

Julie Aldridge, Ph.D

• Aldridge.10@osu.edu

ACADEMIC HISTORY

The Ohio State University (OSU), Columbus, OH
2018 Ph.D. Agricultural Communication, Education, and Leadership (ACEL)

Bemidji State University, Bemidji, MN
2002 State Teaching Licensure, General Science: Dept. of Professional Education

The Ohio State University, Columbus, OH
M.S. Environmental Education, Interpretation and Communication
Member, Gamma Sigma Delta, Honor Society of Agriculture

Wittenberg University, Springfield, OH
B.A. Art History

ADDITIONAL TRAINING

2023 Certification from University of Pittsburgh: Gender & Sexuality-Diversity and Inclusion
In the Workplace

2023 Systematic Reviews and Meta-analysis. The Campbell Collaborative

2022 Certification from the Cultural Intelligence Center: Developing Cultural Intelligence: Working
Effectively Across Cultures

2021 OSU Advanced Methods Institute, Qualitative Track
Training to strengthen methods approaches and effect system-wide, organization change using the
latest research methods that impact the cultural relevance and sustainability of scholarly research
in the social-behavioral sciences.

PROFESSIONAL EXPERIENCE

OSU, College of Engineering, Department of Engineering Education (EED)
2020 to present Assistant Research Professor

Funded Research

2022-2026 PI, The Organizational Climate Challenge: Promoting the Retention of
Students from Underrepresented Groups in Doctoral Engineering Programs
National Science Foundation
Budget: \$1.5 million over 48 months

Dissertation and Thesis Advising

2022 Dissertation Defense Committee Member
Research Methods Expert
Emily Nutwell, doctoral candidate, Engineering Education Department

2021 Doctoral Candidacy Exam Committee Member
Research Methods Expert
Emily Nutwell, doctoral student, Engineering Education Department

2021 Dissertation Defense Committee
Graduate Faculty Representative
Alisher Khaliyarov, doctoral candidate, Department of History

2018-2020 Postdoctoral Scholar
2018 Graduate Research Associate
PROJECT: Why We Persist: An intersectional approach to characterizing and examining the experiences of women and women of color tenure-track faculty in engineering.
Worked as member of multi-disciplinary, multi-institution team; designed survey scales for national data collection instrument to probe the perceptions of workplace climate for tenure track engineering faculty; registered instrument for copyright; obtained and maintained IRB approval; prepared annual progress reports for National Science Foundation; prepared and presented conference papers; prepared journal manuscripts

2014 to 2017 OSU, CFAES, ACEL
Graduate Research Associate
Responsibilities included: developed semi-structured interview guide; analyzed qualitative data using NVivo and MAXQDA; analyzed quantitative data using SPSS; conducted literature reviews; developed leadership workshop content; prepared white papers on team science, organizational learning, organizational innovation; organizational climate and culture; presented research findings at national conferences; co-authored manuscripts and reports; represented department on White House briefing book team.

PROJECT: Innovation in Extension Task Force
Extension Committee on Organization and Policy (ECOP) Task Force on Innovation Assisted Task Force Chair; facilitated group discussions; drafted report of findings and executive summary;

PROJECT: Obama Administration's President's Nation of Makers Initiative
Purpose: to connect more students, entrepreneurs, and citizens with the maker movement to promote STEM learning and encourage innovation.
Member of White House briefing book team

OTHER RESEARCH EXPERIENCE

2019-2021 OSU, Technology Commercialization Office (TCO)
PROJECT: Investigation of Influences on the Rate of Technology Transfer at OSU and How to Improve TCO Performance.
Supervised graduate students; prepared white paper with recommendation for how to improve technology transfer rates.

2019-2020 Research contract (funded by OSU, College of Engineering, Associate Dean):
PROJECT: Future Classrooms in Engineering
Purpose: to inform the design of classroom space in the Advanced Materials Corridor Phase II project. Project PI: Peter Rogers
Role: Co-PI

2019-2021 Research contract (funded by eXtension Foundation):
PROJECT: Forecasting Emerging Technology
Purpose: to provide insight on future of technological innovations for national Extension professionals.
Role: Co-PI

- 2018 Research contract (funded by OSU Dept. of Animal Sciences through Centers for Disease Control
PROJECT: Understanding the reward worth the risk: The true cost of showing pigs, with or without influenza
Role: Key Personnel
- 2018 OSU, Food, Agricultural and Environmental Sciences Library
PROJECT: Bibliometric analysis of the Ohio Agricultural Research and Development Center's (OARDC) SEEDS grant program scholarly output.
Role: Co-PI

OTHER PROFESSIONAL EXPERIENCE

- 2019 to present Futuring Advisory Committee
Purpose: to provide feedback on emerging trends and issues focused on, but not limited to, the Cooperative Extension System. Develop project teams
- 2009- 2014 Walker Hackensack Akeley, Minnesota Schools: Alternative Learning Program
Lead Teacher
Managed daily operations for state-funded public school credit recovery program for at-risk learners ages 16+ including assessment and intake. Served large rural Minnesota school district including part of the Leech Lake Band of Ojibwe Reservation. Managed staff of licensed teachers; developed curricula for math, science, and social studies program providing credit recovery opportunities; incorporated learning units grounded in Ojibwe culture; evaluated and documented program activity; created student learning plans and documented individual and program progress; reported outcomes to state leadership.
- 2009- 2014 North Country Adult Basic Education (ABE) Consortium Program
Program Coordinator
Managed staff of 8-10 licensed teachers in school districts distributed across rural northern Minnesota including a portion of the Leech Lake Band of Ojibwe Reservation; evaluated program effectiveness to identify staff professional development needs; retrained teaching staff to adhere to funding contract requirements; documented improvements and reported outcomes to state leadership; obtained funding renewal through grant application
- 2009- 2014 North Country Adult Basic Education (ABE) Consortium Program
Lead Educator: Walker, MN program
Recruited students for state-funded program to complete a high school credential, learn English, and improve basic skills such as literacy and math, and/or prepare for post-secondary education or employment. Instructed out-of-school youths and adults in remedial education classes, preparatory classes for the General Education Development test, and literacy. Observed limitations, interests, and abilities to establish individual learning plans. Adapted teaching methods and instructional strategies to meet individual learner needs.

GRANTS

Awarded

- 2022 Collaborative Research: The **Organizational Climate** Challenge: Promoting the Retention of Students from Underrepresented Groups in Doctoral Engineering Programs
Submitted Oct. 2021 to the National Science Foundation
Budget: \$1.5mil over 48 months

Pending Grants (in review)

Collaborative Research: Collaborative Research: Intervention Effects on Undergraduate Student Learning in Introductory Analog and Digital Circuits Courses: A Research Synthesis
NSF 23-510 DUE-IUSE Engaged Student Learning
\$750,000 over 36 months

SERVICE TO PROFESSION

2019-present Journal of Agricultural and Food Information, manuscript reviewer
American Educational Research Association, proposal reviewer
American Society for Engineering Education, proposal reviewer
2017- present Science of Team Science, conference proposal reviewer

INSTITUTIONAL SERVICE

2020- present Dissertation defense committee member: methods expert
2020-present Doctoral candidacy exam committee member: methods expert
2020 to present Doctoral defense graduate school representative
2020-2022 Diversity, Equity, and Inclusion committee member for EED
2020 Faculty Search committee member, EED

PUBLICATIONS

Books

Smith, K.L, Hill, P., ... **Aldridge, J.L.** (2017) "The Innovation Imperative: Can Extension Change?" Utah State University. usuextensionstore.com/the-innovation-imperative-can-extension-change/.

Refereed Journal Articles

Yoon, S.Y., **Aldridge, J.L.**, *et al.* (2022) Development and validation of the workplace climate and persistence scale for STEM faculty framed in intersectionality of gender, race/ethnicity, and socioeconomic background. *Research in Higher Education*
Aldridge, J.L. & Diekmann, F. (2019). A bibliometric analysis of an agbioscience research enhancement grant program. *Journal of Agricultural and Food Information.* (20)1.

Refereed Conference Proceedings

Aldridge J.L., Else-Quest, N.M., Roy, J. Yoon, S.Y., (2023) Doctoral student retention from an organizational climate and intersectionality perspective: A targeted literature review-of engineering education literature in ASEE Annual Conference and Exposition, Baltimore, MD, June 2023
Aldridge, J.L., Yoon, S.Y., Cox, M.F, McGee, E.O. & Main, J. (2022). Workplace climate for first-generation engineering faculty: Intersectional analysis with gender, race/ethnicity, and socioeconomic background. 50th Annual Frontiers in Education (FIE) Conference (proceedings): Uppsala, Sweden.
Aldridge, J.L., Yoon, S.Y., Cox, M.F, Main, J. & McGee, E.O. (2020). Validation of the persistence of engineers in the academy survey. 127th American Society for Engineering Education (ASEE) Annual Conference and Exposition: virtual meeting.
Aldridge, J.L., Yoon, S.Y., Cox, M.F, McGee, E.O. & Main, J. (2019). Workplace climate: Comparison of science and engineering faculty perceptions by gender. 49th Annual Frontiers in Education (FIE) Conference (proceedings): Cincinnati, OH. (**Best Diversity Paper Award**).
Aldridge, J.L., Yoon, S.Y., Cox, M.F, Main, J. & McGee, E.O. (2019). Development of the

persistence of engineers in the academy survey (PEAS). 126th American Society for Engineering Education (ASEE) Annual Conference and Exposition: Tampa, FL.

Web-Based Publications and Reports

Thomas, J., **Aldridge, J.L.** & Newell, E. (2020) eXtension Report on Emerging Technologies Impacting the Cooperative Extension System.

Aldridge, J.L., Smith, K.L., & Cochran, G.R. (2018). Bibliometric analysis of the OARDC SEEDS grant program. The College of Food, Agricultural and Environmental Sciences (CFAES) Research Competitive Grants Program 2017 Report of Progress: Columbus, OH.

Extension Committee on Organization and Policy (ECOP) Task Force on Innovation (2016). Extension Task Force Innovation Report.

Manuscripts in Review

Yoon, S.Y., **Aldridge, J.L.**, Cox, M.F., Main, J. & McGee, E.O. Development and Validation of the Workplace Climate and Persistence Survey for Engineering Faculty Framed in Intersectionality of Multiple Social Identities. Submitted to the Journal of Engineering Education

Nolting, J.M., Okhuysen, G., **Aldridge, J.L.** & Bowman, A.S. Understanding reward worth risk associated with Influenza in exhibition swine. Submitted to the Journal of Medical Anthropology

Manuscripts in Preparation

Else Quest, **Aldridge, J.L.**, N.M., Roy, J. & Yoon, S.Y. Systematic Review of Organizational Climate Studies for Doctoral Student Retention in Engineering

Yoon, S.Y., **Aldridge, J.L.**, Else Quest, N.M., Roy, J. Development of the Department Climate for Engineering Doctoral Student Retention Survey.

RECENT CONFERENCE PRESENTATIONS

Frontiers in Education (FIE)

2022 Workplace climate for first-generation engineering faculty: Intersectional analysis with gender, race/ethnicity, and socioeconomic background.

2019 Workplace climate: Comparison of science and engineering faculty perceptions by gender

National Extension Technology Community (NETC)

2022 Innovation: Remote and Hybrid Work in Extension Settings.

Ohio State University Extension Annual Conference

2021 We've Spent Over a Year Doing It: What Best Practices Have We Learned in Remote and Hybrid Work

2020 Now I'm Working from Home: Best Practices for Extension Professionals: Working Remote

2019 Key Trends Affecting Extension and How We Can Remain Relevant

2017 Innovation in Extension

2015 What is team science?

American Society for Engineering Education (ASEE)

2023 Engineering doctoral student retention and persistence from an organizational climate and intersectional perspective: A targeted review of engineering education literature

2021 Development of a survey to investigate engineering student perceptions of classroom characteristics

2020 Validation of the Persistence of Engineers in the Academy Survey

2019 Development of the Persistence of Engineers in the Academy Survey

National Association of Extension Program and Staff Development Professionals

2020 Impact of Remote/Hybrid Extension Work on Outreach/Engagement

American Educational Research Association (AERA)

2020 Workplace climate for science and engineering faculty: intersectionality with gender, race/ethnicity, and social class

2019 STEM faculty's perceptions of climate for persistence: Differences by gender, race/ethnicity, and social class.

Society of Women Engineers (SWE)

2019 "I am the first..." Perspectives of women, women of color, and first in family to obtain university faculty positions in academic engineering.

Association of American Colleges and Universities Project Kaleidoscope

2019 Intersectionality in the development of the persistence of engineers in the academy survey

Science of Team Science

2019 Agbioscience: The land-grant university mission in the 21st century

2017 Team science in agriculture

Interdisciplinary Network for Group Research (INGRoup)

2016 Bibliometric analysis of an interdisciplinary grant competition

Ohio Agricultural Research and Development Annual Research Conference

2017 Bibliometric analysis of the OARDC SEEDS grant program

Joint Council of Extension Professionals Leadership Conference (JCEP)

2015 Got wicked problems? Improved approaches through the science of team science (Peer-ranked top session)

PROFESSIONAL ASSOCIATIONS

2018 to present American Society for Engineering Education

2018 to present Science of Team Science

PATENTS, INVENTIONS & COPYRIGHTS

©2023 Research Tool: Organizational Climate Scale for Doctoral Engineering Student Retention The Ohio State University, University of North Carolina, University of Cincinnati, American Society for Engineering Education. Copyrighted through OSU's Technology Transfer Office.

©2020 Research Tool: Persistence of Engineers in the Academy Survey The Ohio State University, Purdue University, and Vanderbilt University. Copyrighted through OSU's Technology Transfer Office

LICENSES and CERTIFICATES

Minnesota State Teaching License, General Science, Grades 7-12