Putting Mentoring at the Heart of Academia

2019 Meeting

Call to Action
Now is the Time to Prioritize Mentoring

The next generation of talented researchers demands effective and empowering mentorship.

Academic departments, research institutions, and funding agencies are responsible for developing early career scientists to their fullest potential. However, they have all historically neglected to prioritize mentoring. What are the results of that neglect?

- ½ of students who start graduate degrees in the U.S. do not complete them.
- Sexual harassment rates in academia are second only to the military in the US.
- Foreign researchers in precarious visa situations are being exploited to work more for less pay.
- Scientists struggle to take their own research with them when starting their own labs.
- Scientists from historically underrepresented groups are leaving a career path that has failed to create an inclusive and welcoming work environment.
- Ph.D. students are at high risk of mental health issues.

Research funders and academic organizations are increasingly recognizing this mentoring crisis:

- The National Academies of Sciences, Engineering and Medicine (NASEM) are studying The Science of Mentoring in STEM.
- A NASEM sexual harassment report points to the need for multiple mentors to guide a researcher’s career.
- A NASEM report on Graduate Education recommends giving institutional support to mentoring.
- The National Institute of General Medical Sciences identified bad mentoring as a key barrier to scientists’ career progression.
- The National Institutes of Health Working Group on the Next Generation of Researchers recommends the agency require interventions to ensure adequate mentoring of junior researchers, including written mentoring plans.

However, as one attendee at a recent NASEM meeting noted:

“Mentoring involves people, and reports won't do much.”
What Can We Do?

We are the Future of Research. As early career researchers (ECRs), we are the people who are most deeply affected by this neglect of mentoring. **That is why we are hosting a national meeting on June 14, 2019, in Chicago, with additional junior researcher-led satellite meetings around the country.**

We are working with national leaders and the ECR community to translate recommendations for change into concrete action.

Academic research institutes have a fundamental responsibility to ensure ECRs are training for successful careers. This must include both teaching technical proficiency in research and providing professional development opportunities in a safe and inclusive environment. Nearly everyone agrees that sexual harassment, visa exploitation, and other egregious and illegal behaviors have no place in science. To cultivate a productive training environment, those who are given training responsibilities should also be providing competent and appropriate mentoring to the next generation. Failure to effect this change will cause the research enterprise to lose or squander talent. **Our meeting seeks to find ways to place exceptional mentoring at the top of institutional priorities and incentives.**

We will utilize the insights, energy, and vision of leaders in mentoring research and practice (including early career researchers, departmental representatives, and funding agency representatives) to bring about both bottom-up and top-down changes to the mentoring climate. We plan to engage in courageous conversations on what is missing from mentoring in the STEM fields: investigating power dynamics, creating bias awareness, and enhancing anti-racist, culturally-responsive practices into the departmental culture. Our goal is to create widespread acceptance of mentoring excellence as a central priority of training institutions through **promotion of mentoring competency training, incentives for good mentoring, and accountability for egregious behavior.**

Ultimately, this will result in improving the quality of science produced by these centers. Research shows that good mentoring leads to an improvement in the quality of the science produced, and of the ability of the research enterprise to solve problems by maximizing the talents of researchers themselves.

> “Good mentorship impacts who does science, how productive they are, and how satisfied they are on a science career path.”

- Dr. Christine Pfund, National Research Mentoring Network
What Can You Do?

To catalyze discussion around best practices for mentoring evaluations and strategies for departmental implementation, we are hosting the **Central Meeting** on June 14, 2019, in Chicago. We will bring together experts in mentoring and STEM education, funding agencies, professional societies, members of the biotech industry, and university leadership from universities running pilot studies to identify best practices.

**Call for Abstracts:** We are accepting abstracts for break-out session workshops on topics related to improving the training climate at departments nationwide, particularly looking to engage groups and institutions that are often forgotten from such discussions, such as institutions focused on Masters programs. **If you would like to submit an abstract, please follow this link.**

**Call for Satellite Meetings:** we will hold **satellite meetings around the country** to enable participants to watch the talks and presentations from the central site, as well as host their own local speakers and workshops to discuss related mentoring topics. These meetings will provide opportunities to discuss the implementation of positive mentoring practices within individual institutions consistent with the principles put forth at the central stakeholder meeting, as well as to receive feedback from satellite meetings that can be incorporated in the final meeting report. **If you would like to organize a local satellite meeting within your institute or department, please contact info@futureofresearch.org for more information.**

These strategies will allow us to establish a grassroots movement around changing the mentoring landscape by affecting local change in multiple locations simultaneously and enhance our understanding of barriers to implement effective mentoring practices as well as potential solutions to overcome them. We aim to consider the factors that lead to differences in barriers across various types and sizes of departments and institutions. Furthermore, we also strive to identify the “mentoring gaps” that prevent individual institutions and research supervisors from meeting the mentoring needs of their graduate students and postdoctoral scholars. We want to empower ECRs to use their voices to re-shape the current mentoring landscape and eliminate the “mentoring gaps” that detract from their training and education.

Our goal is to bring together an engaged community to figure out how to seed and effect change at institutions, to bridge the current mentoring gap and center mentoring as an institutional priority.
Who Are We?

Future of Research (FoR) is a 501(c)(3) nonprofit organization created for and by early career researchers to make the research enterprise more sustainable for future generations.

Our mission is to champion, engage, and empower ECRs with evidence-based resources to improve the research endeavor.

We are the only organization of our kind and uniquely positioned to drive improvements to problems facing the next generation of researchers in the research enterprise.

Our Motivation

We are focusing on human capital in the research enterprise. We seek to make the enterprise more efficient at solving problems, to increase the potential of researchers to succeed in all sectors of society and to ensure that this system (largely funded by taxpayers) optimally benefits society.

Notable Achievements

We aim to be an independent voice for ECRs everywhere. Our efforts in changing the paradigm for ECRs in the research enterprise have been recognized by the following achievements:

- Science Careers People of the Year (2015)¹;
- Youngest authors on the National Academies of Science, Engineering and Medicine ‘Breaking Through’ report² and the NIH’s responsive Next Generation Researcher’s Working Group;
- Publications covering postdoc salaries³, science communication⁴, and career transparency⁵.

¹ [http://www.sciencemag.org/careers/2015/12/people-year-future-researcher-postdoc-activists](http://www.sciencemag.org/careers/2015/12/people-year-future-researcher-postdoc-activists)
² [https://www.nap.edu/download/25008](https://www.nap.edu/download/25008)