

CURRICULUM VITAE

Personal Details and Date

Surname: Slotte

First names: Tanja Ulrika

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Date of CV: 2023-01-15

Languages spoken: Swedish (native), Finnish (moderate), English (fluent), German (beginner)

Degrees

Title of Docent in Ecological Genomics, December 15, 2016, Stockholm University, Stockholm, Sweden

PhD in Biology, December 11, 2007, Uppsala University, Uppsala, Sweden

Master of Science, Main subject: Biology, April 22, 2003, Uppsala University, Uppsala, Sweden

Current Position

Professor in Ecological Genomics, Department of Ecology, Environment and Plant Sciences, Stockholm University, Stockholm, Sweden. (June 1 2022-).

Previous Work Experience

- Associate Professor in Ecological Genomics, Department of Ecology, Environment and Plant Sciences, Stockholm University, Stockholm, Sweden. (Oct 29 2018-May 31 2022).
- Associate Senior Lecturer and SciLifeLab Fellow in Ecological Genomics, Stockholm University. Tenure-track position. (April 2014- October 2018)
- Associate Professor II, University of Oslo. Part-time appointment as guest lecturer. (2015-2018)
- Assistant Professor in Evolutionary Genetics (Forskarassistent), Uppsala University, Uppsala, Sweden. Fixed-term position (Feb 1 2010 – Apr 13 2014)
- Postdoctoral Fellow with Prof. Stephen Wright at University of Toronto (Dec 2008 – Jan 2010), and at York University (Feb 2008 – Nov 2008), Toronto, Canada
- 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)

Career Breaks

Parental leave with two children for a total of 13 months after PhD degree.

Research Funding and Grants

Major grants awarded as main applicant

- Swedish Research Council Project Grant (2020-2024; 4.3 MSEK): “The role of structural variation for the origin and evolution of a classic supergene”.
- European Research Council (ERC) Starting Grant (2018-2022, €1 475 644.00): “SuperGenE - Supergene evolution in a classic plant system - bringing the study of distyly into the genomic era”.
- SciLifeLab National Biodiversity Project Grant (2015, 0.5 MSEK). “Effects of linked selection on plant genomic variation”.
- Swedish Research Council Project Grant for Young Researchers (2014-2017, 4.38 MSEK). “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, 1.3 MSEK) “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, 0.34 MSEK): “Causes and consequences of dominance at a locus under long-term balancing selection”.
- Swedish Research Council Project Grant (2011-2013, 1.8 MSEK): “Adaptive significance of regulatory changes in plants”.

Major grants awarded as co-applicant/formal collaborator

- Swedish Research Council Project Grant (2020-2024, 3.19 MSEK): “Evolutionary diversification of complex floral traits“. Main applicant: Dr. Magnus Friberg, Lund University.

- Academy of Finland Molecular Regulatory Networks of Life (R'Life) 2019 call, "Molecular regulatory networks of climate adaptation", Main applicant: Dr. Timo Hytönen, University of Helsinki. Formal collaborator.
- FORMAS Project Grant (2019-2021, 3.00 MSEK) "Is ploidy a simple predictor of future plant species extinctions?". Main applicant: Dr. Jan Plue, Stockholm University.
- Norwegian Research Council (2015-2018, 9.6 MNOK), "High speciation rates in Arctic plants", Main applicant: Prof. Christian Brochmann, University of Oslo. Formal collaborator.
- Swedish Research Council Project Grant (2016-2019, 3.25 MSEK) "The ecology and evolution of indirect interactions in host-parasitoid systems", Main applicant: Prof. Peter Hambäck, Stockholm University.

Research Supervision and Leadership Experience

I have supervised four completed PhD theses as main supervisor, three completed PhD theses as co-supervisor, and am currently main supervisor for one PhD student and co-supervisor for three PhD students. I have also been mentor for eight postdoctoral fellows, and I have supervised two Master's Degree projects. In addition, I am member of a formal follow-up group for PhD student Robert Kesälähti at University of Oulu, and Jenni Sirén, University of Helsinki, Finland.

Completed PhD theses

- Main supervisor for PhD student Juanita Gutiérrez (2018-2022), Dept. of Ecology, Environment and Plant Sciences, Stockholm University.
- Main supervisor for PhD student Robert Horvath (2016-2020), Dept. of Ecology, Environment and Plant Sciences, Stockholm University.
- Main supervisor for PhD student Jörg Bachmann (2015-2020), Dept. of Ecology, Environment and Plant Sciences, Stockholm University.
- Main supervisor for PhD student Kim Steige, Dept. of Ecology and Genetics, Uppsala University (2011-2016).
- Co-supervisor for PhD student Xuyue Yang (2016-2021), Dept. of Ecology, Environment and Plant Sciences, Stockholm University.
- Co-supervisor for PhD student Siri Birkeland, University of Oslo, Norway (2015-2020).
- Co-supervisor for PhD student Marcelinus Rocky Hatorangan, Swedish Agricultural University, Uppsala (2013-2017).

Ongoing PhD supervision

- Main supervisor for PhD student Panagiotis-Ioannis Zervakis (2021-), Dept. of Ecology, Environment and Plant Sciences, Stockholm University.
- Co-supervisor for PhD student Ivar Westerberg (2020-), Dept. of Ecology, Environment and Plant Sciences, Stockholm University.
- Co-supervisor for PhD student Lovisa Thilén (2022-), Dept. of Ecology, Environment and Plant Sciences, Stockholm University.
- Co-supervisor for PhD student Maya Edlund (2019-), Dept. of Ecology, Environment and Plant Sciences, Stockholm University.

Postdoc mentoring experience

- Dr. Marco Fracassetti (2017-).
- Dr. Emma Berdan (2019-2020).
- Dr. Alireza Foroozani (2019-2021).
- Dr. P. William Hughes (2018-2020).
- Dr. Benjamin Laenen (2015-2019).
- Dr. Michael D. Nowak (2014-2015).
- Dr. Andrew Tedder (2015-2017).
- Dr. Engy Ahmed (2015-2017).
- Dr. Dario Ojeda Alayon (2014).

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.

Academic Leadership Positions

Subject representative for PhD programme in Ecology and Evolution ("forskarutbildningsämnesansvarig") at the Dept. of Ecology, Environment and Plant Sciences, Stockholm University (April 2021-).

Teaching Merits

Pedagogical Training

- Pedagogical writing project, "Implementing interactive lectures to enhance student learning". Stockholm University (2021, 3 ECTS).
- Teaching and learning workshops, Stockholm University (3 ECTS total, 2018-2021).
- Research supervision, (2020, 2 weeks), Stockholm University.
- Group leader training (2015, 7.5 days), Stockholm University.
- Supervising PhD Students (2011, 3 weeks), Uppsala University.
- Teacher training course (2005, 5 weeks), Uppsala University.
- Scholarly teaching in Science and Technology (2013, 2 weeks), Uppsala University.

Teaching Experience

Course Leader

- Biological Statistics II, 7.5 ECTS, BL7048, Stockholm University, 2016-2022.
- Molecular Evolution and Phylogenetics, 10 ECTS, 1MB446, Uppsala University, 2012-2013.
- Evolutionary Genetics, 15 ECTS, 1BG205, Uppsala University, 2010.

Lecturer

- Biological Statistics II, 7.5 ECTS, BL7048, Stockholm University, 2016-2021.
- Green Biotechnology, 15 ECTS, BL7051, Stockholm University, 2017-2020.
- Gener, Celler och Populationer, 15 ECTS, BL2011, Stockholm University, 2017-2021.
- Methods and Concepts in Molecular Life Sciences, 15 ECTS, BL4015, Stockholm University, 2016-2021.
- 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.

Awards and Honours

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

Other Key Academic Merits

External Evaluator of Doctoral Dissertations

- Opponent for PhD thesis of Pauline Raimondeau, University of Toulouse, December 2, 2022.
- Opponent for PhD thesis of Marni Tausen, Aarhus University, October 30, 2020.
- Opponent for PhD thesis of Niklas Mähler, Norwegian University of Life Sciences, Ås, June 17, 2016.
- Member of 13 PhD and licentiate evaluation committees and one half-time evaluation committee at Uppsala University, Stockholm University, Karolinska Institute and the Swedish Agricultural University in 2017-2021.

Expert Evaluator of Promotion Applications and Applications for Positions

- Expert evaluator of docent lecture in population genetics, Stockholm University, April 23, 2019
- 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).

Evaluation of Proposals

- Member of the Swedish Research Council Natural Sciences Project Grant evaluation panel for Evolutionary Biology and Genetics (NT-C) (2021).
- Member of the Swedish Research Council International Postdoc (IPD) evaluation panel (2020-2021).
- Member of the Proposals Evaluation Committee, SciLifeLab Bioinformatics Long-term Support, Sweden (2017-2020).
- 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), the Austrian Academy of Sciences (ÖAW), and the Natural Environment Research Council of the UK (NERC).

Commissions of Trust

- Member of the Data-Driven Life Sciences DDLs expert group in evolution and biodiversity (2021-)
- Member of the Stockholm University Data-Driven Life Sciences working group (2020-).
- Member of the NBIS (National Bioinformatics Infrastructure Sweden) Steering group (2018-).
- Member of faculty board of electors, Uppsala University (2013-2014).
- Member of nomination committee for the scientific council of the Society for Molecular Biology and Evolution (2021).

Editorial Board Memberships

Associate Editor for *Heredity* (2013-2017), *G3: Genes|Genomes|Genetics* (2014-2019), *Genome Biology and Evolution* (2019-), *Genetics* (2020-) and *PLoS Genetics* (2021-).

Referee for Scientific Publications

Ad-hoc reviewer for *Nature*, *Nature Genetics*, *Nature Ecology & Evolution*, *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*.

Invited Plenary and Keynote Talks at International Conferences and Symposia

- Plenary speaker, Biology19 conference, University of Zürich, Zürich, Switzerland, February 7th, 2019.
- Invited session chair and keynote speaker, 2018 Population, Evolutionary and Quantitative Genetics Conference (PEQG), Genetics Society of America, Madison, USA, May 16th, 2018.
- Plenary speaker, Adaptomics conference, Berlin, Germany, March 15th, 2017.
- Plenary speaker, Nordic OIKOS meeting, Turku, Finland, Feb 2-4th 2016.
- Plenary speaker, Population Genetics Group Meeting, Edinburgh, UK, December 18th 2015.
- Keynote speaker, 3rd Plant Genome Evolution Conference, Amsterdam, the Netherlands, Sep 8th, 2015.
- Keynote speaker, SMBE Satellite Workshop “Investigating biological adaptation with NGS: data and models”, Montpellier, France, May 28th, 2015.

Invited Talks and Departmental Seminars

- A total of 14 invited talks at international meetings, including at Gordon Research Conferences on Ecological and Evolutionary Genomics and on Speciation and at the Crafoord Prize Symposium.
- 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; Durham University, UK; Oulu University, Finland; University of Zürich, Switzerland; University of Bern, Switzerland, and the John Innes Centre, UK.

Conference Organization

- Member of conference organization committee, Evolution in Sweden, Uppsala, January 10-12, 2023.
- Member of conference organization committee, Evolution in Sweden, Stockholm, 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.

Membership in Academic Societies

Member of the Society of Molecular Biology and Evolution, the European Society for Evolutionary Biology, and the Genetics Society of America.

Scientific and Societal Impact

- Jury member at the Swedish Young Researchers (“Unga Forskare”) high school student science competition final exhibition (<https://ungaforskare.se/utställningen/finalen/>), Technical Museum, Stockholm (2019-2020).
- Participation in SciLifeLab Outreach Week with the presentation “Sequencing the supergene that governs Darwin’s different forms of flowers”, 2022-01-26.
- “An evolutionary magic trick is popping up everywhere. ‘Supergenes’ bend the rules of evolution.”, interviewed by science journalist Carrie Arnold for a popular science article on supergenes, published in the Atlantic, November 20, 2022.
- “How supergenes fuel evolution despite harmful mutations”, interviewed by science journalist Carrie Arnold for a popular science article on supergenes in Quanta Magazine, published November 8, 2022 (also printed in the Atlantic). Podcast under production January 2023.
- “Supergen bakom vanlig blomvariation”, interviewed by Emil Nilsson for a popular science article in Svensk Botanisk Tidskrift, 2022-12-20.
- “The long and short of a supergene for efficient pollination”. Stockholm University press release in association with the publication of our 2022 article in Current Biology. This was picked up and resulted in several articles and posts in other venues.
- “A promising approach to characterize selection on functional non-coding regions”. Blog post written with communications officer Amanda Gonzalez-Bengtsson at DEEP on our 2021 Molecular Biology and Evolution paper “Selection on accessible chromatin regions in *Capsella grandiflora*”.
- “Highlight: The Evolutionary Fates of Supergenes Unmasked”. Interviewed by Casey McGrath for a highlight in Genome Biology and Evolution 13: 5, evab079. The highlight was picked up by seven news outlets.
- ”When do polyploidy and self-compatibility go hand in hand?” Behind-the-paper blog post published April 21, 2021 for the Nature Ecology and Evolution community.
- “Snabb spridning av självbefruktande populationer kan ha skadliga genetiska följder”. Interviewed by communications officer Amanda Gonzalez-Bengtsson for a popular science blog post. The story was also picked up by the SciLifeLab communications department.
- “Självbefruktning ger mer skadliga mutationer”. Interviewed by Åke Spross at Uppsala Nya Tidning June 16, 2013 regarding the *Capsella rubella* genome article in Nature Genetics.
- External evaluator of an application to the Swedish Board of Agriculture for a permit to conduct research involving GMOs, 2014.
- “Splicing accounts for an early bloomer”. Communicated with Cell’s Editorial team for a feature on our 2009 Genetics article featured in Leading Edge; Evolutionary Biology Select section: Cell 138: 409-411.