

Thomas Wolfe | Curriculum Vitae

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"Change is the only constant" - Heraclitus of Ephesus

Education

Boku <i>Postdoctoral Fellow</i>	Austria 2019–Present
University of Vienna / Vienna Graduate School of Population Genetics <i>Ph.D. in Evolutionary Genomics</i>	Austria 2015–2019
University of Lausanne <i>Master in Molecular Life Sciences</i>	Switzerland 2014–2015
University of Lausanne <i>Bachelor in Biology</i>	Switzerland 2010–2014
EPFL <i>First year Mathematics</i>	Switzerland 2008–2010
Chamblandes <i>High School, Mathematics-Physics optional line</i>	Switzerland 2005–2008
Mézières <i>Secondary School</i>	Switzerland 2000–2005

Post Doctoral Project

Working Title: Horizontal *Wolbachia* Transfers in an Invasive Cherry Fruit Fly

Associates: Ass. Prof. Hannes Schuler, Prof. Christian Stauffer

Description: This project explores the relevance of *Wolbachia* horizontal transfers for the invasive potential of a cherry fruit fly pest species. We are using state-of-the-art NGS Nanopore and Illumina sequencing to address these problems.

Doctoral Project

Title: *Dactylorhiza* Allopolyploidization, from Ecological Differentiation to Molecular Evolution

Supervisors: Ass. Prof. Ovidiu Paun, Ass. Prof. Claus Vogl, and Prof. Christian Lexer

Description: This project explores the ecological relevance of polyploidy in natural wild Orchid populations. We are using state-of-the-art transcriptomics (RNA-seq) data to assess these questions.

Masters Thesis

Title: *The long term effect of polyploidisation on transposable element activity.*

Supervisors: Prof. Marc Robinson-Rechavi and Dr. Sacha Laurent

Description: This thesis explored the idea that transposable element activity could be higher in polyploids.

Publications

Balao, F. *et al.* Adaptive sequence evolution is driven by biotic stress in a pair of orchid species (*Dactylorhiza*) with distinct ecological optima. *Molecular Ecology* **26**, 3649–3662 (2017).

Wolfe, T. M. *et al.* Macro- and microevolutionary drivers of divergent evolution in two sibling allopolyploid *Dactylorhiza*. *Advanced draft intended for PNAS* (2019).

Wolfe, T. M. *et al.* Patterns of homoeolog biases and expression level dominance and their evolutionary implication between two sibling polyploid orchids. *draft and results. Advanced draft intended for Molecular Biology and Evolution* (2019).

Computer Skills

Basic: Lisp

Intermediate: C/C++, Julia, particular interest in GoLang

Advanced: R, Bash, Python, Awk, Markdown, L^AT_EX

GitHub: www.github.com/twolfe

Applied Skills

Genomics: Genome assemblies, Nanopore, PacBio, Illumina, transcriptomics

Laboratory: RNA sequencing, RT-PCR, whole genome amplification, cell culture and transformations, DAPI and GFP, confocal microscopy, flow cytometry

Theoretical and Modeling: Parametric testing and non-parametric testing, causal inference, diffusion theory, fluctuating selection, population structure and selection, quantitative genetics

Communication Skills

2019-Mai: Oral Presentation at IST - Klosterneuburg, Austria

2018-Sep: Oral Presentation at GFÖ - Vienna, Austria

2018-Aug: Poster at II Joint Congress on Evolutionary Biology - Montpellier, France

2017-Oct: Poster at Plant Genome Evolution - Barcelona, Spain

2017-Sep: Poster at Plant Epigenetics - Vienna, Austria

2017-Jun: Oral Presentation at Botany - Fort Worth, Texas

2017-Jan: Oral Presentation at PopGroup - Cambridge, UK

2016-Mai: Oral Presentation at the International Conference on Polyploidy - Rovinj, Croatia

Teaching

Vienna Graduate School of Population Genetics

Austria

Experimental evolution: From theory to practice

November 6-10, 2017

Assisted student with exercises.

University of Vienna

Austria

300369 UE Genomic approaches to variation and adaptation

2017

Transcriptomics and assistance with exercises.

Courses and workshops

2016-Dec: Inferring Natural Selection using Genomic Data - Ferrara, Italy

2015-Aug: Genetic data analysis in R - Glasgow, Scotland

Experience

Miscellaneous.....

JOWA

Baker, Ecublens

This factory produces bread for the largest swiss supermarket . Night shifts in industry.

Switzerland

2014–2015

Globus

Security guard, Lausanne

I was employed to make sure no items would leave the shop without having been paid. This work involved some diplomacy.

Switzerland

2010–2011

Manor

Logistics, Lausanne

My work was to load and unload the merchandise coming in and going out of the store. Responsible for bringing merchandise to the five floors of the shop.

Switzerland

2006–2008

Various

Watch mechanic

Many monthly work experiences in the fields of the watch industry and mechanics. These were done to sensitize young people to there interests for later apprenticeships.

Switzerland

2002–2004

Languages

English: Mothertongue

Father's language

French: Mothertongue

Mother's language

German: Intermediate

Daily usage

Italian: Intermediate

Learned at school

Serbian: Basic

Basic words and phrases

Interests

- Clarinet/Saxophone

- Music

- Chess

- Reading

- Traveling

- Rugby