

CURRICULUM VITAE

Personal Information

Name/Gender: **Gesa A. Weyhenmeyer**, ORCID: 0000-0002-4013-2281; female; D.o.b.: 4-Nov-69 (Bonn, Germany)
Nationality: Swedish and German
Children: two children (born 2000 and 2001); **Maternity leave: total of 32 months during May 00-Aug 07**
Work address: Dept. of Ecology and Genetics/Limnology, Uppsala University, Norbyvägen 18D, SE-752 36 Uppsala,
Phone: +46-471 2711, email: Gesa.Weyhenmeyer@ebc.uu.se
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University Education and Academic Degrees

2013, Mar **Distinguished University Teacher** - Uppsala University, Sweden
2012, Jul **Professor** of Aquatic Biogeochemistry - Uppsala University, Sweden
2003, May **Associate Professor** of Aquatic Ecology - Swedish University of Agricultural Sciences
1996, Oct **Doctor of Philosophy (PhD)**, Geology - Uppsala University, Sweden
1995, May **Licentiate of Philosophy**, Geology - Uppsala University, Sweden
1992, May **Bachelor of Science** (Dean's Honors List) - Trent University, Canada
1989-1992 Undergraduate studies: Christian-Albrechts-Universität zu Kiel, Germany (1989-90), Albert-Ludwigs-Universität, Germany (1990-91, 'Vordiplom' in Hydrology), Trent University, Canada (1991-92)

Current Position

since Jul 2012 **Professor of Aquatic Biogeochemistry** and since 2013 employed as Distinguished University Teacher
Dept. of Ecology and Genetics/Limnology, Uppsala University, Sweden
Faculty/institutional responsibilities:

- Chair of the Educational Board of Science at Uppsala University: 40% of employment; since Jul 23
- Vice Chair of the Recruitment Committee of the Faculty of Science & Technology at Uppsala University: 40% of employment, evaluation of candidates for about 70 different positions/promotions per year; Jan 17-Dec 22
- Course leader/teacher: 15-35% of employment; since Jul 12
- Communication officer: 5% of employment; 2013-2016
- Engagements in various steering committees/boards etc. (see below)

Previous Academic Positions

May 09-Jun 12 **Senior Lecturer** in Biology
Dept. of Ecology and Genetics/Limnology, Uppsala University, Sweden
Teaching in Geoscience, in Engineering and in Biology on all levels
Jan 06-Apr 09 **Research Fellow Post at the Royal Academy of Sciences**
Dept. of Aquatic Sciences and Assessment, Swedish University of Agricultural Sciences, Sweden
Institutional responsibilities:

- Assistant Department Chair: 2008-2009
- Director of Studies for Research Education: 15% of employment; 2008-2009
- Deputy Director of Studies for the postgraduate school 'Focus on Soil and Water': 2008-2009

Oct 99-Dec 05 **Senior Scientist (Environmental Consultant)**
Dept. of Aquatic Sciences and Assessment, Swedish University of Agricultural Sciences in Uppsala
Very limited research activity
Mar 98-Sep 99 **Researcher**
Dept. of Limnology, Uppsala University, Sweden
Position financed by the EU-project REFLECT (Response of European Freshwater Lakes to Environmental and Climatic Change)
Sep 97-Feb 98 **Post-Doctoral Researcher**
Inst. of Hydrology and Meteorology, Technical Univ. of Dresden, Germany
Research on hydrological processes in dry regions; position financed by a scholarship from the Ministry of Science and Culture in Saxony, Germany
Jan 97-Aug 97 **Post-Doctoral Researcher**
Erken Laboratory, Sweden. Visit to the Yigal Allon Kinneret Limnological Laboratory, Israel
Research on lake eutrophication; position financed by a scholarship of Uppsala University
Nov 96-Dec 96 **Post-Doctoral Researcher**
The University of Western Australia, Perth, Australia
Research on physical lake modelling; host: Prof. Jörg Imberger; financed by the Sederholms foundation
Jun 93-Nov 96 **Research and teaching assistant** (10-20% of full time)
Dept. of Earth Sciences, Uppsala University, Sweden

SCIENTIFIC QUALIFICATIONS

Reviewed International Publications

152 reviewed international publications of which 36 are first or sole author publications; in addition: 39 scientific reports and six other publications including one invited book review, >150 published abstracts and a large variety of popular science publications. First author papers frequently cited in international literature, mainly by non-collaborating authors outside Sweden (for a complete publication list and citation record see separate publication list). The ability to conduct groundbreaking research and to demonstrate leadership in the training and advancement of young scientists was evaluated as being exceptional when having been invited for an ERC Advanced Grant interview in 2022.

Awards, Honors and Prizes

1. [Distinguished Alumni Award Recipient](#), Trent University, Canada, 2023
2. Elected [Member of the Royal Society of Sciences at Uppsala](#) (Class of Biology-Medicine), Sweden, 2023
3. [Sustaining Fellow Award Recipient](#) for having sustained excellence in the contributions to the Association for the Sciences of Limnology and Oceanography and the Aquatic Sciences, United States, 2017
4. [Outstanding Women in Academia Award Recipient](#), Swedish Research Council/Robert Bosch Stiftung in cooperation with 'Spektrum der Wissenschaft' and Nature, 2017
5. Elected [Life-Member of the Royal Swedish Academy of Sciences](#) (Class for Geosciences), 2016
6. [Pedagogical Prize Recipient](#) of the TekNat faculty, Uppsala University, Sweden, 2015
7. Honored, on behalf of King Carl XVI Gustaf, as outstanding scientist to participate in the symposium: Faith in the Future – how science can help in meeting environmental challenges' at the Royal Palace, Sweden, 2012
8. Honored, on behalf of the InterAcademy Panel on International Issues, as outstanding young scientist, to represent Sweden in IAP/WEF 'Summer Davos' in Dalian, China, 2009
9. Special leadership education: Tomorrows academic leaders, selected by the Vice-Chancellor of the Swedish University of Agricultural Sciences, Sweden, 2008
10. Oral Presentation Recognition for one of the 'most innovative, integrative, and exciting abstracts to create stimulating pairings and groupings that address overarching themes of broad interest to limnologists and oceanographers', American Society of Limnology and Oceanography, United States, 2007
11. Five-year Research Fellowship Position at the Royal Swedish Academy of Sciences, 2005
12. DIALOG II (Dissertation Initiative for the Advancement of Limnology and Oceanography) Award Recipient, American Society of Limnology and Oceanography, United States, 1997
13. Dean's Honors List for an excellent Bachelor of Science, Trent University, Canada, 1992

Some more pedagogical awards/prizes are listed below under pedagogical qualifications.

Worth mentioning might also be the Nobel Peace prize which was awarded to IPCC in 2007 to which I officially contributed to.

Scholarships

1. Recipient of a scholarship to stay at the Bergman Estate on Fårö for research and teaching inspiration; awarded by the [Bergman Estate on Fårö Foundation](#), Sweden, 2021 and 2022
2. Recipient of a 6-months postdoctoral scholarship for hydrological studies at the Technical University of Dresden, awarded by the Ministry of Science and Culture in Saxony, Germany; 1997
3. Recipient of a 6-months postdoctoral scholarship for research at Erken Laboratory, awarded by Uppsala University, Sweden; 1997
4. Recipient of a 3-months scholarship for studies at Erken Laboratory, awarded by Uppsala University, Sweden; 1992
5. Recipient of a 12-months scholarship for studies at Trent University in Canada, awarded by Ludwig-Albert University, Germany; 1991

Major Research Grants

For pedagogic grants see below

1. **Swedish Research Council (VR)**: Rapid ice quality changes in the Northern Hemisphere and consequences for the achievement of several global sustainable development goals; 4 000 000 SEK; 2021-2024 (main applicant)
2. **FORMAS**: Challenges and opportunities of rapidly changing ice properties on ecosystem services from freshwaters; 3 000 000 SEK; 2021-2023 (main applicant).
3. **Swedish Research Council (VR)**: Integrating differences in the functioning of lakes in the global carbon cycle for improved estimates of the terrestrial carbon sink; 3 555 000 SEK; 2017-2020 (main applicant).
4. **EU-H2020-MSCA-ITN-2014**: Carbon Cascades from Land to Ocean in the Anthropocene (C-CASCADES). 3 100 000 Euro; 2015-2018 (fellow applicant receiving 260 000 Euro; main applicant: Prof. Pierre Regnier).
5. **Wallenberg**: Inland water ecosystems in the global carbon cycle – towards a mechanistic understanding. 31 000 000 SEK; 2014-2018 (fellow applicant; main applicant Prof. Lars Tranvik).
6. **NordForsk**: Top-level Research Initiative (TRI): Drinking water treatment adaptation to increasing levels of DOM and changing DOM quality under climate change (DOMQUA). 5 500 000 NOK. 2014-2016 (fellow applicant receiving 200 000 NOK; main applicant Dr. Heleen de Wit).

7. **EU-FP7-COST** Action Grant: Networking lake observatories in Europe (NETLAKE). ca 400 000 Euro; 2013-2015 (fellow applicant; main applicant Dr. Eleanor Jennings).
8. **Norwegian Research Council**: Effects of climate change on boreal lake ecosystems. Productivity and community responses (ECCO). 2013-2015 (fellow applicant receiving 206 000 NOK; main applicant Prof. Dag Hessen).
9. **NordForsk**: Nordic Centre of Excellence: Cryosphere-Atmosphere interactions in a changing Arctic climate (CRAICC). 36 000 000 NOK. 2010-2015 (fellow applicant receiving 1 150 000 NOK; main applicant Prof. Markku Kulmala).
10. **FORMAS**: Strong research environment: The color of water – interplay with climate, and effects on drinking water supply. 25 000 000 SEK; 2010-2014 (fellow applicant; main applicant Prof. Lars Tranvik).
11. **FORMAS**: Strategic research on Landscape greenhouse gas exchange (LAGGE)-Integration of terrestrial and freshwater sources and sinks. 20 000 000 SEK; 2010-2014 (fellow applicant receiving 1 500 000 SEK; main applicant Prof. Leif Klemetsson).
12. **Swedish Research Council (VR), respective FORMAS**: Regional differences in the quality of DOC in boreal lakes: drivers and consequences for the global carbon cycle. 3 879 900 SEK; 2010-2012 (main applicant).
13. **Strategic Foundation** of Uppsala University: Personal research grant. 450 000 SEK; 2010-2011.
14. **Strategic Foundation** of Uppsala University's Chancellor: Personal research grant. 744 000 SEK; 2009-2010
15. **FORMAS**: Temporal and spatial variations of persistent pharmaceutical residues in surface waters and their accumulation in sediments. 2 650 000 SEK; 2007-2010 (main applicant).
16. **Ministry of Sustainable Development**: Vulnerability of surface waters in a changing climate; 95 000 SEK; 2007 (main applicant).
17. **Faculty of Natural Resources and Agricultural Sciences** at SLU: Personal research grant. 1 250 000 SEK; 2006-2010.
18. **Swedish Research Council**: Predictability of abrupt ecological shifts in lakes induced by climatic changes. 800 000 SEK; 2006-2008 (main applicant).
19. **Royal Swedish Academy of Sciences**: Personal research grant. 4 033 000 SEK; 2005-2010.
20. **Swedish Environmental Protection Agency**: The response of water quality to changes in the climate: 200 000 SEK; 2004-2005 (main applicant).
21. **Swedish Environmental Protection Agency**: What kind of biology can we expect in limed lakes? - The use of the SOM method: 190 000 SEK; 2004-2005 (main applicant).
22. **FORMAS**: EU-project ECOWATER: 55 000 SEK; 2004 (main applicant).
23. **EU-FP6-Grant**: Climate and Lake Impacts in Europe (CLIME; EVK1-CT-2002-00121) (coordinator: Dr. Glen George, UK): 500 000 SEK for Swedish part; 2003-2005.
24. **Mälaren's Water Protection Association and Stockholm Water**: Automatic measurements of dissolved organic matter in Mälaren's inflow waters: 420 000 SEK; 2003-2005 (main applicant).
25. **Mälaren's Water Protection Association**: The role of sediments for the internal phosphorus loading of Lake Mälaren: 300 000 SEK; 2001-2003 (main applicant).
26. **MISTRA**: Nutrient transport and turnover in littoral areas and the subsequent effects on water blooms in lakes and coastal areas (fellow applicant; main applicant Dr. Kurt Pettersson): 1 500 000 SEK; 1998-2000.
27. **TRYGGERS**: complement to the MISTRA project (fellow applicant; main applicant Dr. Kurt Pettersson): 100 000 SEK; 1998.
28. Travel and research grants from **EU, Malméns foundation, Swiss Federal Inst. for Environmental Science and Technology, Wallenbergs foundation, Letterstedska foundation, Sederholms foundation, Alfred Wegener Inst., Uppsala University** (altogether ca 100 000 SEK as main applicant); 1993-1997.

Editorial, Review and Evaluation Tasks

Editor responsibilities:

1. Associate editor for *Limnology and Oceanography Letters*; 2016-2022
2. Associate editor for *Canadian Journal of Fisheries and Aquatic Sciences*; 2007-2013
3. Member of the Editorial Board for *International Journal of Lakes and Rivers*; 2005-2006

Referee requests for scientific journals:

114 different journals reflecting the broad and interdisciplinary nature of my work: Nature; Science; Nature Geoscience; Nature Climate Change; Nature Communications; Nature Water; Proceedings of the National Academy of Sciences; Global Change Biology; Ecology Letters; Limnology and Oceanography Letters; Advances in Space Research; Advances in Water Resources; African J. of Agricultural Sciences; Ambio; Annales de Limnologie - International Journal of Limnology; Annals of Glaciology; Applied Geochemistry; Aquatic Ecology; Aquatic Sciences; Arch. Hydrobiol.; Arctic, Antarctic and Alpine Research; Atmosphere; Atmospheric Environment; Biogeochemistry; Biogeosciences; Biology Letters; Can. J. Fish. Aquat. Sci.; Canadian Journal of Remote Sensing; Chemosphere; Chinese J. of Oceanography and Limnology; Earth's Future; Earth System Science Data; Earth Science Reviews; Ecography; Ecohydrology & Hydrobiology; Ecological Informatics; Ecological Modelling; Ecological Research; Ecology; Ecosystems; Energies; Environmental Challenges; Environmental Monitoring and Assessment; Environmental Processes; Environmental Research; Environmental Research Letters; Environmental Reviews; Environmental Science and Ecotechnology; Environmental Science and Pollution Research; Environmental Science and Technology; Environmental Science: Processes & Impacts; Estuaries and Coasts; Estuarine Coastal and Shelf Science; Freshwater

Biology; Freshwater Ecology; Frontiers in Ecology and Evolution; Frontiers in Water; Fund. Appl. Limnol.; Geografiska Annaler Series A.; Geography Compass; Geoscientific Model Development; Geophysical Research Letters; GiScience Remote Sensing; Global and Planetary Change; Global Ecology and Biogeography; Hydrobiologia; Hydrological Processes; Hydrology and Earth System Sciences; Hydrology Research; Inland Waters; International Journal of Climatology; International Journal of Environmental Research and Public Health; International Journal of Geosciences; International Journal of Lake and Rivers; International Journal of Sediment Research; International Review of Hydrobiology; Journal of Applied Ecology; Journal of Advances in Modeling Earth Systems; Journal of Cleaner Production; Journal of Hydrology; Journal of Limnology; Journal of Marine Systems; Journal of Plankton Research; Journal of Public Health and Epidemiology; Journal of Water Resource and Protection; Knowledge and Management of Aquatic Ecosystems; Life Science; Limnology and Oceanography; Limnology and Oceanograph-Methods; Marine and Freshwater Research; Marine Biology; Marine Environmental Research; Marine Pollution Bulletin; Microbial Ecology; Naturwissenschaften; Oecologia; Oikos; PLOS Climate; PLoS ONE; Remote sensing of Environment; Sciences Advances; Scientific Reports; Sedimentology; The Cryosphere; The Holocene; The Open Ecology Journal; The Science of the Total Environment; Water; Water Research; Water Resources Research; Water Science and Technology; Wetlands [Awarded as outstanding reviewer](#), Biogeosciences, 2013.

International and national proposal evaluation requests, sorted by country/region in alphabetical order:

1. Austria: Austrian Academy of Science: member of the evaluation panel *Global Change Program*, 2010
2. Canada: proposal evaluation of the Canada Foundation for Innovation (CFI) in 2021 and 2022 and for the Alberta Water Research Institute in 2009
3. Denmark: Danish Council for Independent Research: member of the evaluation panel *Biology*, 2011
4. Estonia: Estonian Research Council: request in 2022 for the expert panel on Earth, Water, and Related Environmental Sciences; proposal evaluations of the Norwegian-Estonian Research Cooperation Programme, 2013.
5. European Research Council: ERC Consolidator Grant, requests in 2017 and 2021; ERC Advanced Grant, requests in 2012 and 2018; proposal evaluation for the Marie Skłodowska-Curie Actions COFUND Fellowship Programme: REWIRE: Reinforcing Women in Research, 2020.
6. Finland: Academy of Finland: member of the evaluation panel: Research Council for Biosciences and Environment (RCBE), 2015
7. Germany: German Research Foundation (DFG), requests in 2016 and 2018
8. Ireland: Research Programme in the Environmental Protection Agency, Ireland (EPA); request in 2023
9. Netherlands: Dutch Research Council: request in 2020
10. Norway: Research Council of Norway (RCN): request in 2014
11. Spain: Spanish Research Council: proposal evaluation for the CONSOLIDER Program, 2009.
12. Sweden: Swedish Research Council (VR): member of evaluation panel VR NT-08 in 2018; member of the evaluation panel NT-B in 2007 and member of the Swedish Research Links Programme in 2005; proposal evaluation for the Malmén foundation in 2013; Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (FORMAS): member of the evaluation panel *Climate and Biogeochemistry* in 2006.
13. United Kingdom: English Natural Environment Research Council: member of evaluation panel: Macronutrient cycles research programme; 2010
14. United States: proposal evaluation for the Graduate Women in Science Program, University of Wisconsin-Madison, 2013

Engagement in national and international dissertation evaluation committees and as faculty opponent:

1. Jansen, J. 2020. Carbon trace gas dynamics in subarctic lakes. Stockholm University.
2. Bunse, C. 2018. Bacterioplankton in the light of seasonality and environmental drivers. Linnaeus University.
3. Panneer Selvam, B. 2016. Reactive dissolved organic carbon in a changing environment. Lund University.
4. Svensson, J. 2016. Progestagenic aquatic contaminants act as potent androgens in fish – Experimental studies in three-spined stickleback and zebrafish. Uppsala University.
5. Norman, M. 2013. Air-sea fluxes of CO₂ – Analysis methods and impact on carbon budget. Uppsala University.
6. Pulkkanen, M. 2013. Under-ice temperature and oxygen conditions in deep boreal lakes. University of Jyväskylä, Finland (written evaluation).
7. Sundblad, G. 2010. Predictive habitat modelling – implications for coastal fish ecology. Uppsala University (reserve)
8. Eriksson, H. 2010. Nutrient budgets of Baltic Sea watersheds. Stockholm University.
9. Hallstan, S. 2009. Species distribution models – ecological theory, modelling techniques and applications. Swedish University of Agricultural Sciences (half-time following up).
10. v. Wachenfeldt, E. 2009. Flocculation of allochthonous dissolved organic matter. Uppsala University.
11. Bryhn, A. 2008. Quantitative understanding and prediction of lake eutrophication. Uppsala University. Faculty opponent.
12. Smedberg, E. 2008. Linking landscape variables, hydrology and weathering regime in Taiga and Tundra ecoregions of Northern Sweden. Stockholm University.
13. Wilhelm, S. 2007. Climate induced impacts on lake functioning in summer. University of Potsdam, Germany (including a written evaluation)
14. Larson, D. 2007. Non-indigenous freshwater plants. Swedish University of Agricultural Sciences (reserve)
15. Åkerblom, N. 2007. Bioavailability of pesticides in freshwater sediments. Swedish University of Agricultural Sciences (reserve)

16. Markensten, H. 2005. Climate effect on phytoplankton biomass and functional groups. Uppsala University.
17. Sobek, S. 2005. Carbon dioxide supersaturation in lakes - causes, consequences and sensitivity to climate change. Uppsala University.
18. Dahl, M. 2004. Appropriate modelling complexity: an application to mass-balance modelling of Lake Vänern, Sweden. Uppsala University. Faculty opponent.
19. Malmaeus, M. 2004. Predictive modelling of lake eutrophication. Uppsala University.
20. Karlsson-Elfgren, I. 2003. Studies on the life cycles of akinete forming cyanobacteria. Uppsala University.

Additional evaluation activities:

A variety of evaluations for lecturer/professorship promotions and positions at Linköping, Lund, Stockholm and Copenhagen University.

Commissions of Trust, Leadership and Other Administrative Tasks

Commissions of trust on climate change issues including IPCC tasks:

1. Official expert reviewer for the IPCC AR6 Climate Change 2022: Impacts, Adaptation and Vulnerability Report ([see Annex V: Expert Reviewers of the IPCC WGII Sixth Assessment Report](#)). Focus was on reviewing the chapter on terrestrial and freshwater ecosystems and their services.
2. [Contributing author of the IPCC Special Report](#) on the Ocean and Cryosphere in a Changing Climate (SROCC; my main contribution was to write chapter 2.2.5. Lake and River Ice in High Mountain Areas); 2017-2019.
3. Official expert reviewer for the IPCC AR5 Climate Change 2013: The Physical Science Basis Report ([see Annex VI: Expert Reviewers of the IPCC WGI Fifth Assessment Report](#); my main contribution was to get a carbon flux from lakes added to the figure illustrating the global carbon cycle (Figure 6.1).
4. Expert reviewer for the Swedish Environmental Protection Agency on monitoring of climate change effects in Sweden; 2008.
5. Expert reviewer of the IPCC Technical Paper on Climate Change and Water; 2007.
6. Expert reviewer of the EEA 2008 climate change impact report; 2007.
7. Official expert reviewer for the IPCC AR4 Climate Change 2007: Impacts, Adaptation and Vulnerability Report and the IPCC AR4 Climate Change 2007: Synthesis Report ([see Appendix III: Reviewers of the IPCC WGII Fourth Assessment and Appendix in the Synthesis Report](#)). For this work IPCC received the Nobel Prize.
8. Member of an expert group concerning the evaluation of climate and vulnerability issues in Sweden under the Ministry of Sustainable Development; 2006-2007.
9. Expert evaluator for the Swedish Environmental Protection Agency concerning the 4th national report on climate change in Sweden; 2005.
10. Expert reviewer for the Strategic Plan for the U.S. Climate Change Science Program; 2004.

Engagement in international prize/award committees:

1. Crafoord Prize Committee Member; since 2018
2. ASLO Yentsch-Schindler Early Career Award Committee Member; 2018-2022
3. Einar Naumann - August Thienemann Medal Committee Member; 2013-2017
4. J. C. Stevenson Memorial Lecture Committee Member; 2007-2013

Engagement in steering and scientific committees outside own university:

1. Nomination Committee Member, Association for the Sciences of Limnology and Oceanography, United States; 2023
2. Scientific and Organizing Committee Member of the Joint Large Lake Symposium ELLS-IAGLR 2 'Implications of Climate Change and Human Impact in Large Lakes'; 2020-2022.
3. Scientific Committee Member for the ASLO-SFS Joint Summer Meeting in Madison, United States; 2019-2020.
1. Global Environmental Change (GEC) Committee Member at the Royal Academy of Sciences; since 2018.
2. Member of the Global Lake Ecological Observatory Network ([GLEON](#)); since 2007.
3. Education Committee Member at the Royal Academy of Sciences; 2018-2021.
4. Reference group member of the National Inventory Programme for Swedish inland waters coordinated by the Swedish Agency for Marine and Water Management; 2012-2020.
5. Member of the Global Lake Temperature Cooperation (GLTC); 2011-2020.
6. Executive Board Member of the [EU C-Cascades project](#); 2015-2018.
7. Steering Committee Member of [Uppsala Water Centre](#); 2011-2015.
8. Earth System Sciences Advisory Board Member of the Global Change programme in Austria; 2011-2015.
9. Scientific Committee Member of the international conference 'Lake Vänern Ecosystem (SOLVE): Past, present and future; 2011-2012'.
10. Co-initiator and member of the [Global Young Academy](#); 2009-2012.
11. Steering Committee Member of the strong research environment: The color of water; 2009-2015.
12. Steering Committee Member of the graduate school: Focus on soils and waters; 2009-2011.
13. Elector for the vote of members of the FORMAS (Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning) Steering Committee; 2009.
14. Scientific Committee Member Of AMAP-SWIPA (Arctic monitoring and assessment programme – climate change and the cryosphere); 2009-2011.
15. Scientific Committee Member of the international symposium 'European large lakes'; 2008-2010.

16. Swedish delegate for the European Climate Change Programme; 2006-2009.
17. Advisory Committee Member of the international symposium 'European large lakes - ecosystem changes and their ecological and socioeconomic impacts'; 2005-2006.
18. Member of SCOPE (Scientific Committee on Problems of the Environment) -Water; 2004.
19. Expert evaluator for the court concerning a 5-years test period of water pumping in Sävastån; 2004.

Engagement in committees/boards and other responsibilities within Uppsala university (since 2009) and the Swedish University of Agricultural Sciences (before 2009):

1. Chair of the Educational Board of Science at Uppsala University: 40% of employment; since Jul 23
2. Member of the University's Electoral College; since 2022
3. Board Deputy Member of the Department of Ecology and Genetics; since 2022
4. Deputy Elector of the Faculty of Science and Technology; since 2022
5. Vice Chair of the Recruitment Committee of the Faculty of Science and Technology (40% of employment, evaluation of candidates for about 70 different positions/promotions per year); 2017-2022
6. Faculty Board Member as teacher representative; 2017-2020
7. Elector of the Faculty of Science and Technology; 2017-2019
8. Steering Committee Member of the Limnology Unit; since 2009
9. Board Member for the Appointment of Excellent Teachers at the Faculty of Science and Technology; 2015-2017
10. Board Deputy Member of the Biology Education Centre; 2016-2017
11. Steering Committee Member of Uppsala University's music council; 2011-2016
12. Deputy Elector for the vote of the University Vice Chancellor and members of the University Board; 2013-2016
13. Steering Committee Member for safety issues at Uppsala University; 2009-2011
14. Assistant Chair of the Dept. of Aquatic Sciences and Assessment at the Swedish University of Agricultural Sciences; 2008-2009
15. Director of Studies for Research Education; Dept. of Aquatic Sciences and Assessment at the Swedish University of Agricultural Sciences; 2008-2009
16. Member of the Programme for Information and Cooperation from the Faculty of Natural Resources and Agricultural Sciences at the Swedish University of Agricultural Sciences; 2005-2006
17. Member of the University Hydrology Committee in Freiburg, Germany; 1990-1991

Additional administrative work:

1. Project leader including budget and staff responsibility for a large variety of research and consulting projects (see also section Major Research Grant); since 1996
2. Participation in the administrative work concerning regional and national monitoring programmes of freshwaters; 1999-2005
3. Administrative work for the National Reference Centre for Freshwaters, SLU, Sweden; 1999-2000
4. Administrative work within EuroWaterNet; 1999-2000
5. Administrative work within the EU-project REFLECT; 1998-2000

Special leadership and administration education:

1. Education in equality issues for persons being involved in recruitment processes (half day); 2018
2. Education in economy for persons in leadership positions at the University (2 days)
3. Leadership education: Tomorrows academic leaders (3 weeks); 2008-2009

Membership in research organizations:

Association for the Sciences of Limnology and Oceanography, Society of International Limnology, American Geophysical Union

Scientific Presentations

Accepted plenary speaker invitations (other invited scientific presentations, invited presentations outside Academia and invited pedagogical presentation are listed below):

1. **Gordon Research Conference** on Biological Responses to Winter Climate Change: *Effects of ice quality changes on lake ecology*; US; Jun 21-26, 2020 (invited oral presentation which was canceled due to COVID-19 in 2020 but then given online (organized by Brent Sinclair) in Jun 2022)
2. Price ceremony **Ingvar Lindqvistdagen**: *High school student's contribution to an important discovery in freshwater sciences*; Stockholm; Apr 3, 2019
3. **European Large Lakes-IAGLR Symposium**: *Large differences in the efficiency of large lakes to transform nutrients and pollutants from the watershed*; Evian, France; Sep 25, 2018
4. **Gordon Research Conference** on Catchment Science: *Global change induced shifts in the functioning of lakes on planet Earth - thinking beyond single lake catchment science*; Maine, US; Jun 27, 2017
5. **International Symposium** on advancing the science of gas exchange between fresh waters and the atmosphere: *Increasing carbon dioxide concentrations in freshwaters towards warmer and nutrient-rich climatic regions*; Hyttälä, Finland; Sep 16, 2014
6. **International Symposium on the state of Lake Vänern ecosystem**-past, present and future (SOLVE): *Large lakes under pressure – how water quality changes over time*; Vänersborg, Sweden; Jun 12, 2012

Frequently invited scientific presentations. The following invited presentations/workshops were accepted:

1. HLR2023 Tylösand, Sweden; Jun 23
2. Stockholm International Water Institute; Sweden; Apr 23
3. International Science Festival, Gothenburg, Sweden; Apr 23
4. University of Madison-Wisconsin, Workshop on Integrating Remote Sensing, In Situ, And Physically-Based Modeling Approaches To Understand Global Lake Ice Dynamics, United States; Feb 23
5. Winter Biology Virtual Symposium, Western University, Canada; Jun 22 (digital invited talk)
6. Beijing Normal University, Beijing, China; Aug 20 (digital invited talk)
7. Gordon Research Conference, United States; Jun 20 (canceled in 2020 but given digitally in Jun 22)
8. Association for the Sciences of Limnology and Oceanography, Wisconsin, United States; Jun 20 (canceled due to COVID-19)
9. Royal Academy of Sciences, Stockholm, Sweden; Apr 19
10. European Large Lakes Symposium, Evian, France; Sep 18
11. UNIS Longyearbyn, Svalbard; Jun 18
12. Vätternsymposium, Jönköping, Sweden; Nov 17
13. Gordon Research Conference, Bates College, United States; Jun 17
14. ETH Zürich, Switzerland; Jan 17
15. NIVA Oslo, Norway; Apr 16
16. Austrian Academy of Science, Austria; Jan 16
17. University of Bruxelles, Belgium; Apr 15
18. Hyytiälä Forest Research Station, Finland; Sep 14
19. Abisko Scientific Research Station, Sweden; Sep 14
20. Lund University, Sweden; Mar 14
21. NIVA Oslo, Norway; Feb 14
22. Århus University, Denmark; Aug 13
23. Budapest University of Technology and Economics, Hungary; Aug 13
24. AGU Conference, San Francisco, United States; Dec 12
25. Vänern Symposium, Vänern, Sweden; Jun 12
26. University of Gothenburg, Sweden; Jan 12
27. Umeå University, Sweden; Sep 11
28. Helsinki University, Finland; Feb 11
29. Erken Laboratory, Norrtälje, Sweden; Nov 10
30. Royal Swedish Academy of Sciences, Stockholm, Sweden; Nov 10
31. Ecology Centre, SLU, Uppsala, Sweden; Oct 10
32. Dutch Academy of Sciences, Amsterdam, Netherlands; Apr 10
33. Natural Environment Research Council, London, United Kingdom; Feb 10
34. AMAP-SWIPA, Potsdam, Germany; Jan 10
35. Erken Laboratory, Norrtälje, Sweden; Jul 09
36. AMAP-SWIPA, Victoria, Canada; Mar 09
37. Royal Swedish Academy of Sciences, Stockholm, Sweden; Feb 09
38. SLU, Uppsala, Sweden; Dec 08
39. Global Lake Ecological Observatory Network, Norrtälje, Sweden; Oct 08
40. AGU Chapman Conference, Lake Tahoe, United States; Sep 08
41. U.S. – Scandinavian ice workshop, Norrtälje, Sweden; Apr 08
42. Liming Symposium, Bergen, Norway; Sep 07
43. Burwalls University Center, University of Bristol, United Kingdom; July 07
44. University Center Obergurgl, University of Innsbruck, Austria; May 07
45. Erken Laboratory, Norrtälje, Sweden; May 07
46. American Society of Limnology and Oceanography, Victoria, Canada; Jun 06
47. Inst. of Zoology and Limnology, University of Innsbruck, Austria; Nov-Dec 05
48. Evolutionary Biology Centre, Uppsala University, Sweden; Nov 05
49. SLU, Uppsala, Sweden; Oct 05
50. CNRS Délégation Midi-Pyrénées, Toulouse, France; Sep 05
51. Canadian-Swedish co-operation, Abisko, Sweden; Sep 05
52. Inst. of Zoology and Botany, Estonian Agricultural University, Estonia; May 05
53. CNRS Délégation Midi-Pyrénées, Toulouse, France; Sep 04
54. Erken Laboratory, Norrtälje, Sweden; Jul 04
55. Austrian Academy of Sciences, Mondsee, Austria; Jun 04
56. Stockholm University, Stockholm, Sweden; Mar 04
57. Grisslehamn, Sweden; Nov 03
58. University of Konstanz, Konstanz, Germany; May 03
59. Abisko Scientific Research Station, Sweden; May 02
60. Lammi Biological Station, University of Helsinki, Lammi, Finland; Dec 00
61. Erken Laboratory, Norrtälje, Sweden; Feb 00

62. University of Innsbruck, Innsbruck, Austria; Dec 99
 63. Austrian Academy of Sciences, Mondsee, Austria; Jun-Jul 99
 64. University of Helsinki, Helsinki, Finland; Apr 99
 65. Centre for Ecology and Hydrology, Grange-over-Sands, United Kingdom; Feb 99
 66. University of East Anglia, Norwich, U.K.; Apr 98
 67. Erken Laboratory, Norrtälje, Sweden; Oct 96
 68. Uppsala University, Uppsala, Sweden; Sep 96
 69. Sao Carlos, Brazil; Jul 95
 70. Swiss Federal Inst. for Environmental Science and Technology (EAWAG), Dübendorf, Switzerland; Oct 94
- > 150 contributions to international conferences/symposia and a variety of session organizations. The following presentations were given in person:**
1. **Congress on Cardiopulmonary Resuscitation** in Tylösand, Sweden; June 13-14, 2023 (invited oral presentation)
 2. **Association for the Sciences of Limnology and Oceanography** aquatic sciences meeting in Palma, Mallorca, Spain; June 4-9, 2023 (poster presentation)
 3. **36th Congress of the International Limnological Society** in Berlin, Germany; Aug 7-10, 2022 (oral presentation).
 4. **Association for the Sciences of Limnology and Oceanography** aquatic sciences virtual meeting; Jun 22-27, 2021 (oral presentation).
 5. **21.5st GLEON Symposium**; digital due to COVID-19; Oct 18 – Oct 23, 2020 (poster presentation).
 6. **Association for the Sciences of Limnology and Oceanography** aquatic sciences meeting in Wisconsin, United States; Jun 7-12, 2020 (invited oral presentation which however needed to be canceled due to COVID-19).
 7. **21st GLEON Symposium** in Huntsville, Canada; Nov 4 – Nov 8, 2019 (poster presentation).
 8. **AGU Chapman Conference** on Winter Limnology in a Changing World in Polson, United States; Oct 14-18, 2019 (poster presentation).
 9. **European Large Lakes-IAGLR Symposium** in Evian, France; Sep 23-28, 2018 (invited oral presentation).
 10. **19th GLEON Symposium** in New Paltz, United States; Nov 27 – Dec 1, 2017 (poster presentation).
 11. **Gordon Research Conference** on Catchment Science: Interactions of Hydrology, Biology & Geochemistry at Bates College in Maine, United States; Jun 25-30, 2017 (invited oral presentation).
 12. **18th GLEON Symposium** in Gaming, Austria; Jul 4-8, 2016 (poster presentation).
 13. **17th GLEON Symposium** in Chuncheon, South Korea; Oct 12-16, 2015 (poster presentation).
 14. **American Society of Limnology and Oceanography** aquatic sciences meeting in Granada, Spain; Feb 22-27, 2015 (oral presentation, session co-chair).
 15. **16th GLEON Symposium** in Jouvence, Canada; Oct 27-Nov 1, 2014 (poster presentation).
 16. **International Symposium** on advancing the science of gas exchange between fresh waters and the atmosphere in Hyttälä, Finland; Sep 15-19, 2014 (invited oral presentation).
 17. **International Symposium** on climate driven changes on coupled terrestrial-terrestrial ecological stoichiometry in Abisko, Sweden; Sep 7-12, 2014 (invited oral presentation).
 18. **15th GLEON Symposium** in Bahia Blanca, Argentina; Nov 4-8, 2013 (poster presentation).
 19. **32nd Congress of the International Limnological Society** in Budapest, Hungary; Aug 4-9, 2013 (oral presentation).
 20. **American Geophysical Union Conference** in San Francisco, United States; Dec 3-7, 2012 (invited oral presentation).
 21. **International Symposium on the state of Lake Vänern ecosystem-past, present and future (SOLVE)** in Vänern, Sweden; Jun 11-14, 2012 (invited oral presentation).
 22. **International Polar Year Conference: From knowledge to action** in Montreal, Canada; Apr 22-27, 2012 (invited session leader and oral presentation).
 23. **American Society of Limnology and Oceanography** aquatic sciences meeting in San Juan, Puerto Rico; Feb 13-18, 2011 (oral presentation).
 24. **31st Congress of the International Limnological Society** in Cape Town, South Africa; Aug 15-20, 2010 (oral presentation).
 25. **Academy Colloquium** 'Predictability of plankton communities in an unpredictable world' in Amsterdam, Netherlands; Apr 7-9, 2010 (invited poster presentation).
 26. **2nd European Large Lakes Symposium** in Norrtälje, Sweden; Aug 10-14, 2009 (oral presentation).
 27. **American Society of Limnology and Oceanography** aquatic sciences meeting in Nice, France; Jan 25-30, 2009 (poster presentation).
 28. **7th GLEON Symposium** in Norrtälje, Sweden; Sep 29 – Oct 1, 2008 (invited oral presentation).
 29. **American Geophysical Union Chapman Conference** 'Lakes and Reservoirs as Sentinels, Integrators, and Regulators of Climate Change' at Lake Tahoe, U.S.; Sep 8-10, 2008 (invited poster presentation).
 30. **First International Symposium of Winter Limnology** in Kilpisjärvi, Finland; May 24-28, 2008 (oral presentation).
 31. **Norwegian-Swedish conference on acidification and liming** in Bergen, Norway; Sep 18-20, 2007 (invited oral presentation).
 32. **American Society of Limnology and Oceanography** aquatic sciences meeting in Santa Fe, United States; Feb 4-9, 2007 (oral presentation).
 33. **American Society of Limnology and Oceanography** summer meeting in Victoria, Canada; Jun 4-9, 2006 (invited oral presentation).

34. **American Society of Limnology and Oceanography** summer meeting in Santiago de Compostela, Spain; Jun 19-24, 2005 (poster presentation).
35. **XXIX Congress of the Intern. Ass. of Theoretical and Applied Limnology** in Lahti, Finland; Aug 8-14, 2004 (oral presentation).
36. **American Geophysical Union Conference** in San Francisco, United States; Dec 8-12, 2003 (oral presentation).
37. **Symposium: Changing Climate and Northern Aquatic Ecosystems** in Lammi, Finland; Sep 25-27, 2003 (oral presentation).
38. **XXVIII Congress of the Intern. Ass. of Theoretical and Applied Limnology** in Melbourne, Australia; Feb 4-10, 2001 (oral presentation).
39. **8th International Symposium: The Interactions between Sediments and Water** in Beijing, China; Sep 13-17, 1999 (oral presentation).
40. **Symposium for European Freshwater Sciences** in Antwerp, Belgium; Aug 25-28, 1999 (poster presentation).
41. **3rd Symposium on Physical Processes in Natural Waters** in Magdeburg, Germany; Aug 31-Sep 3, 1998 (oral presentation).
42. **XXVII Congress of the Intern. Ass. of Theoretical and Applied Limnology** in Dublin, Ireland; Aug 8-14, 1998 (oral presentation).
43. **Dialog II-Symposium** (American Society of Limnology and Oceanography, ASLO) in Bermuda; Oct 11-18, 1997 (invited poster presentation).
44. **7th International Symposium: The Interactions between Sediments and Water** in Baveno, Italy; Sep 22-25, 1996 (oral presentation).
45. **Erken Symposium** in Norrtälje, Sweden; Sep 10-12, 1996 (oral presentation).
46. **XXVI Congress of the Intern. Ass. of Theoretical and Applied Limnology** in Sao Paulo, Brazil; Jul 23-29, 1995 (oral presentation).
47. **UVC-dagarna/ Uppsala Water Center** in Sweden; May 3-4, 1995 (poster presentation).
48. **6th International Symposium: The Interactions between Sediments and Water** in Santa Barbara, United States; Dec 5-8, 1993 (oral presentation).
49. **21st Nordic Sediment Symposium** in Uppsala, Sweden; Apr 27-29, 1993 (oral presentation).

Scientific presentations at project meetings:

Several national and international project meetings per year inside and outside Sweden with presentations of current research activities (see research grants for the projects).

Additional Research Stays Abroad

1. **Boston University**, US; research and teaching exchange on Water and Health with Dr. Maja Carrion; Mar 2022
2. **Expedition with the Research Vessel 'Lance'** from the Nordic Polar Institute in the Arctic Ocean; Scientific assistant: CTD measurements in a transect from Svalbard to Greenland; project leaders: Dr. Eberhard Fahrback and Dr. Ursula Schauer; Aug-Sep 1997.
3. **Expedition to Antarctica** with the American LTER (long term ecological research) team; Scientific assistant: Stream ecosystems in the McMurdo Dry Valleys (NSF-Grant); project leader: Dr. Diane McKnight; Oct-Nov 1995.
4. **Expedition with the INPA Research Vessel** through the Amazon region in Brazil under Dr. Bruce Forsberg; Jul-Aug 1995.
5. **Scripps Institute of Oceanography** in La Jolla, United States; Scientific assistant: ice core studies; Nov-Dec 1994.
6. **Swiss Federal Institute for Environmental Science and Technology (EAWAG)** in Switzerland; Research project in co-operation with Dr. Jürg Bloesch: Sedimentation processes in lakes; Oct 1994.
7. **Erken Laboratory** in Norrtälje, Sweden; Scientific assistant for sediment resuspension studies in Lake Erken; project leader: Dr. Don Pierson; Jun-Sep 1992.
8. **Expedition with the Research Vessel 'Gauss'** from the Ministry of Oceanography and Hydrography in the North Sea; Field assistant for current measurements in the North Sea; project leader: Dr. Wolfgang Lange; Aug 1990.
9. **Ministry of Oceanography and Hydrography** in Hamburg, Germany; Practical experience at the Department of Currents under Dr. Holger Klein; Jun 1988.

Collaboration with Decision-Makers

Engagement as official reviewer and contributing author to the Intergovernmental Panel on Climate Change (see above). I have also functioned as an expert for the Swedish Agency for Marine and Water Management, the Swedish Environmental Protection Agency, the Ministry of Sustainable Development, the Water Protection Associations, and the County Administration Boards. Since my employment at Uppsala University in 2009 I am bringing students into contact with various authorities and organize yearly study visits to Uppsala's stormwater facilities, waste water and drinking water treatment plants. In addition, I had the opportunity in 2009 to communicate with a large variety of national and international decision makers, including the Chinese Minister of Science and Technology. Main contacts go via email and phone but sometimes I also find the time to give talks to people that are involved in decision-making. These are (all are invited talks):

1. [HLR2023](#), Tylösand; Jun 23
2. Swedish [Ice Safety Council](#), Stockholm; Dec 22
3. Vätterndagen in Jönköping, Sweden; Nov 17

4. Sötvattenslaboratoriet, Drottningholm; Jan 13
5. Landstinget, Environmental effects of pharmaceuticals, Uppsala; Nov 09
6. World Economic Forum in Dalian, China; Sep 09
7. Miljöbalksdagarna, Swedish Environmental Protection Agency in Stockholm, Sweden; Oct 08
8. Hydrologidagarna in Norrköping, Sweden; Apr 07
9. Karlskrona Community, Sweden; Oct 06
10. Vätterndagen in Vadstena, Sweden; Nov 05
11. Swedish Environmental Protection Agency, Sweden; Dec 04
12. Vattendagarna in Norrköping, Sweden; Nov 04
13. Mälarens vattenvårdsförbund, Sweden; May 04
14. Uppsala Water Centre, Sweden; Mar 02
15. National Board of Waters and Environment in Tampere, Finland; Nov 98

Public Outreach

A few selected highlights:

August 25, 2022 – Nature Portfolio Earth and Environment: [Lakes on Earth face critical white ice conditions](#)

February 16, 2021 - BBC: [The snowy countries losing their identity](#)

December 6, 2020 – Letter to The Guardian: [A warning on climate and the risk of societal collapse](#)

January 28, 2019 – National Geographic: [Lakes are shedding winter ice at record pace](#)

March 10, 2017 – Press release: [Measurements by school pupils paved way for key research findings](#)

May 12, 2016 – Vetenskap och Allmänhet: [Att kartlägga vattnets färg](#)

Interactions with schools including education of teachers/police:

1. Education on environmental issues for the Swedish police; Oct 23
2. Presentation on lakes on Earth for about 110 high school students from Uppsala community; Nov 22
3. Supervision of the school project ('Gymnasiearbete') at Kathedralskolan 'Microplastic inputs into natural surface waters'; Oct 21-Mar 22
4. Teacher education at Uppsala University: Cyanobacteria, Photosynthesis and Biofuel; Mar 20
5. Supervision of the school project ('Gymnasiearbete') at Celsiusskolan 'Relationship between CO₂ emissions from different kind of waters and the abundance and development of mosquitoes'; Jul-Dec 18
6. [National wide high school project on 'Brown water'](#). Participation of ~200 school classes with ~3500 high school students across Sweden; widespread publicity (newspapers, webpages, journals, film); 2016. This project resulted in an international peer-reviewed publication, published in Scientific Reports in 2017
7. Teacher education at Erken Laboratory: Climate change signals in lake waters; Jul 12
8. Teacher education at Erken Laboratory: Global change impacts on water quality; Jun 10
9. Ekudden school: Research presentation on lake ecosystems; Mar 10
10. Lundellska High School: Presentation of own research and research facilities at Uppsala University; Feb 10
11. Ekudden school: Research presentation in cooperation with Anita Kullen from the Royal Technical Institute; Sep 09
12. Teacher education at Erken Laboratory: Global change impacts on water quality; Jul 09
13. Mikael's school in Stockholm: Life as a scientist; Jan 09
14. Ekudden's school: Research presentation in form of a water day at the Dept. of Environmental Assessment; Nov 06
15. Royal Swedish Academy of Sciences day for teachers in Karlskrona: Water quality changes in Sweden; Oct 06
16. Child care ages 3-5 of Uppsala community: Life in lakes and oceans; Nov 05
17. Konrad-Adenauer High School in Meckenheim, Germany: Forschung auf dem kältesten, windigsten und trockensten Kontinent der Erde (in German); May 96
18. Konrad-Adenauer High School in Meckenheim, Germany: Wie schnell erholt sich ein Ökosystem nach Umweltkatastrophen? (in German); Jul 93

In addition, frequent interactions with schools as a steering committee member of the [Uppsala Water Centre](#) during 2009-2015 and as a communication officer (5% of working time) at Uppsala University during 2013-2016.

Articles in newspapers, magazines, newsletters and social media on research activities and results:

1. Articles, newspaper & social media reportages in many different countries on microplastics in lakes around the world, first published by [Nature](#)
2. Articles & social media reportages on blooms that also like it cold, published by e.g. [Wisconsin Public Radio](#); Feb 23
3. Articles & social media reportages on critical white ice conditions on lakes, published by e.g. [Forschungsverbund Berlin](#); Nov 22
4. Articles & social media reportages on browning of waters, published in e.g. [VDI-Nachrichten](#), [Spektrum.de](#), [web.de](#), [Stuttgarter Zeitung](#); Aug 22
5. Debate on climate change and the lack of political actions, published in [Aftonbladet](#); Aug 22
6. Articles, newspaper & social media reportages in many different countries on the rapid ice cover loss in the Northern Hemisphere, published in e.g. [Washington Post](#), [The Toronto Star](#), [CBC Radio](#), [Science Daily](#); Oct 21
7. Articles, newspaper & social media reportages in many different countries on the oxygen decline in lakes, published in e.g. [The Times](#), [Independent](#), [Guardian](#), [Fox](#), [Zeit](#), [Washington Post](#); [ranked #25](#) in the world in terms of media coverage for all climate change related papers; Jun 21
8. Article on changing snow and ice conditions, published in [BBC Future's Climate Emotions series](#); Feb 21

9. Articles & social media reportages in many different countries on the risk of increased drowning when winters get warmer, published in e.g. [BBC](#), [Forbes](#), [New York Times](#), [Washington Post](#), [Globe and Mail](#), [Scientific American](#), [Sciencedaily](#), Nov 20
10. Articles & social media reportages in many different countries on declining calcium levels in freshwaters around the globe, published in e.g. [Environmental Science and Engineering Magazine](#), [International Institute of Sustainable Development](#), [Water Canada](#), [Canadian Geographic](#); Aug 19
11. Newspaper article on warmer and browner waters that decrease fish biomass production, published in [Upsala Nya Tidning](#); Mar 19
12. Newspaper articles & social media reportages in many different countries on lakes that are shedding winter ice at record pace, published in e.g. [National Geographic](#), [Upsala Nya Tidning](#); Jan 19
13. Newspaper article on effects of warmer winters on aquatic ecosystems, published in [Södermanlands Nyheter](#); Apr 17
14. Article on school children helping researchers, published in [Origo](#) 2, 2017, pages 19-25; Mar 17
15. Newspaper articles & social media reportages in many different countries on measurements by school pupils that paved the way for key research findings, published in e.g. [Extrakt](#), [Upsala Nya Tidning](#), [Sciencedaily](#), [Science Newslines](#); Mar 17
16. Newspaper articles & social media reportages in many different countries on life under lake ice being surprisingly active; Dec 16
17. Newspaper articles on the citizen science project *Brown Water*, published in e.g. [Upsala Nya Tidning](#), [Södermanlands Nyheter](#), [Oskarshamn Tidning](#), [Faculty Newsletter](#), [Nya Horisonter](#) No.2, 2016; Oct 16
18. Article on the assessment of water color in Swedish waters through citizen science, published in [Vetenskap & Allmänhet](#); May 16
19. Newspaper articles & social media reportages in many different countries about a faster warming of Earth's lakes than its air, published in e.g. [Global News](#), [Science and Nature](#); Dec 15
20. Newspaper articles & social media reportages in many different countries on northern lakes acting as carbon dioxide chimneys in a warming world; Nov 15
21. Article describing the Global Lake Temperature Collaboration, published in [LAKELINE](#); Nov 15
22. Article on the rapid transformation of big northern lakes, published in the Newsletter [Environment](#); Nov 15
23. Article on the carbon dioxide release from lakes by sunlight, published in the [EOS Buzz Newsletter](#); Apr 15
24. Article on global warming signals in Lake Vättern, published in the [Vättern Newsletter](#); Apr 15
25. Articles on a new global database which sets the stage for research on the ecological effects of climate change, published in e.g. [National Geographic](#); Mar 15
26. Article on climate change in the Baltic Sea Area, published in the Helsinki Commission HELCOM thematic assessment in 2013, [Baltic Sea Environment Proceedings](#) No. 137; Oct 13
27. Article on the Global Lake Temperature Cooperation project, published in [National Geographic](#); Oct 12
28. Newspaper articles & newsletters on the impact of outdoor festivals on pharmaceutical occurrence in surface waters, published in e.g. [Upsala Nya Tidning](#), [Dagens Nyheter](#), [Newsletter SLU-notiser](#); Jan 12
29. Article on threats to our waters, published in [Miljö & Utveckling](#) p. 26-29; Dec 11
30. Newspaper articles about liming and acidification of Swedish lakes; Aug 11
31. Article in SLU-notiser about increased water chemical variability in lakes in a warmer world; Apr 09
32. Article on 'Sötvattens betydelse i den globala kolcykeln uppvärderas', published in [SLU-notiser](#); Dec 08
33. Article on 'Fosforförbud i tvättmedel enkel åtgärd', published in [Miljömagasinet](#); Mar 08
34. Article on 'Varmare klimat försvårar för Vänerns yrkesfiskare', published in [Mariestad Tidningen](#); Nov 07
35. Newspaper articles on 'Brist på kväve i blommande sjöar', published in e.g. [Miljöforskning](#), [Newsletter SLU-notiser](#); Sep 07
36. Article on 'Mörkare sjöar av varmare klimat', published in [Resurs magazine](#); Oct 07
37. Newspaper articles on the increase in the occurrence in the invasive algal species *Gonyostomum semen*; published in e.g. [Miljörapporten](#), [Dagens Nyheter](#), [Göteborgs Posten](#); Sep 07
38. Article on 'Grön sörja kan vara islossningens fel', published in [Upsala Nya Tidningen](#); Jun 06
39. Newspaper articles on climate effects on Lake Vättern, published in e.g. [Jönköping](#), [Vadstena](#); Nov 05
40. Article on 'Tidigare islossning', published in [Sveriges Natur](#) Periodical No. 2/05; Mar 05
41. Article on 'Extrema flöden påverkar vattenkemin', published in the Newsletter [SEAREG](#); Nov 04
42. Article on 'Gesa identifierar riskzonerna', published in the Newsletter of the Ministry of Agriculture; Sep 04
43. Article on 'Temperaturökning påverkar islossning mer i söder än i norr', published in [SLU-notiser](#); Apr 04
44. Article on 'Varma vinter ger tidig algförekost', published in the Newsletter [m-plus \(Miljöaktuellt\)](#); Mar 02
45. Newspaper articles on increasing winter temperatures and the growth of algae, published in e.g. [Upsala Nya Tidningen](#); Mar 02
46. Article on 'Varmare vintrar ger fler giftiga alger', published in [SLU-notiser](#); Feb 02
47. Newspaper article on 'Forskare tar pulsen på Mälarens vatten', published in [Vestmanlands Läns Tidningen](#); Jul 01
48. Newspaper article on 'Gifter i sjöbotten löses ut i vattnet', published in [Upsala Nya Tidningen](#); Oct 96

Popular science publications:

1. Weyhenmeyer G. 2023. Klimatförändringar ökar risken att gå genom isen (in Swedish). [Krönika](#), Uppsala Universitet
2. Weyhenmeyer G. 2022. Lakes on Earth face critical white ice conditions. [Nature Portfolio Earth and Environment](#)

3. Colliander Celik,...G. Weyhenmeyer et al. 2021. Därför krävs det stora satsningar på geografi och geovetenskap (in Swedish). [Debatt i Ämneslärare](#)
4. Bendell J, G Weyhenmeyer, W Steffen et al. 2020. A warning on climate and the risk of societal collapse. [Letter to The Guardian](#).
5. Prowse, T, K. Alfredsen, S. Beltaos, B. Bonsal, C. Duguay, A. Korhola, J. Mcnamara, W.F. Vincent, V. Vuglinsky, G. Weyhenmeyer. 2011. Changing lake and River Ice Regimes: Trends, Effects and Implications. In: Snow, Water, Ice and Permafrost in the arctic (SWIPA): Climate Change and the Cryosphere. Arctic Monitoring and Assessment (AMAP), Norway. ISBN 978-82-7971-071-4.
6. Weyhenmeyer, G. and I. Bloch. 2007. Mörkare sjöar ger förändrad biologi (in Swedish). *Miljötrender* No. 3, p 11. ISSN 1403-4743.
7. Weyhenmeyer, G. 2006. Klimatförändringarnas påverkan på vattenkvalitén (in Swedish with English Summary). *Sötvatten* 2006, pp. 2-5. ISSN 1652-3962.
8. Wallin, M. and G. Weyhenmeyer. 2002. Mälaren har blivit brun (in Swedish with English Summary). *Sötvatten* 2002, PP. 10-15. ISBN 91-620-8076-8.
9. Weyhenmeyer, G. 2001. Varmare vintrar – ökad risk för algproblem i svenska sjöar (in Swedish). *Miljötrender* No. 3-4, pp 10-11. ISSN 1403-4743.

Radio and TV interviews:

1. German Television ('Hessischer Rundfunk') on browning of waters; May 23
2. [Radio P4](#) and Swedish television, both [local](#) and [national](#) (Mar 03, 2023) on changing ice conditions on lakes; Mar 23
3. SVT Oddasat (May 14, 2020): Unstable lake ice conditions in northern Sweden; May 20
4. Radio 'Vaken med P3' and P4 (Feb 21, 2020): [Lacking ice cover on lakes](#); Feb 2020
5. Radio P4 and Vetenskapsradio (Jan 19, 2019): Lakes are shedding winter ice at record pace; Jan 19
6. Radio P1 (Vetandens värld; Oct 18, 2016): [Browning of waters](#); Oct 16
7. TV and radio in a variety of countries: Earth's lakes are warming faster than its air; Dec 15
8. Daily news (Rapport at 19.30 on January 11, 2012) and several radio transmissions on the impact of outdoor festivals on pharmaceutical occurrence in surface waters; Jan 12
9. Daily news (Rapport at 19.30 on August 1, 2011) and radio transmission on liming and acidification of Swedish lakes; Aug 11
10. Presseminar for Swedish journalists; Mar 2008
11. Several radio transmissions (e.g. Radio Östergötland, Radio Örebro, Radio Skaraborg) about climate effects on Lake Vättern; Nov 05
12. Live transmission (Radio Uppland): Algblooming i Östersjön; Jul 05
13. Daily news (Rapport at 6 pm on February, 2005): Tidigare islossning i norra och södra Sverige; Feb 05
14. Interview Vetenskapsradion-Vetenskapsnyheter: Klimatförändring märks i svenska insjöar; Dec 04
15. Several radio transmissions (e.g. Radio Uppland, Radio Örebro) about increasing winter temperatures and the growth of algae; Mar 02

Additional outreach activities:

1. Open talk at the Uppsala University Sustainability Forum on the reviewing process of IPCC reports, Dec 23
2. UppTalk (popular science seminar lunch series via Zoom) [on environmental and climate change impacts on our lake ecosystems](#) (in Swedish), arranged by Uppsala University, Nov 23
3. Presentation for [HLR2023](#), Jun 23
4. Participation in the Diplomatic Forum: Presentation about ongoing water research at Uppsala University to ~40 ambassadors, Stockholm; Apr 23
5. Participation in the [International Science Festival in Gothenburg](#); Apr 23
6. WaterNature4Future Group: www.waternature4future.com
7. Presentation for the Swedish [Ice Safety Council](#), Stockholm; Dec 22
8. Outreach activities within the Global Lake Ecological Observatory Network ([GLEON](#)); since 2015
9. Contribution to the exhibition of 'Woman in Limnology' which was shown in several countries; Sep 18
10. Writing and distribution of popular science factsheets and videos within the [EU project C-CASCADES](#); 2015-18
11. Presentation of the use of GIS for society at the International GIS day, Uppsala; Nov 14
12. Involvement in SciFest for Uppsala municipality; Mar 13
13. Participation in SkogsSverige query box for the public; 2012-20
14. Outreach activities within the [Uppsala Water Centre](#); 2009-15
15. Outreach activities within the [Global Young Academy](#); 2009-12
16. Participation in the debate concerning the role of young scientists for society organized by Naturvetarna, KVA and SSF; Feb 10
17. Participation in the AGU's Climate Science Question & Answer Voluntary Work for accurate media reports of the Copenhagen Climate Conference; Dec 09
18. Invited seminar: 'Omvärldsdiallog och Engagemang'; Aug 09
19. Information of climate impacts on aquatic ecosystems on the web site of the Swedish Environmental Protection Agency and the Swedish University of Agricultural Sciences; 2007

20. Member of the Programme for Information and Cooperation from the Faculty of Natural Resources and Agricultural Sciences at SLU, Sweden; 2005-06
 21. Web site about [climate impacts on freshwater systems](#); 2003
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PEDAGOGICAL QUALIFICATIONS

Pedagogical Awards and Prizes

1. Recipient of the Second Prize in the photo contest to promote sciences of limnology and oceanography across various social media, awarded by the Association for the Sciences of Limnology and Oceanography; Oct 17
2. Recipient of the Pedagogical Prize of the Faculty of Science and Technology at Uppsala University; May 15
3. Appointed as Distinguished University Teacher by Uppsala University; Mar 13

Pedagogical Talks, Meetings and Conferences

1. **Invited oral presentation** about pedagogical challenges, arranged by the Council for Educational Development at the Faculty of Science and Technology; Mar 23
 2. **Invited oral presentation** about increasing the chances to succeed during recruitment and promotion, arranged by the Junior Faculty at Uppsala University; Nov 20
 3. **Invited oral presentation** about pedagogical requirements for promotion, arranged by the Council for Pedagogical Development at the Faculty of Science and Technology, May 20
 4. Participation in the Conference on Higher Education Pedagogy (TUK) at Uppsala University; each year 2019-23
 5. **Invited oral presentation** about pedagogical challenges at the Faculty of Natural Science and Technology; Pedagogical Conference at Uppsala University; Oct 17
 6. **Invited oral presentation** about methods to increase student's ability of critical thinking; Conference on Higher Education Pedagogy (TUK) at Uppsala University; Mar 16
 7. Participation in the Conference on Higher Education Pedagogy (TUK) at Uppsala University; Mar 15
 8. **Invited oral presentation** about teaching experience; Teacher meeting in Rånäs; Aug 14
 9. **Invited oral presentation** about student examinations; Conference on Higher Education Pedagogy (TUK) at Uppsala University; Mar 14
 10. Participation in the Conference on Higher Education Pedagogy (TUK) at Uppsala University; Apr 13
 11. **Invited oral presentation** 'Ranking with a think/pair/share approach – a way to handle deviating students' knowledge on statistical data analyses'; Conference on Higher Education Pedagogy (TUK) at Uppsala University; Apr 12
- Twice a year **teacher meetings**, organized by the Biology Education Centre at Uppsala University and frequent exchanges with other teachers, program coordinators and director of studies. In addition, frequent participation in literature seminars on various pedagogical topics organized by Uppsala University, and in meetings in connection to pedagogical leadership tasks (see below).

Pedagogical Leadership

For teaching leadership see below

1. **Chair of the Educational Board** of Science at Uppsala University: 40% of employment; since Jul 23
2. **Vice Chair of the Recruitment Committee** of the Faculty of Science & Technology: main responsibility for evaluating pedagogical qualifications of candidates for about 70 different positions/promotions per year; 40 % of employment during 2017-22
3. **Director of Studies for Research Education** at the Dept. of Aquatic Sciences and Assessment: responsibility for about 20 PhD students; 15 % of employment during 2008-09
4. **Deputy Director of Studies** for the postgraduate school 'Focus on Soil and Water'; 2008-09
5. **Member of the pedagogical leadership network** and the **Pedagogical Academy** at Uppsala University with regular meetings; since 2017

Pedagogical Grants

Faculty of Science and Technology: Development of tools how students learn to critically evaluate published statistical results in aquatic sciences. 40 000 SEK; 2015 (main applicant)

Teaching Leadership, Teaching Development and Administration

Ongoing:

1. **Co-course leader** (25% responsibility) of the undergraduate course 'Ecology and Population Genetics' (15 HEC; ca 70 students); since 2016

Previous:

2. **Course developer, leader and administrator** (25-100% responsibility, depending on year) of the undergraduate course 'Aquatic Environmental Analysis' (5 HEC; ca 60 students) within the program 'Environment and Water Engineering'; 2009 (25%), 2012-16 (50%), 2017-20 (100%), 2021-22 (50%)
3. **Coordinator** of the 'Ecosystem Modelling Term' (altogether 3 courses) within the program 'Environment and Water Engineering'; 2011-17

4. **Course developer, leader and administrator** (100% responsibility) of the advanced level course 'Modelling of aquatic ecosystems' (15 HEC; ca 25 students) within the program 'Environment and Water Engineering'; 2010-17 (2017 only 10%)
5. **Course initiator, leader and administrator** (100% responsibility) of the Marie-Curie ITN PhD training course 'Process understanding: from local to catchment integration' (4 HEC; 15 PhD students); 2016
6. **Planning committee** of the advanced level course 'Aquatic Ecosystems' (15 HEC); 2014-15
7. **Planning committee** of the advanced level course 'Limnology II' (15 HEC); 2009-14
8. **Planning committee** of the advanced level course 'Aquatic ecosystem and ecosystem services' (5 HEC) within the program 'Environment and Water Engineering'; 2010
9. **Course developer, leader and administrator** for 25% of the undergraduate course 'Engineering and Environmental Impacts' (9 HEC); 2004-09
10. **Course developer, leader and administrator** for 25% of the undergraduate course 'Energy and the Environment' (5 HEC) within the four year educational program 'Biology and Environmental Sciences'; 2008
11. **Planning committee** of the PhD course: Climate impacts on terrestrial and aquatic ecosystems (5 HEC); 2009
12. **Course developer, marketing person and administrator** of the University course: Introduction to the EC:s water framework directive; 2003-05
13. **Workshop initiator, leader and administrator** of the SIDA Workshop: Water management; 1998
14. **Organizer** of several workshops and courses at the Erken Laboratory; 1992-2000
15. **Coordinator** for several **international exchange students** at the Erken Laboratory, Sweden; 1992-97

Teaching and Supervision Activities, Basic Education Level (Years 1-3)

Since 1999 I have been teaching on the basic education level in altogether 9 different courses at the Swedish University of Agricultural Sciences (until 2009) and Uppsala University (since 2009):

Ongoing:

1. **Undergraduate course:** 20% responsibility and teacher of the course 'Ecology and Population Genetics' (15 HEC; in Swedish; ca 75 students); each year since 2016; total amount of credited hours up to now: 956 hours (incl. 2023)
2. **Evening course on the basic University level:** Teacher of the course 'Nature Conservation and Biodiversity' (10 HEC, in Swedish; ca 15 students); since 2021, total amount of credited hours up to now: 30 hours (incl. 2023)

Previous:

3. **Undergraduate course:** 50% responsibility (100% responsibility during 2017-20) and teacher of the course 'Aquatic Environmental Analysis' (5 HEC; in Swedish; ca 60 students) within the program 'Environment and Water Engineering'; each year during 2009 to 2022; total amount of credited hours: 1419 hours
4. **Undergraduate course:** 25% responsibility and teacher of the course 'Energy and the Environment' (5 HEC; in Swedish); 2008; total amount of credited hours: 72 hours
5. **Undergraduate course:** 25% responsibility and teacher of the course 'Engineering and environmental impacts' (9 HEC; in Swedish); each year during 2004-2009; total amount of credited hours: 330 hours
6. **Undergraduate course:** Teacher of the course 'Applied environmental assessment'; (15 HEC; in English; Lectures: Climate and lake ecosystems, Supervision of projects, Time series analyses; each year during 2000-2008; total amount of credited hours: 258 hours
7. **Undergraduate course:** Teacher of the course 'Natural Sciences Basic Course'; Lecture and Excursion: Environmental Assessment (in English); 2007 and 2008; total amount of credited hours: 24 hours
8. **Undergraduate course:** Teacher of the course 'Soil Biology'; Lecture: Eutrophication and water management (in English); year 2007; total amount of credited hours: 8 hours
9. **Undergraduate course:** Teacher of the course 'Sedimentology'; Lectures and field work: Sediment sampling in lakes (in English); year 1999; total amount of credited hours: 64 hours

In 2021 I was invited to give a lecture on 'Water and Health' at Boston University, US. Due to Covid-19 the lecture was replaced by a site visit to Boston University in 2022.

My supervision experience at the basic education level covers the following:

Extended project-works of undergraduate students apart from those included in courses (main supervision):

1. Guillaume, I. 2009. The effect of the synthetic oestrogen EE2 on wild fish in the environment. 10 pp.
2. Nääs, J. 2006. Nitrogen cycling in lakes in a changing environment.
3. Broström, R. and P. Tholander. 2005. Why are nitrate concentrations very low in the warmest waters?
4. Lind, J. and S. Hallstam. 2005. Algae growth north and south of 62°N (*the limes norrlandicus*).
5. Eriksson, M. 2004. Hur påverkar varmare vintrar kiselhalten i vatten?
6. Nolin, L. 2003. Kan förändringar i Mälarens vattenfärg kopplas till förändringar i NAO (North Atlantic Oscillation)?
7. Fahlander, D. and E. Nandorf. 2002. Effekter av North Atlantic Oscillation på nitrathalten i Mälaren.
8. Lehtinen, L.-M. 2001. Varmare vinter - vad händer med våra sjöar?

Besides I was a tutor for a variety of international exchange students working at the Erken Laboratory during 1992-97.

Teaching and Supervision Activities, Advanced Education Level (Years 4-5)

Since 1996 I have been teaching on the advanced education level in 11 different courses at the Swedish University of Agricultural Sciences (until 2009) and Uppsala University (since 2009):

Ongoing:

1. **Combined advanced level and undergraduate course:** Teacher of the course 'Limnology' (15 HEC; in English; ca 25 students); since 2022; total amount of credited hours up to now: 24 hours (incl. 2022)

Previous:

2. **Advanced level course:** Ecosystems in the Anthropocene (15 HEC; in English); Lecture: Modelling and Time Series Analysis; 2021; total amount of credited hours: 8 hours
3. **Advanced level course:** 100% responsibility and teacher of the course 'Modelling of aquatic ecosystems' (15 HEC; in Swedish; ca 25 students); each year during 2011-2017 (2017 only 10% responsibility); total amount of credited hours: 1493 hours
4. **Advanced level course:** Aquatic Ecosystems (15 HEC; in English); Lecture and computer lab: Biogeochemistry; year 2015; total amount of credited hours: 80 hours
5. **Advanced level course:** Limnology II (15 HEC; in English); Lecture and computer lab: Biogeochemistry; each year during 2010-2014; total amount of credited hours: 303 hours
6. **Advanced level course:** Teacher of the course 'Applied Ecosystemecology' (15 HEC; in English); Lecture: Metals in the environment; years 2010 and 2011; total amount of credited hours: 28 hours
7. **Advanced level course:** Teacher of the course 'Renewable energy'; Lecture: Effects of hydroelectric power dams on aquatic systems (in English); each year during 2007-2009; total amount of credited hours: 24 hours
8. **Advanced level course:** Teacher of the course 'Pollutant-effects in the environment' (5 HEC; in English); year 2009; total amount of credited hours: 5 hours
9. **Advanced level course:** Teacher of the course 'Ecological methods'; Lecture: Environmental assessment - water quality of Lake Mälaren as a case study (in English); year 2000; total amount of credited hours: 8 hours
10. **Advanced level course:** Teacher of the course 'Radiometric tools and scales in land-water studies'; Lecture: The use of isotopes in determining lake sedimentation (in English); year 1998; total amount of credited hours: 8 hours
11. **Advanced level course:** Teacher of the course 'Lake Sedimentology'; Lectures: Methods of sampling, sedimentation in lakes, water dynamics, lake bottom dynamics (in English); year 1996; total amount of credited hours: 48 hours

My supervision experience at the advanced level education level covers the following:

Master Thesis:

1. Ejderby, Sofia. 2023. A comparison of ecosystem services from two stormwater ponds (subject reviewer/advisor).
2. Melhus, Christoffer. 2019. Mixing of aquatic and terrestrial microbial communities during ice break-off in freshwater lakes and the effects on DOC degradation (subject reviewer/advisor).
3. Düfback, Emma. 2019. Nitrogen uptake by vegetation in the Wakkerstroom wetland, South Africa (subject reviewer/advisor).
4. Cronander, Joel. 2017. Recreation of natural thresholds in small rivers and wetlands – model development for the simulation of changing water flows (subject reviewer/advisor).
5. Hållén, Joakim. 2016. PCBs in the Lake System Oxundasjön-Rosersbergsviken – Predictive massbalance modelling for different recovery scenarios (subject reviewer/advisor).
6. Svensson, Oscar. 2016. Modelling of phosphorous concentrations in Sävjaån using INCA-P. Uppsala University, Sweden (subject reviewer/advisor).
7. Scherrer, Kim. 2015. Light, temperature and competition – understanding the causes for climate-driven regime shifts in arctic marine benthos. Uppsala University, Sweden (subject reviewer/advisor).
8. Sporre, Anna. 2015. Evaluation of turbidity in programs for environmental monitoring of surface water during construction activities. Uppsala University, Sweden (subject reviewer/advisor).
9. Gunnarsson, Emelie. 2014. Investigation of the suitability of an aluminum treatment for the restoration of Växjösjö. Uppsala University, Sweden (subject reviewer/advisor)
10. Grandin, Karin. 2012. Variations of methane emissions within and between three hydroelectric reservoirs in Brazil. Uppsala University, Sweden (subject reviewer/advisor).
11. Broberg, Nils. 2012. Increasing algal biomass despite decreasing phosphorus concentrations – what is limiting algal growth in Swedish lakes? Uppsala University, Sweden (main supervision).
12. Louis-Alvin, Alexandra. 2011. Effects of nitrogen removal of waste water treatment plants on lake water quality. Uppsala University, Uppsala, Sweden (subject reviewer/advisor).
13. Jiménez Ledesma, José. 2011. Dynamics of color and organic carbon within the Mälaren catchment- fluxes, drivers and modelling. Dept. of Aquatic Sciences and Assessment, SLU, Uppsala, Sweden (subject reviewer/advisor).
14. Broström, Maria. 2009. Sensitivity of tropical freshwater reservoirs to changes in phosphorus concentrations. Dept. of Ecology and Evolution, Uppsala University, Sweden (main supervision of the modeling part in Mauritius).
15. Pirard, Jenny. 2008. Jämförande studie av recipientmodellerna StormTAC, LakeMab and WASP. Dept. of Environmental Assessment, SLU, Uppsala, Sweden (main supervision).
16. Westerö, Anna-Karin. 2004. Isfria vintrar-hur påverkas vattenkvalitet och växtplanktonutveckling i Sveriges största sjöar? Dept. of Environmental Assessment, SLU, Uppsala, Sweden (main supervision).
17. Tilja, Marie. 2003. Water colour trends in Lake Mälaren. Dept. of Thematic Studies, Linköping University, Campus Norrköping, Sweden (supervision together with Per Sandén).
18. Neumann, Dörthe. 2001. Bedömning av vattenkvalité i Sverige och Tyskland – en jämförande studie i teori och praktik. Dept. of Environmental Assessment, SLU, Uppsala, Sweden (supervision together with Mats Wallin).

Other advanced level student projects

1. Supervision of 10-25 projects each year within the 15 HEC course: Modelling of Aquatic Ecosystems during 2011-2017.
2. Grust, Karin. 1999. The relationship between long-term weather conditions and nutrient concentrations in Lake Erken. six months research project, Erken Laboratory, Uppsala University, Sweden.

Teaching and Supervision Activities, Research Education Level

1. **PhD course:** Main responsibility, organizer and teacher of the Marie-Curie ITN training course 'Process understanding: from local to catchment integration' (4 HEC; 15 PhD students); Uppsala University; year 2016; total amount of credited hours: 60 hours
2. **PhD course:** Teacher of the course 'Literature course in Limnology' (10 HEC); Uppsala University; year 2012; total amount of credited hours: 8 hours
3. **PhD course:** Teacher of the course 'Climate change in aquatic ecosystems'; Lund University; Invited guest lecturer; year 2012; total amount of credited hours: 8 hours
4. **PhD course:** Teacher of the course 'Literature course in Aquatic Sciences and Assessment' (7.5 HEC); SLU; year 2011; total amount of credited hours: 5 hours
5. **PhD course:** Teacher of the course 'Paleoecological and limnological approaches to environmental change'; Lund University; Invited guest lecturer; year 2008; total amount of credited hours: 8 hours
6. **Postgraduate school:** Focus on Soil and Water; SLU; Deputy Director of Studies; 2008-2009
7. **Course on distance:** EC:s water framework directive; Uppsala Water Center; altogether: 2 courses à 2 weeks: course organization, marketing and administration; year 2004; total amount of credited hours: 80 hours
8. **Workshop:** Partial responsibility and teacher of the Latvian/Estonian training in water management; Uppsala University, Erken Laboratory; years 1994 and 1998; total amount of credited hours: 80 hours
9. **SIDA Workshop:** Main responsibility, organizer and teacher of the workshop 'Water management'; Uppsala University, Erken Laboratory; year 1998; total amount of credited hours: 80 hours
10. **Workshop:** Teacher of the course 'Nutrient enrichment for the restoration of fisheries and biodiversity'; Uppsala University; Lecture: The response of European lakes to environmental changes; year 1998; total amount of credited hours: 8 hours
11. **NORFA Workshop:** Partial responsibility and teacher of the workshop 'Biological, chemical and physical exchange processes'; Uppsala University, Erken Laboratory; year 1995; total amount of credited hours: 50 hours

My supervision experience at the research education level covers the following (all PhD projects are externally funded):

PhD students:

1. Jakobsson, Ellinor. ongoing since 2021. Effects of ice quality changes on primary production in lakes (main supervision).
2. Ayala-Zamora, Ana. 2018-2023. Modelling impact climate-related change on the thermal responses of lakes. PhD thesis, Uppsala University (co-supervision).
3. Münzner, Karla. 2018-2022. Causes and consequences of blooms of *Gonyostomum semen*. PhD thesis, Uppsala University (co-supervision).
4. Rudebeck, Hugo. 2021-2022. Lake ice quality changes in a warmer world and consequences for ice safety (main supervision; finished with one international peer reviewed publication because of unforeseen private reasons).
5. Engel, Fabian. 2016-2020. The role of freshwater phytoplankton in the global carbon cycle. PhD thesis, Uppsala University (main supervision).
6. Björnerås, Caroline. 2014-2020. Drivers of increasing iron concentrations in freshwaters. PhD thesis, Lund University (co-supervision).
7. Jane, Stephen. 2019-2020. Response of lake benthic invertebrate communities to dissolved organic matter (DOM) loading as well as oxygen depletion in temperate lakes (Fulbright funded guest PhD student; received his PhD in 2021).
8. Nydahl, Anna. 2015-2019. Carbon dioxide in inland waters – drivers and mechanisms across spatial and temporal scales PhD thesis, Uppsala University (main supervision).
9. Horgby, Åsa. 2015-2019. Temporal variations of greenhouse gas fluxes (CO₂, CH₄, N₂O) from headwaters to downstream water systems (secondary supervision within the EU Marie Curie ITN C-Cascades).
10. Hastie, Adam. 2015-2018. Reservoir and lake effect on carbon fluxes through the land-ocean aquatic continuum (secondary supervision within the EU Marie Curie ITN C-Cascades).
11. Denfeld, Blaize. 2011-2016. Greenhouse gas dynamics in ice-covered lakes across spatial and temporal scales. PhD thesis, Uppsala University (main supervision).
12. Grubisic, Lorena. 2010-2016. Activity and composition of freshwater bacterioplankton communities when exposed to alterations in thermal structure, dissolved organic matter and solar radiation (co-supervision; finished with two peer-reviewed international first author publications).
13. Müller, Roger. 2010-2015. Lake dissolved organic matter quantity and quality-variability across temporal and spatial scales. PhD thesis, Uppsala University (main supervision).
14. Dimberg, Peter. 2010-2015. Predictions within and across aquatic systems using statistical methods and models. PhD thesis, Uppsala University (co-supervision).
15. Winterdahl, Mattias. 2007-2013. Modeling climate influence on surface water DOC regimes across spatial and temporal scales. PhD thesis, SLU (co-supervision).
16. Daneshvar, Atlasi. 2007-2012. Source, occurrence and fate of pharmaceuticals in natural waters. PhD thesis, SLU (main supervision).

17. Eklöf, Karin. 2007-2012. The influence of forest harvest on water quality with emphasis on mercury. PhD thesis, SLU (co-supervision).
18. Khalili, Maria. 2007-2012. Macronutrient cycling in surface waters – large-scale patterns and assessment of global change. PhD thesis, SLU (main supervision).
19. Bloch, Ina. 2006-2010. Climate-induced changes in the phytoplankton species composition along a latitudinal gradient. Licentiat thesis with two international peer-reviewed publications, SLU (main supervision).
20. Erlandsson, Martin. 2004-2008. Credible acidification assessments in a changeable environment. PhD thesis, SLU (co-supervision).
21. Blenckner, Thorsten. 1997-2001. Climate related impacts on a lake – from physics to biology. PhD-thesis, Uppsala University (in principle main supervision but not officially since I only had a postdoc position when Thorsten began).

Short-term PhD student supervision:

22. Azadeh Yousefi. 2022. Modelling lake ice quality using artificial intelligence (guest PhD student from Trento University, Italy; stayed at Uppsala University for six months)

Student evaluations on supervision skills are usually pleasant, e.g. 'Gesa, who has been the most helpful, inspiring and enthusiastic supervisor one can imagine' or 'Gesa, thank you for giving me the opportunity to explore the scientific and geographic world and for always believing in me. Thank you for your time, patience, energy and for all the insight along the way. You have supported me in many ways, both scientifically and personally, and I am very grateful for that. I appreciate our shared sense of adventure and proactiveness' (examples have been taken from PhD thesis acknowledgements).

Postdoctoral (all projects are externally funded):

1. Vikström, Kevin. 2022-2024. Lake ice quality changes in a warmer world and consequences for ice safety.
2. Jansson, Joachim. 2021-2023. BigOx: Understanding and predicting long-term oxygen decline in northern lakes using big data.
3. Wallin, Marcus. 2013-2015. Modelling of dissolved organic carbon transformations along the aquatic continuum.
4. Norman, Maria. 2014. Climate change scenarios for Swedish boreal waters.
5. Koehler, Birgit. 2013-2014. Large-scale modelling of dissolved organic carbon transformations (project shared with Lars Tranvik).
6. Kothawala, Dolly. 2010-2014. Characteristics of dissolved organic matter in aquatic ecosystems (project shared with Lars Tranvik).
7. Temnerud, Johan. 2006-2008. Influence of abrupt changes in air temperature and precipitation on water chemistry

Official Mentorship within a mentorship programme:

1. Mentor for Claudia Mohr, Wallenberg Academy Fellow, Stockholm University; Wallenberg Academy Fellows' mentorship program (2020-2025)
2. Mentor for Carolina Corrales, PhD student at Uppsala University; Mentorship programme was organized by the GENECO graduate school at Lund University (2010-2012).

Pedagogic Education

Courses and workshops (total of 18 weeks):

1. Workshop on research ethics in doctoral education (half day); Nov 23
2. Workshop on goals, grades and assessment in Swedish schools with Swedish experts and the National Agency for education, organized by the Royal Academy of Sciences (1 day); Dec 20
3. Mini workshop on the development and the use of quizzes during teaching (2 hours); Sep 20
4. Mini workshop on how to apply 'zoom' to teach student-centered (2 hours); Apr 20
5. Course on student-centred teaching and learning (half day); Apr 18
6. Workshop on examination possibilities of course goals (half day); Jan 17
7. Media training course (half day); Mar 13
8. Workshop on problem-based learning methods with focus on group dynamics (half day); Mar 13
9. Course on ethics (5 half-days); Oct-Nov 12
10. Workshop on gender perspectives in biology (2 half days); May 12
11. Workshop on how to create suitable exam questions (half day); Jan 12
12. Course on pedagogic portfolios; 1 week during Feb-May 11
13. Advanced course for teachers with focus on new teaching methods; 2 weeks during Sep-Dec 10
14. Mentorship education by the research school GENECO at Lund University (1 day); Aug 10
15. Workshop on how to use turning point and smartboards for teaching purposes (2 half days); Apr-May 10
16. Course on supervision (2 days); Oct-Nov 09
17. Leadership education (appointed by the Chancellor of the Swedish University of Agricultural Sciences to participate in MAL 3 – Tomorrows academic leaders); 2 weeks full time during May 08 – Jan 09
18. Workshop on plagiarism and higher education (1 day); Apr 08
19. Course on evaluation criteria (3 days); Dec 2007 and Feb 08
20. Course on preparation of pictures and illustrations for teaching purposes (1 day); Oct 05
21. Advanced course in pedagogic with focus on supervision (Docentkurs); 4 weeks full time during Oct-Nov 02
22. Workshop on supervising research students (1 day); Sep 02

23. Basic course in pedagogic with focus on teaching; 4 weeks full time during Feb-May 00
24. Course in rhetoric (voice, presentation analyses etc.) (3 days); Mar 1999
25. Course in poster techniques (1 day); Apr 1994

Seminars with special topics (the seminars required reading of a substantial amount of literature in advance):

1. Seminar on the ABC of ALC (Active Learning Classroom) (2 hours); Mar 23
 2. Seminar on problem-solving strategies (1 hour); Sep 22
 3. Seminar on how to connect students on a distance (1 hour); Nov 20
 4. Seminar on how students develop mastery (1 hour); Feb 20
 5. Seminar on the way how students organize knowledge affect their learning (1 hour); Oct 19
 6. Seminar on how to increase teacher's and student's responsibility (2 hours); Nov 18
 7. Seminar on technical devices for teaching purposes (2 hours); Apr 18
 8. Seminar on students with special needs (2 hours); Oct 17
 9. Seminar on assessment and evaluation in higher education (1 hour); May 15
 10. Seminar on ethical aspects being a professional (1 hour); Apr 15
 11. Seminar on validity on course evaluations (1 hour); Dec 14
 12. Seminar on interactions to working environments outside academia during student's education (2 hours); Oct 13
 13. Seminar on giving comments to written student's work (2 hours); May 13
 14. Seminar on marking group work (2 hours); May 13
 15. Seminar on the use of wireless devices during lectures (2 hours); Feb 13
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ADDITIONAL SKILLS

1. **Languages:** daily use of three languages, i.e. German (mother tongue), English (fluent), Swedish (fluent); in addition French (school knowledge)
2. **Computer:** Extensive experience with PC computers and a large variety of software programmes; experience with dataloggers
3. **Media:** Responsible for media contacts of Uppsala Sports Club in Track and Field (UIF with >1000 members); writing of newspaper articles and writing of news on the homepage; 2016-2019
4. **Current leisure activities:** Double-bass since 1984; playing in e.g. the Royal Academic Orchestra (since 1992; honored with a gold medal in 2022 for 30 years of engagement) and in the Chamber Orchestra in Uppsala (2000-15); over several years chair and member of the orchestra steering committee; outdoor activities such as kayaking, skiing and hiking; travelling: >80 different countries on all seven continents.