

## COMPUTATIONAL ANALYSIS OF RNA-PROTEIN INTERACTIONS AT VIENNA BIOCENTER CAMPUS

## 1 PhD student position available 1 Postdoctoral position available

One PhD student position and one postdoctoral position are available immediately in the group of Bojan Zagrovic (Max F. Perutz Laboratories and University of Vienna) at the Vienna Biocenter Campus in Vienna, Austria for work on **computational analysis of RNA-protein interactions**. Candidates for the PhD student position should have a background in molecular biology, chemistry, physics, computer science or a related discipline and an interest in molecular dynamics simulations, computational structure modeling and structural bioinformatics. Candidates for the postdoctoral position should have a significant track record in the area of physicochemical modeling and computational analysis of biomolecular systems.

Interested candidates should send an expression of interest and a CV to:

## bojan.zagrovic@univie.ac.at

## References

**1.** Bartonek L & Zagrovic B (2017) "mRNA/protein sequence complementarity and its determinants: The impact of affinity scales", **PLOS Computational Biology**, 13(7), e1005648.

**2.** 10. Hajnic M, de Ruiter A, Polyansky AA & Zagrovic B (2016) "Inosine nucleobase acts as guanine in interactions with protein side chains", **Journal of the American Chemical Society**, 138, 5519–5522.

3. de Ruiter A & Zagrovic B (2015) "Absolute binding-free energies between standard RNA/DNA nucleobases and amino-acid sidechain analogs in different environments", **Nucleic Acids Research**, 43(2), 708–718.

4. Polyansky AA & Zagrovic B (2013) "Evidence of direct complementary interactions between messenger RNAs and their cognate proteins", **Nucleic Acids Research**, 41(18), 8434-8443.