

Master's Project in Bioinformatics



The Pavri group at the IMP is offering a Master's project in the field of bioinformatics. Our group works on understanding the mechanisms of antibody maturation in B cells and associated genome instability. Antibody maturation is essential to generate a diverse and antigen-specific repertoire of antibodies. However, this process necessarily involves transcription-mediated mutation and DNA breaks that can, infrequently, also lead to deleterious chromosomal translocations and cancer. Our goal is to understand how the interplay between transcription, DNA repair and DNA replication contribute to the generation of genome instability in B cells. As part of this goal, we have generated next-generation sequencing datasets of genome-wide transcription, replication and translocation profiles in B cells which require extensive bioinformatics analysis.

The applicant should:

- have experience in at least one scripting language such as Python / Perl
- have basic knowledge in R for data handling and plotting
- be able to work on a Linux-platform
- have a basic intuition about statistics

The student will be integrated into an excellent and diverse group of bioinformaticians at the IMP, and will hence benefit from close interactions and shared expertise. Although the student will be supervised by and work together with our bioinformatician, he/she will be expected to work independently and collaborate closely with our internationally diverse group. Therefore, it is essential that the student is highly motivated and curiosity-driven, a good team player, proficient in English and has a basic background in biology.

Interested candidates should send a CV and letter of interest to:

Dr. Rushad Pavri

Group Leader
Research Institute of Molecular Pathology (IMP)
Vienna BioCenter
Campus-Vienna-Biocenter-1
Vienna 1030, Austria

Email: rushad.pavri@imp.ac.at