

# William C. Barley

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## RESEARCH INTERESTS

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Collaboration and coordination  
Knowledge boundaries  
Data representation  
Organizational communication  
Field studies of diverse teams  
Policy implications of interdisciplinary work

## ACADEMIC POSITIONS

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2021-Present Associate Professor, Department of Communication, University of Illinois at Urbana-Champaign  
2025-present Program Director, Translational Team Science Initiative at Illinois  
2025-present Faculty Affiliate, Center for Social & Behavioral Science, UIUC  
2024-2025 Director's Advisor for Team Science, Carl R. Woese Institute for Genomic Biology, UIUC  
2021-present Illinois Strategic Organizations Initiative Scholar, Gies College of Business, UIUC  
2021-2023 Inaugural Director's Faculty Fellow, Carl R. Woese Institute for Genomic Biology, UIUC  
2014-2021 Assistant Professor, Department of Communication, University of Illinois at Urbana-Champaign  
2016-present Faculty Affiliate, National Center for Supercomputing Applications, UIUC  
2015-16 Faculty Fellow, National Center for Supercomputing Applications, UIUC  
2011-12 Visiting Scientist, National Center for Atmospheric Research

## EDUCATION

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2010-2014 Ph.D. in Media, Technology, and Society  
Department of Communication Studies  
Northwestern University  
2008-2010 M.A. in Media, Technology, and Society  
Department of Communication Studies  
Northwestern University  
2002-2006 B.S. in Cognitive Science, *Departmental Honors*  
Department of Cognitive Science  
University of California, San Diego

## OTHER WORK EXPERIENCE

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2006-2008 General Motors Corporation, Warren, MI  
Associate Researcher, Vehicle Development Research Lab

## PUBLICATIONS

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*Note: an <sup>+</sup> indicates a co-author who was a graduate student during the publication process*

### A. Articles in Journals

21. Barley, W. C., Dinh, L., ^Johnson, L. P., & Allan, B. F. (2025). Membership in team science institute enhances diversity of researchers' collaboration networks. *PLoS ONE*, 20(5). <https://doi.org/10.1371/journal.pone.0322943>
20. Treem, J. W., & Barley, W. C. (2025). The Growth of Process Expertise and the Absence of Process Experts in the Digital Age. *Research in the Sociology of Organizations*, 97, 69–85. <https://doi.org/10.1108/S0733-558X20250000097004>
19. ^Sharma, N., Treem, J. W., Feister, M. K., & Barley, W. C. (2025). Complex Technologies and Ignorant Expertise: The Communicative Value of Not Knowing but Figuring it Out. *Management Communication Quarterly*, 39(3), 407–434. <https://doi.org/10.1177/08933189241286452>
18. Ruge-Jones, L. R., Barley, W. C., ^Wilson, S. R., & Poole, M. S. (2025) Interacting barriers: How barriers compound across levels of analysis to affect teams. *Management Communication Quarterly*. 39(1), 120-155. <https://doi.org/10.1177/08933189241249963>
17. Dinh, L., Barley, W. C., ^Johnson, L., & Allan, B. F. (2024). Hyperauthored papers disproportionately amplify important egocentric network metrics. *Quantitative Science Studies*, 1–24. doi: 10.1162/qss\_a\_00307
16. Treem, J. W., Barley, W.C., Weber, M., and Barbour, J. (2023) Signaling and meaning in organizational analytics: coping with Goodhart's Law in an era of digitization and datafication. *Journal of Computer-Mediated Communication*. 28(4), doi: 10.1093/jcmc/zmad023
15. ^Ruge-Jones, L. R., Barley, W. C., ^Wilson, S. R., ^MacSwain, C., ^Johnson, L. P., ^Everett, J., & Poole, M. S. (2023) Activated Differences: A Qualitative Study of How and When Differences Make a Difference on Diverse Teams. *Management Communication Quarterly*. doi: 10.1177/08933189231153847
14. Wissa, A., Alleyne, M., Barley, W.C., Suarez, A. (2022) Best Practices of Bioinspired Design: Key Themes and Challenges. *Integrated and Comparative Biology*. Doi: 10.1093/icb/icac143
13. Barley, W. C., ^Ruge-Jones, L.R., Wissa, A., Suarez, A. V., Alleyne, M. (2022) Addressing Diverse Motivations to Enable Bioinspired Design. *Integrative and Comparative Biology*. doi: 10.1093/icb/icac041
12. Leonardi, P. L., Barley, W. C., & Woo, D. (2022) Why should I trust your model? How to successfully enroll digital models in the innovation process. *Innovation: Organization & Management*. (24)1, 47-64, doi: 10.1080/14479338.2021.1873787
11. Barley, W. C., ^Dinh, L., ^Workman, H., & ^Fang, C. (2022). Exploring the Relationship Between Interdisciplinary Ties and Linguistic Familiarity Using Multilevel Network Analysis. *Communication Research*, 49(1), 33–60. doi: 10.1177/0093650220926001
10. ^Wilson, S. R., Barley, W. C., ^Ruge-Jones, L., & Poole, M. S. (2022) Tacking amid tensions: Using oscillation to enable creativity in diverse teams. *Journal of Applied Behavioral Science*. 58(1), 5-28. doi: 10.1177/0021886320960245
9. Taylor, B. C., Barley, W. C., Brummans, B. H. J., Ellingson, L. L., Ganesh, S., Herrmann, A. F., Rice, R. M., Tracy, S. J. (2021) Forum Essay: Whatever Happened to Ethnography in Organizational Communication Studies? *Management Communication Quarterly*. (35)1, 623-652, doi: 10.1177/08933189211026700
8. Leonardi, P. L., Woo, D., & Barley, W. C. (2021) On the Making of Crystal Balls: Five Lessons About Simulation Modeling and the Organization of Work for Predicting COVID-19. *Information and Organization*. (30)1. doi: 10.1016/j.infoandorg.2021.100339

7. Treem, J. W., Barley, W. C., & Leonardi, P. M. (2021) Resourcing expertise: How existing schemas and ongoing communication shape the meaning of expert work in a global organization. *Communication Monographs*. (88)2, 237-262. doi: 10.1080/03637751.2020.1775271
6. <sup>†</sup>Vandewalle, B., Barley, W. C., Padmanabhan, A., Katz, D. S., & Wang. S. (2021) Understanding the multifaceted geospatial software ecosystem: A survey approach. *International Journal of Geographical Information Science*. 35(11), 2168-2186. doi: 10.1080/13658816.2020.1831514
5. Barley, W. C., Treem, J. W., & Leonardi, P. M. (2020). Experts at coordination: Examining the performance, production, and value of process expertise. *Journal of Communication*. 70(1), 60-89. doi:10.1093/joc/jqz041
4. Barley, W. C., Treem, J. W., & Kuhn, T. R. (2018) Valuing multiple trajectories of knowledge: A critical review and research agenda for knowledge management research. *Academy of Management Annals*, 12(1), 278-317. doi: 10.5465/annals.2016.0041
3. Barley, W. C., & <sup>†</sup>Weickum, N. R. (2017). The work gap: A structured review of collaborative teamwork research from 2005-2015. *Annals of the International Communication Association*, 1(2), 136-167. doi:10.1080/23808985.2017.1322912
2. Barley, W. C. (2015). Anticipatory Work: How the need to represent knowledge across boundaries shapes work practices within them. *Organization Science*, 26(6), 1612-1628. doi:10.1287/orsc.2015.1012
1. Barley, W. C., Leonardi, P. M., & Bailey, D. E. (2012). Engineering objects for collaboration: Strategies of ambiguity and clarity at knowledge boundaries. *Human Communication Research*, 38(3), 280-308. doi:10.1111/j.1468-2958.2012.01430.x

## B. Chapters in Books

7. Ruge-Jones, L. R., Barley, W. C., & Treem J. W. (2024) Past, Present, and Future Analysis of Digital Work in Qualitative Organizational Communication Research. In Brummans, B.H.J.M., Taylor, B.C., & Sivunen, A. (Eds.), *The SAGE Handbook of Qualitative Research in Organizational Communication*. Thousand Oaks, CA: SAGE
6. Barley, W. C. & Poole, M. S. (2019) Networks and technology. In J. McDonald & R. Mitra (Eds.), *Movements in organizational communication research: Current issues and future directions* (pp. 233-252). New York, NY: Routledge
5. Treem, J. W. & Barley, W. C. (2018) A framework for how expertise is communicated and valued in contemporary organizations: Why process work matters. In P. Salem & E. Timmerman (Eds.), *Transformative Practices and Research in Organizational Communication*, (pp. 130-149). Hershey, PA: IGI Global. doi:10.4018/978-1-5225-2823-4.ch008
4. Barley, W. C. (2017). Technology-organization relationship. In C. Scott & L. Lewis (Eds.), *The International Encyclopedia of Organizational Communication*. Hoboken, NJ: Wiley. doi: 10.1002/9781118955567.wbieoc204
3. Treem, J. W. & Barley, W. C. (2016) Exploring the (de)valuation of process experts in contemporary organizations. In J. Treem & P. Leonardi (Eds.), *Expertise, Communication, and Organizing* (pp. 213-231). Oxford, UK: Oxford University Press.
2. Leonardi, P. M., Treem, J. W., Barley, W. C., & Miller, V. D. (2014). Attitude surveys. In V.D. Miller & M.E. Gordon (Eds.), *Meeting the challenge of human resource management: A communication perspective*, (pp. 155-166). New York, NY: Routledge.

1. Leonardi, P. M., & Barley, W. C. (2011). Materiality as organizational communication: Technology, intent, and delegation in the production of meaning. In T. Kuhn (Ed.), *Matters of communication: Political, cultural, and technological challenges to communication theorizing*, (pp. 101-124). Cresskill, NJ: Hampton Press.

### C. Patents

2. Lenneman, J. K., Barley, W. C., Szczerba, J. F., & Naik, S. M. (2012). *Human-machine interface device for an autonomic vehicle control system*. U.S. Patent No. 8,160,760. Washington DC: U.S. Patent and Trademark Office.
1. Lenneman, J. K., Szczerba, J. F., Mathieu, R. J., Barley, W. C., and Seder, T. A. (2009) *Fuel cost predictor system*. U.S. Patent Application No. 11/770,927. Washington DC: U.S. Patent and Trademark Office.

### D. Refereed Conference Proceedings

3. Dinh, L., Barley, W.C., Johnson, L., Allan, B.F. (2023) Diversity measures for scientific collaborations. *Proceedings of iConference23*
2. Barley, W. C., Leonardi, P. M., & Bailey, D. E. (2011) Engineering objects for collaboration: Strategies of ambiguity and clarity at knowledge boundaries. *Academy of Management Best Paper Proceedings*
1. Forlizzi, J., Barley, W. C., & Seder, T. (2010) Where should I turn? Moving from individual to collaborative navigation strategies to inform the interaction design of future navigation systems. *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2010)*, pp. 1261-1270. New York: ACM Press.

### E. Creative Works

1. Pollack, J.A., Barley W.C., Dinh, L.D., & Allan B.A. (2025) Mechanism of the Heavens [graphic display]. Carl R. Woese Institute for Genomic Biology Art of Science Program

## FUNDING

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### External Grants

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|-----------|--|
| 2022-2025 | <p><i>Collaborative Research: Enabling SBE Science via the Network for Transformative Research</i>. <b>Barley W. C. (PI)</b>, with Poole, M. S. (Co-PI). Funding Source: National Science Foundation. Total award amount: \$477,401</p> <ul style="list-style-type: none"> <li>• <i>Linked collaborative proposal submitted with Jackson State University</i>: Campbell, A. L. (PI), with Whittaker, J. A. (Co-PI), Kuslikis, A. S. (Co-PI), Moder, J. (Co-PI), Ruge-Jones, L. R. (Co-PI)</li> </ul> |
| 2020-2022 | <p><i>BII-Design: Reintegrating Biology as a Key Component of Bioinspired design</i>. Suarez, A. (PI), with Alleyne, M. (Co-PI), <b>Barley, W. C. (Co-PI)</b>, Wissa, A. (Co-PI). Funding Source: National Science Foundation. Award amount: \$200,000</p>   |
| 2020-2021 | <p><i>2021 EFMA Germination Investigators Workshop</i>. <b>Barley, W. C. (PI)</b>, with Kuslikis, A. S. (Co-PI), Moder, J. (Co-PI), Poole, M. S. (Co-PI), Whittaker, J. (Co-PI). Funding source: National Science Foundation. Award amount: \$50,000</p>   |
| 2017-2020 | <p><i>EAGER Germination Renewal: Extending a platform to germinate transformative science through diverse collaboration</i>. <b>Barley, W. C. (PI)</b>, with Kuslikis, A. S. (Co-PI), Moder, J. (Co-PI), Poole,</p>  |

- M. S. (Co-PI), Whittaker, J. (Co-PI). Funding source: National Science Foundation (EFMA-1745889). Award amount: \$300,000
- 2017-2020 *SI2-S2I2 Conceptualization: Geospatial Software Institute*. Wang, S. (PI) with Katz, D. (Co-PI), Cox, D. (Co-PI), Palmer, M. (Co-PI), Morin, P. (Co-PI). Funding Source: National Science Foundation (OAC-1743184). Award amount: \$500,000. **Role: Senior Personnel**
- 2016-2018 *EAGER Germination: Crystallizing Transformative Ideas by Seeding a Diverse Knowledge Community*. **Barley, W. C. (PI)**, with Kuslikis, A. S. (Co-PI), Moder, J. (Co-PI), Poole, M. S. (Co-PI), Whittaker, J (Co-PI). Funding Source: National Science Foundation (EFMA-1629367). Award amount: \$100,000

### University of Illinois

- 2022-2023 *Using network analytics to examine how participation in a multidisciplinary science center affects researchers' careers*. **Barley, W. C. (PI)**, Allan, B. F. (Co-PI), Funding Source: Campus Research Board. Award. Amount: \$18,228
- 2015-2016 *Interdisciplinary Work in a Highly Technical Context: Uncovering Successful Strategies and Potential Costs of Collaboration*. (NCSA Faculty Fellowship) Funding source: National Center for Supercomputing Applications. Award amount: \$25,000
- 2015-2017 *Seeing Systems: Technology Studies and Knowledge Infrastructures across the Humanities*, Schaffner, S. (Project Leader), with **Barley, W. C.**, Canales J., Chan, A., Cole, C., Jackson, S., Littlefield, M., McDonough, J., Meier, P., and Weissman, T. Funding source: INTERSECT Initiative, Graduate College. Award amount: \$250,000

## AWARDS AND HONORS

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- 2024 Dennis Gouran Research Award  
 “Activated Differences: A Qualitative Study of How and When Differences Make a Difference on Diverse Teams”  
 (Co-authored with Luisa Ruge-Jones, Sam Wilson, Lauren Johnson, Jack Everett, and Scott Poole)  
*National Communication Association, Group Communication Division*
- People’s Choice Best Poster Award  
 “A structured review tests the value of transdisciplinarity in bioinspired design research”  
 (Co-authored with Elizabeth Bello, Rebecca Carranza, Paul Lee, Marianne Alleyne, Andrew Suarez, Kelli Trei, & Aimy Wissa)  
*Science of Team Science Annual Conference*
- 2023 Best Research Paper  
 “Diversity measures for scientific collaborations”  
 (co-authored with Ly Dinh, Lauren Johnson, and Brian Allan)  
*iConference2023*
- 2022 LAS Dean’s Award for Excellence in Undergraduate Teaching  
*College of Liberal Arts and Sciences, University of Illinois*
- 2021 Top Paper Award  
 “How and when differences make a difference: A qualitative study of activated differences on diverse teams”  
 (co-authored with Luisa Ruge-Jones, Chandler MacSwain, Sam Wilson, Jack Everett, Allison Wasielewski, Lauren Johnson, and Scott Poole)  
*National Communication Association, Group Communication Division*

- 2020      Unsung Hero of Illinois Recipient  
*University of Illinois Alumni Association*  
*(campus-wide honor awarded via selection from faculty, staff, and student nominations)*
- 2019      Best Paper Award  
 “Connection or dialog? How frames for collaboration impact interdisciplinary practice”  
*2019 Davis Conference on Qualitative Research*
- Top Paper Award  
 “Tacking amid tension: Using oscillation to enable creativity in diverse teams”  
 (co-authored with Sam Wilson, Luisa Ruge-Jones, and Scott Poole)  
*National Communication Association, Group Communication Division*
- 2018      Best Paper Award  
 “Enhancing team science through mobilizing the diversity-creativity tension”  
 (co-authored with M. Scott Poole, Samuel Wilson, and Luisa Ruge-Jones)  
*Science of Team Science Annual Conference*
- Top Poster Award  
 “Destabilizing divergence and convergence: An intervention to transcend the tension between diversity and creativity in teams”  
 (co-authored with Sam Wilson, Luisa Ruge-Jones, and M. Scott Poole)  
*International Communication Association, Organizational Communication Division*
- 2017      Best of the B.E.S.T. Presentation Award  
 “Examining the structure of interactional expertise in a scientific organization using multilevel egocentric analysis”  
 (Co-authored with Ly Dinh, Hallie Workman, and Chengyu Fang)  
*International Communication Association, Organizational Communication Division*
- 2016      Outstanding Article Award  
 “Anticipatory work: How the need to communicate across boundaries shapes work practices within them”  
*National Communication Association, Organizational Communication Division*
- Top Paper Award  
 “Frame Mismatch: How framing communication as transmission hinders interdisciplinary collaboration” (Co-authored with Kaitlyn Childs, Hallie Workman, and Ly Dinh)  
*International Communication Association, Organizational Communication Division*
- 2015      W. Charles Redding Dissertation Award  
 “Cloudy with a chance of partnership: How weather researchers shape science to support collaboration”  
*International Communication Association, Organizational Communication Division*
- 2013      Art Stinchcombe Dissertation Prize in Organization Studies  
 “Cloudy with a chance of partnership: How weather researchers shape science to support collaboration”  
*Northwestern University*
- Best Presentation Award  
 “Cloudy with a chance of partnership: How weather researchers shape science to support collaboration”

*American Meteorological Society, Eighth Symposium on Policy and Socio-economic Research Student Competition*

Best Student Paper Nominee

“Acknowledging specialized work: A coalitional approach to collaboration.”

*European Group for Organizational Studies (Conference-wide award, 1 nominee per division)*

2012 Top Paper Award

“Interaction, transparency and practice: Communicative and material factors contributing to convergence in technology use.” (Co-authored with Alan Clark & Paul Leonardi)

*International Communication Association, Organizational Communication Division*

## PRESENTATIONS

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### Refereed

48. Whittaker, J.A., Campbell, A., Barley, W., Ruge-Jones, L., Elliott, C., Kuslikis, A., Moder, J., Poole, M.S., & DePass, A. (2025, February) *Interventional Research to Develop and Sustain Teams Embedded in Diverse Research Ecosystems*. Presentation at the 2025 Understanding Interventions that Broaden Participation in Science Conference. Baltimore, MD
47. Barley, W.C. (2024, August) *Process expertise & conundrums of invisible work*. Presentation at the Annual Meetings of the Academy of Management. Chicago, IL
46. Bello, E., Carranza, R., Lee, P. Trei, K., Suarez, A.V., Wissa A., Barley, W.C., Alleyne, M. (2024, July) *A Structured Review Tests the Value of Transdisciplinarity in Bioinspired Design (BID) Research*. Poster presented at the Science of Team Science Virtual Conference.
45. Bunsold, K., Barley, W.C., Ruge-Jones, L., & Poole, M.S. (2024, April) *Should'a, Could'a, Would'a: How Unrecognized Tensions Affect Interorganizational Collaborations*. Paper presented at the Central States Communication Association Annual Conference. Grand Rapids, MI
44. Sanders, J.D., Bunsold, K., Benevento, S., & Barley W.C. (2024, April) *Collective, Negotiated, and Politicized Identity/ies: Creating New Opportunities for Collaboration Research Through an Intersectional Approach*. Paper presented at the Central States Communication Association Annual Conference. Grand Rapids, MI
43. Weber, M., & Barley, W.C. (2023, November) *Automation discourses and the power of the past to predict the future of work: A computational analysis of news stories from 1950-2019*. Paper presented at the National Communication Association Annual Conference. National Harbor, MD
42. Barley, W.C., & Weber, M.S. (2023, November) *Talking about automation & work: A qualitative analysis of New York Times articles from 1950-2019*. Paper presented at the National Communication Association Annual Conference. National Harbor, MD
41. Barley, W. C., Dinh, L., Johnson, L., & Allan, B.A. (2023, May) *How organizational resources enable interdisciplinarity: An ego-centric comparative network approach*. Paper to be presented at the International Communication Association Annual Conference. Toronto, Canada.
40. Dinh, L, Barley, W. C., Johnson, L., & Allan, B.A. (2023, March) *Diversity Measures for Scientific Collaborations*. Paper presented at iConference2023. Barcelona, Spain.
39. Ruge-Jones, L., Barley, W. C., Wilson, S., Poole, M. S. (2022, November) *Interacting Barriers: How challenges embedded in organizational and team practices compound to exacerbate teamwork and performance*. Paper presented at the National Communication Association Annual Conference. New Orleans, LA

38. Barley, W.C. (2022, May) *Navigating the Need to Manage an Applied Intervention While Also Collecting Publishable Research Data*. Presentation at the International Communication Association Annual Conference. Paris, France.
37. Alleyne, M., Wissa, A.A., Barley, W.C., & Suarez, A. (2022, January) *Introduction to the Symposium on best practices for bioinspired design education, research and product development*. Symposium Introduction at the Society for Integrative & Comparative Biology Annual Meeting. Phoenix, AZ
36. Barley, W.C. (2022, January) *Addressing the practical challenges of bioinspired design work*. Paper presented at the Society for Integrative & Comparative Biology Annual Meeting. Phoenix, AZ
35. Ruge-Jones, L., Barley, W. C., MacSwain, C., Wilson, S., Everett, J., Wasielewski, A., Johnson, L. P., & Poole, M. S. (2021, November). *How and when differences make a difference: A qualitative study of activated differences on diverse teams*. Paper presented at the National Communication Association Annual Conference. Seattle, WA
34. Weber, M., Barley, W. C., & Khan, E. (2021, May) *Artificial Intelligence and the Power of the Past to Predict the Future of Work*. Paper presented at the International Communication Association Annual Conference. Virtual Conference.
33. Ruge-Jones, L., Barley, W. C., Wilson, S. W., Poole M. S., Whittaker, J. A., Kuslikis, A., & Moder, J. (2020, November) *Multiple axes of difference in teams: Conceptualizing multidimensionally diverse teams*. Paper presented at the National Communication Association Annual Conference. Indianapolis, IN
32. Ruge-Jones, L., Barley, W.C., Wilson, S.W, & Poole, M.S. (2020, July) *Compounding barriers: How barriers interact to inhibit diverse scientific teams*. Paper presented at the INGroup 2020 Conference. Seattle, WA
31. Ruge-Jones, L., Poole, M.S., Barley, W.C., & Wilson, S.W. (2019, November) *Forging new directions in group communication research: Interactive collaboration to define critical topics and projects*. Interactive Session hosted at the National Communication Association Annual Conference. Baltimore, MD
30. Ruge-Jones, L., Wilson, S., Moder, J., Barley, W.C., Whittaker, J., Poole, M.S., & Kuslikis, A. (2019, November) *Compounding consequences: Barriers and opportunities of diversity in collaborative teams*. Paper presented at the National Communication Association Annual Conference. Baltimore, MD
29. Wilson, S., Ruge-Jones, L., Barley, W.C., & Poole, M.S. (2019, November) *Tacking amid tension: Using oscillation to enable creativity in diverse teams*. Paper presented at the National Communication Association Annual Conference. Baltimore, MD
28. Barley, W.C., Treem, J.W., & Leonardi, P.M. (2019, May) *Experts at coordination: Examining the performance, production, and value of process expertise*. Paper presented at the International Communication Association Annual Conference. Washington, D.C.
27. Barley, W.C. (2019, March) *Connection vs. dialog: How frames for interdisciplinarity impact collaboration practices*. Paper presented at the Davis Conference on Qualitative Research. Davis, CA
26. Ruge-Jones, L., Wilson, S., Poole, M.S., & Barley, W.C. (2018, November) *Leveraging disciplinary diversity: A hands-on collaboratory to define projects on civic discourse in a new media age*. Collaboratory hosted at the National Communication Association Annual Conference. Salt Lake City, UT
25. Barley, W.C. (2018, August) *Anticipatory work and the construction of process flexibility: How representation affords control at knowledge boundaries*. Paper presented at the Academy of Management Annual Meeting. Chicago, IL

24. Dinh, L. & Barley, W.C. (2018, July) *A multiple membership multiple classification (MMMC) model approach for egocentric network data*. Paper presented at the 4th Annual International Conference on Computational Social Science (IC2S2). Evanston, IL
23. Wilson, S.W., Ruge-Jones, L., Barley, W.C., & Poole, M.S. (2018, May) *Destabilizing divergence and convergence: An intervention to transcend the tension between diversity and creativity in teams*. Paper presented at the International Communication Association Annual Conference. Prague, Czech Republic.
22. Poole, M.S., Wilson, S.W., Ruge-Jones, L. & Barley, W.C. (2018, May) *Enhancing team science through mobilizing the diversity-creativity tension*. Paper presented at that Science of Team Science 2018 Conference. Galveston, TX.
21. Dinh, L. & Barley, W.C. (2017, July) *Towards a multilevel analysis for egocentric network data: An application of multiple membership multiple classification (MMMC)*. Paper Presented at the 1st North American Social Networks Conference (NASN2017). Washington, D.C.
20. Barley, W.C., Dinh, L., Workman, H.M., & Fang, C. (2017, May) *Examining the structure of interactional expertise in a scientific organization using multilevel egocentric analysis*. Paper presented at the International Communication Association Annual Conference. San Diego, CA
19. Barley, W.C., & Weickum, N. (2016, November) *The Work Gap: A structured review of collaboration research in management and communication studies from 2005-2015*. Paper presented at the National Communication Association Annual Conference. Philadelphia, PA
18. Barley, W.C., Childs, K., Workman, H.M., Dinh, L. (2016, June) *Frame mismatch: How framing communication as transmission hinders interdisciplinary collaboration*. Paper presented at the International Communication Association Annual Conference. Fukuoka, Japan.
17. Dinh, L., & Barley, W.C. (2016, April) *Exploring the meaning of interdisciplinary collaboration in a scientific organization: An application of text and network analysis*. Paper presented at the XXXVI Sunbelt Conference of the International Network for Social Network Analysis
16. Treem, J.W. & Barley, W.C. (2016, February) *Exploring the (de)valuation of process experts in contemporary organizations*. Paper presented at the Organizational Communication Traditions, Transitions, and Transformations Conference. Austin, TX
15. Barley, W.C. (2015, May) *Long-term consequences of interdisciplinarity: How the need to sell work shapes a discipline over time*. Paper presented at the International Communication Association Annual Conference. San Juan, Puerto Rico.
14. Barley, W.C. (2014, May) *"We're not a job shop:" Strategically managing mixed motives at disciplinary boundaries*. Paper presented at the International Communication Association Annual Conference. Seattle, WA
13. Barley, W.C. (2013, November) *Staging technology: The upstream consequences of knowledge representation for collaborative work*. Paper presented at the National Communication Association Annual Conference. Washington, D.C.
12. Barley, W.C. (2013, July) *Acknowledging specialized work: A coalitional approach to collaboration*. Paper presented at the 28th European Group for Organizational Studies (EGOS) Conference. Montreal, Canada.
11. Barley, W.C. (2013, January) *Cloudy with a chance of partnership: How weather researchers shape science to support collaboration*. Presented at the 93rd Meeting of the American Meteorological Society. Austin, TX.

10. Barley, W.C. (2012, October) *Cloudy with a chance of partnership: How weather researchers shape science to support collaboration*. Presented at the 25th Organizational Communication Mini-Conference. Norman, OK.
9. Clark, A.T., Barley, W.C., & Leonardi, P.M. (2012, May) *Interaction, transparency and practice: Communicative and material factors contributing to convergence in technology use*. Paper presented at the International Communication Association Annual Conference. Phoenix, AZ.
8. Barley, W.C., Leonardi, P.M., & Treem, J.W. (2011, November) *Information triage: Evaluating expertise to support distributed collaboration*. Paper presented at the National Communication Association Annual Conference. New Orleans, LA.
7. Treem, J.W., Leonardi, P.M., & Barley, W.C. (2011, November) *The discursive construction of expertise: Implications for interorganizational communication*. Paper presented at the National Communication Association Annual Conference. New Orleans, LA.
6. Barley, W.C., Leonardi, P.M., & Bailey, D.M. (2011, August). *Engineering objects for collaboration: Strategies of ambiguity and clarity at knowledge boundaries*. Paper presented at the Academy of Management Annual Conference. San Antonio, TX.
5. Barley, W.C., Clark, A.T., & Leonardi, P.M. (2011, May). *Emerging technologies-in-practice: A communication framework of convergence of technologies-in-use*. Paper presented at the International Communication Association Annual Conference. Boston, MA.
4. Barley, W.C. & Leonardi, P.M. (2010, November). *Engineering objects: The strategic production of boundary objects*. Paper presented at the National Communication Association Annual Conference. San Francisco, CA.
3. Barley, W.C. (2010, October). *Negotiating engineered objects: Exploring the collective interpretation of strategically designed objects*. Poster presented at the 23rd Annual Organizational Communication Mini-Conference. New Brunswick, NJ.
2. Barley, W.C., Treem, J.W., Leonardi, P.M., Rozenfeld, R.A., Kelleher, M.D., & Woods, D.M. *The role of interpersonal and organizational trust in emergency pediatric transfers*. Poster Presented at:
  - National Patient Safety Foundation Annual Congress. Orlando, FL. May 2010
  - AcademyHealth Annual Research Meeting. Boston, MA. June 2010
  - Child Health Services Research Meeting. Boston, MA. June 2010
1. Forlizzi, J., Barley, W.C., & Seder, T. (2010, April). *Where should I turn: Moving from individual to collaborative navigation strategies to inform the interaction design of future navigation systems*. Paper presented at the 28th International Conference on Human Factors in Computing Systems (CHI 2010). Atlanta, GA.

#### **Invited Talks**

- 2026 Center for Genomic Science Innovation Seminar, University of Wisconsin-Madison, WI *Collaborative Work: How Acknowledging the Labor of Interdisciplinarity Can Facilitate Science Teams*.
- 2025 Big Ten Academic Alliance Interdisciplinary Institute Directors Meeting, Rosemont, IL  
Team Science for Interdisciplinary Discovery: Scholarship and Practice.  
(Keynote lecture to the directors of 30+ research institutes from across the Big Ten)
- Center for Research on Programable Plant Systems Seminar, Cornell University, NY & Co-hosted with National Center for Supercomputing Applications seminar.

- Collaborative Work: How Acknowledging the Labor of Interdisciplinarity Can Facilitate Science Teams*  
(Hybrid Lecture delivered at NCSA and streamed to virtual participants from 6 universities).
- 2024 Workshop co-facilitator. African Biodiversity Fellowship for Emerging Genomics Leaders. Urbana, IL  
*Managing collaboration in team science* (with Jacinda Dariotis)
- Carl R. Woese Institute for Genomic Biology Staff Seminar. Urbana, IL  
*A conversation about building the future of IGB team science*  
(Invited seminar with ~100 institute staff)
- Carl R. Woese Institute for Genomic Biology Faculty Retreat. Urbana, IL  
*Some considerations for the future of IGB team science*  
(Keynote Speaker)
- National Science Foundation Germination Workshop, Alexandria, VA  
*Facilitating Diverse Collaboration: Lessons from the Network for Transformative Research*  
(invited keynote lecture with Joseph Whittaker & Luisa Ruge-Jones)
- Department of Entrepreneurship and Innovation Seminar Speaker. HEC Montréal. Montréal, Canada  
*Acknowledging Collaborative Work: How to Build Organizational Policies to Facilitate Interdisciplinary Collaboration*
- Department of Entrepreneurship and Innovation Professionalization Workshop. HEC Montréal. Montréal, Canada  
*How Do We Conference? Discussing How to engage and benefit from Academic Meetings*
- Workshop co-facilitator. Carl R. Woese Institute for Genomic Biology Team Science Leadership Program. Urbana, IL (with Jacinda Dariotis)  
*Dialog and Interdisciplinary Collaboration*
- Invited Panelist. National Center for Principled Leadership & Research Ethics. Urbana, IL  
*Enabling Interdisciplinary Research and Team Science*
- 2023 Schneider Lab Seminar Speaker. School of Information, University of Illinois Urbana-Champaign, Urbana, IL.  
*How organizational resources enable interdisciplinarity: An ego-centric comparative network approach*
- Future of Work Research Showcase, Champaign, IL  
*How have we talked about automation and work? A qualitative analysis of New York Times articles from 1950-2019*
- 2022 International Network for the Science of Team Science (INSciTS) Virtual Seminar Speaker  
*Challenges and opportunities for computational approaches to team science research*  
(virtual presentation with 140+ registrants)
- 2021 RICK-OCIS Special Issue Showcase Workshop: Responding to Crisis Through Digital Innovation  
*On the making of crystal balls: Five lessons about simulation modeling and the organization of work*
- 2020 Department of Communication Colloquium, University of Illinois, Urbana-Champaign, Champaign, IL  
*Panel: What we are learning about teaching online during COVID-19?*
- Keynote Speaker, University of Illinois Fall New Student Convocation, Champaign, IL  
*(university-wide speech; invited by the provost as result of a university-wide nomination process)*
- Keynote Speaker, Illinois State University COMweek, Department of Communication, Bloomington, IL  
*Rising to the challenges of cross-boundary work (cancelled due to COVID-19 pandemic)*

- 2019 2019 NSF Emerging Frontiers and Multidisciplinary Activities Germination Workshop, Boise, ID  
*A “stepladder” to addressing diversity and inclusion: a guided experience in oscillation*
- Department of Communication Colloquium, University of Colorado at Boulder, Boulder, CO  
*The actions around interaction: How seeing the back-stage of science complicates theories of communication at knowledge boundaries*
- Leading Forward Professional Development Program, University of Illinois Office of Advancement, Urbana, IL  
*Cross-functional teams are hard: Using team science to enable cross boundary collaboration*
- NSF Geospatial Software Institute Conceptualization Project (NSF-OAC-1743184)  
*Webinar: Conceptualizing a National Geospatial Software Institute. (90+ audience participants)*
- 2018 Illinois Summit on Diversity in Psychological Sciences. Urbana, IL  
*Workshop: Rising to the Challenges of Interdisciplinary Work*
- 2018 NSF Emerging Frontiers and Multidisciplinary Activities Germination Workshop, Alexandria, VA  
*Extending a Platform to Germinate Transformative Science Through Diverse Collaboration*
- NSF Geospatial Software Institute (GSI) Conceptualization Workshop. Chicago, IL  
*Who are the users? What are their needs? Results from the GSI user survey*
- Sidney S. Micek Leadership Fellows Program. Urbana, IL  
*Teamwork is hard: Using team science to get off to a good start*
- Invited Seminar, Illinois Extension Annual Conference. Urbana, IL  
*Communicating across boundaries*
- 2017 Center for Health Aging and Disability Seminar, University of Illinois, Urbana, IL  
*Interdisciplinary Work: Its promise, its challenges, and some strategies for success*
- Keynote Speaker: Annual University Advancement Conference, University of Illinois, Urbana, IL  
*The promise and challenge of cross-boundary communication*
- Department of Organizational Behavior Seminar, University of Illinois, Urbana, IL  
*Ironies of Interdisciplinarity: Revealing tensions in the practice and structure of scientific collaboration*
- 2016 Mandela-Washington Fellowship Institute for Young African Leaders, Urbana, IL  
*Beyond Features: Understanding how technologies come to influence organizations*
- Mandela-Washington Fellowship Institute for Young African Leaders, Urbana, IL  
*From Transmission to Dialog: Public communication in a networked age*
- National Center for Supercomputing Applications Seminar Series, Urbana, IL  
*Interdisciplinarity in a Highly Technical Context: Exploring strategies and structures of collaboration*
- 2014 Graduate School of Information Science Seminar, Urbana, IL  
*Anticipating Data Representation: How the need to communicate across disciplinary boundaries changes work practices within them*
- 100<sup>th</sup> Annual National Communication Association Conference, Chicago, IL (Panelist)  
*Meeting the Needs of Human Resource Management: A Communication Perspective*

100<sup>th</sup> Annual National Communication Association Conference, Chicago, IL (*Panelist*)  
*The Presence of our Future(s): Reflections and Suggestions on Negotiating the Academic Job Market*

National Center for Atmospheric Research, Boulder, Colorado  
*How data representation constrains and enables applied weather research*  
Michigan Interactive and Social Computing Seminar, University of Michigan, Ann Arbor, MI  
*Staging Representations: Upstream Consequences for Collaborative Work*

College of Architecture and Design, Lawrence Technological University, Southfield, MI  
*Communication, Audience, and Design*

2012 Graphic Design, College for Creative Studies, Detroit, MI  
*Fieldwork: What is it and why do we need it?*

2011 Department of Communication, University of Colorado at Boulder, Boulder, CO  
*Moving from research questions to finding an ethnographic field site*

2007 Department of Engineering, Peking University, Beijing, China  
*Using fieldwork to inform human-machine interface design in automobiles*

## TEACHING

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### University of Illinois

Department of Communication, 2014-present

Instructor of Record

- Field methods for knowledge intensive contexts (CMN 529, Graduate Seminar)
  - Semesters offered: SP18, FA21
- Knowledge, Technology, & Organizing (CMN 529, Graduate Seminar)
  - Semesters Offered: FA19, SP17
- Communication, Technology, & Social Change (CMN 529, Graduate Seminar)
  - Semesters Offered: FA15, SP21
- Collaboration & Teams (CMN 529, Graduate Seminar)
  - Semesters Offered: SP23
- Workplace Communication Technology (CMN 410, Undergraduate cross-listed with Masters)
  - Semesters Offered: SP25, SP24, FA22, SP22, FA21, SP21, FA20, SP20, SP19, SP18, FA17, SP17, FA16, SP16, SP15
- Communicating for Innovation (CMN 312, Undergraduate, upper-division lecture)
  - Semesters Offered: FA22, SP22, FA20, FA19, SP19, FA17, FA16, FA15
- Small Group Communication (CMN 213, Undergraduate, lower-division lecture)
  - Semesters Offered: FA24, SP25

Course Director

- Introduction to Organizational Communication (CMN 212, Undergraduate, lower-division Lecture)
  - Semesters Offered: SP23, FA22
- Small Group Communication (CMN 213, Undergraduate, lower-division Lecture)
  - Semesters Offered: SP23, FA22

**Appearances on UIUC-wide list of “Teachers Ranked as Excellent”** (\* indicates instructor ratings were outstanding): SP15, FA15, SP16, FA16\*, SP17, FA17\*, SP18\*, SP19\*, FA19, SP20\*, FA20\*, SP21, FA21\*, SP22\*, FA22\*, SP24, FA24, SP25

## **GRADUATE STUDENT ADVISING**

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### **Doctoral Students (Primary Adviser)**

Jacob Sanders, 2023-present  
Chandler Macswain, 2023-present  
Katherine Bunsold, 2022-present  
Lauren Johnson, 2020-present  
Samuel Wilson, 2017-19  
Hallie Workman, 2015-2022

### **Masters Students (Primary Adviser)**

Adan Mulvaney, 2023-present  
Jacob Sanders, 2021-2023  
Elisabeth Yang, 2017-2019  
Samuel Wilson, 2015-2017  
Kaitlyn Childs, 2014-2016

### **PhD Committee Membership**

Sarah Benevento, 2024-present  
Ethan Morrow, 2023-present  
Shaimaa Khanam, 2023-present  
Lindsay Kelpinski, 2021-present  
Samantha Okegbe, 2021-present  
Sarah Julien-Bell, 2021-2024  
Shana Makos, 2021-2024  
Samantha Walkow, 2021-2024  
Rachel Kimmach, 2019-2022  
Luisa Ruge-Jones, 2019-2022  
Ann Bryan, 2015-2022  
Jeffrey Proulx, 2012-19

### **MA Exam Committee Membership**

Sara Babu, 2020-22  
Shaimaa Kahnam, 2020-22  
James Handal, 2020-21  
Katherine Bunsold, 2019-21  
Chengyu Fang, 2016-18  
Luisa Ruge-Jones, 2016-18  
Ly Dinh, 2014-16

## **PROFESSIONAL ACTIVITIES**

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### **Memberships**

International Communication Association  
National Communication Association  
Academy of Management  
International Network for the Science of Team Science

### **Editorial Work & Editorial board memberships**

Guest Editor, Proceedings of the National Academies of Science (2026 – 1 manuscript)

Editorial Board, Management Communication Quarterly (2026-present)  
Editorial Board, Small Group Research (2026-present)  
Editorial Board, Oxford University Press Social Network Mechanisms Book Series (2023-present)  
Associate Editor, Human Communication Research (2022-present)  
Editorial Board, Communication Research (2020-present)

### **Ad-hoc Reviewing Activity**

*Communication Monographs* (2018)  
*Communication Research* (2018, 2019, 2020)  
*Communication Theory* (2014, 2015, 2016, 2017)  
*Corporate Communications* (2017)  
*Human Communication Research* (2021, 2022x2)  
*Human Relations* (2021)  
*Information and Organization* (2022, 2023, 2024)  
*Information Systems Research* (2025)  
International Communication Association Annual Conference (2014-25)  
• Recognized as a Star Reviewer by the Organizational Communication Division (2015)  
International Conference on Information Systems (2016)  
*International Journal of Communication* (2019)  
*Journal of Communication* (2017, 2019, 2024)  
*Journal of Computer Supported Cooperative Work* (2014)  
*Management Communication Quarterly* (2017, 2018, 2021)  
MIT Press (2014)  
*Mobile Media and Society* (2020)  
National Communication Association Annual Conference (2015-24)  
National Science Foundation (2017, 2018, 2019)  
*Organization Science* (2014, 2015, 2016, 2017, 2018, 2020, 2022)  
*Research in the Sociology of Organizations* (2024)  
*Small Group Research* (2022)

### **Professional Service**

Co-chair, Organizational Communication Research Escalator, ICA Annual Conference (2016)  
Faculty Co-organizer, Organizational Communication Mini Conference (2019)  
Member, Awards Special Action Committee, NCA Organizational Communication Division (2016)  
Member, Organizational Communication Division Awards Nomination Committee, NCA (2017)  
Member, Review Committee, INFORMS Dissertation Proposal Competition (2016, 2017)  
Member, Review Committee, W. Charles Redding Dissertation Award, ICA Annual Conference (2016)  
Mentor, Organizational Communication Doctoral Preconference, ICA Annual Conference (2017)  
Mentor, Organizational Communication Research Escalator, ICA Annual Conference (2015, 2017, 2018, 2019, 2023)  
Mentor, Organizational Communication Division Research Engagement and Development Session (2020)  
Mentor, Organizational Communication Research Escalator, NCA Annual Conference (2025)  
Session Chair, NCA Annual Conference (2014, 2018)  
Session Chair, ICA Annual Conference (2014, 2016-2019)  
Session Respondent, ICA Annual Conference (2018, 2021, 2023)  
Session Respondent, NCA Annual Conference (2018)  
Session Respondent, Organizational Communication Mini Conference (2021)

### **Public Engagement**

Panel Organizer, The Science and Practice of Team Science. Urbana, IL (2025)  
*Designed and coordinated a public-facing panel assembling a diverse audience of community stakeholders representing multiple occupational communities to reveal and address the organizational challenges necessary to facilitate interdisciplinary scientific discovery.*

Invited Participant, NSF Proposal Review Panel, Washington, DC (2020)

Workshop Organizer (2020) and Invited Participant (2016, 2018, 2019), NSF Emerging Frontiers and Multidisciplinary Activities Germination Workshop, Washington DC

*A series of workshops hosted by the National Science Foundation to help the NSF build strategy to solicit and fund research proposals that effectively address current scientific grand challenges.*

Invited Participant, NSF Professionalization in Cyberinfrastructure Workshop, Santa Barbara, CA (2017)

*Workshop assembling social scientists and administrators from multiple national supercomputing facilities.*

*Program designed to inform policy development to facilitate creating the cyberinfrastructure workforce necessary to maintain national computing resources in the 21<sup>st</sup> century.*

Invited Participant, NSTC Collaboration Planning for Team Science Workshop, Austin, TX (2014)

*Workshop hosted by the National Science and Technology Council, a council that reports directly to the executive branch of the U.S. Government. Program focused on developing guidelines for calls for proposals that would effectively encourage interdisciplinary teams to submit to national funding agencies.*

### **Team Science Workshop Design & Facilitation**

*Note: A key facet of my scholarship has been the co-development and facilitation of engaged workshops where I apply the empirical findings of my research to generate multidisciplinary, cross-institutional research teams involving participation of researchers from minority-serving institutions. Our programs have focus on longitudinal engagement of cohorts focused on building projects addressing specific grand challenges.*

### **NSF Germination Program**

Cohort 1. Topic: Resilience to Climate Change

*(2016, November 4-6) Germination Workshop. National Center for Supercomputing Applications. Urbana, IL*

*(2017, March 18-19) Crystallization Workshop. National Center for Supercomputing Applications. Urbana, IL*

Cohort 2. Topic: Food & Water Security

*(2018, February 22-25) Germination Workshop. National Center for Supercomputing Applications, Urbana, IL*

*(2018, June 29-30) Crystallization Workshop. National Center for Supercomputing Applications. Urbana, IL*

*(2018, October 19-20) Reignition Workshop. Jackson State University. Jackson, MS*

Cohort 3. Energy Sustainability

*(2019, January 7-9) Germination Workshop. Big 10 Conference Center. Rosemont, IL*

*(2019, April 6-7) Crystallization Workshop. National Center for Supercomputing Applications. Urbana, IL*

*(2019, July 8-10) Reignition Workshop. National Science Foundation Headquarters. Alexandria, VA*

### **Network for Transformative Research (NTR)**

Stakeholder Alignment. Topic: Building Infrastructure for Interdisciplinary Science Across Mississippi

*(2023, February 3) Stakeholder Alignment Workshop. Jackson State University. Jackson, MS*

Cohort A. Topic: Food & Water Security in Mississippi

*(2023, June 14-16) Germination Workshop. Jackson State University. Jackson, MS*

*(2023, September 8) Crystallization Workshop. Jackson State University. Jackson, MS*

*(2024, January 26) Reignition Workshop. Jackson State University. Jackson, MS*

Cohort B. Topic Resilience to Natural Disasters in the Southern US

*(2024, December 13) Program Introduction & Orientation. Virtual*

*(2025, January 10) Germination Workshop. Virtual (forced online due to extreme weather)*

**Note: Our engagement with this cohort was disrupted because of executive orders from the U.S. Government**

### **Translational Team Science Initiative (TTSI) at Illinois**

*(2025, May) Team Science Stakeholder Alignment Workshop. Urbana, IL*

(2026, January-March) Team Science Small Grant Coaching Program. Urbana, IL  
(2026, March) MIGHTY All-Hands Team Science Workshop. Urbana, IL

## **UNIVERSITY SERVICE**

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Member, Culture & Society Steering Committee, National Center for Supercomputing Applications (2014-16)  
Member, Department of Communication Colloquium Committee (2014-16; 2017-19)  
Core Faculty, Seeing Systems: Technology Studies and Knowledge Infrastructures Across the Humanities (2015-17)  
Reviewer, Campus Research Board (2015, 2020, 2024)  
Reviewer, INSURE Grant Committee, College of Liberal Arts and Science (2025-26)  
Faculty Affiliate, Institute for Computing in Humanities, Arts, and Social Sciences (I-CHASS; 2015-Present)  
Member, Faculty Advisory Committee, Academic Technology in Liberal Arts and Sciences (2016 – 22)  
Member, Faculty Appeals Committee, College of Liberal Arts and Sciences (2024-25)  
Faculty Affiliate, Cline Center for Digital Democracy (2016-Present)  
Reviewer, National Center for Supercomputing Applications Faculty Fellows Program (2017)  
Member, Department of Communication Capricious Grading Committee (2017-18)  
Member, Department of Communication Admissions Committee (2020-21)  
Mentor, The Graduate School, Summer Predoctoral Institute (2020)  
Chair, Department of Communication Capricious Grading Committee (2020-21)  
Member, Gies College of Business, Envisioning Committee for the Illinois Social Innovation (ISI) Initiative (2020)  
Member, Department of Communication 75<sup>th</sup> Anniversary Committee (2022-23)  
Member, Department of Communication Advisory Committee (2021-23)  
Chair, Department of Communication Hiring Committee (2021, 22)  
Member, Department of Communication Hiring Committee (2021, 22)  
Member, Department of Communication Chair 5-Year Review Committee (2022)  
Member, Team Science Advisory Group, Carl R. Woese Institute for Genomic Biology (2022-Present)