

TEACHING

During the early stages of my formal education as a biomedical scientist, I was fortunate to also receive pedagogical training. I first had the opportunity to apply this pedagogical training as teaching assistant. I have been teaching to undergraduates, graduate and professional students since.

I have the same commitment to teaching biological sciences as I have for biomedical research. As a teacher, my goal is to inform, entertain and ultimately transmit enthusiasm for the subject matter by always delivering information through well-developed instructional strategies regardless of the subject or the audience. While teaching, I also must remain sensitive to learners' didactic needs while being consistent with the knowledge objectives. Learners should be actively involved in the learning process, thus a course should blend lectures with computer-assisted and team-based learning activities. As such, lectures should be few and directed at giving class cohesiveness as well as directional stability to the didactic process, a learning process that must also directly engage learners through specific assignments, presentations-discussions, computer-assisted simulations, etc. To deliver informative well presented lectures, instructors must have command of the subject (preferably first hand experience), a willingness to constantly improve his/her teaching skills and develop a sensitivity for determining when learners have an understanding of what is being taught. Moreover, it is always important to review critically every aspect of your didactic approach and be willing to accept criticisms regardless of the source. A thorough analysis of criticisms and suggestions is essential to improving and reshaping the didactic process. Effective teaching also requires learners' participation, thus being a student also carries its responsibilities. Learners' responsibilities always include a commitment to acquiring the necessary discipline for reviewing the subject matter and willingness to be active participants during all aspects of the didactic process.

Training graduate students in biomedical research is a special form of instruction. This training is largely based on building a trusting relationship between an experienced faculty advisor and a graduate student. These learnerships rest on mutual respect and are built step-by-step thus, similar to that found between an experienced craftsman and his/her apprentice. Training often take years and initially involves identification of learners' deficiencies in basic scientific knowledge. This is followed by giving learners conditions to acquire the necessary discipline to conduct experimental research safely and critical review and analysis of experimental observations regardless of how these appear to give clear or unexplained results. As learners progress in their training, advisors must also provide them with guidance ranging from respecting the point of view of others, including competitors, to the ethical principles governing the conduction of research. For the above learning strategy to be effective, the instructor has to be able to give priority to graduate students' growth as scientists over the research project itself.