MARK ZURBRUEGG

Molecular Biologist & Coder

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betaglutamate.github.io/online-cv/

EXPERIENCE

Doctoral Student

University of Edinburgh

- August 2019 Ongoing
- Edinburgh, UK
- Created new E. coli strain using Gibson assembly
- Investigated triggers of the osmotic shock response
- Built automated analysis platform for our custom built bioreactor in Python
- Used custom R script to analyze protein expression in response to osmotic shock

Research Associate

Karolinska Institute

- **Sept 2016 October 2019**
- Stockholm, Sweden
- Published first author article about glucocerebrosidase in Parkinsons
- Developed new technique to measure α synuclein lipid binding affinity using recombinant protein

Master Student

Universitätsspital Zürich

- **2014 2016**
- Zürich, Switzerland
- Worked in a team to develop a high-throughput siRNA screen

Undergraduate Student

University of Glasgow

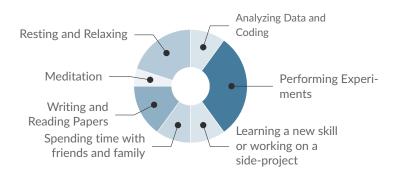
- **2014 2014**
- Glasgow, UK
- Used confocal microscopy imaging and annotation
- confirmed previous findings about localization of glycinergic neurons to specific subtype of dorsal horn neurons

Research Internship

Inselspital, Universitätsspital Bern

- **2013 2013**
- Bern, Switzerland
- Extracted genomic DNA from patient blood samples
- checked for single nucleotide polymorphisms within a lipoprotein gene

A DAY OF MY LIFE



CV SUMMARY

I love learning and rising to a new challenge. I excel in what I do because I bring passion with me. If you give me an interesting project I will give you interesting results.

ACHIEVEMENTS



First Class Honours & Distinction

Received nearly Perfect grades during my Undergraduate and Master's



Self-Taught

I taught myself how to write code in Python, R and others



Dean's Honour list

Recognized for outstanding Academic Performance



Roche Continents participant

Essay on art and science selected as one of the top 100 submissions worldwide

STRENGTHS

Passionate

Curious

Dedicated

Molecular Biology & Neuroscience

Microbial Growth Kinetics

Microfluidics

EDUCATION

Ph.D. in Molecular Biology

University of Edinburgh

September 2019 - August 2023

M.Sci. in Neuroscience

Universität Zürich

iii September 2014 - February 2016

B.Sci. in Neuroscience

University of Glasgow

September 2010 - August 2014

PUBLICATIONS AND CONFERENCES

Journal Articles

• Zurbruegg, Mark, Man Ying Chan, and Per Svenningsson (2019). "GBA RNAi but not catalytic inhibition of glucocerebrosidase with Conduritol- β -epoxide increases levels of total α -synuclein in SH-SY5Y cells". In: *Neuroscience Letters*. ISSN: 18727972. DOI: 10.1016/j.neulet.2019.05.027.

Conference Presentations

- Zurbruegg, M (2020). Is Trehalose Synthesis Determined by the Growth Rate in Escherichia coli? Paper presented at Microbial Stress, Rome, Italy.
- Zurbruegg, Mark (2017). Is modulation of glucocerebrosidase a viable new strategy for treating Parkinson's Disease? Paper presented at Karolinska Neuroscience Conference, Trysil, Norway.

LANGUAGES

A English: Fluent **A** German: Fluent

REFEREES

Prof. Per Svenningsson

@ Karolinska Institute

■ BioClinicum J5:20, Akademiska stråket 1, 17164 Solna

Prof. Teuta Pilizota

- @ University of Edinburgh
- Roger Land Building, King's Buildings, Edinburgh EH9 3JQ