

## **PERSONAL STATEMENT ON DOCTORAL MENTORING STYLE**

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I am deeply honored to be nominated for a 2020-2021 Doctoral Dissertation Advisor/Mentoring Award as I consider mentoring both the most challenging and the most satisfying aspect of my professional duties as a University of Florida Professor.

I fundamentally see myself as a 'guide to independence'. I believe that it is my role to guide students in attaining the knowledge, experience, and confidence that will allow them to conduct original research and develop independent careers. My goal is to maximize each student's potential. I aim to mentor them individually, depending on their personality, motivation, and experience, while paying particular attention to my possible approaches to build their strengths and overcome their weaknesses.

As a mentor, I believe it is important to instill in students a strong research ethic while preparing them with skills to survive in a highly competitive job market after graduation. I try to model for my students. I believe that good mentors must be good role models and that our work and demeanor must be well respected in our field and community. I hold them to high standards of excellence. I impress upon them my belief that in order to be successful it is critical for them to not only conduct quality research but also to be able to effectively communicate their findings both orally and in writing. To assist in these aspects of their career development I spend significant time with them polishing their writing and speaking skills and encourage them to speak publicly whenever possible and prepare manuscripts for publications as their research progresses.

As they mature I invite my students to participate in reviewing manuscripts, and when the occasion arises, I include them in the development of grant applications. I do this because I believe such exposure to be an essential aspect of graduate student learning as it not only sharpens their critical view of scientific endeavors but also prepares them for tasks they will invariably face in the future. Again, I try to lead by example, allowing them to participate in both my successes and failures; including the joy of a successful grant application and its resulting funding as well as the inevitable and demoralizing grant proposal rejections. In my experience, the latter can be particularly devastating for the developing scientist. I share with them that yes rejection hurts, but more importantly emphasize that they should not see failure of a proposal as a personal deficiency. I relate to them that these highs and lows are an integral part of our being scientists and encourage them to take things in stride, to work to the best of their abilities, and to proceed with confidence to confront the challenges that lie ahead in their future careers.

I believe that the process of developing free-thinking independent scientists is greatly aided by a healthy laboratory environment; one that supports active sharing and discussion, promotes collaboration, enhances scientific exchange, and furthers innovative ideas. I actively encourage these interactions and allow maximum freedom while providing a safety net should they stray afar. All of my students attend at least one national or international scientific conference a year. These provide unlimited unique opportunities to meet and share ideas with others in the research community. The visibility they gain and the experiences they have increase their research competency and create a level of enthusiasm for scientific endeavor that is priceless.

Since arriving at the University of Florida in the summer of 1995, 15 students have received their PhD under my supervision and I am currently mentoring two PhD students. I have served on 47 PhD student advisory committees. Support for my students and their research has come from federal NCI and State of Florida grants, pharmaceutical company resources, as well as my endowed chair in radiation oncology. During my past 25 years at the University of Florida my lab has published 134 manuscripts with my doctoral students participated in 55 of these; as first author on 37 and as co-author on the other 18. My graduates have found success in academic institutes, pharmaceutical industry, and the federal government. They also have been recognized for their academic and research achievements. One of my current student is perhaps my best example. Mai Tanaka in 2019 won the Junior Investigator Award at the 16<sup>th</sup> International Tumor Microenvironment Workshop, a prestigious UF Health Cancer Center Pre-Doctoral Award and was selected to be UF's international student to apply for the highly competitive National Cancer Institute F99/F00 Predoctoral to Postdoctoral Transition Award. In 2020 she received the UF Alec Cortelis Award, and a third place in the 2020 UF 3-minute thesis competition.

I have been recognized for my mentoring as the recipient of COM Student Mentoring Awards in 2005, 2011, 2020, the 2013 UFHCC Mentoring Outside the Box Award, the COM Exemplary Teachers Award in 2016, and the Department of Radiation Oncology Basic Research Education Award in 2016 and 2019. It was my commitment to graduate education which in 2014 led me to develop the Cancer Biology Concentration in the COM Graduate Program in Biomedical Sciences. This experience resulted in a major shift in my career from one emphasizing research to one focused on education and led me in 2017 to accept the role of Associate Director for Education and Training at the UFHCC. During the past 3 years I have developed the UFHCC University Scholars Program, a Cancer Certificate, a Cancer Policy Internship in DC, a Cancer Symposium for High School Students, and two Cancer Conferences for Middle and High School Teachers in Florida. In all of these I encouraged the active participation of our graduate students. They have welcomed these opportunities to speak about their research while serving as ambassadors and promoting graduate education to the next generations of students. Such experiences will undoubtedly enhance their potential to achieve successful professional careers.

As a mentor of students, I aim to assist in their developing not only laboratory skills but also the confidence to meet the challenges of a research career. I make them aware of the processes involved in funding research programs and encourage them to pursue fellowships not only for the prestige of potentially receiving such an award but perhaps even more importantly to allow them to begin to gain an understanding of the granting mechanisms which will likely become part of their future. My overall goal is to develop capable, independent, and inquisitive scientists, who are excited about what they do and are equipped to seek out and thrive in whatever field they choose to explore. I believe that exceptional mentoring is at the core of the graduate education mission and I hope in my own humble way to contribute to the legacy of those who inspired me. I take great pride in my students' success. To observe their development from a novice who first enters the laboratory, to an accomplished productive young research scientist who leaves it, is one of the most rewarding aspects of my role as a University of Florida Professor.