

# MAI THU NGUYEN

Birth date, place: 04.01.1996, Bremen, Germany  
Address: Freudenbergstrasse 146, 8044 Zurich  
Email: [nguyenma@student.ethz.ch](mailto:nguyenma@student.ethz.ch)  
Tel. +41779979649  
Nationality: Vietnam



## Education

---

2021-present	Assistante diplomee, Pannell group, Uni Lausanne
2018-2021	Master Degree in Systems biology, ETH Zurich, Switzerland
2015-2018	Bachelor of Bioscience, Uni Heidelberg, Germany
2014-2015	Studienkolleg Heidelberg and German courses in Max-Weber-Haus
2011-2014	High school for gifted students HNUE, Hanoi, Vietnam Asian science camp 2013 Tsukuba, Japan
2007-2011	Nguyen Tat Thanh Secondary school, Hanoi, Vietnam
2002-2007	Cau Dien Primary school, Hanoi, Vietnam

## Experience and skills

---

Laboratory work  
(molecular and  
computational biology)

**Mar 2021 - present**

Sandec, EAWAG and ETH Zurich  
*Research Assistant*

My project aims to develop methods to characterize the structure of faecal sludges from Africa. We aimed to use microscopy for the exploration of particle interactions and to use Dr Lange's test, TSS/VSS for its characters and features.

**Feb 2020 - Aug 2020**

AG R.Regoes, Theoretical Biology, ETH Zurich  
*Master thesis student*

My thesis aims to explore the relationship between the distribution of fitness effects of new mutations (DFE) and the fitness landscapes. Using R, four different fitness landscape models were constructed and on each landscape, DFEs along adaptive walks were analyzed and compared.

**Sep 2019 - Dec 2019**

AG R.Regoes, Theoretical Biology, ETH Zurich  
*Master project student*

The project aimed to prove the effect of environmental selection on HIV evolution and to determine the mutational fitness effects distribution (MFED or DFE) of HIV in two different environments from sequencing data.

**Feb 2019 - May 2019**

AG E.Hafen, Institute of Molecular Systems Biology, ETH Zurich  
*Master project student*

The project aimed to study the regulatory relationship between sex determination pathway and growth pathway.

**May 2018 - Aug 2018**

AG J.Wittbrodt, Centre for Organismal Study (COS), Heidelberg  
*Bachelor thesis student*

My thesis project was to characterize the growth and morphology of non-visual retina in medaka..

**Sep 2017 - Jul 2018**

AG H.Monyer, German Cancer Research Center (DKFZ), Heidelberg

*Research assistant*

The main task of my job was genotyping different mouse strains.

**Aug 2017 - Jun 2018**

AG J.Pahle, Bioquant, Heidelberg

*Intern*

This position involved using R packages to model the change of different metabolites and proteins under different Calcium input signals.

**Nov 2016 - Mar 2017**

AG A.Johnstons, Centre for Organismal Study (COS), Heidelberg

*Research assistant*

In this first job at the university I was tasked with helping different projects in the lab, I worked with two model organisms: Yeast and Cress plant. My work was very diverse during these five months: bacterial transformation, yeast recombination, seed sterilisation,...

Language skills

Vietnamese: native

English: C1 (IELTS 7.5)

German: C1 (DSH 3, Heidelberg Studienkolleg)

Computer literacy

R, Matlab, Python, LaTeX, Copasi, HTML, CSS, MS office.

Other work experience

Physics tutor (2016), Piano teacher (2017), Book saler (2017), Marketing (2016)

Social engagement

**Nov 2020 - Aug 2021**

AOZ Zurich

*Volunteer*

Helping refugees with integration and study.

**Feb 2021 - present**

Silver Lining Vietnam

*Program developer*

Designing in budget lectures and activities to improve soft skills and knowledge of children in rural areas.

References

**Prof. Dr. Roland Regoes**

Universitätstrasse 16, 8092 Zürich, Switzerland

Work +41 44 632 69 35

Email: [roland.regoes@env.ethz.ch](mailto:roland.regoes@env.ethz.ch)

**Prof. Dr. Ernst Hafen**

HPM H 29, Otto-Stern-Weg 3, 8093 Zurich, Switzerland

Work +41 44 633 36 88

Email: [hafen@imsb.biol.ethz.ch](mailto:hafen@imsb.biol.ethz.ch)

**Dr. Erika Tsingos**

Snellius, Niels Bohrweg 1, 2333 CA Leiden, Netherlands

Work +31 71 527 2727

Email: [e.tsingos@math.leidenuniv.nl](mailto:e.tsingos@math.leidenuniv.nl)