Gifford J Wong, Ph.D.

Washington, DC, United States

POLICY AND DIPLOMACY (EMPLOYMENT)

IDA Science & Technology Policy Institute (Research Staff Member) MAY 2019 - PRESENT

• Support the White House Office of Science and Technology Policy (OSTP) and its broad mandate to advise the President on science and technology affairs.

U.S. Department of State (Foreign Affairs Officer)

JANUARY 2017 - JANUARY 2019

• Served as Environment, Science, Technology, and Health Officer in the Office of Chinese and Mongolian Affairs ("China Desk") within the Bureau of East Asian and Pacific Affairs. Facilitated both interagency and bilateral communication on science and environmental issues including oceans and fisheries, global health security, polar affairs, science and technology cooperation, energy, and climate change.

Office of Senator Sheldon Whitehouse (AAAS/AGI Science Fellow) OCTOBER 2015 - DECEMBER 2016

• Prepared the Senator's weekly floor remarks on climate change, wrote memos in preparation for stakeholder meetings and Environment and Public Works Committee hearings, and authored legislation while serving as the Senator's energy and climate Congressional Science Fellow.

NARRATIVE OF RESEARCH EXPERIENCE

I first became interested in the nexus of science and policy while flying in a helicopter with the U.S. Antarctic Program (USAP) in 2008. I was responsible for the safety of Congressional staffers taking a six-hour tour of the Dry Valleys of Antarctica, and the deft manner by which the accompanying National Science Foundation (NSF) representative connected Polar research projects with pressing policy concerns inspired me to develop my own science-policy expertise.

I studied as a glaciologist working on Polar environmental change at Dartmouth College, where I also engaged in public outreach, participated in interdisciplinary climate research, and refined my science communication skills. My research looked at atmospheric factors that influence how much snow or rain falls in northwest Greenland, a region where the ice sheet is losing ice quickly and contributing substantially to rising global sea levels. As an NSF Integrative Graduate Education and Research Traineeship (IGERT) Fellow, I examined the necessary and evolving relationships among indigenous stakeholders, Greenlandic policymakers, and STEM advisors as they confront the impacts of climate change and human activities in the Arctic (e.g., mineral exploration, community adaptation, infrastructure development).

EDUCATION

Dartmouth College (*Ph.D. in Earth Sciences*)

• Thesis: Environmental and Climatic Controls on Glaciochemistry of Near-Surface Snow in Greenland

University of Tasmania, Hobart (Honours in Antarctic Studies)

• Thesis: Investigating the Dominant Source of Sea Salt to Antarctica: The Sea Salt Signal in Ice Core GD17

University of California, Berkeley (Bachelor of Arts in Asian American Studies)

TEACHING AND LEADERSHIP

University of Southern California (Adjunct Associate Professor)

JANUARY 2020 – PRESENT

• Develop and teach Spring 2020 course titled "Environmental, Energy, and National Security" within the USC Dana and David Dornsife Washington, DC, Program

Dartmouth College (Graduate Fellow and Instructor)

SEPTEMBER 2009 - AUGUST 2015

- NSF GK-12 Fellow: Partner teacher in 7th-grade science class at Newport Middle School (NH) [2014-2015]
- Developed and Instructed a 10-week graduate student science communication course [2013 & 2014]
- Polar Environmental Change IGERT Fellow: Examined climate change in Greenland and discussed climate change effects on Greenland economy and society with Greenlandic stakeholders [2009-2011]

Acting Chief Scientist: West Antarctic Ice Sheet Divide Camp [November 2010-February 2011], Greenland Inland Traverse [April-June 2012]

SELECT PUBLICATIONS, PROFESSIONAL MEMBERSHIPS, AND HONORS

- Colvin, T.J., I. Liu, T.F. Babou, and G.J. Wong. February 2020. A Brief Examination of Chinese Government Expenditures on Artificial Intelligence R&D. https://www.ida.org/research-and-publications/publications/all/a/ab/a-brief-examination-of-chinese-government-expenditures-on-artificial-intelligence-r-and-d
- Moon, T.A., I. Overeem, M. Druckenmiller, M. Holland, H. Huntington, G. Kling, A.L. Lovecraft, G. Miller, T. Scambos, C. Schädel, E.A.G. Schuur, E. Trochim, F. Wiese, D. Williams, G.J. Wong. 2019. The expanding footprint of rapid Arctic change. *Earth's Future* 7(3), https://doi.org/10.1029/2018EF001088
- Wong, G.J. March 2017. A Half-Ton Fish-Eating Machine with Teeth. *The Story Collider* (podcast). https://www.storycollider.org/stories/2017/8/11/zoology-stories-about-wild-animals
- Wong, G.J., E.C. Osterberg, R.L. Hawley, Z.R. Courville, D. Ferris, and J. Howley. 2015. Coast to interior gradient in recent precipitation trends in northwest Greenland instrumental period (1952-2012). *Environmental Research Letters* **10**(11), 114008, doi.org/10.1088/1748-9326/10/11/114008.
- **Wong, G.J.**, R.L. Hawley, E.R. Lutz, and E.C. Osterberg. 2013. Trace element and physical response to melt percolation in Summit, Greenland snow. *Annals of Glaciology* **54**(63), 52-62. doi:10.3189/2013AoG63A602.

Professional Memberships: American Geophysical Union (2009-present), International Glaciological Society (2012-present), American Meteorological Society (2014-present), Geological Society of America (2015-present), NH Science Teachers Association (2014-2016)

Honors: Superior Honor Award, U.S. Department of State (2018); Investiture Speaker, Dartmouth College Graduate Commencement (2016); Gary Malone Award, exemplary Dartmouth Geologist (2015); GW Paltridge Award, highest thesis mark in Antarctic Studies (2007); Golden Shovel Award, USAP (2001)