



**Mount  
Sinai**

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**Q&A with Dr. Ellie Schmelzer, PhD: Director of Career Services and Strategy (OCSS) at ISMMS**

By Delaine Ceholski

**Q:** Please summarize your education and training background and describe how you ventured into career development (please describe any relevant training and qualifications pertaining to this as well).

**A:** I have been working alongside being a student since I was 18 years old - I worked part-time through my B.S., PhD, and during all summer vacations. The only time I focused exclusively on academic work was during the main portion of my postdoctoral training (the first three out of four years at Yale). Thus, I have had the opportunity to ‘try-out’ many jobs (electrical engineering, court interpreting, sales, banking, and systems engineering). I have also been a tutor, grader, and Teaching Assistant. During my postdoc in physics at Yale, I applied for academic jobs and, although I had several potential opportunities, I had already discovered that the prospect of a tenure-track career in academia was not sufficiently satisfying to me. I wasn’t sure what type of a role or industry would both utilize my abilities and keep me interested and motivated. I spent significant time investigating careers in patent law and financial services, while also considering science writing, science journalism, and editorial positions. It was also helpful that during both my PhD and postdoc I went to 100+ networking events organized by the MIT Enterprise Forum on a weekly basis. During the period of investigating all the various career possibilities suitable for PhDs, I took immaculate notes of what it takes to apply for these positions and how to be successful in those industries. One of the industries I focused on was management consulting. During the last year of my postdoc I spent an enormous amount of time doing case interview practices (nearly 60-80 cases), participated in case competitions, and was very active at the Yale Graduate Student Consulting Club. I interviewed at McKinsey, BCG and a few other management consulting firms and passed several rounds of those interviews, but ultimately decided to withdraw my application and pursue a career in academic administration – career services. I discovered that I had started mentoring many of my peers in writing effective resumes, interviewing, and negotiating, and noticed how that role became extremely rewarding and enjoyable for me. As a result, after my postdoc was over, I stayed at Yale and joined the Yale Office of Career Strategy.

**Q:** What services does the OCSS offer?

**A:** All the services that OCSS offer are easily accessed through the office web page: <https://icahn.mssm.edu/education/graduate/office-career-services>.

**Q:** When do you think is a good time for postdocs to come to you for advice and help?

**A:** It is never too early to come and see me to flush out ideas of possible career pursuits, to edit a current CV, or to talk about interviewing, networking or negotiations.

**Q:** Considering the importance of networking and connections in today’s job market, what advice can you give postdocs when they are on the hunt for a job and how can your office help with this?

**A:** I recommend that postdocs attend my networking workshop (I have tried combining years of networking experience, distilling the most non-obvious advice from it and delivering it in a practical, recipe-like manner). Additionally, I urge postdocs to attend all networking opportunities that are available to them, including, but not limited to, Network After Work and the events organized by the Drop Out Club (links on the OCSS website), and to consider coming to me with networking questions, if they have such.



Dr. Ellie Schmelzer, PhD

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**Q:** What are your future plans for the OCSS at ISMMS?

**A:** The OCSS will continue to focus on personal, individual advising and strategizing, yet the office is constantly looking for ways to improve its services and to learn and expands its offerings.

**Q:** What do you think is the biggest issue postdocs face in today's job market? In your opinion, what can they do to overcome it?

**A:** The biggest challenge for postdocs is that [very often] they have never acquired any work experience outside of academia and that during their postdoctoral training such experience is complicated to obtain. The way to remedy these challenges is to encourage students during their bachelors and doctorate degrees to acquire jobs outside of school and to educate faculty in the need for postdocs to have the freedom to develop themselves professionally in a scope wider than their academic responsibilities.



## Co-Chair Corner



Greetings fellow postdocs!

The holiday season is upon us – family, celebration, and cheer are synonymous with the Thanksgiving and Christmas seasons. However, this time of year can be difficult, with impending cold weather, busy schedules, distance from family, and, this year, post-election blues. Many already find this season difficult and with the recent events of early November leaving feelings of uncertainty for the future, the Postdoc Executive Committee (PEC) wants you to know that there are many services available here at ISMMS to help.

First, postdocs are eligible for short-term counselling through the Employee Assistance Program (EAP), located on 98 Street (between Madison and 5th Avenues). This discrete and anonymous counselling is free to all ISMMS postdocs and employees and your visits are not recorded on your medical or employee records. In addition, you may contact Student/Trainee Mental Health. An initial appointment with a psychologist or psychiatrist can be requested by sending an email that briefly describes the reason for the request to the following address: [STMH@mssm.edu](mailto:STMH@mssm.edu). Second, the Ombuds Office at ISMMS is a safe, informal, impartial, and strictly confidential place where postdocs can freely discuss any issue or concern. Dr. George Huntley is the Ombuds for postdocs and can be contacted by email: [george.huntley@mssm.edu](mailto:george.huntley@mssm.edu). Third, the Mistreatment Resource Panel (MRP) is a terrific resource to report mistreatment or seek institutional support. Lastly, the Office of Postdoctoral Affairs (Theresa Scarabino and Dr. Charles Mobbs) are always available to provide guidance and direct you to appropriate resources. The PEC is providing postdoc representation on the Dean's Mental Health Task Force to improve Mental Health Services, Well-Being and Resilience, and Academic Culture at ISMMS. This task force will put together a proposal that will be reviewed by Dean Charney in January 2017. The additional resources that stem from this Task Force will be shared with the postdoc community as soon as they are available.

As postdocs ourselves, we know how stressful that life as a postdoc in NYC can be. It is important to take time to focus on your health and happiness – go for a run or a walk in Central Park, read a good book, go to one of the many museums that NYC has to offer, or simply take a few moments to relax. As always, your PEC co-chairs are here to help or listen whenever the need arises. If you are uncertain about who to contact or which resource to use, we are more than happy to guide and direct.

Be well.

Delaine

Geneviève Galarneau and Delaine Ceholski are your PEC Co-Chairs

### Ways to keep in touch

- Our website: <http://icahn.mssm.edu/education/postdoctoral-training>
- Follow our Twitter account: [@MtSinaiPostdocs](https://twitter.com/MtSinaiPostdocs)
- Join our Facebook page: “[Mount Sinai Postdocs](#)”
- Follow us on LinkedIn ([Mount Sinai Postdocs and Postdoc Alumni](#))

### The Mount Sinai Postdoc Periodical

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# A STEM Ph.D., one or two Postdocs, and then what?

By Alaa Abdine

A recent online poll conducted by Nature magazine shows the struggles that scientists face on a daily basis (1). Among the 8,802 respondents, more than two-thirds say they are considering quitting research, mostly due to the lack of funding opportunities, and work-life balance. These roadblocks to innovation and research are discouraging, particularly since 85% of scientists in the USA feel stimulated by their job, per the 2016 Life Sciences Salary Survey, conducted by the Scientist (2).

So why are most young scientists fed-up and ready to leave academic science? Several weeks ago, Nature polled its Facebook followers, asking young scientists to voice their concerns (Most comments can be found on the Nature blog #ResearchRealities (3)). The fight for funding seems to be one that most respondents agreed on. Established scientists “have longer track records and well-established labs”, which puts them “in a stronger position to win funds” (4). “What are the challenges facing young scientists?” asked Nature via Twitter. To which Rob Carlson, Ph.D. and founder of Biodesic, a strategy and engineering consulting firm, humorously replied “Old Scientists”.

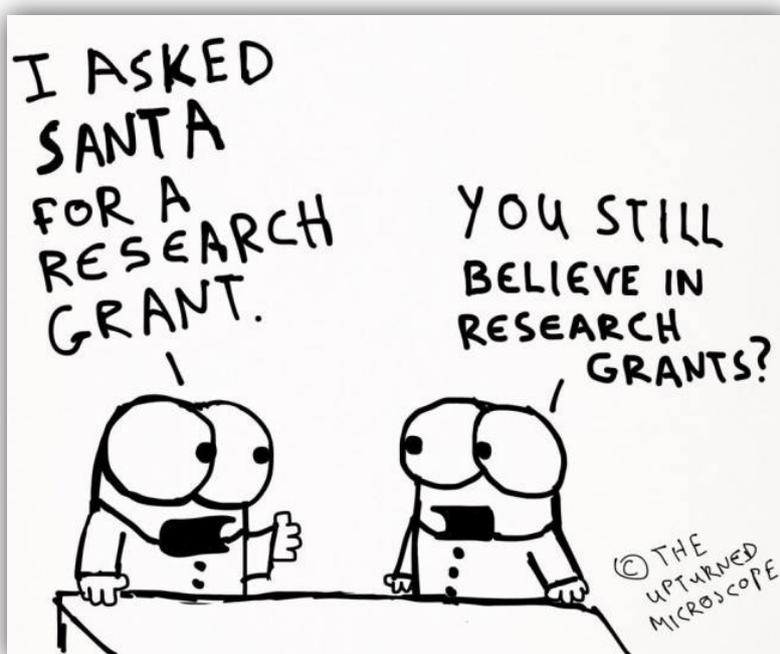
Internal pressure is another struggle scientists contend with - “Do I have enough publications? Do I need more data?”. Philip Guo, a cognitive scientist at UCSD, argued that at his previous job as a software engineer at Google, he had “tremendous clarity about what and how much” he needed to do. In sharp contrast, as a scientist in academia, he needs to teach, advise, supervise, do research, write grants, support the academic community, etc... and “none of these sources of work know of or care about one another”. This leads to the last common hurdle shared by most scientists - lack of time for critical thinking. Most young professors and postdoctoral researchers agree that the pressure to publish and obtain prestigious grants makes them focus on the necessary experiments, rather than expanding their creativity.

One of the solutions to this pressure is to publish less, according to Dr. Daniel Sarewitz (5). As the number of scientific publications is growing exponentially, more and more papers are not getting cited. This means that several papers are being published to get funds, without being substantial or deeply relevant. Dr. Bruce Alberts agrees, arguing that the hyper-competitive atmosphere is stifling creativity and pushing scientists “to do mediocre science” (4). To help young investigators, Dr. Alberts thinks that instead of rewarding “safe and uninteresting” science, there should be encouragement of “doing things differently”. He also supports an increase in early-career funding resources, dedicated to help postdocs and young investigators start their career, without having to compete with senior scientists who often have a higher level of experience in grant writing. This has been the strategy behind the R35 grants, or MIRA (for Maximizing Investigators’ Research Award), from the National Institute of General Medical Sciences (6), separating the early-stage investigators from the established ones.

Despite these struggles, positive changes are being witnessed on a local and national level. Starting in December, the NIH will be monitoring how institutions implement the new regulations on postdoctoral stipend levels – perhaps signaling more positive change is on the horizon.

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- 3 - [www.researchrealities.tumblr.com](http://www.researchrealities.tumblr.com)
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- 5 - The pressure to publish pushes down quality. Daniel Sarewitz. May 11 2016. Nature Columns, World view.
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# Music - from prose to clinical therapy

By Elisa Núñez Acosta

*“A sound arose of endless interchanging melodies woven in harmony that passed beyond hearing into the depths and into the heights; and the music and the echo of the music went out into the Void, and it was not void.”*

- J.R.R. Tolkien

In his effort to invent a world-wide mythology, J.R.R. Tolkien described the act of creation in the paragraph above, suggesting that music was first and it filled the space. Beyond this beautiful abstract image, music can have a powerful effect – influencing mood, cognition, and experience – and scientists studying music understand that its effect on our physiology is beyond transient emotional experiences.

Developmental biologists have investigated the positive effects of music during embryonic development and in infants [1], some of which suggests that musical capacities are innate and can appear even in the absence of any exposure to music. This innate musical capacity turns out to be an evolutionary conserved trait, as a study showed that rhesus monkeys can judge two melodies to be the same when one of them is shifted one or two octaves from the original [2]. Furthermore, if the original melody was transposed by 0.5 or 1.5 octaves, the monkeys could not identify those melodies to be the same. These results are impressive as they show that without any musical training, monkeys possess an innate sense of music. Moreover, these results indicate that the brain could encode for melodic recognition and that there are innate constraints in musical perception.

Neuroscientists study music with fascination because it can stimulate perception, cognition, emotion, learning, and memory. Through neuroimaging, neuroscientists have identified parts of the brain that can be stimulated by music [3]. These same brain regions, including the amygdala, nucleus accumbens, and hippocampus, are activated by other stimuli such as primary rewards (food, drink, sex) and emotional expression. These results are promising as the potential of music to modulate the activity of the brain could be useful in the treatment of psychiatric and neurological disorders such as depression, post-traumatic stress disorder, autism spectrum disorders, and Alzheimer’s disease. These discoveries are leading the way in the application of music as a clinical therapy. For example, there is evidence from patients with brain lesions or degenerative diseases that recognition of music expressing different emotions is impaired (sad vs. uplifting music). Moreover, it has been observed that the damaged brain regions of these patients are similar to those regions involved in music-evoked emotions [4]. Furthermore, individuals with autism spectrum disorders have shown a normal ability to recognize, experience and process music, despite their socio-emotional difficulties. Music therapy could help such patients to develop a vocabulary created from musical experiences, which could translate into socio-emotional skills in situations of everyday life. Beyond the joy that it brings to our lives, there is hope that at some point we will know how to take advantage of the therapeutic powers of music.

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