

## CURRICULUM VITAE

### TANJA SLOTTE

#### HIGHER EDUCATION DEGREE

Master of Science, Uppsala University, Uppsala, Sweden. Apr 22<sup>nd</sup>, 2003. Main subject: Biology.

#### DOCTORAL DEGREE

PhD in Biology, Uppsala University, Uppsala, Sweden. Dec 11<sup>th</sup>, 2007. Thesis Title: Evolution of flowering time in the tetraploid *Capsella bursa-pastoris* (Brassicaceae). Supervisor: Prof. Martin Lascoux.

#### POSTDOCTORAL POSITIONS

Feb 2008 – Jan 2010. Postdoctoral fellow in the lab of Stephen Wright at University of Toronto (Dec 2008 – Jan 2010) and York University (Feb 2008 – Nov 2008), Toronto, Canada.

#### CURRENT POSITION

Associate Professor and SciLifeLab Fellow in Ecological Genomics, Stockholm University, Stockholm, Sweden. (Oct 29<sup>th</sup> 2018-)

#### DOCENTSHIP (HABILITATION)

Docent in Ecological Genomics, December 15th, 2016, Stockholm University

#### PREVIOUS POSITIONS AND PERIODS OF EMPLOYMENT

- Associate Senior Lecturer in Ecological Genomics, Stockholm University. Tenure-track position. (April 2014- October 2018)
- Associate Professor II, University of Oslo. Part-time appointment. (2015-2018)
- Assistant Professor in Evolutionary Genetics (Forskarassistent), Uppsala University, Uppsala, Sweden. Fixed-term position (Feb 1<sup>st</sup> 2010 – Apr 13<sup>th</sup> 2014)
- PhD Student at Uppsala University, Uppsala, Sweden. (Mar 2003 – Dec 2007)
- Research Assistant, Computational Genomics, Purdue University, USA. (Feb – May 2005)
- Research Assistant, Plant Ecology, Uppsala University, Uppsala, Sweden. (Jun – Aug 2002)

#### MAJOR RESEARCH GRANTS AWARDED AS MAIN APPLICANT

- **European Research Council (ERC) Starting Grant** (2018-2022) "SuperGenE - Supergene evolution in a classic plant system - bringing the study of distyly into the genomic era".
- **SciLifeLab National Biodiversity Project Grant** (2015) "Effects of linked selection on plant genomic variation".
- **Swedish Research Council Project Grant for Young Researchers** (2014-2017). "Evolutionary consequences of dominance at a locus under long-term balancing selection".
- **SciLifeLab Collaborative Grant** for a two-year post-doctoral position, Stockholm University (2014) "Testing the utility of massively parallel sequencing on ancient sediments", Main applicants: Dr. Tanja Slotte and Prof. Barbara Wohlfarth, Stockholm University, Dr. Laura Parducci, Uppsala University.
- **SciLifeLab National Biodiversity Project Grant** (2014): "Causes and consequences of dominance at a locus under long-term balancing selection".
- **Swedish Research Council Project Grant** (2011-2013): "Adaptive significance of regulatory changes in plants".
- **EMBO Long-Term Fellowship** (2009-2010) "Evolution of incipient sex chromosomes in *Populus*", Declined in favour of position as Assistant Professor at Uppsala University.

### RESEARCH GRANTS AWARDED AS CO-APPLICANT

- **FORMAS Project Grant** (2019-2021) "Is ploidy a simple predictor of future plant species extinctions?". Main applicant: Dr. Jan Plue, Stockholm University.
- **Norwegian Research Council** (2015-2018), "High speciation rates in Arctic plants ", Main applicant: Prof. Christian Brochmann, University of Oslo. Formal collaborator.
- **Swedish Research Council Project Grant** (2016-2019) "The ecology and evolution of indirect interactions in host-parasitoid systems", Main applicant: Prof. Peter Hambäck, Stockholm University.

### AWARDS

The King's Award from the Carl XVI Gustaf 50th Anniversary Fund for Science, Technology and the Environment, Stockholm, Sweden, May 2011

### COMMISSIONS AND POSITIONS OF TRUST

- Expert evaluator of docent lecture in population genetics, Stockholm University, April 23, 2019
- Member of the NBIS (National Bioinformatics Infrastructure Sweden) Steering group (2018-)
- External Examiner (opponent) for the PhD thesis of Niklas Mähler, Norwegian University of Life Sciences, Ås, June 17, 2016
- Member of the PhD thesis evaluation committee for Ramprasad Neethiraj, Dept. of Zoology, Stockholm University, February 22nd, 2019
- Member of the PhD thesis evaluation committee for Patricia Pecnerova, Dept. of Zoology, Stockholm University, February 13th, 2018
- Member of the PhD thesis evaluation committee for Linus Östberg, Karolinska Institute, Stockholm, June 2nd, 2017
- Member of the PhD thesis evaluation committee for Merina Shrestha, Swedish Agricultural University, Uppsala, January 27th, 2017
- Member of the Licentiate thesis evaluation committee for Ramprasad Neethiraj, Dept. of Zoology, Stockholm University, March 30th, 2017
- Member of faculty board of electors, Uppsala University (2013-2014)

### EVALUATION OF APPLICATIONS AND PROPOSALS

- External evaluator for promotion procedure at Sant'Anna School of Advanced Studies, Pisa, Italy (2018)
- External evaluator of applications for an Assistant Professor position in Evolutionary Genetics, Umeå University (2017)
- Member of the Proposals Evaluation Committee, SciLifeLab Bioinformatics Long-term Support, Sweden (2017-)
- Expert reviewer of grant proposals for the National Science Foundation (NSF), the German Research Foundation (DFG), the French National Research Agency (ANR), the Austrian Science Fund (FWF), and the Natural Environment Research Council of the UK (NERC)

### EDITORIAL BOARD MEMBERSHIPS

Associate Editor for *Heredity* (2013-2017), *G3: Genes|Genomes|Genetics* (2014-), and *Genome Biology and Evolution* (2019-).

### LEADERSHIP TRAINING

Selected for leadership training at Stockholm University, 2015, and for Uppsala University's mentorship programme for junior female researchers in Science and Technology, 2012-2013

### INVITED TALKS AT CONFERENCES OR SYMPOSIA

A total of 14 invited talks at international meetings in the past four years, of which 7 were plenary or keynote talks.

- Invited speaker, Gordon Research Conference on Ecological and Evolutionary Genomics, Manchester, New Hampshire, USA, July 19th, 2019. "Genomic studies of plant mating system supergenes"
- Invited speaker, Gordon Research Conference on Speciation, Ventura, CA, USA, March 12th, 2019. "Genomic signatures of selection on genes involved in pollen competition"
- Plenary speaker, Biology19 conference, University of Zürich, Zürich, Switzerland, February 7th, 2019. "Genomic studies of plant mating system variation"
- Invited speaker, Next Generation Genomics Symposium, Helsinki University, Helsinki, Finland, October 24th, 2018. "Genomic analyses of *cis*-regulatory variation in *Capsella*"
- Invited session chair and speaker, 2018 Population, Evolutionary and Quantitative Genetics Conference (PEQG), Genetics Society of America, Madison, USA, May 16th, 2018. "The role of parallel genetic changes for plant mating system shifts"
- Plenary speaker, Adaptomics conference, Berlin, Germany, March 15th, 2017. "Genomic analysis of *cis*-regulatory variation and divergence in *Capsella*"
- Invited speaker, Plant and Animal Genomes XXV conference, San Diego, USA, January 16th, 2017. "Demography and mating system shape the genome-wide impact of natural selection in *Arabis alpina*"
- Invited speaker, SMRT Sequencing workshop, Uppsala, November 16th, 2016. "SMRT sequencing of a locus under strong balancing selection"
- Plenary speaker, Nordic OIKOS meeting, Turku, Finland, Feb 2-4th 2016. "Evolutionary consequences of the transition from outcrossing to self-fertilization"
- Plenary speaker, Population Genetics Group Meeting, Edinburgh, UK, December 18th 2015. "The impact of selection on *cis*-regulatory variation and divergence in plants"
- Keynote speaker, 3rd Plant Genome Evolution Conference, Amsterdam, the Netherlands, Sep 8th, 2015. "Adaptive significance of *cis*-regulatory variation and divergence in *Capsella*"
- Keynote speaker, SMBE Satellite Workshop 'Investigating biological adaptation with NGS: data and models', Montpellier, France, May 28th, 2015. "Genomic and regulatory consequences of recent plant speciation"
- Invited speaker, Crafoord Prize Symposium, Royal Swedish Academy of Sciences, Stockholm, May 5th, 2015. "The impact of mating system and polyploidy on plant genomic variation"
- Invited speaker, SciLifeLab Day, SciLifeLab, Karolinska Institute, Stockholm, April 10th, 2014. "Regulatory changes in association with recent plant speciation"

### INVITED DEPARTMENTAL SEMINARS

A total of >25 invited departmental seminars, including talks at the Bioinformatics Research Centre, Århus University, Denmark; Vienna Graduate School of Population Genetics, University of Vienna, Austria; University of Lille, France; Max Planck Institute, Cologne, Germany; Oulu University, Finland; University of Zürich, Switzerland; University of Bern, Switzerland, and the John Innes Centre, UK.

### SUPERVISION AND MENTORING

I have supervised one completed PhD thesis as main supervisor, one completed PhD thesis as co-supervisor, and am currently main supervisor for three PhD students and co-supervisor for three PhD students. I have also been mentor for six postdoctoral fellows at Stockholm University, and I have supervised two Master's Degree projects.

## **Supervision of PhD Students**

### *Completed*

Co-supervisor for PhD student Marcelinus Rocky Hatorangan, Swedish Agricultural University, Uppsala (2013-2017). Rocky defended his thesis in October 27th, 2017.

Main supervisor for PhD student Kim Steige, Dept. of Ecology and Genetics, Uppsala University (2011-2016). Kim is currently a postdoc in the lab of Prof. Juliette de Meaux, University of Cologne, Germany.

### *Ongoing*

Main supervisor for PhD students Juanita Gutiérrez (2018-), Robert Horvath (2016-), and Jörg Bachmann (2015-), Dept. of Ecology, Environment and Plant Sciences, Stockholm University.

Co-supervisor for PhD student Xuyue Yang (2016-) and Maya Edlund (2019-) at Dept. of Ecology, Environment and Plant Sciences, Stockholm University, and for PhD student Siri Birkeland, Natural History Museum, University of Oslo (2015-).

## **Supervision of postdocs**

Dr. P. William Hughes (2018-present), ongoing.

Dr. Marco Fracassetti (2017-present), ongoing.

Dr. Benjamin Laenen (2015-2019).

Dr. Michael D. Nowak (2014-2015).

Dr. Andrew Tedder (2015-2017).

Dr. Engy Ahmed (2015-2017).

## **PEDAGOGICAL TRAINING**

- Group leader training (2015, 7.5 days); Stockholm University, Supervising PhD Students (2011; 3 weeks), Teacher training course (2005; 5 weeks), Scholarly teaching in Science and Technology (2013, 2 weeks); Uppsala University.

## **TEACHING EXPERIENCE**

### Course Responsible

- Biological Statistics II, 7.5 ECTS, Stockholm University, 2016, 2017, 2018
- Molecular Evolution and Phylogenetics, 10 ECTS, 1MB446, Uppsala University, 2013.
- Molecular Evolution and Phylogenetics, 10 ECTS, 1MB446, Uppsala University, 2012.
- Evolutionary Genetics, 15 ECTS, 1BG205, Uppsala University, 2010.

### Lecturer

- Biological Statistics II, 7.5 ECTS, Stockholm University, 2016, 2017, 2018
- Molecular Evolution and Phylogenetics, 10 ECTS, 1MB446, Uppsala University, 2013, 2014.
- Evolutionary Genetics, 15 ECTS, 1BG205, Uppsala University, 2012. Evolutionary Genetics, 15 ECTS, 1BG205, Uppsala University, 2010.
- Genome Biology, 5 ECTS, 1MB428, Uppsala University, 2010.

## **ADMINISTRATIVE EXPERIENCE**

Member of conference organization committee, Evolution in Sweden, January 8-10, 2018.

Conference organizer, SciLifeLab workshop on Ancient Environmental DNA, March 10th, 2016.

Conference organizer, SciLifeLab workshop on the Genomics of adaptation, October 23rd, 2014.

## **ACADEMIC SERVICE**

Ad-hoc reviewer for e.g. Nature Genetics, PNAS, PLoS Genetics, Current Biology, Genome Biology, Nature Communications, Molecular Biology and Evolution, Ecology Letters, Molecular Ecology, Nature Scientific Reports, Genetics, Genome Biology and Evolution, G3, Heredity, BMC Plant Biology, and Philosophical Transactions of the Royal Society B

**MEMBERSHIP IN ACADEMIC SOCIETIES**

Member of the Society of Molecular Biology and Evolution and the European Society for Evolutionary Biology