

Curriculum vitae

Lahti, Leo M. (born 2nd July, 1979 in Turku, Finland; Finnish national)

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Academic Degrees

9/2015 Title of Docent (Applied Mathematics), University of Turku, Finland.

12/2010 Doctor of Science in Technology (Bioinformatics), Aalto University, Finland.

12/2003 Master of Science in Technology (Engineering Mathematics), Helsinki Univ. Technology, Finland.

7/2008 Bachelor of Science in Political Sciences (Practical Philosophy), University of Helsinki, Finland.

Current positions

9/2016-8/2021 PI & Academy Research Fellow. University of Turku. Dpt. Mathematics and Statistics.

6/2019- Board member and scientific advisor. Turku City Data Oy. By demand (~monthly meeting).

4/2017- Scientific advisor. Blueprint Genetics Co. By demand (~4 meetings per year).

Previous positions

12/2015-8/2018 (2.5 years) Visiting scholar. VIB/KU Leuven, Belgium.

9/2012-8/2015 (3 years) Academy of Finland Postdoc. Univ. Helsinki & Wageningen (The Netherlands).

3-12/2011 (9 months) Postdoc, Univ. Helsinki / FiDiPro & Microbial Food Safety Center of Excellence.

11/2010-1/2011 (3 months) Visiting scholar. European Bioinformatics Institute EBI, UK.

1/2006-2/2011 (5 years) Doctoral candidate. Information and Computer science, Aalto University, Finland.

Adaptive Informatics Research Center of Excellence, Helsinki Institute for Information Technology HIIT.

9-12/2005 (4 months) Researcher. University of Helsinki, Finland. Dpt. Computer Science

9/2004-8/2005 (1 year) Researcher. Turku Center for Biotechnology, Finland (Civil service)

1/2003-6/2004 (1.5 years) Research assistant. Helsinki / TKK; Neural Networks Center of Excellence.

7/2002 (1.5 months) Summer trainee. Croatian Meteorological Institute, Zagreb, Croatia.

6/2001-8/2001 (3 months) Research trainee. CERN, Geneva, Switzerland.

9-10/2000 (2 months) Volunteering teacher. Dakshinayan, Bihar, India.

6-8/2000 (3 months) Programmer. Teleste co.

Research funding Total personal funding >1.5Me; funding as a member of research team ~1.3Me;

Major personal grants 9/2016-8/2021 Academy of Finland Research Fellow (1.14Me); 9/2012-8/2015 Academy of Finland Postdoctoral Fellow (378 657e); 2012 Postdoc grant, Kordelin foundation (35 000e); 2006-2010 Postgraduate scholarship, Dpt Information and Computer Science, Aalto University (80 000e; 1850e/mo 4 years); 2000-2014 personal travel grants from universities and graduate schools >3000e. 2019-2020 SPARC grant, Government of India (60 000e; Co-PI; Led by Prof Richa Ashma).

Major contributions as a research team/consortium member (>1,300,000e). In the following projects I made significant contributions to the design and writing of the computational and open science components:

9/2018-8/2022 CROSSYS, Academy of Finland (450000e; Jarna Hannukainen); 1/2016-12/2019 COMHIS consortium, Academy of Finland (833258e; Hannu Salmi); 2015 Digital humanities grant, University of Helsinki (30 000e; M. Tolonen); 2012-2013 Sitra New Democracy grant (12000e; Kansan muisti ry).

Research leadership and supervision

Postdocs Co-supervisor: 2 postdocs (Marja Heiskanen, Ali Ijaz).

PhD students Primary supervisor: 2 PhD students (Ville Laitinen & Aaro Salosensaari; dissertations in 2022); Co-supervisor: 4 PhD students (Anna Aatsinki, Anna Kaisanlahti, Joonatan Palmu, Ville Vaara). Graduated: Sudarshan Shetty (2019; co-supervisor); Jose Caldas (2012; daily instructor). Both with distinction.

MSc students Primary supervisor: 4 MSc students; Graduated (as co-instructor): 7 MSc, now employed in Belgium, Finland, Sweden, UK, Portugal; 4/7 (>50%) MSc students continued to PhD studies.

Academic leadership PI in Academy of Finland Research Fellow & Postdoc projects. Now leading a research team in University of Turku with 2 PhD students, 4 MSc students, and co-supervisor for 2 postdocs and 4 PhD students. *Coordinator*: TEKES Multibio consortium 2008-2011. *Training*: EMBO Research Leadership (4 days; 11/2017). VIB Leadership Program (4 days; 2/2017); VIB Oral Presentation (3 days; 2/2017); VIB Research Ethics (1 day; 3/2017); VIB Convincing, Debating, and Negotiating (2 days; 5/2017).

Teaching

5/2018 (3 days) bioinformatics summer school organizer, Wageningen University, The Netherlands;
3/2018 Introductory pedagogical courses for university teachers by University of Turku.
9/2017 (3 days) numerical ecology summer school organizer, KU Leuven, Belgium;
10/2015 (2 weeks) bioinformatics intensive course co-organizer, Wageningen University, The Netherlands;
2015 Work group member designing Digital Humanities MSc module, University of Helsinki, Finland;
2006-2009 Assistant in 4 annual university courses on bioinformatics. Aalto University, Finland;
2005-2018 10+ academic lectures and workshops in Finland and abroad.

Organizing scientific meetings

12/2018 Computational Life Science seminar. Turku. Organizing committee. ~80 participants
12/2016 Conference on Philosophy and History of Open Science. Organizing committee; ~100 participants
3/2018 Digital Humanities in the Nordics. Program committee (Open Science chair). ~300 participants.
2008-2010 Finnish Bioinformatics Days (annual seminar). Organizing committee. ~50 participants annually.

Acknowledgements and awards

2019 Best paper award. Hill MJ *et al.* Digital Humanities in the Nordics conference.
2017 Open Science award. Ministry of Education and Culture. For Open Knowledge Finland Open Science work group, where I am founding member, first coordinator, and active contributor.
2016 Open Science award. Ministry of Education and Culture. For Helsinki Computational History group led by Prof Mikko Tolonen. I am co-founder of this research group.
2015 Nature Communications paper in NCI's Epidemiology and Genomics Research Highlights
2013 Waterloo Institute for Complexity and Innovation Data Challenge 1000CAD
2011 Int'l Dupuytren award for Mosakhani *et al.*, *Modern Pathol.*
2011-2014 6 Apps4Finland & 2 Datademo awards by HRI and Sitra for open data science projects
2005 Best poster award; Seminar of Systems Biology Research Program. Academy of Finland, Helsinki
2001 Professor E.J. Nyström stipend (1000e) excellence in mathematical studies, Espoo, Finland.

Publications

59 peer-reviewed publications in machine learning, computational life sciences and digital humanities; 10+ open research software packages with ~100k annual downloads; reports, workshop papers, and outreach material. Scopus h-index 20; 2000+ citations.

Other academic merits

2005-2019 100+ invited and contributed presentations in 15+ countries; including video interviews
2019- DARIAH-EU Bibliographic Data work group member.
2019-2020 Digital humanities advisory panel (National Library of Finland)
2018-2019 Advisor. Indian Microbiome Project.
2017-2019 European Conference Machine Learning & Knowledge Discovery. Program committee member.
2010-2018 Reviewed manuscripts for >30 scientific journals and conferences
2017-2018 Research support network member, developing open science policies in University of Turku.
2016 Design of tiedonhinta.fi campaign, signed by >2700 researchers to support publisher negotiations
2014 Keynote presentation. Gut Day. Amsterdam, The Netherlands.
2014 Freedom of Information request on academic journal prices, led to open data release by Ministry of Education and Culture, making Finland a leading country in the transparency of journal pricing.
2008-2018 Steering group member for: Digitalia (2015-2018); Data Elections Finland network for election analytics (2012-2013); MultiBio TEKES consortium (2008-2011). All in Finland.
2009-2014 COST networks. Leukemia (2009-12) & microbial bioinformatics (2013-14).

Memberships and positions of trust in scientific societies

2019- Review Editor. Frontiers in Microbiology.
2018- Editorial board member. Versus journal, Finland.
2013-15 Founder & coordinator. Open Knowledge Finland ry. Open Science Work Group. Finland.
2010 Founder. Int'l rOpenGov network. Launched at NIPS Open Source workshop, US 2013.
2009-10 Board member, PR & vice president. Society for Bioinformatics. Finland.
2002 Treasurer. Mathematics student union, Helsinki University of Technology. Finland.

Full CV https://openresearchlabs.github.io/cv/CV_Lahti.pdf