

Staff scientist Greg Finak describes his role as that of a "mini-faculty" member.

Phu T. Van

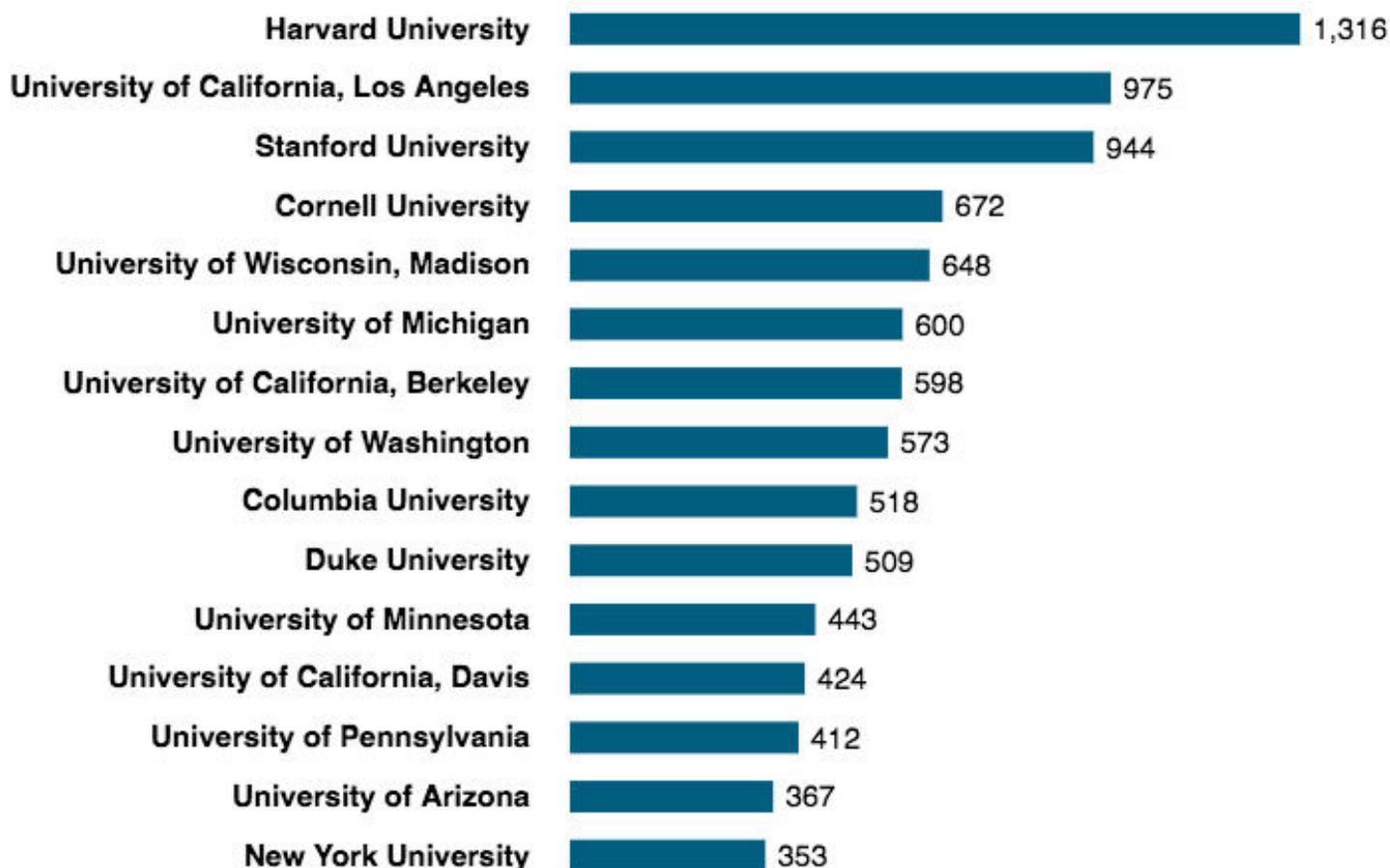
Staff scientists find satisfaction in playing the support role

By [Maggie Kuo](#) | Mar. 29, 2017, 4:30 PM

As a new postdoc contemplating the tenure-track job hunt, [Megan Spurgeon](#) saw how mightily her fellow postdocs struggled to launch principal investigator (PI) careers. When she took her next career step 4 years later, she knew she didn't want to spend all her time looking for funding, and she wasn't sure whether she wanted to be the person in charge. But Spurgeon wanted to stay in academia—it was familiar, and she liked the collaborative environment. So she embarked on the staff scientist path. After almost 3 years as a staff scientist at the University of Wisconsin in Madison, in the lab where she began as a postdoc, she relishes her scientific freedom and the opportunity to mentor junior scientists. The job isn't perfect: It's an underappreciated role, she feels, and career advancement can be challenging. But, she says, "I'm happy to share the pressure and play a supportive role."

Filling new shoes

With the small number of tenure-track faculty positions available and the large number of Ph.D. holders in career limbo, many are [advocating for increased numbers of staff scientist positions](#). As of 2015, doctorate-granting universities employed roughly **25,200 doctoral-level staff scientists** (see chart below for the top 15 employers). This is an 18% increase from the approximately 21,300 in 2010, but it still doesn't come close to the **63,861 postdoctoral fellows** working at these institutions. The extent to which the number of staff scientist positions will continue increasing remains to be seen, but the role can offer an appealing option for those who want to stay close to research while also expanding their skills and responsibilities.



Rachel Bernstein/Science

Data: 2015 Survey of Graduate Students and Postdoctorates in Science and Engineering

The specific duties of staff scientists—who can work in core facilities as well as in labs in academia, non-profit research institutions, and government—generally include both doing independent research and helping others get work done, though the specifics vary. When Spurgeon's postdoc PI offered her a staff scientist role, for example, it was in part because he knew that his administrative duties would soon demand most of his time. Spurgeon now helps with the day-to-day laboratory interactions and mentoring. She enjoys working closely with the grad students in the lab, helping them with experimental techniques, editing their manuscripts, and advising them about the big-picture implications of their data and ways to move forward. During lab meetings, her PI gives his thoughts on his students' progress; afterward, Spurgeon checks in with the students to see whether they need clarification or help working out his suggestions. Sometimes she doesn't know what her PI has in mind for a student's project, which can be somewhat frustrating, Spurgeon says. But, "like any job, you need to have communication, and when you have that, you're pretty much on the same page."

Spurgeon also pursues her own research projects and collaborations, and appreciates having the freedom to pursue new scientific angles. "As a postdoc, I was very much wedded to a specific research project," she says, because she was focused on developing a research narrative to present in faculty job interviews. Now, she's still expected to produce and publish original work, but, she says, "I feel like I don't have the pressure to stay within one particular niche of the lab."

She also helps her PI write grant applications, in addition to applying for ones for herself. Until recently, her salary, like that of most staff scientists, came from her PI's grants. But as of last September, she has 5 years of salary support from an individual [National Cancer Institute Research Specialist Award](#), or R50 for short. Having the R50 offers her peace of mind, she says, but such funding mechanisms specifically aimed at staff scientists are rare, and relying on a PI's grants being funded can be stressful. "I know a lot of [staff] scientists who do have to worry on a year-to-year basis whether they're going to have a job next year," Spurgeon says. It was a source of uncertainty she accepted when she chose the path. On the other hand, PIs and institutions can offer some stability for the researchers their grants support. When a grant ends, for example, a PI can start paying a researcher from another one, and if a staff scientist has to change labs, institutions may have hiring policies that favor current employees.

Although many staff scientists have long careers, they can fall between the cracks in ways that slow career growth. At Spurgeon's institution, she says, staff scientists don't have access to the professional resources that faculty members, or even trainees, do—such as grant writing support. Moreover, many of her institution's internal grants are reserved for faculty members. There isn't a defined timeline for career advancement; many of her colleagues have stayed at one title for too long before being promoted, she says, and they had to actively advocate for themselves to move up. "We're kind of this overlooked, forgotten, orphan group of staff on campus," she says.

meetings. Staff scientists can climb a clear career ladder, with the responsibilities becoming more similar to those of a PI at each step.

But regardless of whether an institution has well-established resources and infrastructure to support staff scientists, the greater responsibilities of the role inevitably lead to career and professional development. Finak, for example, learned to budget his time more effectively as he got involved with more projects. "I realized I couldn't do everything myself, which is something you tend to do as a postdoc," Finak says. Delegating tasks became an important time management method. For Spurgeon, editing manuscripts for the lab's grad students and writing grants has further strengthened her communication skills. In many ways, the staff scientist position offers the opportunity to grow and learn while preserving the high points of research that can get lost in the grind of leading a lab.

Making the move

Like Spurgeon, Finak became a staff scientist in his postdoc lab. Around the time that he was thinking about what he would do after his postdoc, his PI was preparing to move to a new institution in a new city. Finak thought that moving with his PI would be a good career opportunity. He also wanted a job that could offer some stability for his family, so he brought up the possibility of a staff scientist role, and his PI was on board. After moving, Finak considered faculty and industry positions, but pursuing those opportunities meant having to pack up and move his family again. "That wasn't something we wanted to go through," he says. Moreover, he had a good working relationship with his PI—which is crucial when considering staff scientist positions because you work together so closely—and enjoyed working at the institute. So, continuing on as a staff scientist was an optimal opportunity for him.

For others looking to join a new lab at the staff scientist level, the job search can be similarly informal. When **Matthew Conklin** left his postdoc position at the University of California, San Diego, and moved back home to Madison, Wisconsin, for example, he didn't rely on job boards to find open positions; instead, he emailed PIs whose work matched his interests about the possibility of working in their labs. Conklin initially offered himself as a postdoc "to be more palatable to PIs," he says. But his current PI offered him a staff scientist position after he mentioned that he planned to stay in the area long-term. The two clicked immediately, he says; he has now been in the lab for 12 years. The intellectual back and forth and shorthand way he and his PI discuss ideas and plan next steps—"that part I really like, and I'm grateful for that," he says.

Experience in the lab's bread-and-butter experimental techniques is the most straightforward way to present yourself as a strong candidate, but that doesn't have to be a limitation. When Conklin joined his lab, he had no experience in his **PI's core area of cancer research**, but he brought valuable expertise in cell imaging techniques. The PI wanted to expand her work in this direction, and Conklin went on to adapt the techniques he had originally used to examine brain cells so that they could be applied to cancer cells.

There can be a stigma against the role, staff scientists acknowledge. It can be seen as the position for Ph.D.s who don't have enough drive or who failed at becoming PIs—but "I think it's getting better," Spurgeon says. Those contemplating the staff scientist path need to address these perceptions in themselves, too. When Spurgeon was deciding what to do after her postdoc, she asked herself whether she was failing if she didn't push on for the faculty track. Ultimately, though, she decided that she wanted to stay close to the science and wasn't interested in leading a lab. "I consider it a privilege to still be able to do science," she says, and she works to make her career "something that I can be proud of."

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