

CURRICULUM VITAE MONIKA WINDER

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EDUCATION

- 2013 Docent in Marine Ecology, Stockholm University, Sweden (10/12/2013)
2011 Habilitation in Aquatic Ecology, Christian-Albrechts University Kiel, Germany
2002 Ph.D. in Natural Sciences, ETH (Swiss Federal Institute of Technology), Zürich, Switzerland
1997 Dipl. in Zoology, University Innsbruck, Department of Zoology, Austria
1997 Dipl. in Biology Education, University Innsbruck, Department of Biology, Austria

PROFESSIONAL APPOINTMENTS

- 2016 – Professor in Marine Pelagic Ecology, Stockholm University, Sweden
2011 – 2016 Associate Professor, Stockholm University, Sweden
2009 – 2013 Assistant Research Professor, University of California, Davis, USA
2010 – 2011 Research Scientist, Helmholtz Zentrum für Ozeanforschung Kiel GEOMAR, Germany
2005 – 2008 Research Associate, University of California, Tahoe Environmental Research Centre, Davis, USA
2002 – 2005 Post-doctoral Fellow, University of Washington, School of Aquatic and Fishery Sciences and Department of Biology, Seattle, USA
1998 – 2002 Doctoral Student Researcher, EAWAG/ETH, Switzerland
1995 – 1996 Research Technician, Arge Limnologie, Innsbruck, Austria

LEAVE OF ABSENCE

Parental leave: 2016 – 2017(80%); 2020-2021 (80%)

ASSIGNMENTS

- 2018 – 2020 Research subject representative in Marine Biology, Department of Ecology, Environment and Plant Sciences, Stockholm University
2015 – 2017 Deputy Head of Department of Ecology, Environment and Plant Sciences, Stockholm University
2013 – 2017 Director of Research Studies, at the Department of Ecology, Environment and Plant Sciences, Stockholm University

RESEARCH VISITS

- 2006 – 2007 Visiting Scientist, Ocean Sciences, University of California, Santa Cruz, USA
2006 Visiting Scientist, EAWAG, Switzerland
2001 Visiting PhD student, Max-Planck-Institute for Limnology, Plön, Germany
1996 Graduate studies in Biological Sciences, University of New Orleans, USA

RESEARCH GRANTS

- **Swedish Research Council Formas** (2021-2023) 'Plankton-fish interactions: an understudied link in Baltic Sea food webs and fisheries management', PI

- **SIDA-Marine and Coastal Science for Management (MASMA)** (2019-2021) 'Larval Fish Production and Dispersal in Critical Habitats', National PI
- **Swedish Research Council VR, Vetenskapsrådet** (2017-2019) 'Consequences of environmental change on species interaction networks and ecosystem function', PI
- **Swedish Research Council Formas** (2016-2018) 'Responses of pelagic-benthic coupling to environmental change in the Baltic Sea', PI
- **SFO-medel for Baltic Sea Research** (2016-2018) 'Drivers of organic material fluxes between benthic and pelagic systems', PI
- **Swedish Research Council VR, Vetenskapsrådet** (2016-2018) 'How trophic interactions mediate physiological responses to climate change in food-webs', co-PI
- **Baltic Ecosystem Adaptive Management (BEAM)** (2015) 'Benthic-pelagic coupling in the Baltic Sea', PI
- **BONUS** (2014 – 2017) 'BIO-C3 project Biodiversity changes – causes, consequences and management implications', National PI
- **Delta Science Program, California, USA** (2011 –2014) 'Nutritional quality of zooplankton as prey for fish in the Sacramento-San Joaquin Delta', PI
- **EU Marie-Curie IRG** (2011 – 2014) 'Trophic efficiency in plankton food webs', PI
- **Baltic Ecosystem Adaptive Management (BEAM)** (2012 – 2014) 'Effects of climate on plankton dynamics in the Baltic Sea', PI
- **DFG Grant (German Science Foundation)** (2011 – 2013) 'Effects of plankton community structure on energy pathways and trophic efficiency', PI
- **MESOAQUA Transnational Access** (2011) 'Cycling of organic matter through the pelagic food web under warmer acidified ocean conditions (CYCLE)', competed, PI
- **CALFED Science Grant, California, USA** (2008 – 2011) 'Plankton dynamics in the Sacramento-San Joaquin Delta: Long-term trends and trophic interactions', PI
- **Austrian National Science Foundation (FWF)** (2003 – 2004) Postdoctoral research grant, PI
- **Swiss National Science Foundation (SNF)** (2002 – 2003) Postdoctoral research grant, PI

RESEARCH FELLOWSHIPS & AWARDS

- Highly cited researcher-2020: production of multiple highly cited papers in the Web of Science.
- Publication Award, Institute of Marine Science (IFM-GEOMAR), Kiel, Germany, 2010.
- PASI Workshop travel grant; (2009)
- NSF Training course in Antarctic Biology NSF (2008)
- University of California, Pacific Rim Research Program, Workshop grant for initiating research on 'Climate impacts on lakes of the Pacific Rim', 2007
- Deutscher akademischer Austauschdienst (DAAD, 2001) fellowship (2001)
- Best Student Poster, Symposium for European Freshwater Science, (1999)
- Austrian Federal Fellowship Grant for studies in a foreign country (1996)
- Vorarlberger Fellowship Grant for abroad studies and research (1996)
- Austrian Federal Fellowship Grant for excellent studies (1993, 1995)

ACADEMIC TEACHING

Course leader of master courses

- Marine Ecosystem Dynamics, Stockholm University, 7.5 hp, 2019
- Marine Population and Ecosystem Dynamics, Stockholm University, 15 hp, 2017-2018
- Biological Statistics and Experimental Design, Stockholm University, 15 hp, 2014-2016.

- Environmental Monitoring and Risk Assessment, Stockholm University, 15 hp, 2012-2016

Course leader of PhD courses

- Network modelling and thinking, Stockholm University, 3 hp, 2020
- Science communication, Stockholm University, 3 hp, 2015
- Time series analysis for ecology, Stockholm University, 3 hp, 2014

Lecturer

- Ecology and Climate Change, Stockholm University, 2014-2015
- Biological Interactions, Stockholm University, 2016-2020
- Biological Oceanography, Christian-Albrechts University Kiel, 2010-2011
- Current Topics in Biological Oceanography, Christian-Albrechts University Kiel, 2010-2011
- Introduction to Marine Biology, Christian-Albrechts-University, Kiel 2010
- Practical Course in Biological Oceanography', Christian-Albrechts-University, Kiel 2010
- Comparative anatomy of vertebrates, University of California, 2008-2010
- Limnology, University of California, Davis, USA, 2007-2010
- Limnology, University of Washington, Seattle, USA, 2003-3004

Thesis opponent or committee:

12 times member of PhD thesis committee or opponent and 3 times licentiate or half-way seminar examiner

SUPERVISION AND MENTORING

PhD supervisor: Tinanshou Xu, Stockholm University, Apr 2020 - present
Noah Ngisiange, Stockholm University, Nov 2019 – present
Baptiste Serandour, Stockholm University, 2019 – present
Karen Lykkebo Petersen, Stockholm University, 2018 - 2019
Andreas Novotny, Stockholm University, 2017 – present
Konrad Karlsson, Stockholm University, 2014 – 2019 (current position: Researcher at Unis, Norway)
Per Hedberg, Stockholm University, 2016 – present
Jens Nilson, Stockholm University, 2012 – 2016 (current position: Researcher at NOAA, Seattle, USA)
Alfred Burian, Stockholm University, 2012 – May 2016 (current position: Postdoctoral researcher, UK)
Rafael Bermudez, GEOMAR, Kiel University, 2012 - 2014 (current position: Researcher at ESPOL University, Ecuador)

PhD co-supervisor: Julie Garrison, Stockholm University, 2019 - present
Serena Albert, Stockholm University, 2018 - present
Barnabas Tarimo, Stockholm University, 2016 – present
Sven Iburg, Stockholm University, 2018 – present
Andrea Caputo, Stockholm University, 2014-2018
Marcus Stenegren, Stockholm University, 2014-2019
Elina Kari, Stockholm University, 2014-2018
Dennis Rossol, GEOMAR, Kiel University, 2009
Rong Bi, GEOMAR, Kiel University, 2008-2014

Postdoc supervisor: Dr. Sara Zamora, Stockholm University, 2016 - 2018
Dr. David Costalago, Stockholm University, 2016 – 2017 (current position: Researcher at OceanMind)

Dr. Olle Hjerne, Stockholm University, 2013-2015 (current position: Researcher at Swedish Nuclear Fuel and Waste Management)

Dr. Jennifer Griffith, Stockholm University, Sept 2013-2016 (current position: Researcher at Washington Department of Fish and Wildlife)

Dr. David Angeler, Stockholm University, July 2014-Dec 2014 (current position: Docent at SLU, Uppsala)

Dr. Aaron Galloway, UC Davis, 2013 – 2014 (current position: Assistant Professor at University of Oregon, USA)

Dr. Andrea Downing, Stockholm University, 2012- 2014 (current position: Researcher at Stockholm Resilience Center)

Dr. Pavel Katrina, UC Davis, 2011 – 2013 (current position: Ass. Professor at Queen Mary University of London, UK)

Dr. David Finger, UC Davis, 2008 (current position: Asst. Prof. at Reykjavik University, Iceland)

Master student supervisor: 14 master students between 2011 and present

Mentoring of researchers and assistant professors: 2016-2017, 2019-2021

PEDAGOGICAL AND LEADERSHIP TRAINING

- To be a leader ('Att vara chef på Stockholms universitet'), Stockholm University, 2016-2015);
- Supervision of research in theory and practice, 3 hp, Stockholm University, 2015
- Scientific communication and leadership training, 40 hrs, COMPASS, 2013
- Academic teaching, 12 hrs, Christian-Albrechts University Kiel, 2011
- Teaching and learning for university teachers (UL1), 7.5 hp, Stockholm University, 2016
- Teaching and learning in science and mathematics (UL2), 7.5 hp, Stockholm University, 2016

ACADEMIC SERVICES

Ad-hoc Reviews for: Nature Communication, Nature Climate Change, Ecology Letters, Ecology, PNAS, Nature Climate Change, Nature Ecology and Evolution, Scientific Reports, Global Change Biology, Limnology and Oceanography, Oecologia, Proceedings of the Royal Society B, Freshwater Biology, Hydrobiology, Journal of Plankton Research, Limnology and Oceanography: Methods, Functional Ecology, Aquatic Sciences, Canadian Journal of Aquatic and Fishery Sciences, Australian Ecology, Journal of the North American Benthological Society, Journal of Ecology, Polar Biology.

Grant reviewer for: National Science Foundation (NSF); German Science Foundation (DFG); Norwegian Research Council; Chilean Science Foundation; European Research Council (ERC) Advanced Grant, Olle Engkvist Foundation, NCERC, Canada

Referee for Academic Positions and Promotions: Gothenburg University, different Norwegian universities

Editorial Board: Journal of Plankton Research (since 2009)
Guest editor for Marine Biology special issue (2012)
Oikos (since May 2012)
Limnology and Oceanography: Letters (since 2016)

Scientific Advisory Panel

EU project FP7-ENV OCEAN CERTAIN, 2014 – 2017

Hanse-Wissenschaftskolleg, Institute for Advances Study, Germany, Steering Board, 2016–present

Membership in Academic Societies: American Society of Limnology and Oceanography (ASLO), Ecological Society of America (ESA).

Research Cruise

Jeddah Transect Project (2011), Red Sea, RV Poseidon

PUBLICATIONS

See full publication list at: <https://scholar.google.com/citations?user=AC5LpJkAAAAJ&hl=en>
Google scholar (1/2021): h-index is 34, i10-index is 56, total citations 8209

POPULAR ARTICLES

Spaak P, Engeler L, Winder M (2004) Überlebensstrategien der Wasserflöhe in Bergseen: Störfaktor Mensch (Survival strategies of water fleas in alpine lakes). Cratschla 2: 21-23.

Winder M, Spaak P (2003) Genetische Diversität von Daphnien in alpinen Seen (Genetic diversity of Daphnia in alpine lakes). EAWAG News 56:22-23.

Winder M, Spaak P (2001) Der Einfluss von Umweltfaktoren auf die Vertikalwanderung von Daphnien in Bergseen (The effects of environmental factors on the diel vertical migration of Daphnia in alpine lakes). EAWAG Annual Report.

Winder M (2002) Limnologisches Projekt am Obersee abgeschlossen (Limnological project at the Obersee is finished). Arosa Zeitung, Local newspaper.

Winder M (2000) Riesen ‚Experimentgläser‘ im Obersee (Enormous ‚experimental tubes‘ in the Obersee). Arosa Zeitung, Local newspaper.

Winder M, Lass S, Spaak P, Bürgi HR (1999). Einfluss von Fischkairomonen auf die Vertikalwanderung von Daphnien (The influence of fish kairomones on Daphnia vertical migration). EAWAG Annual Report.

Winder M (1999) Wieviel Enten verträgt der Obersee? (How many ducks can the Obersee tolerate?) Arosa Zeitung, Local newspaper.

Winder M (1998) Limnologisches Projekt am Aroser Obersee (Limnological project at the Aroser Obersee). Arosa Zeitung, Local newspaper.

MEDIA AND PUBLIC OUTREACH

Talks Ocean acidification of the Baltic Sea, Baltic Sea Breakfast, Jan 2020
The state of the Baltic Sea, Rotary, 2020

Print Press Release SU Jun 2020: Prey for important fishes in the Archipelago can withstand a future warmer Baltic Sea: <https://www.su.se/deep/english/about-us/news/prey-for-important-fishes-in-the-archipelago-can-withstand-a-future-warmer-baltic-sea-1.501254>
Ecosystems threatened as ocean acidification extends to the Baltic Sea, Policy Brief, Jan 2020

Press Release SU Dec 2018: Increasing seal population will not harm main fish stocks in the Baltic, cited in over 20 national newspapers and radio stations.

Universitetsnytt, Juni 2016: ‚EU-anslag ska lösa Östersjöns utmaningar‘
https://issuu.com/stockholmsuniversitet/docs/suni_031_universitetsnytt_3_2016_w

English: ‚EU Funds will solve the challenges of the Baltic Sea‘

The Seattle Times (June 22, 2005) 'Lake Washington at risk';
(<http://seattletimes.nwsourc.com/html/home/>)
Seattle Post-Intelligencer (July 11, 2005): 'Lake Washington's ecosystem in trouble';
(http://seattlepi.nwsourc.com/local/232047_lakewash11.html)
Der Standard: 'Gestörtes Gleichgewicht im Wasser'
(<http://derstandard.at/Text/?id=2365726>):
Chesapeake Quarterly: 'Lessons from a Lake';
(<http://www.mdsg.umd.edu/CQ/V05N3/side1.html>)
Bridges, vol. 21, 2009; 'INTRODUCING MONIKA WINDER: FROM ECONOMIST TO
ECOLOGIST'; (<http://www.ostina.org/content/view/4003/1153/>)
Zukunft Forschung, University Innsbruck, Austria: 'Life in lakes';
(http://www.uibk.ac.at/forschung/magazin/4/0110_48_49.pdf)
Science News, Delta Science Program, Sept/Oct 2010: 'Fellows Study Harmful Algal Blooms
and Affected Food Webs';
(http://www.science.calwater.ca.gov/publications/sci_news_1010_fellows.html)

- Radio Swedish National Radio, Increasing seal population will not harm main fish stocks in the
Baltic (2019)
Swedish National Radio, P1 (Mar 26, 2016)
National Public Radio, Puget Sound (July 12, 2004)
- TV RTL: Climate and primary production (July 29, 2010)
ZDF: Climate effects on marine ecosystems (October 14, 2010)
- Jury Jury member at the Swedish Young Researchers (Unga Forskare) high school student
science, Technical Museum, Stockholm, 2019-2020,
<https://ungaforskare.se/utställningen/finalen/>
- Blogs <https://winderlab.com>

WORKING GROUP PARTICIPATION

SCOR Working Group 137: Global Patterns of Phytoplankton Dynamics in Coastal Ecosystems:
Comparative Analysis of Time Series Observations. Hangzhou, China, October 17-21, 2010.
SCOR working group 137: Global Patterns of Phytoplankton Dynamics in Coastal Ecosystems:
Comparative Analysis of Time Series Observations. Preparation meeting for China. Roskilde,
Denmark, June 21-24, 2010.
National Center for Ecological Analysis and Synthesis (NCEAS): Interactions between the near
coastal ocean and the San Francisco Estuary, California.
Pan-American Advanced Studies Institutes (PASI): Relationship between biodiversity
conservation and water resource development in Chile-Patagonia. 2007.

INVITED TALKS OR SEMINARS

A total of > 22 invited departmental seminars, including talks at University of Konstanz, Germany;
University of Hamburg, Germany; University of Lund, Sweden; University of Stockholm, Sweden;
University Potsdam, Germany; University Kiel IFM-GEOMAR, Germany; USGS Menlo Park CA, USA;
Cornell University USA; University of British Columbia, Canada; Romberg Tiburon Center for
Environmental Studies CA, USA; Austrian Academy of Sciences, Institute of Limnology Mondsee,
Austria; Imperial College of London, UK; Simon-Fraser University, BC, Canada; University of
Washington, USA; Swiss Federal Institute of Aquatic Science and Technology (EAWAG),
Switzerland; Alaska Fisheries Science Center NOAA-NMFS, USA; Hatfield Marine Science Center

Oregon, USA; Florida Atlantic University USA, Michigan State University USA, University of Warschau, Poland.

INVITED TALKS AT CONFERENCES OR SYMPOSIA

- Invited speaker, Aquatic Community Ecology Symposium, GEOMAR, Kiel, Germany, September 2018
- Plenary speaker, Research and Management of Eutrophication in Coastal Ecosystems (EUTRO 2018), Nyborg, Denmark, June 2018.
- Invited speaker, Celebrating 50 years of Science at Helgoland Roads, Germany, September 2012.
- Invited speaker, Workshop of the International Association of Phytoplankton Taxonomy and Ecology, Trento, Keynote speaker; Italy, August 2011.
- Invited speaker, Academy Colloquium on Predictability of plankton communities in an unpredictable world, Keynote speaker, Royal Netherlands Academy of Arts and Sciences, April 2010.
- Keynote speaker, Chapman Conference on Lakes as Sentinels, Integrators, and Regulators of Climate Change; USA, Sept 2008
- Invited Speaker, American Society of Limnology and Oceanography, Salt Lake City, USA, Feb 2005.

PRESENTATIONS AT SCIENTIFIC MEETINGS

- Winder M, Øystein Varpe. The annual cycle of zooplankton in the Baltic Sea. Baltic Sea Science Conference, Stockholm, Aug 2019.
- Winder M, Carstensen J, Galloway A, Jakobsen H, Cloern J. Phytoplankton diversity across the land-sea interface and its implications for secondary production. ASLO, Honolulu, Feb 2017.
- Winder M. Zooplankton diet preferences across species, life stages and seasons using DNA barcoding and compound-specific stable isotopes. ICES/PICES Zooplankton Production, Bergen, May 2016.
- Winder M. Adaptive capacity to climate change of Baltic Sea copepods. ICES, Copenhagen, Sept 2015.
- Winder M. The land-sea interface: a special place for producing fish. ASLO, Feb 2015, Granada, Spain.
- Winder M. Long-term ecological observations: taking the pulse of aquatic ecosystems. OIKOS meeting, Umeå, Jan 2015.
- Galloway AWE, Taipale SJ, Kankaalaa P, Winder M. Food web consequences of seasonal and decadal changes in phytoplankton fatty acid production. JASM, April 2014, Portland USA.
- Winder M. Cycling of organic matter through the pelagic food web under warmer acidified oceans conditions. ASLO, Hawaii, Feb 2014.
- Winder M. Warming up food-webs: implications for energy transfer. Aug 2013, ESA, Minnesota, USA.
- Bermúdez JR, Riebesell U, Schulz KG, Winder M: CO₂-induced shifts in natural phytoplankton community composition and biochemical make-up. The Ocean in a High-CO₂ World, September 2012, Monterey, California, USA.
- Bermúdez JR, Larsen A, Riebesell U, Schulz KG, Winder M: Effect of high CO₂ on competition and community composition of a natural phytoplankton assemblage. Mesoqua International Symposium, October 2012, Heraklion, Greece.
- Kratina P., Winder M: Invasive zooplankton alter nutritional prey quality for fish in San Francisco Estuary; Biennial Bay-Delta Science Conference, CA-Sacramento, 2012. Co-author

- Kratina P., Winder M: Shifts in zooplankton species composition affect nutritional food quality for fish. ESA, Portland, 2012. Co-author
- Winder M. Synergies between climate anomalies and hydrological modifications facilitate estuarine biotic invasions: European Geosciences Union (EGU). Vienna, Austria 2011.
- Winder M. Climate extremes promote the proliferation of invasive species. Life in warming waters: Aquashift Conference. Kiel, Germany 2010.
- Winder M. Shifts in zooplankton community structure: implications for food-web processes in the San Francisco Estuary. Bay-Delta Science Conference, Sacramento 2010.
- Winder M. Shifts in zooplankton community structure: implications for food-web processes in the San Francisco Estuary. Climate change impacts on estuarine and coastal ecosystems: a zooplankton perspective. Boulogne sur Mer, France, June 2010.
- Winder M, Jassby AD. Shifts in zooplankton community structure: implications for food-web processes in the San Francisco Estuary. ASLO, Santa Fe, USA, June 2010.
- Schladow SG, Winder M, Urrutia R, Araneda A, Stehr A, Reid B. Headwater lakes of the Chilean Patagonia: A laboratory for studying the impacts of global and local stressors. Physical Processes in Natural Waters, Reykjavik, Iceland, June 2010.
- Winder M, Cloern J. Does the terrestrial phenology concept apply in water? Coastal and Estuarine Research Federation, Portland, OR, 2009.
- Kissman, CEH, Winder M, Williamson CE, Saros JE. Deuterium stable isotopes: What do they reveal about food sources for *Diaptomus* sp. And cladocerans in alpine and subalpine lakes? Ecological Society of America, Albuquerque, USA, 2009.
- Winder M. Linking physical forcing and phytoplankton community structure: Does cell size matter? Physical Processes in Natural Waters, TERC, Incline Village, Nevada 2008.
- Winder M. Picophytoplankton dynamics in Lake Tahoe: establishing their sensitivity to external forces. Society of International Limnology, Montreal, Canada, 2007.
- Winder M, Reorganization of phytoplankton communities linked to physical forcing. Ecological Society of America, San Jose, CA, 2007.
- Winder M, Hunter D., Schladow G. Phytoplankton community responses to physical forcing in Lake Tahoe. ASLO, Victoria, 2006.
- Winder M, Essington TE, Litt AH, Schindler DE. Climatic effects on copepod population dynamics. ASLO, Salt Lake City, 2005.
- Winder M, Essington TE, Litt AH, Schindler DE. Climatic effects on *Leptodiaptomus* population dynamics. ESA, Portland, OR, August 2004.
- Winder M, Schindler DE. Climatic effects on trophic interactions in aquatic ecosystems. Climate change and aquatic ecosystems, Plymouth, UK, July 2004.
- Winder M, Schindler DE, Hampton SE. Climate impact on the phenology of lake processes. ASLO, Salt Lake City, UT, February 2003.
- Winder M, Schindler DE. Aquatic responses to environmental changes in Lake Washington, LIMPACS workshop, Silkeborg, Denmark, January 2003.
- Winder M, Spaak P. Local adaptation of alpine zooplankton. ESEB, Aarhus, Denmark, August 2001.
- Winder M, Spaak P. Diel vertical migration: not a predator avoidance strategy in alpine lakes? SIL Congress, Melbourne, Australia, February 2001.
- Winder M, Spaak P. Occurrence and clonal variation of *Daphnia* in Alpine lakes. International Symposium: High mountain lakes and streams: indicators of a changing world, Innsbruck, Austria, September 2000.
- Winder M, Spaak P. Behavioural adaptation of *Daphnia galeata* to changing fish biomass in an alpine lake. 6th Annual Meeting of Ph.D. Students in Evolutionary Biology, Leuven, Belgium, February 2000.

Winder M, Spaak P, Bürgi HR. Diel vertical migration of daphnids in relation to changing fish biomass in an alpine lake. ASLO, Kopenhagen, Denmark, June 2000.

Winder M, Bürgi HR, Spaak P. The influence of diel vertical migration on the condition of daphnids in an alpine lake. International Symposium on Cladocera, Plön, Germany, September 1999E

Winder M, Spaak P, Bürgi HR. Diel vertical migration of Daphnia in relation to fish biomass and food distribution in an alpine lake. Symposium for European Freshwater Sciences, Antwerp, Belgium, August 1999.