

John A. Baross, Professor Emeritus CV 2/25

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Positions:

Positions:

1995-present: Professor, School of Oceanography and the Astrobiology Program,
University of Washington
1985-1995: Associate Professor, School of Oceanography,
Univ. Washington
1983-1985: Associate Professor, Microbiology and Oceanography,
Oregon State University
1977-1983: Assistant Professor, Research, Microbiology and Oceanography, Oregon State University
1975-1977: Research Associate, Microbiology and Oceanography, Oregon State University
1973-1975: Postdoctoral Research Associate, Microbiology, Oregon State University
1973: PhD, University of Washington, Marine Microbiology, College of Fisheries

Honors:

Undergraduate Teaching Award, College of Ocean and Fisheries Sciences,
University of Washington (2005)
Fellow, American Academy of Microbiology (1999)
Lifetime National Associate, The National Academy of Sciences (2003) Recognized through
Thermococcus barossii (Duffaud, et al., Syst. Appl. Microbiol. 21:40-49, 1998)
Recognized through *Geogemma barossii* (Kashefi K. and D. R. Lovley. Science 301:934, 2003)
NASA Group Achievement Award, *Jupiter Icy Moons Orbiter Science Definition Team*, 2005
NASA Exceptional Scientist Medal (2021)

Membership in Professional Societies

American Academy of Microbiology
American Association for the Advancement of Science (AAAS)
American Society for Microbiology
American Geophysical Union
International Society for the Study of the Origin of Life
The Geochemical Society
International Society for Microbial Ecology (ISME)

Graduate Students Advise

Current Member, Committee

Georges Kanean, PhD student 2022
Taylor Walton, PhD student 2021, MGG Ocean

Past Member, Committee for:

Susan Peters, 1982, MS, Microbiology OSU (Committee chair)
Bruce Monger, 1988, MS, Bio. Ocean.

Susan Neuer, 1988, MS, Biol. Ocean
Marie de Angelis, 1989, PhD, Biol. Ocean. (Committee chair)
Monica Orellana, 1990, PhD, Biol. Ocean.
Joan Cleveland, 1990, PhD, Biol. Ocean.
Mary Ruckelshause, 1990, MS, Fisheries
Ivan Tosques, 1991, MS, Biol. Ocean. (Committee chair)
Ralph Pledger, 1992, PhD, Biol. Ocean. (Committee chair)
James Holden, 1996, PhD, Biol. Ocean (committee chair)
John Landsdown, 1992, PhD, Chem. Ocean.
R. Geyer, 1992, MS, Marine Geology and Geophysics
Graig Cowie, 1992, PhD, Chem. Ocean.
Craig Plante, 1992, PhD, Biol. Ocean.
Miguel Goni, 1993, PhD, Chem. Ocean.
Kimberly Calhoon, 1994, MS, Marine Geology and Geophysics
Ann Conrad, 1993, MS, Marine Geology and Geophysics
Ed Doran, 1995, MS, Biol. Ocean.
John Gosink, 1996, PhD, Microbiology
Elizabeth McLaughlin, 1998, PhD, Chem. Ocean.
Matti McCarthy, 1998, PhD, Chem. Ocean.
Peter Hernes, 1999, PhD, Chem. Ocean.
Patricia Yager, 1997, PhD, Biol. Ocean.
Stephan Archer, 1998, MS, Marine Geology and Geophysics
Karl Rockne, 1997, Ph.D., Civil Engineering
Krista Anders, 1998, PhD, Civil Engineering
Byron Crump, 1999, PhD, Biol. Ocean. (Committee chair)
V. Bhat, 1999, MS, Marine Geology and Geophysics
K. Anders, 2000, PhD, Chem Engineering
Melanie Summit, 2000, PhD, Biol. Ocean. (Committee chair)
Carrie Miller, 2001, MS, Biol. Ocean.
A. Aufdenkampe, 2002, PhD., Chem. Ocean
H. Mellow, 2002, PhD., Chemistry Dept.
Adrienne Huston, 2003, PhD., Biol. Ocean
O. Nercessian, 2003, PhD., University of Brest, Brest, France
Jonathan Kaye, 2004, PhD., Biol. Ocean. (Committee chair)
P. Kim, 2004, PhD, Mathematics
Lisa Gilbert, MG&G (PhD)
Julie Huber, 2004, PhD, Biol. Ocean and Astrobiology (Committee chair)
Matt Schrink, 2005, PhD, Biol. Ocean and Astrobiology (Committee chair)
D. LaRowe, 2006, Geology and Geophysics, U. C. Berkeley (PhD)
Susan Lang, 2006, PhD, Chem. Ocean.
Mausmi Mehta, 2006, PhD, Biol Ocean. (Committee chair)
M. Wery, 2007, Microbiology and Biotechnology (PhD), IFREMER, Centre de Brest,
and Univ. of Brest, Plouzane, France
Zach Adam, 2007, Aeronautical Engineering (MS)
Steve Vance, 2008, Earth and Space Science (PhD)
Mark Claire, 2008, Astronomy and Astrobiology (PhD)

Nathan Ahlgren, 2008, Biol. Ocean. (PhD)
 Julie Wright, 2009, Biol. Ocean. (MS)
 Min Lin, 2009, (Co-chair with D. Kelley) (MS)
 Nick Pinel, 2009, Microbiology and Chemical Engineering (PhD)
 Eric Collins, 2010, Biol. Ocean. (PhD)
 J. Harnmeijer, 2010, Earth and Space Science and Astrobiology (PhD)
 Billy Brazelton, 2010, (Chair) Oceanography and Astrobiology (PhD)
 Nick Cowan, 2010 Astronomy and Astrobiology (PhD)
 Andrew Opatkiewicz 2010 (Chair) Oceanography and Astrobiology (MS)
 Anne Baxter, 2010, Fisheries (MS)
 Aaron Goldman 2010, (Co-chair) (Microbiology and Astrobiology) (PhD)
 Linda Sauter, 2011, Microbiology and Chemical Engineering (MS)
 John Kirkpatrick, 2011, Chem. Ocean and Astrobiology (PhD)
 Jesse Colangelo-Lillis, 2012, Biol. Ocean and Astrobiology (MS)
 Colleen Durkin, Biol. Ocean, PhD 2012
 Rika Anderson, 2013 (Chair) Oceanography and Astrobiology
 Kyle Costa 2013, Microbiology and Astrobiology (PhD)
 Marcella Ewert Sarmiento, 2013, Biol. Ocean. (PhD)
 Jeff Bowman, 2014, Biol. Ocean and Astrobiology (PhD)
 Zoe Harrold, 2014, (ES&S) (PhD)
 Eva Stueken, 2014, (ES&S and Astrobiology) (PhD)
 Monica Riess, 2014, Oceanography MG&G (MS)
 Aditya Chopra, 2014 (PhD) Astronomy, Australian National University (co-advisor)
 Frederick “Ricky” Dooley 2015 (Biology) (PhD)
 Barbara Walter, 2015, Earth and Space Science (MS)
 Jonathan Babst, 2015, Earth and Space Science (MS)
 Katharine Marshall, 2015, (Biol. Ocean) (PhD)
 Vaughn Iverson, 2015, Biol. Ocean. (PhD)
 Michael Carlson, 2015, Biol. Ocean (PhD)
 Jaclyn Saunders, 2016, Biol. Ocean (PhD)
 Evan Firth, 2017, (Biol. Ocean and Astrobiology) (MS)
 Chloe Hart, 2018, (ES&S) (PhD)
 Jonathan Babst, 2018, (ES&S) (PhD)
 Vega Shah, 2018, (Biol. Ocean) (PhD)
 Gordon Showalter, 2020, Biol. Ocean and Astrobiology (PhD)
 Teresa Whorley, 2021, MGG (PhD)
 Zac Cooper, 2022, Biol. Ocean and Astrobiology (PhD)
 Addien Wray, 2022, ESS (PhD)
 (Member on 6 graduate student graduate committees at Oregon State University)

Others: Stefan Sievert, Fullbright Scholar from Bremen, Germany (1992-1993)
 Ken Takai, Rotary Fellow from Kyoto, Japan (1994-1995)
 Jan Amand, visiting Post Doctoral Fellow from Washington University, Saint Louis (1997-1998); Craig Moyer, Sabbatical year in my lab (2003-04); Sanjoy Som, UW Astrobiology graduate student (ESS) doing a research rotation in my lab. Hakon Dehle, Post Doctoral Fellow (2008-2009). Aditya Chopra, Post Doctoral Fellow (2016); Rika Anderson, sabbatical 6/2019 – 3/2020.

Committees, Workshops and other Community Activities (2003-present)

Co-Chair National Research Council (National Academy of Sciences) Committee on the Origins and Evolution of Life, COEL (2000 – 2004)

Member, Mars Exploration Payload Assessment Group (MEPAG) (2002-03)

Member, Science Definition Team for Jupiter Icy Moons Orbiter (JIMO) Mission (2003)

Membership NAI Titan Focus Group (2003-2005)

Organized and convened “Weird Life” planning session for the National Research Council’s (NAS) Committee on the Origins and Evolution of Life (2002)

Scientific Organizing Committee, Second Astrobiology Science Conference, NASA Ames Research Center, California (2002)

Organizing Committee, 3rd Astrobiology Institute General Meeting, Tempe AZ (2003)

Co-Organize and Co-Chair American Geophysical Union (AGU) session entitled “Terrestrial and Synthetic Environments: Where in the Solar System Can They Take Us?” (2002)

Organized and convened American Society for Microbiology (ASM) Colloquium entitled “Novel Organisms and Novel Metabolisms; What More Can We expect to Find?” Washington DC, May, 2003

Co-Organize and Co-Chair Geological Society of America (GSA) session entitled “Submarine Hydrothermal Systems: The Emergence of Geobiology”, Seattle, WA, November, 2003.

Co-organize and Co-Chair The American Association for the Advancement of Science (AAAS) session on The Lost City Hydrothermal System, Seattle, WA (02/04)

Chair, National Research Council (National Academy of Sciences) Task Group “The Limits of Carbon Life on Earth and Elsewhere”, 2004-2006

Organized National Research Council (National Academy of Sciences) Workshop “The Limits of Carbon Life on Earth and Elsewhere” Washington D. C., May 10-11, 2004

Member, InterRidge (International Ridge) Working Group: “Biogeochemical Interactions at Deep-Sea Vents”, 2004-2007

Co-organize and Co-Chair American Geophysical Union (AGU) session entitled “Unraveling the ‘Fingerprints’ of Geochemical Processes Recorded in Earth Materials”, Fall meeting, San Francisco, Dec. 13-17, 2004.

Member, Science Education Advisory Committee, Pacific Science Center, Seattle, WA (2005-2015)

Lecturer and co-organizer of Vatican Observatory Summer School (VOSS) on Astrobiology, June 15-July 14, 2005, Vatican City, Italy

Charter Member, Seamount Coordinated Network (NSF), 2004-present

Chair, Science Advisory Council, International Census of Marine Microorganisms (ICoMM), 2004-2011

Organizing Committee, International Extremophile Meeting, Tokyo, Japan, Nov. 2005

Invited participant, “Pale Blue Dot III, Searching for Life on Distant Worlds”, Chicago, IL, September 17-20, 2006

Coordinate reviews and final recommendations for the National Academy report: “Planetary Protection Requirements for Venus Missions” prepared by the NAS Task Group on Planetary Protection Requirements for Venus Missions, 2006

Invited participant, IDOP workshop “Exploring the Deep Biosphere and the Integrated Ocean Drilling Program”, 3-5 October 2006, Vancouver, BC.

Co-organizer and Co-chair, The American Society for Microbiology symposium “The Rare Microbial Biosphere: Implications and Study”, ASM annual meeting, Toronto, Canada (05/07)

Member of organizing committee and session convener, Bioastronomy-2007 meeting, San Juan, Puerto Rico, July, 2007

Co-organize, AGU Chapman Conference on Planetary Habitability (2009).

Invited participant and speaker, National Academy of Sciences, “Colloquium on Astrobiology and Mars Exploration”, Pasadena, CA, July 2007.

Invited speaker on education in Astrobiology, National Academy of Sciences Committee on The Future of the NASA Astrobiology Program, Orange County, CA, Aug. 2007.

Committee member, American Academy of Microbiology USFCC/J. Roger Porter Award Nominating Committee, 2007-2012.

Invited participant, American Academy of Microbiology colloquium “The Uncharted Microbial World: Microbes and Their Activities in the Environment. (2007).

Session co-organizer and invited plenary speaker, Gordon Conference on the Origin of Life, Session entitled: “Real World Geochemical Complexity: Interfaces, Gradients and Cycles”. Jan. 20-25, 2008, Ventura, CA.

Invited participant and discussion leader, NASA Workshop: “Cyanobacteria on the Moon”, January 28-30, 2008, NASA Ames, CA.

Co-organizer of Plenary Session on “Weird Life”, Astrobiology Science Conference (AbSciCon) , Santa Clara, CA, April 14-18, 2008.

Invited Plenary Speaker at Plenary Session “Life on Exoplanets: What will Space Missions Tell Us?”, Astrobiology Science Conference (AbSciCon), Santa Clara, CA, April 14-18, 2008.

Invited speaker, National Academy of Sciences workshop on the “Origin of Life”, National Academy Building, Washington DC, May 13-14, 2008.

Invited participant and discussion leader, Sloan Foundation Symposium “Deep Carbon Cycle”, Carnegie Geophysical Institute, Washington. DC, May 15-17, 2008.

Invited participant, Netherlands Academy of Science meeting on Diversity of Marine Microorganisms, May 27-30, 2008, Amsterdam, Netherlands

Chair, Steering Committee, International Census of Marine Microbes, met May 25-27, 2008, Amsterdam, Netherlands

Invited Plenary speaker, Santa Fe Institute on Compartmentalization and the Origin of Life, June 15-20, 2008.

Review Panel member, review proposals submitted to NASA Astrobiology Science and Technology for Exploring Planets (ASTEP) program, June 10-12, 2008, Pasadena, CA

Invited speaker, European Science Foundation, “Water World Symposium” workshop, Sicily, November 2008

Invited participant and chaired ICoMM Scientific Advisory Council meeting, International Census of Marine Life International Meeting, Long Beach, CA, February 2009.

Co-organizer and speaker, symposium on “Weird Life”, AAAS meeting, Chicago IL, February 2009

Invited participant (chair of ICoMM Scientific Advisory Council) International Census of Marine Microbes, 454 User Spring Meeting, Marine Biological Laboratory, Woods Hole, MA (April 6-9, 2009)

Invited speaker, “The Search for Life in the Universe”, May Symposium Space Telescope Science Institute, May 4-7, 2009 (Baltimore, MA)

Invited participant and group leader, American Academy of Microbiology colloquium “The Rare Microbial Biosphere”, San Francisco, CA (2009).

Invited Lecturer, 2009 Santander Summer School: Earth’s Extremophiles and Extraterrestrial Habitability, Santander, Spain (June 20-26, 2009)

Invited speaker, Minimal Life meeting, National Science Foundation, August 10-11, 2009

Co-organizer and speaker, symposium on “Weird Life”, AAAS Pacific Division meeting, San Francisco, CA, August, 17-19, 2009

Chair, ICoMM (International Census of Marine Microbes) Scientific Advisory Council meeting, Amsterdam, Netherlands, September 19-21, 2009.

Invited Public Lecture: NASA Lecture Series: Evolution of Biology, Technology, Science and Exploration, November 2, 2009. Mountain View Center for the Performing Arts, Mountain View, CA. Lecture title: “The Limits of Evolution and the Search for Extraterrestrial Life”.

Member, Steering Committee and invited speaker, Pontifical Academy of Sciences Study Week on Astrobiology, Casma Pio IV, Vatican City (November 6-11, 2009)

Organize and Convene, session entitled “The Deep carbon Cycle” Gordon Conference Origin of Life, January 10-15, 2010, Galverston, Texas

Co-organize and Convene, symposium entitled “Implications of Rare Microbes in Natural Populations”, International Society for Microbial Ecology (ISME), international meeting, August 2010, Seattle, Washington.

Member, International Founders Committee, the “Deep Carbon Observatory”, sponsored by the Sloan Foundation (2009-2010)

Member, Executive Committee, the “Deep Carbon Observatory”, sponsored by the Sloan Foundation (2010-2020)

Member, External Advisory Board, Center for Dark Energy Biosphere Investigations (C-DEBI) (2010-2012)

Chair, External Advisory Board, Center for Dark Energy Biosphere Investigations (C-DEBI) (2013-2015)

Member, Executive Council of the Astrobiology Society (2010-2020)

Member, National Academy of Science (NAS) Committee on “Planetary Protection of Icy Bodies in the Outer Solar System” (2010-2012).

Member, European Space Agency (ESA) Planetary Protection Committee – Mars Sample Return (2011-2012)

Member, Selection Committee for the USA Library of Congress Baruch Blumberg Chair in Astrobiology (2012-2016)

Member, Scientific Organizing Committee, International meeting "The Search for Life Beyond the Solar System: Exoplanets, Biomarkers, and Instruments" sponsored by the Vatican Observatory and the Steward Observatory (University of Arizona) to be held at the University of Arizona, March 2014.

Co-Chair, Blumberg Dialogues on astrobiology and the humanities, Library of Congress (2014-2015)

Co-PI and co-organizer, Deep Carbon Observatory (DCO) Summer School – First Summer School, July 2014, Yellowstone National Park (supported by the Sloan Foundation)

Member, USA and Japan, joint Committee organizing a sample return mission from Enceladus (2013-2015)

Member, National Academy of Science National Research Council (NRC) committee Mars Exploration Program Analysis Group (MEPAG) “Special Regions” selection (2014-2015)

Co-organizer and convener, Deep Carbon Observatory (DCO) meeting, Rome, Italy, August 2015.

Member, Deep Carbon Observatory (DCO) committee “Emerging Leader Awards” (2016 to 2020)

Member, SETI Institute Science Advisory Board, 2016-2023

Invited participant, National Academy Workshop “Ocean Memory”, September 2017, Friday Harbor

Invited participant, 3D Earth Workshop – Subsurface Science and Exploration, CIFAR sponsored, Toronto, Ontario, Canada December 4-6, 2017.

Invited participant, Deep Carbon Observatory International Meeting in Zurich, Switzerland, October 11-12, 2018 (focus on field studies)

Invited participant, Extreme Biophysics Research Coordinating Network, Troy New York, Dec. 2-3, 2018

Invited participant, Ocean Memory workshop, Santa Catalina Island, California, February 20-27, 2019.

Invited participant, Ocean Memory workshop, Friday Harbor Labs, San Juan Island, Washington, October 2023.

Current and Past Editorial Positions:

Co-Editor (with A. Brack, M. Mayor, and G. Horneck) on Advances in Astrobiology and Biogeophysics Series, Springer-Verlag Press (2001-2006)

Associate Editor, Marine Microbiology and Microbial Ecology Sections, The Encyclopedia of Microbiology, Third Edition, Editors-in Chief, J. Lederberg and M. Schaechter, Elsevier Press, London (published 2009)

Editorial Board and editor in charge of reviews, Astrobiology Journal, Mary Ann Liebert, Inc. Publishers (2003-2013)

Editorial Board, Environmental Microbiology (2006 to 2012)

Editorial Board, Journal Hypothesis in the Biological Sciences (2010 -2014)

Editorial Board, Life Journal (2014-2018)

Co-editor (with R.M. Hazen and A. Jones) Carbon in the Earth, Special issue Reviews in Mineralogy and Geochemistry (2013 publication date)

Co-Editor (with W. Baines) a special issue in the Journal Life on “Limits of Life and Implications”. Published in 2015

Books Published

Co-Editor (with W. Wilcock, D. Kelley, E. DeLong and G. Cary) AGU Monograph: Deep Subsurface Biosphere at Mid-Ocean Ridges, Geophysical Monograph 144, 2004, American Geophysical Union, Washington, DC.

Co-Editor, Series Editor, *Advances in Astrobiology and Biogeophysics*, 2004-2009, Springer-Verlag, Berlin
Co-Editor (with W. Sullivan) *Planets & Life: The Emerging Science of Astrobiology*, 2007. Cambridge University Press
Associate Editor, Marine Microbiology and Microbial Ecology Sections, The *Encyclopedia of Microbiology*, Third Edition, Editors-in Chief, J. Lederberg and M. Schaechter, 2009. Elsevier Press, London
Co-Editor (with R. M. Hazen, & A. P. Jones) *Carbon in the Earth*, Special issue of *Reviews in Mineralogy and Geochemistry* Vol. 75, Mineralogical Society of America – Geochemical Society, 2013

Non-UW Courses (lecturer and/or organizer and lecturer)

Lecturer and co-organizer of Vatican Observatory Summer School (VOSS) on Astrobiology, June 15-July 14, 2005, Vatican City, Italy
Invited lecturer, Winter School in Astrobiology, University of Hawaii, January 2009
Invited Lecturer, 2009 Santander Summer School: Earth's Extremophiles and Extraterrestrial Habitability, Santander, Spain (June 20-26, 2009)
Invited lecturer, Marine Biological Laboratory (MBL) Summer Microbial Diversity course, July 2010
Invited lecturer, Winter School in Astrobiology, University of Hawaii, January 2011
Invited lecturer, 41st SAAS-Fee School, Planets and Life, Switzerland, April 2011 (gave 9 lectures)
Invited lecturer, Astrobiology Summer School, Iceland, July 1-15, 2012
Invited lecturer, Winter School in Astrobiology, University of Hawaii, January 2014
Invited lecturer, Astrobiology graduate course, Biosphere 2, Tucson, AZ, March 2014
Invited lecturer, International Summer School in Astrobiology, Santander, Spain, June 29-July 3, 2015 (The Origin of Life: From Monomers to Cells)
Co-organizer and lecturer, Deep Carbon Observatory (DCO) Summer School, Big Sky Conference Center, Yellowstone, July 13-18, 2014

Examples of Invited Talks (2004 to present)

M. J. Murduck sponsored "Partners in Science" National Conference (Plenary speaker to 200 secondary school science teachers) San Diego, CA (01/04)
The Agouron Institute, Marine Microbial Ecology Meeting, Del Mar, CA (01/04)
The American Association for the Advancement of Science (AAAS), two invited talks, Seattle, WA (02/04)
National Research Council (National Academy of Sciences) Work shop "The Limits of Carbon Life on Earth and Elsewhere" Washington D. C., May 10-11, 2004
The American Society for Microbiology (colloquium speaker), New Orleans, LA (05/04)
Goldschmidt Conference (Plenary speaker), Copenhagen, Denmark (06/04)
Woodfest Conference (conference to celebrate the 60th birthday of Woody Sullivan), University of Washington, Seattle (June 16-18, 2004)
Dark Energy Workshop (Plenary speaker) Wood Hole Oceanographic Institute, Oct. 4-6, 2004
Carnegie Institution of Washington, Washington, D. C. (Oct. 04)
Winter School for Astrobiology (8 lectures) University of Hawaii, Jan. 2005
Gordon Conference on Origin of Life (Plenary speaker), Ventura, CA, Jan. 2005
International Extremophile Meeting (Plenary speaker), Tokyo, Japan, November 2005.
Joint European Space Agency (ESA)/NASA meeting on Europa, UCLA, December, 2005

National Astrobiology Institute, Europa Focus Group meeting, Mountain View, CA (03/06)

The University of Arizona, Templeton public-talk series “Astrobiology and the Sacred” (03/06)

The University of Arizona, Astrobiology students, lecture and discussion on “Evolution and Astrobiology” (03/06)

The National Academy of Sciences, “Weird Life and Astrobiology”, (05/12/06)

The American Society for Microbiology (invited colloquium speaker), Orlando, FL (05/06)

Santa Fe Institute, “Hydrothermal Vents and the Origin of Life, Santa Fe, NM (06/06)

RIDGE Theoretical Institute, Modeling Mid-Ocean Ridge Hydrothermal Processes: magma to Microbe, Invited speaker, Mammoth Lake, Nevada (06/06)

The Forest and the Trees Workshop, Arizona State University (12/06)

American Astronomy Society Annual Meeting, “The Limits of Organic Life in the Universe”, Seattle, WA (01/05-10/07)

American Astronomy Society Annual Meeting, “The Dark, Hot Subsurface Biosphere on Earth and Elsewhere”, Seattle, WA (01/05-10/0)

The American Society for Microbiology annual meeting, introduction to the symposium entitled “The Rare Microbial Biosphere: Implications and Study”, May 2007, Toronto, Canada.

Santa Fe Institute Workshop entitled: “The Origin of Nucleic Acids”, June 2007, Santa Fe, N. M. Gordon Conference, The Origin of Life, January 20-24, 2008. Opening night plenary presentation and convened a session.

NASA Workshop “Cyanobacteria on the Moon”, January 28-30, NASA Ames, Moffitt Field, CA. Invited discussion leader.

NASA Astrobiology Science Conference (AbSciCon), April 14-17, 2008. Invited plenary talk on habitability on extra-solar planets and organized special plenary session on “Weird Life”.

European Science Foundation “Frontiers of Science” event: - Complex Systems and Changes: Water and Life, Presentation title: “Submarine Hydrothermal Vents: Limits of Life, Biofilms and Early Evolution”, 29-31 October 2008, Taormina, Sicily, Italy.

Washington University, St. Louis, Biology Department, “Unexpected Molecular and Physiological Diversity in the Microbial Biofilm at the Lost City Hydrothermal Environment”. March 4, 2009

Washington University, St. Louis, Earth and Space Science Department, “Distant Biosignatures: Life on Exoplanets”, March 5, 2009

Space Telescope Science Institute, May Symposium: The Search for Life in the Universe, Presentation title: “Submarine Hydrothermal Vents: - Limits of Life, Biofilms and Early Evolution”, May 4-7, 2009

Invited Lecturer, 2009 Santander Summer School: Earth’s Extremophiles and Extraterrestrial Habitability, Santander, Spain (June 20-26, 2009)

Santa Fe Institute Origin of Life Meeting: Minimal Life, National Science Foundation, August 10-11, 2009

AAAS Pacific Division meeting, Distant Biosignatures: Life on Exoplanets, Symposium on “Weird Life”, San Francisco, CA, August 17-19, 2009

Public Lecture: NASA Lecture Series: Evolution of Biology, Technology, Science and Exploration, November 2, 2009. Mountain View Center for the Performing Arts, Mountain View, CA. Lecture title: “Searching for life in the universe: A new Darwinian voyage”

Pontifical Academy of Sciences Study Week on Astrobiology, “Limits of life, early evolution, and the search for habitable planets” Casma Pio IV, Vatican City, November 6-11, 2009

Gordon Conference on the Origin of Life, “Microbial ecology of deep ocean environments-Lost City Hydrothermal System”, Galveston, Texas, January 2010.

Cancer Forum Workshop 1, “Biofilms as cancer analogues” Arizona State University, AZ, February 10-12, 2010.

University of Colorado, “Minimal cells, hydrothermal vent biofilms and the origin of multicellular communities” Boulder, CO, May, 2010.

Invited lecturer, Marine Biological Laboratory (MBL) Summer Microbial Diversity course, July 2010

Invited speaker, International Deep-Sea Microbiology Workshop, Brest, France, September 2010, Presentation title: “Minimal cells, hydrothermal vent biofilms, and the origin of multi-cellular communities”.

Invited speaker, The Origins Institute, McMasters University, Canada, October 2010 (two lectures including a public lecture)

Invited speaker, Plenary Session, Geological Society of America, Denver, CO, November 2010, Presentation title: “Limits of life, early evolution, and the search for habitable planets”.

Invited lecturer, Winter School in Astrobiology, University of Hawaii, January 2011 (gave 3 lectures)

Invited lecturer, 41st SAAS-Fee School, Planets and Life, Switzerland, April 2011 (gave 9 lectures)

Invited speaker, International Thermophile meeting, Big Sky, CO, September 2011

Invited plenary speaker, Astrobiology Science Conference, Atlanta GA, April 2012

Invited lecturer, Nordic Summer School in Astrobiology, Iceland, July 2012

Invited speaker, Geological Society of America, Charlotte, North Carolina, November 2012

Invited speaker, Origin of Life Workshop, Princeton University, January 2013.

Invited panel speaker, Deep Carbon Observatory International Meeting, National Academy, Washington, DC, March 2013

Invited speaker, University of Dusseldorf, Germany, June 2013

Invited plenary speaker at the 2013 International Association for the Advancement of High Pressure Science and Technology (AIRAPT), Seattle, WA, July 2013

Invited speaker, University of Toronto, Earth Sciences Seminar Series, September 2013

Invited Panel member (with Stephan Hand and Barbara Sherwood-Loller), A two hour discussion with a public audience on Astrobiology and related topics. Toronto Science Festival, 27-29 September 2013

Invited lecturer, Winter School in Astrobiology, University of Hawaii, January 2014 (gave 3 lectures)

Invited lecturer, Astrobiology, Biosphere 2, Tucson, AZ, March 2014 (3 hours of lectures and led a 2 hour discussion)

Invited plenary speaker (and the opening speaker of the meeting), "The Search for Life Beyond the Solar System: Exoplanets, Biomarkers, and Instruments", Tucson, AZ, March 2014

Co-organizer and speaker (with D. Malone-France, Philosophy Professor at George Washington University) on the topic “Process Philosophy and Astrobiology” at the American Philosophical Society meeting, San Diego, CA, April 2014

Invited speaker with John Delaney, University of Washington Alumni Association and Seattle Arts & Lectures (SAL) “A Dialogue: Life within Planets and Beyond Earth”, May 20, 2014.

Co-organizer and convener, Blumberg Dialogues 1: Astrobiology and Religion, Library of Congress, March 2015.

Co-organizer and convener, Blumberg Dialogues 2: Astrobiology and Philosophy and History, Library of Congress, May 27-28, 2015.

Co-organizer and convener, Blumberg Dialogues 3: Astrobiology and the Arts, Library of Congress, August 5-7, 2015.

Invited lecturer, International Summer School in Astrobiology, Santander, Spain, June 29-July 3, 2015 (The Origin of Life: From Monomers to Cells)

Invited speaker: International meeting “Re-conceptualizing the Origin of Life: Experimental, Interdisciplinary, and Computational Windows on the Core Concepts”, November 9-13, 2015, Carnegie Institution for Science, Washington, DC.

Invited speaker, graduate student biology class, Georgia Tech University, November 2015.

Invited speaker and discussion leader, Public forum on Astrobiology and the Humanities, Georgia Tech University, November 2015.

Invited speaker, public seminar, Port Townsend, WA, April 16, 2016

Invited speaker, seminar on science, philosophy and religion, Department of Philosophy, Claremont College, June 27, 2016

Invited speaker, public seminar on Astrobiology and the Humanities, Claremont College, June 28, 2016

Invited speaker, National Academy of Sciences Workshop: Searching for Life across Space and Time, Presentation title: How Likely is it that Life Exists Beyond Earth. December 5-6, 2016.

Invited speaker, Deep Carbon Observatory, Deep Life talk entitled: The Deep Life Community - Early Expectations and Achievements, Saint Andrews, Scotland March 23-26, 2017.

Invited speaker, Emory University, Atlanta Georgia – “Astrobiology and Religion: The New Darwinian Voyage”, March 2018.

Invited speaker, Astrobiology Science Conference (AbSciCon), Graduate Student Primer, “Hydrothermal vents – Origin of life and astrobiology implications. Seattle, June 23, 2019.

Invited speaker, Ocean Memory Webinar, October 15, 2020, Evolution, Communication and Memory in the Microbes of the Ocean (co-presented with Rika Anderson).

Invited speaker, Ocean Memory Webinar, May 11, 2023: Pollution, Forgetting and Loss.

Invited speaker, Ocean Memory, The Remembering Workshop, October 2023, Friday Harbor Laboratories (University of Washington) San Juan Island, Washington

Publications

Fletcher, D. W. and J. A. Baross. 1968. Nutritional factors effecting genetic competence in *Bacillus subtilis*. Mikrobiologija 5:1-19.

Baross, J. A. and J. Liston. 1968. Isolation of *Vibrio parahaemolyticus* from the Northeast Pacific, Nature, London 217:1263-1264.

Baross, J. A. and J. Liston. 1970. Occurrence of *Vibrio parahaemolyticus* and related hemolytic vibrios in marine environments of Washington State. Appl. Microbiol. 20:179- 186.

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