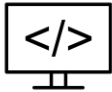


Vera Flück | *MSc in Biology*

Major Virology - Minor Bioinformatics

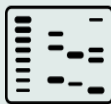
As a highly motivated researcher with a M.Sc. degree in Virology and Bioinformatics, I possess a strong foundation in both biological and computational sciences, which I am eager to apply to cutting-edge research projects. My particular interests lie in understanding virus-host interactions, single-cell transcriptomics, and comparative genomics at the animal-human interface.

Technical experience



High level of expertise in programming languages such as **R** and **bash**. Good technical competences in **Python** and interacting with a High-Performance Computing (HPC) clusters.

Practical experience with bioanalytical questions in cell biology as well as micro- and molecular techniques such as **RNA extraction**, **RT-qPCR**, **SNP** detection methods.



Technical skills with cellular assays using **CHO** and **HaCaT** cell lines.

Technical competences for biochemical and immunological methods such as **SPR**, **BLI**, **SDS-PAGE** and **ELISA**. Practical experience with **GC** and **HPLC analytics**



Practice with particle analytics, especially with **liposomes** used as drug delivery systems using **DLS**, **Zeta Potential** and **DSC** measurements

Training in thorough conception, planning and conduction of experiments with statistical experimental design. Training in detailed documentation of projects in written and oral format.




29.07.1995

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+41774722790

 <https://orcid.org/0000-0003-2807-5891>

 <https://www.linkedin.com/in/veraflueck/>

Core competencies

Project management

- Co Project Manager on Nano Argovia Project in 2020

Data analysis of scRNA-seq data

- Masterthesis project on single cell Transcriptomics

Communication and Responsibility

- Supervision of Master- and Bachelor students
- Class representative and Member of Student Council for three years



German, native language

English, C1, fluent written and spoken

French, B1, basic communication skills

Leisure



Employment History

2022 - today

Doctoral student

January 2024 – today
Institute of Virology and Immunology,
Vetsuisse Faculty, University of Bern



Graduate School
for Cellular and
Biomedical Sciences

Federal Trainee in Bioinformatics

April 2023 – September 2023
Institute of Virology and Immunology,
Vetsuisse Faculty, University of Bern



«Development of a Bioinformatics Framework to
process and analyze Nanopore Sequencing data»



Graduate Research Fellow

February 2022 – February 2023
Institute of Virology and Immunology, Vetsuisse Faculty, University of Bern
«Comparison of MERS-CoV infection in human and camelid primary airway
epithelial cells with single-cell resolution»

Scientific Associate and Co-Project Manager

February 2020 – January 2022
Institute for Pharma Technology
FHNW School of Life Sciences, Muttentz, Switzerland
In Collaboration with Acthera Therapeutics AG



«Mechanoresponsive Liposomes – Development of a preclinical
formulation and a manufacturing process for pilot scale production»

2019 - 2022
September – January

Scientific Assistant

September 2019 – January 2020
Institute for Chemistry and Bioanalytics
FHNW School of Life Sciences, Muttentz, Switzerland
«Development of an enzyme-based Lateral Flow Immunoassay
for a Biomarker relevant in Transplant Medicine»



2019
April – July

Undergraduate Research Fellow

Bachelor thesis
«Array-based Molecular Computing using Reaction-Diffusion»
Harvard University, Boston, Massachusetts, USA



2018
August – November

Intern

Development of an LFIA based on a biomarker for the
program “Digital in-vitro diagnostics for the ageing society”
FHNW School of Life Sciences, Muttentz, Switzerland



2014 - 2015
September – August

Intern

Maturity Certificate in Health Studies and Natural Sciences
Photostability of tattoo pigments under the impact of light
Health Department, State Laboratory Basel, Switzerland

Education History

2020 - 2023
February - April

MSc in Biology

Concentration in Virology, Minor in Bioinformatics
University of Zürich
Zürich, Switzerland



BSc in Molecular Life Sciences

Specialization in Biochemistry, Cell biology, Micro- and
Molecular Biology
FHNW School of Life Sciences
Muttentz, Switzerland



2016 - 2019
September – September