Patching the Leaky Faculty Pipeline

I have heard the analogy of a leaky pipeline being used to describe the process of developing from a student to an academic. I have seen the analogy in action throughout my career path, with many friends leaving along the way. It is true that academia is not right for everyone, and I suppose the process, however bruising it may be, helps individuals figure that out. There are many situations, however, when the cause of the leak is external—a sharp object puncturing the pipe, if you will. For those situations I would like to offer another analogy: the set of tools or patches that we as individuals, departments, and universities can offer to prevent or mitigate leaks from the pipeline. I cannot claim to have made it all the way through the pipeline; as I write this I am in the year leading up to tenure evaluation. My career has certainly seen a lot of punctures, but the support of individuals and good departmental and university policies have prevented me from leaking out along the way so far. I want to share some of my experiences with you to provide food for thought for colleagues, departments, and universities wanting to help young colleagues make their way through the academic pipeline.

Active mentoring for new faculty and general support from senior faculty, both within my department and in the wider community, have been critical to my career. My senior colleagues have exercised “tough love” in making sure that I know what is expected of me and encouraging me to do things that help me meet those expectations. They have pushed me to become involved in the greater geologic community in ways that I would not otherwise have considered, and, even though this has taken me outside my comfort zone at times, I have learned much in the process. They have pushed me to continually submit grant proposals, despite my early failures, offering advice on all aspects of the grant-proposal process. They continue to push me to produce high-quality work and write thoughtful papers about my results.

A number of professional development resources have helped me launch my career. The Early Career Geoscience Faculty workshop run by the On the Cutting Edge program was invaluable in giving me a clearer understanding of the tenure-track process in the United States and helped me develop my research and teaching. The workshop leaders continue to act as unofficial mentors as I move forward, plus the program introduced me to a peer group of tenure-track geoscience faculty at other universities.

For some ideas: If you are an advisor or mentor, remember that there is no single path through the pipeline for students, postdocs, and junior colleagues. Life’s “punctures” will ensure that their experiences will not parallel yours. Provide support in whatever way you can. Remember that we all have lives outside of our jobs, and sometimes, especially during adversity, we need help organizing and prioritizing. Make the expectations of academia as clear as possible so that those you mentor and advise have every chance of succeeding. While we may agree with Peter Doherty (Nobel Laureate in Medicine) that to succeed as a scientist, “You have to be willing to get up when you’re knocked down…”. We scientists are rather accustomed to falling flat on our faces!”, it sure helps to have someone give you a hand up the first few times.

Departments can be proactive when recruiting early-career faculty and think outside the box in their hiring policies. Mentoring programs for early-career faculty are crucial. Departments should offer a supportive environment in which junior faculty have the opportunity to succeed. Universities that provide faculty and students, as well as their partners and families, with affordable on-campus daycare and quality healthcare options create an atmosphere in which individuals can work more productively.

It is up to all of us to contribute to keeping the pipeline in good shape. Act in any way you can to promote policies that make life easier for those dealing with health issues, parenting, two-body problems, or any other issue that contributes to the leaky pipeline. Collectively, we can stem the leaks, so that there is always a supply of diverse, vibrant faculty.

Sarah Penniston-Dorland (sarahpd@umd.edu)
Department of Geology, University of Maryland College Park, MD 20742, USA

In her research, Assistant Professor Sarah Penniston-Dorland uses geochemical tracers and petrologic tools to investigate high-temperature processes in rocks as diverse as blueschists and amphibolites of the Catalina Schist and mafic and ultramafic igneous rocks of the Bushveld Complex.