Mary Ann Steiner 412 614-9568 Email mhs19@pitt.edu

University of Pittsburgh, Learning Research Development Center 5301 Wesley W. Posvar Hall, 230 S Bouquet St, Pittsburgh, PA 15213

Senior Research Associate, University of Pittsburgh Center for Learning in Out of School Environments, Pittsburgh PA 2019-present

Co-Pi on NSF #1906368, establishing rural networks to connect museums, scientists and rural communities to identify local approaches to starting climate change conversations.

Co-Pi on IMLS # ME-249096-OMS-21

Carnegie Science Center: Establishing a Culture of Evaluative Practice to Strengthen Informal Science Learning.

Visiting Scholar, University of Pittsburgh Center for Learning in Out of School Environments, Pittsburgh PA 2016-2019

Steiner Learning Design, Pittsburgh PA

Consultant 2014-present

Provide learning design and community collaboration expertise to informal science education projects including conceptualization, grant writing, staff development, and learning research and evaluation design and implementation.

Carnegie Museum of Natural History, Pittsburgh PA

Director for Learning Research, Curator Public Engagement

2009-2014

Initiate and lead collaborative learning research program focused on visitor connections to nature, interactions between scientific sections and the public, iterative professional development, and museum's role in broader learning ecologies to address scientific questions of social importance. Set strategic public program directions with Director of Science, Director of Visitor Experience, and senior staff team.

University of Pittsburgh, Pittsburgh PA

Graduate Researcher for University of Pittsburgh Center for Learning in Out of School Environments (UPCLOSE) 2007-2016

Design and implement qualitative research focused on university-public exchanges of knowledge and the influence of cross-disciplinary expertise on personal and professional learning,

National Science Foundation, Arlington, Virginia

Program Director, Informal Science Education in the Directorate for Education and Human Resources through the Intergovernmental Personnel Act (IPA) 2005- 2007

Direct the implementation, review, funding, post-award management, and evaluation of the youth and community, informal science portfolio. Contribute to the intellectual integration with other programs supported by the Division. Evaluate progress of awards through review and evaluation of reports and publications submitted by awardees and / or meetings at NSF and during site visits.

Science Museum of Minnesota, Saint Paul, Minnesota Director Youth Science Center

1996-2007

Lead the development of the YSC strategic plan, convene internal and external planning committees, survey community based organizations, families, youth and the museum field.

Create and implement YSC infrastructure, programs and community partnerships Attracted program endowments from six foundations totaling 2.9 million dollars. Oversee development, implementation and evaluation of multi-year programs engaging over 100 young people each year, ages 11 to 17 years old. Developed collaborative science facilitation programs with community partners. Led over ten federally funded grants.

EDUCATION

University of Pittsburgh, Pittsburgh Pennsylvania, PhD in Learning Sciences and Policy Program, 2016

University of Minnesota, St Paul & Minneapolis, Minnesota, MEd, Youth Development Leadership, 2003

Bard College, Annandale-on-Hudson, New York, Bachelor of Fine Arts, minor chemistry 1986

CONTRIBUTIONS TO THE FIELD OF INFORMAL SCIENCE LEARNING
Creatives for Climate 2018-present

PUBLICATIONS

Steiner, M.A.*, Lyon, M., & Crowley, K. (2020). Museums that connect science and citizen: Using boundary objects and networks to encourage dialogue and collective response to wicked, socio-scientific problems. In P. Hetland, P. Pierroux, and L. Esborg (Eds), A History of Participation in Museums and Archives. Traversing Citizen Science and Citizen Humanities. Routledge.

Knutson, K., Crowley, K., Russell, J.L., & Steiner, M.A. (2020). Approaching art education as an ecology: Exploring the role of museums. In Karen Knutson, Takeshi Okada, & Kevin Crowley (Eds.), *Multidisciplinary approaches to art learning and creativity*. Routledge.

Steiner, Mary Ann (2016) <u>Climate Change Education in Informal Settings: Using Boundary Objects to Frame Network Dissemination.</u> Doctoral Dissertation, University of Pittsburgh.

Steiner, M.A. & Crowley, K. (2013). <u>The natural history museum: Taking on a learning</u> research agenda. *Curator: The Museum Journal*, *56*(2): 267-272.

Steiner, M., Galvin, & T. Green (2012). <u>Manchester Craftsmen's Guild: Art, Mentorship, and Environment Shape a Culture of Learning and Engagement</u>. In VeLure Roholt, R., Baizerman, M., & Hildreth, R.W. (Eds.) Civic Youth Work: Cocreating Democratic Youth Spaces. (pp 81-114). Chicago: Lyceum Books.

DiSalvo, C., Louw, M. Coupland, J., Steiner M. (2009). <u>Local issues, local uses: Tools for robotics and sensing in community contexts</u>. In Proceedings of the Seventh ACM Conference on Creativity & Cognition (C&C '09). ACM, New York, NY, USA

Reich, C., Price, J., Rubin, E., & Steiner, M. (2009). <u>Inclusion, Disabilities and Informal Science Learning</u>. A CAISE <u>Inquiry Group Report</u>. Washington, D.C.: Center for Advancement of Informal Science Education (CAISE).

Velure Roholt, R. and M.A. Steiner, "Not Your Average Workplace: The Youth Science Center, Science Museum of Minnesota. Curator 48/2, 1541-1577, April 2005

PRESENTATIONS

- McGill, B. Nelson, T. and Steiner, M. CRSP climate communications workshop presented to Indiana County Conservation Staff in service February 25, 2022.
- Nelson, T., Russell J., and Steiner, M. CRSP Climate Communications part 1 and 2. Presented at PA Wilds Climate Network meetings August 26, 2021 and November 3, 2021.
- MGill, B., Nelson, T., Horner, L., Steiner, M. *Climate Rural Systems Partnership Program*. Presented at Indiana County Sustainability Summit. March 4, 2021.
- Nelson, T., McCullough, J. and Steiner, M. *Building rural networks; leading with relationships and supporting with science* Presented at Association of Science and Technology Centers 2020 Conference, Virtual, October20, 2020.
- Steiner, M. and Crowley, K. Beyond Shrink Wrap: How boundary objects support learning between informal learning networks. Presented at American Educational Research Association, San Antonio, Texas, April 28, 2017.
- Steiner, M. and Allen, L. *Climate Urban Systems Partnerships*. Presented at PA Environmental Educators Conference, Antiochian Village, PA. March 15, 2014.
- Steiner, M., Lyon M., McShea P., and Allen L. (2013) *Green Spaces Festival Kit and NASA Data Activity*. Presented at Climate Change Education Principal Investigators (CCE PI) Meeting, Arlington, Virginia, October 7-9, 2013.
- Elliott E.M, Bain, D.J., Divers, M.T., Crowley K.J., Tison-Povis, K.A., Scardina A., Steiner, M. (2012). *Energy-NET (Energy, Environment and Society Learning Network) Enhancing opportunities for learning using an earth systems science framework.*Presented at American Geophysical Union Annual Meeting, December 3-7, 2012 San Francisco, CA.
- Allen, L. B. Steiner, M. A., Crowley, K. J. (2012). How do we support informal educators teaching for climate literacy? Lessons from design-based research to improve climate science field trips through educator experience. Poster presented at American Geophysical Union Annual Meeting, December 3-7, 2012, San Francisco, CA.
- Reich, C., Price, J., Rubin, E., & Steiner, M. (2010). *Inclusion, Disabilities, and Informal Science Learning*. <u>A CAISE Inquiry Group Report</u>. Talk presented at US-China Science Center Forum, Beijing 2010.

GRADUATE ADVISORS Kevin Crowley, Jennifer Lynn Russell, Mary Kay Stein, Professors in Learning Science and Policy Program, University of Pittsburgh, and Steve Tonsor, Director of Science Research, Carnegie Museum of Natural History.

COLLABORATORS

Nicole Heller, Carnegie Museum of Natural History; Laurie Giarratani, Carnegie Museum of Natural History, Bonnie McGill, Carnegie Museum of Natural History, Taiji Nelson, Carnegie Museum of Natural History, Jay Russell; Mercer County Conservation District, Kirsi Jansa, Creatives for Climate; Michelle King, Creatives for Climate, Lindsey Scherloum, Creatives for Climate, Judy Diamond, University of Nebraska.