MARK ZURBRUEGG

Molecular Biologist & Coder

- @ m.zurbruegg1990@gmail.com
- 17/7, Hawkhill, EH7 6LA United Kingdom
- Edinburgh, UK

- betaglutamate.github.io/online-cv/
- github.com/Betaglutamate in mzurbruegg

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

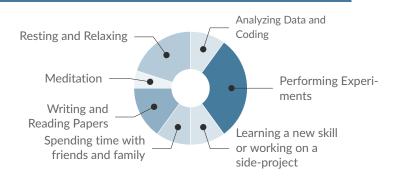
- **2014 2014**
- Glasgow, UK
- Used confocal microscopy imaging and annotation
- confirmed previous findings about localization of glycinergic neurons to specific subtype of dorsal horn neurons

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 new things and rising to challenges. 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

STRENGTHS

Passionate

Curious

Dedicated

Molecular Biology & Neuroscience

Custom Solutions

Microfluidics

LANGUAGES

English: Fluent
German: Fluent

EDUCATION

Ph.D. in Molecular Biology

University of Edinburgh

iii 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

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.

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