## PAUL ARTHUR BERKMAN

Science diplomat, polar explorer and global thought leader applying international, transdisciplinary, and inclusive processes with informed decisionmaking to balance national interests and common interests for the benefit of all on Earth across generations.

## EDUCATIONAL BACKGROUND

1988 (Biological Oceanography) - Graduate School of Oceanography, University of Rhode Island.

Ph.D.

M.S.	1986	(Biological Oceanography) - Graduate School of Oceanography, University of Rhode Island.
B.A.	1980	(Aquatic Biology) - Department of Biology, University of California, Santa Barbara.
		Awards and Honours
2024-Present		Visiting Distinguished Professor, <u>International Institute of Science Diplomacy and Sustainability</u> . UCSI University, Kuala Lumpur, Malaysia.
2023-Present		Fellow of the International Science Council (ISC) (France).
2023		Guiness World Record (" <u>DEEPEST DIVE THROUGH AN ICE HOLE</u> ") achieved in 1981 (16 meters) through the McMurdo Ice Shelf at White Island, Antarctica [application submitted in 2022 and awarded currently].
2021-2022		Fulbright Arctic Chair 2021-2022: United States Department of State, United States Congress and Norwegian Ministry of Foreign Affairs, Tromsø (Norway).
2017		Vernadsky Medal: Russian Academy of Natural Sciences (Russian Federation).
2014-2015		Science Diplomacy Fellow: Fletcher School of International Law and Diplomacy. Tufts University (United States).
2011		Elected Member: Norwegian Scientific Academy for Polar Research (Norway).
2007-2008		Fulbright Distinguished Scholar: US-UK Fulbright Commission, University of Cambridge, Scott Polar Research Institute (United Kingdom).
2002		National Aeronautics and Space Administration Faculty Fellowship: California Institute of Technology, Jet Propulsion Laboratory (United States).
2001-2002		Erskine Faculty Fellowship: Gateway Antarctica, University of Canterbury (New Zealand).
2001-2003		Mershon Faculty Fellowship: Mershon Center for International Security and Public Policy, Ohio State University (United States).
1996		Faculty Innovator Award: Technology Enhanced Learning and Research Program, Ohio State University

for the Promotion of Science, National Institute of Polar Research (Japan).

JSPS Visiting Scientist Fellowship: Japanese Ministry of Science, Education and Culture; Japan Society

(United States).

1996

1992-1994	JSPS Postdoctoral Fellowship: Japanese Ministry of Science, Education and Culture; Japan Society for the Promotion of Science, National Institute of Polar Research (Japan).
1991	Outstanding Faculty Award: Sphinx and Mortar Board Honor Societies, The Ohio State University (United States).
1989-1990	Byrd Fellow: Byrd Polar Research Center, The Ohio State University (United States).
1983-1988	NSF Graduate Fellow: National Science Foundation (United States).
1980-1981	Antarctic Service Medal (Winter-Over): United States Congress, (United States).
1972	Eagle Scout: Boy Scouts of America (United States).

1980-1981	Antarctic Service Medal (Winter-Over): United States Congress, (United States).			
1972	Eagle Scout: Boy Scouts of America (United States).			
Experience				
2024-Present	Board Member, Fulbright Association, Massachusetts Chapter.			
2023-Present	International Advisory Council Member, International Institute of Science Diplomacy and Sustainability (IISDS), UCSI University, Kuala Lumpur. [see 2023 television panel interview]. (Malaysia).			
2023-2024	Member, Working Group 4 (Capacity Building), European Commission Working Group initiative on science diplomacy (Europe).			
2023-2024	Mentor, <u>Science Advice Skills Development Program (SASDP)</u> with the <u>International Network for Government Science Advice (INGSA) – Africa</u> . (mentee, Dr. Devina Lobine, from Mauritius).			
2023	Member, United Nations Environment Programme (UNEP) Advisory Committee for the Science Diplomacy for the Environment Program (global).			
2022-Present	Coordinator, GLOBAL INDIGENOUS YOUTH SUMMIT ON CLIMATE CHANGE (GYSCC) August 9th, circling the Earth with the Sun across three 8-hour time zones in 24 hours (00:00-24:00 GMT) as a "virtual dialogue by, for and among Indigenous youth with global inclusion" on the INTERNATIONAL DAY OF THE WORLD'S INDIGENOUS PEOPLES. GIYSCC-2023 was hosted by the United Nations Institute for Training and Research (UNITAR) with YouTube archival, involving 1300+ registrants from 112+ nations across 88+ languages with partners globally. GIYSCC 2024 was hosted by Future Earth., involving 800+ registrants from 100+ nations across 230+ languages.			
2022-2023	Mentor, Science Advice Skills Development Program (SASDP), International Network for Government Science Advice (INGSA) – Africa. (mentee, Dr. Temitope Sogbanmu, from Nigeria).			
2022-Present	Founder, Science Diplomacy Center, Inc. (SDCI), incorporated in Massachusetts as a 501(c)(3) nonprofit in the United States.			
2022-2024	Invited Expert, Panel on International Science and Technology Partnership Opportunities. Council of Canadian Academies. Ottawa (Canada).			
2021-Present	<i>Institutional Lead</i> , United Nations Institute for Training and Research (UNITAR) as a member of the European Science Diplomacy Alliance. (Europe).			
2021-2022	Director (from Massachusetts), <u>Science Diplomacy Center at MGIMO University</u> (Moscow State Institute of International Relations Moscow). Moscow, (Russian Federation).			

2021-Present Member, ICES/PICES/PAME Working Group on Integrated Ecosystem Assessment (IEA) for the Central Arctic Ocean (WGICA). Copenhagen (Denmark).

2021-Present *Editorial Advisory Board Member*, <u>Science Diplomacy Review</u>, Research and Information System for Developing Countries (India).

2021	Advisory Board Member. <u>Towards an International Architecture for Managing Global Threats.</u> Royal United Services Institute, London (United Kingdom).
2020-Present	Founder, Science Diplomacy Center™ at EvREsearch LTD (United States).
2020-2024	Associated Fellow, United Nations Institute for Training and Research (UNITAR), Geneva (Switzerland).
2020-Present	Editorial Board Member, Sustainability. MDPI Publishing, Basel (Switzerland).
2020-2021	Working Group Member (WG 6 – Data), <u>Arctic Ocean Decade Initiative</u> , Danish Centre for Marine Research, United Nations Decade on Ocean Science and Sustainable Development (UNDOS), Copenhagen (Denmark).
2020	Advisory Board Member. Emerging Trade Routes between Europe and Asia. International Institute for Applied Systems Analysis. Laxenburg, (Austria).
2019-Present	Assistant Director of Science Diplomacy, MIT-Harvard Public Disputes Program. Cambridge (United States).
2019-Present	Faculty Associate, <u>Harvard Law School, Program on Negotiation</u> , Harvard University, Cambridge (United States).
2019-2022	Member: International Expert Council, MGIMO University, Moscow (Russian Federation).
2019-2021	Member: External Advisory Board: Canadian Foreign Service Institute, Global Affairs, Ottawa (Canada).
2018-Present	Senior Editor with Oran R. Young and Alexander N. Vylegzhanin as co-editors for the Springer books series on <a href="INFORMED DECISIONMAKING FOR SUSTAINABILITY">INFORMED DECISIONMAKING FOR SUSTAINABILITY</a> .
2018-2021	Member, Advisory Board: Science Policy in Diplomacy and External Relations (SPIDER) Network with the Foreign Ministry Science and Technology Advice Network (FMSTAN) and International Network on Government Science Advice (INGSA) through the International Science Council (ISC).
2017-Present	<i>Editor-in-Chief,</i> Science Diplomacy Action. Serial Publication of the Science Diplomacy Center (ISSN-Online 2573-976X and ISSN-Print 2573-9751).
2017-2020	Founding Director, Science Diplomacy Center. Fletcher School of Law and Diplomacy, Tufts University. Medford (United States).
2017-2020	<i>Member</i> , Science Advisory Board, Arctic Data Center. National Center for Ecological Analysis and Synthesis. University of California, Santa Barbara (United States).
2017-Present	<i>Editorial Board Member</i> , <u>Moscow Journal of International Law</u> . MGIMO University, Moscow (Russian Federation).
2016-2018	Director: US-Russian Relations Project. Fletcher School of Law and Diplomacy, Boston and MGIMO University, Moscow. Carnegie Corporation of New York. (United States and Russian Federation).
2016-Present	Member, Data Policy Committee, Committee on Data (CODATA), International Science Council (France).
2016-2017	Director: Arctic Futures Initiative. International Institute for Applied Systems Analysis, Laxenburg (Austria).
2015-2022	Coordinator and Principal Investigator: Pan-Arctic Options: Holistic Integration for Arctic Coastal-Marine Sustainability. Project funded through the Belmont Forum consortium of national science agencies in Canada, China, France, Norway and Russian Federation with the National Science Foundation (United States).
2015-2020	Professor of Practice in Science Diplomacy, Fletcher School of Law and Diplomacy, Tufts University, Medford (United States).

2014	Visiting Distinguished Professor: Arctic Science Diplomacy. MGIMO University, Moscow (Russian Federation).
2014	Global Luminary: National Geographic Explorer, Lindblad Expeditions (Southern Ocean).
2013-2019	Coordinator and Principal Investigator: Arctic Options: Holistic Integration for Arctic Coastal-Marine Sustainability. Project funded by the National Science Foundation (United States) and Centre Nationale de la Recherche Scientifique (France).
2012	Global Luminary: National Geographic Explorer, Lindblad Expeditions (Arctic Ocean).
2012	Invited Reviewer: MISTRA Futures Programme. Stockholm (Sweden).
2012-2017	Chief Executive Officer and Chairman: Digital Integration Technology Limited (United Kingdom).
2011-2015	Chercheur Senior: Université Pierre et Marie Curie, Sorbonnes Universités, Paris (France).
2011-2016	<i>Principal Investigator:</i> Arctic Climate Change, Economy and Society (ACCESS). Project funded by the European Commission from 2011-15 (United Kingdom).
2011-2012	Expert, European Space Agency, Paris (France).
2011-2016	Visiting Professor: Science Diplomacy in the Polar Regions. Royal College of Defense Studies, London (United Kingdom).
2010-2022	Board Member (Chair since 2012): Foundation for the Good Governance of International Spaces (United Kingdom) as a legacy of the 2009 Antarctic Treaty Summit.
2010	Invited Programme Reviewer: MISTRA Futures Programme. Stockholm (Sweden).
2010	Consultant, Ministry of Justice (United Kingdom).
2009-2011	Co-Director and Convener: NATO Advanced Research Workshop on Environmental Security in the Arctic Ocean. 13-15 October 2010, University of Cambridge (United Kingdom). Head, Arctic Ocean Geopolitics Programme, Scott Polar Research Institute and Judge Business School, University of Cambridge (United Kingdom).
2008-2009	Member, Working Group on Environmental Policy, Arctic TRANSFORM Project, European Commission. (Germany).
2006-2009	Convener and Chair of the International Board: <u>Antarctic Treaty Summit: Science-Policy Interactions in International Governance</u> . 30 November – 3 December 2009. Celebrating the 50 <sup>th</sup> Anniversary of the 1 December 1959 signing of the <i>Antarctic Treaty</i> in Washington, DC. (Smithsonian Institution, Washington, D.C. (United States).
2005-2015	Research Professor: Bren School of Environmental Science and Policy, University of California, Santa Barbara (United States).
2005-2008	Chair: Working Group on Knowledge Management and Discovery. Electronic Geophysical Year (United States).
2004-2007	Chair: Sustainability Standing Committee for the National Science Foundation, National Science Digital Library (NSDL) program (United States).
2004	Host Lecturer: Travel Dynamics cruise to Antarctica on the 'Orion' (Southern Ocean).
2003-2005	Associate Research Professor: Bren School of Environmental Science and Policy, University of California, Santa Barbara (United States).
2003-2007	Chief Scientist: The New Media Studio, Santa Barbara (United States).

2002-2006	United States Team Member: International Preservation of Authentic Electronic Records (InterPARES 2) Project (United States).
2001-2002	Visiting Professor and Antarctic Expedition Co-Leader. Graduate Certificate in Antarctic Studies Programme. Gateway Antarctica, University of Canterbury (New Zealand).
1999-Present	Chief Executive Officer (Founder and Owner), EvREsearch LTD (United States).
1999-2002	Chair: Project CLEAR (Community Leadership to Effect Air Emission Reductions): City of Columbus, Ohio (United States).
1998-2003	Research Scientist: Byrd Polar Research Center, The Ohio State University (United States).
1998-2003	Member: Diving Control Board, The Ohio State University (United States).
1998-1999	International Expedition Leader: Terra Nova Bay, Antarctica. National Science Foundation and Italian
1997-2000	Antarctic Research Program (Antarctica).  Member, Steering Committee: Antarctic Ice Margin Evolution (ANTIME) Program, Scientific Committee on Antarctic Research (SCAR) / International Geosphere-Biosphere Program (PAGES), (United States).
1996	Senior Science Fellow: Japan Society for the Promotion of Science, Tokyo (Japan).
1994-2004	Member, Steering Committee: West Antarctic Ice Sheet (WAIS) Program, National Science Foundation and National Aeronautics and Space Administration (United States).
1994-1998	Senior Research Associate: Byrd Polar Research Center, The Ohio State University (United States).
1994-1996	Member, Science Advisory Group: Consortium for International Earth Science Information Network (CIESIN) (United States).
1994-1995	International Expedition Leader: Victoria Land Coast Expedition, National Science Foundation and Italian Antarctic Research Program (Antarctica).
1993-1994	Postdoctoral Fellow: Japan Society for the Promotion of Science, Tokyo (Japan).
1992-1997	Member, Board of Directors: Friends of Stone Laboratory, Ohio State University Alumni Fund (United States).
1991-2003	Adjunct Professorships: Department of Ecology, Evolution and Organismal Biology; Environmental Science Graduate Program; School of Natural Resources; The Ohio State University (United States).
1990-1994	Research Associate: Byrd Polar Research Center, The Ohio State University (United States).
1989-1990	Byrd Fellow: Byrd Polar Research Center, The Ohio State University (United States).
1987	Lecturer: Graduate School of Oceanography, University of Rhode Island (United States).
1986-1987	Visiting Scientist, Scripps Institution of Oceanography (Antarctica).
1983-1984	Graduate Research Assistant: Graduate School of Oceanography, University of Rhode Island (United States).
1983	Consultant: Antarctica Project, Washington, D.C. (United States).
1982	Visiting Professor: Council on Educational Development, University of California Los Angeles (United States) – "Antarctic Marine Ecology and Ocean Policy".
1982	Legal Assistant: Knossaman, Krueger and Marsh, Los Angeles (United States).
1981-1982	Staff Research Associate: Scripps Institution of Oceanography (winter-over SCUBA research in McMurdo Sound, Antarctica).

1980 Lecturer: College of Creative Studies, University of California, Santa Barbara (United States).

1978-1980 Research Assistant: Marine Science Institute, University of California, Santa Barbara.

# AUTHOR OF JOINT RESOLUTION ADOPTED WITH UNANIMOUS CONSENT BY THE UNITED STATES CONGRESS

Prof. Paul Arthur Berkman wrote the Concurrent Resolution (*Recognizing the 50<sup>th</sup> Anniversary of the Signing of the Antarctic Treaty*) sponsored by Congressman Patrick Tiberi of Ohio with 33 co-sponsors in the United States House of Representatives. This Concurrent Resolution was adopted with unanimous consent in both chambers of the United States Congress during the 1<sup>st</sup> Session of the 111<sup>th</sup> Congress: United States House of Representatives on 30 September 2009 (*House Concurrent Resolution 51*) and United States Senate with sponsorship of Senator Barbara Boxer of California on 1 December 2009 (*Senate Resolution 365*). Bipartisan support in the *Congressional Record* on 30 September 2009 with sponsor comments from Congressman Patrick Tiberi on 8 October 2009.

## **BOOK SERIES**

Berkman, P.A., Vylegzhanin, A.N. and Young, O.R. (series editors). <a href="Introduce-books series">INFORMED DECISIONMAKING FOR SUSTAINABILITY</a>. Springer, The Netherlands [contract to produce book series with Volumes 2-3 involving the Memorandum of Understanding between the Science Diplomacy Center™ and Arctic Frontiers (Tromsø, Norway)].

#### **B**ooks

- Berkman, P.A., Young, O.R., Vylegzhanin, A.N., Balton, D.A. and Øvretveit, O. (eds.). <u>Building Common Interests in the Arctic Ocean with Global Inclusion. Volume 2. Informed Decisionmaking for Sustainability.</u> Springer, Dordrecht. 454p.
- Vyleghzhanin, A.N., Berkman, P.A., Zhuravleva, I.P. and Soloveva, A.V. COOPERATION AND COMPETITION OF THE STATES IN THE ARCTIC: POTENTIAL OF INTERNATIONAL LAW AND SCIENCE DIPLOMACY. MGIMO University, Moscow. 235p. (in Russian).
- Young, O.R., Berkman, P.A. and Vylegzhanin. (eds.). <u>Governing Arctic Seas: Regional Lessons From THE Bering Strait and Barents Sea. Volume 1. Informed Decisionmaking for Sustainability</u>. Springer, Dordrecht. 358p.
- 2019 Berkman, P.A., Vylegzhanin, A.N and Young, O.R. BASELINE OF RUSSIAN ARCTIC LAWS. Springer, Dordrecht. 734p.
- Berkman, P., Vylegzhanin, A. Young, O., Dudinkina, I. and Norkina, E. Political and Legal Junction of the Arctic and Pacific Oceans. Interdisciplinary Research of the Status of the Bering Strait Region. Books of the Institute of International Research. Volume 32. Vylegzhanin, A. (ed). MGIMO University Press, Moscow. 126 p. (In Russian).
- 2013 Berkman, P.A. and Vylegzhanin, A.N. (eds.). **ENVIRONMENTAL SECURITY IN THE ARCTIC OCEAN**. NATO Science for Peace and Security Series. Springer, Dordrecht. 459p. **[79,000+ downloads]**
- 2012 Berkman, P.A. **Environmental Security in the Arctic Ocean: Promoting Cooperation and Preventing Conflict.** Korean Translation Korean Polar Research Institute, Ansan (with permission from Routldege, London). 136p.
- Berkman, P.A., Lang, M.A., Walton, D.W.H. and Young, O.R. (eds.). SCIENCE DIPLOMACY: ANTARCTICA, SCIENCE AND THE GOVERNANCE OF INTERNATIONAL SPACES. (With Foreword by HSH Prince Albert II of Monaco). Smithsonian Institution Scholarly Press, Washington, DC. 337p.

- 2010 Berkman, P.A. ENVIRONMENTAL SECURITY IN THE ARCTIC OCEAN: PROMOTING COOPERATION AND PREVENTING CONFLICT. (With Foreword by Adm. James G. Stavridis, NATO Supreme Allied Commander for Europe). Routledge, London. 135p.
- 2002 Berkman, P.A. SCIENCE INTO POLICY: GLOBAL LESSONS FROM ANTARCTICA. Academic Press, San Diego. 252p.
- Berkman, P.A. and Yoshida, Y. (eds.). HOLOCENE ENVIRONMENTAL CHANGES IN ANTARCTIC COASTAL AREAS.

  MEMOIRS OF THE NATIONAL INSTITUTE OF POLAR RESEARCH (JAPAN), SPECIAL ISSUE. No. 50. National Institute of Polar Research, Tokyo. 107p.

## SCIENCE DIPLOMACY ACTION

(ISSN Online and Print versions – Editor-in-Chief: Prof. Paul Arthur Berkman)

- Arctic Circle Japan Forum Panel. <u>Arctic Science and Technology Advice with Ministries</u>. **Science Diplomacy Action** 7:1-25. [involving the Sasakawa Peace Foundation]. (<a href="https://doi.org/10.47555/172023">https://doi.org/10.47555/172023</a>).
- Webinar Series Team. <u>Enhancing International Scientific Cooperation: Arctic Science and Technology Advice with Ministries</u>. **Science Diplomacy Action** 6:1-82. [please also see <u>UNITAR website</u> for transcripts and recordings of this project that was funded by the Ministry of Foreign Affairs of Japan with]. (<a href="https://doi.org/10.47555/162022">https://doi.org/10.47555/162022</a>).
- 2020 Gota, K.C., Lichte, L. and Berkman. P.A. <u>The Boston Innovation Ecosystem and its Science & Technology Diplomatic Circle (S&TDC)</u>. **Science Diplomacy Action** 5:1-112 [Collaboration with Greek Consulate of Boston and S&TDC of Boston with its 65+ diplomatic missions]. (https://doi.org/10.47555/152020).
- Berkman, P.A. and Vylegzhanin, A.N. <u>Training Skills with Common-Interest Building</u>. **Science Diplomacy Action** 4:1-65. [Student-Ambassador Declarations (2016-2020) from the Joint Video-Conferencing Course on *Science Diplomacy: Environmental Security and Law in the Arctic Ocean* with the Fletcher School of Law and Diplomacy at Tufts University (United States) and International Law Programme at MGIMO University (Russian Federation)]. (https://doi.org/10.47555/142020).
- Arctic Science Agreement Dialogue Panel. <u>Supporting Implementation of the Arctic Science Agreement</u>. Science Diplomacy Action 3:1-58. [involving diplomats from Foreign Ministries of four nations with former Prime Minister of Greenland and heads of international science organizations as co-authors]. (https://doi.org/10.47555/132019).
- Talloires Dialogue Team. <u>Science Diplomacy: To 2030 and Beyond</u>. **Science Diplomacy Action** 2:1-9. [involving diplomats from Foreign Ministries of seventeen nations as co-authors from the 2<sup>nd</sup> International Dialogue on Science and Technology Advice in Foreign Ministries]. (https://doi.org/10.47555/122018).
- Vienna Dialogue Team. <u>A Global Network of Science and Technology Advice in Foreign Ministries</u>. **Science Diplomacy Action** 1:1-20. [involving diplomats from Foreign Ministries of eighteen nations as co-authors from the 1<sup>st</sup> International Dialogue on Science and Technology Advice in Foreign Ministries]. (https://doi.org/10.47555/112017).

## PEER-REVIEWED INTERDISCIPLIANRY PUBLICATIONS

#### Science Diplomacy and Informed Decisionmaking

- Berkman, P.A. Informed Decisionmaking with Science Diplomacy in Our World of Accelerating Technological Development. IN: Lüdert, J. and Waehlisch, M. (eds.). **Science Diplomacy in an Era of Technological Disruption**. Palgrave (invited in preparation).
- Berkman, P.A. Science Diplomacy and the 5<sup>th</sup> International Polar Year (IPY-5). <u>Cambridge Prisms: Coastal Futures</u> (invited by Cambridge University Press in preparation);
- 2024 Berkman, P.A. Cold War Lessons for Arctic Diplomacy. *Nature* 626:954.

- Berkman, P.A. Science Diplomacy with Diplomatic Relations to Facilitate Common-Interest Building. IN: Hare, P.W., Manfredi-Sánchez, J.L. and K. Weisbrode (eds.). <a href="https://doi.org/10.1016/journal.com/">THE PALGRAVE HANDBOOK OF DIPLOMATIC REFORM AND INNOVATION</a>. Palgrave, London. Pp. 673-689.
- 2023 Berkman, P.A., Gabrielyan, V., El-Haddad, R. and Isabel Claramunt Garro, C.I.C. <u>Common-Interest Building</u>

  <u>— Training Game with the UN Sustainable Development Goals</u>. **Science Diplomacy** October-December 2022. 6p.
- Berkman, P.A., Fiske, G.J., Lorenzini, D., Young, O.R., Pletnikoff, K., Grebmeier, J.M., Fernandez, L.M., Divine, L.M., Causey, D., Kapsar, K.E. and Jørgensen, L.L. <u>Satellite Record of Pan-Arctic Maritime Ship Traffic. NOAA Arctic Report Card 2022</u>. **NOAA Technical Report OAR ARC 22-10**:1-8
- 2022 Berkman, P.A., Shibata, A. and Baeseman, J. <u>Arctic Science Diplomacy Maintains Russia Co-Operation</u>. *Nature* 604:625.
- 2022 Stakeholder Alignment Collaborative. When Launching a Collaboration, Keep it Agile. Stanford Social Innovation Review 20(2):40-47.
- Berkman, P.A., Young, O.R., Vylegzhanin, A.N., Balton, D.A. and Øvretveit, O. Chapter 1. Introduction: Building Common Interests with Informed Decisionmaking for Sustainability. IN: Berkman, P.A., Vylegzhanin, A.N., Young, O.R., Balton, D.A. and Øvretveit, O. (eds). Building Common Interests in the Arctic Ocean with Global Inclusion. Volume 2. Informed Decisionmaking for Sustainability. Springer, Dordrecht. Pp. 3-54.
- Berkman, P.A., Fiske, G., Grebmeier, J.M. and Vylegzhanin, A.N. Chapter 24. Maritime Ship Traffic in the Central Arctic Ocean High Seas as a Case Study with Informed Decisionmaking. IN: Berkman, P.A., Vylegzhanin, A.N., Young, O.R., Balton, D.A. and Øvretveit, O. (eds.). Building Common Interests in the Arctic Ocean with Global Inclusion. Volume 2. Informed Decisionmaking for Sustainability. Springer, Dordrecht. Pp. 321-346.
- Berkman, P.A. Chapter 29. Powered by Knowledge. IN: Berkman, P.A., Vylegzhanin, A.N., Young, O.R., Balton, D.A. and Øvretveit, O. (eds). <u>Building Common Interests in the Arctic Ocean with Global Inclusion.</u>

  Volume 2. Informed Decisionmaking for Sustainability. Springer, Dordrecht. Pp. 389-390.
- Berkman, P.A., Young, O.R., Vylegzhanin, A.N., Balton, D.A. and Øvretveit, O. Chapter 35. Conclusions: Building Global Inclusion with Common Interests. IN: Berkman, P.A., Vylegzhanin, A.N., Young, O.R., Balton, D.A. and Øvretveit, O. (eds.). Building Common Interests in the Arctic Ocean with Global Inclusion. Volume 2. Informed Decisionmaking for Sustainability. Springer, Dordrecht. Pp. 409-425.
- 2021 Kontar, Y.Y., Ismail-Zadeh, A., Berkman, P.A., Duda, P.I., Gluckman, P., Kelman, I. and Murray, V. Knowledge exchange through science diplomacy to assist disaster risk reduction. Progress in Disaster Science 11:1-4.
- 2020 Berkman, P.A. Chapter 6. Polar Science Diplomacy. IN: Scott, K.N. and Vander Zwaag, D. (eds). **RESEARCH HANDBOOK ON POLAR LAW**. Edward Elgar, London. pp.105-123.
- 2020 Berkman, P.A. <u>'The Pandemic Lens': Focusing Across Time Scales for Local-Global Sustainability</u>. *Patterns* 1(8):1-4.
- 2020 Berkman, P.A. <u>Science Diplomacy and its Engine of Informed Decisionmaking: Operating Through Our Global Pandemic with Humanity</u>. *The Hague Journal of Diplomacy* 15:435-450.
- Berkman, P.A., Young, O.R. and Vylegzhanin, A.N. <u>Book Series Preface: Informed Decisionmaking for Sustainability</u>. IN: Young, O.R., Berkman, P.A. and Vylegzhanin, A.N. (eds.). **Informed Decisionmaking for Sustainability. Volume 1. Governing Arctic Seas: Regional Lessons from the Bering Strait and Barents Sea.** Springer, Dordrecht. Pp. v-xxv.
- Young, O.R., Berkman, P.A. and Vylegzhanin, A.N. Chapter 1: Introduction. IN: Young, O.R., Berkman, P.A. and Vylegzhanin, A.N. (eds.). **Informed Decisionmaking for Sustainability. Volume 1. Governing Arctic Seas: Regional Lessons from the Bering Strait and Barents Sea.** Springer, Dordrecht. Pp. 3-24.

- Young, O.R., Berkman, P.A. and Vylegzhanin, A.N. Chapter 5: Bering Strait Region Synthesis. IN: Young, O.R., Berkman, P.A. and Vylegzhanin, A.N. (eds.). INFORMED DECISIONMAKING FOR SUSTAINABILITY. VOLUME 1. GOVERNING ARCTIC SEAS: REGIONAL LESSONS FROM THE BERING STRAIT AND BARENTS SEA. Springer, Dordrecht. Pp. 95-116.
- Young, O.R., Berkman, P.A. and Vylegzhanin, A.N. Chapter 9: Barents Sea Region Synthesis. IN: Young, O.R., Berkman, P.A. and Vylegzhanin, A.N. (eds.). INFORMED DECISIONMAKING FOR SUSTAINABILITY. VOLUME
  1. GOVERNING ARCTIC SEAS: REGIONAL LESSONS FROM THE BERING STRAIT AND BARENTS SEA. Springer, Dordrecht. Pp. 185-203.
- Berkman, P.A., Fiske, G. Røyset, J.A., Brigham, L.W. and Lorenzini, D. Chapter 11: Next-Generation Arctic Marine Shipping Assessments. IN: Young, O.R., Berkman, P.A. and Vylegzhanin, A.N. (eds.). INFORMED DECISIONMAKING FOR SUSTAINABILITY. VOLUME 1. GOVERNING ARCTIC SEAS: REGIONAL LESSONS FROM THE BERING STRAIT AND BARENTS SEA. Springer, Dordrecht. Pp. 241-268.
- Pulsifer, P.L., Kontar, Y., Berkman, P.A. and Taylor, D.R.F. Chapter 12: <u>Information Ecology to Map the Arctic Data Landscape</u>. IN: Young, O.R., Berkman, P.A. and Vylegzhanin, A.N. (eds.). **INFORMED DECISIONMAKING FOR SUSTAINABILITY. VOLUME 1. GOVERNING ARCTIC SEAS: REGIONAL LESSONS FROM THE BERING STRAIT AND BARENTS SEA.** Springer. Pp. 269-291.
- Young, O.R., Berkman, P.A. and Vylegzhanin, A.N. Chapter 15: Conclusions. IN: Young, O.R., Berkman, P.A. and Vylegzhanin, A.N. (eds.). **Informed Decisionmaking For Sustainability. Volume 1. Governing Arctic Seas: Regional Lessons from the Bering Strait and Barents Sea.** Springer, Dordrecht. Pp. 341-353.
- 2019 Berkman, P.A. <u>Evolution of Science Diplomacy and its Local-Global Applications</u>. *European Foreign Affairs Review (Special Issue 2019: Broadening Soft Power in EU-US Relations)* 24:63-79.
- 2018 Kontar, Y.Y., Beer, T., Berkman, P.A., Eichelberger, J.C., Ismail-Zadeh, A., Kelman, I., LaBrecque, J.L., Sztein, A.E. and Zaika, Y. <u>Disaster-related Science Diplomacy: Advancing Global Resilience through International Scientific Collaborations</u>. *Science & Diplomacy* 7(2): (June 2018).
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- Berkman, P.A. **Ecology of the circumpolar Antarctic scallop**, *Adamussium colbecki* (Smith, 1902). Graduate School of Oceanography, Doctoral Dissertation. University of Rhode Island, Narragansett. 215p.
- Berkman, P.A. **Ecological relationships between the bay scallop**, **Argopecten irradians**, and its **EPIZOOIC ASSEMBLAGES IN CHARLESTON POND**, **RHODE ISLAND**. Graduate School of Oceanography, Master's Thesis. University of Rhode Island. 131p.

## PATENTS ASSIGNED TO EVRESEARCH LTD

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"Storage Medium Encoded with a Server and Method Using Same." Registered in: Canada (Patent No. 2454740); United States of America (Patent No. 7440995).

## KNOWLEDGE BANKS AND DIGITAL LIBRARIES

- Berkman, P.A. <u>Arctic Council Ministerial Declarations and Statements. Knowledge Bank.</u> **EvREsearch LTD.**, Falmouth, United States). [updated every two years with Arctic Council Ministerial Meetings 1996-2023].
- 2020 Berkman, P.A. *United States Arctic Security Documents. Knowledge Bank*. **EvREsearch LTD**, Medford, United States.
- 2015 Berkman, P.A. Polar Data Forum II: Knowledge Bank. EvREsearch LTD, Cambridge, United Kingdom.
- 2014. Berkman, P.A. <u>Bering Strait Maritime Governance. Knowledge Bank.</u> **EvREsearch LTD**, Cambridge, United Kingdom.
- 2014 Berkman, P.A. <u>International Conference on Data Sharing and Integration for Global Sustainability (SciDataCon I).</u>
  <u>Knowledge Bank</u>. **EvREsearch LTD**, Cambridge, United Kingdom.
- 2013 Berkman, P.A. Arctic Observing Summit 2013. Knowledge Bank. EvREsearch LTD, Cambridge, United Kingdom.
- 2012. Berkman, P.A. Complete Works of Charles Dickens. Knowledge Bank. EvREsearch LTD, Cambridge, United Kingdom.
- 2012. Berkman, P.A. *England High Speed Rail (HS2). Knowledge Bank.* **Digital Integration Technology Ltd.**, Cambridge, United Kingdom.
- 2012. Berkman, P.A. *Silicon Valley Bank. Knowledge Bank*. **Digital Integration Technology Ltd.**, Cambridge, United Kingdom.

- 2006 Berkman, P.A. and Morgan, G.J. *Marine Mammal Commission Digital Library of International Environmental and Ecosystem Policy Documents.* **EvREsearch LTD**, Columbus. CD-ROM.
- 2003 Berkman, P.A. and Morgan, G.J. *Integration of Marine Environmental and Ecosystem Policies.* **EvREsearch LTD**, Columbus. CD-ROM.
- Berkman, P.A. and Morgan, G.J. *United Nations Convention on the Law of the Sea Searchable Database.* **EvREsearch LTD**, Columbus. CD-ROM.
- Berkman, P.A. and Morgan, G.J. *Antarctic Treaty Searchable Database.* 1st 8th Editions. **EvREsearch LTD**, Columbus. CD-ROM. [updated annually from 2000-2007 with all Antarctic Treaty System documents since 1959 in collaboration with the United States Department of State, preceding the Antarctic Treaty Secretariat that was founded in 2004].
- Haltuch, M.A. and Berkman, P.A. *Lake Erie Geographic Information System: Bathymetry, Substrates and Mussels.* **Ohio Sea Grant College Program**, Columbus. CD-ROM.

## University Courses, Professional Development and Diplomatic Training

- 2024-Present Adjunct Faculty. Arctic Operation Risk Course (AORC). Team taught with Capt. (United States Navy, ret.) James Pettigrew. Ted Stevens Center for Arctic Security Studies, (United States).
- 2022-Present Scene Setter and Panelist. Module: Risk in the Arctic. Arctic Region Security Orientation Course (ARSOC). Professionalizing Service of Security Practitioners for the Arctic Region. **Ted Stevens Center for Arctic Security Studies**. Anchorage (United States).
- 2022 Invited Expert and Trainer. Science Diplomacy. Colombian Ministry of Foreign Affairs (Online).

  United Nations Institute for Training and Research (UNITAR). Geneva (Switzerland).
- Coordinator, UNITAR-MGIMO Joint Master's Degree Programme in Science Diplomacy. United Nations Institute for Training and Research (UNITAR) and Moscow State Institute for International Relations. [Memorandum of Understanding signed with Assistant Secretary-General of the United Nations among others, leading to the first graduate degree in Science Diplomacy in the world].
- 2021 Invited Expert and Trainer. Science Diplomacy. Lebanese Ministry of Foreign Affairs (Online). United Nations Institute for Training and Research (UNITAR). Geneva (Switzerland).
- Coordinator and Trainer. Executive Summer Programme on Innovations in Science Diplomacy (Online). United Nations Institute for Training and Research, Boston (UNITAR). Boston (United States). [Teaching team involves the: Program on Negotiation at Harvard Law School; Science Impact Collaborative, Massachusetts Institute of Technology; McCormack Graduate School of Policy and Global Studies, University of Massachusetts Boston; Frederick S. Pardee School of Global Studies, Boston University; Science Diplomacy Center, EvREsearch LTD and MGIMO University; Swissnex, Boston].
- 2021 Invited Expert and Trainer. Science Diplomacy. Costa Rican Ministry of Foreign Affairs (Online).

  United Nations Institute for Training and Research (UNITAR). Geneva (Switzerland).
- 2020 Invited Expert and Trainer. Science Diplomacy. Ethiopian Ministry of Foreign Affairs (Online). United Nations Institute for Training and Research (UNITAR). Geneva (Switzerland).
- 2020 Invited Expert and Trainer. <u>Executive Diploma on International Law in the 21st Century: Polar Law</u> (Online). **United Nations Institute for Training and Research (UNITAR)**. Geneva (Switzerland).
- Invited Expert and Trainer. <u>Science Diplomacy and Informed Decisionmaking During our Global Pandemic (Online)</u>. **United Nations Institute for Training and Research (UNITAR)**, Geneva (Switzerland).

2019-Present Invited Expert and Trainer. Diplomacy 4.0 - Beyond the Digital Frontier: Module 6. Science Diplomacy. (Online). United Nations Institute for Training and Research (UNITAR). [taught at least annually since 2019] Geneva (Switzerland). Invited Expert and Trainer. Science Diplomacy. The Diplomatic School of the Ministry of Foreign 2019-Present Affairs of Armenia, Yerevan (Republic of Armenia). 2019 Invited Expert and Trainer. Science Diplomacy. Retreat for Directors of Arabic Diplomatic Academies and Institutes. United Nations Institute for Training and Research. Algiers (Algeria). 2018 Professor of Practice. Science Diplomacy Dialogue Series. Science Diplomacy Center, Fletcher School of Law and Diplomacy, Tufts University, Medford (United States). 2019 Co-Convener, 3rd Science Diplomacy: Dissertation Enhancement Workshop, McCormack Graduate School of Policy and Global Studies. University of Massachusetts Boston, Boston, (United States). Co-Convener, 2nd Science Diplomacy: Dissertation Enhancement Workshop, Department of Urban 2018 Studies and Planning, Massachusetts Institute of Technology (United States). 2017 Co-Convener. 1st Science Diplomacy: Dissertation Enhancement Workshop, Science Diplomacy Center, Tufts University, Medford (United States). 2017-2020 Professor of Practice. Science Diplomacy: Environmental Security and Law in the Arctic Ocean (DHP-P259). Fletcher School of Law and Diplomacy, Tufts University (United States) team taught via video-conferencing with **MGIMO University** (Russian Federation). 2016 Professor of Practice. Science Diplomacy: Environmental Security in the Arctic Ocean (DHP-P259). Fletcher School of Law and Diplomacy, **Tufts University** (United States). 2015 Visiting Professor. Short Course on Science Diplomacy: Environmental Security in the Arctic Ocean. Fletcher School of International Law and Diplomacy, Tufts University (United States). 2014 Visiting Professor. Short Course on Science Diplomacy in the Polar Regions. International Law Programme, MGIMO University (Russian Federation). 2013 Visiting Professor. Short Course on Science Diplomacy and International Spaces. Buryat State University, Ulan Ude (Russian Federation). 2001-2002 Erskine Fellow and Visiting Professor. Graduate Certificate in Antarctic Studies Programme. Gateway Antarctica, University of Canterbury, Christchurch (New Zealand). 1996-2003 Lecturer. Law of the Sea (UCIS 501D). University Center for International Studies. The Ohio State University, Columbus (United States). 1996 Lecturer. Human Dimensions of Global Environmental Change (GEOG 694, GEOL 694, NAT RES 694, PUB POL 894),). Interdepartmental Seminar Series: Department of Geography, Department of Geological Sciences; School of Natural Resources; School of Public Policy. The Ohio State University, Columbus (United States). 1996 Coordinator and Lecturer. National Seminars: Interactions Between Society and the Environment; Environmental Systems and Climate Change; and Environmental Responsibility: Policy and Politics. The Ohio State University, Columbus (United States). Lecturer. Marine Biology and Ecology (EEOB 505). Department of Ecology, Evolution and Organismal 1992-1999 Biology, The Ohio State University, Columbus (United States). 1991-2003 Lecturer. Antarctic Marine Ecology and Policy (UCIS/NAT RES/ZOO 597.02). Cross-Listed Capstone Course: University Center for International Studies; School of Natural Resources; Department of Zoology; Honors Program, **The Ohio State University**, Columbus (United States).

Lecturer. Antarctic Ecology and Paleoecology (GEOL 896). Department of Geology and Mineralogy. The Ohio State University, Columbus (United States).
 Lecturer: Antarctic Science (OCG 694I). Graduate School of Oceanography, University of Rhode Island, Narragansett (United States).
 Visiting Professor, Antarctic Marine Ecology and Ocean Policy. Council on Educational Development, University of California Los Angeles, Los Angeles (United States).
 Lecturer, An Ecological Approach to Adaptation. College of Creative Studies, University of California

## Post-Doctoral Fellows

Santa Barbara, Santa Barbara (United States).

- Harriet Harden-Davies. Science Diplomacy Fellow Science in the Development of a New International Legally-Binding Instrument for the Conservation and Sustainable Use of Biological Diversity in Marine Areas Beyond National Jurisdiction. Funded by Nereus Fellow. Australian National Centre for Ocean Resources and Security (ANCORS), University of Wollongong University, Australia, at the Science Diplomacy Center, Tufts University, Medford (United States).
- 2018-2019 Qingchao Xu. Science Diplomacy Fellow Progress and Limitations of China-U.S. Arctic Cooperation: From a Perspective of Regional Cooperation. Funded by the China Scholarship Council at the Science Diplomacy Center, Tufts University, Medford (United States).
- Noor Johnson. Science Diplomacy Fellow Decision-Making in Arctic Indigenous Institutions and Communities. Funded by the National Science Foundation for the Pan-Arctic Options project through the Belmont Forum at the **Science Diplomacy Center**, Tufts University, Medford (United States).
- Yeketerina Y. Kontar. *Science Diplomacy Fellow Arctic Data e-Cosystem Scientist.* Funded by the National Science Foundation for the *Pan-Arctic Options* project through the Belmont Forum at the **Science Diplomacy Center**, Tufts University, Medford (United States).

## **GRADUATE STUDENTS**

- 2020 Konstantina C. Gota. *Science Diplomacy Case Study: The Boston Innovation Ecosystem.* Master's of Arts in Law and Diplomacy (Advisor). Fletcher School of Law and Diplomacy, **Tufts University**, Medford (United States).
- Jade Rhoads. Sustaining Indigenous Sovereignty: An Issue of Human Rights and Security. Master's of Arts in Law and Diplomacy (Advisor). Fletcher School of Law and Diplomacy, **Tufts University**, Medford (United States).
- 2020 Matthew A. Kokkinos. *Global Governance of Autonomous Weapon Systems: The Russia Case Study.*Master's of Arts in Law and Diplomacy (Advisor). Fletcher School of Law and Diplomacy, **Tufts University**, Medford (United States).
- Jérôme Nicolaï. *Transatlantic science diplomacy practices in emerging biotechnologies: towards transatlantic common interest-building?* (in progress). Master's of Arts in Transatlantic Affairs (Co-Advisor). Fletcher School of Law and Diplomacy, **Tufts University**, Medford, and **College of Europe**, Bruges (Belgium).
- 2019 Inna P. Zhuravleva. International Law Doctrines on the Current Status of the Arctic. Doctoral Dissertation (Council Member). Council, **MGIMO University**, Moscow (Russian Federation).
- 2019 Grace Tamble. Self-Designed Field of Study in Science Diplomacy. Master's of Arts in Law and Diplomacy (Advisor). Fletcher School of Law and Diplomacy, **Tufts University**, Medford (United States).
- Yoshimitsu Sato. A New Role for the Japan Maritime Self-Defense Force: Responding to Climate Change and Sea-Ice Melting in the Arctic Ocean. Master's of Arts in Law and Diplomacy (Advisor). Fletcher School of Law and Diplomacy, **Tufts University**, Medford (United States).

- 2018 Harriet Harden-Davies. MARINE GENETIC RESOURCES BEYOND NATIONAL JURISDICTION: AN INTEGRATED APPROACH TO BENEFIT-SHARING, CONSERVATION AND SUSTAINABLE USE. Doctorate of Philosophy (Reviewer). Australian National Centre for Ocean Resources and Security (ANCORS), **University of Wollongong** (Australia).
- Aditya Kaushik. Self-Designed Field of Study in Science Diplomacy. Master's of Arts in Law and Diplomacy (Advisor). Fletcher School of Law and Diplomacy, **Tufts University**, Medford (United States).
- Jean-Christophe Mauduit. A Science Diplomacy Center at The Fletcher School, Tufts University: A Primer on Science Diplomacy and Proposal to the University. With Self-Designed Field of Study in Science Diplomacy. Master's of Arts in Law and Diplomacy (Advisor). Fletcher School of Law and Diplomacy, **Tufts University**, Medford (United States).
- 2017 Max McGrath Horn. *Arctic Socio-Economic Sustainability Assessment (ASESA) Tool.* Master's of Arts in Law and Diplomacy (Advisor). Fletcher School of Law and Diplomacy, **Tufts University**, Medford (United States).
- Nadim Choucair. Applying Human Centered Design to Advance the Sustainable Development Goals in Beirut, Lebanon. Master's of Arts in Law and Diplomacy (Advisor). Fletcher School of Law and Diplomacy, **Tufts University**, Medford (United States).
- 2016 Felder, C.D. Options for Russian Natural Gas Exports to Asia: A Qualitative Assessment of Russian Gas Projects. Master's of Arts in Law and Diplomacy (Advisor). Fletcher School of Law and Diplomacy, **Tufts University**, Medford (United States).
- 2011 Eucker, W. A GEOSPATIAL ANALYSIS OF ARCTIC MARINE TRAFFIC. Doctorate of Philosophy (Advisor). Scott Polar Research Institute, **University of Cambridge**, Cambridge (United Kingdom).
- Eucker, W. *Monitoring Surface Ship Movement in the Ice-Diminishing Arctic Ocean*. Master's of Philosophy (Advisor). Scott Polar Research Institute, **University of Cambridge**, Cambridge (United Kingdom).
- Ortman, C. Radioactive Waste Impacts Mitigated by the Arctic Military Environmental Cooperation Program: Lessons in International Cooperation. Master's of Philosophy (Advisor). Scott Polar Research Institute, University of Cambridge, Cambridge (United Kingdom).
- Pulsifer, P. An Ontological Exploration of Antarctic Environmental Governance: Towards a Model For Geographic Information Mediation. Doctorate of Philosophy (Committee Member). **Carleton University**, Ottawa (Canada).
- 2008 Ekstrom, J. California Coastal Current Large Marine Ecosystem: Marine Protected Areas. Doctorate of Philosophy (Advisor). Bren School of Environmental Science & Management. **University of California Santa Barbara**, Santa Barbara (United States).
- Grant, S. Development of a Marine Protected Area System for Antarctica. Master's of Philosophy (Advisor). Scott Polar Research Institute, **University of Cambridge**, Cambridge (United Kingdom).
- 2000 Bauer, M. *Venn Diagram Courseware for Interdisciplinary Education.* Master's of Science (Advisor). School of Natural Resources, **The Ohio State University**, Columbus (United States).
- Yu, N. Zebra mussel (*Dreissena polymorpha*) colonization in a thermally-stratified reservoir and its ecological impacts. Doctorate of Philosophy (Committee Member). Department of Zoology, **The Ohio State University**, Columbus, (United States).
- Haltuch, M.A. Modeling expansion of exotic mussels on Lake Erie sediments using Geographic Information Systems (GIS). Master's of Science (Advisor). Environmental Science Graduate Program, **The Ohio State University**, Columbus (United States).
- Dawber, M. Benthic communities and the potential fossil record at polar glacier grounding lines. Master's of Science (Committee Member). Department of Geology, **Northern Illinois University**, Dekalb (United States).

- Van Bloem, S.J. Exploring the biomass-productivity paradox: the case of the long-lived Antarctic scallop. Master's of Science (Advisor). Environmental Science Graduate Program, **The Ohio State University**, Columbus (United States).
- Hodory, L.L. Responsible environmental behavior in natural resources students at Sterling College, Vermont, and The Ohio State University. Master's of Science (Advisor). School of Natural Resources, **The Ohio State University**, Columbus (United States).
- Janke, E.H. The effect of stream and lake habitats on the shell morphology of Lampsilis radiata luteoloa (Lamarck, 1819) with a review of the use of shell growth lines as an aging technique. Master's of Science (Advisor). Department of Zoology, **The Ohio State University**. Columbus (United States).

## RESEARCH FUNDING

- Berkman, P.A. (coordinator), Berry, L.D., Fernandez, L., Fiske, G., Grebmeier, J.M., Lorenzini, D., Pletnikoff, K. and Young, O.R. *Collaborative Research: Arctic Satellite Knowledge (ASK): Integrating Maritime Ship Traffic.* National Science Foundation (United States). Office of Polar Programs, jointly with the Arctic Observing Network (AON) and Arctic Research Coordination and Policy Support (ARCPS) programs. (pending 4-year project).
- Kulmula, M. and others with Berkman, P.A. *Arena for the Gap Analysis of the Existing Arctic Science Co-Operations* (AASCO) 2. University of Helsinki. Funded by the Prince Albert II of Monaco Foundation. (10/23-10/26).
- Berkman, P.A. (coordinator). *Global Indigenous Youth Summit on Climate Change* hosted by the United Nations Institute for Training and Research (UNITAR) on 9 August 2023 (United Nations International Day of the World's Indigenous Peoples). Funding from Springer-Nature. 9/22-9/23.
- Berkman, P.A. Arctic Region Security Orientation Course (ARSOC). Session 4. Risk. Ted Stevens Center for Arctic Security Studies (United States). 5/22-2/23.
- Berkman, P.A. Fulbright Arctic Chair Norway 2021-2022, University of Tromsø The Arctic University of Norway. United States Department of State and Norwegian Ministry of Foreign Affairs, Tromsø, (Norway). 5/21-12/22.
- Berkman, P.A. Enhancing International Scientific Cooperation: Arctic Science and Technology Advice with Ministries. Ministry of Foreign Affairs. 10/21-3/22
- Berkman, P.A. Automated Discovery of Content-in-Context Relationships from a Large Corpus of Arctic Social Science Data. National Science Foundation (United States), Office of Polar Programs (NSF/OPP 1719540). 7/17-7/21.
- Berkman, P.A. US-Russian Foreign Relations. Carnegie Corporation of New York. 10/16-10/18.
- Berkman, P.A. Science-Diplomacy Short Course to Establish a Global Network of Foreign Ministry Science and Technology Advisors. Richard Lounsbery Foundation. 04/16-04/17.
- Berkman, P.A. (coordinator), Young, O.R., Pulsifer, P.L., Lee, O.A., L.W., Gascard, J.C., Provost, C., Winther, J.G., Sun, K., Vylegzhanin, A.S. and Taylor, D.R.F. *Pan-Arctic Options: Holistic Integration for Arctic Coastal-Marine Sustainability.* Project through the Belmont Forum International Opportunities Fund Call for Proposals on Arctic Observing and Science for Sustainability. Awarded in Canada, China, France, Norway, Russian Federation and United States (National Science Foundation, Integrative and Collaborative Education and Research, NSF/ICER 1660449 and 2103490). 10/15-10/22.
- Pulsifer, P.L. and Berkman, P.A. The Second Polar Data Forum: Understanding the Polar Regions through Globally Collaborative Data Management. Project funded by the National Science Foundation (United States). 2/15-2/16.
- Berkman, P.A. (coordinator), Young, O.R., Davis, F., Gascard, J.C. and Provost, C. *Arctic Options: Holistic Integration for Arctic Coastal-Marine Sustainability*. Project funded by the National Science Foundation (United States), Office of Polar Program (NSF/OPP 263819) and Centre Nationale de la Recherche Scientifique (France). 9/13-8/19.
- Gascard, J.C. with others including Berkman, P.A. Arctic Climate Change, Economy and Society (ACCESS). European Commission (Directorate-General Mobility and Transport). 3/11-3/15.

- Berkman, P.A. and Vylegzhanin, A.N. *Environmental Security in the Arctic Ocean. North Atlantic Treaty Organization (NATO) Advanced Research Workshop.* NATO Science for Peace and Security Programme. (Additional Funding from the: Aspen Institute; John Sloan Dickey Center for International Understanding, Dartmouth University; Shell International Exploration and Production; and WWF International Arctic Programme; Co-Sponsorships from the: Canadian Polar Commission; Ecologic Institute; and NATO Parliamentary Assembly). Cambridge University, 1/10-6/11.
- Berkman, P.A. Antarctic Treaty Summit: Science-Policy Interactions in International Governance. (Benefactors: Smithsonian Institute; Tinker Foundation; Prince Albert II of Monaco Foundation - Monaco; Patrons: The Eisenhower Institute of Gettysburg College; Fulbright Commission (United States / United Kingdom); Marine Mammal Commission; National Science Foundation (Office of Polar Programs); Prince Albert II of Monaco Foundation - United States; and Transpolar (A Raytheon / AECOM Company); Sponsors: Aspen Institute (Dialogue and Commission on Arctic Climate Change); Arctic Governance Project; Columbia University (Center for International Earth System Information Network); Foundation for the Good Governance of International Spaces; Greenpeace; Japan Polar Research Association; KBR; Korean Polar Research Institute; Korea Supporters Association for Polar Research; Lindblad Expeditions; Pew Charitable Trusts; Scientific Committee on Antarctic Research; Stanford University (School of Earth Sciences); The Explorers Club; United States Geological Survey; Universit Sains Malaysia (Centre for Global Sustainability Studies); and World Wildlife Fund - Australia (Antarctica and Southern Ocean Initiative); Additional Sponsorships: American Association for the Advancement of Science; American Geophysical Union; Association for Polar Early Career Scientists; Columbia University - Center for International Earth Science Information Network; Foundation for the Good Governance of International Spaces; Fulbright Academy of Science and Technology; Korean Polar Research Institute; Korea Supporters Association for Polar Research; Pew Charitable Trusts; National Geographic Society; The Royal Society; Scientific Committee on Antarctic Research; Stanford University - Department of Earth Sciences; The Explorers Club; United Nations Environmental Programme; United States Geological Survey; United Nations University - Institute of Advanced Studies; United States House of Representatives; United States Senate; Universiti Sains Malaysia Centre for Global Sustainability Studies). [See: http://www.atsummit50.org/session/about the summit-3.html]. 6/07-6/10.
- Berkman, P.A. Marine Mammal Commission Digital Library of International Environmental and Ecosystem Policy Documents. (National Science Foundation / National Science, Technology, Engineering and Mathematics Digital Library Program, NSF/DUE 0329044). 3/03-2/07.
- Berkman, P.A. Travel Grant to Attend the XXVII Scientific Committee on Antarctic Research (SCAR) Meeting in Shanghai, China. (National Aeronautics and Space Administration / Jet Propulsion Laboratory). 7/02.
- Berkman, P.A. *Implementation of the Antarctic Treaty Secretariat*. (Mershon Center for International Security and Public Policy). 6/01-6/03.
- Haltuch, M.A. and Berkman, P.A. *John A. Knauss Marine Policy Fellowship Awarded to Doctoral Student*. National Oceanic and Atmospheric Administration (assignment at the United States Department of State, Washington, D.C.). 12/00-12/01.
- Bromwich, D.H., Berkman, P.A. and Hadad, C. *Central Ohio Air Quality Modeling*. (Ohio Air Quality Development Authority, Grant # 00-37). 10/00-12/02.
- Berkman, P.A., Lyons, W.B., Priscu, J.C., Smith, W.O., Waddinton, E.D., Powell, R. *Victoria Land, Antarctica, Coastal Biome: Marine-Terrestrial Biocomplexity Across a High-Latitudinal Environmental Gradient*. (National Science Foundation/Office of Polar Programs NSF/OPP 0084037). 9/00-8/02.
- Berkman, P.A., Reutter, J.M., Ricker, K.T. *Lake Erie Geographic Information System Products*. (National Oceanic and Atmospheric Administration, Sea Grant College Program, NA86RG0053). 5/99-12/00.
- Berkman, P.A. Searchable Database of Antarctic Treaty Consultative Meeting Documents. (National Science Foundation/Office of Polar Programs and the United States Department of State/Office of Oceans and Environmental Affairs. NSF/OPP 9727582). 12/98-11/99.
- Berkman, P.A. and Garton, D.W. Biological Baselines and Responses for Assessing Environmental Impacts in Antarctica Coastal Areas: Collaborative Research. (National Science Foundation/Office of Polar Programs. NSF/OPP 9727582). 9/98-8/01.

- Berkman, P.A. Cenozoic Environmental Variability in Antarctic Coastal Areas. (National Science Foundation/Division of International Programs. NSF/INT 9603369). 4/97-3/01.
- Berkman, P.A. and Fortner, R.A. *Antarctic Science and Policy: Interdisciplinary Research Education (ASPIRE)*. National Science Foundation/Division of Undergraduate Education and the Office of Polar Programs. NSF/DUE-OPP 9652883). 6/97-5/01.
- Berkman, P.A. Scientific and Public Policy Rationale for Air Quality Standards in the United States: Ohio and the Midwestern Region. (Office of Research, Ohio State University). 3/97-7/97.
- Berkman, P.A. Scientific and Public Policy Rationale for Air Quality Standards in the United States: Ohio and the Midwestern Region. (Ohio Environmental Protection Agency No. 97G029). 5/97-7/97.
- Berkman, P.A., Garton, D.W., Gannon, J.E., Kennedy, G.W. and Mackey, S.D. *Ecosystem State Changes in Lake Erie: Expansion of Invading Mussel Assemblages on Soft Substrates.* (National Oceanic and Atmospheric Administration/National Sea Grant Program). 9/96-8/99.
- Berkman, P.A. *Human Dimensions of Global Environmental Change*. (Interdisciplinary Seminar Program, Office of Research, Ohio State University). 4/96-3/97.
- Berkman, P.A. *Ecosystem State Changes in Lake Erie: Expansion of Invading Mussel Assemblages on Soft Substrates.* (Ohio Sea Grant College Program). 3/96-2/97.
- Berkman, P.A. JSPS Senior Scientist Fellowship. (Japan Society for the Promotion of Science). 1/96-3/96.
- Berkman, P.A. Invading Mussel Assemblages on Soft Substrates in Lake Erie: Side Scan Sonar and Sediment Analyses. (Ohio Sea Grant College Program). 4/95-3/96.
- Berkman, P.A. *Research Experiences for Undergraduates (Supplement*). (National Science Foundation/Office of Polar Programs. NSF/OPP 9221784). 7/96-6/97.
- Berkman, P.A. and Prentice, M.P. "Holocene Environmental Variability Associated with West Antarctic Ice Sheet Retreat Along the Victoria Land Coast: Collaborative Research." (National Science Foundation/Office of Polar Programs. NSF/OPP 9221784). 7/93-6/97.
- Prentice, M.P. and Berkman, P.A. *The chronology of Late Neogene Antarctic Climate Change: Dry Valley Fjord Fossil Evidence: Collaborative research.* (National Science Foundation/Office of Polar Programs. NSF/OPP 9307760). 7/93-6/96.
- Berkman, P.A. Molluscan Shell Growth Patterns, Mineralogy, and Isotope Profiles: Proxy Records for Interpreting Antarctic Nearshore Environmental Variation During the Holocene. (National Science Foundation/Division of International Programs. NSF/DPP). 9/92-5/94.
- Berkman, P.A. *Japan Society for the Promotion of Science (JSPS) Fellowship*. (Ministry of Education, Science and Culture. Tokyo, Japan). 9/92-5/94.
- Berkman, P.A. *Ecology of the Antarctic scallop, Adamussium colbecki, at New Harbor, Antarctica.* (National Oceanic and Atmospheric Administration / Antarctic Marine Living Resources Program). 6/86-5/87.
- Langton, R.A., Robinson, W.L. and Berkman, P.A. *Ecology of the Sea Scallop, Placopecten magellanicus (Gmelin), in the Gulf of Maine*. (National Oceanic and Atmospheric Administration/National Undersea Research Program). 9/84-8/87.
- Berkman, P.A. *National Science Foundation Graduate Fellowship*. (National Science Foundation / Division of Fellowships). 9/84-8/86, 9/87-8/88.

## MISCELLANEOUS PROFESSIONAL ACTIVITIES

- 2024 Inaugural Distinguished Speaker (virtual), The Role of Science Diplomacy in Contributing to the International Legal Order Based on the Charter of the United Nations. Science Policy and Diplomacy Distinguished Speaker Series, Arizona University (United States).
- 2024 Invited Opening Keynote, Transdisciplinary Research in the Arctic with Open Science: Remote Sensing Lessons. International Conference on Earth Observations and Societal Impacts. National Central University, Taoyuan (Taiwan).
- 2024 Invited Seminar, Science Diplomacy: Global Inclusion with Common-Interest Building and Informed Decisionmaking for Sustainability. Center for Sustainability Science, Future Earth Taipei, Academia Sinica, Taipei (Taiwan).
- 2024 *Invited Presentation* (virtual), <u>Capacity Building with Next-Generation Science Diplomats</u>. Webinar on Science Diplomacy. Marine Curie Alumni Association (MCAA) Switzerland (Switzerland).
- Panel Dialogue (virtual), <u>Reframing Conflicts Over Natural "Resources: The Rights of Nature as a Pathway for Consensus Building and Relational Planning</u>. Herbert C. Kelman Seminar on International Conflict Analysis and Resolution with the Program on Negotiation at Harvard Law School. [Part 2 of 2-part series on Science Diplomacy, Indigenous Knowledge, Rights of Nature].
- 2024 Interview (virtual), Conflict or Common Interests? Negotiation Choices with Science Diplomacy. Herbert C. Kelman Seminar on International Conflict Analysis and Resolution with the Program on Negotiation at Harvard Law School, [Part I of 2-part series on Science Diplomacy, Indigenous Knowledge, Rights of Nature].
- 2024 Attendee, 9th Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals. United Nations, New York City (United States). [hosted by the Permanent Mission of the Republic of Kenya to the United Nations].
- 2024 *Invited Chapter Author*, Book Workshop SCIENCE DIPLOMACY IN AN ERA OF TECHNOLOGICAL DISRUPTION. German Center for Research and Innovation (DWIH) New York, New York City (United States).
- 2024 Invited Keynote (virtual), The Role of Science Diplomacy in Contributing to the International Legal Order Based on the United Nations Charter. Conference on "The Current Scope of International Law (Terrestrial, Maritime, Air, Outer Space and Cyberspace)." MGIMO University, Moscow (Russia).
- 2024 Invited Member, AASCO-2 Project Meeting at the Arctic Science Summit Week (ASSW), Edinburgh, (Scotland).
- 2024 Invited Member, European Commission Working Group (WG 4) on Science Diplomacy meeting at the International Institute for Applied Systems Analyses (IIASA). Laxenburg (Austria).
- 2024 *Invited Keynote*, 2<sup>nd</sup> HAI-FES International Workshop. Building bridges between Arctic and Asia. Arctic Research Center (ARC), Hokkaido University Arctic Initiative for Future Earth and SDGs, Sapporo (Japan).
- 2024 Invited Panelist, <u>Arctic Science Diplomacy: Charting a Path Through Conflict</u> session. American Association for the Advancement of Science (AAAS) Annual Meeting, Denver (United States).
- 2023 *Invited International Advisory Board Member,* International Institute for Science Diplomacy and Sustainability (IISDS) at UCIS University, Kuala Lumpur (Malaysia).
- 2023 *Moderator and Co-Convener, Arctic Science Diplomacy: The Next Generation.* Arctic Circle Assembly, Reykjavik (Iceland). [see video on <u>Science Diplomacy Center™ YouTube channel</u>].
- 2023 Invited Keynote (virtual), "The Role of Science Diplomacy in the Era of World Order Transformation: Key Tracks and Platforms for Cooperation." 15th Russian International Studies Association (RISA) Convention. Centre for Science Diplomacy, MGIMO University, Moscow (Russia)

- 2023 Moderator and Co-Convener, Arctic Science and Technology Advice with Ministries. Arctic Circle Japan Forum, Tokyo (Japan).
- 2024 Invited Presentation (virtual), 4th Arctic Science Ministerial, St. Petersburg (Russia).
- 2022 *Invited Keynote* (virtual), *Science Advise in the Post-Covid Era.* International Network for Government Science Advice (INGSA) and African and Network of African Science Academies (NASAC). (South Africa).
- 2022 Invited Discussion Paper, Exploring Post-Normal Science Perspectives. North Pacific Arctic Conference (Taking Stock of the State of the Arctic: Exploring Options for the Future). East-West Center and Korean Maritime Institute.
- 2022 *Member,* Informal Advisory Board of Science Diplomacy Practitioners to the President of the International Science Council, <u>International Science Council</u>, Paris (France).
- 2022 *Invited Keynote* (virtual), <u>Scientific Cooperation in the Arctic Region</u>, Project Office for Arctic Development (PORA), (Russian Federation).
- 2022. Invited Keynote (virtual). Planetary Time Scales for the Security and Sustainability of Our Globally-Interconnected Civilization. Security from the Perspective of International Security Symposium. University of International Relations. Beijing. (China)
- 2022 Participant, University of the Arctic (UArctic) Assembly. Portland, ME (United States).
- 2022 Presenter with (J.M. Grebmeier, G. Fiske and L.L. Jørgensen). <u>Satellite Observations of Maritime Ship Traffic to Enhance Implementation of Binding Agreements in the Central Arctic Ocean (CAO) High Seas</u>. Arctic Observing Summit. Arctic Science Summit Week. International Arctic Science Committee. Tromsø (Norway).
- 2022 Participant, University of the Arctic (UArctic) Thematic Network Leads (representing the Science Diplomacy Thematic Network). St. Andrews (Scotland).
- 2022. Co-Convener. Session 1. Pan-Arctic Infrastructure Development. Arctic Frontiers 2022. Tromsø (Norway).
- 2022 Coordinator (Virtual). Webinar Series on Enhancing International Scientific Cooperation: Arctic Science and <u>Technology Advice with Ministries</u>. Ministry of Foreign Affairs of Japan (Japan) with logistics for three webinars in February-March 2022 provided by the United Nations Institute for Training and Research (UNITAR).
- 2022 *Mentor* (Virtual). Interagency Arctic Research Policy Committee (IARPC). Office of Science and Technology Policy (OSTP), The White House. (mentees in Sweden, Finland and Norway).
- 2022 Invited Keynote (Virtual). Arctic Policy in 2022: Sustainable Energy and Environmental Protection. United Nations Association of Greater Boston (United States).
- 2022 *Invited Panelist* (Virtual). <u>International Dimensions of Environmental Security: Why care?</u> Seventh Symposium on US-International Partnerships. 102<sup>nd</sup> American Meteorological Society Annual Meeting. Houston (United States).
- 2021 *Invited Keynote* (Virtual). <u>Arena for the Gap Analysis of Arctic Science Co-Operation</u>. Pan-Eurasian Experiment (PEEX). University of Helsinki, Helsinki (Finland).
- 2021 Invited Keynote (Virtual). Science Diplomacy as a Path for World Peace. New Sci-tech Revolution and International Security: Innovation, Exchange, Cooperation. University of International Relations. Beijing (China).
- 2021 Invited Panelist (Virtual). <u>Science, Technology and the Path Forward for a New Arctic. Session 5.</u>
  <u>Technological Dimensions of Arctic Governance</u>. 2021 North Pacific Arctic Conference. East-West Center, Honolulu (United States).
- 2021 Invited Keynote (Virtual). <u>Arena for the Gap Analysis of the Existing Arctic Science Co-Operations (AASCO)</u>. University of Helsinki and Prince Albert II Foundation. (Monaco).

- 2021 *Mentor* (Virtual). Interagency Arctic Research Policy Committee (IARPC). Office of Science and Technology Policy (OSTP). The White House. (mentees in the United States).
- 2021 UNITAR representative. *International Forum on Diplomatic Training (IFDT). Prof. Paul Arthur Berkman with the United Nations Institute for Training and Research (UNITAR) and MGIMO University*, Angwar Gargash Diplomatic Academy, Abu Dhabi (United Arab Emirates).
- 2021 *Invited Speaker.* 30th Anniversary of the Moscow Journal of International Law. MGIMO University, Moscow (Russian Federation).
- 2021 Invited Panelist with Adm. James Stavridis (Virtual). War and Peace in the 21st Century. The U.S. China Competitive Evolution and Science Diplomacy. Motao Strategic Forum, Taipei (Taiwan).
- 2021 Invited Speaker (Virtual). Building Global Inclusion with Common Interests: Art and Science Diplomacy in the Arctic. 2021 Fulbright Conference. The Fulbright Program at 75: Past, Present and Future. The Fulbright Association, Washington, DC (United States).
- 2021 *Invited Panelist* (Virtual). <u>Policy–Science–Law Nexus in the Arctic</u>. 14<sup>th</sup> Polar Law Symposium. Kobe University, Kobe (Japan).
- 2021 Invited Panelist (Virtual). <u>Strengthening Collective Action on Complex Global Issues</u>. Fulbright Day: Germany. Fulbright Germany (Germany).
- 2021 *Invited Expert* (Virtual), *UN Online Immersion Programme Science Diplomacy Webinar.* United Nations Institute for Training and Research (UNITAR). Geneva (Switzerland).
- 2021 Invited Keynote (Virtual). Great Powers and the Melting Arctic Worcester World Affairs Council. Boston (United States).
- 2021 Session Co-Convener (Virtual). The Role of Science Diplomacy in the European External Policies. <u>European Union in International Affairs (EUIA20)</u>. Brussels (Belgium).
- 2021 Invited Speaker (Virtual). <u>Struggles Over the Melting Arctic</u>. Great Decisions Series. WorldBoston, WGBH and Lowell Institute (United States).
- Invited Keynote (Virtual). Science Diplomacy and American-Soviet Cooperation in Outer Space. Current Problems and Global Trends Conference, Moscow State Institute of International Relations (MGIMO University), Kutafin Moscow State Law University (MSAL) and People's Friendship University of Russia (RUDN University), Moscow (Russian Federation).
- 2020 *Invited Keynote* (Virtual). <u>Arena for the Gap Analysis of the Existing Arctic Science Co-Operations (AASCO)</u>. University of Helsinki and Prince Albert II Foundation. (Monaco).
- 2020 Opening Keynote (Virtual). <u>Science Diplomacy: A Crucible for Turning the Tide in the South China Sea</u>. E-W Center, Washington, DC (United States).
- 2020 Invited Participant (Virtual). Advancing Collaboration in Canada-U.S. Arctic Regional Security (ACCUSARS).
  Arctic Domain Awareness Center and North American and Arctic Security and Defense Network. Anchorage (United States) and Ottawa (Canada).
- 2020 *Invited Lecture* (Virtual). <u>Science Diplomacy and Informed Decisionmaking During our Global Pandemic.</u>
  Osher Lifelong Learning Institute, Tufts University (United States).
- 2020 Invited Participant. Virtual Tabletop Exercise on Arctic Conflict. Rand Corporation, Los Angeles (United States).
- 2020 Invited Panel (Virtual). Advancing Global Resilience and Fostering Cross-border Cooperation through Disaster Diplomacy Efforts. <u>Euroscience Open Forum (ESOF)</u>. United Nations Educational, Scientific and Cultural Organisation, Trieste (Italy).

- 2020 *Invited Lecture* (Virtual). 'Ask Me Anything' Session. Science and Us Community, Pioneer Charter School. Boston (United States).
- 2020 *Invited Lecture* (Virtual). *Building Common Interests in the Arctic Ocean.* Arctic Summer Internship Program, Arctic Domain Awareness Center, Anchorage (Alaska).
- 2020 Invited Lecture (Virtual). Science Diplomacy and Informed Decisionmaking for Sustainability. Elisabeth Haub School of Law, Pace University. New York. (United States).
- 2020 *Invited Lecture* (Virtual). *Environmental Security in the Arctic Ocean.* Graduate Course on Environmental Security in the Arctic. University of Alaska Anchorage. (United States)
- 2020 *Invited Lecture* (Virtual). *Science Diplomacy in these Challenging Times*. Stammtisch Lecture, Friends of Switzerland (United States).
- 2020 Invited Lecture (Virtual). Informed Decisionmaking with New Research Opportunities for Society. European XFEL. Hamburg (Germany).
- 2020 Invited Lecture (Virtual). <u>Operating Short-Term to Long-Term through the COVID-19 Pandemic: Negotiating a Global Renaissance with Science Diplomacy</u>. Program on Negotiation, Harvard Law School. Cambridge (United States).
- 2020 Session Co-Convener and Invited Speaker. Arctic Frontiers 2020, Tromsø (Norway).
- 2019 Invited Panelist. The Role of Science Diplomacy in the Face of Global Challenges. Humanities Forum: From Knowledge to Action. Russian Academy of Sciences, Institute of World History. Moscow (Russian Federation).
- 2019 Invited Advisor Board Member. Science Policy in International Diplomacy and External Relations (SPIDER) Network; Foreign Ministries Science and Technology Advice Network (FMSTAN); International Network for Government Science Advice (INGSA). Austrian Ministry of Foreign Affairs. Vienna (Austria).
- 2019 *Invited Panelist*. 46th International Forum on Diplomatic Training. Diplo Foundation, United Nations Institute for Training and Research, Palais des Nations. Geneva (Switzerland).
- 2019 Invited Panelist. <u>Strengthening International Cooperation in Science and Education in Multi-Cultural World.</u>

  <u>Centennial Celebration Day.</u> International Union of Geodesy and Geophysics. United Nations Educational, Scientific and Cultural Organization. Paris (France).
- 2019 *Invited Contributor:* European Science Advisers Forum. International Group of Science Advisers (INGSA), European Commission's Group of European Chief Scientific Advisers and the European Commission's Joint Research Centre, Dublin (Ireland).
- 2019 Invited Keynote: Science Diplomacy: Informed Decisionmaking for Lifelong Learning. Expeditions to STEM (ETS) "A STEM-Outreach Event Open to Middle School Students Throughout Massachusetts." Cambridge (United States).
- 2019 Opening Keynote: Science Diplomacy and the Socratic Methods for the 21<sup>st</sup> Century. 11th Annual Symposium on Global STEM Education, Harvard Graduate School of Education, Cambridge (United States).
- 2019 Invited Keynote: Science Diplomacy: Balancing National Interests and Common Interests with Informed Decisionmaking. <u>US-Russia Fort Ross Dialogue</u>. Vologda (Russian Federation).
- 2019 Contributor: Synoptic Arctic Survey (SAS) International Planning and Coordination Workshop. Pacific Arctic Group. Woods Hole Oceanographic Institution, Woods Hole (United States).
- 2019 *Invited Participant:* BASELINE OF RUSSIAN ARCTIC LAWS Book Launch. 5th International Arctic Forum: Territory of Dialogue. Roscongress, Saint Petersburg (Russian Federation).
- 2019 *Invited Expert:* Diplomatic School of the Ministry of Foreign Affairs Republic of Armenia ("Science Diplomacy" training for mid-career government officials and diplomats). Yerevan (Armenia).

- 2019 Invited panelist by the Ministry of Foreign Affairs of Oman: Foreign Ministries Science and Technology Advice Network (FMSTAN) and Science Policy in International Diplomacy and External Relations (SPIDER) Division of the International Network for Government Science Advice (INGSA) in the International Forum on Science and Technology Diplomacy, Muscat (Oman).
- 2018 Invited Panelist: Emerging Technologies: Societal Challenges and Global Governance (EMERTECH 2018).

  <u>Primakov National Research Institute of World Economy and International Relations (IMEMO)</u>. Moscow (Russian Federation).
- 2018 *Invited Panelist:* Science and Diplomacy Panel with Foreign Minister Science and Technology Advisors. *Science Advice for a Changing World.* International Network for Government Science Advice (INGSA). Tokyo (Japan).
- 2018 Opening Keynote: 2nd Sofia Earth Forum on Grand Challenges, Solutions and Legitimacy. Helsinki (Finland).
- 2018 Session Convener, <u>High-Level Panel on Supporting Implementation of the Arctic Science Agreement</u>. Arctic Circle. Reykjavik (Iceland).
- 2018 Invited Chair and Panelist: Panel on Science and Diplomacy. 45th International Forum on Diplomatic Training, Edmund Walsh School of Foreign Service, Institute of Study of Diplomacy, Georgetown University, Washington, DC (United States).
- 2018 Session Convener: Ambassadorial Panel on Arctic Science Diplomacy. University of the Arctic (UArctic) Congress 2018. Oulu (Finland).
- 2018 Memorandum of Understanding. (25 October 2018) Academic and Outreach Cooperation Regarding Arctic Frontiers and Springer Book Series Between Akvaplan-Niva (Norway) and the Science Diplomacy Center, Fletcher School of Law and Diplomacy, Tufts University (United States).
- 2018 Various Presentations: POLAR2018. Davos (Switzerland).
- 2018 *Invited Panel Presentation:* US-Russia Relations Conference between The Fletcher School and MGIMO University, Moscow (Russian Federation).
- 2018 *Invited Keynote and Panelist:* Students and Science Diplomacy Workshop. Science and Policy Exchange Meeting. Montreal (Canada).
- 2018 *Invited Presentation:* New England Arctic Network. Navigating the New Arctic: Research Coordination Network. University of New Hampshire. Durham (United States).
- 2018 Advisory Board Member: European Commission project on Using Science for/in Diplomacy for Addressing Global Challenges (<a href="https://www.s4d4c.eu/">https://www.s4d4c.eu/</a>) meeting in Vienna (Austria).
- 2018 Invited Keynote: Connecting the Arctic. Arctic Frontiers, Tromsø (Norway).
- 2018 Invited Keynote: MIT Policy Hackathon, Cambridge (United States).
- 2017 Invited Panel Chair. Sustainable Ocean Summit 2017. World Ocean Council, Halifax (Canada).
- 2017 *Invited Participant.* International Science in the Russian Arctic (ISIRA) Workshop. Russian Academy of Sciences. Moscow (Russian Federation).
- 2017 Invited Keynote: 1st Mexican Congress on Science-Informed Policy: Enhancing the Science-Policy Interface.

  Convened by the Science Advisory Council of Mexico (CCC), the Office of Science, Technology, and Innovation (STI) of the Presidency of Mexico, and the American Association for the Advancement of Science (AAAS). Ministry of Foreign Affairs, Mexico City (Mexico).
- 2017 Chair and Co-Convener (with the International Network for Government Science Advice), 2<sup>nd</sup> International Dialogue on Science and Technology in Foreign Ministries (with the seven Science and Technology Advisors to Foreign Ministers and senior diplomats from seventeen foreign ministries). Tufts European Center in Talloires (France).

- 2017 *Invited Keynote:* <u>High Altitudes meet High Latitudes: Globalizing Polar Issues.</u> Ecole Polytechnique Fédérale de Lausanne, *Swiss Polar Institute and University of the Arctic.* Crans-Montana (Switzerland).
- 2017 Invited Speech. Science and Technology Advice in Foreign Ministries. Ministry of Foreign Affairs of Spain, Madrid (Spain).
- 2017 Invited Speaker: Evidence for Informed Decision-Making to Achieve Arctic Sustainability.7<sup>th</sup> North Pacific Arctic Conference (Building Capacity for a Sustainable Arctic in a Changing Global Order). Korean Maritime Institute, East-West Center, Honolulu (United States).
- 2017 Coordinator; <u>Science Diplomacy Thematic Network</u>. (Approved). University of the Arctic (200+ institutions). Nuuk (Greenland).
- 2017 Institutional Representative for The Fletcher School of Law and Diplomacy. University of the Arctic (virtual university with 188 institutions across all Arctic states and with many non-Arctic States). Approved in Nuuk (Greenland).
- 2017 Session Co-Convener: Arctic Sustainability across the 21<sup>st</sup> Century: Governance Lessons from the Bering Strait and Barents Sea Regions. 9<sup>th</sup> International Congress of Arctic Social Sciences, Umea (Sweden).
- 2017 Invited Speaker: Video on Pan-Arctic Options: Holistic Integration for Arctic Coastal-Marine Sustainability. Interagency Arctic Research Policy Committee, Washington, DC (United States).
- 2017 *Invited Panelist:* <u>Security in the Arctic.</u> United States and Russia in the Arctic. Wilson Center Arctic Circle Forum. Washington, DC (United States).
- 2017 Special Arctic Policy Session Co-Convener. International Conference on Arctic Science: Bringing Knowledge to Action. Reston (United States).
- 2017 *Invited Plenary Speaker. Science Diplomacy: Arctic Sustainability Across the 21st Century.* Symposium on Science + Innovation for Diplomacy. Harvard Kennedy School. Cambridge (United States).
- 2017 *Invited Speaker.* Community Workshops for Synthesis Studies of the Pan-Arctic / Earth System. National Science Foundation, Washington, D.C. (United States).
- 2017 *Invited Speaker. Science Diplomacy: Arctic Sustainability Across the 21st Century.* International Arctic Forum, Arkhangelsk (Russian Federation).
- 2017 *Invited Speaker.* Arctic Sustainability Across the 21<sup>st</sup> Century. Higher School of Economics. Moscow (Russian Federation).
- 2017 *Invited Speaker.* Science Diplomacy and US-Russia Cooperation in the Arctic. Russian International Affairs Council, Moscow (Russian Federation).
- 2017 Coordinator. Panel Dialogue among Science and Technology Advisors to Foreign Ministers. Co-Convened by the Fletcher Science Diplomacy Club and American Association for the Advancement of Science. Fletcher School of Law and Diplomacy, Tufts University (United States).
- 2017 *Invited Brown Bag.* Refugee Crisis in Context of Human Population Growth. Praxis Club. Fletcher School of Law and Diplomacy, Tufts University (United States).
- 2017 *Invited Panelist and Moderator.* Fletcher Arctic Conference VI. Fletcher School of Law and Diplomacy, Tufts University (United States).
- 2017 Invited Panelist. EPIIC Conference. The World of Tomorrow Order and Chaos in the 21st Century. Tufts University (United States).
- 2016 *Invited Panelist.* Québec Forum: *Arctic Sustainability Across the 21st Century.* Sustainable Development in Northern Regions: An Integrated and Partnership-Based Approach. Arctic Circle and Government of Québec. Québec City (Canada).

- *Invited Speaker.* EPIIC Colloquium on *Order and Chaos: Diplomacy and Force in a Changing World.* Tufts University (United States).
- *Invited Speaker.* Collaborative Research Action: e-Infrastructures and Data Management. Belmont Forum. Paris (France).
- 2016 Co-Convener and Co-Chair. <u>International Dialogue on Science and Technology Advice in Foreign Ministries</u>. International Institute for Applied Systems Analysis. Vienna (Austria).
- *Invited Panelist.* Conference: International Cooperation in the Arctic: New Challenges and Vectors of Development. 20<sup>th</sup> Anniversary of the Arctic Council. Russian International Affairs Council. Moscow (Russian Federation).
- *Co-Convener.* Breakout Session on the Arctic High Seas: Building Common Interests in the Arctic Ocean. Arctic Circle. Reykjavik (Iceland).
- 2016 Co-Convener and Co-Chair. 2nd Annual Ambassadorial Panel on the Arctic High Seas: Building Common Interests in the Arctic Ocean (with Foreign Minister of Iceland, former President of Iceland and ambassadors and ministers from Canada, China, Finland, France, Germany, Greenland, Iceland, Norway, Russian Federation, Sweden, United Kingdom and United States). Reykjavik University. Reykjavik (Iceland).
- *Invited Participant.* Committee on Data for Science and Technology, International Council of Science. Denver (United States)
- *Participant.* 2<sup>nd</sup> Meeting of the International Network of Government Science Advisers. European Commission. Brussels (Belgium).
- *Invited Participant*. Arctic Expertise in Nordic Cooperation (NordArc2016). Prime Minister's Office of Finland. Helsinki (Finland).
- *Invited Panelist*, The Future Design of the Arctic Legal Order. International Polar Research Center, Kobe University, Kobe (Japan).
- *Invited Keynote*, XXIII Congress of the International Society for Photogrammetry and Remote Sensing, Prague (Czech Republic).
- 2016. Invited Panelist, Banks in the Land of Ice and Fire. The Royal Society, London (United Kingdom).
- 2016. Invited Speaker, Arctic Circle Greenland. Government of Greenland, Nuuk (Greenland).
- *Invited Panelist,* U.S.-Russia Relations in the Arctic. Harriman Institute for Russian, Eurasian, and East European Studies, Columbia University (United States).
- *Invited Panelist,* Arctic Futures Initiative. American Association for the Advancement of Science (AAAS) / International Institute for Applied Systems Analysis (IIASA), Washington, DC (United States).
- *Invited Participant,* 5<sup>th</sup> Annual Neureiter Science Diplomacy Roundtable. American Association for the Advancement of Science (AAAS), Washington, DC (United States).
- 2015 Guest of Honor and Opening Keynote, Arctic Futures Initiative meeting, International Institute for Applied Systems Analysis, Vienna (Austria).
- 2015 Member, Local Organizing Committee, 2<sup>nd</sup> Polar Data Forum, Ottawa (Canada).
- *Invited Panelist*, Arctic Circle, Singapore (Singapore).
- 2015 Organizing Committee Member and Invited Keynote, Polar Data Forum II, Waterloo University, Waterloo (Canada).
- 2015 Convener, Arctic High Seas (session). Arctic Circle, Reykjavik (Iceland).

- 2015 Co-Convener and Chair. <u>Ambassadorial Panel on the Arctic High Seas: Building Common Interests in the Arctic Ocean</u>. (with President of Iceland and ambassadors and ministers from China, Finland, Greenland, Iceland, Norway, Russian Federation, United States). Reykjavik University. Reykjavik (Iceland).
- *Invited Keynote,* WWF-Russia Meeting on the Bering Strait, United States Embassy, Moscow (Russian Federation).
- *Invited Keynote* Roundtable on Preventing Unregulated Use of Marine Living Resources in the Central Arctic Ocean. Ministry of Foreign Affairs, MGIMO University, Moscow (Russian Federation).
- *Invited Intervention.* Dialogues with Former Heads of State from 17 nations. <u>32<sup>nd</sup> Annual Plenary Meeting</u>. InterAction Council, Cardiff (Wales).
- *Invited Keynote Arctic Resource Development and Infrastructure III.* Bering Sea Alliance, Village of Gambell, St. Lawrence Island (United States)
- 2015 Session Chair and Steering Committee Member <u>Science Diplomacy 2015: Scientific Drivers for Diplomacy</u>.

  American Association for the Advancement of Science, Washington, DC (United States).
- 2015 Invited Presenter: Fletcher Warming Arctic International Inquiry IV: Leadership, diplomacy and Science-Resolving the Arctic Paradox. Fletcher School of Law and Diplomacy, Tufts University, Cambridge, (United States).
- 2015 Invited Keynote: Science Diplomacy and the Arctic. Finnish Academies of Science, Helsinki (Finland).
- 2014 Chair and Co-Convener: Workshop on Safe Ship Operations in the Arctic Ocean. United Nations, International Maritime Organization (IMO) Headquarters, 28 February 2014. Information Paper 12, Workshop on Safe Ship Operations in the Arctic Ocean, MSC 93/INF.12. Submitted by Finland to the IMO Maritime Safety Committee, 11 March 2014. London (United Kingdom).
- *Invited Keynote Arctic Resource Development and Infrastructure II.* Bering Sea Alliance, Village of Gambell, St. Lawrence Island (United States).
- 2014 Co-Chair: <u>International Conference on Data Sharing and Integration for Global Sustainability</u>. International Council of Science (ICSU) / World Data System (WDS) and Committee for Data Science and Technology (CODATA), New Delhi (India).
- 2014 Participant: Arctic Observing Summit, Helsinki (Finland).
- *Invited Keynote, <u>Arctic 2050: Toward Ecosystem-Based Management in a Changing Arctic Ocean.</u> European Marine Board / European Polar Board, Brussels (Belgium).*
- *Invited Speaker*: 5<sup>th</sup> ACI Polar Shipping Conference, London (United Kingdom).
- *Invited Speaker:* Expert Meeting on Energy and Security in the Arctic. International Peace Institute (IPI) and International Gas Union (IGU). The Hague (Netherlands).
- *Invited Speaker and Panelist:* North Atlantic Treaty Organization (NATO) Maritime Commander's Meeting (with the NATO Supreme Allied Commander Europe and the heads of 44 Navies). London (United Kingdom).
- 2013 Invited Keynote: 6th Malaysian International Seminar on Antarctica. Penang (Malaysia).
- *Invited Keynote and Panelist:* International Polar Data Forum, International Council of Science, World Data System, International Arctic Science Committee. Tokyo (Japan).
- *Invited Participant,* The 3<sup>rd</sup> International Arctic Forum of Dialogue (with President Vladimir Putin of Russia, President Ólafur Ragnar Grimsson of Iceland and President Sauli Niinistö of Finland). Russian Geographic Society. Salekhard (Russian Federation).
- *Visiting Professor.* Science Diplomacy and International Relations. MGIMO University. Faculties of International Law and International Relations. Moscow (Russian Federation).

- 2013 *Television Guest:* Regional Television of Buryatia Broadcast on 18 September 2013. Ulan-Ude (Russian Federation).
- 2013 *Visiting Professor:* Law of the Sea and Earth System Science. Buryat State University, Ulan-Ude (Russian Federation).
- 2013 Invited Speaker: Arctic Observing Summit, International Study for Arctic Change, Montreal (Canada).
- 2013 *Invited Keynote:* The Trans-Arctic Agenda: Challenges of Development, Security, Cooperation. University of Iceland, Stockholm International Peace Research Institute, Swedish and Icelandic, Ministries of Foreign Affairs, Reykjavik (Iceland).
- 2013 *Invited Expert: Environment, Climate Change and Security in the Arctic.* European Environment Agency and Organization for Security and Co-Operation in Europe. Copenhagen (Denmark).
- 2012 *Invited Speaker:* A New Era in Maritime Security? Risks, Rules and Responsibilities. *Chatham House*, London (United Kingdom).
- 2012 Invited Panelist: Global Economic Symposium 2012, Rio de Janeiro (Brazil).
- 2012 Invited Expert: Cooperation of States in the Protection of the Environment and Conservation of Marine Living Resources in the Arctic Ocean. Russian Foreign Ministry, Russian Council on International Issues, Pew International, Russian Association on the Law of the Sea. Moscow (Russian Federation).
- 2012 Invited Keynote: Democracy at the End of the World: New Perspectives on the Politics and Government of Antarctica. Sydney Democracy Initiative. Sydney (Australia).
- 2012 *Invited Speaker:* Climate and Security: Evidence, Emerging Risks and a New Agenda. Sciences Po and Intergovernmental Panel on Climate Change, Paris (France).
- 2012 Invited Speaker and Chair: 3rd ACI Polar Shipping Conference, London (United Kingdom).
- 2012 Session Convener: International Polar Year From Knowledge to Action. Session 2.2.7 Sustainable Arctic Development: Integrated Perspectives. Montreal (Canada).
- 2011 *Co-Convener:* White-Blue Arctic: Promoting Cooperation and Preventing Conflict in the Arctic Ocean. American Association for the Advancement of Science (AAAS) Annual Meeting, Washington, DC (United States).
- 2011 Lead Author for the Security Chapter: Arctic Human Development (AHDR) II. Arctic Council, Sustainable Development Working Group ((Iceland).
- 2011 *Invited Keynote* Anticipating the Future: Risk Management for Long-Term Planning. Cambridge Centre for Risk Studies, 3<sup>rd</sup> Annual Meeting, Judge Business School, University of Cambridge, Cambridge (United Kingdom).
- 2011 Lead Author Planning Meeting for the Arctic Human Dimensions Report II. Arctic Council, Sustainable Development Working Group. Copenhagen (Denmark).
- 2011 *Invited Speaker:* International Maritime Organization: Workshop on Environmental Aspects of the Polar Code. University of Cambridge (United Kingdom).
- 2011 Invited Keynote: Sustainable Shipping Conference. Vancouver (Canada).
- 2011 *Invited Participant,* The 2<sup>nd</sup> International Arctic Forum of Dialogue (with Prime Minister Vladimir Putin from Russia, President Ólafur Ragnar Grimsson from Iceland and HSH Prince Albert II of Monaco). Russian Geographic Society. Arkhangelsk (Russian Federation).
- 2011 Invited Expert: Online Question & Answer with the Guardian Newspaper (United Kingdom).

- *Invited Speaker:* 77<sup>th</sup> Rose-Roth Seminar on Changes in the High North: Implications for NATO and Beyond. Stortinget (Norwegian Parliament) and NATO Parliamentary Assembly, Tromsø (Norway).
- *Invited Session Chair:* Environmental and Strategic Challenges for Arctic Shipping. Arctic Shipping Summit, Helsinki (Finland).
- *Invited Panelist:* British Perspectives on the South Atlantic. Institute for Statecraft. University of Westminster, London (United Kingdom).
- 2011 Invited Panelist: Polar Bears, Politics and Petroleum Conflicting Issues in Arctic Hydrocarbon Exploration. Geologic Society. London (United Kingdom).
- *Invited Lecturer:* International Spaces: Crossing The Global Governance Threshold in Our Civilization. Conference on Earth System Governance, Colorado State University, Colorado (United States).
- 2011 Invited Keynote: Balancing National Interests and Common Interests Beyond National Boundaries. Rapid Warming in the Polar Regions and its Implication to the Pacific. 5<sup>th</sup> Malaysian International Seminar on Antarctica. Kuala Lumpur (Malaysia).
- *Invited Lecture:* Exploring Common Interests. Preparing for Rio+20. University Sains Malaysia. Penang (Malaysia).
- *Invited Lecture:* Balancing National Interests and Common Interests in the Arctic Ocean. National Institute of Polar Research, Tokyo (Japan).
- *Invited Plenary Address:* Environmental State-Change in the Arctic Ocean: Legal and Policy Consequences for the Global Community. Arctic Summit Science Week, International Arctic Science Committee. Seoul (South Korea).
- *Invited Panelist:* Balancing National Interests and Common Interests in the Arctic Ocean. Arctic Science, International Law and Climate Protection Legal Aspects of Marine Science in the Arctic Ocean. German Federal Foreign Office, Berlin (Germany).
- *Invited Panelist:* Knowledge, Resources and Legal Regimes: The New Geopolitics of the Polar Regions. National Environmental Research Council, British Library, London (United Kingdom).
- *Invited Speaker: Balancing National Interests and Common Interests in the Arctic Ocean.* International Arctic Conference: Geopolitical Issues and Equation in the 21<sup>st</sup> Century. Centre Jacques Cartier. Lyons (France).
- *Visiting Professor:* Science Diplomacy and International Relations. MGIMO University. Faculties of International Law and International Relations. Moscow (Russian Federation).
- *Invited Keynote*, Workshop on the Future of Space Cooperation in the Arctic Region. European Space Agency, Paris (France).
- *Invited Keynote:* The Arctic Ocean: Changes and Opportunities. The Special Lecture with Invited Arctic Experts and Briefing on Study Results *Korea Maritime Institute;* Ministry of Land, Transport and Maritime Affairs; Korea International Trade Association. Seoul (South Korea).
- *Invited Keynote*. Whitehall Paper Launch on Environmental Security in the Arctic Ocean. Royal United Services Institute for Security and Diplomacy Studies, London (United Kingdom).
- *Invited Participant.* The Arctic: Forum for Dialogue (with Prime Minister Vladimir Putin from Russia, President Ólafur Ragnar Grimsson from Iceland and HSH Prince Albert II of Monaco). Russian Geographic Society, Moscow (Russian Federation).
- *Invited Participant:* Science Diplomacy: <u>Applying Science and Innovation to International Challenges</u>. Wilton Park, British Foreign and Commonwealth Office (United Kingdom).

- 2010 Dinner Keynote: Governance and Security Issues in the Arctic. The Athenaeum Club, London, (United Kingdom).
- *Invited Keynote:* InterAcademy Panel on International Issues. Biodiversity Conference, The Royal Society, London (United Kingdom).
- *Invited Speaker:* Tackling Resource Challenges in the 21st Century: Avoiding Worst Case Scenarios. Chatham House, London (United Kingdom).
- *Special Contributor:* Antarctic Treaty at 50, a Beacon for Joint Management of Earth. National Geographic News Watch (United States).
- *Invited Public Lecture:* Friends of the Scott Polar Research Institute, University of Cambridge, Cambridge (United Kingdom).
- 2009 Invited Public Lecture: Gresham College, Museum of Science, London (United Kingdom).
- 2009 Radio Interview: Today, BBC-4 Radio Broadcast on 19 September 2009 (United Kingdom).
- *Invited Panelist:* Common Challenges to Transatlantic Energy Security: From Ukraine To The Arctic And Beyond. Finnish Institute of International Affairs, Finnish Ministry for Foreign Affairs and National Intelligence Council, Helsinki (Finland).
- *Invited Expert:* Aspen Dialogue and Commission on Arctic Climate Change, Aspen Institute, Winnipeg (Canada).
- *Invited Speaker:* Muslim Heritage Awareness Group, Foundation for Science Technology and Civilisation, The Royal Society, London (United Kingdom).
- *Invited Testimony:* OSPAR Commission Annual Meeting, Commission for the Convention for the Protection of the Marine Environment of the North-East Atlantic, Brussels (Belgium).
- 2009 Opening Keynote: International Ocean Stewardship Forum, National Oceanography Centre, Southampton (United Kingdom).
- *Invited Speaker:* New Frontiers in Science Diplomacy. American Association for the Advancement of Science and the The Royal Society, London, United Kingdom.
- 2009 Invited Expert, Aspen Dialogue and Commission on Arctic Climate Change, Aspen Institute (Monaco).
- *Invited Panelist*, Policy Pathways Toward Improved Arctic Governance, The German Marshall Fund, Washington, DC (United States).
- *Invited Speaker*, Distinguished Speaker Series, John Muir Institute of the Environment, University of California Davis, Davis, California (United States).
- 2009 Radio Interview, Leading Edge BBC Radio-4 Interview Broadcast on 25 June 2009 (United Kingdom).
- *Invited Speaker:* New Chances and New responsibilities in the Arctic Region. International Conference of the German Federal Foreign Office in cooperation with the Ministries of Foreign Affairs of Denmark and Norway and the Max Planck Institute for Comparative Public Law and International Law. Berlin (Germany).
- 2009 Invited Expert: Aspen Dialogue and Commission on Arctic Climate Change, Aspen Institute, Brussels (Belgium).
- 2009 Radio Interview: Costing the Earth BBC Radio-4 Broadcast On 6 April 2009 (United Kingdom).
- 2009 Invited Panelist: <u>Transatlantic Policy Options for the Marine Arctic</u>, Arctic Transform, Brussels, (Belgium).
- *Invited Lecture*: Friday Lunchtime Lecture, Lauterpacht Centre for International Law, University of Cambridge (United Kingdom).

- 2009 *Convener:* Environmental Governance Workshop, Arctic Ocean Geopolitics Programme and Arctic Transform, University of Cambridge (United Kingdom).
- 2008 *Invited Speaker:* Melting the political ice? Recent developments in the Arctic, British Institute of International and Comparative Law, London (United Kingdom).
- 2008 Invited Expert: Working Group meeting. Arctic Transform, Berlin (Germany).
- 2008 Radio Interview: Night Waves, BBC-3 Radio Broadcast on 24 November 2008. (United Kingdom).
- 2008 Invited Panellist: International Symposium: Looking beyond the International Polar Year: Emerging and reemerging issues in international law and policy in the Polar Regions. United Nations University – Institute of Advanced Studies and University of Akureyri (Iceland).
- 2008 Invited Keynote: London School of Economics, Environmental Security Seminar (United Kingdom).
- 2008 Convener and Chair: Meeting of the International Board for the Antarctic Treaty Summit. Scott Polar Research Institute, University of Cambridge (United Kingdom).
- 2008 *Invited Keynote:* Benjamin Franklin House, London (United Kingdom).
- 2007 Convener and Chair: Meeting of the International Board for the Antarctic Treaty Summit. Scott Polar Research Institute, University of Cambridge (United Kingdom).
- 2007 *Invited Participant:* 845<sup>th</sup> Wilton Park Conference: Polar Regions: Challenges and Possibilities. Wilton Park, British Foreign and Commonwealth Office (United Kingdom).
- 2007 Invited Panelist: International Polar Year Panel. National Science Foundation, Washington, DC (United States)
- 2007 Honoured Guest: Fulbright Scholars Reception. King's College London (United Kingdom).
- 2007 Invited Participant: Electronic Geophysical Year Steering Committee Meeting, Boulder (United States).
- 2006 *Invited Participant*, Workshop to Develop a Task Force on Digital Library Sustainability. Library of Congress, Washington, DC (United States).
- 2006 *Co-Convener:* The New Frontier in Defining the Data to Knowledge Paradigm. Committee on Data for Science and Technology (CODATA). International Council of Science, Beijing (China).
- 2006 *Invited Speaker:* Interdisciplinary Research During the International Polar Year. Valparaiso University, Valparaiso (United States).
- 2006 *Invited Participant:* International Polar Year Data Information Service. British Antarctic Survey, Cambridge (United Kingdom).
- 2006 *Invited Participant:* International Research on Permanent Authentic Records in Electronic Systems (InterPARES). Vancouver (Canada).
- 2006 *Invited Participant:* Electronic Geophysical Year Steering Committee Meeting, Boulder (United States).
- 2005 Invited Doctoral Dissertation External Examiner: University of, Cambridge, (United Kingdom).
- 2005 *Invited Speaker:* Deciphering Data: Communicating Research Activities and Findings to Diverse Audiences. American Geophysical Union, San Francisco (United States).
- 2005 *Invited Speaker:* Integrating Digital Information into Knowledge. United Nations World Summit on the Information Society, Tunis (Tunisia).
- 2005 Invited Speaker: Public Lecture Series, Austin College, Sherman, Texas (United States).

- 2005 Invited Participant: International Research on Permanent Authentic Records in Electronic Systems (InterPARES). Chicago (United States).
- 2005 Participant and Panel Convener: National Science Foundation, National Science Digital Library (NSDL) Annual Meeting, Chicago (United States).
- *Invited Participant:* Policy Committee Meeting, National Science Digital Library (NSDL). Columbia University, Palisades (United States).
- *Invited Participant:* Universities Space Research Association, National Aeronautics and Space Administration, Earth System Science Education (ESSE) meeting. Fairbanks (United States).
- *Invited Participant:* International Research on Permanent Authentic Records in Electronic Systems (InterPARES). Vancouver (Canada).
- *Invited Keynote Speaker:* Sustaining the National Science Digital Library. CENDI (Federal Managers of Science Technology Information Group), National Science Foundation, Washington, DC (United States).
- *Invited Panelist:* International Council of Scientific Unions, Committee on Data for Science and Technology (CODATA) meeting, Berlin (Germany).
- 2004 Invited Participant: International Research on Permanent Authentic Records in Electronic Systems (InterPARES). Vancouver (Canada).
- 2004 Participant and Workshop Convener: National Science Foundation, National Science Digital Library (NSDL) Annual Meeting, Chicago (United States).
- *Invited Speaker:* International Council of Scientific Unions, Scientific Committee on Antarctic Research (SCAR) meeting. Bremen (Germany).
- *Invited Participant:* Universities Space Research Association, National Aeronautics and Space Administration, Earth System Science Education (ESSE) meeting. Monterey (United States).
- *Invited Keynote Speaker:* Biological Interaction between the Antarctic and the Magellan Region *International Symposium and Workshop.* Ushuaia (Argentina).
- *Invited Participant:* International Research on Permanent Authentic Records in Electronic Systems (InterPARES). Los Angeles (United States).
- 2003 Invited Participant: Digital Library for Earth System Education. University of Colorado, Boulder (United States).
- *Invited Speaker:* Earth System Science and Policy Institute, California State University. Monterey Bay (United States).
- *Invited Participant:* International Research on Permanent Authentic Records in Electronic Systems (InterPARES). Vancouver (Canada).
- *Invited Participant:* National Science Digital Library Meeting, National Science Foundation, Washington, DC (United States).
- *Invited Participant:* 85<sup>th</sup> Polar Research Board Meeting, National Academy of Sciences. Washington, DC (United States).
- 2002 Invited Participant: XXVII Scientific Committee on Antarctic Research (SCAR) Meeting. Shanghai, (China).
- 2002 Invited Participant: Digital Library for Earth System Education. Cornell University, Ithaca (United States).
- 2002 Invited Participant, Integrating Education in Biocomplexity Research Workshop, National Academy of Sciences, Washington DC (United States).

- 2001-2 Expedition Co-Leader and Invited Educator. Graduate Certificate in Antarctic Studies Program in McMurdo Sound, Antarctica. Gateway Antarctica, University of Canterbury (New Zealand).
- 2001 *Workshop Convener*: Latitudinal Ecosystem and Environmental Variability Across Victoria Land. Scientific Committee on Antarctic Research (SCAR) Symposium on Antarctic Biology. Amsterdam, (The Netherlands).
- 2001 Workshop Co-Convener: Using DLESE Resources An Environmental Summit. Digital Library for Earth System Education. University of Northern Arizona, Flagstaff (United States).
- 2001 *Invited Speaker:* Antarctic Neotectonics (ANTEC) Workshop. Scientific Committee on Antarctic Research, University of Siena (Italy).
- 2001 Workshop Convener: Victoria Land, Antarctica, Coastal Biome: Marine-Terrestrial Biocomplexity Across a High Latitudinal Environmental Gradient. Byrd Polar Research Center, The Ohio State University (United States).
- 2001 Keynote Speaker: 6<sup>th</sup> International Wildlife Law Conference. American Society of International Law, Washington College of Law, American University. Washington, DC (United States).
- 2000 *Invited Speaker:* Digital Library for Earth System Education Symposium. Geological Society of America, Reno, Nevada (United States).
- 2000 *Invited Speaker:* 26<sup>th</sup> Scientific Committee on Antarctic Research (SCAR) Meeting / Biology Working Group, Geology Working Group and Joint Committee on Antarctic Data Management. Tokyo (Japan).
- 2000 Invited Speaker: The Victoria Land Coastal Transect Program. University of Siena (Italy).
- 2000 *Invited Speaker:* Old Water in the Ocean: The Antarctic Marine Radiocarbon Reservoir. Nagoya. University Radiocarbon Symposium, Nagoya (Japan).
- 2000 Invited Speaker: Global Lessons from Antarctica Rissho University, Tachigawa (Japan).
- 1999 *Invited Speaker:* Late-Quaternary Climatic Transitions in the Circum-Antarctic Coastal Zone. 19<sup>th</sup> National Institute of Polar Research Earth Science Symposium, Tokyo (Japan).
- 1999 Invited Speaker: Science into Policy: Global Lessons from Antarctica. Rissho University (Japan).
- 1999 *Invited Speaker:* 82<sup>nd</sup> Polar Research Board Meeting, National Academy of Sciences, Washington, DC (United States).
- 1999 Participant: Circumpolar Environmental Transition in the Antarctic Coastal Zone since the Late-Quaternary. 6th West Antarctic Ice Sheet (WAIS) meeting, National Science Foundation / National Aeronautics and Space Administration. Sterling, Virginia (United States).
- 1999 Co-Convener: Circum-Antarctic Sea Level and Coastal Environmental Variability During the Late Quaternary Cenozoic Environmental Variability in Antarctic Coastal Areas. International Geosphere-Biosphere Program/ Scientific Committee on Antarctic Research, Lake Kawagughi-ko (Japan).
- 1998 *Invited Speaker:* Applications of Radiocarbon in Antarctic Research. Symposium at Woods Hole Oceanographic Institution. Scientific Committee on Antarctic Research / International Geosphere-Biosphere Program / National Science Foundation (United States).
- 1997 Invited Speaker: Interdisciplinary Environmental Research in Antarctica. Rissho University (Japan).
- 1997 *Invited Speaker:* Holocene Geochemsitry of Antarctic molluscs. 17<sup>th</sup> National Institute of Polar Research Earth Science Symposium, Tokyo (Japan).
- 1997 *Invited Participant:* 6<sup>th</sup> United States/Japan Workshop on Global Change Research East-West Center, Honolulu, Hawaii (United States).

- *Convener:* National Workshop on the Scientific and public policy rationale for air quality standards in the United States: Ohio and the midwestern region. The Ohio State University (United States).
- *Contributor*: Intergovernmental Panel on Climate Change, Office of United States Global Change Research Program, Washington, DC (United States).
- *Invited Speaker:* Indicator Species for Interpreting Environmental Variability in the Antarctic Coastal Zone. Fifth International Symposium on Antarctic Science. Korean Ocean Research Development Institute, Ansan (Korea).
- *Invited Speaker:* Antarctic Science and Policy: Interdisciplinary Research Education (ASPIRE) American Geophysical Union, Baltimore (United States).
- 1996 Invited Participant: Earth System Science Education Universities Space Research Association. BIOSPHERE II, Oracle, Arizona (United States).
- *Invited Speaker:* Retreat of the West Antarctic Ice Sheet and Subsequent Persistence of Marine Macrofaunal Assemblages Along the Victoria Land Coast During the Holocene. International Symposium on Antarctica and Global Change: Interactions and Impacts. Scientific Committee on Antarctic Research. Tasmania (Australia).
- *Invited Participant:* Spheres of Influence in Earth Systems Sciences Education American Geophysical Union, Washington, DC (United States).
- *Invited Speaker:* Antarctic Cumulative Impacts International Union for the Conservation of Nature, Washington, DC (United States).
- *Invited Participant:* Monitoring of Environmental Impacts from Science and Operations in Antarctica Scientific Committee on Antarctic Research, Texas A & M, College Station, Texas.
- *Invited Speaker:* Isotope geochemistry of mollusc shells in Antarctic coastal areas (INVITED). Lamont-Doherty Earth Observatory, Columbia University, Palisades (United States).
- *Invited Speaker:* Interdisciplinary research in Antarctic coastal areas. National Institute of Polar Research, Tokyo (Japan).
- *Invited Speaker:* Circumpolar records of environmental variability in Antarctic coastal areas after the Last Glacial Maximum. VII International Symposium on Antarctic Earth Science, Siena (Italy).
- *Invited Speaker:* Late Neogene Antarctic Glacial Fluctuations: Prospect Mesa Stratigraphy in Wright Valley Revisited. Pliocene Antarctic Glaciation Workshop, Woods Hole (United States).
- *Invited Speaker:* Ecological variability in Antarctic coastal areas: past and present Scientific Committee on Antarctic Research Sixth Biology Symposium, Venice (Italy).
- *Invited Speaker:* Coastal uplift a tectonic record? (Workshop on the Geodynamic Evolution of the Transantarctic Mountains and West Antarctic Rift System, Estes Park (United States).
- *Co-Convener:* Holocene Fossil Geochemistry in Antarctic Coastal Areas. International Workshop on Holocene Environmental Changes in Antarctic Coastal Areas, Tokyo (Japan).
- *Invited Speaker:* Assessing Antarctic ice sheet-sea level dynamics during the Holocene: the 'meltwater test'." Third International Symposium on Antarctic Science Antarctic Biology and Ecology, Seoul, (Korea).
- *Invited Speaker:* Interpreting the West Antarctic Ice Sheet contribution to Holocene Sea level changes. International Symposium on Quaternary Environmental Changes in the Pacific Region, Tokyo (Japan).
- *Participant:* A circumpolar record of melting along Antarctic ice sheet margins during the Holocene. International Conference on Antarctic Science Global Concerns, Bremen (Germany).
- 1991 Session Convener: Polar Benthic Ecology Session. 17th Marine Benthic Ecology Meeting. Williamsberg (United States).

- *Speaker:* Conservation of the Circumpolar Antarctic Scallop. 7th International Pectinid Workshop, Portland, Maine (United States).
- 1989 Invited Speaker: Research in the Antarctic. United States Coast Guard Academy, New London (United States).
- *Speaker:* Size thresholds of the Antarctic scallop. American Society of Zoologists, San Francisco (United States).
- *Invited Speaker:* Conservation of the circumpolar Antarctic scallop, *Adamussium colbecki* (Smith, 1902). Scientific Committee on Antarctic Research Fifth Biology Symposium, Hobart, Tasmania, (Australia).
- *Speaker:* Ecology of the Antarctic scallop, *Adamussium colbecki*, in New Harbor, Antarctic During the 1986 Austral Summer. American Geophysical Union, New Orleans (United States).
- Speaker: Epizooic succession and community dynamics on the sea scallop *Placopecten magellanicus*, in the Gulf of Maine. Undersea Science Symposium, University of Connecticut, Avery Point (United States).
- 1984 Invited Speaker: Winter research diving in McMurdo Sound, Antarctica. ICEDIVE 84, Stockholm, (Sweden).
- *Speaker:* Cryptic coloration of the intertidal isopod, Idotea montereyensis. California Ecological Research Society Fifth Symposium, California State University, Sacramento (United States).
- *Speaker:* Ecology of the Intertidal Isopod, *Idotea montereyensis*. Fifth Undergraduate Research Conference, Santa Clara (United States).