

Nancy L. Staus
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Education

- Ph.D., Science Education**, 2012, Oregon State University, Corvallis, OR.
Dissertation: *Crossing the Cartesian Divide: An Investigation into the Role of Emotion in Science Learning*.
- M.S., Conservation Biology**, 1997, University of Minnesota, St. Paul, MN.
Thesis: *Ecology and conservation of the West Indian whistling-duck in the Bahamas*.
- B.A., Anthropology**, 1990, University of Minnesota, Minneapolis, MN.

Professional Work Experience

- 2017-present **Senior Researcher**. STEM Research Center, Oregon State University, Corvallis, OR
- 2015-2021 **Co-PI, Synergies – Customizing Interventions to Sustain Youth STEM Interest and Participation Pathways (NSF funded 5-year project)**
College of Education
Oregon State University, Corvallis, OR
- 2012-2015 **Post-Doctoral Research Associate, Synergies – Understanding and Connecting STEM Learning in the Community**
College of Education
Oregon State University, Corvallis, OR
- 2010-2012 **Graduate Research Assistant/Graduate Teaching Assistant (Science Education)**
Department of Science and Mathematics Education
Oregon State University, Corvallis, OR
- 2004-2011 **Adjunct Faculty (Biology)**
Linn-Benton Community College, Albany, OR
- 1998-2012 **Conservation Biologist**
Conservation Biology Institute, Corvallis, OR

Grants

Co-Principal Investigator: *Customizing Interventions to Sustain Youth STEM Interest and Participation Pathways*, National Science Foundation award #DRL-1516718; \$1,999,986 (2015-2021).

Awards

University Outreach and Engagement Vice Provost Award for Excellence, Innovation-Partnerships

Dierking, L. D., Falk, J. H., **Staus, N. L.**, & Wyld, J. N. (April 2016). *SYNERGIES Research-Practice Partnership*.

Outstanding Paper Award

Niess, M. L., van Zee, E., Gillow-Wiles, H., & **Staus, N.** (March 2011). *Advancing K-8 teachers' STEM education for teaching interdisciplinary science and mathematics with technologies*. Paper presented for Society of Information Technology and Teacher Education (SITE) Annual Conference, Nashville, TN.

Best Reviewed Conference Proposal

Niess, M. L., **Staus, N.**, & Gillow-Wiles, H. (March 2011). *Global positioning systems (GPS), motion detectors, and spreadsheets enhance K-8 teachers' mathematics proficiency in the context of mathematical functions*. Paper presented for Society of Information Technology and Teacher Education (SITE) Annual Conference, Nashville, TN.

Peer-Reviewed Publications

Staus, N. L., O'Connell, K., & Storksdieck, M. (2021). Addressing the ceiling effect when assessing STEM out-of-school time experiences. *Frontiers in Education*, 6, 690-431. doi: 10.3389/educ.2021.690431.

Staus, N. L., Falk, J. H., Price, A., Tai, R., & Dierking, L. (2021). Measuring the long-term effects of informal education experiences: Challenges and potential solutions. *Disciplinary and Interdisciplinary Science Education Research*, 3:3, 1-15. <https://doi.org/10.1186/s43031-021-00031-0>.

Shaby, N., **Staus, N. L.**, Dierking, L., & Falk, J. (2021). Pathways of interest and participation: How STEM-interested youth navigate a learning ecosystem. *Science Education*, 105(4), 628-652. <https://doi.org/10.1002/sce21621>.

Falk, J. H., Dierking, L. D., & **Staus, N. L.** (2020). The use of ecological concepts in the social sciences: Measuring the productivity, durability & resilience of learning ecosystems. *Ecology & Conservation Science*, 1(3), 84-86. DOI: 10.19080/ECO.A.2020.01.555563.

Staus, N.L., Falk, J.H., Penuel, W., Dierking, L., Wyld, J., & Bailey, D. (2020). Interested, disinterested, or neutral: Exploring STEM interest pathways in a low income urban community. *EURASIA Journal of Mathematics, Science and Technology Education*, 16(6), em1853. DOI: <https://doi.org/10.29333/ejmste/7927>.

Staus, N.L., Lesseig, K., Lamb, R., Falk, J.H., & Dierking, L. (2020). Validation of a measure of STEM interest for adolescents. *International Journal of Science and Mathematics Education*, 18(2), 279-293. DOI 10.1007/s10763-019-09970-7.

Staus, N. L., & Falk, J. H. (2017). The role of emotion in informal science learning: Testing an exploratory model. *Mind, Brain, and Education* 11(2), 45-53.

- Falk, J.H., Dierking, L.D., Swanger, L., **Staus, N.**, Back, M., Barriault, C., Catalao, C., Chambers, C., Chew, L.-L., Dahl, S.A., Falla, S., Gorecki, B., Lau, T.C., Lloyd, A., Martin, J., Santer, J., Singer, S., Solli, A., Trepanier, G., Tyystjärvi, K. & Verheyden, P. (2016). Correlating science center use with adult science literacy: An international, cross-institutional study. *Science Education* 100, 849-876.
- Falk, J. H., **Staus, N.**, Dierking, L. D., Penuel, W. R., Wyld, J., & Bailey, D. (2016). Understanding youth STEM interest pathways within a single community: The Synergies Project. *International Journal of Science Education, Part B*, 6(4), 369-384.
- Falk, J. H., Dierking, L. D., **Staus, N. L.**, Wyld, J. N., Bailey, D. L., & Penuel, W. R. (2016). The Synergies research-practice partnership project: a 2020 Vision case study. *Cultural Studies of Science Education* 11, 195-212.
- Falk, J. H., **Staus, N.**, Dierking, L. D., Wyld, J., Bailey, D., & Penuel, W. R. (2015). The Synergies project: Preliminary results and insights from two years of longitudinal survey research. *Museology Quarterly*, 29(1), 15-21.
- Staus, N. L.**, Gillow-Wiles, H., Niess, M. L. (2014). TPACK development in a three-year online masters program: How do teacher perceptions align with classroom practice? *Journal of Technology and Teacher Education*, 22(3), 333-350.
- DeChenne, S. E., Lesseig, K., Anderson, S. M., Li, S. L., **Staus, N. L.**, & Barthel, C. (2012). Toward a measure of professional development for graduate student teaching assistants. *The Journal of Effective Teaching*, 12(1), 4-19.
- Staus, N. L.**, Stritholt, J. R., & DellaSala, D. A. (2010). Evaluating areas of high conservation value in western Oregon with a decision support model. *Conservation Biology*, 24(3), 711-720.
- Scott, M. J., Loveland, T., Gergely, K., Stritholt, J. R. & **Staus, N. L.** (2004). National Wildlife Refuge System: Ecological Context and Integrity. *Natural Resources Journal* 44, 1041-1066.
- Staus, N. L.**, & Weast, E. F. (2003). A survey of Peruvian torrent ducks (*Merganetta armata leucogenis*) on two rivers in Peru. *Ornitologia Neotropical* 14, 269-273.
- Staus, N. L.**, Stritholt, J. R., DellaSala, D. A., & Robinson, R. (2002). Rate and pattern of forest disturbance in the Klamath-Siskiyou ecoregion, U.S.A. between 1972 and 1992. *Landscape Ecology* 17(5), 455-470.
- DellaSala, D. A., **Staus, N. L.**, Stritholt, J. R., Hackman, A., & Iacobelli, A. (2001). An updated protected areas database for the United States and Canada. *Natural Areas Journal*, 21, 124-135.
- Staus, N. L.**, & Mayer, P. M. (1999). Arthropods and predation of artificial nests in the Bahamas: Implications for subtropical avifauna. *Wilson Bulletin*, 111, 561-564.
- Staus, N. L.** (1998). Behaviour and natural history of the West Indian whistling-duck *Dendrocygna arborea* on Long Island, Bahamas. *Wildfowl* 49, 194-206.
- Staus, N. L.** (1998). Habitat use and home range of West Indian whistling-ducks. *Journal of Wildlife Management*, 62, 171-178.

Non-peer-Reviewed Book Chapters

- Staus, N. L.** (2019). The educational value of zoos: An empirical perspective. In B. Fischer (Ed.), *The Routledge Handbook of Animal Ethics*. (pp. 367-380).
- Staus, N. L.**, & Falk, J. H. (2013). The role of emotion in ecotourism experiences. In R. Ballantyne & J. Packer (Eds.), *International handbook on ecotourism*. (pp. 178-191). Cheltenham, UK: Edward Elgar Publishing Limited.

- Falk, J. H. & **Staus, N. L.** (2013). Free-choice learning and ecotourism. In R. Ballantyne & J. Packer (Eds.), *International handbook on ecotourism*. (pp. 155-168). Cheltenham, UK: Edward Elgar Publishing Limited.
- Paquet, P. C., Strittholt, J. R., **Staus, N. L.**, Wilson, P. J., Grewel, S., & White, B. N. (2001). Feasibility of timber wolf reintroduction in Adirondack Park. In D. S. Maehr, R. F. Noss & J. L. Larkin (Eds.), *Large mammal restoration* (pp. 47-64). Washington, D.C.: Island Press.

Peer-reviewed Conference Presentations

- Shaby, N., **Staus, N.**, Dierking, L., & Falk, J. Navigating a STEM learning ecosystem: Obstacles and opportunities. (April 2021) Poster presented at the Virtual NARST Annual Conference.
- Peleg, R., Shaby, N., Hughes, C., Funk, S., Sodini, C., **Staus, N.**, Bonebrake, V., Astroga, A., Janniello, E., & Gioli, A. (April 2021) From ‘physical to digital’; How institutions of informal science education adapt to an online presence during the COVID-19 crisis (and beyond). Paper presented at the Virtual NARST Annual Conference.
- Falk, J. H., Maltese, A.V., Dierking, L. D., **Staus, N. L.**, Skeeles-Worley, A., Shaby, N., Price, A., & Meier, D. (April 2020). Measuring the long-term effects of informal education experiences: An interactive research symposium. Accepted for presentation at NARST Annual Conference, Portland, OR, but was cancelled due to COVID.
- Storksdieck, M., **Staus, N. L.**, & Hunter, N. (April 2019). Using an evidence-based professional learning framework to strengthen and broaden the informal STEM (ISL) field. Paper presented at the NARST Annual Conference, Baltimore, MD.
- Staus, N. L.**, Dierking, L. D., Falk, J. H., & Choi, Y. (March 2018). Do STEM ecosystem approaches positively affect youth outcomes? Preliminary results from an underserved community. Paper presented at the NARST Annual Conference, Atlanta, GA.
- Staus, N. L.**, Wyld, J., Dierking, L. D., Falk, J. H., & Choi, Y. (April 2017). Using Research to Practice Partnerships to develop ecosystem-wide, customized interventions to sustain youth STEM interest. Paper presented at the NARST Annual Conference, San Antonio, TX.
- Dierking, L. D., **Staus, N. L.**, Falk, J. H., & Wyld, J. (April 2017). Synergies: Customizing interventions to sustain youth STEM interest and participation pathways. Poster presented at the AERA Annual Conference, San Antonio, TX.
- Staus, N. L.**, Dierking, L. D., Bailey, D., Wyld, J., Penuel, W., & Falk, J. H. (April 2016). Using case studies to develop deep understandings of adolescent youths’ STEM interest pathways. Poster presented at the NARST Annual Conference, Baltimore, MD.
- Dierking, L. D., Falk, J. H., **Staus, N. L.**, Penuel, W., Wyld, J., & Bailey, D. (April 2015). The Synergies Project: Looking at STEM education as a community-wide experience. Paper presented at the NARST Annual Conference, Chicago, IL.
- Staus, N. L.**, Falk, J. H., Dierking, L. D., Penuel, W., Wyld, J., & Bailey, D. (April 2014). Declining STEM interest in adolescents: A longitudinal research approach. Paper presented at the NARST Annual Conference, Pittsburgh, PA.
- Dierking, L. D., Falk, J. H., **Staus, N. L.**, Penuel, W., Bailey, D., & Wyld, J. (April 2014). SYNERGIES: Measuring Children’s STEM Interest Development Longitudinally. Poster presented at the AERA Annual Conference. Philadelphia, PA.
- Staus, N. L.** (April 2013). Beyond Cartesian dualism: How does emotion influence science learning? Paper presented at the NARST Annual Conference, Puerto Rico.
- Falk, J. H., Dierking, L. D. **Staus, N. L.**, Haun-Frank, J., Penuel, W., Wyld, J., & Bailey, D. (April 2013). Viewing STEM learning through a community-wide lens: The Synergies Project. Poster presented at the NARST Annual Conference, Puerto Rico.
- Staus, N. L.**, Gillow-Wiles, H., & Niess, M. L. (April 2012). *TPACK development in a 3-year online masters program: How do teacher perceptions align with classroom practice?*

Paper presented at American Educational Research Association (AERA) Annual Conference, Vancouver, BC.

Professional Memberships

American Educational Research Association (AERA)
A Worldwide Organization for Improving Science Teaching and Learning Through Research (NARST)
North American Association for Environmental Education (NAAEE)

Professional Service

Co-coordinator for Strand 6 (Learning in Informal Environments) for NARST (2018-2020)
Reviewer: International Journal of STEM Education, Environmental Education Research, Journal of Ecotourism, NARST Annual Conference (2012 – present)
STEAM education roundtable organized by U.S. Congresswoman Suzanne Bonamici, 1st Congressional District. Presented research findings related to youth STEM outcomes in Oregon, (August, 2018)
Contributed to a Center for Advancement of Informal Science Education (CAISE)'s task force on evaluation and measurement about STEM interest. (2018)