

# Mental Wellness in the Lab: Reflections from the TMM Pre-Conference Workshop ‘Surviving and Thriving in Grad School’

*Reflections from the 2022 Till & McCulloch Meetings*

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*“...To be successful in graduate school, you are told you have to be in the lab from 9 to 9, and then you have to find time for data analysis and eating.” – Anonymous Trainee*

These are words that nest in the minds of many graduate students yet are rarely spoken aloud, but why? Why do trainees feel pressured not to talk about their feelings? Their successes, challenges *and struggles*? As the Stem Cell Network’s Trainee Communication Committee (TCC) knows all too well, the buildup of these strong, often negative emotions leads many to feelings of depression and burnout, which in turn makes people less effective researchers. The next generation of scientists must be taught that it is okay to express their feelings and nurture open dialogues between supervisors and graduate students. Otherwise, the unnecessary pressure resulting from these feelings will continue to harm the minds of brilliant scientists and dissuade them from becoming researchers. To this end, the TCC organized their first-ever survival guide for trainees in graduate programs—a workshop that covered the ins-and-outs of designing experiments, writing papers, and — arguably most importantly — maintaining mental wellness in graduate school. Let’s unpack the mental wellness portion of the workshop and talk about what trainees and supervisors can do to mitigate any toxic work environments that may have seeped into their laboratory.

## What a graduate program is like from the trainee perspective

Graduate programs put an immense amount of pressure on trainees. As Dr. Colin Francis, a panelist in the workshop recalls, “this was the most stressful time in my entire life.” The table of expert panelists who are in or completed their graduate program unanimously agreed, which is telling considering several of the panelists were raising children during their program. In fact, Dr. Paula Littlejohn (panelist) pointed out that she was raising her five kids at the time! As each panelist shared their graduate survival stories, the sixty trainees sat in silent agreement. As Ellen Gates (panelist) put it, “[graduate students] are in such a sustained environment of stress that struggles are commonplace.” But, they should not be commonplace.

*“This was the most stressful time in my entire life.”  
– Dr. Colin Francis*



## **Burnout is the most common feeling among trainees, and it comes at the cost of great experiments never being done or done improperly**

Mental wellness is a top priority for many organizations and institutions, but a bottom-up approach — one that starts at individual laboratories rather than administration — may be the most effective and quickest way to initiate change. But first, what exactly is burnout?

Using the the fun definition provided by Dr. Melanie-Anne Atkins (panelist), burnout is “when someone comes up to you in the lab and says you're acting crispy, and then you snap back ‘how dare you’”. This ‘crispy’ feeling results from being overworked to the point of apathy. Burnout can arise for a multitude of reasons: a lack of fulfillment, a lack of opportunity to rest, a lack of control, a lack of recognition for accomplishments, a lack of community support, and a conflict between personal values and workplace values (Maslach & Leiter, 2016). Being aware of these triggers, every person in the laboratory — students, research associates and supervisors — has the capacity to improve the mental wellness of those in the laboratory.

***“Education shouldn’t be traumatizing. It should be a space to tap into our brilliance and innovation to create a better world.”  
– Dr. Paula Littlejohn***

## **Setting boundaries is the first step to reducing burnout in graduate school**

Clinical counsellor Nelson Szeto (panelist) set the tone for the discussion with his opening recommendation. “Rest!” he emphasized, “that nagging, heavy experience you feel when you have to go do a task... you won’t get out of it unless you rest.” Nelson paused for a moment before continuing, “don’t keep pushing. You have to find your way to rest. You have to respect yourself. This is called boundaries.” And there it was, the word boundaries hung in the air and became the centerpiece of discussion — what are boundaries, and how do you make them?

***“How do you deal with burnout? Rest! You have to find your way to rest. This is called setting boundaries.”  
– Nelson Szeto***

Dr. Daniel Aguilar-Hidalgo (panelist) talked about his personal experience and started with an anecdote from his upbringing in Spain. He acknowledged that this advice may be difficult to internalize for many, “boundaries are different between cultures. When I grew up, I didn’t know you could have boundaries. I went around saying ‘WHAT ARE BOUNDARIES?’”

Daniel talked about how he once would have never said no to someone older, like his parents, because this was not a part of Spanish culture. But, over the course of his career as a researcher, he learned that he must set boundaries for when to say yes and when to say no. He did this by making a list of values that he would never break under any circumstances, empowering him to say no to requests in the moment.

***“Boundaries are different between cultures. When I grew up, I didn’t know you could have boundaries.”  
– Dr. Daniel Aguilar-Hidalgo***



The panel gave some examples of their values, which included: weekend and evening work hours, when to eat and sleep, when family time was mandatory, and what self-care activities would never be missed (or rescheduled) for laboratory work.

### Setting boundaries that can withstand a student-supervisor relationship

Regardless, as the panelists acknowledged, setting and maintaining boundaries is difficult in graduate school. While the student-supervisor power dynamic, and other cultural forces in academia, can wear away at an individual's values, there are some strategies the panelists have used to maintain their boundaries.

First and foremost, “make sure your supervisor understands your work,” said Dr. Francis. The experiences of panelists and those in attendance indicated that the supervisor may not be aware of how much time a task can take, and thus supervisors will keep adding to your to-do list. For example, some attendees were told by their supervisor that they (the supervisor) only stop giving tasks when they hear the word no because they do not know how long the experiments take, or they lose track of how many tasks they have given out. Ellen Gates found that the most effective strategy for her to push back on the abundance of tasks being given to her was to print out a detailed schedule of her week to show her supervisor and ask “where do you see this fit in with my schedule?” But, as Ellen noted, this strategy was her last resort.

**“Make sure your supervisor understands your work.”  
– Dr. Colin Francis**

### Building a healthy student-supervisor relationship helps you maintain boundaries

Building a healthy relationship with a supervisor can be difficult or even impossible, depending on the person. Before Dr. Aguilar-Hidalgo expanded on this point, he emphasized “all you can control is yourself... your boundaries.” He went on to say that getting your supervisor to understand that you are a human being with interests outside the laboratory can greatly improve your mindset. He recalled a time when he discovered a trainee struggling in the laboratory; the trainee did not feel like they would ever thrive in this environment. They did not value an environment where everyone only talked about work. One day, however, the trainee discovered that they and their supervisor shared a mutual interest in tennis, so the trainee started all conversations with their supervisor on this topic, and the rest was history. Once the supervisor started having personal conversations with this trainee, this individual felt at home in the laboratory — they felt they could thrive here.

**Once the supervisor started having more personal conversations with their trainee, the trainee finally felt they could thrive in their laboratory.**

“Although,” Dr. Aguilar-Hidalgo acknowledged, “some supervisors are more human than others.” Despite your best efforts, some supervisors do not want to establish personal relationships, and it may be better to turn to the strategy Ellen Gates used. “I tried being personal,” Daniel said. One of Dr. Aguilar-Hidalgo's supervisors went to China, so he asked how the trip was. “Good,” this supervisor replied. The conversation stopped there. In contrast, with a different supervisor, Daniel recounted the time he was regaled with a twenty-minute monologue.



“If [your supervisor] does not respect your boundaries, you have to bounce,” Dr. Aguilar-Hidalgo recommended. He returned to what he and others said previously: all you can control is yourself.

“If you stay in an environment that does not respect your boundaries,” Dr. Francis said, “you will feel bad. No matter how successful you are.”

### Setting boundaries does not mean you will be less successful

Many trainees feel pressured to work long hours for one reason or another. In fact, the quote that started this blog was said after the panelists discussed boundaries. Trainees feel that setting boundaries that allow them to have time for family, self-care and rest will hamper their careers. “How do you deal with this uncertainty?” Dr. Jon Draper, Vice-President, Research & Training, Stem Cell Network, asked from the audience.

**Trainees feel that setting boundaries that allow them to have time for family, self-care and rest will hamper their careers.**

While the response to this question was lengthy, the discussion could be summarized by the words from Dr. Paula Littlejohn, “the people who stay in their laboratory the latest running experiments don’t necessarily finish their degree the fastest, or get the job the fastest.” Many solutions to an issue are discovered when you step away from the problem. Also, the panelists, many of whom are in the early stages of their careers, reminded the attendees that the job market landscape has changed dramatically since your supervisor was looking for a job. Working 60-80 hours a week in a laboratory does not guarantee that you will have or get a job. The panel discussed that these days a recent graduate will more likely get a job through a networking connection or a specific skill they have. This point was emphasized by Ellen Gates, “biotech companies want the skills you have,” she said, “you have so many skills.”

***“The people who stay in their laboratory the latest running experiments don’t necessarily finish their degree the fastest, or get the job the fastest.”  
– Dr. Paula Littlejohn***

### We can start changing research culture now, to be more inclusive, caring and productive

Graduate school is hard. Students expect to learn new assays and conduct experiments to test hypotheses, but we all quickly learn that there is so much more to the graduate school experience. Not only do graduate students have to be effective scientists, but they also have to be strong storytellers and confident advocates for themselves while navigating various stressors that can arise during their training. In short, graduate students are trying to survive.

***“I think a lot of people are of an older generation who are scared to talk about their struggles. I hope this changes... as the new generation comes in.”  
– Ellen Gates***

Supervisors, how can you help? Lab culture is everything. You are at the helm of this ship and set the tone for how things are or will be.



Here are some **simple** actions you can implement immediately to nurture the excellent trainees you have:

- Normalize conversation about mental wellness at an individual and lab level. Include mental wellness seminars in your lab meeting rotations.
- Ditch the “I went through it, and so do you” mindset. This is not a competition on who can suffer or tolerate suffering the most.
- Open the lines of communication with your trainees but also listen to what they have to say. Many trainees feel truly unheard and, in some instances, patronized.
- Be open to constructive feedback. We are all learning as we navigate this thing called life while in the academic setting. We do not have all the answers, but we can learn, grow and adapt together.
- Remember that your trainees are human and have lives outside the lab: they have partners, kids, family, friends, bills, people they support financially, etc., all while making a stipend that dictates they live paycheck to paycheck or get a second job.

Knowing this, check in on your colleagues and trainees. Be an advocate for one another. The more we take care of our mental wellness, the more productive and fulfilled we can be. It is more likely you will discover something profound when you are not “crispy” from burnout. For those who need or want to talk, feel free to reach out to the members of the TCC — we will gladly listen.

### Acknowledgments:

The ‘Surviving and Thriving in Grad School’ pre-conference workshop was supported by the Stem Cell Network. The ‘Surviving and Thriving in Grad School’ workshop included the following panelists: Dr. Cara Ellis, Dr. Melanie-Anne Atkins, Dr. Paula Littlejohn, Ellen Gates, Dr. Colin Francis, Dr. Daniel Aguilar-Hidalgo, Peter Overby, and Nelson Szeto. TCC members included Priye Iworima (Chair), Kevin Robb (Vice Chair), Dr. Rasha Al-Attar, Jules Granet, Kabita Baral, Alexandra Kozlov, Kieran Mahedan, Dr. Morten Ritso, Fereshteh Sadat, Laura Stankiewicz, Coulter Montague Szakaly, and myself. A special thanks to Priye Iworima for helping me write this article.

