

James Super

Senior Editor at Nature Geoscience



What is your current occupation?

I'm currently a Senior Editor at Nature Geoscience, a scientific journal that publishes work from across the Earth sciences. I'm based out of the London office of Springer Nature, which runs the wider set of Nature journals. My primary responsibilities are assessing manuscripts for publication in the journal, managing peer review, editing, and commissioning new work.

What is your educational background?

I have a Bachelor of Science in Geological and Environmental Science as well as a Master of Science in Earth Systems (an interdisciplinary environmental science program), both from Stanford University. I also have a PhD in Geology and Geophysics from Yale University, where my research focused on the use of paleoclimate proxies to reconstruct warm past climates.

A key message for students is that the geoscience workforce is dynamic, and boundaries between sectors and occupations are fluid. How has this been true in your career?

The geosciences have changed substantially since I was an undergrad. The concept of doing work, whether academic or professional, that spans disciplines has become better recognized and supported. At the same time, the skills related to classic geology degrees – geochemistry, numerical modelling, spatial analysis and geostatistics - are becoming ever more important even as the topics these skills are applied to are evolving.

My own career path shows the advantage of maintaining a multidisciplinary outlook. My graduate research heavily relied on technical skills related to mass spectrometry and paleoclimate-related sedimentary geology, which I started to develop during classes and lab tech work I took on as an undergrad. I then made a big jump to my current job as an editor, which instead focuses on the broader conceptual and theoretical side of a broader range of geoscience fields. While I'm continuing to learn every day, this path would not have been possible without the wide-ranging set of skills and topics covered in my geoscience education.

Where do you see your sector moving in future years? How would you advise students to prepare to be competitive job applicants and successful employees?

The geosciences are going to be critical for a lot of the upcoming challenges that societies will face around the world in coming years. This of course includes the building pressures that will come along with climate change - the effects of which cut across many social, economic, and scientific divides – but also relate to the myriad of other, rapidly changing ways in which humans interact with the Earth system.

Geoscientists who can handle the complex data analysis needed to understand the nature of these challenges are going to be in ever greater demand. At the same time, there will also be a growing need for those that can interpret the broader lessons from these datasets and turn the results in to action and policy. Regardless of the exact direction you'd like to go, it's a good idea to take classes in both realms – you never know where you'll end up. You might also find yourself in the situation of having a unique set of technical and broader picture skills that could you land your dream job. Figuring out what that dream job might be can take a while, and might change with time, so it's a good idea to start thinking about early and get as much advice as you can along the way.

What is the role of networking in your sector? Do you have advice for a student who is just beginning to build their network? What is the best way for students to get their foot in the door?

Scientific communication and publishing fundamentally relies on networks of scientists and other professionals. I interact with dozens of geoscientists each day, all of whom contribute substantial amounts of time, effort, and expertise to writing and reviewing manuscripts. This process helps bring to light important developments in the field, many of which have implications for society as a whole. My own networking makes my job a lot easier, especially when finding reviewers, and it's one of the more enjoyable parts of the job.

Networking can be tough, especially when you find yourself in situations where you don't already know people. One thing to remember is geoscientists usually really like talking about geoscience and oftentimes knowing a bit about what they do is enough to set of fascinating conversations that can sometimes lead to future projects. Also, if you're an undergrad reaching

out to professors, don't worry about being upfront that you're interested in potentially working with them. It might not work out, but it's a great way to happen upon hidden opportunities. The last year has also shown that online networking really works, though I'd recommend keeping an eye out for smaller conferences and seminars if you're interested in meeting new people.

What does a “typical” day of work look like for you?

My workday has changed quite a bit in the last year and half but the core work is the same. I generally go through as many emails as I can first thing the morning. I then go through a few newly submitted manuscript, which involves reading them and any related background literature carefully before deciding whether or not to send the manuscript to review. I'll then go through the manuscripts that are currently out to review, making sure everything is on track or finding replacements for reviewers that, for a whole host of reasons, can't complete their report. There are then the manuscripts that need to be evaluated after the reviews have come back in, which typically involves me having a discussion with one of my editorial colleagues to decide if we should invite submission of a revised manuscript. I also usually have some manuscripts that have been accepted for publication and are going through the proofing process, which often requires me to provide more detailed feedback on the figures, text, and formatting. On top of all this, I take care of other tasks like helping run the journal's Twitter feed and writing press releases. I also frequently attend conferences and seminars, where I interact with scientists in the fields I cover while also making sure I keep up with scientific developments that we might want to highlight.

What is the best part of your job?

Far and away, the best part of my job is getting to see the reaction of authors when their papers get published.

Do you have any other comments or advice for students looking to enter your sector of the geoscience workforce?

There are many ways to be a geoscientist so make sure to use your time in university to explore. If something strikes your fancy, reach out to professors, postdocs, and graduate students to see if there are available research opportunities or other ways to get involved.