

Curriculum Vitae

1. Full name and date

- Mäntyniemi, Samu Henrik Petteri
- Male
- 20.3.2015

2. Date and place of birth, nationality, current residence

- 18.4.1975 Oulu, Finland
- Finnish
- Viikinportti 2 A 1, 00790 Helsinki, phone +358 50 4151098, email: samu.mantyniemi@helsinki.fi

3. Education and degrees awarded

- Ph.D., University of Helsinki (Rolf Nevanlinna Institute), Biometry, 14.9.2006
- M.Sc., University of Oulu, Statistics, 11.12.2001
- title of docent: Fishery Biology, University of Helsinki, 4.11.2011

4. Other education and training, qualifications and skills

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5. Linguistic skills

- Finnish: mother tongue
- English: self assessment: C1-C2
- Swedish: self assessment: A2-B1

6. Current position

- Professor of multidisciplinary risk analysis, University of Helsinki, Fisheries and Environmental Management group, Department of environmental sciences, 1.8.2012-30.6.2018

7. Previous work experience

- University Researcher, University of Helsinki, Fisheries and Environmental Management group, Department of environmental sciences, 1.1.2009-31.7.2012
- Researcher, University of Helsinki, Fisheries and Environmental Management group, Department of environmental sciences, 1.1.2009-31.7.2012
- Researcher, University of Helsinki, Fisheries and Environmental Management group, Department of Biological and Environmental Sciences, 1.10.2005-31.12.2008:
- Researcher (PhD student), University of Helsinki, Department of Mathematics and Statistics, Rolf Nevanlinna institute, 1.11.2001-30.9.2005
- Research Assistant (Part time), Finnish Game and Fisheries Research Institute, Oulu and Simo, 1999-2001

8. Research funding as well as leadership and supervision

- 2000-2002 Source of funding: Probabilistic Modelling of Baltic Salmon Stocks (PROMOS) European Commission, Part time salary, No role in the application phase
- 2002-2005 Graduate School in Computational Biology, Bioinformatics and Biometry, Full salary, 100% share in the application preparation
- 2005-2008 Precautionary Risk Methods for Fisheries (PRONE) European Commission (6th framework), Full salary, 10% share of the application
- 2008-2011 Judgement And Knowledge in Fisheries Involving Stakeholders (JAKFISH) European Commission (7th framework), Full salary, 20% share of the application
- 2010-2014 Effective use of ecosystem and biological knowledge in fisheries (ECOKNOWS) European Commission (7th framework), Full salary, 50% share of the application, leader of the modelling workpackage (budget of 600000e) and leader of the whole project in September 2013 – January 2014 (Total budget of 1.7Me)
- 2014 EUSBSR Seed Money – funding for project planning and proposal preparation (43600e).
- Role in the preparation of funding applications for a research group:
 - In addition to the above projects, my role has been to supervise all other proposal preparations of the FEM group (PI: Sakari Kuikka) from the perspective of inferential methods and decision analysis
- leadership in research work
 - In addition to the above projects, my role has been to lead the development of Bayesian modelling skills in the FEM group.
- experience as officially appointed supervisor to undergraduate and post-graduate students/doctoral students
 - Graduated PhD students: Teppo Juntunen 2013, Annukka Lehtikoinen 2014, Henni Pulkkinen 2015
 - I am currently supervising 3 PhD students, expected graduation in 2017.
 - I am currently supervising 1 MSc student
- **Merits in teaching and pedagogical competence**
- No formal pedagogical training
- Involvement in curriculum planning:
 - Working group for the campus wide development of teaching of statistics in Viikki campus, University of Helsinki
 - Planning of department's curriculum in aquatic sciences, Department of environmental sciences, University of Helsinki
 - Leading the working group for teaching in English, Department of environmental sciences, University of Helsinki
 - Planning of training programme courses for the International Council for the Exploration of the Sea
- Implementation of courses:
 - Introduction to Bayesian inference (24h lectures+ 24h practical sessions)
 - Probability models and decision analysis (48h lectures+ 48h practical sessions)
 - Fisheries stock assessment (44h lectures+44h practical sessions)
 - Advanced course in Bayesian inference (36h lectures+36h practical session)
 - Statistical methods for assessing wildlife populations, department of mathematics and statistics, 2006 (20h lectures + 20h practicals)

- Graduate Course in Statistical Inference, Helsinki Graduate School in Biotechnology and Molecular Biology (GSBM), 2007 (20h lectures + 20h practicals)
- special courses for other research institutes:
 - “WinBUGS for Fisheries Scientists”. This course was developed and lectured together with Dr. Murdoch McAllister (University of British Columbia, Canada) and Dr. Catherine Michielsens (Pacific Salmon Commission, Canada). We gave the course for the following institutes: 1) University of Aberdeen, Scotland, UK, 2005 2) Carl Walter’s group, University of British Columbia, Vancouver, Canada, 2005 3) Jon Schnute’s lab: DFO Pacific Biological station, Nanaimo, Canada, 2005 4) South West fisheries center, Santa Cruz, USA, 2006
 - Introduction to Bayesian inference, FGFRI, 2004
 - Advanced course in Bayesian inference, FGFRI, 2004
 - Bayesian stock assessment, FGFRI, 2007
 - Introduction to Bayesian inference in fishery science, ICES, Copenhagen, Denmark, 2010 and 2012. This course was developed and lectured together with professor Ray Hilborn (University of Washington, USA). Modeling and decision making using Bayesian statistics, Aalto University, Espoo, Finland 2012. Summer school with associate professor Marek Druzdzel (University of Pittsburgh, USA)
- Assessment of teaching skills by the Faculty of Biological and Environmental Sciences: Excellent

9. Awards, prizes and honours

My MSc thesis was awarded the Leo Törnqvist prize by the Finnish Statistical Society. The award is given annually for the best MSc thesis in statistics.

10. Other academic merits

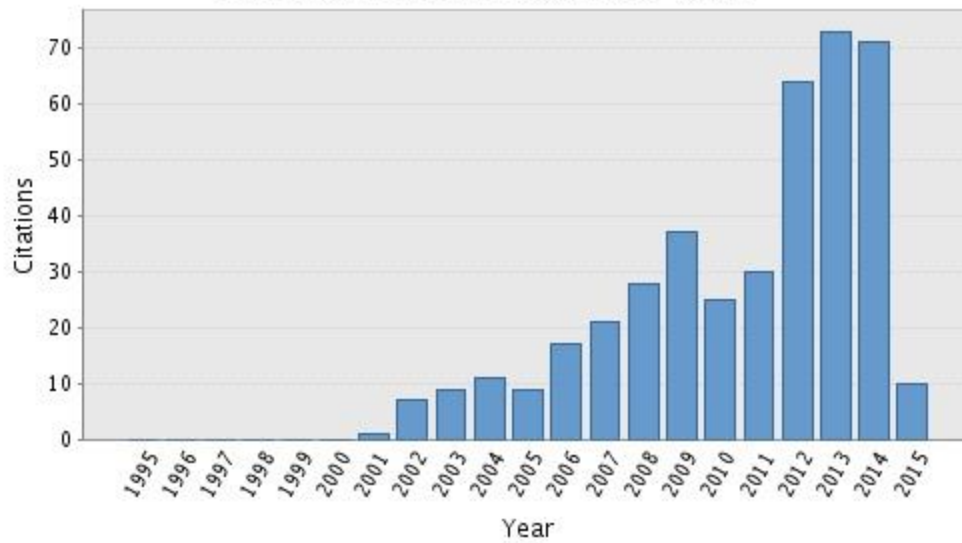
- Steering group of the TOPCONS project.
- Board member of the DENVI doctoral training programme
- Member of the research affairs committee of the Faculty of Biological and Environmental sciences
- I have served as a referee for the following journals: Canadian Journal of Fisheries and Aquatic Sciences, Scandinavian Journal of Statistics, Fisheries Management and Ecology, Ecology of Freshwater Fish, Environmental and Ecological Statistics, ICES Journal of Marine Science, Methods in Ecology and Evolution.
- I have served as the opponent for the doctoral dissertation of Olli Leino, University of Eastern Finland
- Invited lectures abroad:
 - 13.6.2012 Keynote: Combining stakeholder knowledge using model averaging, Danish Fisherman Association, Copenhagen.
 - 14.10.2012 Keynote: Uncertainty in climate model predictions, Swedish Meteorological and Hydrological Institute, Norrköping
- I have organised three national seminars on biological and environmental applications of Bayesian inference (“Bio-Bayes”): Helsinki 2013 & 2014, Oulu 2015.

11. Scientific and societal impact of research

- My publication activity started in 2001. The total number of all publications is 65.

- Google Scholar: 740 citations / h-index =13
- ISI Web of Science: 413 citations / h-index = 10 (Data from 30 articles)

Citation Distribution by year



- I supervised and participated to the development of stock assessment models that are currently being used by the International Council for the Exploration of the Sea (ICES) to assess the status of Baltic salmon stocks.
- I participate actively to the planning of the modelling roadmap of the Finnish Environment Institute

12. Positions of trust in society and other societal merits

- Policy advice tasks: member of ICES working group for Baltic salmon and sea trout, see 11)