

I have been a Faculty member of the College of Medicine (COM), University of Florida (UF) since 1999. During this time, it has been my great privilege to mentor 23 and co-mentor an additional 5 PhD students, as well as mentor 3 MSc students, and also be a committee member for hundreds of UF and other institution graduate students. In addition to these students, I am also currently training 2 PhD and 2 MSc students in the laboratory.

I have also had the great pleasure of teaching graduate students in formal lecture environments. During the past academic year, my teaching assignment involved lecturing in courses for undergraduate and graduate students and included 38 hours of lecture and 52 hours of discussion/review and exams. All the above duties give me great pride in my mentoring of graduate students but the most self satisfying aspect of my position is having the opportunity for one on one graduate research training in the laboratory.

*My concept of graduate student mentoring:*

My philosophy of graduate education is simple: it should be a life-defining experience. With this in mind, I approach graduate student education with vigor and enthusiasm. I ask my students to give their very best towards their research endeavors. This includes obtaining a fundamental understanding of both the basic and application science implications of the system they are studying; acquiring conceptual knowledge of the methodologies they apply and developing the skills of hypothesis-driven research. Beyond the expected system-mechanics of teaching, in order to ensure students acquire the skills that will broadly prepare them for professional and scientific careers, I want to pass onto my students my own passion for research. That is, I want them to experience what I can only describe as “the euphoria” of scientific discovery.

*My methods of mentoring graduate students:*

I see the mentoring of a graduate student as a very individualized experience almost like a parent–child relationship, and as such I treat each graduate student differently, trying to tailor our joint educational experience for the benefit of both teacher and student. I believe we all perform to our best ability when we are in the right environment, the atmosphere that drives the desire to learn and push research.

To achieve this goal, when I take on a new graduate student, the first year, is like an exploratory period, when the student and I try different avenues to determine what works best for us to achieve our mutual objectives. I have found this is a critical time for both of us to learn how best we can serve each other and maximize the benefits of the teacher-mentor relationship. Once this has been

established, I address mentoring with the same analytical and hypothesis-driven approaches that I use in research, as I encourage the students to plan their own dissertation projects and determine the sequence of experimentation themselves. As a consequence, I feel my students have always pursued highly original research projects using many different techniques.

I also strongly believe in my students learning from collaborative-base research, and I use the vast resources at UF to ensure all my students work closely with other faculty and students. I constantly ask my students to apply the fundamental concepts and theory learned in the classroom, including other disciplines, to their research interest. My main goal is to encourage independent thinking and analytical reasoning to augment their problem-solving skills.

I always try to teach my students to their strengths yet push them into areas where they will test their abilities. At the same time, I try to learn from my students' experiences. We share experimental concepts, experimental designs, and methods as we conduct hypothesis-driven research, write manuscripts, and read the published literature together.

*Outcome of mentoring graduate students:*

I will let my student successes speak for my mentoring skills. With regard to the 23 graduate students I have mentored at UF, all completed their training in less than five years (several in four years). All have authored (many as first authors) multiple research papers (with an average of 8 papers) in respectable peer-reviewed journals. In their final year of graduate training all have been invited to national meetings (several to an international meetings) to orally present their research findings. All are currently continuing their research careers at nationally recognized institutions, industry, or practicing law, and those in academia have since published papers in their respective fields of research.

In conclusion I consider myself dedicated, enthusiastic, approachable, resourceful, organized, innovative, and knowledgeable, with a keen attitude towards mentoring students. I believe that the role of a mentor is allowing the student to discovery themselves and most importantly enjoy the journey to enlightenment. I feel my students develop the skill sets to be successful, with the ability to ask the right questions, evaluate data, and draw defensible conclusions. The rewards for mentoring are great; for I have realized the joy of seeing the students, I have trained "leave the nest, spread their wings and fly".