

**Dr. Laila Alves Nahum** was born and raised in Belo Horizonte, Minas Gerais, Brazil. As a teenager, she decided to pursue a career in Science, inspired by her parents and by Professor Jenner Procópio de Alvarenga, a family friend. In 1990, she received her Bachelor degree in Microbiology from the Federal University of Minas Gerais – <u>UFMG</u>, Brazil. Her undergraduate work was developed with Dr. Romain Rolland Golgher and was focused on the study of populations of parainfluenza virus, interference, and interferon induction.

In 1993, Dr. Nahum received her Master degree from the University of São Paulo – <u>USP</u>, Brazil, working with Dr. Bianca Zingales. Her dissertation described the cloning and characterization of surface antigen encoding genes of *Trypanosoma cruzi*, the agent of Chagas Disease. Just after that, Dr. Nahum spent about three years with Dr. Carlos F. M. Menck at <u>USP</u> working on DNA repair in *T. cruzi*. In 1996, Dr. Nahum joined Dr. Anita Wajntal's Laboratory at <u>USP</u> to study the molecular phylogeny and evolution of Ramphastinae (toucans and aracaris) using mitochondrial DNA sequences. Dr. Nahum received her her Ph.D. degree in 1998.

At the Marine Biological Laboratory – <u>MBL</u>, USA, Dr. Nahum worked as a Postdoctoral Scientist with Dr. Monica Riley and her group from 1999 to 2002. At <u>MBL</u>, Dr. Nahum had the opportunity then to take a very close look at the protein world, expanding her knowledge on biochemistry, genomics, and molecular evolution. During the time working at <u>MBL</u>, Dr. Nahum applied a variety of bioinformatic tools to address questions regarding the evolution of protein families, focusing on gene duplication and functional divergence of enzymes.

Between 2002 and 2003, Dr. Nahum worked as a Senior Scientist at <u>Alellyx Applied Genomics</u>, a pioneer biotechnology company in Campinas, Brazil. With Dr. Joao Setubal and Joao Kitajima, she helped designing a gene discovery system to support multiple projects besides working also with Dr. Paulo Arruda.

Dr. Nahum joined Dr. David Pollock's Laboratory at Louisiana State University – <u>LSU</u>, USA, in 2004 to work on the functional divergence of photolyases (DNA repair) and cryptochromes (circadian clocks, etc) as well as the design and documentation of <u>EGenBio</u>, a system for Evolutionary Genomics and Biodiversity. While conducting research on protein evolution, Dr. Nahum reviewed an old dream: she started working more closely with graduate and undergraduate students. Between 2006 and 2007, Dr. Nahum was invited to return to the <u>MBL</u> by Dr. Monica Riley and Dr. Gretta Serres to expand her previous projects on the functional divergence of protein family member.

In 2007, Dr. Nahum returned to Brazil to work with Dr. Sergio Mendonça at Oswaldo Cruz Foundation – <u>Fiocruz</u>, Rio de Janeiro, Brazil, combining molecular biology, genomics, and bioinformatics to characterize potential targets for development of vaccines against leishmaniasis.