

NEWS

Spectrum Launch: Postdoc salaries, tenure clocks and a writing hack

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Hello, and welcome to *Spectrum* Launch — where we bring you conversations and resources important to early-career autism researchers. Today we're diving into discourse about postdoctoral salaries.

Jennifer Silvers comes from a line of academic women, including her mother and maternal grandmother, who both earned doctoral degrees. Silvers also felt herself drawn to a career in academic research, she says. But a year into her stint as a postdoctoral researcher at Columbia University, she considered giving it all up.

"I really loved the postdoc," she says. But, she adds, "I still didn't know how I would have career stability, where we would live, how we would ever pay for anything." And although she and her partner wanted children, she knew they couldn't afford it on her postdoc salary.

In 2016, Silvers landed a faculty job at the University of California, Los Angeles, where she is assistant professor of psychology. But if she'd had to remain on a postdoc salary for much longer, she says she would have started looking for jobs outside of academia.

Silvers is one of many researchers who say they have had to make this sort of calculation. Postdoc positions are designed to be temporary jobs that help researchers develop new skills. But as senior positions in academia become more difficult to obtain, researchers, particularly in the biological sciences, are **spending more time in a postdoc role** (or in multiple postdoc roles) before finding a permanent position, **if they ever do**. For some, postdoc salaries are the deciding factor between pursuing a career in academia and switching to a different field.

My choice came down to this:

1. Stay a postdoc for 4-7yrs hoping to land a TT position after (and meanwhile delay having kids and starting my family)
2. Do a short PD and go into industry where I can make enough money to support myself and start a family as a single parent

— Dr. Maddie Ray (@maddiehray) **March 6, 2022**

“Just because some people are sticking with it doesn’t mean that’s because it’s a sustainable system,” Silvers says.

Most biomedical postdocs in the United States are funded through a grant from the National Institutes of Health (NIH) that provides a **fixed level of funding** based on experience. In 2021, first-year postdocs on this grant received \$53,760. In many parts of the country, that is considered a **living wage** — at least, for someone who has no children.

But for postdocs who support anyone other than themselves, or who are, as Silvers was, based in cities that have a high cost of living, that NIH stipend starts to look a lot smaller. As one Boston, Massachusetts-based postdoc who asked to remain anonymous put it, “Usually, the monthly rent for a one-bedroom apartment is more than 70 percent of the postdoc’s salary after tax.”

In other countries, **salaries can be much lower**: Only 29 percent of postdocs in Europe and 13 percent in Asia reported earnings of more than \$50,000 per year, according to a 2020 *Nature* survey.

Some postdoctoral researchers make additional money by teaching, securing funding from individual foundations or taking on second jobs. But in general, Silvers says, the researchers who can afford to live on a postdoc salary have other support structures — family members or partners who help financially — “which is going to fuel inequities in who remains in academia and who doesn’t.”

Some researchers are urging institutions to **increase postdoc pay** to compete with what a Ph.D.-level researcher would be making outside of academia — which could be more than double the current NIH stipend. But **Jonathan Sebat**, professor of psychiatry at the University of California, San Diego, caused a stir on Twitter last month when he pushed back against this idea.

Anyone who has been a young PI starting a new lab with postdoc hires that are coming from a wide variety of backgrounds with limited experience in YOUR field knows EXACTLY

why they are called “trainees” and why they are not paid six figure salaries.

— Jonathan Sebat (@sebatlab) **March 3, 2022**

Postdocs aren't staff scientists, he argued, and therefore shouldn't be paid like them. If that leads to more Ph.D.-level scientists leaving academia for industry positions, then the academic market **will correct for that** by reducing their reliance on postdocs, he wrote in a later Twitter thread.

Jobs and funds:

- The newly launched research funding database, **scientificRESEARCH**, offers researchers a way to filter their grant search (for example, by career level, geographic location and subject area) and to receive email alerts for relevant funding opportunities. (The author of this newsletter previously worked with one of the co-founders of scientificRESEARCH but is not involved with the site.)
- The Autism Science Foundation announced the five recipients of its **undergraduate summer research fellowship**.
- **Black in Neuro** and the National Institute of Neurological Disorders and Stroke (NINDS) are hosting a webinar on how to navigate funding. The event will take place 8 April, and registration is **open now**.

In collaboration with NINDS, join us for a webinar on 4/8 to learn the 1st steps for applying + receiving NIH funding! We'll share many NINDS funding opportunities, walk you through how to read a Funding Opportunity Announcement, + much more! Link to register in thread below!???? pic.twitter.com/bqAB49cfi4

— Black In Neuro ???? (@BlackInNeuro) **March 14, 2022**

Recommended reads:

- After much online discussion about how and why people leave academia, some researchers touted the benefits of academic life in a Twitter thread. As **Josh Dubnau**, professor of anesthesiology at Stony Brook University in New York, pointed out, “there are students and postdocs whose dream is to find a TT [tenure-track] job, run a lab, publish good science, and obtain external funding to support their research.”

7/9 But, we also find joy in our colleagues, thrill at each new result, delight in the beauty of biology, pride in a paper published, enjoyment at a well presented seminar. To this day, I lie in bed thinking about experiments and wake up with those thoughts too.

— Josh dubnau (@joshdubnau) **March 7, 2022**

- Those who do go the tenure-track route have to navigate the ‘tenure clock’: the time a tenure-track faculty member has between being hired and being evaluated for tenure. This is typically a set amount of time, but in certain circumstances, and with approval from the school, it can be stretched or shortened. **Rachel Diner**, a postdoctoral researcher in **Jack Gilbert**’s lab at the University of California, San Diego, asked the Twitterverse about the **benefits of those two options** and received some helpful responses:

It depends entirely on what you are forecasting for grants and papers in the next 5 years. If you have lots of stuff that’s ready to pop, then better to fast track. If you think a couple of years are needed to get things off the ground, then it may be better to postpone

— Jonathan Sebat (@sebatlab) **March 16, 2022**

- Joseph T. Devlin, professor of cognitive neuroscience at University College London in the United Kingdom, announced that his graduate-level class, “**Designing and Analysing fMRI Experiments**,” is now available online for free.
- Clinicians who **trained during the pandemic** have had little in-person experience with patients, making it difficult for them to learn some of the less tangible aspects of the job, *Spectrum* reported last month.
- Remote work has also drastically altered many researchers’ graduate school experiences — from missed conferences to paused experiments. *Nature* highlighted in a March career profile how five students have **coped with those changes**.
- Ahead of his first day as a postdoctoral researcher at Columbia University, Thiago Arzua asked fellow scientists what they **wish they had known** when they started, which inspired a wide range of answers — from “build a network of mentors in addition to your PI,” to “bring lunch.”
- Sticking with the advice theme: **Kristen Bottema-Beutel**, associate professor of teaching, curriculum and society at Boston College in Massachusetts, tweeted last month about a **useful writing hack** that she wished she had started sooner: She copies research

questions into each section of her paper before she starts writing. “This ensures I cover the methods, results and implications of each one, and a consistent order helps the reader follow along,” she says.

- Lastly: *Spectrum* is working to include more voices from early-career researchers — from the level of postdocs on up. If this describes you and you’d like us to consider you as a source for a future story, please get in touch.

Any suggestions for how to make this newsletter as useful as possible, or recommendations for what topic we should cover next? Send them to angie@spectrumnews.org.