

SHORT CURRICULUM VITAE¹

Personal information

Surname, given names: Roslin, Tomas Valter

Gender: Male

Date of current CV: September 1, 2015

Date and place of birth:

December 6, 1969, Turku, Finland

Citizenship: Finnish

Current residence:

Uudenkaupungintie 7C27
FI-00350 Helsinki, Finland

Marital status: Married, two children



Education and degrees awarded

- 2006 Docent of Ecology, University of Helsinki, January 31, 2013
- 1999 Doctor of Philosophy, Major in Morphological-Ecological Zoology,
University of Helsinki, Faculty of Mathematics and Science
(currently Faculty of Biological and Environmental Sciences;
email bio-diploma@helsinki.fi, ph. +358-(0)9-1911)
- 1994 Master of Science (major in Zoology), University of Helsinki
- 1988 Graduated from comprehensive school (Gymnasiet Lärkan)
with highest marks (6 *laudatur*).

Linguistic skills

Mother tongue: Swedish

Other languages: Finnish (fluency equivalent to a native speaker); English (fluent); French (earlier good); Spanish (satisfactory); German (basics)

Current position

Professor of Insect Ecology 1.9.2015
Swedish University of Agricultural Science, Department of Ecology, Uppsala, Sweden

Previous work experience (most important posts and full-time positions)

- 2009-2015 University Lecturer in Agroecology 1.4.2009–31.8.2015
(leave of absence 1.4.2009–31.7.2010 for work as Academy Research Fellow)
- 2005 – 2010 Academy Research Fellow, funded by the Academy of Finland
- 2004 – 2005 Coordinator, Finnish Graduate School in Wildlife Biology, Conservation
and Management (Finnish acronym LUOVA)

¹ Structured according to [guidelines](#) offered by the Finnish Advisory Board on Research Integrity (TENK)

- 1999 – 2003 Post doctoral research fellow, funded by the Academy of Finland. University of Helsinki (1999 – 2001; 2002-2003) and University of Alberta, Canada (2001 – 2002)
- 1995 – 1998 PhD student funded by the Finnish Graduate School in Wildlife Biology, Conservation and Management. Thesis project supervised by Academy Prof. Ilkka Hanski.

Research funding, leadership and supervision

Major research funding (competitive funding obtained over the last five years (grants ≥5000€ in all cases obtained as the PI):

2015	Ella and Georg Ehrnrooth Foundation	60 000 €
2014	Ella and Georg Ehrnrooth Foundation	60 000 €
2014	General Research Grant from the Academy of Finland, project <i>Biotic interactions in a changing Arctic</i>	670 000 €
2014	Targeted Research Grant from the Arctic Academy Programme, project <i>Exposing the long-term dynamics of Arctic ecosystems by novel and transdisciplinary techniques</i>	774 640 €
2013	Travel expenses for field work granted by the EU-funded INTERACT Transnational Access programme	20 000€
	Oskar Öflund foundation	6 000 €
2012	Carl Cedercreutz foundation	9 440 €
	Travel expenses for field work granted by the EU-funded INTERACT Transnational Access programme	20 000€
2011	Travel expenses for field work granted by the EU-funded INTERACT Transnational Access programme	21 000 €
2010	Three-year research grant from the University of Helsinki, project <i>A quantitative insect food web for the high Arctic</i>	125 000 €
	General Research Grant from the Academy of Finland, project <i>Biodiversity change and ecosystem functioning in modified landscapes</i>	670 000 €
	Grant related to a book in popular science, Waldemar von Frenckells stiftelse	6 000 €

Leadership in research work:

From 2003 onwards, I have served as a principal investigator (PI) and group leader at the University of Helsinki. From 2003 to 2009, I served as one of six PIs within the Metapopulation Research Group (Centre of Excellence in Research) at the Department of Biological and Environmental Sciences. From 2009 onwards, I serve as the head of an independent research team at the Department of Applied Biology (currently the Department of Agricultural Sciences). The [group](#) currently encompasses two post docs, two PhD students and three undergraduate students, with a variable number of research technicians hired during field seasons.

Supervision of post-doctoral researchers:

Dr Helena Wirta (2011-; graduate from the University of Helsinki)
Dr Bernhard Eitzinger (2015-; graduate from the University of Göttingen)
DPhil Eleanor Slade (2012-2013; graduate from the University of Oxford)
Dr Riikka Kaartinen (2011-2012; graduate from the University of Helsinki)

Experience as officially appointed supervisor to doctoral students (by graduation year, in all cases as sole supervisor):

2011 Riikka Kaartinen: *Spatial ecology of food webs: Herbivore-parasitoid communities on the pedunculate oak*. Department of Biological Sciences, University of Helsinki

2010 Ayco Tack: *Spatial ecology of an oak-associated herbivore community*. Department of Biological and Environmental Sciences, University of Helsinki.

2007 Sofia Gripenberg: *Spatial ecology of a specialist insect herbivore*. Department of Biological and Environmental Sciences, University of Helsinki.

I currently supervise two PhD projects: Silvija Budaviciute, University of Helsinki (jointly with Prof. Mar Cabeza) and Matti Landvik, University of Turku (jointly with Prof. Pekka Niemelä).

Experience as officially appointed supervisor to undergraduate students:

At the undergraduate level, I have supervised some ten BSc theses and some twenty MSc projects. Students completing their MSc projects with me include the following (sorted alphabetically by surname; thesis completion year in brackets): Tiina Avomaa (2006); Marianne Fred (1998); Sofia Gripenberg (2007); Bess Hardwick (2008); Tapani Hopkins (2012); Henna Kettunen (2011); Anne Koivunen (2001); Anniina Kuusijärvi (2014); Minttu Leonard (2008); Saija Lähteenmäki (2013); Elly Morriën (2004); Emilia Nordling (2010); Atte Penttilä (2012); Tähti Pohjanmies (2014); Ingrid Quintero (2004); Elina Rossi (2006); David Roth (2005); Mirjami Smalén (2012); Juha Syväranta (2010); Helena von Limburg-Stirum (née Rosenlew; 2007); Hedi Syrjälä (2007), Kristiina Visakorpi (2014).

I currently supervise two BSc and one MSc student. Given my general interest in supervision, I have given several seminar presentations on this topic.

Merits in teaching and pedagogical competence

Pedagogical training and competence:

To develop as a teacher, I have completed basic training in University Pedagogics in 2008 at the University of Helsinki (10 credits; grade 5/5), and strive to keep track of recent literature and discussion in this field. To grow as a teacher, I believe that one should always keep teaching. During funding periods as a full time researcher (1999-2003 and 2005-2010), I have therefore engaged in the development of new courses.

Involvement in curriculum planning and in the implementation of courses:

I have served as a teacher at the University of Helsinki, Department of Biological and Environmental Sciences, at the University of Alberta (Canada), Department of Biological Sciences, and at the University of Helsinki, Department of Agricultural Sciences.

At the University of Helsinki, Department of Biological and Environmental Sciences, I have taught a number of courses: In 1996, I coordinated the 12 ECTS course *The sustainable use and conservation of populations*. In 2000, 2001 and 2006, I coordinated the 10 ECTS course *Conservation Biology in Fragmented Landscapes*, and lectured parts of the course in 2003-2009. From 2003 onwards, I have given visiting lectures in multiple lecture series and seminars. In 2009, I organized a course called *Making science matter – increasing the impact of ecological findings* (jointly with Dr Mar Cabeza).

At the University of Alberta (Canada), Department of Biological Sciences, I lectured and supervised student projects during a two-week *Field Course in Animal Ecology* (Kananaskis Field Station, Alberta; August 2002).

At the University of Helsinki, Department of Agricultural sciences, I served as a University lecturer between August 2010 and August 2015. During this period, I planned and taught two regular courses, *The Agroecosystem and Agrobiodiversity* as well as a course on the *Principles of ecology for students in agricultural sciences* (the latter in Finnish). In addition, I contributed to revising and implementing a major course on *Experimental Design and Analysis*. I also participated in teaching at a field course organized for second-year students, at multiple introductory courses etc.

At my former Department of Biological and Environmental Sciences, I served as the coordinator of the Finnish Graduate School in Wildlife Biology, Conservation and Management (*LUOVA*) from October 2004 to July 2005. Here, I planned and coordinated the training programme for over 50 PhD students. I was also responsible for establishing national and international networks for teaching at the post graduate level. Following my period as the coordinator, I have continued as an active supervisor in *LUOVA*, and given talks in seminars organized by the graduate school – most recently on how to grade academic theses at all levels.

Development of teaching methods:

The principal courses developed and currently taught by me are based on a mix of lectures, problem-based assignments and group work. I have also introduced unconventional approaches such as workshops where researchers and students interacted in small groups and apply their knowledge to e.g. practical conservation issues, as well as games where the rules are based on fundamental principles of population dynamics. The students are encouraged to search for independent information, to analyse and apply it to solving the tasks at hand, and to report their findings to their fellow students.

During my career, I have designed teaching material for a wide range of audiences. A recent achievement is the book developed for the entrance exam to our Faculty (Seppänen, M (ed.) 2012. *Maailma muuttuu – muuttuko maatalous*. [The world is changing – does agriculture change?] Unigrafia). Here, I suggested that to attract motivated students to the Department of Agricultural Sciences, we should write a new book – making it not an all-covering text book, but a stimulating presentation of topical research questions. This idea was then successfully turned into practice by the indefatigable work of editor Mervi Seppänen.

Teaching awards:

2007 and 2010 As a teacher, I have twice received a distinction from the Faculty of Biosciences for commendable supervision of MSc theses. This distinction from is awarded annually to a supervisor active within any field of Biosciences, as nominated by his/her own students.

Awards, prizes and honours

I have received three awards related to different aspects of my research vocation:

- 2011 As a University Lecturer, I was awarded the Grand Prize (15 000 €) of the Oskar Öflund foundation. This award is given to a single Finnish researcher across all field of science.
- 2005 As an Academy Research Fellow, I was awarded the Academy of Finland Recognition Award. This prize is awarded once a year to a single Finnish researcher among all fields of science, for excellence in research, making the researcher's work known to the general public, attracting public interest in science and taking part in the public debate.
- 1998 As a young graduate student, I was awarded Olli's prize – an award offered annually to the best PhD student presentation of the year at the Department of Biological and Environmental Sciences, University of Helsinki.

Other academic merits

Service as a pre-examiner or as an opponent of a doctoral dissertation, or as a member in dissertation committees: I have reviewed seven PhD dissertations, six as a pre-examiner or member of the committee, one as the opponent. As Finnish graduate schools have recently established a system of support groups for PhD candidates, I have participated in the support group of two completed theses and am currently engaged in the support of four ongoing thesis projects (one in Jyväskylä, one in Joensuu, two in Helsinki).

Evaluation of academic/scientific competence: I have reviewed four applications for docentships.

Member of international peer evaluation committees of funding applications: I have evaluated applications for the Discovery Grants Program of NSERC, Canada (2013).

Memberships and positions of trust in scientific and scholarly societies: I currently serve as a Member of the Board of *Societas Entomologica Helsingforsiensis* (1997-2001 and since 2003 onwards),

Membership in national or international expert groups, evaluation or steering committees, as well as other expert duties: I currently serve as a Member of the Board of the [LUOVA Doctoral Programme](#) (2013-), and have previously served as a member of the steering committee of two national research projects (EconTools and Fokus)

Positions as editor-in-chief, editor, or member of editorial boards of scientific and scholarly journals and publication series: I am currently a Member of the Editorial Board of *Ecological Entomology* and *Annales Zoologici Fennici*.

Referee for scientific and scholarly journals: As a part of the academic community, I have annually reviewed ten to tens of manuscripts for a total of ca 25 different journals

Administrative responsibilities at higher education institutions or at research organisations, responsibilities in the higher education community: I am currently a member of the planning committee for teaching at the Department of Agricultural Sciences, a vice member of the Faculty's committee for student selection, and a member of the board of the international and interdisciplinary Master's Degree Programme in Environment and Natural Resources ([MENVI](#)).

Invited keynote lectures abroad: In 2009, I gave a plenary talk at the Royal Entomological Society, Oxford, UK. In October 2013, I gave a plenary lecture at the [5th International](#)

[Barcode of Life Conference](#) in Kunming, China. In 2014, I gave the plenary talk at the [Nordic Oikos meeting](#).

Meetings organized: In 2004, I organized an international workshop on the Spatial Ecology of Insect-Plant Interactions (jointly with Dr Johan Kotze; see Roslin and Kotze 2005). This first attempt at merging the fields of metapopulation dynamics and insect-plant interactions attracted top names in the field.

Scientific and societal impact of research

Publications

As the main outcome of my research, I have published 57 papers as enlisted on the Web of Science, in journals including *Science*, *PNAS*, *Trends in Ecology and Evolution*, *Ecology Letters*, *Ecology*, and the *Journal of Animal Ecology*. I have also produced a number of other scientific and non-scientific book chapters and articles, as well as two books popularising my science.

Merits related to the production and distribution of research results and research data

To diffuse my findings, I have actively engaged in knowledge transfer to the public, including some hundred radio- and television programmes, articles in newspapers and magazines, a book popularising my science, presentations in seminars aimed at the general public and visits in primary and high schools. For a summary of press coverage of a recent paper in *Science*, click [here](#); for media coverage of our paper in PLoS ONE, click [here](#) I have also involved volunteers in data collection, including two nationwide projects sampling dung beetle communities across Finland (1996 and 2008; cf. Roslin, T. 2001. Large-scale spatial ecology of dung beetles. *Ecography* 24: 511-524.), a [volunteer-based survey of gall wasps](#) (2007), and – as the first of its kind – a manipulative field experiment implemented across the country (see Kaartinen, R., Hardwick, B. & Roslin, T. in press. Using citizen scientists to measure an ecosystem service nationwide. *Ecology*; <http://dx.doi.org/10.1890/12-1165.1>). In 2012, we implemented a [volunteer-based survey of a flagship species](#) for insect conservation, the hermit beetle *Osmoderma barnabita*. Importantly, each of these projects has allowed me to collect a scientific data set unachievable by professional biologists, and to disseminate ecological findings of fundamental importance to the public.

Merits in science communication and expert assignments in the media:

During the last few years, I have been an active teacher of science communication. In 2009, I organized a course called *Making science matter – increasing the impact of ecological findings* (jointly with Dr Mar Cabeza), as aimed at PhD students. This course was aimed at improving the communication skills of PhD students in ecology, and included prof. Stuart L. Pimm (Duke University, USA) among the visiting teachers. [The course was repeated in September 2013](#).

In March 2013, I served as one of three invited scientists in a national seminar on how to communicate science to society ([Miksi ulos tutkijankammioista? \[Why descend from your ivory tower\]](#)) as organized by the Finnish Environment Centre and the University of Helsinki

Other merits

Collaboration

Reflecting the international and collaborative character of my work, I have published joint research conducted with coauthors of more than fifteen nationalities. During the past five years, I have published joint papers with, *inter alia*, Dr Y. Basset (Panama), Dr S. Gripenberg (Oxford, UK), Prof. T. Lewinsohn (Sao Paulo, Brazil), Prof. S. F. Matter (Cincinnati, USA), Dr E. Morriën (Amsterdam, the Netherlands), Dr A.-L. Laine (Helsinki, Finland), Prof. M. Luoto (Helsinki, Finland), Dr O. Ovaskainen (Helsinki, Finland), Dr P. Pulkkinen (Läyliäinen, Finland), MSc Ingrid Quintero (Brazil and Colombia), Prof. J. Roland (Edmonton, Canada), Prof. J-P. Salminen (Turku, Finland), Dr G. Stone (Edinburgh, UK), Dr Daniel Stouffer (Christchurch, New Zealand) and others.