

GABRIELA CHAVARRIA

Denver Museum of Nature and Science
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Professional and Academic Experience

January 2018-Present *Vice President & Chief Curator, Research and Collections Division*
Denver Museum of Nature and Science

- Provides leadership, direction and support for their division, as well as for all staff across the Museum. Guides development and implementation of plans and strategies that successfully support the Museum's mission, strategic plan and annual operating plan.
- Reviews, approves, and ensures the accomplishment of annual work plans, strategic initiatives, and performance standards for the division.
- Acts as a champion for continuous improvement strategies and opportunities.
- Collaborates with departments across the museum on issues that need to be addressed by top management, especially related to decisions and actions that may impact our employees.
- Builds an effective leadership platform that inspires and motivates employee performance in line with the Museum's focus and expectations and that ensures a future generation of Museum leadership.
- Provides mentoring and coaching to direct reports that aids in job and career development.
- Works with members of the Senior Leadership Team (SLT) to ensure a consistent leadership direction and message is conveyed across the Museum.
- Contributes to the Museum's strategic planning process by actively participating with the Board's strategic planning committee and others to ensure the long-term viability of the Museum.
- Actively participates in all Senior Leadership Team meetings to provide the science, research, and collections perspective to decision-making.
- Provides vision and leadership for the development of science policy, research activities, research collections, education collections, archives and library resources in order to maintain the museum's position as a vital scientific resource for the Rocky Mountain Region.
- Leads community outreach through strategic relationships to ensure that science education and museums continue to be relevant.
- Aligns research activities in support of the regional focus, including identifying new opportunities to enhance the visitor experience and grow revenue and income.
- Actively leads a science advocacy program that is of regional, national, and/or international significance.
- Ensures curators are actively engaged in education and public outreach programs and the development and delivery of temporary and permanent exhibitions.
- Partners with Director team to lead Collection Planning and approve use of special acquisition funds.
- Ensure appropriate oversight of, and compliance with, the DMNS Collection Policy, Long -range Conservation Plan, and Records Retention Schedule.
- Builds a science, research and collections leadership platform that communicates and emphasizes the Museum's mission, vision, values and standards. Aligns decisions with these and the goals and objectives of the annual business plan and the strategic plan.
- Chairs the Curatorial Review Committee.
- Leads Collection Planning and approve use of special acquisition funds.
- Ensures appropriate oversight of compliance with the DMNS Collection Policy, long-range Conservation Plan and Records Retention Schedule.
- Provides the direction and leadership necessary to ensure the division's department plans successfully support the Museum's annual operating plan while concurrently supporting the mission, vision, values and strategic plan of DMNS.
- Supervises the development and implementation of the annual department operating plans in support of the Museum's annual operating plan ensuring department objectives are met on time and on budget.
- Initiates budget adjustments in anticipation and/or in response to DMNS annual business plan performance.
- Ensures division's departments plans strategies and tactics are strategically-grounded and totally integrated.

April 2014-December 2017

Senior Science Advisor and Forensic Science Branch Chief, Senior Level (SL)
U.S. Fish and Wildlife National Forensics Laboratory, Ashland, OR

- *Senior Science Advisor:* Co-chair of the Species Table at the Canada/Mexico/U.S. Trilateral Committee for Wildlife and Ecosystem Conservation and Management. (Work on behalf of FWS Assistant Director for Ecological Services).
- *Forensic Science Branch Chief:*
- Establishing goals, objectives, policies, and procedures for the professional and functional operation of the Forensics Branch.
- Overall management of all Forensics Branch functions and programs.
- Directly supervising all subordinate supervisors (Section Chiefs) of the Forensics Branch.
- Directly supervising any otherwise unsupervised staff of the Forensics Branch.
- Guiding the development, implementation, adaptation, and daily operation of the forensic analysis Branch of a unique wildlife crime laboratory capability to support law enforcement investigations of wildlife violations at the federal, state and international levels.
- Managing and coordinating the Laboratory's analytical casework (evidence examination, identification, comparison, reporting, and expert-witness testimony) functions.
- In coordination with the Deputy Lab Director, managing and coordinating the Forensic Branch's research (standard specimen collection, data-set development, methods development and scientific publication) efforts.
- Providing scientific and technical assistance, advice, and counsel to the Service (specifically to assistant directors, regional directors, and assistant regional directors for law enforcement, special agents in charge, supervisory special agents, special agents, and wildlife inspectors) in wildlife forensic science and technical support matters.
- Conduct case work on wood anatomy and insect identification. Conduct research on wood anatomy identification as it relates to CITES protected species. Created and maintain a Xylarium of wood protected species and their looks alike.

August 2010-April 2014 ***Science Advisor to the Director, Senior Level (SES-SL)***
US Fish and Wildlife Service, Washington, DC

- Principal science advisor to the Director of the US Fish and Wildlife Service (FWS) on all science and research matters of fish, wildlife, plants, and their habitats.
- Provide scientific leadership, program formulation, and technical definition of research needs.
- Liaison between the Department of the Interior (DOI) and FWS Programs, Regional Offices, and its Regional Director as well as Regional Scientists to address science program standards, priorities, and funding.
- Partner with states to address science training and the role of science in natural resource management.
- Coordinate issues with the DOI Science Advisors Group, working with all bureaus and other Federal agencies, such as the National Marine Fisheries Service, the Environmental Protection Agency, the U.S. Forest Service, and NASA; universities, and other science organizations across the U.S., Mexico, and Canada.
- Coordinate our innovative national network of 22 Landscape Conservation Cooperatives, which is up and running in all 50 states, and in some adjacent areas of Canada and Mexico. The network has succeeded in taking science to the ground and bringing together a diverse array of organizations and interests to collaborate on conservation science and planning at landscape scales.
- Coordinated the development of the National Fish, Wildlife, and Plants, Climate Adaptation Strategy that will reduce the effects of climate change on fish and wildlife, released in March 2013.
- Personally responsible for bringing science to the forefront of everything the Service undertakes. Have achieved this by re-invigorating the Service's Science Committee, sharpening the focus of the Service's Climate Team, and making it possible for our scientists to have direct access to the most up-to-date scientific literature through the Service's Improved Conservation Library.
- Has begun the critically important process of developing a comprehensive vision that the Service can use to guide its programs and achieve its mission through the next decade.

2006-2010

Director, Science Center
Natural Resources Defense Council (NRDC), Washington, DC

- Created the NRDC's Science Center in 2006 and successfully led the Center for 3 ½ years. Worked across an organization of 400 people to support them in their science needs and manage the science fellowship program. Provided scientific expertise to all the programs: climate center, air and energy; health and environment; water; oceans; land and wildlife. Managed the Center's capacities: communications department, development and membership, litigation team, international programs and the center for market transformation. Led the institutional program, which involves working with the office of the president, the executive director, the chief financial officer, and the board of trustees.
- In my first year, led an effort to reinvent and revamp the water program. Interviewed some of the top science and policy experts in the country to gather ideas so that we could find a niche for our work. This effort was a success: the redesign of the program brought more visibility to the work in terms of resources and recognition in the community.
- Led a review of the Center's strategic planning, guiding the staff and board of trustees to assess the work and achievements and plan for the best strategic priorities for the next 5 years. The process demanded complex and difficult decisions, resulting in phasing out some projects and issues and developing new opportunities.
- Managed a \$15M endowment to support science fellowships, science consultants who provide scientific expertise to the policy and litigations teams. Funds supported staff and their partners interested in attending or participating in scientific meetings, or organizing symposia or workshops. Funds also supported the on-line library system.
- Developed and implemented an internal and external peer review process for all printed and online materials developed by the Center, from reports and white papers to factsheets and the information on the web site—both in English and Spanish.
- Maintained NRDC's commitment to scientific excellence in the development of policy and litigation recommendations. Ensured that policy position and legal cases were well grounded in sound science. Performed high level analysis and coordinated with academic experts. Created 10 scientific advisory committees that aid in specific projects and provide the most current scientific information to aid me in the development of policy and advocacy campaigns and to support litigation work.
- Guided and mentored six science fellows. These fellows come to NRDC after they finish their Ph.D.'s to spend 2 years with the organization, providing scientific expertise to NRDC programs.
- Developed scientific networks and organized symposia and workshops to highlight our work.
- Worked very closely with all of the internal departments and programs to help develop and execute strategies to broaden the reach and increase effectiveness of science in shaping opinions and influence regulators, industry leaders, and the public.

2004- 2006

Vice President for Conservation Policy

Defenders of Wildlife, Washington, DC

- Created, led, and developed a very successful program, the Conservation Policy. Brought together a team of people who used to work individually under a new umbrella, leading a team of 30 people, including eight direct reports and a field office. In my first staff meeting, I set forth my vision and embarked on a process of learning, evaluating, and planning strategically. I listened and learned about the issues they worked on and their interests. I invited an open dialogue, which constantly helped me to assess their needs and requirements. Under my leadership, the program thrived. I developed and implemented national and regional wildlife strategies, campaigns, programs, and projects for the program under my purview: Federal, State, and Private Lands Conservation; Transportation and Wildlife, Conservation Economics; and Conservation Science.
- Promoted coordinated science-based conservation planning among Federal and state agencies on a bio-regional or ecosystem scale. I assisted with the development of recovery plans, conservation agreements, and habitat conservation plans for selected species. During my tenure we successfully reviewed all of the State Wildlife Action Plans, providing for assessments that have been used to incorporate climate change information.
- Coordinated technical assistance necessary to inform and support Defenders' litigation program, particularly initiatives to conserve protected areas and protected endangered species.
- Established and maintained effective working relationships with leading conservation biologists, other scientists, wildlife managers, agency administrators, members of Congress, Congressional staff, leading non-profit organizations, and regional activists, providing a working network to Defenders staff and more specifically staff working under my programs.
- Represented Defenders in coalitions, scientific and public meetings, hearings, press events, conferences, national and international forums, and in general communications with public officials, the media, members, the donor community, and the public.

2002- 2004

Policy Director, Wildlife Conservation

National Wildlife Federation (NWF)

- Provided strategic policy direction and leadership in developing the Foundation's conservation and education program as well as all of their wildlife technical and popular publications.
- Provided leadership on cross-cutting policy issues and approaches, resolved policy and programmatic issues and conflicts in collaboration with field office directors and other senior staff.
- Ensured policy consistency between projects and offices, working with field directors and staff on developing a plan to ensure integration of national, regional, and international approaches. I was the NWF's representative on wildlife policy issues and programs to external audiences, governmental, congressional, and other decision makers, constituent groups, funders, and other. In conjunction with program staff, I approved programmatic content for the website, content related to membership communications, and solicitations.
- Coordinated technical assistance necessary to inform and support NWF's litigation program, particularly initiatives related to wildlife conservation. I reviewed and recommended approval or disapproval of litigation authorizations.

1996- 2002

Director of International and Special Programs

National Fish and Wildlife Foundation (NFWF)

Washington, DC

- Successfully managed over 600 projects averaging \$10M a year. Provided customer service to my grantees and used my scientific knowledge and organizational skills to effectively manage the different projects. Worked closely with the Federal agencies and private partners to set priorities on best conservation investments. Created advisory committees to help select the best projects, including all stakeholders involved in these projects. Developed very sophisticated spreadsheets that tracked different sources of funds assigned to each project. These spreadsheets had to separate the different federally appropriated funds per fiscal year allocated to the different conservation issues. This information was always critical to negotiate additional funds and to allow agency staff to track their involvement both programmatically and fiscally. Programs ranged from projects in the National Wildlife Refuge System, working in collaboration with the U, S. FWS International Division Mexico Program; managing all invasive species and native plant conservation; projects dealing with livestock and wildlife conflicts; and projects to protect endangered species. Also managed portfolios for the USDA-Forest Service, the Bureau of Land Management, the DOD Legacy Program, and the Exxon-Mobil Save the Tiger Fund.
- Represented the Foundation at the President's Invasive Species Advisory Committee, where I applied my knowledge from the work our projects were performing on the ground and becoming a strong voice for the removal and control of invasive species.
- Established a formal collaboration with the US Fish and Wildlife Service, International Division, Mexico Program through the Canada/Mexico/US Trilateral Committee for Wildlife and Ecosystem Conservation and Management.
- Guided the foundation internship program, training and mentoring 20 interns, who have successfully followed conservation careers.

1996-2010

Research Associate

Smithsonian Institution, Natural History Museum, Washington, DC

Department of Entomology. Continuing research on native pollinators.

* Strategic Planner, Assist in developing fundraising activities for the Entomology Department

Education

HARVARD UNIVERSITY, Cambridge, MA. Ph.D. in Organismic and Evolutionary Biology.

Thesis: Taxonomy, Behavior and Biogeography of the Neotropical Bumble Bees genus *Bombus*. Thesis Advisor: Prof. Edward O. Wilson

HARVARD UNIVERSITY, David Rockefeller Center for Latin American Studies, Certificate on Latin American Studies

HARVARD UNIVERSITY, M.A. in Organismic and Evolutionary Biology

NATIONAL AUTONOMOUS UNIVERSITY OF MEXICO (U.N.A.M.), Mexico City, Mexico. B.S. in Biology

Thesis: Africanized Honey Bees in Mexico. Thesis Advisor: Prof. Juan Manuel Labougle Renteria

Other Studies

2016-2019 **Certified in Wildlife Forensics**. Society for Wildlife Forensic Science

2014- present **French Language**. Ashland Parks and Recreation Department

1997-2002 **U.S.D.A. Graduate School**, Washington, D.C. courses on: Fundraising, Natural Resources Law and Policy, Environmental Law, Environmental Economics, and Politics of Conservation.

Selected Advisory and Board Experience

January 2019 **University of Colorado Denver**, Denver, CO, Dept. of Integrative Biology, Affiliate Faculty

January 2019 **American Institute of Biological Sciences**, Herndon, VA, Board Member

2016-present **Science Works Museum**, Ashland, Oregon, Science Advisor Member

2015-present **Doris Duke Conservation Scholars** at University of California, Santa Cruz, Advisor

2012-2014 **NOAA RESTORE Science Program** Executive Oversight Board, Member

2013-2014 **USGS Climate Science Center Science Advisory Committee**, Member

2011-2014 **Cooperative Ecosystem Studies Unit**, Member

2010-2012 **EPA Farm, Ranch, and Rural Communities Committee**, Member

2010-2011 **Mexican Conservation Fund for Nature**, Board Member

2010-2011 **Society for Conservation Biology, Board of Governors**, Member

2004- 2008 **The Darwin Project**, Member Scientific Advisory Committee

* Provides scientific and technical direction to the development of science areas to the “Big Dig” Project in downtown Boston, MA.

2002 - 2010 **Wildlife Center of Virginia**, Member, Scientific Advisory Panel.

* Providing scientific and technical direction, review, and assistance to the WCV's research and policy programs.

2002 - 2010 **Ecos System Institute**, Founding Board Member

* Promotes a human-centered approach to environmental conservation, as well as provide the leadership and tools to make it achievable

2001- 2003 **Global Invasive Species Program (GISP)**, Member Executive Board

* Leading program planning, financing, and evaluation to minimize the spread and impact of invasive species.

2000-2010 **Coevolution Institute**, Chairman North American Pollinator Protection Campaign, Co-Chair & Co-Founder

2000-2005 **Mexico-North Research Network Inc.** Member Board of Directors

Publications

Trail, P.W. and **G. Chavarria**. 2017. Colibries: ¿Joyas Voladores de Mexico en Venta? [Hummingbirds: Flying Jewels of Mexico for Sale?]. *Especies* (October-December 2017): 28-30.

Philip D. Evans, Mundo, I.A., Wiemann, M.C., **Chavarria, G.D.**, McClure, P. J., Voin, D. and Espinoza, E.O. 2017. Identification of selected CITES-Protected Araucariaceae using DART TOFMS. *International Association of Wood Anatomy* 38(2)

PJ.McClure, **GD Chavarria** and EO Espinoza. 2015. Metabolome chemotypes of CITES protected *Dalbergia* timbers from Africa, Madagascar and Asia. *Rapid Communications in Mass Spectrometry*. Vol. 29, pp.783-788.

Espinoza, Edgard O, Michael C Wiemann, Josefina Barajas-Morales, **Gabriela D Chavarria**, and Pamela J McClure 2015. Forensic Analysis of CITES Protected *Dalbergia* Timber from the Americas. *International Association of Wood Anatomists Journal*. Vol. 36, Issue 3, pp. 311-325.

Chavarria, G. K. Knowlton, and D. Atchley. 2010. Securing the Future: Preparing for Climate Change Impacts on Wildlife-Human

Infectious Diseases. Bulletin of the Atomic Scientists, January 2010.

Wells, J. S. Casey-Lefkowitz, G. Chavarria and S. Dyer. 2008. Danger in the nursery—Impacts on Birds of Tar Sands Oil Development Canada's Boreal Forest. Natural Resources Defense Council Report 39 pp.

Pike, C, Thomas, R, Porter, R, Hellman, J, Dukes, J, Lodge, D, and Chavarria, G. 2008. Climate Change and Invasive Species Policy: Interactions, Tensions, and Synergies. Conservation Biology 22:814-820.

Windle, P. and G. Chavarria. 2005. The Tragedy of the Commons Revisited: Invasive Species. Forum. Frontiers in Ecology, page 101-

Heinrich, B. and G. Chavarría 2001. Bumble Bee Energetics and Conservation. In: Bees and Crop Pollination-Crisis, Crossroads and Conservation. Ed. C. S. Stubbs and F.A. Drummond. Proceedings Entomological Society of America. 156 pp.

Chavarría, G. 1999. Conservation of Pollinators. Renewable Resources Journal, Volume 17, Number 4, Winter 1999-2000.

Kania G. and Chavarría, G. 1998. The Good, The Bad, and The Endangered. Wild Times Newsletter. Edited by National Fish and Wildlife Foundation. Summer 1998.

Chavarría, G. 1998. The Buzz on Pollinators. Wild Times Newsletter. Edited by National Fish and Wildlife Foundation. Summer 1998.

Chavarría, G. 1997(1996). Notes on *Bombus pullatus* (Hymenoptera: Apidae) and their inquiline *Acromyrmex octospinosus* (Hymenoptera: Formicidae). Journal of the Kansas Entomological Society 69(4):403-405.

Chavarría, G. & A. Romero. 1996. Agents of change in Guatemala. Bird Conservation 1996:6-9.

Chavarría, G. 1996. Private greenways protect Costa Rica's birds. La Tangara, No. 11, Nov-Dec pp.7

Chavarría, G. and J.M. Carpenter. 1995. Total Evidence and the evolution of highly social bees. Cladistics 10(3):229-58

Chavarría, G. 1994. Phoresy on a Neotropical bumble bee (Hymenoptera: Apidae) by *Anterophagus* (Coleoptera: Cryptophagidae). Psyche 101(1-2):109-111.

Chavarría, G. 1994. First Neotropical mutualistic association in bumble bee nests. Psyche 101(1-2):113-118.

Mancera, M. and G. Chavarría. 1990. Características fenotípicas de las poblaciones de *Apis mellifera* en México. En Memorias del XXV Congreso de la Sociedad Mexicana de Entomología. Oaxaca, México. p. 147-150.

Correspondence

2003 Chavarria, G. Letter to the Editor "When Wildlife Stay Wild" NY Times -Science Times- July 8, 2003

1997 Brower, A.V.Z., G. Chavarria, and D.D. Judd. Letter to Science "Phylogenetic Analysis". SCIENCE, 30 May 1997, Vol.276.

Oral Presentations

Congressional Invitations

2011 House Committee on Natural Resources, Testified on behalf of the Department of Interior on White-nose Syndrome.

2004 House Resources Committee, Testified on behalf of the National Weed Act.

2003 Environment and Public Works Committee Testified on Exotic Pets.

2002 House Resources Committee, Testified on Invasive Species.

2002 House Resources Committee, Testified on behalf of the National Aquatic Invasive Species Act (NAISA).

Invited lectures and poster presentations

2018 Wood Anatomy of CITES Protected Species. Regional Training Workshop on capacity assessment on wood identification for the trade of CITES-listed priority timber species. *Invited Speaker, Chetumal, Quintana Roo, Mexico.*

2018 Pollinator Conservation: The Truth About the Birds and the Bees. *Keynote Speaker, 2018 Plant Select Annual Meeting, Denver, CO (May 2018)*

2017 Pollinator Conservation: The Truth About the Birds and the Bees. *Invited Speaker, Oregon State Federation of Garden Clubs, Inc. Ashla (June 12, 2018)*

2017 Pollinator Conservation: The Truth About the Birds and the Bees. *Invited Speaker, Grants Pass Audubon Chapter, Grants Pass, OR January 2017*

- 2016 Jefferson Public Radio, Interview with Jeffrey Riley, Pollinator Pro Explains the Challenges, <https://ijpr.org/post/pollinator-pro-explains-challenges>
- 2016 Pollinator Conservation: The Truth About the Birds and the Bees. *Invited Speaker, Science Works Museum, Ashland, OR (September 2016)*
- 2016 Careers in Conservation and Environmental Biology, Panelist. Webinar organized by the American Institute of Biological Science, Online August 31, 2016
- 2016 Pollinator Conservation: The Truth About the Birds and the Bees. *Invited Speaker, Southern Oregon Audubon Society, Medford, OR*
- 2015 Fighting Illegal Logging Using Wood Anatomy and Chemical Analysis. Poster and Short Presentation. Wood Science Underpinning Tropical Forest Ecology and Management Symposium. Tervuren, Belgium.
- 2015 Combating Illegal Logging Using Wood Anatomy and Chemical Analysis. Poster presentation. Society for Wildlife Forensics Science, Missoula, MT.
- 2014 Analisis del Duramen de Maderas de CITES usando un DART TOFMS. Consejo Nacional de la Biodiversidad (CONABIO). Mexico, DF
- 2012 Student Climate Conservation Congress. Keynote Speaker: Addressing Science in the US Fish and Wildlife Service. Workshop: *Protecting and Conserving Pollinators*, Shepherdstown, WV
- 2011 Conserving the Future Conference. Keynote Speaker: Deference Reborn: Strengthening the Scientific Foundations of the NWRs, Conserving Science across the American Landscape. Protecting Wildlife and Habitat. Madison, WI
- 2011 The Wildlife Society. Invited Panelist, *Solutions to Conservation Problems by Working Together—The Landscape Conservation Cooperatives*, Kona, HI
- 2011 American Museum of Natural History, Student Conference on Conservation Science. Invited Panelist, *This Year In Conservation*, New York, NY
- 2011 Ecological Society of America. *Invited Panelist, Making your Science Usable for Decision Makers*, Austin, TX
- 2011 FWS, NWR Vision Conference, *Keynote Speaker, Deference Reborn*, Madison, WI
- 2011 Student Climate Conservation Congress. Keynote Speaker: *Addressing Climate Adaptation in the US Fish and Wildlife Service*. Workshop: *Protecting and Conserving Pollinators*, Shepherdstown, WV
- 2010 Workshop on Illegal Turtle Trade, Keynote speaker, St Louis, MO
- 2010 Hampton Garden Club, *Speaker, The Science, Policy and Law of Protecting Nature's tiny creatures*, Southampton, NY
- 2010 National Invasive Species Awareness Week, *Keynote Speaker, Securing the Future, The Human-Climate-Wildlife Nexus*, Washington, DC
- 2010 Cary Institute of Ecosystem Studies. *Invited Speaker. NRDC Science Center, The Science Policy and Law of Protecting our Natural Resources*, Millbrook, NY
- 2009 American Association for the Advancement of Science. *Invited Panelist, Preparing for Climate-Change Impacts on Infectious Zoonotic Diseases*, Chicago, IL
- 2008 American Association for the Advancement of Science. *Invited Panelist, Climate Change and Health, are we ready?* Boston, MA
- 2007 Ecological Society of America. *Invited Panelist, From Science to Policy—How?* San Jose, CA
- 2006 Implementation of State Wildlife Action Plans. *Invited Panelist, Nature Serve Leadership Conference*, Hunt Valley, MD
- 2006 Wildlife Conservation from Science to Policy. *Invited Speaker, Unity College, Unity, Maine.*
- 2006 Invasive Species, a Global Challenge. *Invited Speaker, Everglades Coalition Meeting, Hutchinson Island, Florida*
- 2006 Women in Leadership Roles. *Invited Speaker, Women Environmental Network Annual Meeting, Washington, DC*
- 2005 Pollinator Conservation: The Truth About the Birds and the Bees. *Invited Speaker, Mountain Heritage Center, Cullowhee, NC*
- 2005 Women in Leadership Roles. *Invited Speaker, Women Environmental Network Annual Meeting, Washington, DC*
- 2005 Invasive Species, a Global Challenge. *Invited Panelist, Everglades Coalition Meeting, Naples, Florida*
- 2004 Capitol Hill-Topping in D.C. and Conservation Policy. *Invited Speaker, Kalamazoo College*
- 2004 Earth Day—Invasive Species, A Global Problem. *Invited Speaker, University of Michigan, Dearborn, MI*
- 2004 Earth Day—The importance of Science in Wildlife Conservation Policy. *Invited Speaker, Catherine Ferguson Academy, Detroit, MI*
- 2004 Earth Day--Pollinator Conservation. *Invited Speaker, Detroit Day School for the Deaf, Detroit, MI*
- 2004 Wildlife Conservation Policy. *Invited Speaker, University of Maryland, College Park, MD*
- 2004 Wildlife Conservation, Why do We Need to Protect our Native Species. *Invited Speaker, Marymount University, Arlington, VA*
- 2004 Women in Leadership Roles. *Invited Speaker, Women Environmental Network Annual Meeting, Washington, DC.*
- 2003 Pollinator Conservation: The Truth About the Birds and the Bees. *Invited Speaker, US. Fish and Wildlife Center National Conservation Center, Shepardstown, West Virginia.*
- 2003 Invasive Alien Species: Forging a Partnership Network. *Invited Speaker, Life as a Conservationist: Collective Experiences of Harvard Alumni. Harvard University, Cambridge, MA*
- 2003 Bee Diversity – Pollinator Conservation. *Invited speaker, CS Fund, Vancouver, Canada*

- 2003 Invasive Species – What are they? *Invited Speaker, Canada/Mexico/US Trilateral Committee for Wildlife and Ecosystem Management and Conservation, Albuquerque, NM*
- 2003 Capitol Hill-Topping: in D.C. and Conservation Policy. *Invited speaker, Washington Entomological Society, D.C.*
- 2002 Pollinator Conservation: The Truth About the Birds and the Bees. *Invited Speaker, American Association for the Advancement of Science (AAAS) Panama City, Panama*
- 2002 Pollinator Conservation: The Truth About the Birds and the Bees. *Invited Speaker, Western Carolina University, Cullowhee, NC.*
- 2002 Pollinator Conservation: The Truth About the Birds and the Bees. *Invited Speaker, The University of Georgia, Athens, GA*
- 2001 The Pulling Together Initiative; Private/Public Partnership to Manage and Control Noxious Invasive Species. *Invited Speaker, The North America Weed Management Association Annual Meeting, Colorado Springs, CO*
- 2000 Pollinator Conservation: The Truth About the Birds and the Bees. *Invited Speaker, Washington Entomological Society, Washington, DC*
- 2000 Pollinator Conservation: The Truth About the Birds and the Bees. *Invited Speaker, Scholastic, Inc. New York, NY*
- 2000 The Conservation of Pollinators. *Keynote Speaker, North American Wildlife and Natural Resources Conference, Workshop on Pollinator Conservation, Chicago, IL*
- 1999 Pollinator Conservation: The Truth About the Birds and the Bees. *Invited Speaker, Humboldt State University, Arcata, CA*
- 1999 Conservation of Pollinators. *Keynote Speaker, Wildlife Habitat Council Annual Meeting, Baltimore, MD*
- 1999 Conservation of Pollinators. *Invited Speaker, Science Day, June 9, 1999, Washington, D.C.*
- 1999 The Conservation of Pollinators. *Keynote Speaker, Migratory Pollinators and their Corridors: Conservation Across Borders, Tucson, AZ*
- 1999 Conservation of Pollinators: How to Create Your Own Pollinator Garden. *Invited Speaker, Unitarian Universalist Church of Arlington, Arlington, VA*
- 1998 Saving Americas Pollinators Symposium, *Organizer and Moderator, The National Zoo, Washington, D.C.*
- 1998 The Bees and their Wonders. *Invited speaker, Horace Mann School, Washington, DC*
- 1997 Bee Diversity - The Forgotten Pollinators. *Invited speaker, Native Plant Conservation Initiative, Washington, DC*
- 1997 Bee Diversity - The Forgotten Pollinators. *Invited speaker, National Parks Conservation Association, Washington, DC*
- 1997 Bee Diversity - The Forgotten Pollinators. *Invited speaker, Fairfax Audubon Society, Vienna, VA*
- 1997 Systematics and Behavior of the Neotropical Bumble Bees. *Invited speaker, Lehigh University, Bethlehem, PA*
- 1997 Bee Diversity - The Forgotten Pollinators. *Invited speaker, Western Carolina University, Cullowhee, NC*
- 1997 Systematics and Behavior of the Neotropical Bumble bees. *Invited speaker, Western Carolina University, Cullowhee, NC*
- 1996 Better living with bumble bees; travels trials and tribulations. *Invited speaker, Washington Entomological Society, Smithsonian Institution, Washington, D.C.*
- 1996 Systematics and Behavior of the Neotropical Bumble bees. *Invited speaker, Boston University, Boston, MA*
- 1995 Morfología y Taxonomía de los abejorros Neotropicales del género *Bombus*. *Invited speaker, Universidad Central de Venezuela, Maracay, Venezuela.*
- 1995 Comportamiento de anidación de los abejorros Neotropicales del género *Bombus*. *Invited speaker, Universidad Simón Bolívar, Caracas, Venezuela.*
- 1994 Bumble bee nests, buzzwords and other beesness. *Invited speaker, American Museum of Natural History, New York Entomological Society, New York.*
- 1994 Análisis filogenéticos de los abejorros Neotropicales. *Invited speaker, D. Rockefeller Center for Latin American Studies, Harvard University.*
- 1994 Better living with bumble bees; travels trials and tribulations. *The Cambridge Entomological Club, Cambridge, MA*
- 1994 The Neotropical bumble bees. *Invited speaker, Institut für Zoologie, Berlin, Germany.*
- 1994 Preliminary cladistic analysis of some Neotropical bumble bees. *Presented in graduate student symposium, Eastern Branch ESA (Providence, Rhode Island).*
- 1994 Preliminary cladistic analysis of some Neotropical bumble bees using morphological and behavioral characters. *Poster, presented at the International Union for the Study of Social Insects Meetings, Paris, France.*
- 1994 Total Evidence and the Evolution of Social Bees. *Poster, together with Dr. J.M. Carpenter, presented at*

the Willi Hennig Meeting, Copenhagen, Denmark.

- 1994 Preliminary cladistic analysis of the Neotropical bumble bees using morphological and behavioral evidence. *Presented for the student competition, National ESA in Dallas, TX.*

Workshops

- 2015-2017 Identification of CITES-Protected Tropical Hardwoods using wood anatomy and chemical analysis. US FWS National Forensic Laboratory, yearly training workshops to FWS Law Enforcement Staff and Scientist from countries signatories to CITES. Ashland, OR
- 2011 Student Climate Conservation Congress. Workshop: Protecting and Conserving Pollinators, Shepherdstown, WV
- 2009 Pollinator Conservation, half day workshop at the Military Association of Fish and Wildlife Conference Washington, DC
- 2008 White bark Pine Monitoring, a GIS training workshop, Dubois, WY
- 2008 Brucellosis Science and Policy Round Table, Emigrant, MT
- 2003 International Pollinator Initiative, Policy Tools for Pollinator Conservation, Mabula Lodge, South Africa.
- 2002 Conservation of Ecological Services, Environmental Grantmakers Association, Asheville, NC
- 2002 North American Pollinator Protection Campaign (NAPPC), National Academy of Science, Washington, DC.
- 2001 North America Pollinator Protection Campaign (NAPPC), National Academy of Science, Washington, DC.
- 2000 Pollinator Conservation, half day workshop at the North American Wildlife and Natural Resources Management Conference, Chicago, IL
- 1998 Saving America's Pollinators, U.S. National Zoo, Washington, DC
- 1997- National Invasive Weed Awareness Week (NINWA), weekly events to create awareness among member of 2002 Congress and Federal Agencies about the issue of Invasive Species, Washington, DC

Teaching and Training Experience

- 2015 Wood Science Underpinning Tropical Ecology and Management, Royal Museum for Central Africa, Tervuren, Belgium—several speakers
- 2014 Wood Anatomy Analysis sampling – Mexican Species, work with Maestra Josefina Barajas Morales, Xyloteca del Instituto de Biología, UNAM, Mexico, DF
- 2014 Training Identification on CITES Timber, work with Prof. Hans Beeckman, Royal Museum for Central Africa, Tervuren, Belgium
- 2014 Training Identification On CITES Timber, work with Prof. Gerald Koch, Thunen Institute for Wood Research, Hamburg, Germany
- 2013 Strengthening Our Scientific and Forensic Network for Timber-related Cases Meeting. Symposium organized by the USDA Forest Service International Programs, Washington, DC
- 2011 Student Climate Conservation Congress. Workshop: Protecting and Conserving Pollinators, Shepherdstown, WV
- 2009 Pollinator Conservation, half day workshop at the Military Association of Fish and Wildlife Conference Washington, DC
- 2008 White bark Pine Monitoring, a GIS training workshop, Dubois, WY
- 2008 Brucellosis Science and Policy Round Table, Emigrant, MT
- 2008 Ecological Society of America Annual Meeting, workshop organizer, “*How to use your science to protect the environment and why you should*”
- 2004-2007 Ecosystems Service: Pollinator Conservation, lecture at John Hopkins University, Conservation Biology Program
- 2003 International Pollinator Initiative, Policy Tools for Pollinator Conservation, Mabula Lodge, South Africa.
- 2002 Conservation of Ecological Services, Environmental Grantmakers Association, Asheville, NC
- 2002 North American Pollinator Protection Campaign (NAPPC), National Academy of Science, DC
- 2001 North America Pollinator Protection Campaign (NAPPC), National Academy of Science, Washington, DC.
- 1999 Pollinator Conservation, half day workshop at the North American Wildlife and Natural Resources Management Conference, Chicago, IL
- 1999 Saving America's Pollinators, U.S. National Zoo, Washington, DC

1997-2002 National Invasive Weed Awareness Week (NINWA), weekly events to create awareness among member of Congress and Federal Agencies about the issue of Invasive Species, Washington, DC

1990- 1996 Harvard University, Graduate Researcher

1991- 1996 Museum of Comparative Zoology, Harvard University, Graduate Curatorial Assistant

1993- 1996 Harvard University, Evolutionary Biology, Professor E. O. Wilson

Spring 1995 Harvard University, Tropical Ecology, Professor Peter S. Ashton

Spring 1994 Harvard University, Biology of Trees and Forests (for non-science majors), Professor Donald Pfister

Fall 1993 Harvard University, Organismic and Evolutionary Biology, Professors Otto T. Solbrig and A.W. Crompton

Spring 1993 Harvard University, Human Behavior (for non-science majors), Professors Irven DeVore and Marc Hauser

Fall 1992 Harvard University, Animal Behavior, Professor Jay Choe

Fall 1991 Harvard University, Organismic and Evolutionary Biology, Professors Karel Liem, Robert Cook and Colleen Cavanaugh

1987- 1989 Oxford School, Mexico City, Mexico: General Introductory Biology-high school level

1987- 1990 Ecological Center U.N.A.M. Ecology of Social Insects Lab. Field and Laboratory Assistant

Curatorial Experience

Research on Bees at the following American, Latin American, and European Collections:

Academy of Natural Sciences, Philadelphia, PA
 American Museum of Natural History, New York, NY
 Carnegie Museum of Natural History, Pittsburgh, PA
 Cornell University Insect Collection, Ithaca, NY
 INBIO (Insect Collection), Costa Rica
 Instituto de Biologia, Insect collection, UNAM, Mexico
 Entomology Collection, Vladivostok, Russia
 Muse de Insectos, Universidad de Costa Rica, Costa Rica
 Museum für Naturkunde und der Humbolt Universitat, Berlin, Germany
 Museum National d'Histoire Naturelle, Paris, France
 Snow Entomological Museum, Lawrence, KS
 The Natural History Museum, London, United Kingdom
 Universidad Catolica de Ecuador, Insect collection, Quito, Ecuador
 Universidad Central de Venezuela, Insect collection, Maracay, Venezuela
 U.S. National Museum of Natural History, Washington, DC

Research on Wood at the following, Latin American, and European Collections:

Royal Museum for Central Africa, Tervuren, Belgium
 Thunen Institute, Institute of Wood Research, Hamburg-Bergedorf, Germany
 Xyloteca del Instituto de Biologia, UNAM, Mexico

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