

PhD position in Structural RNA Bioinformatics

Vienna, January 2023

A fully funded three-year PhD position is available at the Wolfinger lab, Research Group Bioinformatics and Computational Biology, Faculty of Computer Sciences, University of Vienna, Austria. We are recruiting a highly motivated PhD candidate to join our team and help us understand the intricate mechanisms of **structured viral RNAs in Synthetic Biology**.

The project: The research project will be in the field of **Computational RNA Biology**, focusing on the **design of exoribonuclease-resistant RNAs (xrRNAs)** and **xrRNA riboswitches**. It is part of the FWF/DFG-funded project “Design of RNase-resistant RNA structures” in collaboration with Prof. Mario Mörl, Leipzig University, Germany.

The position: In this position, you will have the opportunity to work on cutting-edge research questions using state-of-the-art computational techniques for **Computational RNA Design** to uncover novel insights into **Structural RNA Biology**. You will be developing novel computational tools for **Synthetic Virus Bioinformatics** and you will also have the opportunity to collaborate with experimentalists to validate your computational predictions.

The lab: Our lab is located alongside the Department of Theoretical Chemistry, University of Vienna, which is the home of the **ViennaRNA Package**. The lab is equipped with state-of-the-art computational resources, including high-performance computing clusters and access to the main ViennaRNA development team. We are committed to providing a stimulating and supportive environment to help you achieve your research goals and develop your skills as a scientist.

Your profile: The ideal candidate will have

- a graduation (Diploma or Masters certificate) in Computational Biology, Bioinformatics, Theoretical Chemistry, Physics, Mathematics, Computer Sciences, or a related field
- dedication and enthusiasm about computational RNA structure prediction and algorithm development
- strong programming skills in C/C++, and Python
- experience in machine learning techniques
- a critical and analytical mind, and team spirit
- excellent English skills

Previous experience in RNA structure prediction, as well as software development are an asset.

Salary: The salary follows the standard FWF personnel cost guidelines, see <https://www.fwf.ac.at/en/research-funding/personnel-costs>.

If you are excited about the opportunity to contribute to the field of **Synthetic and Computational RNA Biology** and make a real impact, we would love to hear from you. Send your letter of motivation, CV, detailed description of project-related experiences and technical skills, university certificates, and contact data of at least one reference as a **single PDF file** by email to

jobs@xrrna.bio (subject [PhD application - xrRNA])

Applications will be considered until the position is filled.