

Statement by Meg Urry at the FAS Senate meeting on October 15, 2020

Science at Yale 2020+

Two years ago, Yale announced an ambitious science initiative enumerating specific priorities and cross-cutting initiatives. The university wants science departments to aspire to “top 10” or even “top 5” national rankings. This increased attention to science contrasts with substantial underinvestment over the past century, which other speakers have described.

How can the university advance in a field where it starts behind peer institutions? In normal times, it is an uphill battle. Now, however, the pandemic scourge that is so negatively impacting the world has nonetheless left Yale in far better shape than many peer institutions. Now is the time to be bold, to move when others cannot, to think big. We should invest in hiring exciting new science faculty, at both the junior and senior levels, and we should embrace bold initiatives that make us more attractive to those scientists. For example, we could make graduate student stipends and tuition free to faculty (as it is in many other departments at Yale, and as had a very positive impact on the Music School). We could develop a world-class program for brilliant postdoctoral scholars that is prestigious, interdisciplinary, and inclusive; as these scholars move on to other top institutions, they will send us their best students and help build our reputation. We could start an Institute for Advanced Studies. We could say “yes” to great ideas rather than, as is more often the case, “no, sorry, we’re not Caltech.”

There is no reason Yale science cannot be better than others. We are bigger than Caltech. We are richer than Berkeley. We have the means and motivation to create a highly visible, highly successful science landscape at Yale.

Which brings me to this year’s Nobel prizes in science. One of the winners of the 2020 Nobel Prize in Physics is Andrea Ghez, a professor at UCLA and an old friend, who proved the existence of a massive black hole at the center of our Milky Way galaxy. Fifteen years ago, after it was obvious her work was Nobel-worthy but before she had received an avalanche of accolades, I suggested we try to hire her away from UCLA. I think we had a chance but it would have meant a big investment in telescope facilities and other incentives. We didn’t even try.

This year’s Nobel in Chemistry went to Jennifer Doudna and Emmanuelle Charpentier for their discovery of CRISPR, a novel technique for editing the genome. (This is the first time the Nobel has been given to a team of women only. How wonderful that so many women have been recognized this year!) Doudna was on the Yale faculty until she moved to UC Berkeley in 2002. What if we had fought harder to keep her? What if these two Nobel prizes had come to Yale? What if many other Nobel prizes in STEM had come to Yale?

We can do this. We just need to be ambitious and leverage our considerable financial advantage at this difficult time.