# Thomas Wolfe | Curriculum Vitae

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"Change is the only constant" - Heraclitus of Ephesus

#### **Education**

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

# **Doctoral Project**

Working 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, Python, Bash Scripting, Markdown, LATEX

GitHub: www.github.com/twolfe

#### **Communication Skills**

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 Epigentics - 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 - Rovini, 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**

Switzerland

Intern for Prof. Hardtke's lab

University of Lausanne

2012-2013

Our project was aimed at classifying root meristems of Arabidopisis cotyledons using a cross entropy method. My direct supervisors were Dr. L. Santuari and Dr. E. Scacchi.

#### Detailed achievements:

- o I learned how to work in a collaborative scientific group
  - Communication
  - Assessing feasibility
  - Implementing new ideas
    - · What biological data is needed
    - · What statistical methods are appropriate
- O Do not reinvent the wheel!

#### Miscellaneous.....

**JOWA Switzerland** 2014-2015

Baker, Ecublens

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

Globus Switzerland

Security guard, Lausanne

2010-2011

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

Manor Switzerland

Logistics, Lausanne

2006-2008

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.

Various Switzerland

Watch mechanic 2002–2004

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.

# Languages

English:MothertongueFather's languageFrench:Mother ongueMother's languageGerman:IntermediateDaily usageItalian:IntermediateLearned at schoolSerbian:BasicBasic words and phrases

#### **Interests**

- Clarinet/Saxophone

- Music

- Chess

- Reading

- Traveling

- Rugby