ANNA N. BOSS

Zürich, CH | Email | LinkedIn | GitHub

// PROFILE

I am currently pursuing a second Master's in Bioinformatics and Computational Biology, building on a background in Biomedical Science with a focus on ageing research. I want to contribute to bridge the gap between biomedical research and computational analysis, leveraging data-driven approaches to uncover insights into complex biological processes. Eager to gain hands-on experience in bioinformatics, I am passionate about integrating multi-omics data, developing predictive models, and contributing to innovative solutions in healthcare and longevity research.

// WORK EXPERIENCE

Nov. 2021 - Jul. 2024
Rotkreuz, CH

R&D Scientist Lab Technician Assay Development
Roche Diagnostics International AG

- Implemented a semi-automated clinical sample management system using JSL, streamlining sample tracking, improving accuracy, and ensuring regulatory compliance.
- Developed Tableau dashboards using SQL to analyse product performance data, enabling data-driven decisions enabling faster identification of product issues and improving customer satisfaction.
- Contributed to IVDR product development in a BSL-3 environment, adhering to GxP guidelines and maintaining high safety and quality standards.

Jul. - Aug. 2019
Basel, CH

Research Summer in Peter Scheiffele Lab
University of Basel

My project aimed to evaluate if the method of rolling circle amplification can be used to detect alternative spliced mRNA in cortical neurons in mice.

// EDUCATION

2024 – 2026
Fribourg/ Bern, CH

MSc Bioinformatics and Computational Biology
University of Fribourg and Bern

- Gained proficiency in Bash, Python, and R programming, with a focus on bioinformatics applications. Built a strong foundation in biostatistics.
- Acquired hands-on experience SNP calling using tools like SnpEff, and performed de novo assembly of HiFi reads.
- Conducted an RNA-seq project analysing breast cancer samples using HPC computing. Workflow and code are available on GitHub.

2020 – 2021
Brighton, UK

MRes Stress, Ageing and Chronic Disease
University of Brighton

- Investigated abnormalities in routine kidney function tests as markers of severe COVID-19 using machine learning techniques.
- Acquired Python programming skills autonomously to preprocess data, develop predictive models, and extract actionable insights.
- Collaborated within a multidisciplinary team to address complex research challenges.
- Presented findings at the British Pharmacology Society Annual Meeting 2021 and published research in IJMS (doi:10.3390/ijms23137260)

2017 – 2020
Brighton, UK

BSc Hons Biomedical Science
University of Brighton

My project evaluated whether the data generated by 23andMe yielded SNPs thought to have a significant effect on the metabolism of simvastatin and warfarin.

2010 – 2016
Zug, CH

Swiss Matura
Kantonsschule Zug

Main focus on Mathematics and Physics