"To Thrive at an Undergraduate Institution, One Must Love Teaching and Advising"

Jessica M. Karanian

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Abstract In her interview, Jessica Karanian tells us about her goal of staying in academia and finding a balance between teaching and research. After holding a visiting assistant professor position, she now works at an undergraduate-focused university. This role requires an interest in teaching and advising. Research in this setting is primarily done with undergraduate research assistants as volunteers or when enrolled in independent research project courses. Jessica provides some advice on how to prepare for this career path, particularly in engaging in teaching and advising when possible and in looking for professional development opportunities. She also reminds us that there are many jobs that involve stimulating, rewarding, and meaningful work—we just need to keep our minds open.

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Christopher Madan: Can you introduce yourself and tell me a bit about your current position?

Jessica M. Karanian: In Fall 2019, I joined the faculty at Fairfield University as a tenure-track assistant professor of Cognitive Neuroscience in the Department of Psychological and Brain Sciences. The Department of Psychological and Brain Sciences offers a Bachelor of Science in Psychology and a newly launched Bachelor of Science in Behavioral Neuroscience. The department is composed of 11 full-time faculty members with active research programs that span many areas of psychology and serves over 300 majors and minors.

Fairfield University is a "more selective" private, primarily undergraduate institution with ~4200 undergraduate students. The typical teaching load in my department is three courses per semester, and the average class size is approximately 20 students with our largest classes capped at 30 students. Our mission centers around undergraduate education and the university has a very strong commitment to excellence in teaching.

Upon obtaining my Ph.D., I began postdoctoral training at Tufts University working on a collaborative project that spanned cognitive psychology and cognitive neuroscience. In 2017–2018, I was a visiting assistant professor of Cognitive Neuroscience at Wesleyan University. Then, in 2018–2019, I was a tenure-track assistant professor of Psychology at John Jay College of Criminal Justice with appointments in the doctoral programs in Psychology and Law and Behavioral and Cognitive Neuroscience at the City University of New York Graduate Center. I was lured back to my alma mater, Fairfield University, at the time when they were launching their new neuroscience major, because after my time in a research-heavy department, teaching one large 250-student lecture per semester, I realized how much my passion was focused on the undergraduate experience.

What was the focus of your PhD?

In 2017, I received my Ph.D. in Psychology with a concentration in Cognitive Neuroscience from the Department of Psychology at Boston College (Chestnut Hill, MA, USA). I worked with Dr. Scott Slotnick in the Memory, Attention, and Perception Lab. My graduate work focused on understanding the neural

mechanisms that underpinned true and false memories for visual information using cognitive neuroscience techniques, including functional magnetic resonance imaging (fMRI), electroencephalography (EEG), and transcranial magnetic stimulation (TMS). Towards the end of my Ph.D., some of my research focus shifted to more applied topics, like eyewitness memory.

As you were finishing your PhD, what were you thinking about your career plans?

I seemed to always want to stay in an academic position. There truly has never been another job that has been of interest to me. While I briefly considered other options, I only did so as a "plan b" and truly hoped that I wouldn't have to resort to this plan. I began graduate school interested in both research and teaching. I was fortunate to have some meaningful teaching experiences as an undergraduate, serving as a teaching intern for statistics and a peer tutor for other psychology and neuroscience courses. I very much enjoyed these positions and found the role rewarding. So as a graduate student, I sought out teaching opportunities beyond serving as a teaching assistant, a role that primarily consisted of grading. This quickly led to my involvement in Boston College's Apprenticeship in College Teaching program. This program involved a series of seminars and workshops, as well as teaching observations and reflection exercises. This program also prepared and motivated me to teach three of my own courses during graduate school, two during the summer and one during the regular academic year. While I found it challenging to split my energy and focus between teaching and my research, I was confident that I was passionate about both and I was so glad that my Ph.D. advisor supported me as I explored my passion for teaching. However, the ultimate balance of how much time did I want to send teaching as opposed to focusing on my research was something that I was still unsure of while finishing my Ph.D.

For someone who has similar interests to you, what are some options you considered as part of your "plan b"?

I really had my sights set on a position in academia. I considered other positions beyond tenure-track assistant professor lines, such as full-time lecturer lines. There are quite a few similarities between full-time lecturer positions at R1 universities and tenure-track assistant professor positions at SLACs. Of course, there is less support for research as a lecturer (because it's not an expectation of the job) and also positions are typically renewed in 1–3-year contracts. I also thought that there might be other areas in the academic world that I could use my cognitive psychology/neuroscience training and apply that to teaching in a meaningful way. For instance, many universities have centers that support faculty

teaching by running workshops and keeping faculty members up to speed on the "best practices" as shown by research. Clearly, I was really tied to the idea of being in a vibrant, student-focused environment as I always thought that would be the most rewarding to me. I did briefly consider whether I would enjoy high school-level teaching but decided it was not for me given the difficulty in specializing in psychology and/or neuroscience. Beyond academia, I'm not sure there were any jobs that truly excited me other than some unique roles at neuroscientific consulting companies, user experience roles, or within nonprofits geared toward criminal justice issues. Many people point to data science as an excellent alternative, and I would've considered it more seriously if my academic dreams did not come to fruition.

Earlier you mentioned that you had worked for a year as a "visiting assistant professor." Can you tell us a bit more about what that position is?

Visiting assistant professor (VAP) positions are often filled by candidates that have recently finished their Ph.D. and ultimately want to end up in a primarily undergraduate-oriented university. VAP positions differ between universities and sometimes even across different departments at the same university. In my role, I had a relatively light teaching load of 3-2 (three courses one semester and two courses the other semester). I know of many other VAP positions with heavier teaching loads (e.g., 4-4). My particular VAP position opened because two faculty members in cognitive neuroscience were on sabbatical that year. This is often the case for the creation of these positions, which unfortunately often means the positions are only for 1 year. Alternatively, other VAP positions are created in a time of transition—perhaps a faculty member retires or a need in a certain subject area has presented itself. These positions may be for more than 1 year and sometimes even turn into tenure-track lines. I asked about this on my interview for the job, and it was made very clear that this position would only be for 1 year due to the circumstances in the department. While I was still excited about the position, this was stressful because it meant that I needed to start applying for jobs for the following year during the first semester of the position. Still, because I wanted to end up in a tenure-track position at a primarily undergraduate university, I knew this extensive teaching experience would be worth it. During my short time in this position, I was also able to mentor an undergraduate student on an independent thesis project, finish up some of my own research projects from graduate school, and begin some new postdoctoral research. Also, one huge benefit that I did not plan for is that I had the option to count this time in the VAP position toward my tenure clock at my current institution given the heavy amount of teaching. Not many universities offer this benefit, but it is something to inquire about when on the tenure-track job market, especially at primarily undergraduate universities.

Can you tell us a bit about what day-to-day life is like in your current position?

In my current position, I teach three courses per semester. So during the academic year, much of my time is dedicated to teaching. I do also mentor students through research positions in my lab, for which they earn course credit. These students often help collect data from our participant pool. Some of these students choose to build on this work and complete an additional course in which they complete an independent research project. Advising these students during the semester on top of teaching three courses can be time-consuming, but the bonus is that it allows your research program to move forward and provides a truly rewarding mentorship experience.

I also advise approximately 40 students within the department. Fairfield University—like many SLACs—has a very hands-on approach where students must meet with a faculty academic advisor in order to register for the following semester. And I think it's worth noting that all undergraduate academic advising is done by full-time faculty members in the student's area of study, as opposed to staff members, as I know this is typical in some larger institutions. Advising sessions usually take place over a few weeks during the semester. These advising weeks can be hectic given the number of individual meetings, but I have found that it is a great way to get to know students and connect with them beyond the classroom.

When not teaching during the academic year, I am also attending department-, college-, and university-wide faculty meetings, as well as engaging in a variety of service roles. Such service positions include more department-specific activities like advising the Psychology Club or broader roles like serving on a committee that reviews university curriculum.

During the summer, we are "off contract"; thus, we do not have specific obligations. However, many faculty use this time to engage in their research. The university offers funding to support faculty research (both in the form of grants for supplies/equipment and supplemental stipends), as well as free summer housing to summer research assistants. Some faculty choose to teach additional summer courses as well. Furthermore, there are a variety of professional development offerings by our university's Center for Academic Excellence, as well as opportunities to engage with students during orientation weeks. These off-contract summer activities typically come with a stipend.

If someone currently finishing their PhD was considering a similar position as you have now, how might they decide if it would be a good fit?

To thrive at an undergraduate institution, one must love teaching and advising. It is perfectly fine to also love your research (I certainly do!). But if teaching and advising are not rewarding and enjoyable to you, then this job will simply feel

burdensome. To figure out if you would like this, find opportunities to teach! Many Ph.D. students have teaching assistantships—so make the most of that experience. Ask the course instructor if you can give a guest lecture or host a review session before an exam. If your advisor is supportive and you can find the time, I also recommend teaching your own course. I was extremely fortunate to have an advisor who was fully supportive of my desire to explore my teaching interests, so I ended up teaching three undergraduate courses during my PhD. I am certain that this teaching experience made me a very strong candidate for a visiting assistant professor position and possibly viable even some tenure-track positions.

Another way to test out the undergraduate-focused academic path is to mentor undergraduates in the research lab. This is probably much more feasible than teaching independent courses during your Ph.D. You can start by inviting students to help with some of your own work and then graduate to advising them on their own undergraduate projects. As a graduate student, I had the pleasure of advising two undergraduate thesis projects, and I found these experiences to be incredibly rewarding and also a way to move some of my own research forward. I recommend asking these students for written feedback so that you can provide evidence of effective advising on future job applications.

Can you tell us a bit more about how you move your own research forward through undergraduate projects? For instance, how do you find what might be a manageable topic for a thesis project and how do you balance the research topic being in the students' own interests while still fitting with your own longer-term vision?

My university, like many, offers course credit to undergraduates to engage in research during the academic year, and provides some summer funding to support faculty-student research as well. Ideally, students will work in the same lab for multiple semesters, as it can be difficult to provide a rich, hands-on experience in just one semester (especially in labs that employ techniques that require intensive training). Students also have the option to develop and conduct an independent research project. These opportunities certainly help bring students into the lab. Once in the lab, students may express interest in big research questions that simply are beyond the scope of the professor's research interests and/or expertise. So, it takes some effort to guide the student to a specific, feasible research question that falls within the scope of the professor's research program. For me, this is the toughest part—because I often want to let students be creative and to think big—but doing so would come at a big time cost to my own research program.

Regarding the amount of training that is involved once a project topic is decided, there is a lot of variability in the amount of mentorship that will be required to get the project completed. Some students are incredibly independent and operate more at the level of a graduate student, while others require much more guidance.

Sometimes, this is a bit hard to predict, but typically students start in a volunteer or supervised research role and then only the most dedicated and intrinsically motivated students are advised to take on an independent research project.

Some more behaviorally oriented research studies are very feasible to complete with undergraduate research assistants. It is the more technical projects (e.g., EEG) that require many months of training. These projects are quite difficult to get off the ground in an undergraduate environment, but certainly possible if you find the right students and establish a pipeline of students to streamline the training process. While the quality of research is not impacted, the rate of research output is often slower at an undergraduate-focused university.

If someone was interested in pursuing a similar career path, what would you suggest they do to better prepare themselves?

There are a variety of things that I did to prepare myself for my career path. That said, I acknowledge that there are many paths that one could take to reach the same final destination. Regardless, the following certainly would not hurt:

- Engage in teaching and advising when possible, and begin as early as possible. As you engage in these activities, be sure to document them all. Think about your approach/philosophy and refine it as you gain experience and feedback.
- Look for opportunities for professional development. Many universities offer workshops and special lectures on the topic—some are even specifically geared towards graduate students. For instance, Boston College has an Apprenticeship in College Teaching program. The University of New Hampshire offers a variety of courses on college teaching for graduate students as well.
- Find a professor at your university that is particularly dedicated to undergraduate teaching and mentoring (ideally, someone who is not your Ph.D. advisor!). Many larger research universities now have full-time teaching lines (e.g., Lecturers, Professor of the Practice). These professors will be excellent resources for you. Ask if you can observe their classes. When comfortable, ask if you can give a guest lecture and have them observe you. Even better, perhaps do a couple over the years and have them document how you have developed as a teacher. Reflecting on teaching is a critical part of the process and something that faculty at primarily undergraduate institutions value.

What do you like most about your work?

There are many things I like about my work, but I think what stands out as the most unique is the freedom and flexibility. Aside from scheduled class meetings, I decide when I do my work. I am not "checking in" with anyone on a daily basis. I can bring my car to be serviced on a Tuesday and know that I can work later that evening or

on the weekend to make up those hours. More specifically, I love that my research challenges me on a daily basis. I love designing new studies and learning about new findings or methods. I suppose this all stems back to my love of learning. As for teaching, I enjoy connecting with students and watching them learn over the course of the semester. Especially in my statistics and neuroscience courses, students often tell me that they are only taking my course because it's a requirement. Being able to get those students excited about anything from that point forward is incredibly rewarding. Related to the above point about loving to learn: teaching also provides endless opportunities for continued learning.

What do you like least about your work?

What I like least about my work is actually related to the above point about flexibility and freedom. While I think this is mostly a benefit of my job, it does come with some challenges. (1) First, once in a tenure-track position, the job can be a bit isolating and overwhelming. You previously worked with a team of individuals who were experts in your exact research area who could act as a sounding board for research ideas. However, in most primarily undergraduate institutions, you are the only expert in your specific area of the field, so your support system changes a bit. But, finding great colleagues and mentors in your department—even if they are outside of your specific research area—can really make up for that. You learn quickly that the problems you are facing might not be so unique to you after all. Still, I have found that maintaining collaborations beyond my institution and open communication with my former graduate school cohort and mentors, as well as postdoctoral advisors, has really helped fill in the gaps. (2) Also related to the flexibility, my work seems to have no boundaries. I cannot remember a week that I did not spend time working on evenings or weekends. As I progress in my career, I've come to realize that some boundaries are critical, and I think it is easy to become burned out without them. Examples of boundaries include setting aside a fixed time to unplug and do something for yourself (e.g., exercise) or limiting time on email to only certain hours of the day.

Based on your journey, what is some advice or suggestions you would want to pass on to someone who's currently finishing their PhD?

Keep your mind open! There are so many jobs out there that allow you to spend your days doing stimulating, rewarding, and meaningful work. These exist both within and outside of academia. And, remember that every job comes with its perks and downsides—even your dream job! Be open to learning about the wide variety of academic positions, which range from nearly 100% teaching to nearly 100%

research. Also, think about the way your job application will present to future employers.

Acquiring specific skills and experiences beyond your Ph.D. research can give you a big edge over other applicants. And remember that these other skills and experiences can be related to your PhD research! For instance, a few of my graduate school peers took time to become proficient programmers using online resources, like DataCamp. They used what they learned to enhance their own research while simultaneously gaining a highly marketable skill. Also, many of my peers taught upper-level undergraduate courses in their Ph.D. subject area. For example, I taught a course on Human Memory (my Ph.D. was on the neural underpinnings of false memories). Teaching this course provided an opportunity to further explore and master my research area while also providing excellent preparation and exposure to college teaching.

Thank you so much for sharing your experiences and perspectives with us!