A Generation at Risk

Earlier this year, I had the good fortune to attend a day of events at the White House that celebrated science students and called on philanthropies like HHMI to continue helping to drive science forward. Reflecting on successful STEM scholars, President Obama said this:

“It’s not enough for us to just lift up young people and say, ‘great job, way to go.’ You’ve also got to have labs to go to, and you’ve got to be able to support yourself while you’re doing this amazing research. That involves us as a society making the kinds of investments that are going to be necessary for us to continue to innovate for many years to come.”

In recognizing commitments to emerging scientists, the president called out a new program, “Faculty Scholars,” that HHMI has created with the Bill & Melinda Gates Foundation and the Simons Foundation. Through this program, we will together award up to 70 grants, every two to three years, to early career basic researchers and physician scientists who have the potential to make unique contributions to their fields. The first round of the Faculty Scholars competition launched in March, and we plan to make the first grant awards in the fall of 2016. Our three organizations will invest a total of $148 million in research support over the program’s first five years.

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— ROBERT TJIAN

We plan to identify and support not only accomplished researchers who have already demonstrated their capacity for important scientific contributions, but also promising scientists who have not yet reached their potential.

Today’s emerging scientists face increasingly tough odds. The percent of all NIH research grant funding awarded to scientists under the age of 36 has dropped from 5.6 percent to 1.3 percent over roughly the past decade. The average scientist is now 42 years old before obtaining his or her first R01 NIH research grant. With this reality, a growing number of promising researchers are leaving the U.S. for opportunities overseas or, worse, abandoning science altogether, prompting some to label them “a generation at risk.”

Scientists at the beginning of their careers need adequate funding to be aggressive with their research programs. In that early phase, generally between years 4 and 10, start-up funds from a university become exhausted, just when it’s time to start ramping up. For these scientists to persist, they must have help to clear the pathway.

HHMI already supports some excellent early career scientists in the United States and abroad. But there is much more to do to help launch the next generation of scientists. We need to expand our reach, nurturing greater numbers of early career scientists with the funding, mentoring, collaboration, and training they need to successfully establish careers today. Doing this well, at scale, will require significant, sustained leadership and collaboration – the kind of support best provided by big, strategic organizations coming together to create change.

I personally look forward to meeting the newest members of HHMI’s community when our first crop of Faculty Scholars arrives at HHMI for meetings. Wait and see what they will do.