CURRICULUM VITAE

ANNA B. NEUHEIMER

Assistant Professor School of Ocean and Earth Science and Technology University of Hawai'i at Mānoa 1000 Pope Road Honolulu, HI, 96822

abneuheimer@gmail.com www.abneuheimer.org +1 808 956 2613

1 EDUCATION

Doctorate: Oceanography, Dalhousie University, Canada, 2002-2008

Dissertation: "Growth in fishes: Size-at-age, temperature and food";

Advisor: Dr. C.T. Taggart

Undergraduate: Bachelor of Science, Honors with Distinction, 1997-2001

Marine and Freshwater Biology, University of Guelph, Canada

Biology, Carleton University, Canada (first year)

Other Training: Stock Assessment Course, June 2011

International Council for the Exploration of the Sea, Denmark

University Pedagogy Course, November - December 2011

Aarhus University, Denmark

Software Carpentry Course, October 2015

University of Hawai'i at Mānoa, USA

Training in Bayesian Modeling for Practicing Ecologists, May 2016

Colorado State University, USA

2 ACADEMIC APPOINTMENTS & RESEARCH EXPERIENCE

Assistant Professor 2013 – Present

School of Ocean and Earth Science and Technology, University of Hawai'i at Mānoa

Postdoctoral Fellow 2012

Center for Macroecology, Evolution and Climate, DTU Aqua & University of Copenhagen, Denmark

Focus: Developing modeling tools to explain and predict dynamics of cod (*Gadus morhua*) and herring (*Clupea harengus*) populations across the north Atlantic. *Advisor: B.R. MacKenzie*

Last Updated: 07/2017

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Postdoctoral Fellow 2009 – 2012

Department of Bioscience, Aarhus University, Denmark

Focus: Disentangling effects of climate and fishing on growth of exploited fish populations. Modeling of fish and zooplankton populations. *Advisor: P. Grønkjær*

Endeavour Research Fellow

Thresher

2009 - 2010

Commonwealth Scientific and Industrial Research Organisation, Australia Focus: Assessing spatial variability in climate effects on temperate marine fish. *Advisor: R.E.*

Postdoctoral Fellow 2007 – 2009

Engineering Mathematics and Internetworking, Dalhousie University, Canada Focus: Modeling zooplankton population dynamics with focus on Calanus finmarchicus in the North Atlantic. *Advisor: W. Gentleman*

Ph.D. Candidate 2002 – 2007

Oceanography, Dalhousie University, Canada

Focus: Modeling food consumption of Atlantic cod (*Gadus morhua*). Disentangling temperature, food consumption and fishing effects on growth of exploited fish populations in the North Atlantic. (Degree awarded 15 May 2008)

Biotechnology Research Policy Intern

2001 - 2002

Canadian Biotechnology Secretariat, Canada

Focus: Research, presentation, report-writing, funding proposals, etc. concerning biotechnology developments

Research Assistant 2001

Zoology, University of Guelph, Canada

Focus: oceanographic and ecological field- (monitoring oceanographic metrics, zooplankton populations, CTD sampling, etc.) and lab- (chlorophyll analysis, sample measurement, etc.) work.

Honors Research Project

2001

Zoology, University of Guelph, Canada

Focus: Temperature and food effects on copepod growth and development.

Marine Biology and Oceanography Field Course

2000

Huntsman Marine Science Center, Canada

Focus: Temperature and salinity effects on mussel physiology.

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Field Experience

• 2014 Station ALOHA, North Pacific Subtropical Gyre 13-day cruise to sample food web; Vessel: RV Kilo Moana

• 2011 Aarhus Bay, Denmark:

1-day instruction assistant for Fisheries Oceanography course; Vessel: RV Tyra

• 2011 Aarhus Bay, Denmark:

1-day instruction assistant for Fish Biology course; Vessel: RV Tyra

• 2010 Aarhus Bay, Denmark:

1-day flatfish sampling; Vessel: RV Tyra

• 2003 Southern Gulf of St. Lawrence, Canada:

13-day cod prey-field survey (principal investigator); Vessel: RV Opilio

3 TEACHING EXPERIENCE

Instructor 2014 - Present

School of Ocean and Earth Science and Technology, University of Hawai'i at Mānoa, USA Course: OCN 621 Biological Oceanography

Course Creator / Instructor

2013 - Present

School of Ocean and Earth Science and Technology, University of Hawai'i at Mānoa, USA Course: OCN 682 Introduction to Programming and Statistics in R

Guest Lecturer 2013, 2015

School of Ocean and Earth Science and Technology, University of Hawai'i at Mānoa, USA Courses: Communications of Research Results; Global Environmental Change Invited lecturer on fisheries and science communication

Co-Instructor 2011

Department of Biological Sciences, Aarhus University, Denmark

Course: Biological Research in Theory and Practice

Design and implementation of larval fish survival experiments for undergraduate students

Co-Instructor 2011

Department of Biological Sciences, Aarhus University, Denmark

Course: Fisheries Oceanography

Co-instructor for graduate course including contributions to scheduling, lectures, modeling tutorials, assignments, and exams.

Guest Lecturer 2010 - 2011

Department of Biological Sciences, Aarhus University, Denmark

Course: Biological and Physical Oceanography

Invited lecturer on "Fisheries Oceanography"

Instructor 2009

Engineering Mathematics, Dalhousie University, Canada

Course: Ecosystem Modelling of Marine and Freshwater Environments

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Guest Lecturer 2009

Oceanography, Dalhousie University, Canada

Course: Fisheries Oceanography

Invited lecturer on "Disentangling factors affecting fish growth"

Teaching Assistant 2007

Oceanography, Dalhousie University, Canada

Course: Fisheries Oceanography

Provided guidance on course material; graded class assignments; prepared examination

questions

Guest Lecturer 2005 – 2007

Oceanography, Dalhousie University, Canada

Course: Fisheries Oceanography

Invited lecturer on "Growth Functions" (2005, 2006) and "Climate Change" (2007)

Teaching Volunteer 2003

The Maritime Museum of the Atlantic, Canada

Planned and implemented oceanography workshops for high-school students

4 ADVISING

Primary advisor/Advisory committee chair

2016- S. Lal, *Graduate*, *Oceanography*, *University of Hawai'i at Mānoa* (co-advisor)

2015- T. Jackson, Undergraduate, Biology, University of Hawai'i at Mānoa

2016- C. Esquivel, Undergraduate, Global Environmental Studies, University of Hawai'i

at Mānoa

J. Wong-Ala, Undergraduate, Global Environmental Studies, University of

Hawai'i at Mānoa

During mentorship, Wong-Ala was awarded the 2015 National Oceanic and Atmospheric Administration Ernest F. Hollings Scholarship Program, 2015 Pacific Islands Fisheries Science Center Young Scientist Opportunity, 2015 Massachusetts Institute of Technology CONVERGE Opportunity, as well as a number of travel awards to international conferences. In addition, Wong-Ala won the 2015 Early Career Scientist Best Presentation Award at the 2015

International Council for the Exploration of the Sea Annual Science

Conference (Copenhagen, Denmark)

2014- M. Ferguson, MSc Candidate, Oceanography, University of Hawai'i at Mānoa

2014-2016 C. Chang, MSc Candidate, Oceanography, University of Hawai'i at Mānoa

During mentorship, Chang was awarded a full scholarship to attend the 2015 Open Science Grid User School (University of Wisconsin Madison)

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Advisory committee member

2017	E. Brush, PhD Candidate, Zoology, University of Hawai'i at Mānoa
2017	E. Barba, PhD Candidate, Marine Biology, University of Hawai'i at Mānoa
2016-	M. Hoban, PhD Candidate, Marine Biology, University of Hawai'i at Mānoa
2016-	E. Lenz, PhD Candidate, Marine Biology, University of Hawai'i at Mānoa
2016-	H.Y. Chang, PhD Candidate, Marine Biology, University of Hawai'i at Mānoa
2016-	J. Buehler, PhD Candidate, Zoology, University of Hawai'i at Mānoa
2015-	R. Geronimo, PhD Candidate, Geography, University of Hawai'i at Mānoa
2014-2017	M. Gerringer, PhD Candidate, Marine Biology, University of Hawai'i at Mānoa
2014	G. Pérez-Andújar, MSc Candidate, Marine Biology, University of Hawai'i at
	Mānoa
2014-	S. Scherrer, PhD Candidate, Marine Biology, University of Hawai'i at Mānoa
2013-	A. Leitner, PhD Candidate, Oceanography, University of Hawai'i at Mānoa
2013	E. Nuss, MSc Candidate, Oceanography, University of Hawai'i at Mānoa
2013-2017	G. Del Raye, PhD Candidate, Oceanography, University of Hawai'i at Mānoa
2013-2016	G. Giorli, PhD Candidate, Oceanography, University of Hawai'i at Mānoa
2013-2016	J. Wren, PhD Candidate, Oceanography, University of Hawai'i at Mānoa
2013	E. Norton, MSc Candidate, Oceanography, University of Hawai'i at Mānoa

Exam committee member/Thesis reviewer/Other formal mentorship

2017	M. Siegelman, PhD Candidate, Oceanography, University of Hawai'i at Mānoa
2016	A. Smith, Undergraduate, Global Environmental Studies, University of Hawai'i at Mānoa
2016-	C. Genovese, PhD Candidate, Zoology, University of Hawai'i at Mānoa
2015	A. Trujillo, PhD Candidate, Oceanography, University of Hawai'i at Mānoa
2015	V. Futch, PhD Candidate, Oceanography, University of Hawai'i at Mānoa
2008-2009	Assistant supervisor for undergraduate and graduate students in the Department of Engineering Mathematics and Internetworking, Dalhousie University, Canada
2004-2007	Assistant supervisor for undergraduate students in the Department of Oceanography, Dalhousie University, Canada

5 FELLOWSHIPS, AWARDS AND FUNDING

2018 AIAS-COFUND Fellowship, Aarhus Institute of Advanced Studies, Aarhus University, Denmark

~221 000 USD

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2018	Travel Honorarium, NAMOR Workshop, Centre for Ecological and Evolutionary Synthesis, University of Oslo, Norway	3 500 USD
2017	Travel award to attend 31st Wakefield Symposium as invited speaker, Alaska Sea Grant, USA	~\$1 500 USD
2016	Travel award and honorarium, Visiting Researcher, Department of Bioscience, Aarhus University, Denmark	~15 000 USD
2016	Participant stipend for Training in Bayesian Modeling for Practicing Ecologists workshop, USA	1 000 USD
2015	Travel award for undergraduate scholar (J. Wong-Ala), Joint Institute for Marine and Atmospheric Research, University of Hawai'i at Mānoa, USA	4 500 USD
2015	Graduate student funding, National Oceanic and Atmospheric Administration, USA	~19 200 USD
2015	Undergraduate scholar support, Center for Microbial Oceanography: Research and Education, University of Hawai'i at Mānoa, USA	8 000 USD
2015	Funds to support computing services, Dr. M. Hixon, University of Hawai'i at Mānoa, USA	1 400 USD
2015	Honorarium, Visiting Researcher, Centre for Ecological and Evolutionary Synthesis, University of Oslo, Norway	3 500 USD
2014	Graduate student funding, Dr. E. Goetze, University of Hawai'i at Mānoa, USA	~19 200 USD
2014	Graduate student funding, National Oceanic and Atmospheric Administration, USA	~19 200 USD
2014	Honorarium, Visiting Researcher, Center for Macroecology, Evolution & Climate, University of Copenhagen, Denmark	8 000 USD
2014	Undergraduate scholar support, Center for Microbial Oceanography: Research and Education, University of Hawai'i at Mānoa, USA	8 000 USD
2013	University of Hawaii Sea Grant Program (Co-Investigator), USA	67 887 USD
2012	Postdoctoral Fellowship, DTU Aqua & University of Copenhagen, Denmark	697 068 DKK
2009	Postdoctoral Fellowship, Aarhus University, Denmark	780 360 DKK
2009	NSERC Visiting Fellowship, St. Andrew's Biological Station, Fisheries and Oceans Canada, Canada (Declined in favor of Aarhus University Postdoctoral Fellowship)	90 000 CAD
2009	Australian Endeavour Research Fellowship, Australia	23 500 AUD
2009	ACCELERATE Mathematics of Information Technology and Complex Systems (MITACS) Postdoctoral Internship, Canada	7 500 CAD
2009	Postdoctoral Grant, Northwest Atlantic Fisheries Centre, Fisheries	7 500 CAD

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	and Oceans Canada, Canada	
2009	Postdoctoral Fellowship, University of California, Santa Cruz and the National Marine Fisheries Service, USA (Declined in favor of Endeavour Research Fellowship)	45 000 USD
2008	Mathematics of Information Technology and Complex Systems (MITACS) Postdoctoral Internship, Canada	15 000 CAD
2008	Postdoctoral Grant, Northwest Atlantic Fisheries Centre, Fisheries and Oceans Canada, Canada	15 000 CAD
2007	Postdoctoral Fellowship, Dalhousie University, Canada	36 000 CAD
2006	Canadian Conference For Fisheries Research Clemens-Rigler Travel Award, Canada	250 CAD
2005	Natural Sciences and Engineering Research Council of Canada (NSERC) Postgraduate Scholarship - Doctoral, Canada	42 000 CAD
2005	Canadian Conference For Fisheries Research Clemens-Rigler Travel Award, Canada	250 CAD
2005	Faculty of Graduate Studies Conference Travel Grant, Canada	750 CAD
2003	Natural Sciences and Engineering Research Council of Canada (NSERC) Postgraduate Scholarship - Master's, Canada	34 600 CAD
2002	Dalhousie University Research Funding Grant, Canada	13 739 CAD
2002	Dalhousie University Faculty of Graduate Studies Scholarship, Canada	2 761 CAD
1998	Carleton University William E. Beckel Scholarship, Canada	2 500 CAD
1997	Carleton University Faculty of Science Award, Canada	500 CAD
1997	Carleton University President's Scholarship, Canada	2 000 CAD
1997	University of Guelph University Scholarship, Canada	1 600 CAD

Other:

- Nominated, Board of Regents Excellence in Teaching Award (2017)
- Nominated, Peter V. Garrod Distinguished Graduate Mentoring Award (2017)
- UH nomination for Simons Investigators in the Mathematical Modeling of Living Systems (2014)
- UH nomination for NSF Data-Enabled Science & Engineering Research Traineeship (Co-PI, 2014)
- Nominated for Sloan Research Fellowship (2013, 2014)
- Nominated for ASLO Yentsch-Schindler Award for Early-Career Aquatic Scientists (2013, 2014, 2016)
- Department of Oceanography nomination for 2007 Dalhousie Doctoral Thesis Award in the Natural and Medical Sciences and Engineering (2008)
- Dean's Honors List Carleton University (1997-1998), Guelph (2000-2001)
- Ontario Scholar Ontario Ministry of Education (1997)

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6 Publications

Please note:

• Author order by "sequence-determines-contribution" unless otherwise stated

- <u>Underlining</u> indicates mentee
- Citation rate from Google Scholar as of 11 July 2017
- Total citation rate = 576

6.1 Peer-Reviewed

- <u>Chang, C.</u>, D. Wagner, R. Kosaki, & **A.B. Neuheimer**. Macrobenthic community structure in shallow vs. mesophotic coral ecosystems of the Northwestern Hawaiian Islands. *in prep with complete draft*
- **Neuheimer**, **A.B.**, C.T. Taggart, & J.M. Hanson. Disentangling size-at-age variation in southern Gulf of St. Lawrence Atlantic cod (*Gadus morhua*) Temperature, food and size-selective fishing. *in prep with complete draft*
- **Neuheimer**, **A.B.**, J.M. Hanson, & C.T. Taggart. Temporal variability in food consumption by Atlantic cod (*Gadus morhua*) in the southern Gulf of St. Lawrence. *in prep with complete draft*
- **Neuheimer, A.B.,** C.T. Taggart, W.C. Gentleman & J.M. Hanson. Estimating food consumption in fish: what really matters? *in prep with complete draft*
- **Neuheimer**, **A.B.**, B.R. MacKenzie & M.R. Payne. Temperature-dependent adaptation allows fish to meet their food across their species' range. *Submitted to Nature Ecology & Evolution*.
- <u>G. Giorli</u>, **A.B. Neuheimer**, J. Drazen, & W. Au. Deep-sea animal density and size estimated using Dual-frequency IDentification SONar (DIDSON) offshore the island of Hawaii. *Submitted to Progress in Oceanography*
- 1. Comfort, C.M., K.A. Smith, M.A. McManus, **A.B. Neuheimer**, J.S. Sevadjian, & C.E. Ostrander. 2017. Observations of the hawaiian mesopelagic boundary community in daytime and nighttime habitats using estimated backscatter. *AIMS Geosciences*. DOI: 10.3934/geosci.2017.3.304.
- 2. <u>A.B. Leitner</u>, **A.B. Neuheimer**, E. Donlon, C.R. Smith, & J.C. Drazen. 2017. Environmental and bathymetric influences on abyssal bait-attending communities of the Clarion Clipperton Zone. *Deep-Sea Research Part I* 125:65-80. (authorship by "first-last-author-emphasis").
- 3. <u>Giorli, G.</u>, **A.B. Neuheimer**, A. Copeland, W. Au. 2016. Temporal and spatial variation of beaked and sperm whales foraging activity in Hawai'i, as determined with passive acoustics. Journal of the Acoustical Society of America. 140(4):2333. (authorship by "first-last-author-emphasis"). Times cited: 1
- 4. <u>Giorli, G.</u>, **A.B. Neuheimer**, W. Au. 2016. Spatial variation of deep diving odontocetes' occurrence around a canyon region in the Ligurian Sea as measured with acoustic

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- techniques. Deep-Sea Research I: 116:88-93. (authorship by "first-last-author-emphasis"). Times cited: 1
- 5. **Neuheimer, A.B.**, M. Hartvig, J. Heuschele, S. Hylander, T. Kiørboe, K.H. Olsson, J. Sainmont, and K.H. Andersen. 2016. Adult and offspring size in the ocean: A database of size metrics and conversion factors. Ecology 97:1083. (authorship by "first-last-author-emphasis"). Times cited: 1
- 6. J.M. Gove, M.A. McManus, **A.B. Neuheimer**, J.J. Polovina, J.C. Drazen, C.R. Smith, M.A. Merrifield, A.M. Freidlander, J.S. Ehses, C. Young, A.K. Dillon, & G.J. Williams. 2016. Ocean oases: near-island biological hotspots in barren ocean basins. Nature Communications. 7:10581. *Times cited:* 12
- 7. L.T. Teneva, M.A. McManus, C. Jerolmon, **A. B. Neuheimer**, S. J. Clark, G. Walker, K. Kaho'ohalahala, E. Shimabukuro, C. Ostrander, J.N. Kittinger. 2016. Reef flat sediment regimes and hydrodynamics can inform erosion mitigation on land. Collabra, 2: 1–12. *Times cited:* 1
- 8. <u>G. Giorli</u>, W. Au, H. Ou, & **A.B. Neuheimer**. 2016. Differences in the foraging strategy of deep diving odontocetes in the Ligurian Sea determined by passive acoustic recorders. Deep-Sea Research Part I, 107:1-8. *Times cited:* 6
- 9. K.H. Andersen, T. Berge, R.J. Gonçalves, M. Hartvig, J. Heuschele, S. Hylander, N.S. Jacobsen, C. Lindemann, E.A. Martens, **A.B. Neuheimer**, K. Olsson, A. Palacz, F. Prowe, J. Sainmont, S.J. Traving, A.W. Visser, N. Wadhwa, and T. Kiørboe. 2016. Characteristic Sizes of Life in the Oceans, from Bacteria to Whales. Annu. Rev. Mar. Sci. 8:3.1-3.25. (authorship by "first-last-author-emphasis"). Times cited: 22
- 10. **Neuheimer**, **A.B.**, M. Hartvig, J. Heuschele, S. Hylander, T. Kiørboe, K.H. Olsson, J. Sainmont, and K.H. Andersen. 2015. Adult and offspring size in the ocean over 17 orders of magnitude follows two life history strategies. Ecology 96:3303-3311. (authorship by "first-last-author-emphasis"). Times cited: 5
- 11. **Neuheimer, A.B.**, & B.R. MacKenzie. 2014. Explaining life history variation in a changing climate across a species' range. Ecology. 95:3364-3375. *Times cited:* 1
- 12. Brander, K., **A.B. Neuheimer**, K.H. Andersen, & M. Hartvig. 2013. Overconfidence in model projections. ICES Journal of Marine Science 70:1065-1068. *Times cited:* 28
- 13. **Neuheimer**, **A.B.**, & P. Grønkjær. 2012. Climate effects on size-at-age: Growth in warming waters compensates for earlier maturity in an exploited marine fish. Global Change Biology, 18:1812-1822. *Times cited:* 31
- 14. **Neuheimer, A.B.**, R.E. Thresher, J.M. Lyle & J.M. Semmens. 2011. Tolerance limit for fish growth exceeded by warming waters. Nature Climate Change 1:110-113. *Selected for cover, Times cited:* 127
- 15. **Neuheimer, A.B.**, W.C. Gentleman, & P. Pepin. 2010. Explaining regional variability in copepod recruitment: Implications for a changing climate. Progress in Oceanography 87: 94-105. *Times cited:* 15
- 16. **Neuheimer**, **A.B.**, & C.T. Taggart. 2010. Can changes in length-at-age and maturation timing in Scotian Shelf haddock (*Melanogrammus aeglefinus*) be explained by fishing? Canadian Journal of Fisheries and Aquatic Sciences 67: 854-865. *Times cited:* 35

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17. **Neuheimer, A.B.**, W.C. Gentleman, P. Pepin, & E. Head. 2010. How to build and use individual-based models (IBMs) as hypothesis testing tools. Journal of Marine Systems 81:122-133. *Times cited:* 19

- 18. **Neuheimer**, **A.B.**, W.C. Gentleman, C.L. Galloway & C.L. Johnson. 2009. Modeling larval *Calanus finmarchicus* on Georges Bank: Time-varying mortality rates and a cannibalism hypothesis. Fisheries Oceanography 18: 147-160. *Times cited*: 23
- 19. Gentleman, W.C., & **A.B. Neuheimer**. 2008. Functional responses and ecosystem dynamics: How clearance rates explain the influence of satiation, food-limitation and acclimation. Journal of Plankton Research 30: 1215-1231. *Times cited*: 44
- 20. Gentleman, W.C., **A.B. Neuheimer**, & R.G. Campbell. 2008. Modeling copepod development: Current limitations and a new realistic approach. ICES Journal of Marine Science 65: 399-413. *Times cited:* 31
- 21. **Neuheimer**, **A.B.**, C.T. Taggart, & K.T. Frank. 2008. Size-at-age in haddock (*Melanogrammus aeglefinus*) application of the growing degree-day (*GDD*) metric. Proceedings of the 24th Lowell Wakefield Fisheries Symposium: Resiliency of Gadid Stocks to Fishing and Climate Change Symposium: 111-123. *Times cited:* 7
- 22. **Neuheimer**, **A.B.** 2007. Growth in fishes: size-at-age, temperature and food. Ph.D. Thesis, Department of Oceanography, Dalhousie University, Halifax, Canada. *Times cited*: 2
- 23. **Neuheimer, A.B.,** & C.T. Taggart. 2007. The growing degree-day and fish size-at-age: the overlooked metric. Canadian Journal of Fisheries and Aquatic Sciences 64: 375-385. *Times cited:* 161

6.2 Other

- **Neuheimer**, **A.B.** 2011. Fish in Hot Water. Article for Australasian Science, December 2011, p. 34-35. (*Invited*)
- Neuheimer, A.B., & C.T. Taggart. 2009. Climate and fishing: Disentangling factors affecting the growth in Scotian shelf haddock (*Melanogrammus aeglefinus*) International Council for the Exploration of the Sea Document CM 2009/E:31.
- Neuheimer, A.B., W.C. Gentleman, P. Pepin & E. Head. 2008. How to build and use individual-based models (IBMs) as hypothesis testing tools. International Council for the Exploration of the Sea Document CM 2008/L:09.
- Neuheimer, A.B., C.T. Taggart, & J.M. Hanson. 2008. Disentangling variation in fish growth: Evidence for size-selection in southern Gulf of St. Lawrence cod (*Gadus morhua*). International Council for the Exploration of the Sea Document CM 2008/J:06.
- Gentleman, W.C., & **A.B. Neuheimer**. 2008. Functional responses and ecosystem dynamics: The roles of satiation, food-limitation and acclimation. International Council for the Exploration of the Sea Document CM 2008/Q:03.

7 PRESENTATIONS (Underlining indicates mentee)

1. **Neuheimer, A.B.** 2017. Factors controlling larval fish timing at high latitudes: Implications for production, distribution and adaptation over time. 31st Wakefield Symposium, Anchorage, USA. (Invited)

- 2. **Neuheimer, A.B.** 2017. How larval fish find their season at high and low latitudes. Conference of Biological Oceanography Graduate Students, University of Hawai'i at Mānoa, USA. (Invited Plenary)
- 3. Comfort, C.M., K.A. Smith, J.C. Sevadjian, M.A. McManus, **A.B. Neuheimer**, & C.E. Ostrander. 2017. Observation of the mesopelagic micronekton boundary community's diel migration at Oahu, Hawaii based on backscatter data. 2017 *Aquatic Sciences Meeting*, *Honolulu*, *USA*.
- 4. Leitner, A.B., **A.B. Neuheimer**, & J.C. Drazen. 2017. Unraveling the mystery of seamount enhanced primary production: A global analysis of satellite chlorophyll data around seamounts. 2017 Aquatic Sciences Meeting, Honolulu, USA.
- 5. **Neuheimer, A.B.,** L. Ciannelli, G. Ottersen, & J. Durant. 2017. Session Tutorial: Bridging the eco-evolutionary gap: Plastic and adaptive responses to climate change. 2017 Aquatic Sciences Meeting, Honolulu, USA.
- 6. **Neuheimer, A.B.** 2016. How larval fish find their season at high and low latitudes. *Hawaii Pacific University, Honolulu, USA. (Invited)*
- 7. Ciannelli, L., **A.B. Neuheimer**, L.C. Stige, & M. Hunsicker. 2016. Life history spatial constraints and species adaptability to climate change. *PICES 2016 Annual Meeting, San Diego, USA*.
- 8. Gove, J.M., McManus, M.A., **Neuheimer, A.B.**, Polovina, J.J., Drazen, J.C., Smith, C.R., Merrifield, M.A., Friedlander, A.M., Ehses, J.S., Young, C.W., Dillon, A.K., & Williams, G.J. 2016. Ocean Oases: Near-island biological hotspots in barren ocean basins. 13th International Coral Reef Symposium, Honolulu, USA.
- 9. **Neuheimer, A.B.** 2016. How larval fish find their season at high and low latitudes. *Department of Bioscience, Aarhus University, Denmark. (Invited)*
- 10. <u>Chang C.</u>, **A.B. Neuheimer**, & E. Goetze. 2016. Can biophysical processes explain copepod connectivity and distribution across the Atlantic Ocean? *ICES/PICES 6th Zooplankton Production Symposium, Bergen, Norway*.
- 11. <u>Wong-Ala, J.</u>, **A.B. Neuheimer**, M. Hixon, & B. Powell. 2016. The Influence of Life History Variability on Population Connectivity: Development and Application of a Trait-Based Biophysical Model of Individuals. *Ocean Sciences Meeting, New Orleans, USA.*
- 12. **A.B. Neuheimer**, M.R. Payne & B.R. MacKenzie. 2015. Controlling factors in fish early life history and how they combine to influence trophic links across the North Atlantic Ocean. *International Council for the Exploration of the Sea Annual Science Conference*, *Copenhagen*, *Denmark*.
- 13. **Neuheimer**, **A.B.**, <u>J. Wong-Ala</u>, B.S. Powell & M. Hixon. 2015. The influence of life history variability on population connectivity: Development and application of a trait-

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- based biophysical model of individuals. *International Council for the Exploration of the Sea Annual Science Conference, Copenhagen, Denmark.*
- 14. **Neuheimer, A.B.** 2015. How big and how many: Developing physiologically relevant modeling tools to explain fish size and abundance in a changing climate. *Centre for Ecological and Evolutionary Synthesis, Oslo, Norway (Invited)*
- 15. <u>Leitner, A.B.</u>, **A.B. Neuheimer**, & J.C. Drazen. 2015. Seamount induced primary productivity hotspots. Deep Sea Biology Symposium, Aveiro, Portugal.
- 16. **Neuheimer, A.B.** 2015. How big and how many: Developing physiologically relevant modeling tools to explain fish size and abundance in a changing climate. *National Oceanic and Atmospheric Administration, Pacific Islands Fisheries Science Center, Honolulu, USA (Invited)*
- 17. **Neuheimer, A.B.,** M.R. Payne, & B.R. MacKenzie. 2015. The roles of plasticity and adaptation in spawning time of Atlantic cod (*Gadus morhua*): explaining phenology and making predictions in a changing climate. 3rd International Climate Change Symposium, Santos City, Brazil
- 18. Kahng, S., D. Wagner & **A.B. Neuheimer**. 2014. Temperature regime at the lower depth limits for warm-water corals in Hawai'i. *The Second International Workshop on Mesophotic Coral Reef Ecosystems. Red-Sea, Israel.*
- 19. **Neuheimer, A.B.,** B.R. MacKenzie, & M.R. Payne. 2014. Explaining variation in life history timing across a species' range: Effects of climate on spawning time in Atlantic cod (*Gadus morhua*). Arctic Change 2014, Ottawa, Canada
- 20. **Neuheimer, A.B.,** M.R. Payne, & B.R. MacKenzie. 2014. Atlantic cod and bloom phenology: Exploring "critical period" adaptation across a species' range. *Johan Hjort Symposium on Recruitment Dynamics and Stock Variability, Bergen, Norway*
- 21. **Neuheimer**, **A.B.**, & MacKenzie, B.R. 2014. Explaining variation in life history timing across a species range: Effects of climate on spawning time in an exploited marine fish. *IMBER Ecosystem Studies of Sub-Arctic Seas*, *Copenhagen*, *Denmark*
- 22. **Neuheimer**, **A.B.**, M. Hartvig, J. Heuschele, S. Hylander, T. Kiørboe, K. H. Olsson, J. Sainmont, & K.H. Andersen. 2014. Patterns of adult and progeny size in the ocean: From rotifers to whales. *Ocean Sciences Meeting* 2014, *Honolulu*, *USA*
- 23. Drazen, J.C., C.A. Choy, **A.B. Neuheimer**, C.F. Phleger, & P.D. Nichols. 2014. Examining the Hawaiian Pacific food web from the epipelagic to the mesopelagic using fatty acid biomarkers. *Ocean Sciences Meeting* 2014, *Honolulu*, *USA*
- 24. **Neuheimer, A.B.** 2013. Explaining variation in life history timing: Fish spawning time in a changing climate. *School of Ocean and Earth Science and Technology, University of Hawai'i at Mānoa, Honolulu, USA*.
- 25. **Neuheimer, A.B.** 2013. Explaining variation in size-at-age and life history timing for fish in a changing climate. *Second JIMAR/PIFSC Symposium: Climate and Change, Honolulu, USA.* (*Invited*)
- 26. **Neuheimer, A.B.** & MacKenzie, B.R. 2013. Explaining variation in life history timing across a species' range: Spawning time in an exploited marine fish. *International Council for the Exploration of the Sea Annual Science Conference, Reykjavik, Iceland.*

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27. **Neuheimer, A.B.** 2013. Modeling phenology: Explaining variation in spawning time across a species' range. *Conference of Biological Oceanography Graduate Students, University of Hawai'i at Mānoa, USA (Invited Plenary)*

- 28. **Neuheimer, A.B.** & MacKenzie, B.R. 2013. Explaining variation in life history timing across a species' range: Effects of climate on spawning time in an exploited marine fish. *ASLO 2013 Aquatic Sciences Meeting, New Orleans, USA*
- 29. **Neuheimer, A.B.** & MacKenzie, B.R. 2012. Explaining variation in life history timing across a species range: Spawning time in an exploited marine fish. *National Institute of Aquatic Resources, Technical University of Denmark, Charlottenlund, Denmark*
- 30. **Neuheimer, A.B.** 2011. Linking physiology to ecology for fish in a changing climate. *Center for Macroecology, Evolution & Climate, University of Copenhagen, Denmark. (Invited)*
- Neuheimer, A.B. 2012. Linking physiology, ecology & oceanography: Modeling marine organisms in a changing climate. *School of Marine and Atmospheric Sciences, Stony Brook University, USA. (Invited)*
- 32. **Neuheimer, A.B.** 2012. Linking physiology, ecology & oceanography: Modeling marine organisms in a changing climate. *Texas Marine Science Institute, University of Texas at Austin, USA. (Invited)*
- 33. **Neuheimer, A.B.** 2012. Linking physiology, ecology & oceanography: Modeling marine organisms in a changing climate. *School of Ocean and Earth Science and Technology, University of Hawai'i at Mānoa, USA.* (*Invited*)
- Neuheimer, A.B. 2011. Linking physiology to ecology for fish in a changing climate. *Scripps Institute of Oceanography, University of California at San Diego, USA. (Invited)*
- 35. **Neuheimer, A.B.** 2011. Linking physiology to ecology for fish in a changing climate. *National Institute of Aquatic Resources, Technical University of Denmark, Charlottenlund, Denmark (Invited)*
- 36. **Neuheimer, A.B.** 2011. Linking physiology to ecology for fish in a changing climate. *Department of Biological Sciences, Aarhus University, Denmark.*
- 37. **Neuheimer, A.B.**, P. Grønkjær, & C.T. Taggart. 2011. Integrated temperature: A theory of relativity for aquatic ectotherms. *16 Danske Havforskermøde, Ebeltoft, Denmark*.
- Neuheimer, A.B., & P. Grønkjær. 2011. Declining length-at-age and age-at-maturity in North Sea cod (*Gadus morhua*): Temperature effects and implications for management in a changing climate. 16 Danske Havforskermøde, Ebeltoft, Denmark.
- 39. **Neuheimer, A.B.**, R.E. Thresher & J.M. Lyle. 2010. Spatial variability in climate impacts on growth of a temperate marine fish (banded morwong, *Cheilodactylus spectabilis*). The Fisheries Society of the British Isles Annual Symposium, Belfast, United Kingdom.
- 40. **Neuheimer**, **A.B.** & P. Grønkjær. 2010. Declining length-at-age and age-at-maturity in North Sea cod (*Gadus morhua*): temperature effects and implications for management in a changing climate. *The Fisheries Society of the British Isles Annual Symposium, Belfast, United Kingdom*.
- ^{41.} **Neuheimer, A.B.,** R.E. Thresher & J.M. Lyle. 2010. Climate impacts on growth of a temperate marine fish (Banded morwong *Cheilodactylus spectabilis*). *Australian Society for Fish Biology Annual Conference, Melbourne, Australia*.

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42. **Neuheimer, A.B.** 2009. Disentangling variation in fish growth: Climate, food and fishing. *Commonwealth Scientific and Industrial Research Organisation Marine Laboratories, Hobart, Australia.* (*Invited*)

- Neuheimer, A.B., W.C. Gentleman, P. Pepin, & E. Head. 2009. Regional variability in copepod phenology: Application of a new individual-based model (IBM) and implications for a changing climate. *National Institute of Aquatic Resources, Technical University of Denmark, Charlottenlund, Denmark (Invited)*
- 44. **Neuheimer, A.B.,** & C.T. Taggart. 2009. Climate and fishing: Disentangling factors affecting growth in Scotian shelf haddock (*Melanogrammus aeglefinus*). *International Council for the Exploration of the Sea Annual Science Conference, Berlin, Germany.*
- 45. **Neuheimer, A.B.** 2009. Disentangling variation in fish growth: Temperature, food and fishing. *Department of Biological Sciences, Aarhus University, Aarhus, Denmark. (Invited)*
- 46. **Neuheimer, A.B.**, C.T. Taggart, & J.M. Hanson. 2009. Cod size-at-age: Disentangling effects of climate and fishing. *3rd Global Ocean Ecosystem Dynamics Open Science Meeting, Victoria, Canada.*
- ^{47.} **Neuheimer, A.B.,** W.C. Gentleman, P. Pepin, & E. Head. 2009. Regional variability in copepod phenology: Application of a new individual-based model (IBM) and implications for a changing climate. *3rd Global Ocean Ecosystem Dynamics Open Science Meeting, Victoria, Canada.*
- 48. **Neuheimer, A.B.**, W.C. Gentleman, P. Pepin & E. Head. 2009. How to build and use individual-based models (IBMs) as hypothesis testing tools. *Atlantic Mathematical Biology Workshop, Halifax, Canada*.
- 49. **Neuheimer, A.B.,** W.C. Gentleman, P. Pepin & E. Head. 2009. How to build and use individual-based models (IBMs) as hypothesis testing tools. *Bedford Institute of Oceanography, Dartmouth, Canada. (Invited)*
- 50. **Neuheimer**, **A.B.** 2008. Disentangling variation in fish growth: Temperature, food and fishing. *Department of Oceanography, Dalhousie University, Halifax, Canada. (Invited)*
- 51. **Neuheimer**, **A.B.**, W.C. Gentleman, P. Pepin & E. Head. 2008. How to build and use individual-based models (IBMs) as hypothesis testing tools. *International Council for the Exploration of the Sea Annual Science Conference, Halifax, Canada.*
- Neuheimer, A.B., C.T. Taggart, & J.M. Hanson. 2008. Disentangling variation in fish growth: Evidence for size-selection in southern Gulf of St. Lawrence cod (*Gadus morhua*). International Council for the Exploration of the Sea Annual Science Conference, Halifax, Canada.
- 53. **Neuheimer, A.B.** & W.C. Gentleman. 2008. Development and application of a new individual-based model (IBM) for copepods. *Advances in Marine Ecosystem Modeling Research Symposium, Plymouth, England.*
- 54. **Neuheimer, A.B.,** W.C. Gentleman, & C. Galloway. 2008. To eat her own: Cannibalism, climate and copepod nauplii. *American Society of Limnology and Oceanography Summer Meeting, St. John's, Canada.*
- 55. **Neuheimer, A.B.,** C.T. Taggart, & J.M. Hanson. 2008. Disentangling variation in fish growth: Evidence for size-selection in southern Gulf of St. Lawrence cod (*Gadus morhua*). *Bedford Institute of Oceanography, Dartmouth, Canada.* (*Invited*)

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56. **Neuheimer, A.B.**, W.C. Gentleman, & C. Galloway. 2008. Modeling juvenile *Calanus finmarchicus* on Georges Bank: Where have all the nauplii gone? *International Council for the Exploration of the Sea Working Group on Physical-Biological Interactions, Sète, France.*

- 57. Gentleman, W. C., & **A. B. Neuheimer**. 2007. Modeling copepod development: Current limitations and a new realistic approach. 4th International Zooplankton Production Symposium, Hiroshima, Japan.
- 58. **Neuheimer, A.B.,** & C.T. Taggart. 2007. Condition estimates and length-at-age in Scotian Shelf haddock (*Melanogrammus aeglefinus*). *Fisheries Oceanography Committee Meeting, Bedford Institute of Oceanography, Dartmouth, Canada. (Invited)*
- 59. **Neuheimer, A.B.,** C.T. Taggart, & K.T. Frank. 2006. Growth in fishes: a near-universal metric. 24th Lowell Wakefield Fisheries Symposium, "Resiliency of Gadid Stocks to Fishing and Climate Change", Anchorage, U.S.A.
- 60. **Neuheimer, A.B.,** & C.T. Taggart. 2006. Growth in fishes: a near-universal metric. *Northwest Atlantic Fisheries Organization Symposium, Dartmouth, Canada.*
- 61. **Neuheimer, A.B.,** & C.T. Taggart. 2006. Growth in fishes a near-universal metric. Annual Workshop and General Meeting of the Atlantic Canada Coastal and Estuarine Science Society and Canadian Rivers Institute Symposium, Fredericton, Canada.
- 62. **Neuheimer, A.B.,** & C.T. Taggart. 2006. Growing degree-day and growth in fishes. 2006 Conference of Dalhousie Oceanography Graduate Students, Halifax, Canada.
- 63. **Neuheimer, A.B.,** & C.T. Taggart. 2006. Growing degree-day predicts fish growth. *Canadian Conference for Fisheries Research, Calgary, Canada.*
- 64. **Neuheimer, A.B.,** W. Gentleman & C.T. Taggart. 2005. Estimating food consumption in fish: What really matters? *Bedford Institute of Oceanography, Dartmouth, Canada*.
- 65. **Neuheimer, A.B.**, W. Gentleman & C.T. Taggart. 2005. Estimating food consumption in fish: What really matters? 2005 Conference of Dalhousie Oceanography Graduate Students, Halifax, Canada.
- 66. **Neuheimer, A.B.,** W. Gentleman & C.T. Taggart. 2005. Estimating daily ration in fish: What really matters? *Canadian Conference for Fisheries Research, Windsor, Canada.*
- 67. **Neuheimer, A.B.** 2003. The development of an empirically-based prey consumption model for Atlantic cod of the southern Gulf of St. Lawrence. 2003 Conference of Dalhousie Oceanography Graduate Students, Halifax, Canada.

8 Professional Activities, Service and Outreach

- Co-organizer, 2017 Larval Biology Symposium
- Session co-convener, Session 044 Bridging the eco-evolutionary gap: Plastic and adaptive responses to climate change, 2017 Aquatic Sciences Meeting
- Mentor, 2017 Aquatic Sciences Meeting.
- Invited panelist, 2017 Ecological Dissertations in the Aquatic Sciences (Eco-DAS) Symposium
- Founding member, Pacific Center for Ecological Sciences (PACES)

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• Creator and faculty organizer, Conference of Biological Oceanography Graduate Students, University of Hawai'i at Mānoa, USA (2013- present)

- Host & Participant, International Workshop on Fish Growth Models (2015)
- Elected to Departmental Personnel Committee (DPC), University of Hawai'i at Mānoa, USA (2015)
- Fellow, Joint Institute for Marine and Atmospheric Research, University of Hawai'i at Mānoa
- Participant, Natural Mortality Workshop, University of Oslo (2015)
- Participant, MEMC/SUNFISH Joint Meeting, Denmark (2011)
- Participant, Ecosystem Studies in Sub-Arctic Seas (ESSAS) Meeting, Canada (2008)
- Participant, Workshop on Advancement in Modeling Physical-Biological Interactions in Fish Early-Life History (WKAMF) Collaborators Meeting, France (2008)
- Participant, Gulf of Maine Zooplankton Workshop, Canada (2008)
- Member, Women in Oceanography, University of Hawai'i at Mānoa, USA
- Member, the American Society of Limnology and Oceanography
- Member, the American Fisheries Society
- Member, the American Naturalist
- Member, the International Council for Exploration of the Sea (ICES) Working Group on Physical-Biological Interactions
- Member, Earth Sciences Women's Network
- President, Department of Oceanography Students Association, Dalhousie University, Canada, (2003-2004)
- Co-President, Marine and Freshwater Biology Society, University of Guelph, Canada, (1999-2001)
- Board Member, College of Biological Sciences Student Government, University of Guelph, Canada (1999-2001)
- Judge: Association for the Sciences of Limnology and Oceanography Aquatic Sciences Meeting (2013), Ocean Sciences Meeting (2014)
- Judge, 56th Hawai'i State Science and Engineering Fair, USA (2013)
- Reviewer, Global Environmental Science undergraduate presentations (2015)
- Proposal reviewer, EUR-OCEANS (2012)
- Proposal reviewer, National Science Foundation
- Reviewer: Canadian Journal of Fisheries and Aquatic Sciences, Continental Shelf
 Research, Ecology, Ecosphere, Fisheries Oceanography, Fishery Bulletin, Global Change
 Biology, Great Lakes Research, Hydrobiologia, Journal of Experimental Marine Biology
 and Ecology, Journal of Fish Biology, Journal of Marine Systems, Journal of Northwest
 Atlantic Fishery Science, Journal of Plankton Research, Marine Ecology Progress Series,
 Marine Biology Research, Oecologia, PLoS ONE, Population Ecology, Progress in
 Oceanography, Reviews in Fish Biology and Fisheries

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9 OTHER SKILLS/INFORMATION

- Citizenship: Canadian
- Languages: English, introductory French, introductory Danish, Matlab, R
- Hawaiian Studies: HWST 107 Hawai'i: Center of the Pacific, Fall 2013
- NAUI SCUBA Open Water Dive Certification 1997
- Red Cross Certified: Adult and Pediatric First Aid/Cardiopulmonary Resuscitation/Automated External Defibrillator, 2015

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