

A Career in Undergraduate Education: Mary Morrison
Assistant Professor, Lycoming College

What excites you most about your teaching career?

"I love working with the undergrads because they're at a great time of life, everything is new and exciting for them everything is a 'gee wiz' moment and they are totally unafraid to ask questions which pushes my development as a scientist too. They come in as an eighteen-year old kid and they are getting used to dorm life and they slowly get interested in life in the research lab and I see them engage further into these projects, I develop them and they come to regional and national meetings with me and they go off to graduate school. I have a lot of alumni from my lab that I'm still in touch with and seeing them develop into the people that they are going to be is tremendously rewarding for me; I love doing that."

How did you pursue a career in teaching at a private undergraduate institution?

"I did a post-doctoral stint with Carol Mason at Columbia studying the purkinje cells, looking at their axon and mostly looking at the dendrite development of the purkinje cells and, after I finished in Carol's lab, I was a research associate for a couple years at the Scripps Research Institute in San Diego. But I found I had two problems, terrible problems. I was running a research group in San Diego, it was beautiful and we're making progress with the research so you might ask, 'well what problems are those?' I had nieces and nephews in the east coast that were growing up without me so I wanted to come back East and the happiest parts of my day were actually when the undergraduate interns were coming into the lab. And so there was one day where I was sitting at my computer, I was revising a grant application and I looked up at the clock and I said, 'when are the undergrads coming, when are the undergrads coming?' And I kind of had an epiphany and said 'why am I not doing more of this?' and from that day I started sort of planning to make a transition from full time running research lab as a research associate under Dr. Collin Fletcher to making a career for myself teaching at undergraduate institutions where more of my day was actually spent with those excited undergrads. So that's kind of how I came to teach at a small college."

What are some potential challenges of teaching at an undergraduate institution?

"I'm not going to tell you it's all wine and roses working in a small undergraduate institution. Funding is a challenge for undergraduate education as it is for all skills of science, but the pressures are a little bit different. It's okay if I have grants periodically. I don't have to have RO1s funded continuously or I get fired and I have to fire other people. So little grants can do it for undergraduate research. Getting administration to understand that it takes resources, even for undergraduate level research, has been a challenge and getting other departments interested in building a neuroscience presence at my college has been one of our challenges. We now have a neuroscience minor that's just working its way through curriculum revision process. It's a joint effort between our biology, psychology, philosophy and sociology departments and that's a great thing on our campus because neuroscience is so cross-disciplinary. So when I first came to the college, it was an impediment that maybe other people didn't quite appreciate what this neuroscience thing was and now I've developed that into a group of junior faculty that are all excited to create a program for the students. So you can take those challenges and you can turn them around."

What advice would you give to neuroscience trainees interested in teaching at an undergraduate institution?

"...it's never too early to getting associated with these groups and seeking out mentors. You want to get some teaching experience along the way if you can. If you're a graduate student that's interested in this kind of career path than maybe TAing in a couple of labs, if you are the post doc that's interested in this career path you can get yourself invited to do some guest lectures as part of somebody else's course. It's even better if you get to run one of your own courses totally 100% on your own, but that's not going to preclude you from a job at a small college if you don't have that experience, it just makes you stronger applicant if you do have that. So you want to keep your ears perked for opportunities along the way."

How can practicing neuroscientists transition to a career teaching at an undergraduate institution?

"...showing that you can communicate science to a diverse group of an audience is really important. Doing brain awareness outreach activities helps. When I was a post doc in Carol Mason's lab, she encouraged me to do outreach activities into the community. I became the brain lady for some of the high schools in the Bronx. Bring in a human brain and talk about neuroscience with those groups. Or I would get myself invited to various career fairs. So brain awareness week that the Society for Neuroscience sponsors is also an entree into these kinds of communication experiences that look good when you're trying to apply to jobs at small colleges."

"...it's really important to identify and cultivate mentors and stay involved with them. When I was deciding to make my career transition, I contacted people in my alumni network through Princeton. You can go online, they have a little search engine that tells

you, you know, what former alumni are actually teaching at these different types of places. And I got in touch with a few of them and talked with them. But I also came and talked to Faculty for Undergraduate Neuroscience (FUN) that's an organization to which I have belonged to for several years now. And it is made up of neuroscience educators at the undergraduate level and graduate programs, all people that are interested in basically the getting undergraduates involved in education. There's a tremendous group of mentoring and knowledge that goes on through faculty for undergraduates of neuroscience. And we have a website it's: www.funfaculty.org. And so that's a ready-made group of mentors that are excited about this kind of a career path that anybody can access."

For more information about various career path choices, please visit www.sfn.org. Continue the discussion and network with other neuroscientists on [NeurOnLine](#)