# **CURRICULUM VITAE**

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### **Education**

Ph.D. University of Alaska Fairbanks (1999)

Major: Fisheries Oceanography

M.S. University of Alaska Fairbanks (1998)

Major: Statistics

M.S. University of Alaska Fairbanks (1992)

Major: Biological Oceanography

Vordiplom (B.S.) Rhino-Westphalian Technical University, Aachen, Germany

Major: Biology

# **Appointments and Experience**

Jul 2023 – present	Chair, Department of Fisheries
Jul 2020 – present	President's <u>Professor</u> of Quantitative Fisheries and Ecosystems, University of Alaska Fairbanks, Juneau, Alaska
Jul 2019 – Jun 2020	Professor of Fisheries, University of Alaska Fairbanks
Jul 2013 – Jun 2019	Associate Professor of Fisheries, University of Alaska Fairbanks
Aug 2014 – Jul 2015	Visiting Professor, University of Tasmania, Hobart, Tasmania, Australia
Aug 2008 – Jun 2013	Assistant Professor of Fisheries, University of Alaska Fairbanks
2001 - 2012	Statistical and Fisheries consultant, Sigma Plus, Statistical Consulting.
Jan – May 2006 Aug – Dec 2007	Adjunct faculty, School of Fisheries and Ocean Sciences, UAF
Jul - Dec 2005	Research Scientist, Joint Institute for the Study of the Atmosphere and Ocean, University of Washington
2002 – Jun 2005	Research Associate, Joint Institute for the Study of the Atmosphere and Ocean, University of Washington
1999 - 2001	<u>Post-doctoral fellow</u> , School of Resource and Environmental Management, Simon Fraser University, Burnaby, BC, Canada
1995 - 99	Research Assistant / Graduate Student (Ph.D.), Institute of Marine Science, University of Alaska, Fairbanks, AK

- 1993 94 <u>Research Technician</u>, Juneau Center, School of Fisheries and Ocean Science, University of Alaska Southeast, Juneau, AK
- 1988 92 <u>Research Assistant / Graduate Student (M.S.)</u>, Institute of Marine Science, University of Alaska, Fairbanks, AK

#### **Professional Services (ongoing)**

- **2016-present** Contributing Editor, Marine Ecology Progress Series. As CE for MEPS I annually handle the review process and make decisions on 12-20 manuscripts submitted to MEPS in my areas of expertise.
- 2011-present Co-chair, Ecosystem Studies of Sub-Arctic Seas (ESSAS). As co-chair of ESSAS, along with Benjamin Planque (IMR, Norway) and Naomi Harada (JAMSTEC, Japan), I help organize and host Annual Science meetings that typically draw 60-80 participants from the circumpolar North. ESSAS coordinates and actively fosters comparative analyses on the effects of climate variability and climate change on subarctic and Arctic marine ecosystems by bringing together researchers from its member countries to participate in workshops, sessions at scientific meetings, and periodic Open Science Meetings.
- 2011-present Member, PICES Section on Climate Change Effects on Marine Ecosystems (S-CCME). S-CCME coordinates international efforts, workshops, sessions and symposia (Effects of Climate Change on the World's Oceans ECCWO).
- 2004-present Scientific and Statistical Committee (SSC), North Pacific Fisheries
  Management Council. The SSC meets five times a year for three days each to review technical analyses and stock assessments conducted by NOAA Fisheries Scientists and Council staff. The SSC provides recommendations and sets catch limits for federally managed fish and shellfish stocks based on the best available scientific information. I served as Co-Chair of the SSC during 2023/2024.
- 2023-present Fisheries, Seafood and Maritime Initiative (FSMI) Research, Enhancement and Management (REM) Working Group. REM includes faculty across the UA system who collaborate to implement the REM sector strategies of the Alaska Workforce Development Plan, and to provide a workforce for federal and state organizations by promoting fisheries programs in the State, awarding undergraduate fellowships and other efforts.
- Reviewer for: Journal reviews: Canadian Journal of Fisheries and Aquatic Sciences; ICES Journal of Marine Science; Fisheries Oceanography; Fisheries Research; Fisheries Science; Progress in Oceanography; Deep-Sea Research; Continental Shelf Research; Estuarine, Coastal and Shelf Science; Journal of Marine Systems; Marine and Coastal Fisheries; Marine Biology Research; Marine Ecology Progress Series; North American Journal of Fisheries Management; Polar Biology; Fishery Bulletin; Oceanographic Literature Review; Global Change Biology; Fish and Fisheries; Environmetrics; Philosophical Transactions of the Royal Society B: Biological Sciences; Proceedings of the Royal Society B; Biological Conservation; Elementa: Science of the Anthropocene

  Proposal reviews: National Science Foundation, Alaska Sea Grant; North Pacific

Research Board; Exxon Valdez Oil Spill Trustee Council; Gulf Ecosystem Monitoring and Research Program; AYK Sustainable Salmon Initiative; Hudson River Foundation; California Sea Grant; NOAA Fisheries and The Environment (FATE); Helmholtz Association, Germany; Maryland Sea Grant; Netherlands Organization for Scientific Research; UAF Global Change student research competition; Australian Antarctic Science Program;

# **Professional Services (completed)**

2014-2022	Co-chair, ESSAS Working Group on Arctic-Subarctic Interactions (WGASI). As co-chair of this WG, I helped organize workshops and scientific sessions at meetings to bring together on experts in high-latitude marine research on advective and migratory exchanges between the Subarctic and Arctic.
2022-2023	Co-Convenor, Session R6: Marine Ecosystems at <a href="ISAR-7">ISAR-7</a>
2018-2020	Guest Editor, Special issue on 'Arctic Gadids in a changing climate' in Polar Biology
2018	Science Advisory Panel for the Climate Action for Alaska Leadership Team.
2017-2018	North Pacific Fishery Management Council Ecosystem Research Workshop Steering Committee.
2016-2017	Co-convener, ESSAS Open Science Meeting, Tromsø, Norway
2017-2018	Guest Editor, 31st Lowell Wakefield Symposium Proceedings
2016-2017	Co-chair, Steering Committee, 31st Lowell Wakefield Fisheries Symposium ( <a href="https://seagrant.uaf.edu/events/2017/wakefield-fish-dynamics">https://seagrant.uaf.edu/events/2017/wakefield-fish-dynamics</a> )
2015-2017	Scientific Expert for Eastern Bering Sea Vulnerability Assessment.
2015-2017	Guest Editor, Special Issue on 'Arctic Ecosystem Integrated Survey' in Deep-Sea Research II ( <a href="https://www.sciencedirect.com/journal/deep-sea-research-part-ii-topical-studies-in-oceanography/vol/135">https://www.sciencedirect.com/journal/deep-sea-research-part-ii-topical-studies-in-oceanography/vol/135</a> )
2014-2016	Guest Editor, Special issue on 'Ecology of Arctic Gadids' in Polar Biology ( <a href="https://link.springer.com/journal/300/39/6/page/1">https://link.springer.com/journal/300/39/6/page/1</a> )
2014	Scientific Expert (Fish) for Aleutian Bering Climate Vulnerability Assessment
2013-2017	Guest Editor, Gulf of Alaska project special issue in Deep-Sea Research II
2013-2014	Guest Editor, 28 <sup>th</sup> Lowell Wakefield Symposium Proceedings ((https://seagrant.uaf.edu/bookstore/pubs/AK-SG-13-03.html)
2011-2012	Chair, Steering Committee, 28th Lowell Wakefield Fisheries Symposium on Responses of Arctic Marine Ecosystems to Climate Change ( <a href="https://seagrant.uaf.edu/events/2013/wakefield-arctic-ecosystems">https://seagrant.uaf.edu/events/2013/wakefield-arctic-ecosystems</a> )
2011-2012	Guest Editor, Theme Section on Gadid-Crustacean Interactions, Marine Ecology Progress Series ( <a href="https://www.int-res.com/abstracts/meps/v469/#theme">https://www.int-res.com/abstracts/meps/v469/#theme</a> )

2008-2013	Co-chair, Working Group 4 on Climate Effects on Upper Trophic Levels, Ecosystem Studies of Sub-Arctic Seas (ESSAS)
2008-2011	ICES/PICES Working Group: Forecasting Climate Change Impacts on Fish and Shellfish (WGFCCIFS)
2007-2008	Guest editor, ICES Journal of Marine Science, theme session related to Early Career Scientist Conference ( <a href="https://doi.org/10.1093/icesjms/fsp012">https://doi.org/10.1093/icesjms/fsp012</a> )
2005-2007	Scientific Steering Committee, PICES/ICES Early Career Scientist Conference ( <a href="http://www.pices.int/meetings/international_symposia/2007_symposia/Young_scientists/newfrontiers.aspx">http://www.pices.int/meetings/international_symposia/2007_symposia/Young_scientists/newfrontiers.aspx</a> )
2006-2018	Working group on Bio-Physical Coupling (WGBPC), Ecosystem Studies of Sub-Arctic Seas (ESSAS)
2006-2007	Working group on Comparison of Marine Ecosystems of Norway and the US (MENU)
2003	North Pacific Ecosystem Status Working Group
2003-2004	SCOR/IOC Working Group 119: Quantitative Ecosystem Indicators for Fisheries Management

## **Workshops and Working Groups**

Racial Equity Dialogue (Tamamta Program), Fairbanks, AK, 12-14 December 2022

Climate & International Fisheries: Avenues for Adaptation Focus Groups (Department Of Commerce) (Hybrid), 28 September 2022.

Arctic Marine Biodiversity and Ecosystem Structure Data Analysis & Synthesis (AMBON-CEO-DBO), Anchorage, AK, 26-28 October, 2021.

Cross-MBON Meeting (Virtual): Toward a National Operational MBON - Applied Ecosystem Function Case Studies, February 9-10, 2021

Bristol Bay Roundtable (virtual), Alaska Federation of Natives, December 11, 2020

US Marine Biodiversity Observation Network (MBON) All-Hands Meeting. Arlington, VA, May 24, 2019.

Ecological and Socio-Economic Profiles workshop (virtual), 19 May 2019

Polar cod in a changing Arctic Ocean (virtual), Mini workshop, Bremerhaven, Germany, 9 May 2018

Climate Action Leadership Team, Working Group on Adaptation (virtual), March 28, 2018

North Pacific Fishery Management Council Ecosystem Research Workshop, Seattle, Washington, February 7, 2018

Sablefish Summit, Juneau, Alaska, September 26, 2017

A 5°C Arctic in a 2°C World. Union Theological Seminary, Columbia University, New York, July 20-21, 2016

Arctic Marine Workshop: Rapid Assessment of Circum-Arctic Ecosystem Resilience (RACER) across the Bering and Chukchi Seas, Anchorage, Alaska, January 19, 2014

Fostering Yukon Chinook Resilience: A UAF Chapman Chair Workshop Honoring C.S. Holling, Fairbanks, Alaska, April 1-3, 2014.

AYK SSI Juvenile Chinook Salmon Workshop: Risks and Benefits of Using Juvenile Salmonid Research to Understand Adult Population Dynamics, Anchorage, Alaska, April 23-24, 2014

Aleutian and Bering Climate Vulnerability Assessment, Anchorage, Alaska, January 20, 2014

2nd Meeting of Scientific Experts on Fish Stocks in the Arctic Ocean, Tromsø, Norway, October 28-30, 2013

Workshop on Assessment/Management Issues Related to Recruitment, Seattle, Washington, April 4-5, 2012

Management Strategy Evaluation Workshop, Seattle, Washington, October 27-28, 2018

Stock-specific indicators workshop, Seattle, Washington, April 7-8, 2011

EBS Snow Crab Symposium: Identifying best approaches for advancing understanding of EBS snow crab biology and incorporating research into fisheries management, Seattle, Washington, February 22-23, 2011

Alaska sablefish data and modeling workshop, Juneau, Alaska, January 26-28, 2010 International Stock Production Modeling Workshop, Woods Hole, Massachusetts, May 10-14, 2010 Alaska Fisheries Research Plan, Juneau, Alaska, May 11-13, 2009

### **Training courses**

Leadership Workshop for Department Chairs (by Kevin Dettmar) (August 24-25, 2023)

Size-based stock assessment modeling in ADMB (January 7-8, 2019)

Alaska Marine Safety Education Association Small Boat Operator Training (April 11-12, 2012)

Spatial Data Analysis (Margaret Short, Juneau, AK, August 2011, 2 days)

Center for Distance Education teaching workshop (Spring 2011, 4 days)

Qualitative Modelling Short Course (Jeffrey Dambacher, Juneau, Alaska, May 17-19, 2010)

ADMB (Marc Maunder, AFS meeting, Anchorage, 2005, 2 days)

Multivariate data visualization with GGOBI (Diane Cook, Palmer, July 2004, 2 days)

Spatial Data Analysis (Dale Zimmermann, Fairbanks, July 2003, 2 days)

Applied Logistic Regression (David Hosmer, Fairbanks, July 2001, 2 days)

### **Field Experience**

2019 R/V *Sikuliaq*, Chukchi Sea, CODA/GO-WEST expedition. Under-ice sampling of zooplankton and fish, oceanography, zooplankton, acoustics (Co-PI)

2019	20' skiff, Auke Bay, Berners Bay, Eagle Beach, sampling zooplankton and water, CTD profiles
2013	F/V <i>Bristol Explorer</i> , Chukchi Sea. Arctic Ecosystem Integrated Survey. Oceanography, zooplankton, acoustics, surface and midwater trawling (Lead PI)
1995-97	M/V <i>Tiglax</i> , Aleutian Islands, Alaska. Prey surveys by bottom trawl around sea lion rookeries; towed video observations; sediment collection; CTD transects; bird observations; hydroacoustic survey of midwater plankton and fish.
1996	M/V <i>Bering Explorer</i> , Cook Inlet, Alaska. Survey of juvenile groundfishes; bottom type assessment; CTD survey.
1995	F/V <i>Big Valley</i> , Shelikof Strait and Sitkinak Strait, Alaska: Survey of juvenile groundfishes by bottom trawl. Oceanographic surveys using CTD, sidescan sonar, Acoustic Doppler Current Profiler (ADCP), ROV, sediment grab, and bottom trawl.
	28' skiff, Kachemak Bay, Alaska. Survey of juvenile flatfishes; CTD survey; sediment collection.
1994	30' Boston Whaler, chief scientist, Kazakof Bay, Afognak Island, Alaska. baseline survey of juvenile ground-fishes; CTD survey; sediment collection.
	28' skiff, Kachemak Bay, Alaska. Survey of juvenile flatfishes; CTD survey; sediment collection.
1993/94	Lake Becharof and Lake Ugashik, SW Alaska. Chief scientist. Limnological sampling and assessment of bathymetry by skiff and float plane.
1993	30' skiff, Icy Strait, SE Alaska. Chief scientist, Collection of outmigrating juvenile salmon using gillnet
1992	F/V <i>Big Valley</i> and skiff, Kodiak Island, Alaska. Collection of juvenile groundfishes using beam trawl; CTD survey; ROV transects.
1991	F/V <i>Big Valley</i> and skiff, Kodiak Island, Alaska. Collection of juvenile groundfishes using beam trawl; CTD survey.
	R/V <i>Little Dipper</i> , Resurrection Bay, Alaska. Ichthyoplankton collections using Tucker trawl; CTD survey.
	R/V <i>Alpha Helix</i> , North Pacific, Alaska to Hawaii. Ichthyoplankton collections using MOCNESS; CTD survey.
1990	R/V <i>Alpha Helix</i> , Gulf of Alaska. Ichthyoplankton collections using MOCNESS; CTD survey.
	F/V Ocean Hope III, Chuckchi Sea, Alaska. Bottom trawl survey; CTD survey.

# **Teaching**

I developed and regularly teach three quantitative courses at the graduate level that are designed for graduate students in fisheries and marine science:

• Modern Applied Statistics for Fisheries (FISH/MSL 604). Taught every other fall since 2007.

- Data Analysis in Community Ecology (FISH/MSL 631). Taught every other spring since 2009.
- Statistical Computing with R (FISH 627). As demand warrants (Pre-requisite for FISH 604/631)

I teach courses focused on general oceanography, marine science, and fishery management:

- *Ecosystem-Based Fisheries Management* (FISH 641, 2cr).
- Oceanography for Fisheries (FISH 440, 3cr). I developed this upper-level undergraduate course for both undergraduate and graduate students in Fisheries to cover basic oceanographic principles (chemical, physical, biological) that are relevant to the study of marine fishes.
- Social, Oceanographic, and Ecological Perspectives (SOEP) in Marine Ecosystems. (Coinstructor). Core course for the Marine Ecosystem Sustainability in the Arctic and Subarctic (MESAS) program.
- Innovative Approaches to Marine Ecosystems (FISH/NRM/MSL 692, Co-instructor).
   Discussion-based seminar course for students enrolled in the Marine Ecosystem Sustainability in the Arctic and Subarctic (MESAS) program.

Seminars and independent study courses:

- Fisheries Department Seminar.
- Dynamics of Marine Ecosystems (Seminar).
- Applied Regression (Independent Study).
- Data wrangling and analysis: Case studies in Fisheries (Seminar)

#### Other:

- I contributed a module on *Arctic Fish & Fisheries* to a Massive Open Online Course on <u>Climate Change in Arctic Environments</u> developed at the International Arctic Research Center, UAF.
- I regularly contribute guest lectures to classes in the Fisheries and Oceanography departments, including *Marine Ecosystems*, *Biological Oceanography*, *Fisheries Oceanography*, and *Responsible Conduct in Research*
- I contributed a segment on *Arctic Fisheries* to a Massive Open Online Course on the *Global Arctic* developed at the 'MOOC factory' at the École Polytechnique Fédérale de Lausanne.
- I have developed and taught several short courses (1-3 days) including *Beyond the linear model:* Analyzing ecological data using generalized mixed-effects models, Introduction to R, and Multivariate Statistics for Ecologists

### Mentoring

Graduate students (thesis advisor, all UAF): Laurinda Marcello (M.S., 2011), Janelle Mueller (M.S., 2011), Brendan Coffin (M.S., 2014), Elizabeth Siddon (Ph.D., 2013), Megan Peterson (Ph.D., 2014), Mayumi Arimitsu (Ph.D. 2016), Jordan Watson (Ph.D., 2017), Jennifer Marsh (Ph.D., 2019), Lauren Wild (Ph.D., 2020), Tadayasu Uchiyama (Ph.D., inactive), Zane Chapman (M.S., 2022), Jared Weems (Ph.D., current), Wesley Strasburger (Ph.D., current), Cassandra

Dahl (MS, withdrew), Alex Knobloch (MS, current), Zachary Stamplis (MS), Samuel Comeau (MS), Max Schoenfeld (M.S.).

*Post-docs*: Jason Waite (now ADF&G); Colleen Petrik (now UCSD Scripps); Cathleen Vestfals (now NOAA), Jen Marsh (now contractor), Krista Oke (now APU), Sean Hardison (current).

*Graduate Students (Committee Member):* 

MS (graduated): Scott Chandler (2024), Kevin McNeel (2023), Tristan Sebens (2023), Lilian Hart (2023), Kevin McNeel (2023), Nina Lundstrom (2021), Matt Callahan (2020), Justin Priest (2020), Michael Knutson (2020), Caitlin Forster (2019), Alicia Schuler (2019), Noel Sme (2019), Sarah Apsens (2017), Dan Olsen (2017), Stephanie Berkman (2017), Jane Sullivan (2016), Michael Kohan (2015), Jessica Glass (2014), Karson Coutré (2014), Kevin Foley (2014), Wesley Strasburger (2012), Mayumi Arimitsu (2009)

MS (current): Anna Medina, Maranda Peterson, Charlotte Levy.

PhD (graduated): Hannah Myers (2023), Chris Sergeant (2022), Lauren Sutton (2022), Robert Levine (University of Washington, 2021), Kelly Cates (2021), Janelle Badger (2021), Valentina Melica (2020), Wendel Raymond (2020), Fletcher Sewall (2020), Cheryl Barnes (2019), Julie Nielsen (2019), Michael Malick (Simon Fraser University, 2018), Ellen Martinson (2017), Suzie Teerlink (2017), Lauren Divine (2016), Zachary Hoyt (2015), Vanessa von Biela (2015), Michael Litzow (University of Tasmania, 2014), Jonathan Richar (2014), Bev Agler (2012), Tammy Hoem-Neher (2012), Kray van Kirk (2012), Douglas Dasher (2010).

<u>Ph.D.</u> (current): Jeannette Gann, Laura Slater, Stephanie O'Daly, Austin Flanigan, Matt Cheng, Carter Johnson, Genoa Sulloway, Chloe Kotik.

*Undergraduate Students*Aksiin Storer (ANSEP Intern, Summer 2023)

#### **Professional memberships**

American Fisheries Society

American Statistical Association

American Association for the Advancement of Science

American Geophysical Union

#### Honors/Awards

2020 Appointment as President's Professor of Quantitative Fisheries and Ecosystems

2020 Dean's Recognition Award for Outstanding Instructor

2018 Dean's Recognition Award for Outstanding Researcher

2006 Robert L. Kendall Best Paper in Transactions of the American Fisheries Society Award

1998 NAS travel award to participate in a symposium to celebrate "50 years of ocean discovery, National Science Foundation 1950-2000" at the National Academy of Sciences, Washington, D.C.

1992 Outstanding graduate student, Graduate Program in Marine Science and Limnology

#### **Current Grants**

Improving data on fishery gear interactions with Bering sea crabs: stock-specific analysis to support dynamic management II (Jan 1, 2025 – Jun 30, 2027). Cooperative Institute for Climate, Ocean, & Ecosystem Studies (CICOES, \$177, 972). PI: Franz Mueter.

Improving data on fishery gear interactions with Bering Sea crabs: stock-specific analysis to support dynamic management I (Sep 1, 2023 – August 31, 2024). Cooperative Institute for Climate, Ocean, & Ecosystem Studies (CICOES, \$147,000). PI: Franz Mueter. (Set up on assumption, pending UW transfer)

The environmental ratchet, revisited: the role of temperature and predation in controlling abundances of snow crab in the Bering Sea. Pollock Conservation Cooperative Research Center (Jul 1, 2023 – Jun 30, 2025). Awarded Jan 2023 (\$141,199). PI: Franz Mueter.

AMBON – Biodiversity in the Arctic (9/2022-8/2027). ONR (\$500,000). PI: Katrin Iken. Co-PIs: Franz Mueter, Seth Danielson, Russ Hopcroft, Donna Hauser.

AMBON - linking biodiversity observations in the Arctic (9/2022-8/2027). NASA (\$470,000). PI: Katrin Iken. Co-PIs: Franz Mueter, Seth Danielson, Russ Hopcroft, Donna Hauser.

A transformative approach to rapidly assess critical life history and energetic responses of fish to environmental change (Feb 1, 2022 – Jan 31, 2025). Alaska Sea Grant (\$85,378, plus 2-year student support). PI: Franz Mueter

A sustainable, integrated AMBON in the Chukchi Sea (09/2019 – 02/2025). NOAA (\$943,000). PI: Katrin Iken; Co-PIs: Franz Mueter, Seth Danielson, Russ Hopcroft.

#### **Recent Grants**

NNA Track 2: Atautchikkun IIitchisukluta: Coming together to learn: Coproducing knowledge across the Northwest Passage. NSF – Navigating the New Arctic (Aug 1, 2019 – July 31, 2023), awarded May 2019 (\$249,793). PI: Courtney Carothers, Co-PIs: Jessica Black, Peter Westley, Seth Danielson. Co-I: Franz Mueter and others.

Arctic Integrated Ecosystem Survey (Arctic IES) Phase II. BOEM (June 1, 2017 - May 31, 2023), awarded May 15, 2017 (\$1,014,390.00) PI: Katrin Iken; Co-PIs: Franz Mueter, Seth Danielson, Russell Hopcroft.

Predicting benthic habitat suitability from functional traits in a changing Arctic marine ecosystem. North Pacific Research Board. (Jan 1, 2020 – May 31, 2022). Awarded Nov 2019 (\$177,966). PI: Katrin Iken, Co-I: Franz Mueter, Claudine Haury.

Utilization of the under-ice habitat by Arctic Cod in the western Arctic Ocean: a multidisciplinary collaborative study. BOEM/CMI (07/01/19 - 06/30/22) (\$258,439). PI: Franz Mueter

Assessing the potential for pollock growth and productivity in the northern Bering Sea. PCCRC (9/1/2019 - 8/31/2021) (\$122,494). PI: Franz Mueter.

Model-based Fish Distributions and Habitat Descriptions for Arctic Cod, Saffron Cod and Snow Crab in the Alaskan Arctic (July 17, 2019 – July 8, 2021) (\$171,308), PI: Franz Mueter.

Environmental covariates of young of the year sablefish growth and recruitment in the Gulf of Alaska. Alaska Sea Grant (September 1, 2018 - August 31, 2021) (\$81,110.00), PI: Franz Mueter.

Ecological controls of Alaskan pollock weight-at-length and size-at-age under rapid environmental change. NOAA Saltonstall-Kennedy (September 1, 2019 - August 31, 2022) (\$199,082.00) PI: Franz Mueter

A sustainable, integrated AMBON in the Chukchi Sea. ONR (08/01/19 - 07/31/22) (\$1,036,256). PI: Katrin Iken; Co-PIs: Seth Danielson, Russell Hopcroft, Franz Mueter.

Go West: Sea-ice association of polar cod and its prey in the western Arctic Ocean. Arctic Research Icebreaker Consortium (ARICE) (September 1, 2019 - June 30, 2020) (€ 555,741). PI: Hauke Flores (AWI, Germany), Franz Mueter, Alexei Pinchuk.

Solving a growing problem in marine carbon stable isotope research (07/11/19 - 06/30/20) (\$79,452). PI: Nicole Misarti, Franz Mueter.

Alaska Marine Biodiversity Observing Network. NOAA-NOPP, BOEM (November 1, 2014 - October 31, 2019) (\$5,607,492), PI Katrin Iken; Co-PIs: Eric Collins, Seth Danielson, Russell Hopcroft, Franz Mueter. (Mueter share: \$228,637)

Identifying Arctic Cod Hatch Dates and Location in the Alaskan Arctic (07/01/18 - 07/31/19) (\$25,000). PIs: Zane Chapman, Franz Mueter.

Alaska Chinook Salmon Production and Decline. State of Alaska, Alaska Department of Fish and Game (July 1, 2013 - June 30, 2018) (\$625,532). PI Milo Adkison; Co-PIs Jeffrey Falke, Larissa Horstmann, Megan Mcphee, Franz Mueter, Trent Sutton, Mark Wipfli (Mueter share: \$35,463).

Extension of CIFAR project 'Status of fishes and research in the central Arctic Ocean', Cooperative Institute for Alaska Research (July 1, 2017 - June 30, 2018) (\$14,307). PI Franz Mueter.

Fish & Fisheries in Central Arctic Ocean, Funded by Cooperative Institute For Alaska Research (May 1, 2016 - March 31, 2018) (\$15,704). PI: Franz Mueter.

Arctic Gadids in a Changing Climate, Funded by North Pacific Research Board (September 1, 2015 - January 31, 2018) (\$255,288). PI Franz Mueter, Co-PIs: Cathleen Vestfals, Seth Danielson

Collaborative Research: Resilience and adaptive capacity of arctic marine systems under a changing climate (RACArctic). NSF / Belmont Forum (June 1, 2015 - May 31, 2018) (\$95,655). PI Franz Mueter.

GOA IERP Synthesis, Funded by North Pacific Research Board (NPRB) (September 1, 2015 – March 31, 2018) (\$185,928). Co-PIs Russell Hopcroft, Ken Coyle, Georgina Gibson, Franz Mueter (Mueter share: \$13,118).

Coastal Resilience Research: Capturing spatial behaviors of observed and unobserved fishing over time using vessel monitoring system data, Funded by Alaska Sea Grant (February 1, 2015 - March 31, 2017) (\$26,272). PI: Franz Mueter.

Distribution of Fish, Crab and Lower Trophic Communities in the Chukchi Sea. Bureau of Ocean and Energy Management (April 1, 2012 - March 31, 2016) (\$1,153,464). PI: Franz Mueter; Co-PIs: Brenda Norcross, Katrin Iken, Trent Sutton, Bodil Bluhm, Tony Gharrett.

Arctic Ecosystem Integrated Survey, Funded by US F&WS / Coastal Impact Assistance Program (CIAP) (November 1, 2011 - June 30, 2016) (\$3,028,542). PI Franz Mueter; Co-PIs: Brenda Norcross, Trent Sutton, Megan Mcphee, Edward Farley (NOAA), Mike Sigler (NOAA), Robert Lauth (NOAA).

- BEST Synthesis: The variable transport of pollock eggs and larvae over the Bering shelf: A marriage of physics and biology. National Science Foundation (July 1, 2011 June 30, 2014) (\$396,397). PI Franz Mueter; Co-PIs Seth Danielson, Cathleen Vestfals.
- GOA IERP: Surviving the Gauntlet. North Pacific Research Board (NPRB) (September 1, 2010 December 31, 2016) (\$743,379). PI Franz Mueter; Co-PI Shannon Atkinson Demaster
- BSIERP Ichthyoplankton, Funded by North Pacific Research Board (NPRB) (August 1, 2009 December 31, 2013) (\$290,968). PI Franz Mueter
- BSIERP Correlative Biomass Dynamics Model. North Pacific Research Board (NPRB) (August 1, 2007 December 31, 2013) (\$320,326). Co-PIs Franz Mueter and Gordon Kruse.
- BSIERP Trophic Interactions of Fish, Birds, and Mammals. North Pacific Research Board (NPRB) (August 1, 2007 December 31, 2013) (\$293,987). PI Franz Mueter, Co-PI Gordon Kruse

# **Publications in review / in prep:**

- Gann, J.C., Kimmel D., Lomas, M.W., **Mueter F.J.**, Eisner L.B., Mincks, S.L. (In Prep.) Phytoplankton Communities in the Bering Sea Reflect Environmental Regime Shifts, with Implications for Consumer Species. Limnology and Oceanography.
- Weems, J., Mueter, F.J., Kimmel, D., Pinchuk, A.I. (In Prep). Late summer distribution and abundance of pelagic larval crab communities, with an emphasis on snow crab (*Chionoecetes opilio*) and blue king crab (*Paralithodes platypus*), in the U.S. Pacific Arctic Gateway. Deep-Sea Research.
- <u>Hart, L.</u>, Cunningham, C., Yasumiishi, E., **Mueter, F.**, Thorson, J., Pirtle, J., Dimond, J. (In Revision). Species distribution models estimate time-varying juvenile salmon distributions in the north- and southeastern Bering Sea. Canadian Journal of Fisheries and Aquatic Sciences.
- Myers, H., Olsen, D., Konar, B. H., Whitney, A., Birch, K., Dugan, P., **Mueter, F. J.**, Guazzo, R., Horstmann, L. A., Ford, J., Matkin, C (In Revision). Killer Whales Have Consistent Communication Rates. Communications Biology (submitted September 2023).

#### **Edited Volumes / Guest editor:**

- **Mueter, F.**, Bouchard, C., Hop, H., Laurel, B., and Norcross, B. (2020) Arctic gadids in a rapidly changing environment. Polar Biology 43(8): 945-950. https://doi.org/10.1007/s00300-020-02696-1
- Ormseth, O.A., Baker, M.M., Hopcroft, R.R., Ladd, C., Mordy, C.W., Moss, J.H., **Mueter, F.J.**, Shotwell, S.K., Strom, S.L. (2019) Introduction to understanding ecosystem processes in the Gulf of Alaska, volume 2. Deep Sea Research Part II: Topical Studies in Oceanography 165, 1-6. https://doi.org/10.1016/j.dsr2.2019.06.019
- Drinkwater, K., **Mueter, F.**, Saitoh, S.-I. (2018) Shifting boundaries of water, ice, flora, fauna, people and institutions in the Arctic and Subarctic. ICES Journal of Marine Science 75(7): 2293-2298. <a href="https://doi.org/10.1093/icesjms/fsy179">https://doi.org/10.1093/icesjms/fsy179</a>

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## Presentations (2008-present, first-author/presenter only):

- Mueter, F.J., M. Williams, L. Wild, D. Goethel, A. Schuler, H. Pearson. Managing Human Cetacean Interactions in Alaska. Ecosystem Studies of the Subarctic and Arctic Seas (ESSAS) Annual Science Meeting. St. John's, Newfoundland and Labrador, Canada, June 18-20, 2024.
- **Mueter, F.J.** (Invited) Subarctic and Arctic Marine Fisheries: Through the Looking Glass. Strait Science series (virtual), February 22, 2024.
- **Mueter, F.J.** (Invited) Subarctic and Arctic Marine Fisheries in a Changing Climate. Earth System Science Seminar, Fairbanks, October 20, 2023.
- **Mueter, F.J.,** Fedewa, E., Litzow, M., Szuwalski, C., Zacher, L., Daly, B. Smeltz, S., Harris, B., Cates, K., Milani, K. Snow crab in a warming Bering Sea: Effects of climate, predation and fishing on their collapse and recovery. CICOES Symposium, Seattle, June 13, 2023.

- **Mueter**, **F.J.** Pinchuk, A., Copeman, L., Maes, S., Geoffroy, M., Chapman, Z. Weems, J., Flores, H. Utilization of the under-ice habitat by Arctic Cod in the western Arctic Ocean.
  - Coastal Marine Institute, virtual meeting, January 19, 2023
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- **Mueter, F.J.** (Invited). Climate Change and Alaska's Fisheries. Alaska Seafood Processors Leadership Institute. Anchorage, Alaska, March 9, 2023.
- **Mueter, F.J.**, Pinchuk, A., Copeman, L., Maes, S., Geoffroy, M., Chapman, Z. Weems, J., Flores, H. Arctic Cod (*Boreogadus saida*) under newly-formed sea ice in the Pacific Arctic. Ecosystem Studies of the Subarctic and Arctic Seas (ESSAS) Annual Science Meeting, Seattle, WA, June 20-22, 2022.
- **Mueter, F.J.**, Iken, K., Cooper, L.W., Grebmeier, J.M., Kuletz, K.J., Hopcroft, R.R., Danielson, S.L., Collins, R.E., Cushing, D. Borealization of Alaska's Arctic: Evidence from two contrasting years in the Chukchi Sea. Alaska Marine Science Symposium (virtual), Arctic Session, January 27, 2022
- Mueter, F.J., Pinchuk, A., Copeman, L., Maes, S., Geoffroy, M., Chapman, Z. Weems, J., Flores, H. Arctic Cod (*Boreogadus saida*) under newly-formed ice. Coastal Marine Institute Annual Research Review. Virtual Meeting. January 19, 2022.
- **Mueter, F.J.** Assessing and managing fish stocks in a rapidly changing environment. (Keynote). Ecosystem Studies of the Subarctic and Arctic Seas. Virtual Meeting. May 31, 2021.
- **Mueter, F.J.**, J.M. Grebmeier, J.M., H.P. Huntington, P.L. Pulsifer, J. Davis. A Step-Wise Progression to Fisheries Ecosystem Science in the Central Arctic. Arctic Science Summit Week. Virtual Meeting. March 26, 2021.
- **Mueter, F.J.**, J. Marsh, C. Vestfals, R. Levine, A. de Robertis, GO-WEST team. Fisheries studies, with a focus on Arctic cod (*Boreogadus saida*), in the Pacific Arctic. IARPC (Interagency Arctic Research Policy Committee) Marine Ecosystems collaboration team webinar. March 25, 2020.
- Mueter, F.J., H. Flores, A. Pinchuk, J. Weems, R. ten Boer, M. van Dorssen, L. Edenfield, A. Klasmeier, K. Kunz, S. Maes, N. Zakharova. Chasing Arctic Cod under the ice. Strait Science (UAF seminar series), Nome, Alaska, March 11, 2020.
- Mueter, F.J., H. Flores, A. Pinchuk, J. Weems, R. ten Boer, M. van Dorssen, L. Edenfield, A. Klasmeier, K. Kunz, S. Maes, N. Zakharova. Utilization of the under-ice habitat by Arctic Cod in the western Arctic Ocean: Chasing fish under ice. CMI Annual Research Review, Anchorage, Alaska, January 31, 2020.
- **Mueter, F.J.** Climate and ecosystem trends in the Bering Sea and Gulf of Alaska. Alaska Young Fishermens Symposium (AYFS), Juneau, Alaska, January 22, 2020.

- Mueter, F.J. The Arctic Cisco mystery. Presentation on R/V Sikuliaq, November 9, 2020.
- **Mueter, F.J.** Arctic Cod in the Bering Sea: A 'bellwether' of changes to come? Strait Science (UAF seminar series), Nome, Alaska, November 5, 2019.
- Mueter, F.J., Benjamin Planque, George Hunt, Irene Alabia, Sei-ichi Saitoh, Padmini Dalpadado, Lisa Eisner, Yutaka Watanuki, Toru Hirawake. Prey resources, food webs, fish and fisheries in rapidly changing Subarctic and Arctic marine systems. IMBER Open Science Conference, June 19, 2019.
- **Mueter, F.J.** Fish, fisheries and fishery management in rapidly changing Subarctic and Arctic marine systems. Fisheries and Ocean Sciences Seminar, Fairbanks, AK, February 20, 2019
- **Mueter, F.J.**, K. Drinkwater, S.-I. Saitoh (Oral). Resilience and Adaptive Capacity of Arctic marine systems under a changing climate. Mid-Term Meeting of the Belmont Forum Arctic Observing and Science for Sustainability Collaborative Research Action (CRA), 8-10 December 2018, Washington D.C.
- **Mueter, F.J.** Fishery Management Challenges in our Changing Bering Sea. Strait Science series, Nome, AK, November 26, 2018.
- **Mueter, F.J.** and H. Flores (Oral). Current and future research on *Boreogadus saida* in the Central Arctic Ocean and surrounding shelf seas. Ecosystem Studies of the Subarctic and Arctic Seas (ESSAS) Annual Science Meeting, Fairbanks, Alaska, June 14, 2018.
- Forster, C., B.L. Norcross, **F.J. Mueter** (Oral). Assessing spatial patterns of Arctic Cod (*Boreogadus saida*) abundance and distribution using GAM in the Chukchi and Beaufort seas.
  - Western Division of the American Fisheries Society Meeting, Anchorage, Alaska, May 24, 2018.
  - Ecosystem Studies of the Subarctic and Arctic Seas Annual Science Meeting, Fairbanks, Alaska, June 14, 2018
- Mueter, F.J., C. Vestfals, J. Marsh, L. Divine, J. Weems, K. Iken, B. Bluhm (Oral). Arctic cod, Boreogadus saida, and snow crab, Chionoecetes opilio, in Alaska's Arctic. Western Division of the American Fisheries Society Meeting, Anchorage, Alaska, May 24, 2018.
- **Mueter, F.J.** (Oral) Arctic Gadids in a Changing Climate. Alaska Marine Science Symposium, Workshop on Arctic Gadids, Anchorage, Alaska, January 24, 2018.
- **Mueter, F.J., Pirtle, J.,** Shotwell, K. (Oral). Linking sablefish recruitment to ocean circulation and habitat in the Gulf of Alaska. NOAA Alaska Fisheries Science Center, Auke Bay Lab, Sablefish Summit, September 26, 2017.

- **Mueter, F.J.** (Department Seminar). Eastern Bering Sea Walleye Pollock in a changing climate. UAF seminar. Global Change seminar, University of Alaska Fairbanks, Fairbanks, Alaska, September 13, 2017.
- **Mueter, F.J.** (Invited seminar). Walleye Pollock in the Eastern Bering Sea: From past patterns to future projections? Seminar presented at the Hatfield Marine Science Center, August 24, 2017.
- **Mueter, F.J.** (Invited) UAF/NOAA collaborations in the Arctic: Past, Present and Future. Presentation to the NOAA Fisheries Science Board. Juneau, Alaska, August 23, 2017.
- **Mueter, F.J.** (Invited). Moving in, out, and across Arctic and Subarctic Marine Ecosystems: Where do we go from here? ESSAS Open Science Meeting, Tromsø, Norway, June 15, 2017.
- Mueter, F.J. Sigler, M.F., Bluhm, B.A., Busby, M.S., Cokelet, E.D., Danielson, S.L., De Robertis, A., Eisner, L.B., Farley, E.V., Iken, K., Kuletz, K.J., Lauth, R.R., Logerwell, E.A., Pinchuk, A.I. (Oral) Summer zoogeography of the Northern Bering and Chukchi seas. ESSAS Open Science Meeting (Session 4), Tromsø, Norway, June 13, 2017.
- **Mueter, F.J.** Siddon, E.C., Holsman, K. Petrik, C., Uchiyama, T., Kruse, G. (Oral). An uncertain future for walleye pollock in the eastern Bering Sea. 31<sup>st</sup> Lowell Wakefield Symposium, Anchorage, Alaska, May 10, 2017.
- **Mueter, F.J.** (Invited). Responses of Arctic Marine Ecosystems to a Changing Climate. Workshop 'A 5°C Arctic in a 2°C World', Union Theological Seminary, Columbia University, New York City, July 20, 2016.
- **Mueter, F.J.**, Marsh, J. (Oral). Northern Gadids in a Changing Climate: 'Winners' and 'Losers'. Ecosystem Studies of the Subarctric and Arctic Seas (ESSAS) Annual Meeting, Yokohama, Japan, March 8, 2016.
- **Mueter, F.J.**, Sigler, M. (Oral). Responses of Fish to Climate Change in a Changing Arctic. Workshop on Resilience and Adaptive Capacity of Arctic marine systems under a changing climate (Belmont Forum), Hakodate, Japan, March 2, 2016.
- **Mueter, F.J.**, Drinkwater, K. (Oral) Responses of Arctic Marine Ecosystems to a Changing Climate. Workshop on Resilience and Adaptive Capacity of Arctic marine systems under a changing climate (Belmont Forum), Hakodate, Japan, March 1, 2016.
- **Mueter, F.J.** (Department Seminar). A tale of 2 poles: High-latitude ecosystems in a changing climate. UAF Fisheries Division Seminar. Juneau, Alaska, February 19, 2016
- Ladd, C., **Mueter, F.J.** (Oral, joint presentation). Gulf of Alaska Project: The Gauntlet Games Final Showdown. Alaska Marine Science Symposium, Anchorage, Alaska, January 2016

- **Mueter, F.J.** (Oral). Some highlights from the Arctic Ecosystem Integrated Survey. Arctic Eis Workshop, Alaska Marine Science Symposium, Anchorage, Alaska, January 2016.
- **Mueter, F.J.** (Department Seminar). From research to adaptation: climate change in northern marine ecosystems. Global Change Seminar Series. UAF, Fairbanks, Alaska, November 18, 2015.
- **Mueter, F.J.** (Invited Seminar). Current and future climate change research in northern marine ecosystems. Institute of Marine and Antarctic Studies. University of Tasmania. August 12, 2015.
- **Mueter, F.J.** (Invited Seminar). Ecosystem challenges and approaches in the management of Alaska's fisheries. CSIRO Marine and Atmospheric Research, Hobart, Tasmania, July 24, 2015.
- Mueter, F.J. (Invited Seminars). High-latitude fish and fisheries in a changing climate.
  - Institute of Marine and Antarctic Studies, University of Tasmania, Taroona, Tasmania, December 2, 2014.
  - CSIRO Marine and Atmospheric Research, Hobart, Tasmania, December 5, 2014.
- **Mueter, F.J.**, Danielson, S., Drinkwater, K., and Gjøsæter, H. (Oral). Pacific and Atlantic gateways to the Arctic for plankton and fish. PICES 2015 Annual Meeting, Yeosu, South Korea, October 21, 2014.
- Siddon, E.C., Kristiansen, T., **Mueter, F.J.**, Holsman, K.K., Heintz, R.A., Farley, E.V. (Oral). Spatial match-mismatch between juvenile walleye pollock (*Gadus chalcogrammus*) and zooplankton prey in the eastern Bering Sea may contribute to recruitment variability. PICES 2015 Annual Meeting, Yeosu, South Korea, October 23, 2014.
- Peterson, M.J., **Mueter, F.J.**, Carothers, C. Criddle, K.R., Haynie, A.C. (Oral) Toothed whale interactions with longline fisheries in Alaska & economic implications. PICES 2015 Annual Meeting, Yeosu, South Korea, October 23, 2014.
- **Mueter, F.J.**, Danielson, S., Drinkwater, K., and Gjøsæter, H. (Oral) Variability in the Subarctic to Arctic transition region and implications for fish populations in the Arctic Ocean. IMBER Open Science Conference FUTURE OCEANS. Bergen, Norway, June 25, 2014
- Mueter, F.J. (Invited) Correlation, Inference and Causality: Challenges to understanding linkages between juvenile and adult salmon population dynamics. AYK SSI Juvenile Chinook Salmon Workshop: Risks and Benefits of Using Juvenile Salmonid Research to Understand Adult Population Dynamics. Anchorage, Alaska, April 23, 2014.
- **Mueter, F.J.** (Invited) The role of ocean survival and fishing in recent Chinook salmon declines. Workshop on "Fostering Yukon Chinook Resilience: A UAF Chapman Chair Workshop Honoring C.S. Holling", Fairbanks, Alaska, April 1, 2014.

- Weems, J. and **Mueter, F.J.** (Department Seminar). Fish and shellfish in the Chukchi Sea and beyond: Status, trends, and outlook. UAF Fisheries Division Seminar. Juneau, Alaska, March 7, 2014.
- Mueter, F.J. (Invited Seminar), Lauth, R., Andrews, A., Taylor, K., Weems, J., de Robertis, A., Kuletz, K., Pham, C., Farley, E., Norcross, B, Sigler, M, and Wilson, C. Twice in the Far North: Chukchi Sea fish communities in 1990 and 2012. Nome, AK, Strait Science Series, September11, 2013.
- **Mueter, F.J.** (Oral) Spatial dynamics of fish communities in subarctic and arctic seas under a changing climate. PICES-ICES workshop on a "Global assessment of the implications of climate change on the spatial distribution of fish and fisheries", St. Petersburg, Russia, May 22, 2013.
- **Mueter, F.J.**, Lauth, R., Andrews, A., de Robertis, A., Britt, L., Farley, E., Norcross, B, Sigler, M, and Wilson, C. (Oral) The Marine fish communities of the Bering & Chukchi Sea. 28<sup>th</sup> Lowell Wakefield Fisheries Symposium. March 27, 2013.
- Mueter, F.J., Lauth, R., Andrews, A., de Robertis, A., Britt, L., Farley, E., Norcross, B, Sigler, M, and Wilson, C. (Oral) Arctic Ecosystem Integrated Survey. Alaska Marine Science Symposium. Anchorage, Alaska, January 22, 2012
- **Mueter, F.J.**, Litzow, M.A., Lauth, R.L., Danielson, S.L., and Spencer, P.D. (Oral) Spatial dynamics of groundfish: the roles of temperature, abundance and advection. Ecosystem Studies of the Subarctic Seas (ESSAS) Annual Science Meeting, Hakodate, Japan, January 9, 2013.
- **Mueter, F.J.** (Department Seminar). Fishes of Alaska's Arctic and the Arctic Ecosystem Integrated Survey. UAF Fisheries Division seminar, Juneau, Alaska, November 30, 2012.
- **Mueter, F.J.** (Invited). Forage fish in Alaska's Arctic (with a focus on Arctic cod). Alaska Beluga Whale Committee Annual Meeting, November 14, 2012
- **Mueter, F.J.** (Keynote). Ecosystems, complexity, and sustainability from global to regional to local scales. American Fisheries Society, Alaska Chapter, Annual Meeting. Kodiak, Alaska, October 24, 2012.
- **Mueter, F.J.**, Litzow, M.A., Lauth, R.L., Danielson, S.L., and Spencer, P.D. (Oral) The roles of temperature, abundance and advection in modifying the spatial dynamics of groundfish at the Subarctic-Arctic boundary in the eastern Bering Sea. PICES 2012 Annual Meeting, Hiroshima, Japan, October 12, 2012.
- **Mueter**, **F.J.** (Invited seminar), Limits to the northward movement of fishes in the Eastern Bering Sea. Nome, AK, Strait Science Series, May 29, 2012.

- **Mueter, F.J.,** Duffy-Anderson, J.T., Curchitser, E., Danielson, D. and Hedstrom, K. (Oral) Ocean forcing and effects of distribution of walleye pollock early life history stages: a marriage of physics and biology. BSIERP Principal Investigator's Meeting. Anchorage, AK, 2012.
- Litzow, M.A., **Mueter, F.J.** (Oral), Urban, D. Rising variance as an early indicator of fishery collapses in Alaskan crab populations. Alaska Marine Science Symposium. January 18, 2012.
- **Mueter, F.J.** (Department seminar). The (F)Utility of Forecasting Climate Change Impacts on Marine Fish and Shellfish: Approaches and Examples. Global Change Seminar Series. UAF, October 19, 2011.
- **Mueter, F.J.**, Bohaboy, E.C., Bundy, A., Fu C., Hjermann, D.O., Link, J.S. (oral) Common patterns, common drivers: comparative analysis of aggregate surplus production across ecosystems. American Fisheries Society 141<sup>st</sup> Annual Meeting, Seattle, WA, September 4-8, 2011.
- Litzow, M.A., **Mueter, F.J.**, Urban, D. (Invited). Can rising variance predict sudden shifts in populations and ecosystems? A test using Alaskan crustacean data. American Fisheries Society 141<sup>st</sup> Annual Meeting, Seattle, WA, September 4-8, 2011.
- **Mueter, F.J.**, Stepanenko, M.A., Smirnov, A.V., and Yamamura, O. (Invited). Comparing walleye pollock dynamics across the Bering Sea and adjacent areas. International Symposium on "Comparative studies of climate effects on polar and sub-polar ocean ecosystems: progress in observation and prediction" (ESSAS Open Science Meeting). Seattle, WA, May 23, 2011.
- **Mueter, F.J.** (Keynote) Groundfish in Hot Water: Challenges facing Fish and Fisheries in Alaska. Alaska Department of Fish & Game. Statewide groundfish meeting, Anchorage, Alaska, April 27, 2011.
- **Mueter, F.J.** (Invited seminar) The Bering Sea ecosystem: From climate to plankton to fish. University of Alaska Southeast. Biological Sciences seminar, Juneau, AK, April 13, 2011.
- **Mueter, F.J.** (Oral) Effects of temperature and density on spatial dynamics of Bering Sea groundfishes. Alaska Marine Science Symposium. January 20, 2011.
- **Mueter, F.J.** (Oral) Spatial dynamics of Bering Sea groundfish: Effects of temperature and density. Alaska Chapter, American Fisheries Society, Annual Meeting. November 4, 2010.
- **Mueter, F.J.**, Nicholas A. Bond, James N. Ianelli (Invited). Long-term forecasts of walleye pollock dynamics in the eastern Bering Sea based on estimated responses of recruitment

- and growth to climate variability. PICES 2010 Annual Meeting, Tuesday, October 26, 2010.
- **Mueter, F.J.**, M.A. Litzow (Invited). Linking climate and fish in the Northeast Pacific. Ecosystem Studies of the Subarctic Seas (ESSAS) Annual Meeting. Reykjavik, Iceland, August 31, 2010.
- **Mueter, F.J.**, N. Bond, J. Ianelli, and A. Hollowed (oral) Future recruitment of Bering Sea walleye pollock: (1) retrospective patterns & uncertainty. International symposium on "Climate change effects on fish and fisheries: Forecasting impacts, assessing ecosystem responses, and evaluating management strategies.", Sendai, Japan, April 25-29, 2010.
- **Mueter, F.J.** (Oral) Biological responses to recent climate variability on the eastern Bering Sea shelf. Workshop on "Networking across global marine "hotspots", held in conjunction with the international symposium on "Climate change effects on fish and fisheries: Forecasting impacts, assessing ecosystem responses, and evaluating management strategies." in Sendai, Japan, April 24, 2010.
- **Mueter, F.J.** (Invited) Climate variability in the eastern Bering Sea. Western Alaska Interdisciplinary Science Conference (WAISC). 24 March 2010, Unalaska, AK
- **Mueter, F.J.** (Invited) Climate variability on the eastern Bering Sea shelf: Effects on the distribution and productivity of fish populations. Western Alaska Interdisciplinary Science Conference (WAISC). 24 March 2010, Unalaska, AK.
- **Mueter, F.J.**, Carol Ladd, Phyllis Stabeno, Ron Heintz, Ken Coyle, Gordon H. Kruse. (oral) Environmental controls of gadid year class strength in the eastern Bering Sea. Alaska Marine Science Symposium, January 21, 2010, Anchorage, AK.
- **Mueter, F.J.,** Gordon H. Kruse, Vernon Byrd, and Heather Renner (Poster). Covariation among major fish, seabird, and mammal populations in the Eastern Bering Sea. Alaska Marine Science Symposium, January 20, 2010, Anchorage, AK.
- **Mueter, F.J.** (Invited) Climate change impacts on fisheries. Alaska Community-Based Climate Change Adaptation Outreach Program Development Workshop, November 16-18, 2009. Videoconference from Juneau to Fairbanks.
- **Mueter, F.J.** and M.A. Litzow (Invited). The spatial footprint of biological re-organization in a demersal community. PICES XVIII Science Board Symposium, Cheju Island, Korea, October 26, 2009.
- **Mueter, F.J.** (Department Seminar). Climate effects on Bering Sea food webs and fisheries. University of Alaska Fairbanks, Fairbanks, AK. September 30, 2009.

- **Mueter, F.J.**, Siddeek Shareef, Jie Zheng. (oral) Gadid-crustacean interactions in the Eastern Bering Sea and Gulf of Alaska. Ecosystem Studies of Subarctic Seas (ESSAS) Annual Meeting. June 18, 2009.
- **Mueter, F.J.** (Invited seminar). Environmental and Ecological Indicators for the Eastern Bering Sea. NOAA, NMFS, Ted Stevens Marine Research Institute. May 4, 2009.
- **Mueter, F.J.** (Invited seminar). Climate effects on Bering Sea food webs and fisheries. NOAA, NMFS Alaska Regional Office. Juneau, Alaska. February 25, 2009.
- **Mueter, F.J.** (Department Seminar). Climate effects on Bering Sea food webs and fisheries. Juneau Center, School of Fisheries and Ocean Sciences, University of Alaska Fairbanks. Juneau, Alaska, January 23, 2009.
- **Mueter, F.J.** et al. (Poster). NPRB, BSIERP PI meeting. Girdwood, Alaska. October 14-16, 2009.
- **Mueter, F.J.** (Invited). Effects of a changing climate on fish and fisheries off Alaska. Dialogue and Commission on Arctic Climate Change. The Aspen Institute. August 13, 2008.
- **Mueter, F.J.**, K. Coyle. (oral) From physics to humans: Climate effects on Bering Sea food webs and fisheries. PICES XVII, Dalian, China, October 30, 2008.
- **Mueter, F.J.**, C. Broms, K. Drinkwater, K. Friedland, J. Hare, **G. Hunt**, W. Melle, and M. Taylor. Comparison of Northern Hemisphere ecosystems: Responses to recent oceanographic variability.
  - presented at ICES Annual Meeting. Helsinki, Finland, September 19, 2007 (**G. Hunt**)
  - presented at PICES XVI, Victoria, B.C., Canada. November 2, 2007.
  - presented at Ocean Sciences Meeting, Orlando, Florida, March 4, 2008 (G. Hunt)