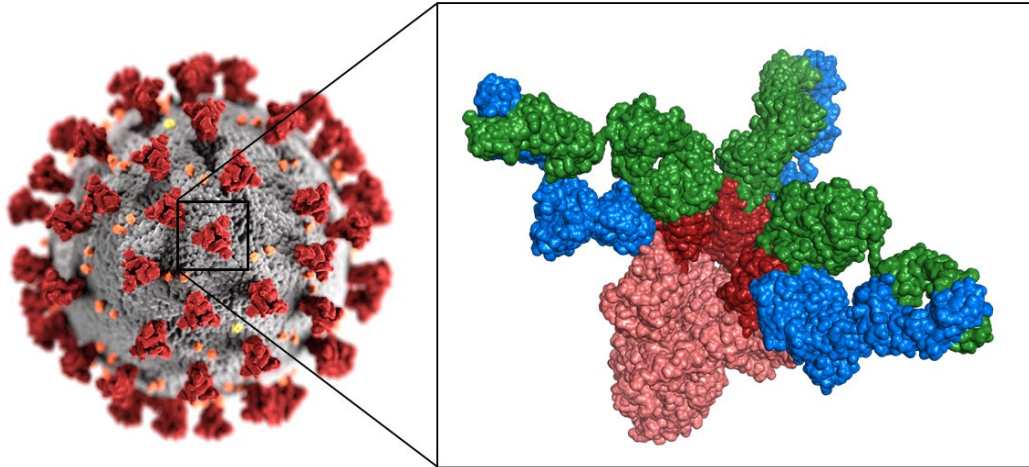


PhD positions in
“Antibody-pathogens interactions”
Institute for Research in Biomedicine
Bellinzona (Switzerland)



What makes a good antibody? A multidisciplinary approach

Our group strives to understand the molecular properties allowing a given antibody to effectively neutralize a human pathogen. We then use this information to engineer new antibodies for immunotherapy or antigens for vaccination strategy or diagnostic.

To perform this research, we, the Varani group (<https://www.irb.usi.ch/structural-biology/>), use a highly multidisciplinary approach varying from structural to cellular and molecular biology, computational simulations, biophysical and infectivity assays, confocal microscopy and virtually any technique that is required to answer biomedical questions. As a PhD student you will be exposed to all these.

In recent years, we enjoyed high impact works on Zika (Cell), Prion (Plos Path.), SARS-CoV-2 (Nature) and more. We developed the first human bispecific against COVID-19, now headed for clinical trial.

Institute for Research in Biomedicine

The IRB (<https://www.irb.usi.ch/>) occupies a brand new, modern building in Bellinzona, Ticino, Switzerland. It is a world-renowned research institute with very high impact publications from all its groups and state of the art facilities.

The IRB doctoral (PhD) program at the IRB enjoys high-caliber speakers from all over the world, allowing students enrolled at Swiss universities to carry out their thesis.

Joint activities with the hosted oncology research institute (IOR) complete the offering.

Your Profile

Candidates should have a Master degree related to life sciences, with hands on laboratory experience (biochemistry, physics, molecular biology) and be comfortable with English. Knowledge in protein expression and purification, and in biochemical and molecular biology methods, is required; hands-on experience in these fields, as programming skills are a big plus. Flexibility and ability to adapt to new challenges is required.

If interested, send your applications including CV, a letter of motivation, reference letters and/or name and contacts of two referees to: luca.varani@irb.usi.ch