

Education

- Ph.D.** Cornell University, EEB (history of science) 1994 “Preservation of Nature and Academic Respectability: Tensions in the Ecological Society of America, 1915-1979”
- M.S.** Cornell University, EEB (ecology) 1990 “Effects of fish chemical cues on the variability in vertical migration behavior of the larvae of the phantom midge (Diptera: *Chaoborus*)”
- Fulbright-Hays Fellowship** University of Helsinki, Helsinki, Finland 1984-85
- Organization for Tropical Studies (OTS)** Costa Rica, Su 1986
- B.A.** Swarthmore College, (biology) 1983

Employment

- Columbia University** 2011-
- Senior Lecturer, School of International and Public Affairs
 - Assoc. Dir. of Curriculum, MPA in Environmental Science & Policy 2007-
 - Lecturer in Discipline 2003-2011
- University of Washington** 1998-2003
- Lecturer, Program on the Environment; History
- University of Minnesota** 1996-1998
- Assistant Director, Institute for Social, Economic and Ecological Sustainability (ISEES)
 - Faculty member, MacArthur Interdisciplinary Program on Peace & International Cooperation
 - Lecturer 1995-1998
 - Research Associate, Program in the History of Science and Technology 1994
- Cornell University** 1985-1991
- Graduate Teaching Assistant

Publications

- Rev. of *Growth: From Microorganisms to Megacities* by Vaclav Smil. Cambridge: MIT Press, 2021
2019. *Environmental History* (forthcoming v. 26.3, July).
- *Fostering Internationalism through Marine Science: The Journey with PICES*. Springer. 2017
- “Victor Shelford.” In *Oxford Bibliographies in Ecology*. ed. David Gibson. New York: Oxford Univ. Press. 2016
- “Ecological Ethics.” In *Oxford Bibliographies in Ecology*. ed. David Gibson. Oxford Univ. Press. 2016
- Rev. of *Shaping Ecology: The Life of Arthur Tansley* by Peter Ayres. *Ecology* 94: 980–981. 2013

- Rev. of Nancy G. Slack G. *Evelyn Hutchinson and the Invention of Modern Ecology*. eds. D.K. Skelly; D.M. Post; M.D. Smith. *The Art of Ecology: Writings of G. Evelyn Hutchinson*. *Isis* 103: 213-214. 2012
- “State of the Oceans: Waves of Change.” *Great Decisions 2012*, The Foreign Policy Ass’n, NY, NY. 2012
- Rev. of *Nature's Ghosts: Confronting Extinction from the Age of Jefferson to the Age of Ecology* by Mark V. Barrow. *Isis* 101: 846-847. 2010
- Rev. of *Technology's Dilemma: Agricultural Colleges between Science and Practice in Germany, 1860-1934* by Jonathan Harwood. *History and Philosophy of the Life Sciences* 28: 431-432. 2006
- *The Journey to PICES: Scientific Cooperation in the North Pacific*. Alaska Sea Grant, Univ. Alaska Fairbanks. 2005
- Rev. of *Nature's Experts: Science, Politics, and the Environment* by Stephen Bocking. *Journal of the History of Biology* 38: 618-620. 2005
- Warren S. Wooster and **Sara F. Tjossem**, “Scientific Cooperation in the North Pacific: The PICES Project” *San Diego International Law Journal* 6: 191-203. 2004
- Biographical sketch of Rachel Fuller Brown. In *Notable American Women*, vol. 5. Harvard Univ. Press. 2004
- Rev. *A Dame Full of Vim and Vigor: A Biography of Alice Middleton Boring, Biologist in China* by M.B. Ogilvie, C.J. Choquette. *Isis* 94: 735-736. 2003
- Rev. *Stephen Forbes and the Rise of American Ecology* by Robert Croker. *Quart. Rev. Biol.* 77: 440. 2002
- Naeem, S., and **S. F. Tjossem**. “Robert M. May”. Ed. T. Munn. *Encyclopedia of Global Environmental Change*, pp. 401-402. Wiley, Chichester. 2002
- Rev. of *A Green and Permanent Land: Ecology and Agriculture in the Twentieth Century* by Randal Beeman, James Pritchard. *Isis* 93: 148-149. 2002
- Rev. of *Lake Erie Rehabilitated: Controlling Cultural Eutrophication, 1960s-1990s* by William McGucken. *Isis* 92: 435. 2001
- Rev. of *Life Stories: World-Renowned Scientists Reflect on Their Lives and the Future of Life on Earth* H. Newbold, ed. *Journal of the History of Biology* 34: 398-399. 2001
- Shahid Naeem, **Tjossem, S**, Byers, D., Bristow, C. “Plant neighborhood diversity and production” *Ecoscience* 6: 355-365. 1999
- Rev. of *Energies: An Illustrated Guide to the Biosphere and Civilization* by Vaclav Smil. *Isis* 90: 796-797. 1999
- Biographical sketches “George Francis Atkinson” and “Rachel Fuller Brown” in eds. John Garraty and Mark Carnes, *American National Biography*. Oxford Univ. Press. 1999

- Rev. of *From Coastal Wilderness to Fruited Plain: A History of Environmental Change in Temperate North America, 1500-Present* by Gordon G. Whitney. *Isis* 88: 698-699. 1997
- Tjossem, S.F. "Reply to James Brown's 'An ecological perspective on the challenge of complexity' " NCEAS : <http://www.nceas.ucsb.edu> 1997
- Rev. of *Naturalist* by E.O. Wilson. *Journal of the History of Biology* 29: 145-147. 1996
- Rev. of *Always, Rachel: The Letters of Rachel Carson and Dorothy Freeman, 1952-1964* ed. Martha Freeman. *Isis* 86: 687-688. 1995
- "Effects of fish chemical cues on vertical migration behavior of *Chaoborus*," *Limnology & Oceanography* 35: 1456-1468. 1990
- Ranta, E. and S. Tjossem. "Size and shape of *Daphnia longispina* in rock-pools," *Hydrobiology* 145: 259-268. 1987
- Ranta, E., S. Tjossem, and N. Leikola. "Female-male activity and zooplankton foraging by the smooth newt (*Triturus vulgaris*)" *Annales Zoologici Fennici* 24: 79-88. 1987

Service/Outreach

Columbia University

- Co-director of Environmental Sciences and Humanities Cluster, Center for Science and Society (CSS) 2017-19
- Faculty Affiliate, Columbia SIPA Center on Global Energy Policy
- Lecturer mentor 2015-
- Admissions Committee, MPA Environmental Science and Policy 2004-
- Associate Faculty, The Center for Science and Society 2015-
- Member, PESP internal review committee 2013
- Faculty advisor for SIPA ECO, SIPA Sustainability Committee 2012-
- Faculty Search Committee, PESP 2009, 2011
- SIPA Energy & Environment Concentration Faculty
- Committee member for Dan Bush, Journalism (2013); Frederica Perera, Columbia School of Public Health (2012)
- Supervise independent studies for masters students
- Member of the Editorial Board of *The History and Philosophy of the Life Sciences* 2009-2018
- Co-host for Joint Sino-USA Collaboration on Sino-USA Project 16-18 Oct 2005
on Ecological Complexity and Ecosystem Services
- Mss reviews for: *BioScience*; *British Journal for the History of Science*; *Isis*; *Ecology*; *Limnology & Oceanography*; *Marine Biology*; *Integrative and Comparative Biology*; NSF; NEH; Bellagio Center

Teaching

Columbia University

- Guest lectures (3) Summer 2016-18 Ecosystem Experiences for Undergraduates (SEE-U) Agro-eco- and Food Systems: The rural-urban landscapes of New York City. ENVBW2140
- Envir. Advocacy (new course F2020); Envir. Fundamentals; Struggles for Sustainability: Food, Farming and Famine (chosen 1 of top 5 out of 200 SIPA classes 2010); Workshop in Applied Earth System Policy Analysis; Earth Systems, Envir. Policy, and Policy Mgt; Hist. American Ecology and Envir.; Political Context of Public/Private Envir. Mgt
- Independent Studies (2-8 / semester)
- CERC certificate class (Sp. 2007)

Univ. Washington

- History US Agriculture; Intro to Envir. Studies: Population and Health; Envir. Response Colloquium Series; Sustainable Campus seminar

Affiliations/Memberships

- Climate Reality Project Leadership Certification (2020)
- History of Science Society (HSS)
- (past) Columbia History of Science Group (CHSG)
- (past) Society for the Social Studies of Science (4S); British Society for the History of Science (BSHS); Ecological Society of America (ESA); American Society for Limnology & Oceanography (ASLO); Sigma Xi
- (past) President, Graduate Students in History of Biology, Cornell

Grants, Honors, and Fellowships

- HELSUS International Visitors Program (€5000), Helsinki, Finland 2018
- Institute for Social and Economic Research and Policy (ISERP) (\$40,000), "A Nexus for Integrative Food Systems Synthesis (NIFSS) at Columbia University: Bringing Order to Complexity." With Shahid Naeem, Wolfram Schlenker, and Pamela Smith 2018
- XIV Cary Conference: "Linking Ecology and Ethics for a Changing World: Values, Philosophy, and Action," Institute of Ecosystem Science, Millbrook, NY 2011
- Invited Seminar Sea Education Association, Key West, FL 2006
- The North Pacific Marine Science Organization NSF (\$51,466) 2001-2002
- MacArthur Program, MN: Collaborative research grant (\$5000) for "National Biology in Costa Rica: Institutions and Affiliations" 1997
- XII Cary Conference: "Successes, Limitations and Frontiers of Ecosystem Science," Institute of Ecosystem Science, NY 1997
- Ecological Society of American Historical Records Committee 1997-1999

- National Science Foundation (NSF) Grant SBR-9511899, “The Nature of Application in Ecology” 1995-1996
- NSF Dissertation Improvement Grant SBE 9213515, “Defying Boundaries: Rachel Carson and Ecological Environmentalism” 1992
- Cornell Univ. Research Travel Grant to United Kingdom 1991
- Tuition fellowship for MBL course “History of Biology: Modern Evolutionary Biology” at Marine Biological Lab, Woods Hole, MA 1991
- Cornell Research Travel Grant to UC Berkeley, CA 1991
- Alternate for American Assoc. of Univ. Women diss. fellowship 1991
- Beatrice Brown Award Fund of Cornell Women's Studies Program 1990, 1991
- Graduate Teaching Fellowship, Cornell Univ. 1990
- American Museum of Natural History: Theodore Roosevelt Fund 1989
- Andrew W. Mellon student research grant. Summer 1989, 1992
- Cornell Chapter Sigma Xi Grant-in-aid of research 1988, 1991
- National Sigma Xi Grant-in-aid of research 1988, 1991
- Rabinowitz/Whittaker Funds. Cornell Univ. Summer 1988, 90-92
- Harold E. Moore, Jr. Endowment Fund travel award to Costa Rica 1986
- Cornell Graduate Summer Fellowship 1986, 1988
- Fulbright-Hays Fellow to Finland 1984-85
- Finnish Government Grant. 1984-85 Finnish Academy Su 1985

Invited Talks

- “Environmental Policy” (recorded lecture) Emerging Climate Leaders Program, Earth Institute, Columbia University 3 March 2021.
- Moderator, “Creating a More Ethical and Sustainable Agricultural System” Columbia Business School Tamer Center for Social Enterprise 19th Annual Social Enterprise Conference, Capital for Good 5 Feb 2021
- Moderator, “Nexus of Food and Climate Change” Columbia Business School Tamer Center for Social Enterprise 18th Annual Social Enterprise Conference, Capital for Good 11 Oct 2019
- Panelist, “Putting Principles to Play: Linking Universities, Communities and Citizens Through Science in “Nature at your Doorstep: Celebrating the Public Participant in Research”. The NY Botanical Garden 12 April 2019
- Hold Norge Rent conference on marine plastics. “Stewardship of the Oceans”, 6 Feb. 2019 Bergen, Norway

- Panelist, "[Science, Journalism, and Democracy: Grappling with a New Reality](#)", 6 Sept. 2017, The Rockefeller University, NY
- Panelist, "Individual Action, Circular Impact" Discussion Panel, Circular Economy Week, 7 April 2017, Columbia University, NY
- Keynote lecture "Scientific and Political Networks in an Age of Climate Change" 2nd Annual DENVI Conference, 6-7 Feb. 2017, Helsinki, Finland
- Science versus activism: A century of shifting environmental landscapes in the ESA journey". OOS 3 The ESA at 100: Historical Perspectives on Ecology and Ecological Management. ESA Annual Meeting, 9-15 Aug 2015, Baltimore, MD
- Moderator "Governance Policies on Climate Change" with panelists Jean-Philippe Brisson (Latham & Watkins), Andrew Darrell (EDF), Farrukh Khan (Climate Finance, UN). 10th Annual Columbia Univ. Energy Symposium 21 Nov 2014, NY
- "What Can Environmental History Offer Environmental Reporting"? Environmental Reporting. Marguerite Holloway, Journalism, 18 Feb 2014, Columbia Univ. NY
- Chicago Council on Global Affairs, Emerging Leaders Forum, 11 Jan 2013, Chicago, IL
- "State of the Oceans" 19 Mar 2012, World Affairs Forum, Greenwich, CT
- "Faculty-Student Roundtable: The Columbia-Barnard Curriculum and the Future of Environmental Citizenship" 10 Feb 2012 Columbia Center for International History, Columbia Univ. NY
- "Understanding Environmental Policy" and "Sustainable Management" 1-3 Dec 2010, Picker Center "Best Practices in Public Management: Chile Ministries of Environment, Energy, Urban Development, and Finance," Santiago, Chile
- "Grassroots in the Field: New Visions for the Rural-Urban Gradient" 24 April 2010, Green Governance conference, Program on the Global Environment, The Univ. of Chicago, IL
- "Interdependence as a rallying cry: Victor Shelford (1877-1968) and the world as one" 4 Aug 2009 Ecological Society of America annual meeting, Symposium 4 Albuquerque, NM
- "Working in and for Nature: Stories from the Past" 18 Oct 2007, Hudson Highlands Nature Museum, Cornwall, NY
- "How Animal are Humans? Making Sense of Man's Place in Nature," 9 Feb 2007, Harvard Forest
- "Science Between Nations: Angling for Cooperation in the North Pacific" and "The Nature Conservancy: American and British Experiences," 28 Mar 2005, Science & Tech. Studies, and EEB, Cornell Univ.
- "The Value Basis of Environmental Problems and the Ethical Dimension of Environmental Policy" Panel Discussion, 21 April 2005, Earth Institute, Columbia University, NY
- "Competing Visions for Advancing Science: The North Pacific Marine Science Organization. Sino-USA Collaboration Project on Ecological Complexity and Ecosystem Services. 22 May-7 June 2004 Beijing, China

- “Competing Visions for Advancing Science: The North Pacific Marine Science Organization” Joint Sino-US Symposium on Biodiversity and Ecosystem Function. 24-25 May 2004 Beijing, China
- “Conflicts of Vision: Applied vs. Basic Ecology in the U.S.” 28 Oct 1999, Simon Fraser Univ., Vancouver, Canada
- “Ecology as a synthetic discipline: a historical perspective,” The Vice President for Science’s Symposium: Structure and Dynamics of Ecological Science: Beyond Boundaries. ESA Annual Meetings, Aug 1998, Baltimore, MD
- “Social Uses of Biology: Sustainable Agriculture,” 13 May 1997 Univ. Minnesota, St. Paul
- “Biodiversity and Ecosystem Functioning: Convergence of Disparate Disciplines” 17-19 Mar 1997, Ekenäs, Sweden
- “A Historian’s View of Women in Ecology” Women in Natural Resources, 19 Feb 1997, Univ. Minnesota, St. Paul, MN
- “Historical Analysis of Relationship Between Environmental Problems and Advances in Ecosystem Science,” 19 Sept 1996, NCEAS, Santa Barbara, CA
- “Origins of Sustainable Farming in the US” Department of Soil, Water and Climate, 29 Jan 1996, Univ. Minnesota, St. Paul, MN
- “Ecology and Social Reform, 1920s-1950s,” 8 Jan 1996, Univ. Washington, Seattle, WA
- “Ecology, Social Reform and the Ecological Society of America,” 11 Jan 1996, Oregon State Univ., Eugene, OR
- “The Intersection of Ecology & Environmentalism” Marine Biological Lab, Dibner Seminar in the History of Science Su 1995, Woods Hole, MA
- “Science and Social Reform: Episodes in the History of Ecology,” 21 Oct 1994, Univ. Minnesota
- “Rachel Carson and Parallels Between Radiation and Pesticide Threats,” 1 May 1992, Univ. Bath, UK

Presented Papers

- “Creating Scientific Cooperation Across Boundaries: Marine Science and the Quest for Understanding” in panel “States in Action: Accounting for Techniques, Politics, and Outcomes in Int’l Technoscientific Projects.” 2005 Society for Social Studies of Science (4S), Pasadena, CA
- “Competing Visions for Marine Science in the North Pacific” 2004 History of Science Society, Austin, TX
- “The Utility of Ecologists in Times of War,” 19th Annual Columbia History of Science Group 4 Mar 2000, Friday Harbor, WA.
- “The Search for Human Ecology,” History of Science Society Annual Meeting, 28 Oct 1995, Minneapolis, MN
- Commentator, “Practicing Science at the Turn of the Century,” The Women, Gender and Science Question, 12-14 May, 1995, Minneapolis/St. Paul, MN
- “Preservation of Nature and Academic Respectability: Tensions in the Ecological Society of America,” History of Science Society Annual Meeting, 14 Oct 1994, New Orleans, LA

- “Defying Boundaries: Rachel Carson and Ecological Environmentalism,” 11th Annual Graduate Student Conference in History, Philosophy and Sociology of Science, Technology and Medicine, 7 Mar 1992, Princeton Univ., NJ
- “Bugs, Bombs, and Rachel Carson,” 28th Annual Joint Atlantic Seminar in the History of Biology and Medicine (JAS), 3-4 April 1992, Cornell Univ., Ithaca, NY