Lauren A. Rogers, PhD Curriculum Vitae

RESEARCH INTERESTS: Fisheries, climate change, ecosystem services, population dynamics, quantitative ecology, time-series analysis, socio-ecological systems, resilience, climate change vulnerability and adaptation.

EDUCATION

| 2004 - 2010 | Ph.D., Aquatic and Fishery Sciences, University of Washington |
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| | Dissertation: Population diversity and the effects of climate on Bristol Bay |
| | salmon and Norwegian coastal cod |
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1998 - 2002 B.S. with distinction, Earth Systems, Stanford University

PROFESSIONAL EXPERIENCE

| 11/2015 - Present | Research Fish Biologist EcoFOCI, Recruitment Processes, RACE Division Alaska Fisheries Science Center National Oceanic and Atmospheric Administration |
|-------------------|--|
| 6/2014 – 11/2015 | Fisheries Ecologist (90% position) The Natural Capital Project, Stanford University |
| 8/2011 – 11/2015 | Post-Doctoral Research Fellow (10% position since 6/2014, 100% prior) Nordic Centre for Research on Marine Ecosystems and Resources Under Climate Change (NorMER), and the Centre for Ecological and Evolutionary Synthesis (CEES), University of Oslo, Norway |
| 2004 - 2010 | Doctoral Student & Graduate Research Assistant School of Aquatic and Fishery Sciences, University of Washington |
| 2009 - 2010 | Visiting Researcher Centre for Ecological and Evolutionary Synthesis, University of Oslo, Norway |
| 2003 - 2004 | Field Team Leader Microbial Ecology Team, Palmer Station LTER, Antarctica |
| 2002 - 2003 | Research Assistant Phytoplankton Ecology Team, Palmer Station LTER, Antarctica |
| Jan – Mar 2001 | Undergraduate Researcher RVIB <i>Nathaniel B. Palmer</i> , East Antarctica |
| Jun - Aug 2000 | Research Assistant Monterey Bay Aquarium Research Institute, Moss Landing, CA |
| 1999 – 2002 | Undergraduate Laboratory Assistant Stable Isotope Lab, Stanford University |

TEACHING AND SUPERVISION

| 2013 | Co-supervisor of Masters student Rémi Patin from École Normale Supérieure A Bayesian state-space model for the population dynamics of North-East Arctic Haddock |
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| Nov 2011, 2012 | Guest Lecturer |
| | Department of Biology, University of Oslo |
| | BIO 4140: Life history strategies and climate effects |
| Spring 2008 | Teaching Assistant |
| | School of Aquatic and Fishery Sciences, University of Washington |
| | FISH 330: Climate change impacts on marine ecosystems |

GRANTS, FELLOWSHIPS AND HONORS

| 2016 - 2018 | Work package leader on Norwegian Research Council grant "A century of change: Ecological responses to pollution, climate, and other stressors on the Skagerrak coast" (\$720,000) |
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| 2015 | W.F. Thompson Award for Best Student Paper Published in 2013, American |
| | Institute of Fishery Research Biologists |
| 2015 - 2017 | Collaborator on a Norwegian Research Council grant "Multi-species dynamics |
| | above and beneath the sea-surface" |
| 2012 | Burgen Scholar Award, Academia Europaea |
| 2011 | Leiv Eiriksson Mobility Grant, Research Council of Norway (\$13,000) |
| 2010 | International travel award, UW SAFS (\$1,000) |
| 2009 - 2010 | National Science Foundation Nordic Research Opportunity (\$17,000) |
| 2009 - 2010 | H. Mason Keeler Endowment for Excellence Scholarship, UW SAFS |
| 2006 - 2009 | National Science Foundation Graduate Research Fellowship (\$121,500) |
| 2005 | Galen and Helen Maxfield Fisheries Scholarship, UW SAFS |
| 2004 | Graduate School Top Scholar Award, University of Washington |
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PUBLICATIONS (See Google Scholar page for updates)

- Patin, R., L.A. Rogers, and J. Ohlberger. 2016. Using a state-space population model to detect agedependent species interactions. *Canadian Journal of Fisheries and Aquatic Sciences*. 73: 811-818, 10.1139/cjfas-2015-0004.
- Pedersen, M.W. *and 22 others (including* **L.A. Rogers**). 2016. Trends in marine climate change research in the Nordic region since the first IPCC report. *Climatic Change* 134:147-161.
- Boonstra, W.J., K.M. Ottosen, A.S.A. Ferreira, A. Richter, **L.A. Rogers** *and 19 others*. 2015. What are the major global threats and impacts in marine environments? Investigating the contours of a shared perception among marine scientists from the bottom-up. *Marine Policy* 60:197-201.
- Rogers, L.A., E.M. Olsen, H. Knutsen and N.C. Stenseth. 2014. Habitat effects on population connectivity in a coastal seascape. *Marine Ecology Progress Series* 511:153-163.
- Ohlberger, J., L.A. Rogers and N.C. Stenseth. 2014. Stochasticity and determinism: How densityindependent and density-dependent processes affect population variability. *PLoS ONE* 9(6): e98940. doi:10.1371/journal.pone.0098940

- Pantel, J.H., D. Pendleton, A. Walters and L.A. Rogers. Linking environmental variability to population and community dynamics. 2014. Pages 119 - 131 in P.F. Kemp, editor. Eco-DAS IX Symposium Proceedings. Association for the Sciences of Limnology and Oceanography, Waco, TX.
- **Rogers, L.A.**, D.E. Schindler, P.J. Lisi, G.W. Holtgrieve, P.R. Leavitt, L. Bunting, B.P. Finney, D.T. Selbie, G. Chen, I. Gregory-Eaves, M.J. Lisak and P.B. Walsh. 2013. Centennial-scale fluctuations and regional complexity characterize Pacific salmon population dynamics over the last five centuries. *Proceedings of the National Academy of Sciences USA* 110:1750-1755.
- Holtgrieve, G.W., D.E. Schindler, W.O. Hobbs, P.R. Leavitt, E.J. Ward, L. Bunting, G. Chen, B.P. Finney, I. Gregory-Eaves, S. Holmgren, M.J. Lisac, P.J. Lisi, K. Nydick, L.A. Rogers, J.E. Saros, D.T. Selbie, M.D. Shapley, P.B. Walsh, and A.P. Wolfe. 2011. A coherent signature of anthropogenic nitrogen deposition to remote watersheds of the Northern Hemisphere. *Science* 334:1545-1548.
- **Rogers, L.A.**, L.C. Stige, E.M. Olsen, H. Knutsen, K.-S. Chan and N.C. Stenseth. 2011. Climate and population density drive changes in cod body size throughout a century on the Norwegian coast. *Proceedings of the National Academy of Sciences USA* 108:1961-1966.
- **Rogers, L.A.** and D.E. Schindler. 2011. Scale and the detection of climatic influences on the productivity of salmon populations. *Global Change Biology* 17:2546-2558.
- Schindler, D.E., R. Hilborn, B. Chasco, C.P. Boatright, T.P. Quinn, L.A. Rogers and M.S. Webster. 2010. Population diversity and the portfolio effect in an exploited species. *Nature* 465:609-612.
- Moore, J.W., M. McClure, L.A. Rogers and D.E. Schindler. 2010. Synchronization and portfolio performance of threatened salmon. *Conservation Letters* 5:340-348.
- Schindler, D.E. and L.A. Rogers. 2009. Responses of Pacific salmon populations to climate variation in freshwater ecosystems. Pages 1127 – 1142 in C.C. Krueger and C.E. Zimmerman, editors. Pacific salmon: ecology and management of western Alaska's populations. Symposium 70. American Fisheries Society, Bethesda, Maryland, USA.
- **Rogers, L.A.** and D.E. Schindler. 2008. Asynchrony in population dynamics of sockeye salmon in southwest Alaska. *Oikos* 117:1578-1586.

In Review

- **Rogers, L.A.,** G. Storvik, H. Knutsen, E.M. Olsen and N.C. Stenseth. The local dynamics of coastal cod: inferring population structure from dynamic state-space models. *In review*.
- Olsen, E.M., J.A. Hutchings, **L.A. Rogers**, N.C. Stenseth and L.A. Vøllestad. Role of plasticity and evolution in Atlantic cod populations facing climate change. *Book chapter in review for inclusion in* The Biology and Ecology of Atlantic Cod.
- Laurel, B.J, D. Cote, R.S. Gregory, L.A. Rogers, H. Knutsen and E.M. Olsen. Recruitment signals in juvenile cod surveys depend on thermal growth conditions. *In review*.

SCIENTIFIC PRESENTATIONS

Invited oral presentations

2015 MonsterJam Seminar, NOAA Northwest Fisheries Science Center, Seattle, WA

2013 Biology Department Seminar, Karlstad University, Sweden.

- 2012 NordForsk Top-level Research Initiative Scientific Advisory Board meeting, Copenhagen, Denmark.
- 2011 Salmon and Climate Change Symposium, American Fisheries Society Annual Meeting, Seattle, WA.
- 2010 Transatlantic Science Week, Washington, DC.
- 2010 Eco-DAS IX Symposium, Ecological Dissertations in the Aquatic Sciences, Honolulu, HI.

Contributed oral presentations (selected)

- 2015 American Fisheries Society Annual Meeting, Portland, OR
- 2015 Natural Capital Symposium, Stanford, CA
- 2013 Late Lunch Talk, Department of Biosciences, University of Oslo, Norway
- 2012 ICES/PICES Conference for Early Career Scientists, Calvia, Majorca, Spain.
- 2011 NorMER Annual Meeting, Nesbru, Norway.
- 2010 SAFS Quantitative Seminar, University of Washington, Seattle, WA.
- 2009 Centre for Ecological and Evolutionary Synthesis (CEES) Annual Meeting, Oslo, Norway.
- 2009 WA/BC American Fisheries Society Annual Meeting, Shelton, WA.
- 2009 Pacific Ecology and Evolution Conference, Bamfield, BC, Canada.
- 2007 Graduate Climate Conference, Pack Forest, WA.
- 2007 Ecological Society of America Annual Meeting, San Jose, CA.

Poster presentations

- 2015 NorMER Annual Meeting, Stockholm, Sweden.
- 2012 Academia Europaea Annual Conference, Bergen, Norway. *Invited
- 2012 NorMER Annual Meeting, Helsinki, Finland.
- 2010 Fish and Climate Change Conference, Fisheries Society of the British Isles, Belfast, UK.
- 2005 American Fisheries Society Annual Meeting, Anchorage, AK.
- 2002 AGU/ASLO Ocean Sciences Meeting, Honolulu, HI.

LEADERSHIP AND PROFESSIONAL ACTIVITIES

Member of an international working group (NOAA/US, DFO/Canada, IMR/Norway) on forecasting recruitment dynamics in coastal cod. 2012 - present.

Conducted trainings in ecosystem services modeling and assessments. 2014 - 2015.

Organized workshops and annual meetings, coordinated interdisciplinary research initiatives, and advised on student projects as a post-doctoral member of NorMER (<u>www.normer.org</u>), a Nordic Centre of Excellence providing an interdisciplinary training network for PhD students. 2011 - 2014.

Selected participant in *Eco-DAS IX (Ecological Dissertations in the Aquatic Sciences)*, a symposium for top new researchers in ecological oceanography and limnology, Honolulu, HI, 2010.

Reviewer for Ecology, Ecological Applications, Oikos, Global Change Biology, Marine Ecology Progress Series, Fisheries Management and Ecology, ICES Journal of Marine Science, Deep Sea Research II.