

Marja Tiirola - CV 4.9.2013

Curriculum vitae

Name Marja Annika TIIROLA (prev. Kauppi)

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Family

Home address Kaupintie 8, FI-41980 Kuivasmäki, Finland

Date and place of birth 1967, Petäjävesi, Finland

University degrees **Tampere University of Technology, Finland**
Docentship 2007, Environmental microbiology

University of Jyväskylä, Finland
Doctor of Philosophy, Molecular biology 31.12.2002

University of Helsinki, Finland
Master of Forestry and Agriculture 1991
-Limnology, Forest management and Fisheries

Other education **Kuru Forest College, Finland** (Tampere University of Applied Sciences)
Teacher's matriculation 1994

Work experience

University of Jyväskylä:
University lecturer 1.8.2012 onwards, permanent recruiting
Academy Research Fellow 1.1.2010- 31.7.2012

Academy of Finland
Academy Research Fellow 1.11.2007- 31.12.2009

University of Jyväskylä:
Researcher 1.10.2007-31.10.2007
Post-doctoral researcher 1.8.2004-31.8.2007
Researcher 1.12.2001-31.7.2004
Assistant 1.10.2000-31.7.2001
Assistant 26.6.1999-31.12.1999
Graduate school student 1.1.2000-31.9.2000
Graduate school student 1.9.1995-31.5.1999

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University of Helsinki:

Training officer, Lahti Research and Education center 1992-1995 (3.4 years)
Planning of the university education of Environmental Science
("perusopetusyksikön koulutussuunnittelija, ympäristötieteet")

Oy Keskuslaboratorio Ab:

Research assistant, Environmental section, 1990-1991 (11 months)

Kuopio Water and Environmental District:

Limnology trainee, summer 1988 (3 months)

Longer visits abroad

European Molecular Biology laboratory (EMBL) Heidelberg, Germany,
laboratory of Toby Gibson 1.10.-31.10.2002

University of Warwick, UK, laboratory of Colin Murrell 1.1.2005-30.6.2005

Personal scholarships

*University of Jyväskylä, scholarship for working abroad 2005

*Kemira Oyj foundation 2004

*University of Jyväskylä, Rectors scholarship 2002

*Antti and Jenny Wihuri's foundation 2001

*DAAD (Deutsche Akademische Austauschdienst)

Other responsibilities

- Coordinator of the Nordic Network for Stable Isotope Research (NordSIR) 1.8.2010->
- Member for EU COST Action "Stable Isotopes in Biospheric-Atmospheric-Earth System Research [ESo8o6 FI] 25.8.2009->
- Coordinator of the Scandinavian postdoctoral course: "Bioinformatics course for NGS data in microbial ecology 2012" organized 11.-15.6.2012
- Student advisor of the section and a member of the teaching committee of the department

Research grants 2007-2012

Title	Funding Agency	Grant period
Nitrogen-fixing endosymbionts of mosses – a missing link in the nitrogen budgets of boreal ecosystems? (PI)	Academy of Finland	2007-2012
Impact of climate fluctuations on microbial communities responsible for carbon and nitrogen cycling in arctic soils (co-PI)	The Finnish Forest Research Institute (METLA)	2008-2011
The use of methane in wastewater treatment technology - aiming for more efficient nitrogen removal and diminished greenhouse gas emission (PI)	Maj and Tor Nessler Foundation	2009-2011
RNA-unit – a universal concept to explore the functions of uncultured microbes in the environment (PI)	Academy of Finland	2012-2016
Enhanced denitrification for efficient wastewater nitrogen load reduction (PI)	Maj and Tor Nessler Foundation	2012-2015
N-SINK Reduction of waste water nitrogen load: demonstrations and modelling N-SINK (co-PI)	EU Life+ Environment and co-financers	2013-2017
	Total 2.0 million €	Grants 2007-2013

*Indicates the budget dedicated from the METLA and EU specially for my working group.

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In addition, NordForsk-funding NordSIR network (2010-2014) and for the Bioinformatics course (2012), PI in both of the activities.

Also achieved a Formas-grant as a co-PI together with Stefan Bertilsson "Closing the nitrogen budget in stratified lakes: the role of non-cyanobacterial nitrogen fixation" (2013-2015).

Supervision of Master's and Doctoral theses:

- Elina Madetoja 2001, Master's thesis: "Mikrobitunnistuksen matemaattisia menetelmiä", "Mathematical methods for microbial identification"
 - Anita Hakala 2002, Master's thesis: "Novosphingobium-suvun bakteerien fylogenen määrittäminen 16S-23S ITS-sekvenssien perusteella", "The phylogeny of *Novosphingobium* -genus based on 16S-23SITS sequences"
 - Milla Sarkasuo 2002, Master's thesis: "Patogeenien bakteerien selviäminen anaerobisessa biokonversiossa", "Survival of pathogenic bacteria in anaerobic bioconversion"
 - Heidi Kunttu 2004, Master's thesis: "Suomen *Flavobacterium columnare* -kalapatogeenikantojen genotyypianalyysi", "Genotype analysis of Finnish *Flavobacterium columnare* fish pathogens"
 - co-supervision: Lotta-Riina Suomalainen 2005, PhD thesis: "*Flavobacterium columnare* in Finnish fish farming - Characterisation and putative disease management strategies"
 - Helena Jäntti 2007, Master's thesis "The spatial and temporal variation of nitrogen fixation in aquatic environments"
 - Kaisa Teräväinen 2007, Bachelor's thesis in Jyväskylä University of Applied Sciences. "Occurrence of the bacterium *Iodobacter* sp. on the skin of fishes susceptible to saprolegniosis"
 - Jatta Karhunen 2011, Master's thesis "
 - co-supervision: Sari Peura, PhD thesis 21.4.2012 " Bacterial communities in stratified humic lakes"
 - Antti Rissanen, PhD thesis 5.10.2012: "Nitrogen removal by microbial processes in aquatic systems"
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- Sanna Leppänen, PhD thesis under supervision 1.2.2008 -> "Nitrogen fixing endosymbionts in mosses", PhD defence should be 12.10.2013
 - Anna Taskinen, PhD thesis under supervision 28.1.2011->"Novel rRNA-based molecular methods as tools in quantitative characterization of microbial communities"
 - Jatta Karhunen, PhD thesis under supervision starting in 1.6.2011-> "Anaerobic microbiology of lakes"
 - co-supervision: Anu Karvinen PhD thesis under supervision 1.3.2011-> "Role of iron and manganese in suppression of methane emissions from wetlands and lakes"
 - Ville Juusela, PhD thesis under supervision 1.2.2013-> "Stimulation of denitrification and DNRA by the treated wastewater"