request for Applications for Pathways 2017**

### **Summary of Opportunity**

Innovation is critical to ensuring a country remains competitive. Universities are key contributors to innovation, serving as hubs for world-class research, and providers of education that prepares students to contribute to the innovation economy.

The Pathways in Innovation Program (Pathways) is a proven institutional change and faculty development initiative that helps universities live up that promise by infusing innovation and entrepreneurship (I&E) into the fabric of the university.

This transformation is not simple. To effectively incorporate I&E, an institution must work collaboratively toward change. Pathways to Innovation Program embodies and fosters this change through a collaborative, peer based approach. Following an assessment of the institution's ecosystem that identifies strengths to leverage and gaps to fill, each school assembles a team to lead this effort. Pathways network alumni who have paved the road ahead provide models and guidance on what has worked and failed elsewhere. Guided by this robust and active partnership, each school begins to implement a plan that will meet their identified needs, and in doing so joins a growing movement of excellence.

Each Pathways school works to strengthen their ecosystem in the way that make most sense given the assessment of their institutional context. This work may include adaptations to curricula and extracurricular offerings, modification of supporting infrastructure, development of leadership initiatives, and modification of policies to catalyze targeted activities. Throughout the process, a strongly collaborative and supportive peer-based "community of practice" is central to the work.

Three groups of institutions have participated in Pathways. An initial group of 12 schools (Pathways 2014) began the program in January 2014; 24 schools joined them in January 2015 (Pathways 2015) and an additional 14 schools in December 2015 (Pathways 2016). Up to 14 schools will be chosen from this round of applications, to participate as the Pathways 2017 cohort.

This call describes the Pathways program and how to submit applications, which are due December 9, 2016.

## Background

Over the past decade, many faculty from institutions across the country have developed and implemented effective ways to integrate I&E on their campuses. However, many of these advances have been small scale and driven by a limited number of faculty, often working solo within their institutions. The goal now is to grow the number of faculty involved, and engage entire institutions in far-reaching change.

While an ambitious goal, research indicates that such change can happen through attention to the following key factors: (1) engagement of upper level administrators, (2) opportunities and challenges at the home institution (3) sustained duration of the project, (4) experiential learning opportunities for faculty and (5) peer interactions among faculty within and across institutions.<sup>1</sup> The Pathways program is designed with these key factors in mind, and also offers participants access to a framework for strategic planning, and proven approaches for integrating I&E.

## Who May Apply

Any college or university with an engineering or science degree program may apply to participate in Pathways. Engineering and/or science must be a focus of the work undertaken through Pathways, but proposals for inter- or multidisciplinary initiatives are actively encouraged.

This year we are excited to announce we are accepting applications from institutions outside of the U.S.. However, your acceptance into Pathways will be contingent upon the recruitment of a sufficient number of institutions from the country or region where your institution resides.<sup>2</sup>

## What can you expect from the Pathways program?

- A motivated and committed community of peers from other schools engaged in this work;
- A facilitated process of planning and implementing change to help you avoid the “death by committee” syndrome of so many ambitious initiatives;
- Guidance from advisors who have implemented significant change on their own campuses;
- A growing resource “library” of model courses, programs, policies and the like;
- Opportunities to hear from and interact with leaders of exemplary programs from across the country.

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<sup>1</sup> Giersch, S., McMartin, F., Nilsen, E., Sheppard, S., Weilerstein, P. (2014). Supporting Change in Entrepreneurship Education: Creating a Faculty Development Program Grounded in Results from a Literature Review. <https://www.asee.org/public/conferences/32/papers/10755/view>

<sup>2</sup> This is critical if your institution is to fully benefit from the Pathways peer community approach. Please contact Victoria Matthew at [vmatthew@venturewell.org](mailto:vmatthew@venturewell.org) with questions regarding this.

## What do we expect from Pathways schools?

- Work with a team of up to 4 Pathways staff and mentors to plan and host a comprehensive 360 degree assessment of your campus ecosystem.
- Attendance of at least two team members at the OPEN conference and the Pathways post-conference planning workshop in Washington DC. Dates for the conference (including the post-conference planning workshop) are March 24-26, 2017.
- Execution of the plan mapped out at the planning workshop. All plans go through revision and pivoting, but steady progress on the plan is expected.
- Monthly participation by the team leader with a virtual peer group to provide and receive feedback on the change process at each campus. These sessions will also require the team leader or a designee to upload a brief status report before the gathering.
- Participation in peer-driven online and in-person meetups showcasing best practices of Pathways teams and topics critical to their work.
- Participation by all team members in the project's evaluation activities. These activities include surveys following online and in-person activities.

## The Role of the Team and Team Leader

Transformation of an institution's I&E ecosystem is not easy. It requires the work of a team. As part of the Pathways program, we will assess your ecosystem to help you identify strengths you can leverage, gaps you can fill, and recommended strategies. Together with you, we will also perform a system mapping exercise. Through the ecosystem assessment and systems mapping exercise we will provide you with recommended strategies to be undertaken and a recommended team for implementing those strategies.

While the selection of the team leader and members will be driven chiefly by the specific strategies to be undertaken, and the individual's expertise and ability to effect change in the area chosen, other important considerations include:

Existing relationships within the school and the university. The team leader and members will need to reach out to various parties to address barriers, discuss policies, and expand the number of people who are involved in the project.

Availability. Working on and leading a Pathways team will take a significant amount of time. For team members this includes time in "official" meetings – in-person gatherings, and monthly peer feedback, as well as monthly meetings on their home campus. Team leaders will have the additional responsibility of scheduling team meetings on their home campus and taking responsibility for work that needs to happen between meetings. It is vital that the institution free up **at least** 10% of the team leader's time to take these tasks on – asking a team leader to fit this work into an already full suite of responsibilities will not be effective.

Comfort with technology. While the in-person gatherings lay the foundation for the Pathways experience, team members must be able and willing to engage on a regular basis with colleagues and Pathways staff through video conferencing.

Effective management style. Team leaders should have the ability to keep a group on task while still collaboratively welcoming new people with fresh ideas. He/she should be a person that other team members will enthusiastically join to take on the project.

A single team leader is the most straightforward way to address the need for all of the above qualities, but a co-leader arrangement is also possible and in some cases preferable – for example, if your institution plans to incorporate one or more colleges, or tackle both institutional research and academics.

## **Selection Criteria**

Schools will be selected for Pathways based on the evidence presented in the proposal for the following qualities:

- Strong support from the institution's leadership, particularly from the VP of Research, Provost or equivalent at your institution.
- Clarity of thinking around the school's objectives in joining the Pathways program. The school need not have a detailed strategic plan in place – in fact, schools without such a plan may benefit the most from the program's design, which incorporates an agile “plan/do/plan” framework. However, each school should be able to articulate why they would like to participate.
- Breadth of objectives; narrowly focusing on one discipline or initiative may be effective in the short term, but we expect teams to tackle multiple projects.
- Evidence of some prior successful work at the institution in the innovation and entrepreneurship area.
- Availability to participate in all program activities and ability to financially support the school's costs to do so.
- Interest in being part of a strongly collaborative and supportive, peer-based “community of practice”.

## **How to Apply**

All program applications must be emailed to Victoria Matthew at [vmatthew@venturewell.org](mailto:vmatthew@venturewell.org). Anyone at the institution may serve as the applicant. Applications will open on October 10, 2016, and the “priority” proposal deadline is 11:59 pm Eastern time on December 9, 2016. Applications will continue to be accepted after that date, but will be considered only on a space-available basis.

Please submit your application package as a single PDF, and include the following elements:

Applicant Information:

Name

Email Address

Telephone

Institution Name

Proposal Narrative

Your proposal narrative may not exceed 7 pages in length using 12-point Times New Roman font and 1-inch margins. The more specific, clear, and compelling your narrative is, the more competitive your proposal will be. Include the following information in your narrative:

- *Proposal Development Team:* List every individual that contributed to this proposal, from the person that spearheaded the idea, to the individuals that wrote and uploaded the proposal. Please include their name, title, their connection to I&E, and why they are interested in bringing Pathways to their institution. Please also describe the role you think each individual might play should your institution be accepted into the program.
- *Vision statement:* Why is your school interested in participating in Pathways? What kinds of institutional change do you envision taking place as a result of your participation in 1 year? In 5 years?
- *Current I&E Ecosystem & Stakeholders:* Briefly describe your campus' current I&E ecosystem. Be sure to address:
  - Educational programming that falls under the Provost and different schools and colleges.
  - Initiatives related to the VP of Research
  - Leadership initiatives
  - Collaborations with the off-campus ecosystem
  - Student-run initiatives
  - Campus policies and culture that fosters I&E

List the stakeholders associated with the initiatives listed above and your perception of their willingness to engage in an ecosystem change process like Pathways. If the stakeholders are already described under the *Proposal Development Team* section of your proposal, please make a note of that. Please also estimate the current proportion of students, faculty and researchers engaged in these efforts. (note: this proportion will not be used as a criterion of whether or not the school should participate in Pathways, but as one indicator of the campus' potential for growth).

- *Student Participation:* Describe how you will include student perspectives in your planning and implementation work.

## The Review and Notification Process

Submitted proposals are screened by a Pathways committee of reviewers. Applicants will be notified of the status of their proposals on a rolling basis, but no later than January 20. In some cases, we may ask for additional information and/or clarification after the proposal has been submitted. We may also request a phone/videoconference interview.

If your proposal is approved, the Applicant will receive a **notification letter** via email requesting the name of the designated leadership contact that will sign the contract. VentureWell will then send a **contract agreement** for signature to the designated leadership contact, be that the VP of Research, the Provost or the Dean.

## Reporting

Reporting requirements will be outlined in the contract.

## Questions?

Questions about this call for applications should be directed to Victoria Matthew at [vmatthew@venturewell.org](mailto:vmatthew@venturewell.org).

## About VentureWell

VentureWell is on a mission to cultivate a pipeline of inventors, innovators, and entrepreneurs driven to solve the world's biggest challenges and to create lasting impact.

We foster collaboration among the best minds from research labs, classrooms, and beyond to advance innovation and entrepreneurship education and to provide unique opportunities for STEM students and researchers to fully realize their potential to improve the world.

Since our founding in 1995, we've funded or trained over 4,500 science and technology inventors and innovators, and nurtured nearly a thousand of their startups reaching millions of people in over 50 countries with ground-breaking technological advancements in fields such as biomedicine and healthcare, sustainable energy and materials, and solutions for low-resource settings