

My personal philosophy towards teaching has emanated from observations made during my matriculation in UF's IDP Ph.D. program, my postdoctoral fellowship, Research Assistant Professorship, my Assistant Professorship as well as my tenured Associate Professorship, and the many interactions I've had with external mentors and collaborators along the way. Knowing for years that I ultimately wanted to be a Principal Investigator and mentor my own students/postdocs/staff, I took notes during my training such as "this person's style is very motivating" or "the way this person does (*fill in the blank*) would make anyone want to join their lab" or "I admire their hard work and honesty" or "I would never do (*fill in the blank*) if I was a PI". I have learned immensely from both positive and negative experiences (even if it's politically incorrect to admit the latter!). Capturing both extremes has shaped how I conduct myself as an educator. I learned from my postdoctoral supervisor, William Hauswirth, Ph.D., the value of mentoring with a long leash, a method that is very effective for self-motivated, independent students. I learned from my Ph.D. supervisor, Susan Semple Rowland, Ph.D., the value of mentoring with a short leash, a method that works very well for students needing additional focus/nurturing. I have chosen what I feel is a happy medium between these two styles. My chosen instructional method is to challenge but also nurture my students. I play a very active role in the progression of their projects but avoid micromanagement. I remain easily accessible, providing direction when necessary, but ensuring students arrive at answers independently. I place heavy emphasis on transparency and believe firmly that if students/staff understand the basic inner workings of the machine, they will be motivated to keep it well-oiled. I routinely keep my team abreast of efforts to secure funding, publish papers etc. This style has engendered dedication and teamwork, and has also fostered self-sufficiency and independent thinking. A speaker in UF's "Social Change and the Ivory Tower" seminar series and TED talks, Jeremy Heimans, summarized this philosophy nicely when he says, "Old power downloads and commands, new power uploads and shares". I am confident that students will be better prepared to succeed in their own academic roles if they're made aware of these things early and often during their training.

Part of being an effective teacher is knowing your audience. I use the philosophy outlined above as a guide, realizing that, at times, I will be required to pivot in either direction, depending on the needs of the individual. I routinely seek input and feedback from my students/staff (weekly group and individual meetings) to ensure that that my mentoring is in alignment with their needs, as things can change very quickly. Students are asked to set goals (where do you want to be in 3 months? In 1 year?), and we revisit these goals routinely. One thing no one prepared me for during my training was how emotionally invested I would become in the development of my students. Life happens outside the lab, and sometimes it's downright awful. I woke up early on the morning of January 26<sup>th</sup>, 2017 to get dressed for a long day of hosting visiting speakers at that year's annual Center for Vision Research Symposium. The alarm clock went off and I did what I do every morning- look at my cell phone to make sure I didn't receive any important emails overnight. I was greeted by the following words in my inbox from my former graduate student, Tyler: "*Dear Shannon, My parents and Ryan were in a really bad crash yesterday on their way back home, and all three passed. Sorry to be so blunt, but I'm sure you understand. I'll call you at some point to update you, but can you let the program know as well. I don't know how long I'll be out.*" I went weak in the knees, woke up my husband, and sobbed harder than I'd sobbed in a long time. Tyler's family had been visiting him to celebrate his mom's birthday. On their way home, they were involved in a head on collision with a tow truck driven by a man that we'd ultimately discover was under the influence of multiple drugs. I barely remember going through the motions of symposium that day, unable to hear anything the speakers were saying, receiving a constant barrage of newspaper clippings via text from the extended members of the lab. I felt utterly helpless to assist Tyler in this time of tragedy (and I still get numb when I think about it), but I knew that I needed to react, and that I needed to react quickly. I knew that Tyler was going to need an unprecedented level of support to maintain his desire to keep on going. His mom had pulled me aside at a party a few months prior to thank me for being so good to her son, and to say how grateful she was that I had suggested Tyler apply to the Ph.D. program. I knew that his parents

would want me to help him finish. The following months/years were very hard, and there were multiple conversations about 'taking a break', which I knew was code for 'leave the program'. I walked a constant tight rope between being a friend and being a boss. At times, he loved me for it, and at times, he harbored resentment because I wouldn't let him give up. There were definitely lots of tears on both sides! Tyler is now a postdoctoral associate at Duke University and remains a close friend. I will forever say that those hard months/years were worth it because I know his parents would have wanted him to get his degree and would be immensely proud of him. Tyler taught me that mentoring goes WAY beyond teaching one how to pipette, and I'm better for it.

Other students have understandably been much easier to mentor, but each requires personal attention and a slightly different style. The mixture of personalities has made for a wild and admittedly fun ride. To uniformly help them all, I stay abreast of effective teaching methods by routinely talking to my faculty mentors and senior colleagues, and by attending workshops like "Faculty as Teachers", a College of Medicine sponsored program designed to teach the 'nuts and bolts' of teaching and learning; setting expectations, teaching skills for active learning, giving effective feedback, assessing learning. Because of how instrumental it has been to my own career advancement, I also continually stress to my mentees the value of being an effective communicator and educator. They are continually urged to take advantage of presentation and teaching opportunities. This will result not only in effective feedback, but will grow their network of institutional and external collaborators and ultimately support their professional development.

In some ways, teaching students is like raising children (I have two *actual* children, have chaired the committees of 6 *lab* children, and served as member of 12 others). I hope they'll be successful but also that they'll be kind and hardworking and will instill these values in the next generation of scientists. My proudest moments as a PI so far have been watching my students instruct the SSTP gene therapy course for gifted high school students (something I enjoyed teaching over 15 years ago when I was a graduate student). Watching them pay it forward is very rewarding. My goal is that all students will leave my lab/UF with the skills required to be a good scientist. These include not only prowess at the bench, but also a solid work ethic and a sense of good citizenship. A poor funding environment can unfortunately be a breeding ground for dishonesty, but I routinely impress upon my team the importance of ethics in their pursuits. My students often mention how impressed they are that I have so many collaborators. I explain to them that this comes from treating people with respect, never promising more than you can deliver, and by working very hard and honestly to maintain professional relationships. It has paid dividends to simply be respectful, and it is this very simple behavior that I hope to instill in all of my mentees.

My students have genuinely been the best part of my career. They bring color to my very hectic existence. I'm sure I've learned as much from them as they've learned from me, and it's with a heavy heart that I watch them graduate and go on to do wonderful things. Four have already left the 'nest' and formed the "Boye Lab Mafia Alumni Association" (BLMAA), a hysterical testament to how close we've all remained.

In closing, my mentoring style may not be for everyone, but it has fostered camaraderie and hard work in all of my previous and existing students. I will therefore continue to embrace this philosophy, and hopefully add many more members to the BLMAA! Thank you so much for considering me for the prestigious award!