

Rahel Frick

Education & Research

✉ rahel.frick@medisin.uio.no

Education

- 2016–today **Ph.D. student**, *University of Oslo*, Norway.
- 2013–2015 **M.Sc. in Biophysics**, *Humboldt University Berlin*, Germany.
- 2010–2012 **B.Sc. in Biochemistry**, *Free University Berlin*, Germany.

Research Experience

- 01/2016–today Ph.D. student at the Department of Biosciences, University of Oslo, Oslo, Norway. Supervised by Inger Sandlie:
Antibody engineering and molecular immunology
- 01/2016–03/2016 Visiting Scholar at Johns Hopkins University, Baltimore, USA in the group of Jeffrey J. Gray:
Computational antibody modeling and docking
- 08/2015–01/2016 Principal Engineer at the Centre for Immune Regulation, Oslo University Hospital/University of Oslo, group of Inger Sandlie:
Phage display
- 11/2014–07/2015 Master thesis at the Centre for Immune Regulation, Oslo, Norway in the group of Inger Sandlie:
Selection and characterization of peptide:MHC binding antibodies
- 05/2014–10/2014 Research project at the Biotechnology Centre, Oslo, Norway in the group of Bernd Thiede:
Proteomics
- 02/2014–04/2014 Project work at Humboldt University Berlin in the group of Andreas Möglich:
Data analysis with python
- 09/2012–12/2012 Bachelor thesis at Free University Berlin in the group of Christian Freund:
Protein biochemistry and molecular immunology
- 07/2012–09/2012 Internship at the Max Delbrück Center for Molecular Medicine in Berlin in the group of Udo Heinemann:
Molecular Biology and crystallography

Scholarships

- 2017 FOCIS travel grant for the FOCIS Advanced Course in Scottsdale, Arizona, USA
- 2016 CIR travel grant to visit Johns Hopkins University, Baltimore, USA
- 2014-2015 Erasmus+
- 2012-2015 Academic scholarship of the Friedrich Ebert Foundation

Computer skills

- Scientific software Antibody modeling and docking using Rosetta
- Programming Python
- Data analysis NumPy (Python), SciPy (Python), Microsoft Excel, LibreOffice Calc
- Data visualization Matplotlib (Python), GraphPad Prism
- Operating systems Mac OS, GNU/Linux, Microsoft Windows
- Word processing L^AT_EX, Microsoft Word, LibreOffice Writer

Additional Skills

- 2008 Cultural communication, intercultural psychology, organizational communication (Part-time courses at Manhattanville College (USA))

Languages

- Native German
- Fluent English
- Intermediate Norwegian
- Basic Spanish, Latin

Publications

- **A TCR α framework-centered codon shapes a biased T cell repertoire through direct MHC and CDR3 β interactions**
Kristin Støen Gunnarsen, Lene Støkken Høydahl, Louise Fremgaard Risnes, Shiva Dahal-Koirala, Ralf Stefan Neumann, Elin Bergseng, Terje Frigstad, **Rahel Frick**, M. Fleur du Pré, Bjørn Dalhus, Knut E.A. Lundin, Shuo-Wang Qiao, Ludvig M. Sollid, Inger Sandlie, Geir Åge Løset.
JCI Insight (2017)
- **Modeling and docking antibody structures with Rosetta**
Brian D. Weitzner, Jeliasko R. Jeliaskov, Sergey Lyskov, Nicholas Marze, Daisuke Kuroda, **Rahel Frick**, Jared Adolf-Bryfogle, Naireeta Biswas, Roland L. Dunbrack Jr., Jeffrey J. Gray.
Nature Protocols (2017)
- **Consolidation of proteomics data in the Cancer proteomics database**
Magnus Ø. Arntzen, Paul Boddie, **Rahel Frick**, Christian J. Koehler, and Bernd Thiede.
PROTEOMICS (2015)