
CURRICULUM VITAE

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<http://tuhat.halvi.helsinki.fi/portal/en/person/lindstro>

1. Personal details

- Lindström (nee Lindqvist), Anna Kristina
- female

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

- 20.01.1954, Helsinki
- Finnish citizen
- Residence: Helsinki

3. Education and degrees awarded

- PhD (Doctor of Agriculture and Forestry), microbiology, University of Helsinki, 31.5.1985
- title of docent: microbiology, 1986

4. Other education and training, qualifications and skills

- broad competence in microbiology, molecular ecology, microbial ecology, microbial genomics, systematics and taxonomy, sustainable agriculture

5. Linguistic skills

- Swedish, mother tongue
- Finnish, excellent
- English excellent
- German, good

6. Current position

- Professor of Sustainable Development, University of Helsinki, Department of Environmental Sciences 1.5.2013-

7. Previous work experience

- University lecturer in microbiology 1.8. 2001-30.4.2013
- Academy senior research fellow (varttunut tutkija) 1.8.2001-31.7.2002
- Professor in Applied Microbiology 15.8. 1998-31.7. 2000
- Associate professor in Microbiology 1.9.1995-31.7.1998
- Research stipend of the University of Helsinki 1995
- Research stipend of the Academy of Finland 1994-95
- Senior research fellow at the Academy of Finland 1993
- Acting associate professor in microbiology, University of Helsinki 1991-92 (11 months)
- Junior research fellow at the Academy of Finland 1985-93

- Research assistant at the Academy of Finland 1979-85
- Visiting scientist, Department of Molecular Biology, Massachusetts General Hospital and Harvard Medical School 1983-84 (7 months)
- OECD research fellow, Massey University, New Zealand 1981-82 (9 months)
- Maternity leaves 15.3.1986-15.2.1987 and 1.3.1989-1.2.1990

8. Research funding as well as leadership and supervision

- Obtained research funding since 1984
- coordinator of EC funded project 1996-1999 (collaboration with China)
- see appendix for recent funding given to KL as a project leader
- established my own research group in 1984
- supervision of 8 post-doc researchers
- main supervisor of 15 and co-supervisor of 7 PhD theses in Finland and abroad
- supervisor of 40+ M Sc theses

9. Merits in teaching and pedagogical competence

- pedagogical training and competence: 50 credits of university pedagogical studies
- involved in development of all major courses and the curriculum as well as international M Sc courses in microbiology 1979-2013 and in Sustainable development 2013-
- organised several international PhD courses in environmental biotechnology, bioinformatics, soil sciences and sustainable development 1993-2012 (in Ethiopia 2010, 2012)

10. Awards, prizes and honours

- Helge Gyllenberg's award to a young microbiologist 1987
- NOVA prize for the Nordic network Soils and Society 2009

11. Other academic merits

- Served as a pre-examiner 10 times, as an opponent of 16 doctoral dissertations and as a member in dissertation committees abroad 6 times
- Reviewer of professor's or associate professor's (försteamanuesnsis, universitetslektor competence 1994, 2000 (2x) and 2001 (3x), 2003, 2011 (2x), 2012 (University of Khartoum, SLU, University of Zimbabwe, University of Tromsø, Univ. Lund) and docent's competence 11 times (domestic and abroad) evaluation of academic/scientific or artistic competence (e.g. title of docent)
- Member of international peer evaluation committees of funding applications: reviewer of research proposals for EC, Academy of Finland, Belgian government, Czeck government, Academy of Finland, National Environment Research Council, U.K., International Science Foundation, Stockholm, The Israel Science Foundation, STINT, SJFR, SIDA Sweden, Genome Canada, Icelandic research Board, Project Management Jülich, Division Bioinnovation and Bioeconomy Germany, Danish Research Council, Research Council of the Netherlands, Research Council of South Africa
- Member of Skogs- och Jordbruksvetenskapliga Forskningsrådet, ecology section, biogeochemistry group, Sweden 1997-2002, now FORMAS, SIDA 2006-2007
- Member of Societas Biochemica, Biophysica and Microbiologica Fenniae, representative of the society in the International committee for bacterial systematics; Agricultural Scientific Society of Finland; International Society for Plant Molecular Biology; International Society for the Molecular Biology of Plant-Microbe Interaction, Finska vetenskaps societeten 2010-, Board member 2014-; Svenska Tekniska Vetenskapsakademien i Finland 2012-
- Member of the International Committee for Systematic Bacteriology, Rhizobium and Agrobacterium subcommittee 1992-, secretary 1995-2014; Member of the ethical committee of the Faculty of Agriculture and Forestry, University of Helsinki; 1991-; Member of the committee for post gradual studies of the Faculty of Agriculture and Forestry, University of Helsinki 1995-2000, chairperson 1998-2000; Member (representative of

professors) of the committee for environmental studies of the Faculty of Agriculture and Forestry 1996-98; Member of the faculty planning group 1999-2000; Member of Institution Board 1991-94, 1998-2000; Member of the faculty committee for development of teaching 2001-2007; Member of the faculty committee for evaluation of teaching skills 2005-2009; Founding member and first head of steering group of the NOVA-SoilSoc network Member 2007- 2013; member of departmental steering group 2013-17; member of faculty teaching committee 2013-; deputy member of faculty committee for research 2013-18; member of faculty board 2018-

- Chair of the steering group of the international MENVI M Sc programme 2009-2013
- Chair of DENVI doctoral programme 2014-17
- Finlands Natur editorial board 1974-88, editor 1974-78; European Journal of Soil Biology editor 2007-; FEMS Microbiology Ecology editorial board 2006-
- Referee for over 20 journals
- Invited keynote lectures abroad several times
- Current research group consists of three post doctoral fellows, three PhD students and associated (foreign and domestic) PhD students. Our main focus is on biodiversity of plant beneficial bacteria: molecular taxonomy, molecular biology and molecular ecology of rhizobia and their leguminous hosts, bioremediation using the legume rhizosphere as the habitat for degraders, nitrogen cycle in soil; plant growth-promoting rhizobacteria; work with Ethiopian farmers on biofertilizer use, collaboration with Norwegian scientist and Chinese company on biofertilizer production.

12. Scientific and societal impact of research

- Total number of scientific publications 143
- Numerous appearances in media (see TUHAT database), public presentations and articles meant for the public on e.g. biological nitrogen fixation, genetically modified organisms and education
- Collaboration with Finnish and Ethiopian biofertilizer producers
- Long-term collaboration with Chinese scientists 1989- and Ethiopians 2005-
- Leader of Helsinki Challenge team Ground&Growth selected for semifinal 2014-15.

13. Positions of trust in society and other societal merits

- Member of national committee designing national hygiene test for persons working with easily spoiled food (2001-02)
- Member of Board of Victoriastiftelsen 1998-2005
- Member of national working group organising seminar on gene technology and environment (2001-02)
- Member of the Finnish Board for Biotechnology 2004-2013
- Member of Board of Research Foundation for Women 2003-, Chair 2009-2013
- Member of programme committee for Finnish Science Days 2015 and 2017
- Member of international advisory board of major conferences on biological nitrogen fixation
- Member of the steering board of the Arcada University of Applied Sciences 2014-
- Member of committee for societal interaction at the University of Helsinki 2014-

14. Other merits

Numerous public appearances in newsmedia such as Yle

APPENDIX

MAJOR RESEARCH GRANTS 1996-2016

| YEAR | TITLE | SOURCE | FUNDING (EURO) |
|------|-------|--------|----------------|
|------|-------|--------|----------------|

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|-----------|---|---------------------------------|-----------|
| | | | |
| 1996-2002 | Bioremediation using the legume rhizosphere and gene ecology | Maj and Tor Nessling Foundation | ~ 150 000 |
| 1996-1999 | Exploitation of Chinese biodiversity resources in sustainable crop production, using a biotechnological approach for rhizobial diversity evaluation, strain improvement and risk assessment (Co-ordinator) | EC - INCO | 230 000 |
| 1996-2000 | Symbiosis and defence | EC - TMR | 185 000 |
| 1997-2001 | Genetic diversity and phylogeny of <i>Sinorhizobium meliloti</i> , <i>S. medicae</i> and <i>Rhizobium galegae</i> in relation to their host plants | INTAS | 4 250 |
| 1997-2001 | Evaluation et utilisation de la biodiversité des microsymbionts de <i>Calliandra calothyrsus</i> pour optimiser la production fourragère au sein de petites exploitations agricoles en zone humide | EC - INCO | 62 601 |
| 1998-2000 | Ecological studies with genetically marked rhizobia: A field release | Academy of Finland | 152 605 |
| 2000-2003 | Prevention of land degradation in the Aral Sea region undergoing disastrous desertification by increasing tolerance of symbiotic nitrogen fixation to salinity | EC - INCO | 111 499 |
| 2000-2003 | Multipurpose nitrogen fixing trees and their associated microsymbionts for soil nutrient enrichment in Sub Saharan Africa | EC - INCO | 70 076 |
| 2000-2003 | Specifik igenkänning och försvar vid Rhizobium – baljväxtinteraktion | University of Helsinki | 67 227 |
| 2000-2003 | Monitoring ecological interactions in the legume rhizosphere | Academy of Finland | 276 151 |
| 2001-2003 | Monitoring ecological interactions in the legume rhizosphere | Academy of Finland | 93 815 |
| 2001-2003 | Phytoremediation of oil-contaminated soil | University of Helsinki | 34 874 |
| 2001-2003 | Effect of rhizoremediation on microbial ecology of soil: monitoring the cleaning process | Neste (Fortum) Foundation | 50 420 |
| 1996-2001 | Exchange of scientists | Academy of Finland | 16 000 |
| 2003-2005 | Developing a genomic toolbox for exploring and exploiting bacterial biodiversity | EC – Quality of life | 250 000 |
| 2002-2004 | Unseen Archaea in northern habitats (with Uwe Münster) | Academy of Finland | 363 900 |
| 2003-2005 | Symbiotic legumes for sustainable food production and prevention of land | Academy of Finland | 300 000 |

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|------------------|--|--|------------------------------|
| | degradation in China | | .. |
| 1996-2002 | NKJ collaboration (Nordic) | No special funding | .. |
| 2003-2005 | Stipend for graduate studies | Victoriastiftelsen | 27 200 |
| 2002-2004 | Invitation of Russian scientist | Academy of Finland | 50 000 |
| 2005-2007 | Bioremediation of oil-contaminated soil | Nessling foundation | 100 000 |
| 2005-2007 | Exchange fellowship to China | Academy of Finland | 10 000 |
| 2005 | EU project preparation grants | University of Helsinki | 10 700 |
| 2005-2006 | Invitation of Russian scientist | Academy of Finland | 18 000 |
| 2005 | PhD thesis grant, Minna Jussila | University of Helsinki | 3 300 |
| 2005 | PhD thesis grant, Qiang Zhou | University of Helsinki | 3 300 |
| 2005 | Pro gradu stipend, Aura Nousiainen | Ekokem foundation | 5 000 |
| 2005 | PhD thesis grant Qiang Zhou | CIMO | 3 240 |
| 2007-2009 | Characterization and conservation of Ethiopian rhizobial biodiversity, and exploring their use in sustainable agroforestry | Academy of Finland | 300 000 |
| 2010-2013 | Molecular mechanisms affecting symbiotic effectiveness in rhizobium - legume symbioses (SYMBEF) | Academy of Finland | 650 000 |
| 2009 | Sustainable use of tropical soils course, Ethiopia | NOVA | 33 000 |
| 2009 | ICI-SAU planning grant | ForMin | 30 000 |
| 2009-11 | CIMO grants (Aregu Aserse, CIMO-NSS) | CIMO | 100 000 |
| 2011-12 | MICCO and HSS symposium grants | Magnus Ehrnrooths stiftelse | 9 000 |
| 2011 | Sustainable use of tropical soils course, Ethiopia | NOVA | 44 000 |
| 2011, 2012, 2014 | Travel and research grants | Societas Scientarum, Magnus Ehrnrooth Foundation | 17 000, 20 000, 12 000, 2500 |
| 2013 | SOILMAN research project | Academy of Finland | 585 000 |

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| 2015, 2016 | Nitrous oxide related bacterial activity and diversity in agricultural soil; post doc research grant | Magnus Ehrnrooth Foundation | 28 000, 28 000 |
| 2015 | Invitation of Ethiopian reseracher | CIMO | 13 500 |
| 2016 | Biofertilizer development | Kingenta Inc, China | 106 000 |
| 2017, 2018 | Travel grant, grant for post doc | Societas Scientarum | 2000, 8000 |
| 2018 | Research grant ERA-Net Agri-LEAP | Academy of Finland | TBA |
| TOTAL | approx. | | 4 100 000 |