

My philosophy of teaching comes from my own personal experience as a research scientist and my prior experience as a student and Teaching Assistant. Values that I consider very important to my teaching are to stimulate **active learning**, to introduce students to different **resources**, to encourage **teamwork**, and to encourage originality and **innovation**. I strongly encourage critical thinking as well as I emphasize **ethics** and professionalism.

In the past, I taught Plant Morphology for two semesters, both classroom and laboratory, for undergraduates in Biology at Federal University of Minas Gerais – <u>UFMG</u>, Brazil. I also taught Instrumentation of Zoology laboratory for senior High School students at <u>Colégio Santo Agostinho</u> for one semester as part of an Education Outreach Program at <u>UFMG</u>.

In 2004, I offered one-day training in **Bioinformatics** at University of São Paulo – <u>USP</u>, Brazil, for graduate and undergraduate students in MicroBiology, Immunology, and Genetics majors. At Dr. David Pollock's laboratory at Louisiana State University – <u>LSU</u>, EUA, I was directly involved with undergraduate **student research** from 2004 to 2006. I returned to <u>USP</u> in 2007 to teach a class (lecture and computer lab) for the students of the <u>Molecular Sciences Program</u>.

I contributed with a chapter on **Genome Evolution** to the multi-authored book, <u>Molecular Biology and Evolution</u>, aimed at graduate and advanced undergraduate students in Biology and related areas. Our main goal was to provide teachers and students with a resource in the ever-expanding fields of Molecular Biology, Molecular Evolution, and Phylogenetics. This was the first textbook in those fields that was accessible to Portuguese speaking students and it has been adopted by several Brazilian Colleges and Universities.

In collaboration with **Dr. Sergio Luiz Pereira**, I wrote another chapter on "**Phylogenomics**, **Protein Family Evolution**, and the **Tree of Life**", which appears in the edited book, <u>Studies in Computational Intelligence (Springer-Verlag)</u>.

Taking the applications of Phylogenomics to the next level, I am offering a graduate course with Dr. Sergio Mendonça at <u>Fiocruz</u>, Rio de Janeiro, Brazil, in August 2008. Our major goal is to explore molecular diversity within a phylogenomic framework, which can be applied to biomedicine and biotechnology (IOC25075).

In my career, I have also had the opportunity to present several **lectures and seminars** about Protein Evolution, Functional Genomics, Biotechnology, Professional Career, among other topics in different environments such as Academia, Industry, and Scientific Meetings.

My long-term goals are to participate actively in graduate and undergraduate research by working as a teacher, and most importantly, as a **facilitator**. I also plan to develop educational

materials and to participate in **teacher education** and pedagogic programs. Together these long-term goals match a broader project; that is to bridge **Science**, **Technology**, **Education**, and **Outreach**.