CURRICULUM VITA

John Howard Falk

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Corvallis, OR 97330 USA e-mail: john.falk@freechoicelearning.org

Born: December 6, 1948, Los Angeles, California

Education

1974 Ph.D.; Biology and Education, University of California, Berkeley.

1972 M.A.; Zoology, Vertebrate Natural History/Ecology, University of California, Berkeley.

1972 Secondary Teaching Credential; California Life Credential; Biological/Physical Sciences,

University of California, Berkeley.

1970 B.A; Zoology, University of California, Berkeley.

<u>Professional Experiences</u>

2014-present Executive Director/Founder

Institute for Learning Innovation

Portland, Oregon

2017-present Emeritus Sea Grant Professor of Free-Choice Science Learning

Colleges of Education & Science

Oregon State University

2006-2016 Sea Grant Professor of Free-Choice Science Learning

Colleges of Education & Science

Oregon State University

2010-2014 Director/Founder

Center for Research on Lifelong STEM Learning

Oregon State University

Visiting Scholar

National Council of Science Centres

Kolkata, India

W. James Whyte Visiting Honorary Research Professor

J.H. Falk CV Page 1

School of Tourism University of Queensland

Brisbane, Australia

2009 Visiting Professor

Department of Science & Mathematics Education

Universidad de Antioquia Medellin, Colombia

2009 Visiting Professor

School of Tourism

University of Queensland

Brisbane, Australia

1986-2007 President/Director/Founder

Institute for Learning Innovation

Annapolis, Maryland

2003-2006 Professor (Courtesy Appointment), Sea Grant/Science Education

Oregon State University

1998 Visiting Professor, Department of Archeology

Universidad de Tarapaca, Santiago Chile

1990,1991 Adjunct, College of Education (early childhood and elementary science education)

1995 University of Maryland, College Park

1988,1989 Adjunct, Museum Education Program (museum audiences and evaluation)

George Washington University, Washington, D.C.

1989 Adjunct, Howard County Community College (early childhood education)

1985-1987 Special Assistant for Education

Assistant Secretary for Research, Smithsonian Institution

1986 Teacher, 12th Grade Oceanography

The Key School, Annapolis, Maryland

1983-1985 Director/Founder

Smithsonian Office of Educational Research

1984 U.S. Information Agency Visiting Scholar, Informal Education Universidade Federal de Pernambuco Recife, Brazil (also Sao Paulo & Rio de Janeiro) 1974-1983 Associate Director for Education Chesapeake Bay Center for Environmental Studies **Smithsonian Institution** 1983 Visiting Professor, College of Education University of Florida, Gainesville, Florida 1982,1987 Research Fellow, National Museum of Natural History 1988,1989 New Delhi, India 1981 Research Associate, Psychology and Education Amadu Bello University, Zaria, Nigeria 1980 Research Fellow, Department of Public Service

Professional Boards and Activities

Editorial Board: Curator: The Museum Journal (1998-present)

Co-Editor: Learning in Everyday Life section, *Science Education* (1997-2011) Editorial Board: *Journal of Museum Education* (1984-1988; 2005-2008)

International Committee on Museums Dictionary of Museology Project (2017-present)

British Museum (Natural History), London, England

National Education Committee, U.S. National Park Service (2011-2016)

Chair Steering Committee, U.S. National Summit on Learning (2014-2016)

Education Committee, Oregon Museum of Science & Industry (2011-2016)

Consensus Study Member, Out of School Time STEM Learning, National Academies of Science, (2014-2015)

Board of Directors, National Association for Research in Science Teaching (2010-2012)

Governor's Task Force on Environmental Education (Oregon) (2009-2013)

International Advisory Board, International Human Dimensions Program on Global Environmental Change (2009-2012)

International Advisor, National Panda Preserve, Chengdu, China (2010)

National Advisory Board, Laser Interferometer Gravitational-Wave Observatory Educational and Professional Outreach Review (2019)

National Advisory Board, Winter Worlds Project (2018-present)

National Advisory Board, Revealing Systemic Impacts of a 12-Year Statewide Science Field Trip

Program (2018-present)

National Advisory Board, OSU Center for Research on Lifelong STEM Learning (2014-present)

National Advisory Board, Hot Times in Cold Places: The Hidden World of Permafrost Project (2014-2018)

National Advisory Board, STEM Learning in Libraries (2014-2017)

National Advisory Board, Science on the Move Project (2013-2017)

National Advisory Board, Nature-Based Tourism and Behavior Project (2011-2015)

National Advisory Board, Time Team America, II Project (2011-2015)

National Advisory Board, New Directions Project (2009-2010)

National Advisory Board, Citizens, Science, and Conservation Program (2010-2014)

National Advisory Board, Master Science Hobbyists: Characteristics, Motivations, Experiences, and Career Trajectories Project (2012-2016)

National Advisory Board, Advance Placement Science Courses & Exams Project (2010-2011)

National Advisory Board, Intersections Project (2009-2011)

National Advisor, Institute of Museum & Library Sciences Task Force on museum data systems (2009)

National Advisory Board, Portal to the Public (2008-2010)

National Advisory Board, <u>www.informalscience.org</u> (2008-2011)

National Advisory Task Force, Visitor Studies Association (2011-2013)

National Advisory Board, Archaeology for All (2009-2010)

Task Force on Informal Learning, Commission on 21st Century STEM Learning, National Academies of Science (2006 – 2007)

National Interpretation Definitions Project Task Force, National Association for Interpretation (2006)

National Advisory Board, Science Education Research Anthology, National Science Teacher's Association (2006)

National Advisor, Research Agenda In Science Education, National Science Teacher's Assoc. (2006)

National Advisory Board, Ocean's Project, Smithsonian Institution, NOAA (2005)

National Advisory Board, National Ecological Observatory Network (2005, 2009)

National Advisory Board, Oregon Sea Grant (2003)

National Advisory Board, 21st Century Learner Initiative, Institute of Museum and Library Services (2000 - 2005)

National Advisory Board, The Maritime Aquarium at Norwalk, CN (1995-2000)

National Advisory Board, National Research Council Subcommittee on Informal Science Education (2005)

Advisory Board, Mid-Atlantic Regional Technology in Education Consortium (2000 – 2004)

Advisory Board, International Laboratory for Visitor Studies (1986-89)

Advisory Board, Faculty, Museums Collaborative (1978-1980)

American Subcommittee ,Nature Experience Research Program (1985-1987)

National Chairman, Search for Excellence in Informal Science Education, National Science Teacher's Association, (1983-1984)

U.S. Representative, Science for the Citizen, U.S./U.K. Joint Committee (1983)

Smithsonian Representative, Federal Interagency Committee on Education (1975-1982)

National Council, National Postal Museum, Smithsonian Institution (2003-2008)

Board of Directors, Visitor Studies Association (1999 - 2003)

Board of Directors, AAM Committee on Audience Research & Evaluation (1992 - 1995)

Reviewer, Social Sciences and Humanities Research Council of Canada (2011, 2013)

Reviewer, National Science Foundation (1978, 1980, 1982, 1984, 1985, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2001, 2002, 2005, 2008, 2010, 2011, 2012, 2013, 2015)

Reviewer, U.S. Office of Education (1977, 1978, 1988, 1991)

Reviewer, National Oceanographic and Atmospheric Administration (1981, 1982, 1988, 2003, 2005, 2008, 2009, 2010)

Reviewer, National Science Board Indicators (2007, 2009, 2010, 2011, 2012, 2013, 2015)

Reviewer, National Sea Grant Program (2003, 2007, 2010)

Reviewer, New Dynamics of Aging, United Kingdom (2009)

Reviewer, The Israel Science Foundation (2009, 2014)

Reviewer, Social Science and Humanities Research Council of Canada (2010, 2012)

Reviewer, Progress in Biophysics and Molecular Biology (2018)

Reviewer, International Journal of Science Education (2015, 2016)

Reviewer, Research in Science Education (2016, 2017)

Reviewer, Instructional Science (2017)

Reviewer, Science Education (2011, 2012, 2013, 2014, 2015, 2016, 2017)

Reviewer, Current Issues in Tourism (2011, 2012)

Reviewer, Studies in Continuing Science Education (2011)

Reviewer, Sociocultural Theory & Identity (2012)

Reviewer, Leisure Studies (2009, 2013)

Reviewer, *Curator* (1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2012, 2013, 2014, 2015)

Reviewer, *Public Understanding of Science* (1999, 2000, 2001, 2003, 2006, 2007, 2008, 2010, 2012, 2016)

Reviewer, Anthrozoös (2008, 2016)

Reviewer, Journal of Interpretation Research (2000)

Reviewer, Journal of Research in Science Teaching (2001, 2004, 2007, 2009, 2010, 2012, 2013, 2015, 2017)

Reviewer, AltaMira Press (2001, 2002, 2003, 2004, 2008)

Reviewer, Routledge Publishers (2005, 2007, 2018)

Reviewer, Springer Publishing (2018)

Awards and Students Advised

Distinguished Career Award, NARST: An worldwide organization for improving science teaching and

learning through research (2016)

Oregon State University, University Outreach and Engagement Vice Provost Award for Excellence, Innovation-Partnerships Award (2016)

Council of Scientific Society Presidents Award for Educational Research (2013)

Invited by the National Science Foundation to present one of its annual Distinguished Lectures (2013)

Named by News Digest International as one of the "Who's Who" of Academia (2013, 2014)

John Cotton Dana Award for Leadership, American Association of Museums (2010)

Selected to American Association of Museums' *Centennial Honor Roll* -- one of 100 most influential individuals in the museum community, 1906-2006 (2006)

Marquis Who's Who in America (2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018)

Advisor Masters Theses (41 students)

Advisor Doctoral Theses (14 students)

Articles and Chapters

Falk J.H. (1971) Guarding your thermometer. *American Biology Teacher*, **33**, 295-296.

Falk, J.H. (1973) Life in early California: A new approach to the outdoor field trip. *Science and Children* **11**(13), 18-19.

Falk, J.H. (1974) Estimating experimenter-induced bias in field studies: A cautionary tale. *Oikos* **25**, 374-378.

Falk, J.H. (1974). Wheeling your way through the outdoors. Science and Children 12, 10-11.

Falk, J.H., Malone, L. & Linn, M. (1975) Outdoor Biology Instructional Strategies: Development and evaluation. *The American Biology Teacher* **37**, 162-165.

Falk, J.H. (1976) Energetics of a suburban lawn ecosystem. *Ecology* **57**(1), 141-150.

Falk, J.H. (1976) Outdoor education: A technique for assessing student behaviors. *School Science and Mathematics* **75**, 226-230.

Falk, J.H. (1977). A partnership in outdoor science education. Science and Children 15(1), 24-25.

Falk, J.H., W.W. Martin, & Balling, J.D. (1978). The novel field trip phenomenon: Adjustment to novel settings interferes with task learning. *Journal of Research in Science Teaching* **15**, 127-134.

Falk, J.H. (1980). The primary productivity of a temperate zone lawn. *Journal of Applied Ecology* **17**, 689-696.

- Falk, J.H. (1980) Taking advantage of local resources: Lawns, a case in point. <u>The American Biology</u> Teacher **42**(6), 351-352.
- Falk, J.H. & Balling, J.D. (1980). The school field trip: Where you go makes the difference. <u>Science and Children</u> **18**(3), 6-8.
- Balling, J.D. & Falk, J.H. (1981). A perspective on field trips: Environmental Effects on Learning. Curator **23**, 229-240.
- Falk, J.H. (1981). Learning through teaching. <u>University of the District of Columbia Graduate Journal</u> **1**(1), 143-146. (reprinted in Alf, H. (ed) <u>Education for Tomorrow's Environmental</u> p. 143-146. Center for Environmental Education, Washington, D.C. 1981.)
- Martin, W.W., J.H. Falk, & Balling, J.D. (1981) Environmental effects on learning: The outdoor field trip. <u>Science Education</u> **65**, 301-309.
- Falk, J.H. (1982) Children in museums: The role of research. In: Glaser, J. (ed.) <u>Proceedings of Children in Museums</u>: An <u>International Symposium</u>. p. 201-206. Washington, DC: Smithsonian Institution Press.
- Falk, J.H. (1982) Environmental education: Informal vs. formal learning. <u>Environmental Education and Information</u> **2**(3), 137-142.
- Falk, J.H. (1982) Using evaluation to improve exhibits. In: S.M. Nair (ed.) <u>Proceedings of Indo-U.S.</u> <u>Natural History Workshop on Exhibition Techniques and Communication Strategies</u>. New Delhi: National Museum of Natural History.
- Falk, J.H. & Balling, J.D. (1982) The field trip milieu: Learning and behavior as a function of contextual events. <u>Journal of Educational Research</u>. **76**(1), 22-28.
- Balling, J.D. & Falk, J.H. (1982) Development of visual preference for natural landscapes: The savanna hypothesis. <u>Environment and Behavior</u> **14**(1), 5-28.
- Falk, J.H. (1982) The response of two turf insects, <u>Endiria inimica</u> (Homoptera: Ciccadelidae) and <u>Oscinella frit</u> (Diptera: Chloropidae) to mowing. <u>Environmental Entomology</u> **11**(1), 29-31.
- Falk, J.H. (1982) The use of time as a measure of visitor behavior and exhibit effectiveness. *Roundtable Reports: The Journal of Museum Education*. **7**(4), 10-13. (reprinted in: Nichols, S. (ed.) (1984). *Museum Education Anthology: 1973-1983*. p. 183-189Washington, DC: Museum Education Roundtable.
- Falk, J.H. (1982) Science education for the citizen: Perspectives on informal learning. In: J. Head (ed.) <u>Proceedings of the U.S./U.K. Science Education Seminar</u>. p. 81-87. London: British Council.

Falk, J.H. (1983) Time and behavior as predictors of learning. <u>Science Education</u>. **67**(2), 267-276.

Falk, J.H. (1983) Field trips: A look at environmental effects on learning. <u>Journal of Biological Education</u>. **17**(2), 134-142.

Falk, J.H. (1983) A cross-cultural investigation of the novel field trip phenomenon: National Museum of Natural History, New Delhi, India. <u>Curator</u> **26**(4), 315-325.

Falk, J.H. (1984) Search for excellence in science education: The informal sector. In: R. Yager (ed.) <u>Proceedings of the Curriculum Update Conference</u>. Iowa City: University of Iowa.

Falk, J.H. (1984) Public institutions for personal learning. The Museologist. 46(168), 24-27.

Falk, J.H. (1985) Defining excellence in informal education. In: Yager and Penick (eds.) <u>Focus on Excellence</u>. Vol. 2(3), p. 4-10, Washington, DC: National Science Teacher's Association.

Yager, R. & Falk, J.H. (1985) Science in non-school settings: Discussion and analysis. In: Yager and Penick (eds.) Focus on Excellence. Vol2(3). p. 105-109. Washington, DC: National Science Teacher's Association.

Falk, J. (1985) The impact of novelty on learning in museums and other informal learning settings. In: <u>Proceedings of the Centenary Meeting of the Bombay Natural History Society</u>, Bombay, India.

Falk, J.H., Koran, J.J., Dierking, L.D & Dreblow, L. (1985) Predicting visitor behavior. *Curator*, 28(4), 326-332.

Falk, J.H., Koran, J.J. & Dierking, L.D. (1986) The things of science: Assessing the learning potential of science museums. Science Education. **70**, 75-89.

Falk, J.H. & L.D. Dierking. (eds.) (1986) Museum Research and Evaluation: Future Directions. <u>Journal</u> of Museum Education. **11**(1), 1-24.

Dierking, L.D. & J.H. Falk (1987) A community-based model for educational innovation. In: Blair, D.J. (ed.) <u>Proceedings of 3rd International Conference of the Nature and Teaching of Environmental Studies</u> and Sciences in Higher Education. Institution of Environmental Studies.

Falk, J.H. (1987) Research on science learning outside the classroom setting. In: Fraser-Abder (ed.) <u>First Regional Consultation on Science Education Research in Latin America and the Caribbean</u>. Port-O-Spain, Trinidad.

Falk, J.H. & L.D. Dierking (1987) Community Learning Exchange: A model program for the utilization

of community resources. In: Riquarts, K. (ed.) <u>Science and Technology Education and the Quality of Life</u>. p. 156-161. Kiel, Federal Republic of Germany: Institute for Science Education at Kiel University.

Falk, J.H. (1988) Museum Recollections. In: Bitgood, S. et al. (ed.). <u>Proceedings of First Annual Visitor Studies Meeting</u>. p. 60-65. Psychology Institute. Jacksonville, AL: Jacksonville State University.

Falk, J.H. (1988) Is it cool to worry? Evidence for an environmental ethic in children. <u>EPA Journal</u> **14**(6), 41-42.

Falk, J.H. (1991) Analysis of Family Visitors in Natural History Museums: The National Museum of Natural History, Washington, D.C. <u>Curator</u> **34**(1), 44-50.

Naqvi, A., B. Venugopal, J. Falk & L. Dierking (1991) Analysis of Family Visitors in Natural History Museums: New Delhi National Museum of Natural History. <u>Curator</u> **34**(1), 51-57.

Falk, J.H. & L.D. Dierking (1991) The effect of visitation frequency on long-term recollection. In: Bitgood (ed.) <u>Proceedings of 1990 Annual Visitor Studies Conference</u>. Jacksonville, AL: Center for Social Design.

Dierking, L.D. & J.H. Falk (1992) Redefining the museum experience: The Interactive Experience Model. Bitgood and Benefield (ed.). <u>Proceedings of 1991Annual Visitor Studies Conference</u>. Jacksonville, AL: Center for Social Design.

Falk, J.H. & L.D. Dierking (1992) Global Warming: Understanding the Forecast; A Review. <u>Museum Anthropology</u> **16**(3), 72-78.

Falk, J.H. (1993) Assessing the impact of exhibit arrangement on visitor behavior and learning. <u>Curator</u> **36**(2), 1-15.

Falk, J.H., K. Phillips & J. Mohr-Johnson. (1993) Utilizing formative evaluation as a tool in facilitating public understanding of science: The Electricity and Magnetism Exhibit as case study. In: Bitgood (ed.) Proceedings of 1992 Annual Visitor Studies Conference. Jacksonville, AL: Center for Social Design.

Dierking, L.D. & J.H. Falk (1994) Family behavior and learning in informal science settings: A review of the research. <u>Science Education</u> **78**(1), 57-72.

Falk, J.H. & M. Weiss. (1994) Utilizing museums to promote public understanding of science: Early adolescent misconceptions about AIDS prevention. In: S. Bitgood (ed.) <u>Proceedings of 1992 Annual Visitor Studies Conference</u>. Jacksonville, AL: Center for Social Design.

Falk, J.H. (1995) Factors influencing African American leisure time utilization of museums. <u>Journal of Leisure Research</u> **27**(1), 41-60.

- Falk, J.H. & D. Holland. (1995) Content planning research "Africa Hall": National Museum of Natural History. In: Bitgood (ed.). <u>Proceedings of 1994 Annual Visitor Studies Conference</u>. Jacksonville, AL: Center for Social Design.
- Falk, J.H. & L.D. Dierking. (1995) Establishing a long-term learning research agenda for museums. in J. Falk & L. Dierking. (eds) <u>Public Institutions for Personal Learning: Establishing a Research Agenda</u>. Washington, DC: American Association for Museums.
- Falk, J.H., L.D. Dierking & D. Holland. (1995) What do we think people learn in museums? in J. Falk & L. Dierking (eds.) <u>Public Institutions for Personal Learning: Establishing a Research Agenda (pp. 17-22)</u>. Washington, DC: American Association for Museums.
- Falk, J.H., L.D. Dierking & D. Holland. (1995) How should we investigate learning in museums? in J. Falk & L. Dierking (eds.). <u>Public Institutions for Personal Learning: Establishing a Research Agenda</u>. Washington, DC: American Association for Museums.
- Falk, J.H. & L.D. Dierking. (1995) Recalling the Museum Experience. <u>Journal of Museum Education</u> 20(2), 10-13.
- Falk, J.H. & L.D. Dierking. (1996) Recollections of elementary school field trips. In: D. Herrmann & M. Johnson (eds.) <u>The Third Practical Aspects of Memory Conference</u>, (pp., 512-26). University of Maryland: College Park.
- Falk, J.H. (1997) Recent advances in the neurosciences: Implications for visitor studies. In: M. Wells & R. Loomis (eds.), 227-238. <u>Visitor Studies: Theory, Research and Practice, Volume 9</u>. Jacksonville, AL: Visitor Studies Association.
- Falk, J.H. (1997) Recollections of Visits to Museums In: M. Borun & A. Cleghorn (eds.) <u>Research on Families in Museums</u> (pp. 156-63). Washington, DC: American Association of Museums.
- Falk, J.H. (1997) Testing a museum exhibition design assumption: Effect of explicit labeling of exhibit clusters on visitor concept development. Science Education. 81(6), 679-688.
- Falk, J.H. & L.D. Dierking. (1997) The role of physical context in museum learning. <u>Journal of Education</u> in Museums.18, 12-17.
- Falk, J.H. & L.D. Dierking. (1997) School field trips: Assessing their long-term impact. <u>Curator</u>. 40(3), 211-218.
- Falk, J.H. & Dierking, L.D. (1998). Free-choice learning: An alternative term to informal learning? *Informal Learning Environments Research Newsletter*. May/June 1998 Washington, DC: American

Educational Research Association.

Falk, J.H. (1998) Visitors: Who does, who doesn't, and why. Museum News. 77(2), 38-43.

Falk, J.H. (1998) A framework for diversifying museum audiences: Putting heart and head in the right place. <u>Museum News</u>. 77(5), 35-43.

Dierking, L.D. & J.H. Falk. (1998) Audiences and accessibility. In: S. Thomas & A. Mintz (Eds.) <u>The Virtual and Real: Uses of Multimedia in Museum, pp. 57-70</u>. Washington, DC: American Association of Museums.

Falk, J.H. (1998). Pushing the boundaries: Assessing the long-term impact of museum experiences. <u>Current Trends</u>, <u>Vol. 11</u>, pp. 1-6. Washington, D.C.: Committee on Audience Research and Development.

Falk, J.H., Moussouri, T. & Coulson, D. (1998) The effect of visitors' agendas on museum learning. Curator. 41(2), 106-120.

Falk, J.H. (1999) Museums as institutions for personal learning. Daedalus. 128(3), 259-275.

Falk, J.H. (1999) Assessing learning in a learning society. <u>Informal Learning</u>. 38, 18-20; also In: E. Koster (Ed.) (2000) <u>Giant Screen Films and Lifelong Learning</u>: <u>Complete Symposium Proceedings</u>, pp. 60-65, Liberty City, NJ: Giant Screen Theater Association.

Chadwick, J., Falk, J.H. & O'Ryan, B. (2000) Assessing institutional web sites: Summary of report. In: Council on Library and Information Resources (Ed.). <u>Collections, Content and the Web</u>. Washington, DC: Council on Library and Information Resources.

Falk, J.H. (2000). Assessing the impact of museums. <u>Curator</u>. 43(1), 5-7.

Adelman, L.M., Falk, J.H., & James, S. (2000). Assessing the National Aquarium in Baltimore's impact on visitor's conservation knowledge, attitudes and behaviors. <u>Curator</u>. 43(1), 33-62.

Falk, J.H. (2001) Free-Choice Science Learning: Framing the issues. In: J. Falk (Ed.) <u>Free-Choice Science Education: How We Learn Science Outside of School</u>. New York, NY: Teacher's College Press, Columbia University.

Falk, J.H, Brooks, P., & Amin, R. (2001) Investigating the long-term impact of a science center on its community: The California Science Center L.A.S.E.R. Project. In: J. Falk (Ed.) <u>Free-Choice Science Education: How We Learn Science Outside of School</u>. pp. 115-132. New York, NY: Teacher's College Press, Columbia University.

Falk, J.H. (2002). The contribution of free-choice learning to public understanding of science. Interciencia, 27(2), 62-65.

Dierking, L.D. & Falk, J.H. (2002). The role of informal science education and learning (with museums as a model). In: Phyllis Katz (Ed.). <u>Community Connections for Science Education</u>, Volume II. History and Theory you Can Use. pp. 5-11. Arlington, VA: National Science Teachers Association.

Falk, J.H. (2002) Forward. In: S. Paris (Ed.) <u>Perspectives on Object-Centered Learning</u>. pp. iii-v. New York: Erlbaum.

Dierking, L.D., Burtnyk, K., Buchner, K.S., & Falk, J.H. (2002). Visitor Learning in Zoos and Aquariums: A literature review. Silver Spring, MD: American Zoo and Aquarium Association.

Dierking, L.D.; Cohen Jones, M.; Wadman, M.; Falk, J.H.; Storksdieck, M. & Ellenbogen, K. (2002). Broadening our notions of the impact of free-choice learning experiences. *Informal Learning Review* 55: 1, 4-7.

Falk, J.H. & Adelman, L.M. (2003) Investigating the impact of prior knowledge, experience and interest on aquarium visitor learning. <u>Journal of Research in Science Teaching</u>, 40(2), 163-176.

Dierking, L.D., Falk, J.H., Rennie, L., Anderson, D., & Ellenbogen, K. (2003). Policy statement of the "Informal Science Education" Ad Hoc Committee. <u>Journal of Research in Science Teaching</u>, 40(2), 108-111.

Adams, M., Falk, J.H. & Dierking, L.D. (2003) Things Change: Museums, Learning, & Research. In: M. Xanthoudaki, L. Tickle & V. Sekules (Eds) <u>Researching Visual Arts Education in Museums and Galleries: An International Reader.</u> Amsterdam: Kluwer Academic Publishers.

Falk, J.H. (2003). Personal Meaning Mapping. In: G. Caban, C. Scott, J. Falk & L. Dierking, (Eds.) *Museums and Creativity: A study into the role of museums in design education*, pp. 10-18. Sydney, AU: Powerhouse Publishing.

Falk, J.H. (2003). The museums and creativity pilot study. In: G. Caban, C. Scott, J. Falk & L. Dierking, <u>Museums and Creativity: A study into the role of museums in design education</u>. Sydney, AU: Powerhouse Publishing.

Dierking, L.D. & Falk, J.H. (2003) Optimizing out-of-school time: The role of free-choice learning. <u>New Directions for Youth Development</u>. 97 (Spring), 75-88.

Falk, J.H., Scott, C., Dierking, L.D., Rennie, L.J. & Cohen Jones, M. (2004). Interactives and visitor

learning. <u>Curator</u>, 47(2), 171-198.

Storksdieck, M. & Falk, J.H. (2004). Evaluating public understanding of research projects and initiatives. In: D. Chittenden, G. Farmelo & B. Lewenstein (eds.) <u>Creating Connections</u>, pp. 87-108, Walnut Creek, CA: AltaMira Press.

Falk, J.H. (2004). The director's cut: Towards an improved understanding of learning from museums. Science Education, 88, S83-S96.

Dierking, L.D.; Cohen Jones, M.; Wadman, M.; Falk, J.H.; Storksdieck, M. & Ellenbogen, K. (2002). Broadening our notions of the impact of free-choice learning experiences. *Informal Learning Review*, 55(1), 4-7.

Falk, J.H. & Storksdieck, M. (2005). Learning science from museums. <u>História, Ciências, Saúde – Manguinhos</u>, Vol 12, pp. 117-144. Rio de Janeiro: Casa de Oswaldo Cruz.

Falk, J.H. (2005). Museums and free-choice learning. In: K. Kaudelka (Ed.) <u>Learning – Experience – Knowledge: Proceedings of Symposium, November 6-7, 2003</u>, pp. 26-37. Dortmund, Germany: DASA.

Falk, J.H. (2005). Free-choice environmental learning: Framing the discussion. <u>Environmental Education</u> <u>Research</u>, 11(3), 265-80.

Dierking, L.D., Falk, J.H. & Ellenbogen, K. (2005). In Principle, In Practice. Curator, 48(3), 246-48.

Falk, J.H., Dierking, L.D. & Storksdieck, M. (2005). Lifelong science learning research. In J. Moon, (ed.). <u>Informal Science Research</u>. Washington, DC: Board on Science Education, National Academy of Science. http://www7.nationalacademies.org/bose/Informal Science John Falk Think Piece.pdf

Falk, J.H., Heimlich, J.E., Bronnenkant, K., & Barlage, J. (2005). Assessing the Impact of a Visit to a Zoo or Aquarium: A Multi-Institutional Research Project. Proceedings of 6th International Aquarium Conference, Monterey, CA. December 2004.

Falk, J.H., Dierking, L.D., Rennie, L. & Scott, C. (2005). In praise of "both-and" rather than "either-or" thinking: A reply to "Interacting with Interactives". Curator, 48(4), 475-477.

Falk, J.H. & Storksdieck, M. (2005). Using the *Contextual Model of Learning* to understand visitor learning from a science center exhibition. <u>Science Education</u>, 89, 744-778.

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Director, Parent Ecology Activities Project, Smithsonian Institution, Washington, D.C. 1978-1980.

Director, Smithsonian Family Learning Project, Smithsonian Institution, Washington, D.C. 1979-1983.

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Consultations (partial listing):

Aquarium of the Pacific, Long Beach, California

Arizona Science Center, Phoenix, Arizona

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Baltimore City Life Museums, Baltimore

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California Science Center/California Museum of Science and Industry, Los Angeles

Carnegie Science Center, Pittsburgh

Central Park Zoo, New York

Cincinnati Zoo, Cincinnati

Chengdu Panda Research & Breeding Center, China

The Children's Museum, Indianapolis

Cincinnati Zoo, Cincinnati

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Disney's Animal Kingdom, Orlando

Flandrau Science Center, University of Arizona, Tucson

The Franklin Institute Science Museum, Philadelphia

George Washington University Museum Education Program, Washington, D.C.

Hartford Children's Museum, Hartford, Connecticut

The Health Museum, Cleveland

Henry Ford Museum and Greenfield Village, Dearborn, Michigan

Heureka, The Finnish Science Center, Helsinki

Howard Hughes Medical Institute, Chevy Chase, Maryland

The Glenbow Museum, Calgary, Canada

The Gold Museum, San Jose, Costa Rica

Las Vegas Springs Preserve, Las Vegas, Nevada

Liberty Science Center, Liberty Island, New Jersey

Los Angeles County Museum of Art, California

Luxembourg Science Center, Luxembourg

Maloka, Bogata, Colombia

Maryland Science Center, Baltimore

Museum of Life, Rio de Janeiro, Brazil

Museum of Modern Art, New York

Museum of Science and Industry, Chicago

Mystic Seaport, Mystic, Connecticut

National Air & Space Museum, Washington, D.C.

National Aquarium in Baltimore, Baltimore

National Health Museum, Washington, D.C.

National Museum American History, Washington, D.C.

National Museum Health and Medicine, Washington, D.C.

National Gallery of Art, Washington, D.C.

National Museum of Natural History, Washington, D.C.

National Museum of Natural History, New Delhi, India

National Museum of Qatar, Doha, Qatar

National Park Service, Harper's Ferry, Virginia

National Science and Technology Museum, Kaohsiung, Taiwan

National Zoological Park, Washington, D.C.

Natural History Museum, London

New York Hall of Science, New York

Odyssey Contemporary Marine Museum, Seattle

Ontario Science Centre, Toronto

Oregon Museum of Science & Industry, Portland

Orlando Science Center, Orlando

Pacific Science Center, Seattle

Papalote Museo de Nino, Mexico City

Petrosains – The Discovery Center, Kuala Lumpur, Malaysia

Presidio National Park, San Francisco

Science Museum of Minnesota, St. Paul

Trapiche, Children's Science Museum, Los Mochis, Mexico

United States Memorial Holocaust Museum, Washington, D.C.

Virginia Air & Space Center, Hampton, Virginia

Virginia Museum of Fine Arts, Richmond

<u>Grants Received</u> (Principal Investigator on the following):

NSF #PES75-02236 Utilization of Outdoor Biology Instructional Strategies Materials. 1975. \$50,000.*

USOE, HEW #300-760-281 A Model Career Education Program in Science and Education. 1976. \$49,950.*

Engelhard Foundation Development of Educational Materials Describing the Ecological Properties of Estuaries. 1976-1977. \$20,000.*

NSF #SED77-18913 An Investigation of the Effect of Field Trips on Science Learning. 1976-1978. \$100,000.*

USDA #DEB79-11563 An Analysis of Ecology and Aesthetic Desirability of Turfgrass as a Function of Management Intensity. 1979-1981. \$75,000.*

NSF #DEB79-11563 Nutrient Dynamics of the Rhode River Ecosystem.1979-1983. \$988,677.

Smithsonian Outreach #123ES1-05 Smithsonian Family Learning Project. 1979-1983. \$50,000.*

Indo-U.S. Subcommission Research Project. Understanding the impact of setting novelty on Indian school children at the National Museum of Natural History, New Delhi, India. 1979-1981. \$35,000.*

Smithsonian Scholarly Studies #123ES1-01 Improving the Quality of Single-Visit Field Trips to the National Zoological Park: Development of Pre-Trip Materials and an Assessment of Learning and Behavior. 1980-1981. \$50,000.*

NSF #SED80-12307 Science Activities for Informal Learning. 1981-1983. \$256,788.*

NSF #SED81-12927 The Role of the Family in the Promotion of Science Literacy. 1981-1983. \$320,000.

Indo-U.S. Subcommission Research Project. Investigating Student Learning and Behavior at the National Museum of Natural History, New Delhi, India. 1982-1983. \$35,000.*

Smithsonian Outreach #1231E4-13 Science Activities for Informal Learning: Maryland Public School Dissemination. 1983-1984. \$20,000.*

Atari Education Foundation #0623-83-005 Home Learning: The Development of Individual and Family Group Science Software. 1983-1984. \$25,000.*

NSF #SPE83-18224 Community-Based Science Education. 1983-1985. \$655,300.*

Smithsonian Scholarly Studies #1231S4-01 Information and Agenda: Strategies for Enhancing the Educational Value of Family Visits to a Zoological Exhibit. 1983-1985. \$50,000.*

NSF #PEI85-50580 Community Science Project. 1986-1988. \$849,650*

Indo-U.S. Subcommission Research Project. An Investigation of the Long-Term Impact of Museum Visitation on Student Learning and Behavior at the National Museum of Natural History, New Delhi, India. 1988-1991. \$50,000.*

Montgomery County Commission on the Humanities. New Horizons for Older Adults: Linking Art, Science and Technology. 1989. \$30,000.

NSF #MDR-9153972 The Utilization of Science Museums by African Americans: Factors Influencing Free-Choice Visitation. 1991-1992. \$50,000.*

NSF #ISE 92-159c Public Institutions for Personal Learning: Understanding the Long-Term Impact of Museums. 1993-1995. \$150,848*

NSF #ISE 9254696 ScienceMinders Project. 1993-1998. \$1,257,000.*

NSF #ESI-9803102 Free Choice Learning: Assessing the Informal Science Education Infrastructure. 1998-2000. \$200,000.*

NSF #ESI-0000527 A Multi-Factor Investigation of Variables Affecting Informal Science Learning. 2000-2001. \$225,000.*

NSF #ESI-0125545 Investigating the Long Term Impact of a Science Center on Its Community. 2002-2003. \$100,000.*

NSF #ESI-0318868 In Principle, In Practice: The Second Annapolis Conference on Museum Learning. 2003-2005. \$200,000.*

NSF #ESI-0205843 Assessing the Impact of a Visit to a Zoo or Aquarium: A Multi-Institutional Research Project. 2003-2007. \$735,000.

Australian Research Council #DP0556543. Investigating the educational impact of wildlife-based leisure experiences in supporting visitors' adoption of environmentally sustainable practices. 2005-2007, \$(Australian)153,000.

NSF #DRL-0636124 The Role of Media in Supporting Free-Choice Science Learning. 2007-2009. \$250,000.*

NSF #DRL-0638981 Informal Science Education Resource Center. 2007-2016. \$9,750,000.

NSF #DRL-0637992 Portal to the Public. 2006-2009. \$1,995,356.

NSF #DRL-0610253 Maya Skies. 2006-2009. \$2,637,114.

The Noyce Foundation Measuring the Impact of a Science Center on its Community. 2008-2010. \$101,870.*

NSF #DRL-0813252 Towards the Next Generation of Research on STEM Learning. 2008-2010. \$100,000.*

The Noyce Foundation SYNERGIES Planning Grant: Understanding and Connecting STEM Learning in the Community. 2010-2011. \$94,481.*

NSF #DRL-1010577 Pushing the Limits: Building Capacity to Enhance the Understanding of Science and Math through Rural Libraries, 2010-2014. \$2,508,018.

NSF #DRL-1020386 Metropolitan Denver Urban Advantage Denver Efficacy Study, 2010-2015. \$3,414,037.

The Noyce Foundation SYNERGIES: Understanding and Connecting STEM Learning in the Community. 2011-2015. \$1,216,177.*

NSF #DRL-1114255 Collaborative Research: Zoo and Aquarium Action Research Collaborative (ZAARC). 2011-2014. \$83,077.*

Wellcome Trust: Modeling the Contributions Informal Education Resources Make to UK Science Learning. 2011-2012. \$117,552.

Australian Research Council #LP120100120. Translating zoo visitors' behavioural intentions into conservation actions using evidence-based post-visit experiences. 2012-2015. \$157,271.

(Participant Funded) International Science Centre Impact Study. 2012-2013. \$275,000.*

The Lemelson Foundation Advancing SCILS (STEM, Creativity & Innovation Learning through Synergies). 2013-2015. \$209,993.*

The Noyce Foundation Multi-Institution Science Center Effects Study. 2014-2016. \$359,873.*

NSF #DRL-1451053 Engaging the Science Center Community in Defining and Utilizing Impact Metrics. 2014-2016. \$49,985.*

NSF #DRL-1515550 Using Big Data and Visual Analytics to Investigate the Long-term, Cascading Effects of Informal STEM Learning. 2015- 2018. \$299,987.*

NSF #DRL-1516718 Synergies: Customizing Interventions to Sustain Youth STEM Interest and Participation Pathways. 2015-2021. \$1,999,857.

NSF #DRL-1515241 Rural Gateways: Fostering the Development of Rural Librarians as Informal Science Facilitators. 2015-2021. \$1,999,778.

Turkish Science Foundation #215K042 - Determining Turkish Public Understanding of Scientific Literary. 2016-2018.

Mott Foundation/STEM Next. National State of STEM. 2016-2017. \$10,000.*

NSF #DRL-1615209 Chief Science Officers: A Strategy for Student Awareness and Industry Engagement. 2016-2019. \$1,196,261.

NSF # DRL-1656124 Reconceptualizing STEM+C Literacy through a Free-Choice Learning Lens. 2016-2018. \$300,000.

NSF # DRL- 1724213 International Conference: The Integration of Science Centres with Natural History Museums for Imparting Informal Education. 2017-2018. \$100,000.*

NSF #DRL – 1746089 International Conference: Travel Grant in Support of Connected Audiences. 2017-2018. \$29,931.

^{*} Project Director on these grants.