Work

MANAGING THE 'GREAT RESIGNATION' FROM ACADEMIA

A career leap into the unknown can be unsettling.
These five researchers set out steps to ease the transition.

MICHELE VELDSMAN

O n 9 September, Elizabeth Gadd, a research-culture specialist at Loughborough University, UK, posted a collage of pictures of 35 people who had recently used the #leavingacademia hashtag on X, the social-media platform formerly called Twitter. She asked: "Notice anything?" Most of the images were of women or people from under-represented groups. The authors of many posts about leaving academia cite sexism, racism, delayed promotions and the lack of permanent positions as reasons why they had quit or were contemplating doing so. The hashtag has become a purposeful rebuke of academia's often lacklustre efforts to diversify faculties, create inclusive environments, rein in ever-increasing workloads and remedy job insecurity.

Last year, *Nature* asked whether the great resignation − the international wave of worker resignations that began in 2021, largely because of the consequences of the COVID-19 pandemic and workplace dissatisfaction − had hit academia. It was one of the most read articles of 2022. Consultants who coach individuals leaving academia say their businesses are still growing. "The trend continues," says Naomi Tyrrell, a social research consultant based in Barnstaple, UK, who in 2020 set up a Facebook support group called AltAc Careers UK. Another Facebook group, called The Professor is Out, which offers coaching and support to academics exploring how to leave academia, had 20,000 members in June 2022. It currently has 30,000 members. And in a survey by Inside Higher Ed, a media company in Washington DC, of college and university chief academic officers last year, 19% of respondents said that faculty-member turnover was 'significantly high' compared with previous years; 60% described the turnover as being 'somewhat higher'.

The ongoing exodus is fuelled, in part, by social media, says Tyrell, which makes it easy to share stories. "Academia is not changing in terms of prejudice or discrimination. Change isn't happening fast enough."

Michele Veldsman started freelance consulting during her postdoctoral position.

Karen Kelsky, an academic-career consultant based in Eugene, Oregon, and creator of The Professor is Out, agrees. "The job isn't what it was," says Kelsky. She says the story used to be, "I can't get an academic job, so I have to leave academia." Now, academics − including established ones walking away from tenure − think, "I have a job and have to leave because I can't stand it."

Nature spoke to five scientists who have left academia in the past two years to learn what motivated their transition, which skills they found to be most in demand and what life is like on the other side.

MICHELE VELDSMAN
CONSULTING AS A BRIDGE TO BUILD NETWORKS

I was frustrated by many aspects of academic life − notably the uncertainty and lack of job security. Uprooting a family over and over again whenever you get a position in a new place is exhausting. Another big factor was what was, in my opinion, the lack of progress towards hiring people from diverse backgrounds in my postdoc departments. I sat on diversity, equity and inclusivity (DEI) committees that routinely discussed how to create a more diverse workforce − only to see five candidates, none of whom were from under-represented groups, hired instead. I also saw non-white colleagues who were senior to me get passed up for promotions. I could no longer take DEI efforts seriously and realized that academia didn't fit my values.

I began to do freelance consulting in 2019 during my second postdoc, to test the waters outside academia. Much of that work focused on designing experiments: for example, a start-up company needed to assess the effectiveness of a gamified training programme that they were developing. As a consultant, I design projects, recruit participants and analyse the data they generate.

I went to the enterprise office, sometimes called a technology-transfer office, at my institution and let them know I was interested in consulting. In exchange for a cut of my consultancy fee paid by my clients, they provided

professional indemnity insurance for me and managed financial aspects of the consulting agreement. This was my first step to building a wider network of industry-based colleagues.

Last year, as co-founder of the non-profit organization Transform Dementia Research, based in Oxford, I was leading a working group on artificial intelligence and dementia research, which had industry partners in attendance. I gave a presentation at a networking event and afterwards heard some people from Cambridge Cognition, a neuroscience digital-health company, talking. I joined the conversation and said, "If you hire people who have PhDs from Cambridge [I graduated from the University of Cambridge, UK, in 2013], then you should hire me." We had a couple of meetings and interviews, and last October, I was hired as director of neuroscience research and development. I oversee our efforts to develop digital technologies to enhance brain and cognitive research. The ever-shifting industry landscape is an adjustment after academia. In my first year, Cambridge Cognition reorganized after acquiring two companies. Still, I feel confident that, if I one day find myself out of work, I can mine my networks and find another job at a tech company.

I have been overwhelmed with requests for advice on how to transition out of academia. I created a practical guide, as well as a community on the online messaging platform Discord, for people to explore these issues. I advise anyone interested in leaving academia to develop their generalizable skills, such as leadership, collaboration, commercial skills and management. Also, you should network. Join communities of like-minded people, perhaps individuals using a technical skill that is in demand, such as AI. Most importantly, sit down and really think about your values and passions, and reflect on how your career fits those things.

Michele Veldsman is director of neuroscience research and development at Cambridge Cognition in Bottisham, UK.

COREY SPARKS
FORMER STUDENTS OFFER FRUITFUL NETWORKS

In 2007, I became a professor at the University of Texas at San Antonio, in the demography department. I received tenure in 2014. When I left in January, I was director of the graduate programmes in applied demography, or the statistical study of populations.

In 2020, I started applying for non-academic jobs. I was about to be considered for a full professorship, and I knew that would probably involve academic administrative tasks – which

I had zero desire to do. I love challenging data, and I wanted to work with teams of people on big projects. Former students started sending me job postings and encouraging me to apply. They were now in high demand in the private sector – notably the technology and insurance industries – for their technical skills in quantitative statistics. Very few went on to work in academia.

I first met a recruiter for Facebook and went through a seven-month interview process that didn't result in an offer. Next, a past student encouraged me to apply for a job at the United Services Automobile Association (USAA), an insurance and financial-services company for military veterans and their families. I got a job offer there last December. I hit the ground running and found that the corporate sphere was strikingly different from academia. I was mentoring people in junior positions, was part of a great team and was improving my technical skills at lightspeed. My blood pressure even dropped five points.

Then, in May, I was laid off. I was advised to activate my LinkedIn network to look for a new job. Within 24 hours, I had eight job referrals, most for positions that paid more than the USAA did. I applied for all of them. I got hired at a start-up company doing data science to help public servants make good decisions on how to spend public funds. I started there in the middle of July, making double what I was making as a professor. Now I train state researchers on how to use restricted-use data, which can contain personal information and are subject to privacy laws, to analyse employment patterns and educational outcomes. I get to train people who are actually making decisions for the state. We also build tools, such as dashboards,

that help people visualize their data.

I really enjoy what I'm doing, but I don't have a five-year plan. I do know that companies are really hungry for experienced researchers. The ability to conceptualize a project, work out how to do it and give a presentation are skills that are needed in the corporate world.

Corey Sparks is a senior research scientist at the Coleridge Initiative, a non-profit organization in New York City.

ALEJANDRA ALVARADO
LEAVE CAREER UNCERTAINTY BEHIND

I'm a first-generation scholar originally from Torreón, Mexico, where I studied biochemical engineering at the Autonomous University of Coahuila. I was surprised to land a top scholarship in 2014 to pursue a PhD at the Max Planck Institute for Terrestrial Microbiology in Marburg, Germany. I felt like there was so much knowledge about how academia works that I simply didn't have. And I was too self-conscious at every stage of my academic career to ask questions that might expose my lack of understanding.

Initially, I wanted to become a professor, and was very determined. After earning my degree, I did two postdocs at German universities on short-term one- to two-year contracts. I wanted to stay in the country, in part because I had some health issues and I had access to affordable health care and treatment there. I always worried about the next round of contracts. I started applying for several academic

Alejandra Alvarado found job stability as a scientific editor at the journal *Patterns*.

positions, and I did get some interviews, but they all required moving to places where I ultimately didn't see myself living.

As I began to consider leaving academia, I sought out several blogs and books. I also spoke with a lot of people, colleagues of mine who had left. To be honest, I felt like I was giving up. Overall, I decided that, as a Mexican based abroad, I needed stability and financial security. For me, the biggest driver was uncertainty. But I didn't want to abandon my scientific curiosity either.

I applied for several medical or scientific writing jobs at biotechnology companies, but I either got no replies or rejections. Then, I found a job advertisement on LinkedIn, for a journal editor at *Patterns*. The mission statement caught my attention — the journal strives to be boundaryless, covering data-science solutions across a vast range of disciplines. I started my job at *Patterns* on 1 August. I love discussing brand new papers with the team. It's a privilege. I am always learning something new, and I appreciate the opportunities for continued professional growth. Although I am very thankful for the job, sometimes I miss the interactions I had with students, and hatching new experimental ideas.

Alejandra Alvarado is a scientific editor at the Cell Press journal *Patterns* in Munich, Germany.

CHRIS JACKSON
IMAGINE YOUR NON-ACADEMIC IDENTITY

I was invited to give a Black History Month talk at Jacobs, a scientific-consulting firm, in Manchester, UK, in October 2021. In a follow-up conversation, I learnt that the company was looking to improve their approach to diversity in the workforce. At the time, I was not very happy in my role at the University of Manchester. I cautiously expressed my interest in leaving academia. Seven months later, I joined Jacobs as director of sustainable geoscience. The hiring process was very ad hoc on both sides.

I had worked in industry straight out of graduate school in 2002, so I had expected exactly what this position would entail. And that's good, because I used past experiences to do risk assessment when I made the decision to leave. Although I'm slightly jaded by my academic experiences, I am now much more self-assured in that I know who I am, what I want and what I'm willing to put up with.

I have had a lot of conversations with other people — roughly two each month — who want to leave academia but are too scared. They seem to think, "This is what I do; what I'm known for." It's almost like they don't have

Geologist Chris Jackson recommends viewing yourself as part of a larger effort.

the will or time or support to think of themselves in a different way — and to imagine being anything else other than an academic. Two other academics have joined Jacobs since I started in May 2022. I feel like it's much easier to draw a line between work and life and to not be haunted by work into the night. Leaving your ego behind and viewing yourself as being just a part of a larger effort is a useful skill. It's important to do due diligence when making this decision, so that you won't have regrets. If you're going to leave, swagger out.

Chris Jackson is director of sustainable geoscience at Jacobs in Manchester, UK.

KATHRIN SPENDIER
HARNESS CURIOSITY AND TECHNICAL KNOWLEDGE

After I got a PhD in biophysics, with a specialization in super-resolution imaging, at the University of New Mexico in Albuquerque, I took a postdoctoral position at the University of Colorado Colorado Springs, a teaching-intensive university. When a tenure-track position opened, I got it.

I really liked my job, until my kids starting saying, "Mommy, you always sit in front of your computer." I didn't always have time for them, and I didn't feel like I was doing research or teaching well any more, because I was so overloaded. I kept taking on more responsibilities because I always want to be helpful, and I have difficulty saying no. After I spent ten years as an academic, something had to give — and I saw other faculty members leaving, so I decided to explore my options.

Writing a non-academic résumé was a learning experience. I got help articulating my skills from a career consultant. It's difficult to translate all the seemingly informal knowledge you gain while conducting a research project into tangible skills. I'm an enthusiastic, curious person, which is why I didn't hesitate to apply for an evangelist position with Quantinuum, a quantum computing company. This position involves promoting the company's software for quantum computers to customers. When I went through the interview process, my communication skills were most highly valued. I had no problem starting a conversation about research and asking loads of questions. This role, which I started in May last year, is a perfect fit. It is like teaching, but I'm going to universities, holding workshops and running hackathons — events, typically lasting days to weeks, at which programmers collaborate to solve real-world problems — to educate potential users. I find myself between technical people and the business side.

During my transition out of academia, I went through a period in which I felt like I had failed. I wasn't strong enough. If I were to go back, I would want to be part of graduate training that is more industry focused. A lot of students don't have the right tools. They are problem solvers, but they don't know how to do that in an industry setting. For example, machine learning is becoming really important in a lot of technical industry jobs, and Python is a programming language that everyone in industry needs to know nowadays. Students also need to be able to run models to test a product. I would want to emulate engineering graduate programmes that cultivate industry partnerships and offer internships to provide students with that insight.

Kathrin Spendier is a quantum-technology evangelist at Quantinuum, a computing company in Broomfield, Colorado.

Interviews by Virginia Gewin.
These interviews have been edited for length and clarity.