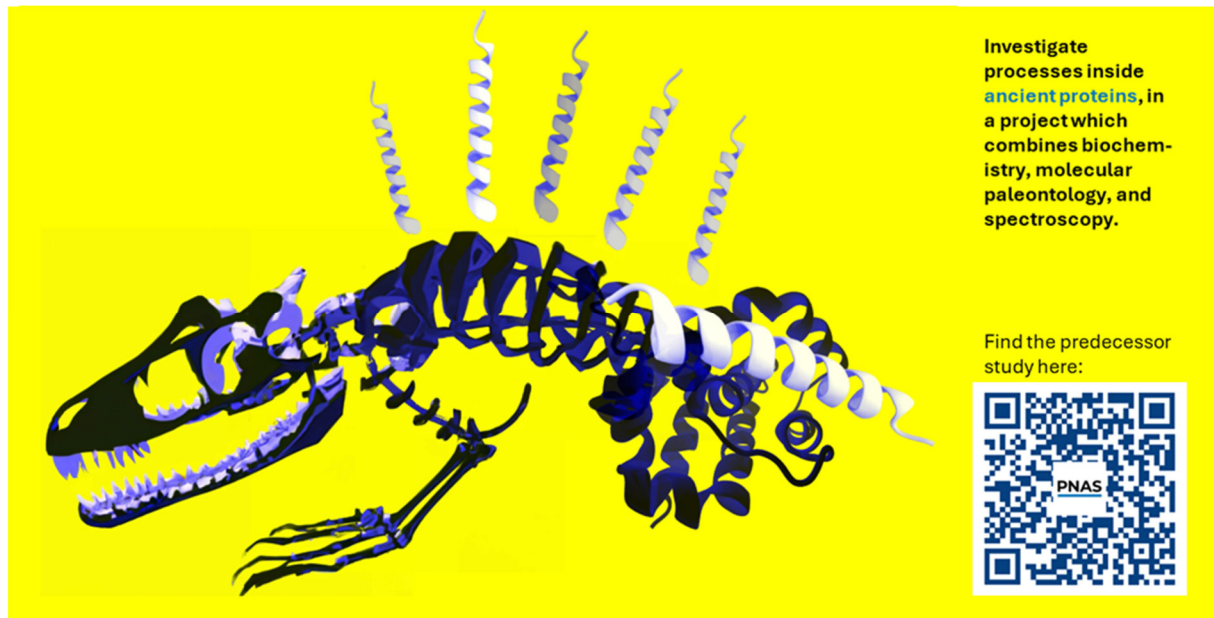


Open Position – Research project for master students in Biochemistry / Chemistry / Life Sciences


Reviving ancient proteins – How did proteins function billions of years ago?

Position for summer/fall 2024 | Application deadline: 14.06.24 | #proteinbiochemistry



Investigate processes inside **ancient proteins**, in a project which combines biochemistry, molecular paleontology, and spectroscopy.

Find the predecessor study here:



Proteins – the fundamental building blocks of life – exist as dynamic ensembles, undergoing rearrangements and folding/unfolding processes. Understanding this dynamic nature is crucial for comprehending protein function. However, the impact of evolution on ultrafast processes within proteins remains largely unexplored.

In a fascinating new project, a team around Dr. Philipp Heckmeier at the Department of Chemistry (Group of Prof. Peter Hamm, Campus Irchel, UZH) wants to go back in time and explore proteins which are older than 4 billion years. Did the molecular mechanisms inside a very old protein family stay untouched for this unbelievably long time scale? Or were the dynamic processes and function altered by selection pressure?

Join us for a research project at Campus Irchel! Be at the forefront of academic research combining biochemical and spectroscopic methods, answering essential questions in molecular paleontology.

You will be trained in methods **relevant for academia and industry**:

- Expressing proteins in a high throughput approach
- Purification of proteins for a scientific application
- Characterization of proteins with UV/VIS and infrared spectroscopy
- Contributing to a study with high scientific potential

Your profile:

- You are a master student in biochemistry / chemistry / life sciences with good or very good marks.
- You are looking for a research project for your curriculum (research projects, thesis, etc.) **in summer/fall 2024.**
- You want to contribute to a study which uncovers elemental questions of life with proteins which have therapeutic potential.

Interested? Then get in touch with Dr. Philipp Heckmeier (Department of Chemistry), until Friday 14.06.2024, philipp.heckmeier@chem.uzh.ch.