CURRICULUM VITAE (Updated August 2021)

Ana M. Aguilar-Islas

College of Fisheries and Ocean Sciences

University of Alaska Fairbanks

PO Box 757220. Fairbanks, AK 99775-7220

Telephone: 907 474 1524 Fax: 907 474 7204 amaguilarislas@alaska.edu

https://www.uaf.edu/cfos/people/faculty/detail/index.xml?id=62

PROFESSIONAL EXPERIENCE

2017-Present	Associate Professor, College of Fisheries and Ocean Sciences, University of Alaska Fairbanks (UAF)
2010-2017	Assistant Professor, School of Fisheries and Ocean Sciences, University of Alaska Fairbanks (UAF)
2007-2010	Postdoctoral Fellow, International Arctic Research Center (IARC), UAF
2001-2007	Graduate Research Assistant, University of California Santa Cruz (UCSC)

EDUCATION

2007	Doctor of Philosophy, Ocean Sciences, University of California Santa Cruz, Santa Cruz, CA
2002	Bachelor of Science (summa cum laude), Chemistry, University of California Santa Cruz, Santa Cruz, CA
1988	Bachelor of Fine Arts (cum laude), Communication Design, University of Illinois at Chicago, Chicago, IL

TEACHING

Graduate	Chemical Oceanography (MSL 660/463), UAF, Spring semester (2011 to present)
Courses	Chemical Coastal Processes (MSL 694/494) UAF, Spring semester (2011 to present)

Seminar: The Role of Atmospheric Input in Trace Element Cycles (MSL692) UAF, Spring 2013

IMS Seminar (MSL692) UAF, Fall 2012, Fall 2021

Chemical Oceanography (OCEA 220), UCSC, Winter 2007

Undergraduate The Oceans (MSL 111X) UAF, Fall 2012- present

Courses Marine Science Laboratory (MSL 213) UAF, Spring 2012- 2021

SUPERVISION AND MENTORING

Students Emily Ortega – PhD Chemical Oceanography, UAF, committee chair, 2019 to present

Channing Bolt – PhD Chemical Oceanography, UAF, committee chair, graduation Spring 2021 Annie Kandel – MS Chemical Oceanography, UAF, committee chair, graduation Fall 2020 Vincent Domena – MS Chemical Oceanography, UAF, committee chair, graduation Fall 2017 Megan Roberts – MS Environmental Chemistry, UAF, committee co-chair, graduation Summer 2018

<u>Committee member to current students</u>: Jake Cohen – MS Oceanography; Kyle Dilliplane – PhD Oceanography; Isaac Reister – PhD Oceanography; Alexis Walker – PhD Marine Biology; Jeannette

Gann – PhD Marine Biology

Committee member to graduated students: Ann Riddle – MS Marine Biology;

Jessica Turner - MS Oceanography; Faith Stemmler - MA Marine Science; Stacey Reisdorph - MS

Oceanography; Courtney Shuert – MS Marine Biology; John Perreault – MS Geology

Postdocs Marie Seguret – UAF, 2012 to 2014; Laura Whitmore – UAF, 2020 to present

FUNDING

- A. Aguilar-Islas (Co-Investigator), 01/10/20-09/30/22, Murdock Charitable Trust, A towed instrument package for high-resolution multidisciplinary study of mesoscale coupling of physical and chemical oceanography to plankton distribution in Alaskan waters. \$591,596 (50% from match) (PI: R. Hopcroft)
- A. Aguilar-Islas (Co-Principal Investigator), 01/10/17-30/09/22, National Science Foundation, *LTER: Resilience in the Environmental Mosaic of the Northern Gulf of Alaska (NGA) Shelf Ecosystem.* \$1,127,000 per year (PI: R. Hopcroft).
- A. Aguilar-Islas (Co-Principal Investigator), 01/09/17-30/08/22, National Science Foundation, *Chemical, Physical and Biological processes linking snow and sea ice to the Arctic Ocean mixed layer: Improving models through the MOSAiC platform.* \$1,312,269 (PI: R. Rember).
- A. Aguilar-Islas (Co-Investigator), 01/09/16-31/08/19, National Science Foundation, MRI: Acquisition of a shared MC-ICPMS. \$581,702 (Principal Investigator: M. Wooler).
- A. Aguilar-Islas (Co-Investigator), 28/02/16-28/02/18, North Pacific Research Board, *GOAIERP Synthesis*. \$99,953 (Principal Investigator: R. Hopcroft).
- A. Aguilar-Islas (Principal Investigator), 10/01/14-09/30/17, US National Science Foundation, US GEOTRACES Arctic Section: Characterization, Sampling and Analysis of the Sea Ice Environment in the Arctic Ocean. \$609,060 (Co-PI: R. Rember (IARC)).
- A. Aguilar-Islas (Co-principal Investigator), 06/01/13-05/31/16, Bureau of Ocean Energy Management (BOEM) through Alaska Coastal Marine Institute, *Distribution and abundance of select trace metals in Chukchi and Beaufort sea ice.* \$262,073 (non-federal match of \$60,990 from IARC, and of \$201,083 from SFOS) (PI: R. Rember (IARC)).
- A. Aguilar-Islas (Principal Investigator, IARC component), 04/01/13-03/31/14, Japan Agency for Marine-Earth Science and Technology (JAMSTEC), *JICS: Theme 5: Biogeochemical Observational Studies in the Arctic Ocean.* \$20,600. (Co-principal Investigators: I. Semiletov (IARC), N. Shigeto and T. Kikuchi (JAMSTEC)).
- A. Aguilar-Islas (Principal Investigator, UAF component), 12/01/12-11/30/15, US National Science Foundation, *Collaborative Research: GEOTRACES Pacific section: Collection and analysis of atmospheric deposition.* \$299,042. (Co-principal Investigators: W. Landing (FSU), C. Buck (FSU))
- A. Aguilar-Islas (Principal Investigator, IARC component), 04/01/12-03/31/13, Japan Agency for Marine-Earth Science and Technology (JAMSTEC), *JICS: Theme 5: Biogeochemical Observational Studies in the Arctic Ocean.* \$31,544. (Co-principal Investigators: I. Semiletov (IARC), N. Shigeto and T. Kikuchi (JAMSTEC)).
- A. Aguilar-Islas (Principal Investigator), 06/01/11-01/31/15, North Pacific Research Board, *Iron size classes in the Gulf of Alaska: Effects on productivity and community structure.* \$499,917.
- A. Aguilar-Islas (Principal Investigator), 07/01/11-06/30/12, US National Science Foundation, RAPID: Continuation of US GEOTRACES North Atlantic Section: The fractional solubility of aerosol iron in seawater. \$15,046.
- A. Aguilar-Islas (Principal Investigator, IARC component), 04/01/11-03/31/12, Japan Agency for Marine-Earth Science and Technology, *JICS: Theme 5: Biogeochemical Observational Studies in the Arctic Ocean.* \$28,478, (Co-principal Investigators: I. Semiletov (IARC), N. Shigeto and T. Kikuchi (JAMSTEC)).
- A. Aguilar-Islas (Principal Investigator), 09/15/09-08/31/12, US National Science Foundation, US GEOTRACES North Atlantic Section: The fractional solubility of aerosol iron in seawater. \$115,305.
- A. Aguilar-Islas (Principal Investigator), 2009, Alaska EPSCoR Early Career Fellowship, Riverine input of trace metals into the Arctic Ocean: Possible effects of increased river discharge on the coastal ecosystem \$22,177.

FIVE RECENT PEER-REVIEWED PUBLICATIONS

- **Kandel, A.,** and **Aguilar-Islas, A.,** 2021. Spatial and temporal variability of dissolved aluminum and manganese in surface waters of the northern Gulf of Alaska. *Deep Sea Research Part II: Topical Studies in Oceanography,* 189–190, doi: 10.1016/j.dsr2.2021.104952.
- Jensen, L.T., Lanning, N.T., Marsay, C.M., Buck, C., **Aguilar-Islas, A.M.,** Rember, R., Landing, W.M., Sherrell, R.M., Fitzsimmons, J.N., 2021 Biogeochemical Cycling of Colloidal Trace Metals in the Arctic Cryosphere. *Journal of Geophysical Research: Oceans*, 126-8, doi: 10.1029/2021JC017394
- **Bolt, C., Aguilar-Islas, A.**, and Rember. R., 2020. Particulate trace metals in Arctic snow, sea ice, and underlying surface waters during the 2015 US Western Arctic GEOTRACES Cruise GN01. *ACS Earth and Space Chemistry*. doi:10.1021/acsearthspacechem.0c0020
- Conway, T.M., Hamilton, D.S., Shelley, R.U., **Aguilar-Islas, A.M.,** Landing, W.M., Mahowald, N.M., John, S.G., 2019. Tracing and constraining anthropogenic aerosol iron fluxes to the North Atlantic Ocean using iron isotopes. *Nature Communications*, 10, doi: 10.1038/s41467-019-10457-w.
- Buck, C.S., **Aguilar-Islas, A.,** Marsay, C., Kadko, D., Landing, W.M., 2019. Trace element concentrations, elemental ratios, and enrichment factors observed in aerosol samples collected during the US GEOTRACES eastern Pacific Ocean transect (GP16). *Chemical Geology*, 511, doi: 10.1016/j.chemgeo.2019.01.002.

FIELD EXPERIENCE

July 2021	R/V Sikuliaq; Gulf of Alaska; sample collection and processing for trace metals and nutrients
May 2021	R/V Sikuliaq; Gulf of Alaska; sample collection and processing for trace metals and nutrients
July 2020	R/V Sikuliaq; Gulf of Alaska; sample collection and processing for trace metals and nutrients
May 2020	R/V Sikuliaq; Gulf of Alaska; sample collection for nutrients, gases, biological parameters
June/July 2019	R/V Sikuliaq; Gulf of Alaska; sample collection for trace metals and nutrients
April 2019	Utqiagvik, Alaska; sea ice sample collection and processing for trace metals and nutrients
April/May 2019	M/V Tiglax; Gulf of Alaska; sample collection for trace metals and nutrients
September 2018	M/V Tiglax; Gulf of Alaska; sample collection for trace metals and nutrients
July 2018	M/V Wolstad; Gulf of Alaska; sample collection for trace metals and nutrients
April/May 2018	R/V Sikuliaq; Gulf of Alaska; sample collection for trace metals and nutrients
September 2017	M/V. Tiglax; Gulf of Alaska; sample collection for trace metals and nutrients
Aug-Oct 2015	USCGC Healy; Arctic Ocean; collection of trace-metal-clean sea ice, snow and seawater samples
May 2015	Oliktok, Alaska; collection of trace-metal-clean sea ice, snow, and seawater samples
October 2014	R/V Point Sur; California Coast; NSF Chief Scientist training cruise; Co-Chief Scientist
Aug-Oct 2013	R/V Mirai, Arctic Ocean; collection of trace-metal-clean seawater and snow samples
April-May 2013	M/V Tiglax, Gulf of Alaska; collection of trace-metal-clean seawater samples
April 2013	NOAA Ship <i>Oscar Dyson</i> , North Pacific; collection of trace metal-clean seawater samples
Nov-Dec 2011	R/V Knorr, North Atlantic; aerosol collection and leaching
September 2011	M/V Tiglax, Gulf of Alaska; collection of trace-metal-clean seawater samples
April-May 2011	R/V Thomas G. Thompson; Gulf of Alaska; trace-metal-clean collection and filtration of seawater
Oct-Nov 2010	R/V Knorr, North Atlantic; aerosol collection and leaching
May 2010	R/V Point Sur, California Coast; on-board dissolved Mn analysis
Nov-Dec 2009	Granite Harbour, Antarctica; trace-metal-clean collection of sea ice, seawater and snow
July 2009	Prudhoe Bay, Alaska; trace-metal-clean collection of river water and snow samples
May 2009	Prudhoe Bay, Alaska; trace-metal-clean collection of river water and snow samples
March 2009	Barrow, Alaska; trace-metal-clean collection of sea ice and snow
August 2008	Copper River, Alaska; trace-metal-clean collection and filtration of river/glacier melt water samples
July 2008	USCG Healy; Bering Sea; trace-metal-clean collection and filtration of seawater samples
June 2008	R/V Knorr; North Atlantic; on-board dissolved Fe analysis
March/April 2008	USCG Healy; Bering Sea; trace-metal-clean collection and filtration of seawater samples
September 2007	R/V Thomas G. Thompson; Gulf of Alaska; aerosol collection and leaching
April-May 2007	USCG Healy; Bering Sea; trace-metal clean collection and filtration of seawater samples
Nov-Dec 2006	R/V Nathaniel B. Palmer; Ross Sea; on-board dissolved Mn analysis
May-June 2006	R/V Wecoma; Columbia River plume; on-board dissolved Mn analysis
Dec 2005/Jan 2006	R/V Nathaniel B. Palmer; Ross Sea; on-board dissolved Mn analysis
August 2005	R/V Wecoma; Columbia River plume; on-board dissolved Mn analysis
May-June 2005	R/V Wecoma; Columbia River plume; on-board dissolved Mn analysis
Oct-Nov 2005	R/V Melville; North Pacific Gyre; on-board total dissolved Fe analysis
July 2004	R/V Wecoma; Columbia River plume; on-board dissolved Mn analysis
June-July 2004	R/V Point Sur; CA, OR, WA Coasts; on-board dissolved Mn analysis
Aug-Sep 2003	R/V Kilo Moana; Bering Sea; on-board dissolved Mn analysis
Feb 2003	R/V Point Sur; California Coast, on-board dissolved Mn analysis

PROFESIONAL SERVICE

Member	LTER Network Committee on Diversity, Equity and Inclusion (2020-present)
--------	--

International GEOTRACES Intercalibration Committee (2018-present)

Arctic Icebreaker Coordinating Committee (2015-present)
US GEOTRACES Science Steering Committee (2014-present)

Chair NGA LTER Diversity, Equity and Inclusion Committee (2020-present)

Reviewer Atmospheric Chemistry and Physics, Continental Shelf Research, Deep Sea Research, Environmental

Chemistry, Frontiers in Chemistry, Geochimica et Cosmochimica Acta, Geophysical Research Letters,

Journal of Environmental Quality, Journal of Geophysical Research – Oceans, Journal of

Oceanography, Limnology and Oceanography Methods, Marine Chemistry, The Oceanography Society

U.S. National Science Foundation; Australia Antarctic Science Program; Sea Grant California;

French National Research Agency (ANR)

Panelist U.S. National Science Foundation (Chemical Oceanography)

Session Chair ASLO Aquatic Sciences and Ocean Sciences meetings

Examiner PhD Thesis outside examiner (Curtin University, Australia; University of British Columbia, Canada;

University of Tasmania, Australia)

DEPARTMENTAL AND UNIVERSITY SERVICE

2021 – present 2021 – present 2020 – present	UAF Vice-Chancellor for Research Search Committee (member) UAF Faculty Senate (alternate); UAF limited Submission Review Committee (member)
2019 – present	CFOS Undergraduate Programs Working Group (member)
2019 – present	CFOS B.S. F&MS Committee (member)
2019 – present	UAF URSA Advisory Board (member)
2018 - 2019	UAF Program Review Faculty Committee (member)
2018 - 2019	CFOS Academic Task Force (member)
2017 - 2018	UAF Provost Search Committee (member)
2016 – present	CFOS Ship Committee (member)
2016 –2018	UAF Faculty Senate (member)
2016 - 2018	UAF Curricular Affairs Committee (member)
2014 - 2016	SFOS Curriculum Review Committee (Chair)
2014 - 2016	SFOS Academic Working Group (member)
2014 - 2015	UAF Faculty Senate (alternate)
2012 - 2016	SFOS Minor in Marine Science Coordinator
2012 - 2014	SFOS Curriculum Review Committee (member)
2012, 2013	UAF Graduate School: Ph.D. Oral Comprehensive Exam Outside Examiner
2013 - 2015	SFOS Faculty Search Committee (member) – Chemical Oceanography Faculty Hire
2012 - 2016	SFOS R/V Sikuliaq Ship Committee (member)
2011 – present	SFOS Comprehensive Exam Committee (member – Chemical Oceanography)
2010 - 2011	SFOS Search Committee (member) – Oceanography Faculty Hire

FELLOWSHIPS, SCHOLARSHIPS, HONORS

2015	Excellence in Teaching Award
	(UAF's Graduate Program in Marine Science and Limnology and Institute of Marine Science)
2010	UAF Faculty Development Travel award (ASLO Aquatic Sciences Meeting. San Juan, Puerto Rico)
2010	NSF's OPP Travel Grant (SCAR Open Science Conference. Buenos Aires, Argentina)
2009	S.T. Lee Young Researcher Travel Award to the Antarctic Research Center, New Zealand
2006	Ida Benson Lynn Graduate Fellow in Ocean Health
2003-2006	NSF Graduate Research Fellowship

PROFESIONAL MEMBERSHIPS

2008-present The Oceanography Society2004-present American Geophysical Union

2003-present American Society of Limnology and Oceanography