

Student Research Positions in Computational Biology (Masters Theses and Project Work)

The **Kamerlin Lab** at the **Department of Cell and Molecular Biology, Uppsala University** is a vibrant research group comprised of 4 postdoctoral, 5 doctoral, and several Masters and undergraduate students. We are computational chemists and biologists, using a broad range of state-of-the-art and in-house techniques to understand the chemical basis for complex biological problems. We also provide a unique opportunity to work in a both interdisciplinary and also highly international research environment, with over ten nationalities from across the globe represented in our group.

Example of key scientific problems of interest to the group include:

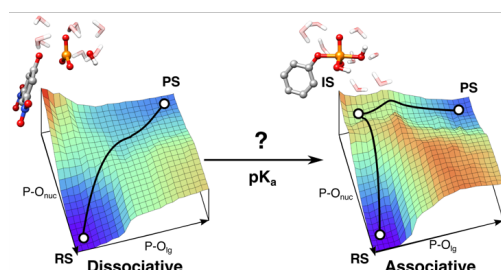
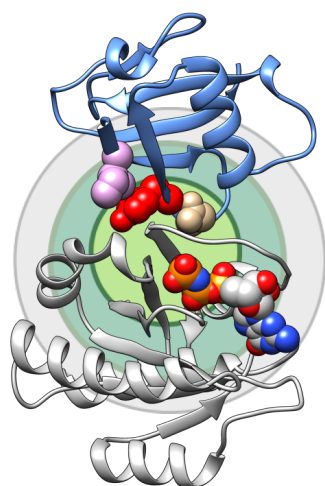
1. Conformational dynamics and the evolution of enzyme function.
2. Enzyme design, both methodology development and applications.
3. Developing new biotherapeutics for treating pesticide and nerve agent poisoning.
4. Using computer simulations to understand how proteins recognize DNA.
5. Understanding the mechanisms and regulation of biological GTP hydrolysis.
6. Modelling the behaviour of disordered proteins such as the amyloid beta peptide, which plays a central role in the development of Alzheimer's disease.

We regularly publish our work in the top journals in the field, including the Journal of the American Chemical Society, Chemical Science, ACS Catalysis, Nature Communications and more, and several undergraduate and Masters projects have led to publications.

We always welcome motivated students from different backgrounds, and can accommodate both Masters thesis projects (exjobb) as well as undergraduate research projects, and due to the diverse nature of our research, projects can be tailored to your interests.

For more information about our research, check out <http://kamerlinlab.com> or <http://elflab.icm.uu.se/kaw/agile>, and to discuss the possibility of joining the group, contact the group leader, Lynn Kamerlin, kamerlin@icm.uu.se.

We look forward to hearing from you!



CADEE
Enzyme Evolution

