

JAMES EVANS

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Conceptual & Historical Studies of Science,
Quantitative Methods & Social Analysis, and the **College**
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PROFESSIONAL EXPERIENCE

- 2022– **[Max Palevsky Chair in History and Civilizations and in the College](#)**,
University of Chicago.
- 2022– **[Research Director, National Network for Critical Technology Assessment](#)**, National Science Foundation.
- 2015– **[Founding Faculty Director, Computational Social Science Programs](#)**,
University of Chicago.
- 2013– **[Founding Director, Knowledge Lab](#)**, University of Chicago.
- 2016– **[Professor, Department of Sociology, Committee on Conceptual and Historical Studies of Science, and the College](#)**, University of Chicago.
- 2020– **Founding Editor-in-Chief, [Journal of Social Computing \(jOsOcO\)](#)**, IEEE
(with Jar-der Luo & Xiaoming Fu)
- 2020– **Associate Editor, [Collective Intelligence](#)**, Sage
- 2020– **Associate Editor, [AI Open](#)**, ACM
- 2012– **Associate Professor (with tenure)**. Department of Sociology, Committee
on Conceptual and Historical Studies of Science, and the College,
University of Chicago.
- 2004-12 **Assistant Professor, Department of Sociology**, Committee on Conceptual
and Historical Studies of Science, and the College, University of Chicago.
- 2005-08 **Associate Editor, [American Journal of Sociology](#)**
- 2000 **Instructor, Department of Sociology, Stanford University**
- 1995-97 **Research Associate, Graduate School of Business, Harvard University**

1992-93 **Co-founder and Executive Director. Utah High School for the Performing and Fine Arts**

AFFILIATIONS

- 2023— **Complexity Science Hub, Vienna**, External Faculty Member
- 2023— **Fudan University, Center for Internet & Society**, Principal Researcher
- 2018— [Santa Fe Institute](#), External Faculty Member
- 2017— **Tsinghua University**, Computer Science Visiting Faculty; Center on Knowledge & Intelligence (K&I) and Center for Computational Social Science, Overseas Collaborator
- 2015— **Northwestern University, Institute on Complex Systems (NICO)**, External Faculty Member,
- 2015— **Stanford University, Meta-Research Innovation Center at Stanford (METRICS)**, Affiliate

EDUCATION

- 1999-04 **Ph.D. in Sociology. Stanford University.** Committee: Mark Granovetter, Walter W. Powell, Stephen R. Barley.
- Dissertation: *Sharing the Harvest: The Uncertain Fruits of Public/Private Collaboration in Plant Biotechnology.*
- 1997-99 **M.A. in Sociology. Stanford University.**
- M.A. Thesis: *The Culture of Markets: The transformation of values, relationships, and identities in the temporary IT labor market*
- 1988-94 **B.A. in Anthropology. Honors Thesis in Economics. Valedictorian for the College of Social Sciences. Brigham Young University.**
- Honors Thesis: *Children of Utopia: Demography & economy among United Order members*

PUBLICATIONS

95. Lai, Shiyang, Yujin Potter, Junsol Kim, Richard Zhuang, Dawn Song, James Evans. 2024. "[Evolving AI Collectives to Enhance Human Diversity and Enable Self-Regulation](#)." *International Conference on Machine Learning (ICML)*.
94. Weyl, Glen, Audrey Tang, and the Plurality Community (I'm in there!). 2024. "[Plurality: The Future of Collaborative Technology and Democracy](#)."

93. Evans, James and Jacob Foster. 2024. "[Algorithmic Abduction: Robots for Alien Reading](#)." *Critical Inquiry* 50(3): 375-401. [free](#).
92. Li, Ninzi, Shiyang Lai, and James Evans. 2024. "**Big Data and the Computational Social Science of Entrepreneurship and Innovation**." *De Gruyter Handbook of Sociology of Innovation and Entrepreneurship*, eds. Olav Sorensen, Patricia Thornton.
91. Aceves, Pete and James Evans. 2024. "[Human Languages with Greater Information Density Increase Communication Speed, but Decrease Conversation Breadth](#)." *Nature Human Behaviour*. [free](#).
90. Kim, Khwan, Noah Askin, and James Evans. 2024. "[Disrupted Routines Anticipate Musical Exploration](#)." *Proceedings of the National Academy of Sciences*. free.
89. Lewis, Molly and James Evans. 2023. "[Local similarity and global variability characterize the semantic space of human languages](#)." *Proceedings of the National Academy of Sciences*. [free](#).
88. Li, Yong, Yunke Zhang, Fengli Xu, Lin Chen, Yuan Yuan, James Evans, and Luis Bettencourt. 2023. "[Counterfactual Mobility Network Embedding Reveals Prevalent Accessibility Gaps in U.S. Cities](#)." *Humanities and Social Sciences Communications*. free.
87. Wolpert, David, Stefani Crabtree, Michael Price, Manfred Laubichler, Timothy Kohler, James Evans, Hajime Shima, Juergen Jost, Peter Stadler. 2023. "[The Past as a Stochastic Process](#)." *Journal of Computer Applications in Archaeology*. free.
86. Sengupta, Nandana, Neaketa Chawla, Anna Agrawal, and James Evans. 2023. "[Do online certifications improve job market outcomes? Evidence from an IT skills certification platform in India](#)." *Information Economics and Policy* 65: 10167. [free](#).
85. Duede, Eamon, Misha Teplitskiy, Karim Lakhani and James Evans. 2023. "[Being Together in Place as a Catalyst for Scientific Advance](#)". *Research Policy* 53(2): 104911. free.
84. Kang, Donghyun and James Evans. 2023. "[Scientific Networks](#)." *SAGE Social Network Analysis Handbook*.

83. Yu, Haizi, James Evans, Lav Varshney. 2023. "[Information Lattice Learning](#)". *Journal of Artificial Intelligence Research*.
82. Sourati, Jamshid and James Evans. 2023. "[Accelerating Science through Human-Aware Artificial Intelligence](#)". *Nature Human Behaviour*.
- Hutson, Matthew. 2023. "[Hypotheses devised by AI could find 'blind spots' in research Artificial intelligence is asking questions that humans hope to answer.](#)" *Nature*. 17 November.
81. Jia, Gengjie, Yu Li, Xue Zhong, Kanix Wang, Milton Pividori, Rabab Alomairy, Aniello Esposito, Hatem Ltaief, Chikashi Terao, Masato Akiyama, Koichi Matsuda, David E. Keyes, Hae Kyung Im, Takashi Gojobori, Yoichiro Kamatani, Michiaki Kubo, Nancy J. Cox, James Evans, Xin Gao, Andrey Rzhetsky. 2023. "[The High-dimensional Space of Human Diseases Built from Diagnosis Records and Mapped to Genetic Loci](#)". *Nature Computational Science*.
80. Sengupta, Nandana, Ashwini Vaidya, and James Evans. 2023. "[In her Shoes: Gendered Labelling in Crowdsourced Safety Perceptions Data from India](#)". *ACM FAccT*.
79. Aceves, Pedro and James Evans, 2023. "[Mobilizing Conceptual Spaces: How Word Embedding Models Can Inform Measurement and Theory within Organization Science](#)". *Organization Science*.
78. Evans, James, Tyler Reigeluth, and Adrian Johns. 2023. "[The Craft and Code Binary: Before, During, and After](#)" in *Beyond Craft and Code: Human and Algorithmic Cultures, Past and Present*. *Osiris* 38; University of Chicago Press.
77. Evans, James and Adrian Johns. 2023. "[How and Why to Historicize Algorithmic Cultures](#)" in *Beyond Craft and Code: Human and Algorithmic Cultures, Past and Present*. *Osiris* 38; University of Chicago Press.
76. Almaatouq, Abdullah, Thomas Griffiths, Jordan W. Suchow, Mark Whiting, James Evans, and Duncan Watts. 2023. "[Beyond Playing 20 Questions with Nature: Integrative Experiment Design in the Social and Behavioral Sciences](#)". *Behavioral and Brain Sciences*.
75. Shi, Feng and James Evans. 2023. "[Surprising combinations of research contents and contexts are related to impact and emerge with scientific outsiders from distant disciplines](#)". *Nature Communications*.

74. Sengupta, Nandana, Madeleine Udell, Nathan Srebro, James Evans. 2022. "[Missing Value Imputation and Sparse Data Reconstruction through Matrix Factorization](#)". *Sociological Methodology*.
73. Daniel Acuña, Misha Teplitskiy, James Evans, Konrad Kording. 2022. "[Author-suggested reviewers rate manuscripts much more favorably](#): a cross-sectional analysis of the neuroscience section of PLOS ONE". *PLOS ONE*.
72. Desikan, Bhargav Srinivasa, and James Evans. 2022. "[Misalignment Between Skills Discovered, Disseminated, and Deployed in the Knowledge Economy](#)". *Journal of Social Computing*.
71. Chen, Lin, Fengli Xu, Zhenyu Han, Kun Tang, Pan Hui, James Evans, Yong Li. 2022. "[Strategic COVID-19 vaccine distribution can simultaneously elevate social utility and equity](#)". *Nature Human Behaviour*.
70. Yu, Haizi, Lav Varshney, Heinrich Taub, James Evans. 2022. "[\(Re\)discovering Laws of Music Theory using Information Lattice Learning](#)". *IEEE BITS the Information Theory Magazine*: Special Issue on Information Processing in Arts and Humanities.
69. Cao, Likun, Ziwen Chen, James Evans. 2022. "[Destructive Creation, Creative Destruction, and the Paradox of Innovation Science](#)". *Sociological Compass*.
68. Xu, Fengli, Lingfei Wu, James Evans. 2022. "[Flat Teams Drive Scientific Innovation](#)". *Proceedings of the National Academy of Sciences*.
67. Sourati, Jamshid, Alexander Belikov, James Evans. 2022. "[Data on How Science is Made can Make Science Better](#)". *Harvard Data Science Review*.
66. Belikov, Alexander V., Andrey Rzhetsky, James Evans. 2022. "[Prediction of robust scientific facts from literature](#)". *Nature Machine Intelligence*.
- Amaral, Luís A. Nunes. 2022. "[A cautionary tale from the machine scientist](#)". *Nature Machine Intelligence* 4: 416–417.
65. Rotaru, Victor, Yi Huang, Timmy Li, James Evans, and Ishanu Chattopadhyay. 2022. "[Event-level Prediction of Urban Crime Reveals Signature of Enforcement Bias in U.S. Cities](#)". *Nature Human Behaviour*.
64. Evans, James. 2022. "[From Text Signals to Simulations](#): A Review and Complement to *Text as Data* by Grimmer, Roberts & Stewart". *Sociological Methods and Research*.

63. Lin, Yiling, James Evans, Lingfei Wu. 2022. "[New directions in science emerge from disconnection and discord](#)". *Journal of Informetrics* 16(1):101234.
62. Siddarth, Divya, Daron Acemoglu, Danielle Allen, Kate Crawford, James Evans, Michael Jordan, E. Glen Weyl. 2021. "[How AI Fails Us](#)". Harvard Justice, Health, and Democracy Impact Initiative.
61. Kanix Wang, Robert Stevens, Halima Alachram, Yu Li, Larisa Soldatova, Ross King, Sophia Ananiadou, Annika M. Schoene, Maolin Li, Fenia Christopoulou, José Luis Ambite, Joel Matthew, Sahil Garg, Ulf Hermjakob, Daniel Marcu, Emily Sheng, Tim Beißbarth, Edgar Wingender, Aram Galstyan, Xin Gao, Brendan Chambers, Weidi Pan, Bohdan B. Khomtchouk, James A. Evans & Andrey Rzhetsky. 2021. "[NERO: a biomedical named-entity \(recognition\) ontology with a large, annotated corpus reveals meaningful associations through text embedding](#)", *npj Systems Biology and Applications* 7(38).
60. Nandana Sengupta, Sarthak Gaurav and James Evans. 2021. "[The Skills Space of Informal Work: Insights from Bangalore Slums](#)". *The Journal of Development Studies* 57:10, 1662-1689.
- Journal of Development Studies prize in memory of Dudley Seers** for the best article to appear in the Journal.
59. Jeremiah Milbauer, Adarsh Mathew, James Evans. 2021. "[Aligning Multidimensional Worldviews and Aligning Ideological Differences](#)". *EMNLP*.
58. Chu, Johan SG, and James Evans. 2021. "[Too many papers? Slowed canonical progress in large fields of science](#)". *Proceedings of the National Academy of Sciences*. [Read here](#)
57. Graziul, Chris, Alexander Belikov, Ishanu Chattopadyay, Ziwen Chen, Hongbo Fang, Anuraag Girdhar, Xiaoshuang Jia, PM Krafft, Max Kleiman-Weiner, Candice Lewis, Chen Liang, John Muchovej, Alejandro Vientós, Meg Young, James Evans. 2021. "[Does Big Data Serve Policy? Not Without Context. An Experiment with in silico Social Science](#)". *Computational and Mathematical Organization Theory*.
56. Evans, James. 2020. "[Social computing unhinged](#)". *Journal of Social Computing* 1(1): 1.
55. Evans, James, and Adrian Johns. 2020. "[The New Rules of Knowledge: An Introduction](#)". *Critical Inquiry* 46(4): 806-812.

54. Wu, Sarah A., Rose E. Wang, James A. Evans, Josh Tenenbaum, David C. Parkes, and Max Kleiman-Weiner. 2020. "[Too many cooks: Coordinating multi-agent collaboration through inverse planning.](#)" In *CogSci*.
53. Kang, Donghyun, and James Evans. 2020. "[Against method: Exploding the boundary between qualitative and quantitative studies of science.](#)" *Quantitative Science Studies* 1(3): 930-944.
52. Wu, Lingfei, Linzhuo Li, and James Evans. 2018. "[Social connection induces cultural contraction: Evidence from hyperbolic embeddings of social and semantic networks.](#)" *Poetics*.
51. Yu, Haizi, Heinrich Taube, James A. Evans, and Lav R. Varshney. 2020. "[Human Evaluation of Interpretability: The Case of AI-Generated Music Knowledge.](#)" Computer Human Interaction (CHI), April 25–30, Honolulu, HI ACM978-1-4503-6819-3/20/04.
50. Yin, Yian, Yang Wang, James A. Evans, and Dashun Wang. 2019. "[Quantifying the dynamics of failure across science, startups and security.](#)" *Nature* 575(7781): 190-194.
2020. "Science reveals the tipping point between success and failure: From Thomas Edison to Silicon Valley startups, those that rise to the top have learned how to treat past failures." *Fast Company*, January 16.
49. Evans, James, and Jacob G. Foster. 2019. "[Computation and the sociological imagination.](#)" *Contexts* 18(4): 10-15.
48. Kozlowski, Austin C., Matt Taddy, and James A. Evans. 2019. "[The geometry of culture: Analyzing the meanings of class through word embeddings.](#)" *American Sociological Review* 84(5): 905-949.
2021. 'Outstanding Article Publication Award' by the American Sociological Association's Mathematical Sociology Section for the best published article in the last three years on mathematical sociology.
47. Danchev, Valentin, Andrey Rzhetsky, and James A. Evans. 2019. "[Meta-Research: Centralized scientific communities are less likely to generate replicable results.](#)" *Elife* 8: e43094.
46. Sengupta, Nandana, Nati Srebro, and James Evans. 2021. "[Simple surveys: Response retrieval inspired by recommendation systems.](#)" *Social Science Computer Review* 39(1): 105-129.

45. Wu, Lingfei, Dashun Wang, and James A. Evans. 2019. "[Large teams develop and small teams disrupt science and technology](#)." *Nature* [Cover] 566(7744): 378-382.
2019. "**When Small Teams are Better than Big Ones**." *Harvard Business Review* February 21.
- Included in the [Altmetric Top100 for 2019](#): "Altmetric has tracked over 62.5 million mentions of 2.7 million research outputs. Here, we've highlighted the most-discussed works of 2019—those that have truly captured the public imagination."
44. McMahan, Peter, and James Evans. 2018. "[Ambiguity and engagement](#)." *American Journal of Sociology* 124(3): 860-912.
43. Shi, Feng, Misha Teplitskiy, Eamon Duede, and James A. Evans. 2019. "[The wisdom of polarized crowds](#)." *Nature human behaviour* 3(4): 329-336.
2019. "**Are Politically Diverse Teams More Effective**." *Harvard Business Review* July 15.
42. Asoodeh, Shahab, Tingran Gao, and James Evans. 2018. "[Curvature of hypergraphs via multi-marginal optimal transport](#)." In *IEEE Conference on Decision and Control (CDC)*, pp. 1180-1185.
41. Foster, Jacob G., and James A. Evans. 2019. "[Promiscuous inventions](#)." *Beyond the Meme: Development and Structure in Cultural Evolution*. University of Minnesota Press.
40. Gao, Tingran, Shahab Asoodeh, Yi Huang, and James Evans. 2019. "[Wasserstein soft label propagation on hypergraphs: Algorithm and generalization error bounds](#)." In *Proceedings of the AAAI Conference on Artificial Intelligence*, vol. 33(01): 3630-3637.
39. Börner, Katy, Olga Scrivner, Mike Gallant, Shutian Ma, Xiaozhong Liu, Keith Chewning, Lingfei Wu, and James A. Evans. 2018. "[Skill discrepancies between research, education, and jobs reveal the critical need to supply soft skills for the data economy](#)." *Proceedings of the National Academy of Sciences* 115(50): 12630-12637.
38. Azoulay, Pierre, Joshua Graff-Zivin, Brian Uzzi, Dashun Wang, Heidi Williams, James A. Evans, Ginger Zhe Jin et al. 2018. "[Toward a more scientific science](#)." *Science* 361(6408): 1194-1197.
37. Teplitskiy, Misha, Daniel Acuna, Aida Elamrani-Raoult, Konrad Körding, and James Evans. 2018. "[The sociology of scientific validity: How professional networks shape judgement in peer review](#)." *Research Policy* 47(9): 1825-1841.

36. Gerow, Aaron, Yuening Hu, Jordan Boyd-Graber, David M. Blei, and James A. Evans. 2018. "[Measuring discursive influence across scholarship.](#)" *Proceedings of the National Academy of Sciences* 115(13): 3308-3313.
35. Katariya, Sumeet, Lalit Jain, Nandana Sengupta, James Evans, and Robert Nowak. 2018. "[Adaptive sampling for coarse ranking.](#)" In *International Conference on Artificial Intelligence and Statistics*, pp. 1839-1848. PMLR.
34. Fortunato, Santo, Carl T. Bergstrom, Katy Börner, James A. Evans, Dirk Helbing, Staša Milojević, Alexander M. Petersen et al. 2018. "[Science of science.](#)" *Science* 359(6379).
33. Shi, Feng, Yongren Shi, Fedor A. Dokshin, James A. Evans, and Michael W. Macy. 2017. "[Millions of online book co-purchases reveal partisan differences in the consumption of science.](#)" *Nature Human Behaviour* 1(4): 1-9.
32. Tutterow, Craig, and James A. Evans. 2016. "[Reconciling the small effect of rankings on university performance with the transformational cost of conformity.](#)" In *The university under pressure*. Emerald Group Publishing Limited.
31. Rzhetsky, Andrey, Jacob G. Foster, Ian T. Foster, and James A. Evans. 2015. "[Choosing experiments to accelerate collective discovery.](#)" *Proceedings of the National Academy of Sciences* 112(47): 14569-14574.
30. Foster, Jacob G., Andrey Rzhetsky, and James A. Evans. 2015. "[Tradition and innovation in scientists' research strategies.](#)" *American Sociological Review* 80(5): 875-908.
2016. **Awarded the Star-Nelkin paper award** by the Science, Knowledge and Technology Section of the American Sociological Association.
29. Shi, Feng, Jacob G. Foster, and James A. Evans. 2015. "[Weaving the fabric of science: Dynamic network models of science's unfolding structure.](#)" *Social Networks* 43: 73-85.
28. Yao, Lixia, Ying Li, Soumitra Ghosh, James A. Evans, and Andrey Rzhetsky. 2015. "[Health ROI as a measure of misalignment of biomedical needs and resources.](#)" *Nature Biotechnology* 33(8): 807-811.
27. Gerow, Aaron, Bowen Lou, Eamon Duede, and James Evans. 2015. "[Proposing ties in a dense hypergraph of academics.](#)" In *International Conference on Social Informatics*, pp. 209-226. Springer, Cham.
26. Zhang, Jingwei, Aaron Gerow, Jaan Altosaar, James Evans, and Richard Jean So. 2015. "[Fast, flexible models for discovering topic correlation across weakly-related collections.](#)" *EMNLP*.

25. Weinberger, Cody J., James A. Evans, and Stefano Allesina. 2015. "[Ten simple \(empirical\) rules for writing science](#)." *PLOS Computational Biology*: e1004205.
24. Blair, David R., Kanix Wang, Svetlozar Nestorov, James A. Evans, and Andrey Rzhetsky. 2014. "[Quantifying the impact and extent of undocumented biomedical synonymy](#)." *PLoS computational biology* 10(9): e1003799.
23. Gerow, Aaron, and James Evans. 2014. "[The modular community structure of linguistic predication networks](#)." In *Proceedings of TextGraphs-9: the workshop on Graph-based Methods for Natural Language Processing*, pp. 48-55.
22. Wang, Jialei, Nathan Srebro, and James Evans. 2014. "[Active collaborative permutation learning](#)." In *Proceedings of the 20th ACM SIGKDD international conference on Knowledge discovery and data mining*, pp. 502-511. 2014.
21. Vilhena, Daril A., Jacob G. Foster, Martin Rosvall, Jevin D. West, James Evans, and Carl T. Bergstrom. 2014. "[Finding cultural holes: How structure and culture diverge in networks of scholarly communication](#)." *Sociological Science* 1: 221.
20. Macal, Charles M., Michael J. North, Nicholson Collier, Vanja M. Dukic, Duane T. Wegener, Michael Z. David, Robert S. Daum et al. 2012. "[Modeling the transmission of community-associated methicillin-resistant Staphylococcus aureus: a dynamic agent-based simulation](#)." *Journal of translational medicine* 12(1): 1-12.
19. Evans, James A., Jae-Mahn Shim, and John PA Ioannidis. 2014. "[Attention to local health burden and the global disparity of health research](#)." *PloS one* 9(4): e90147.
18. Evans, James A. 2013. "[Future science](#)." *Science* 342(6154): 44-45.
17. Evans, James A. 2014. "[Communication and the evolution of cognition](#)." *Developing scaffolding in evolution, cognition and culture*. MIT Press, Cambridge: 125-146.
16. Macal, Charles M., Michael J. North, Nicholson Collier, Vanja M. Dukic, Diane S. Lauderdale, Michael Z. David, Robert S. Daum et al. 2012. "[Modeling the spread of community-associated MRSA](#)." In *Proceedings of the 2012 Winter simulation conference (WSC)*, pp. 1-12. IEEE.
15. Rzhetsky, Andrey, and James A. Evans. 2011. "[War of ontology worlds: mathematics, computer code, or Esperanto?](#)" *PLoS Computational Biology* 7(9): e1002191.

14. Divoli, Anna, Eneida A. Mendonça, James A. Evans, and Andrey Rzhetsky. 2011. "[Conflicting biomedical assumptions for mathematical modeling: the case of cancer metastasis.](#)" *PLoS Computational Biology* 7(10): e1002132.
13. Evans, James A., and Jacob G. Foster. 2011. "[Metaknowledge.](#)" *Science* 331(6018) : 721-725.
12. Evans, James A., and Andrey Rzhetsky. 2011. "[Advancing science through mining libraries, ontologies, and communities.](#)" *Journal of Biological Chemistry* 286(27): 23659-23666.
11. Yao, Lixia, Anna Divoli, Ilya Mayzus, James A. Evans, and Andrey Rzhetsky. 2011. "[Benchmarking ontologies: bigger or better?](#)" *PLoS Computational Biology* 7(1): e1001055.
10. Evans, James A. 2010. "[Industry collaboration, scientific sharing, and the dissemination of knowledge.](#)" *Social Studies of Science* 40(5): 757-791.
9. Evans, James A. 2010. "[Industry induces academic science to know less about more.](#)" *American Journal of Sociology* 116(2): 389-452.
8. Evans, James, and Andrey Rzhetsky. 2010. "[Machine science.](#)" *Science* 329(5990): 399-400.

2010. "**Response to 'Machine Science: The Human Side', 'Machine Science: Truly Machine-Aided Science', and 'Machine Science: What's Missing?'**" *Science* 330(6002): 317-319.
7. Evans, James A. 2010. "[Nonprofit Research Institutes: From Companies without Products to Universities without Students.](#)" In *Politics and Partnerships*, ch. 6: 151-182. University of Chicago Press, 2010.

2011. **Awarded Outstanding Book in Nonprofit & Voluntary Action Research** by the Association for Research on Nonprofit Organizations and Voluntary Action.
6. Yao, Lixia, James A. Evans, and Andrey Rzhetsky. 2010. "[Novel opportunities for computational biology and sociology in drug discovery.](#)" *Trends in biotechnology* 28(4): 161-170.
5. Evans, James A., and Jacob Reimer. 2009. "[Open access and global participation in science.](#)" *Science* 323(5917): 1025-1025.

2009. "**Response to 'Open Access: Increased Citations Not Guaranteed', 'Open Access: The Self-Selection Effect', and 'Open Access: The Sooner the Better,'**" *Science* 325: 266-267.
4. Evans, James A. 2008. "[Electronic publication and the narrowing of science and scholarship.](#)" *Science* 321(5887): 395-399.

2008. “**Response** to ‘Literature Citations in the Internet Era,’ ‘Narrower Focus May Be More Efficient,’ ‘To Each Citation, a Purpose,’ and ‘A Cycle of Tradition and Innovation,’” *Science* 323: 37-38.
2010. **Awarded the best paper award** by the Communication and Information Technologies Section of the American Sociological Association.
3. Evans, James A. 2007. “[Start-ups in science: Entrepreneurs, diverse backing, and novelty outside business.](#)” In *The sociology of entrepreneurship*. Emerald Group Publishing Limited.
 2. Evans, James A., Gideon Kunda, and Stephen R. Barley. 2004. “[Beach time, bridge time, and billable hours: The temporal structure of technical contracting.](#)” *Administrative Science Quarterly* 49(1): 1-38.
 1. Kunda, Gideon, Stephen R. Barley, and James Evans. 2002. “[Why do contractors contract? The experience of highly skilled technical professionals in a contingent labor market.](#)” *ILR Review* 55(2): 234-261.

WORKING PAPERS

- Yu, Haizi, Igor Mineyev, Lav Varshney, James Evans. “[Learning from One-and-Only-One Shot.](#)”
- Kozlowski, Austin, James Evans. “[In Silico Sociology: Forecasting COVID-19 Polarization with Large Language Models.](#)”
- Cao, Likun, James Evans. “[Modularity, Higher-Order Recombination, and New Venture Success.](#)”
- Kang, Donghyun, Robert S. Danziger, Jalees Rehman, James A. Evans. “[Limited Diffusion of Scientific Knowledge Forecasts Collapse.](#)”
- Kang, Donghyun and James Evans. “[Epistemic Bubbles and Tacit Confidence in Randomized Clinical Trials.](#)”
- Foster, Jacob, James Evans. forthcoming. *Knowing*. Princeton University Press. (Under contract).
- Evans, James and Bhargav Desikan. *Thinking with Deep Learning*. (Under review at MIT Press).
- Teplitskiy, Misha, Julianne St. Onge & James Evans. “**How Firm is Sociological Knowledge? Reanalysis of GSS findings with alternative models and out-of-sample data, 1972-2012.**”

Foster, Jacob, Feng Shi and James Evans. "[Surprise! Measuring Novelty by Simulating Discovery.](#)"

Duede, Eamon and James Evans. "[Abduction and the Logic of Scientific Advance.](#)"

Shachter, Simon, Donghyun Kang, James Evans. "[The Inefficiency of Private Support for Public Health: Comparing Nonprofit Biomedical Research Funding with the NIH.](#)"

Evans, James A., Kweku Opoku-Agyemang, Krishna Ratakonda, Kush R. Varshney, and Lav R. Varshney. "**Blockchain and the Scientific Method.**"

Wang, Yang, B. Ian Hutchins, Travis Hoppe, George M. Santangelo, James A. Evans, Dashun Wang. "**NIH funding decision and scientific progress: Unintended consequences and latent opportunities.**"

Books

Evans, James, Adrian Johns, eds. 2023. *Beyond Craft and Code: Human and Algorithmic Cultures, Past and Present.* *Osiris* 38; University of Chicago Press.

REPORTS

Frodeman, Robert, J. Britt Holbrook, et al. 2012 "[The Promise and Perils of Transformative Research.](#)" Summary report of workshop 'Transformative Research: Ethical and Societal Implications' held in Arlington, VA March 8 & 9. Exclusively contributed "**Stable Scientific Strategies and the Unexamined Frontier of Knowledge.**"

Lane, Julia et al. 2011 "[Changing the Conduct of Science in the Information Age.](#)" Summary Report of workshop, organized by the Office of International Science and Engineering of the National Science Foundation held in Arlington, VA November 12, 2010. Exclusively contributed "**Identification and the Complex System of Research.**"

Reviews

Evans, James. 2015. **Review of *Epinets: The Epistemic Structure and Dynamics of Social Networks*** by Mihnea C. Moldoveanu and Joel A. C. Baum. Stanford, Calif.: Stanford University Press, 2014. *American Journal of Sociology* 121(1):322-324. DOI:10.1086/681103

PRESENTATIONS

- 2024 **"Complementary Artificial Intelligence"**, welcome and introduction @ the "Complementary AI Initiative" workshop, Data Science Institute, UChicago (April 12, 2024)
- 2024 **"The Ouroboros will occur where you least expect it"**, invited speaker @ the "Investigating Reality" Conference, Santa Fe Institute (March 28, 2024)
- 2024 **"Simulate Scientists & Robot Research"**, guest lecture @ graduate computer science on Autonomous Laboratories by Rick Stevens & Ian Foster (March 21, 2024).
- 2024 **"from Simulated Subjectivity to Collective Consciousness in Large Language Models"**, invited talk @ Tsinghua University, Computer Science Department (March 19, 2024); invited talk @ Cultural Data Analytics Lab (CUDAN) Open Lab Seminar, Tallinn University, Estonia, virtual (April 1, 2024); keynote @ "Generative Artificial Intelligence & Sociology", Yale University (April 8, 2024); invited talk @ Media, Technology, & Society (MTS) and Technology & Social Behavior (TSB) spring speaker series, Northwestern School of Communications (April 24, 2024); invited speaker @ "Machine + Behavior" Conference, MPI, Berlin (April 29, 2024)
- 2024 **"Large Language Models, Objective Subjectivity, & the Geometry of Perspective"**, Conference on the frontier of Large Language Models @ ZhiPu AI, Beijing, China (March 17, 2024)
- 2024 **"Computational Creativity for Augmented Innovation beyond Human AI"**, invited talk @ DARPA kick-off workshop on Foundation Models for Scientific Discovery, Duke University, virtual (March 12, 2024)
- 2023 **"Human Languages Shape Collective Computation"**, invited talk @ the "Information, Energy, Culture: Growth in Human History" working group, Santa Fe Institute, virtual (December 12, 2023)
- 2023 **"The Bio-, Demographic, & Social Locus of Innovation"**, invited talk @ at the Max Planck Institute for the History of Science Symposium, Berlin, Germany (December 12, 2023)
- 2023 **"Mathematical Investigation & Sociocultural Subjectivity"**, invited talk @ "Mathematics: Evolved or Eternal?", workshop hosted by the Beyond Center for Fundamental Concepts, Arizona State University, Phoenix, AZ (November 14, 2023)
- 2023 **"The Paradox of 'Innovation Science'"**, Invited talk @ the "Accelerating Science: Risks, Incentives, and Rewards" conference, Santa Fe Institute (October 31, 2023)

- 2023 [“The case for Alien AI”](#), invited talk @ TEDx Chicago (October 6, 2023).
- 2023 **“Digital Doubles & Complementary AI”**, invited talk @ the Computational Social Science workshop (September 28, 2023)
- 2023 **“Advancing the Science of Science Funding with Continuous Generative Models of Science and Technology”**, invited talk @ the National Bureau of Economic Research (NBER) Summer Institute on the Science of Science Funding, Cambridge, MA (July 21, 2023); invited talk @ “Broadening the Agenda of Science of Science for Innovation Scholarship in Management”, Professional Development Workshop, Academy of Management, Boston, MA (August 5, 2023)
- 2023 **“Diverse Subjectivities and the Geometry of Perspective”**, invited talk @ the Diverse Intelligences Summer Institute, St. Andrews, Scotland (July 8, 2023); invited talk @ Google Research seminar, virtual (August 16, 2023).
- 2023 **“Thinking with Deep Learning”**, Invited tutorial @ the Diverse Intelligences Summer Institute, St. Andrews, Scotland (July 6, 2023); Accepted tutorial @ International Conference on Computational Social Science (IC2S2), Copenhagen, Denmark (July 16, 2023); invited tutorial @ the International Conference on Social Computing, Beijing, China (September 3, 2023).
- 2023 **“Limited Diffusion of Biomedical Knowledge Forecasts Collapse” & “Socio-Epistemic Bubbles and Tacit Overconfidence in Randomized Clinical Trials”**, accepted talks @ the International Conference on the Science of Science and Innovation (June 27, 2023)
- 2023 **“How Do Innovation Systems Think?”**, invited panelist @ Collective Intelligence: Foundations + Radical Ideas, symposium and short course (June 22, 2023)
- 2023 **“The Geometry of Culture & Society: Analyzing meaning & connection through text and networks”**, invited lecture @ Complex Systems Summer School, Santa Fe Institute (June 20, 2023)
- 2023 **“Accelerating (Social) Science with Human-aware Artificial Intelligence”**, invited talk @ the Max Planck Institute for Machine and Humans, Berlin, Germany (June 11, 2023); and “Machine Learning: Applications and Theory”, Becker-Friedman Institute Big Data Initiative Conference, UChicago (June 12, 2023); keynote @ the International Conference on Social Computing, Beijing, China (September 2, 2023); invited talk @ Computer Science Department, Fudan University, Shanghai, China (September 6, 2023); invited talk @ Institute for Analytic Sociology, Norrkoping University, Sweden (October 2, 2023); invited talk @ the Vienna Complexity Hub colloquium, Vienna, Austria (December 13, 2023)

- 2023 **"China rises to global leadership in emerging science and technology"**, invited talk @ the 3rd Quarterly Meeting of the National Network for Critical Technology Assessment & workshop on "Equity and Labor", Atlanta, GA (June 9, 2023); invited speaker @ "The Emergence of Innovation in New Places" workshop, Mansueto Institute for Urban Innovation, UChicago (June 29, 2023); invited presentation @ National Science Foundation, Technology, Innovation, & Partnerships directorate, virtual (January 23, 2024)
- 2023 **"Objective Subjectivity and the Geometry of Perspective"**, invited talk @ "Networks and Cognition" workshop by the Computational Cognitive Science Lab, Princeton University (June 2, 2023)
- 2023 **"AI and the Transmutation of Skills into Technology"**, keynote @ Microsoft Asia's Workshop on AI's impact on Society and Advancements in Technology & panelist on AI's Impact on Technology, Research and Education, virtual (May 15, 2023)
- 2023 **"Intelligence Technologies to Design Diversity for Sustained Innovation"**, invited talk @ MIT Sloan School of Business, Information Technology Group (March 10, 2023); invited talk @ University of Michigan, School of Information (April 6, 2023); invited talk @ Hong Kong University School of Business, virtual (April 11, 2023)
- 2023 **"Designing Diversity of Sustained (Social/Societal) Innovation"**, Invited talk @ IIT New Delhi's School of Public Policy (January 24, 2023); Social Sci Foo workshop session (February 11, 2023); invited talk @ John Hopkins University, department of sociology; invited talk @ University of Denmark, Social Data Science (SODAS) Center (February 22, 2023); invited talk @ Stanford Graduate School of Business, Organizational Behavior Group (February 27, 2023); invited @ Cornell University, Center for the Study of Economy and Society, Ithaca, NY (March 17, 2023); keynote @ "the Complexity of Knowledge", for the Santa Fe Institute's Science Board Symposium (April 29, 2023); invited lecture @ Complex Systems Summer School, Santa Fe Institute (June 20, 2023); Invited panel on Computational Social Science @ University of Chicago Social Sciences Division visiting committee (October 27, 2023); invited talk @ European School of Management and Technology (December 11, 2023); [invited talk](#) @ the Future of Science seminar, DeSci Foundation, virtual (December 18, 2023)
- 2023 **"Searching for Social Technologies"**, Selected talk @ Social Sci Foo, Menlo Park, CA—Meta Headquarters (February 11, 2023).
- 2023 **"Computational Social Science: Analyzing Society & Culture with Big Data"**, Invited talk at the University of Hong Kong's social science seminar (February 6, 2023).

- 2023 **"Plurality, Diversity, & (Dis)Connection"**, Keynote @ the Inaugural Plurality Conference, UC Berkeley (January 13, 2023)
- 2023 **"Simulations of Science for Society."** Invited Presentation @ the Novo Nordisk Foundation's (NNF) Evaluation team, Copenhagen, Denmark (December 14, 2022); NNF executive leadership board, and program officers (February 21, 2023).
- 2022 **"Creative Destruction, Destructive Creation, and the Paradox of Innovation Science"**, Invited Presentation @ the Vienna Complexity Hub and Santa Fe Institute workshop on "Innovation and Obsolescence in the Space of the Possible", Vienna, Austria (December 12, 2022)
- 2022 **"Complementary AI can Augment Human Technology Advancement"**, Keynote in the session on "Enabling Technology with Electronics and Information Science" @ the 3rd biennial International Forum on Engineering Education co-organized by Tsinghua University, the Chinese Academy of Engineering, and UNESCO (December 7, 2022)
- 2022 **"Toward Global Situational Awareness for a National U.S. Technology Strategy"**, Kick-off talk at the Critical Technologies Network workshop on Situational Awareness (December 2, 2022)
- 2022 **"Designing Optimal Diversity of Sustained Innovation"**, Inaugural talk for new series on the Science of Science and its applications for technology ecosystem builders @ Portal Technologies in Chicago (November 10, 2022); Nordic Network for the Science of Science in Athens, Greece (December 7, 2022)
- 2022 **"Social Limits of Scientific Certainty"**, Invited talk @ "Mapping the Frontiers of Reproducibility" workshop with the Minnesota Center for the Philosophy of Science (November 4, 2022)
- 2022 **"Social Computing and the Optimization of Experiments"**, Invited Speaker at the Computational Social Science Workshop (October 29, 2022)
- 2022 **"Personalizing Responsibility within AI Systems: The Case for Designing Diversity"**, Invited Presentation @ Microsoft Research Summit 2022, in a panel focused on "Responsible Research: An Interdisciplinary Approach" (October 23, 2022)
- 2022 **"Complementary Intelligence for Augmented Intelligence"**, Leverhulme Research Centre for Functional Materials Design, Materials Discovery Symposium @ the University of Liverpool (September 23, 2022); Globus Annual Workshop (October 7, 2022).
- 2022 **"Modeling the Human Domain"**, DARPA Forward Conference @ Washington State University (September 13, 2022).

- 2022 **"Sociology and the Science of Data"**, NSF Transdisciplinary Research in Principles of Data Science (TRIPODS) annual meeting, invited panel on "Interactions between foundational data science and the sciences" @ the University of California at Berkeley (August 20, 2022).
- 2022 **"A Computational Ethnography of Work, Culture, and Aliens"**, Research Presentation @ Retirement Celebration for Stephen R. Barley, University of California at Santa Barbara (August 27, 2022)
- 2022 **"Designing Diversity for Sustained Scientific Innovation"**, Invited talk in the "Data-driven Science of Science" workshop at Knowledge, Data and Discovery (KDD) (August 15, 2022)
- 2022 **"Dynamic Situational Awareness through Discovery/Invention Prediction"**, Invited panel presentation for the Critical Technology Assessment workshop @ National Academy of Sciences (August 4, 2022).
- 2022 **"What is Computational Social Science"**, Welcome and introduction to the International Conference on Computational Social Science (IC2S2) (July 20, 2022)
- 2022 **"Quantifying Existential Risks"**, Invited presentation @ the workshop for the Chicago School of Existential Risk's Summer Research Fellowship (June 29, 2022)
- 2022 **"Designing Trust AI for Radical Innovation"**, Invited Presentation for the Institute for Trusted Intelligence in Society workshop @ University of Chicago (June 24, 2022)
- 2022 **"Computational Social Science and Designing Diversity for Innovation"**, Keynote for Delhi Summer Institute in Computational Social Science @ Ashoka University (June 13, 2022)
- 2022 **"Trusted and Trustworthy AI for Diversity, Equity and Inclusion"**, Keynote for the annual meeting of the Society on Diversity and Inclusion @ the University of Chicago (June 10, 2022)
- 2022 **"Designing Diversity for Sustained Innovation"**, Invited talk @ UCLA's Anderson School of Management (May 23, 2022); Invited talk at the "Structure of Technology" workshop @ the Santa Fe Institute (June 15, 2022); Inaugural Distinguished Lecture for Carnegie Mellon University's newly rebranded Department of Societal Computing (September 28, 2022); Keynote at the Nordic Network for the Science of Science meeting on "Mixed Methods in the Science of Science" at the Swedish Institute in Athens, Greece (December 7,

2022), and at the University of Chicago's Hong Kong campus faculty lecture series (February 7, 2023).

- 2022 **"The Curvature of Culture and Society: Analyzing Meaning and Connection Through Curved Embeddings of Text and Networks"**, Keynote for the conference "Mathematical Concepts in the Sciences and Humanities" @ the Max Planck Institute on Mathematics in Science, Leipzig (May 17, 2022)
- 2022 **"The Rise of Teamwork & Career Prospects In Science**, by Donna Ginther" Entrepreneurship and Innovation Policy (May 11, 2022)
- 2022 **"Deep Learning Advance and the Paradox of Sustained Innovation"** and Panel on "Slow and Fast Science in AI" at the International Conference on Learning Representations (ICLR) (April 29, 2022).
- 2022 **"Artificial Intelligence will make science more open and collaborative, but augmenting innovation will likely make it less"**. Keynote for Open Innovation in Science (OIS) Research Conference @ CERN, Geneva (April 12, 2022);
- 2022 **"Know More"**, Brigham Young University Commencement Speaker, College of Family, Home and Social Sciences (April 11, 2022).
- 2022 **"The Social, Biographical and Demographical Locus of Innovation"**, University of Chicago Computational Social Science workshop (March 29, 2022); Seminar for the The Institute for Analytical Sociology Seminar @ Linköping University (April 28, 2022); Keynote for "Scientific Progress – Individual & Collective" @ Abraham Kuyper Center, Vrije Universiteit Amsterdam (August 24, 2022).
- 2022 **"Artificial Intelligence for Augmented Innovation—AI²"**, Invited talk at the Allen Institute for Artificial Intelligence (March 22, 2022); Introductory Remarks at the Summit on AI in Society's panel on "AI and the Scientific Method" (October 15, 2022)
- 2022 **"The Geometry of Society & Culture"**, Brigham Young University anthropology seminar (March 17, 2022)
- 2022 **"Computational Investigations of Digital Media & Social Life"**, Invited Lecture for "Digital Media and Social Life: Contemporary Methods" (March 7, 2021)
- 2021 **"How to Kill Innovation"**, Keynote at the China International Conference on Social Computing (December 9, 2021)
- 2021 **"Size, Structure & Scientific Advance"**, Invited Talk at "Fundamentals of Scientific Discovery" for the Department of Defense, Washington DC (November 30, 2021)

- 2021 **"How do we Grow AI to Augment Human Intelligence"**, Talk at a SciFoo Conference Session, Google, *Nature* & O'Reilly (October 27, 2021)
- 2021 **"Designing Diversity"**, Invited Speaker at Sociology Department Seminar Series, Duke University (October 15, 2021)
- 2021 **"Social Computing"**, Introduction to the Computational Social Science Workshop, University of Chicago (September 30, 2021)
- 2021 **"Accelerating Science with the Most and Least Human AIs"**, American Sociological Association (August 9, 2021)
- 2021 "Designing Diversity for Collective Intelligence with Expert-Aware AI", Academy of Management symposium on "Leveraging Artificial Intelligence for Collective Intelligence" (August 2, 2021).
- 2021 **"Designing Diversity for Discovery"**, Invited Talk, Merced University's Cognitive Science Department workshop (January 31, 2021); Keynote for the NSF-sponsored Science of Science Summer School, Syracuse University (August 2, 2021); SC Fan Memorial Lecture, Hong Kong University (April 30, 2021); International Conference of Computational Social Science for Tsinghua University's 110-year anniversary (April 28, 2021).
- 2021 **"Individual failure & Collective success for Innovation"**, Keynote for the Quantifying Success satellite conference at NetSci (July 2, 2021).
- 2021 **"Data on How Science is Made can Make Science Better"**, Invited Speaker at the "Value of Science: Data, Products & Use" conference co-sponsored by the National Center for Science and Engineering Statistics (NCSES) and the Harvard Data Science Initiative (June 23, 2021).
- 2021 **"How Science Thinks Beyond the Author"**, invited talk in the "Evidence for Science Policy – UMETRICS in Action" workshop (April 19, 2021)
- 2021 **"Designing Alien AIs: Programming Beyond the Limits of Human Knowledge and Reason"**, Lightning Talk at SciFoo Conference, Google, *Nature* & O'Reilly (October 23, 2021); Keynote and Honorary Member Induction, PSW (Philosophical Society of) Washington (April 9, 2021); "Foundations of Intelligence in Natural and Artificial Systems" at the Santa Fe Institute (March 16, 2021)
- 2021 **"Accelerating science with Human vs. Alien AI"**, Invited talk at the MIT Media Lab Computational Social Science workshop (May 19, 2021), Computational Social Science workshop, University of Chicago (April 15, 2021).

- 2021 **"Accelerating Innovation with More and Less Human AIs"**, Invited Talk at MindBytes, a University of Chicago Technology Conference (March 30, 2021)
- 2021 **"Implications of AI for Science, Technology and Creativity"**, Lightning Talk, *Social Sci Foo*, Facebook & O'Reilly (February 20, 2021)
- 2020 **"Expert-Aware Artificial Intelligence"**, *HAMLET (Human, Animal, and Machine Learning: Experiment and Theory)* University of Wisconsin at Madison (February 5, 2021)
- 2020 **"Social Computing Unhinged"**, *2nd International Conference on Social Computing*, Tsinghua University (December 14, 2020)
- 2020 **"The Social Computation of Innovation"**, Talk at the working group on *Evolution of collective computational abilities of (pre)historic societies @ Santa Fe Institute* (November 4, 2020)
- 2020 **"Science, Technology & Entrepreneurship Advance through Surprise & How Socially Aware AI can Accelerate & Disrupt it"** @ Haas School of Business, University of California, Berkeley, Macro Management of Organizations Colloquium (October 27, 2020)
- 2020 **"Science and Technology Advance by Surprise & Socially Aware AI Accelerate it"**, Invited speaker @ Environmental Data Science workshop, University of Chicago (October 22, 2020)
- 2020 **"Does Big Data Serve Policy? Not Without Context: An Experiment with in silico Social Science"**, Invited Panel Speaker @ SBR-BRIMS (International Conference on Social Computing, Behavioral-Cultural Modeling & Prediction and Behavior Representation in Modeling and Simulation) on the DARPA Ground Truth program (October 19, 2020)
- 2020 **"The Social Limits of Knowledge"**, Keynote Speaker @ Frontiers of Reproducibility conference, University of Minnesota Center for Philosophy of Science (October 19, 2020)
- 2020 **"Human × Machine Learning"**, Invited Speaker @ LUCID (Learning, Understanding, Cognition, Intelligence, and Data-science) Seminar, University of Wisconsin–Madison (October 2, 2020)
- 2020 **"Diversity and Discovery"**, Conference Welcome and Keynote @ China Conference on Big Data and Social Computing (BDSC) in Beijing (August 22, 2020); Air Force Office of Scientific Research (AFOSR) Conference (August 28, 2020)
- 2020 **"Science and Technology Advance through Surprise"**, Talk @ American Sociological Association, Section on Mathematical Sociology Session (August

- 8, 2020); Invited Talk, Materials Innovation Factory at the University of Liverpool (August 17, 2020)
- 2020 **"Embeddings for the Science of Science and Society"**, Invited talk @ the Qatar Computing Research Institute, Hamad bin Khalifa University (June 23, 2020)
- 2020 **"Open Source & Collective Intelligence"**, Invited talk @ the OCEAN (Open Source Complex Ecosystems And Networks) Open Source workshop, Google Open Source Program and the University of Vermont Complex Systems Center (June 19, 2020)
- 2020 **"Designing Diversity for Collective Advance"**, Keynote Speaker @ ACM Collective Intelligence Conference, Northeastern University (June 18, 2020)
- 2020 **"Using the Science of Science to Catalyze Biomedical Breakthroughs"**, Invited Speaker @ the National Institute of Diabetic and Digestive and Kidney Diseases (NIDDK) (June 1, 2020)
- 2020 **"Science of Science"**, Invited Speaker at the Minerva Program Annual Meeting, Washington, DC (May 20, 2020)
- 2020 **"Growing the Least Human Computational Intelligences"**, Keynote @ *Machine Learning, Theory, and Method in the Social Sciences* workshop, Institute for Advanced Study (March 4-5, 2020)
- 2020 **"In Search of Failures for Advance"**, Speaker & panelist @ newly tenured faculty retreat, University of Chicago (February 18, 2020)
- 2020 **"Faceless, impersonal forces in science, tech and innovation"**, Speaker @ "Impersonal trends, big ideas, and great leaders" workshop, Santa Fe Institute (January 21, 2020)
- 2020 **"How to build the most alien intelligences" & "Predicting future science & technology"**, Constructed panels @ SciFoo Camp, Facebook (February 8-9, 2020).
- 2019 **"Radically Augmenting Intelligence: A New Vision for AI"**, Keynote and contributor @ *DSO (DARPA's Defense Sciences Office) Futures* retreat (November 19, 2019); Keynote @ *World Artificial Intelligence Conference*, Shanghai (August 31, 2019)
- 2019 **"Social Computing"**, Speaker @ MIT Sloan System Dynamics Seminar (November 15, 2019)
- 2019 **"New data for machine learning and policy insight"**, Speaker @ *Machine Learning & Public Policy*, pre-conference workshop at the Association for Public Policy and Management (APPAM) (November 6, 2020)

- 2019 **"The Geometry of Culture & Society"**, Invited talk @ the University of Chicago Sociology Department Colloquium (November 4, 2019)
- 2019 **"Diverse Artificial Intelligences"**, Keynote @ *When Technology Transforms Society: Considering the Societal and Ethical Impacts of Quantum Computing and AI* workshop at the Center for Data and Computation (CDAC), University of Chicago (October 31, 2019)
- 2019 **"Social Limits of Scientific Certainty"**, [Keynote Speaker @ MetaScience Symposium: The Emerging Field of Research on the Research Process](#), Stanford University (September 7, 2019); Inaugural Invited Speaker @ *Computational Social Sciences Workshop*, Yale University (October 28, 2019)
- 2019 **"Science and Technology Advance Through Surprise"**, Speaker @ *Computational Social Science Workshop*, University of Chicago (October 17, 2019)
- 2019 **"Science of Science – Science²"**, Speaker @ Minerva grant kick-off workshop (September 16, 2019); Keynote speaker @ *New Frontiers for Research on Research*, Wellcome Trust Symposium, London (September 30, 2019)
- 2019 **"Embeddings for the Science of Democracy, Diversity, Society & Science"**, Keynote @ *Summer School on Democracy in the age of Big Data and AI*, Venice (September 18, 2019)
- 2019 **"The Wisdom of Politically Polarized Crowds"**, Speaker @ Science, Knowledge & Technology (SKAT) roundtable, American Sociological Association, New York (August 11, 2019)
- 2019 **"Social Centralization & Semantic Collapse: Hyperbolic Embeddings of Networks & Meaning"**, Speaker @ Mathematical Sociology Section, American Sociological Association, New York (August 10, 2019)
- 2019 **"Machine Inference for Novel Discovery (MIND)"** DARPA Ground Truth meeting, Arlington, VA (July 30, 2010)
- 2019 **"Finding Meaning & Managing Chaos ∈ Big Social Data"** Invited Talk @ Summer Institute in Social Research Methods (ISRM), University of Chicago (July 2019)
- 2019 **"Interactive Learning for Science & Society"** Invited Talk @ Tsinghua Computer Science Department, Beijing (August 28, 2019)
- 2019 **"Science of Science & Innovation"** Invited talk @ Computer Science Department Seminar, Fudan University, Shanghai (August 30, 2019)

- 2019 **"Social Computing"**, Conference Keynote Address @ International Conference of Social Computing, Tsinghua University (August 26, 2019)
- 2019 **"The Abduction of Reason"** and **"Worldviews as Shared Meaning Structures"**, Orienting and Keynote talks @ *World Views: Mythologies Ancient to Modern*, the inaugural workshop in the series of "Think-Play-Hack: The New Algorithmic Analysis of Culture, Interaction and Experience", Taos, NM (July 1-5, 2019)
- 2019 **"Social Limits of Intelligence & the Redesign of Creative Crowds"**, Keynote @ *ACM Collective Intelligence Conference*, Carnegie Mellon University (June 14, 2019)
- 2019 **"Social Limits to Understanding"**, Invited talk @ Peking University (June 6, 2019); Keynote @ *Science of Science Conference*, Tsinghua-UChicago, Beijing (June 10, 2019)
- 2019 **"Embeddings for the Science of Science and Society"**, Invited talk @ Tsinghua Computer Science Department (November 6, 2018); Invited Talk @ University of Venice, School of Management (February 27, 2019); Invited Speaker @ University of Chicago Applied Mathematics Club (April 25, 2019); Invited Talk @ Tsinghua University, Department of Electrical Engineering (June 5, 2019)
- 2019 **"Science of Science and Innovation"**, Invited talk @ a workshop to explore pathways of collaboration at Ricardo Hausman's Center for International Development, Kennedy School of Public Policy, Harvard University (November 19, 2018), Invited talk @ Beijing Normal University School of Systems Science (November 6, 2018); Inaugural Invited Talk @ Computational Social Science Seminar, EPFL Lausanne (May 3, 2019); Invited Talk @ Institute for Analytical Sociology, Linköping University (May 6, 2019)
- 2019 **"Optimizing the Organization of Science"**, Keynote @ *Portfolio Analysis Symposium*, National Institutes of Health (April 3, 2019).
- 2019 **"Social Limits to Understanding and the Cultural Evolution of Disconnection"**, Keynote @ *Retuning cognition with a pair of rocks: Culture, evolution, technology*, University of Pittsburgh Department of Philosophy (March 29, 2019).
- 2019 **"Centralized Communities & Nonreplicable Results"**, Invited Talk, Tel Aviv University Department of Statistics (March 4, 2019), *Research2Reacher* Conference, London / British Medical Association (February 26, 2019).
- 2019 **"Large Teams Develop; Small Teams Disrupt Science & Technology"**, Invited talk @ the Oxford Internet Institute (February 25, 2019); Invited talk @ SciFoo Camp at Facebook (Facebook 1, 2019).

- 2019 **"Blockchain and the Science of Science"**, Symposium on "Blockchain & Science" at the American Association for the Advancement of Science in Washington, D.C. (February 14, 2019).
- 2019 **"Cultural & Social Fields: The Intrinsic Geometry of Culture & Society"**, Keynote @ Berkeley Haas Culture Conference, UC Berkeley (January 16, 2019).
- 2019 **"The Science of Science"**, Invited talk @ the Chan-Zuckerberg Initiative, Redwood City, California (January 15, 2019).
- 2018 **"Characterizing Skill in the Indian Informal Sector"**, Invited talk @ a Conference on *the Social and Economic Development of Slums*, University of Chicago Delhi Center (December 6, 2018)
- 2018 **"Social Computing"**, Keynote @ 2nd Conference of *On-line Social Behavior* @ Tsinghua University (November 3, 2018); AI & Society Salon, co-sponsored by Tencent Inc. and the Swarma Club (November 7, 2018), and Invited talk Alibaba, Hangzhou, China (November 9, 2018).
- 2018 **"Social Limits to Understanding"**, Keynote @ Computational Social Science Conference, University of Arizona (October 26, 2018); Invited talk, Facebook, Menlo Park (August 22, 2018).
- 2018 **"Computational Social Science: What it means and why it matters"**, Invited talk @ Computational Social Science Steering Committee, University of Arizona (October 25, 2018).
- 2018 **"Social Machine Inference for Novel Discovery (MIND)"**, Invited talk @ DARPA conference for the Ground Truth program (September 14, 2018).
- 2018 **"The Complex Social Structure of Long and Short-term Thinking"**, Invited talk @ Workshop on *Judgment Under a Diversity of Timescales*, Santa Fe Institute at Principal Financial Group, Des Moines, Iowa.
- 2018 **"The geometry of meaning: embedding and systematically interpreting text, tags and social networks"**, Invited talk @ Computational Social Science Summer School, Volkswagen Institute, located at USC's Information Sciences Institute in Marina Del Rey (August 1, 2018).
- 2018 **"Complex Social Systems"**, Invited talk @ Complexity Science for National Security, a Santa Fe Institute Applied Complexity Studio (July 9, 2018)
- 2018 **"A Pseudo-science of Data"**, Keynote @ Taos Data Science Summit about Data Science Summits (July 6, 2018).
- 2018 **"How Society Thinks (Together)"**, Keynote @ Computational Social Science Conference, IIT, Delhi, India (June 20, 2018)

- 2018 **"Algorithmic Abduction: Robots for Alien Reading"**, Invited talk @ the Consortium of Humanities Centers and Institutes, University of Virginia (June 15, 2018)
- 2018 **"What is Scientific Knowing in a Computational Era"**, Invited talk @ Future Compute, a celebration of the Computation Institute at the University of Chicago (May 16, 2018)
- 2018 **"Solving Society Challenges with Artificial Intelligence"**, Presentation and Panelist @ Mind Bytes, a conference sponsored by the Research Center for Computing, University of Chicago (May 8, 2018)
- 2018 **"Until the Singularity, ensembles rule...but which ones?"** Organizing talk at the conference *Beyond Code & Craft* at the Franke Center for the Humanities, University of Chicago (April 27, 2018)
- 2018 **"Social Disconnection Increases Collective Imagination"**, Invited talk @ Stevanovich Institute on the Formation of Knowledge, University of Chicago (April 23, 2018)
- 2018 **"Tiny Teams Disrupt, Fragmented Fields Persist, and Abnormal Audiences Drive Advance in Biomedical Science"**, Keynote @ Conference on *Contexts of Technological Change in Medicine: Centers & Margins*, McGill University & Jewish General Hospital of Montreal (April 19, 2018)
- 2018 **"Modeling Judgment & Influence"** @ Santa Fe Institute in association with the workshop *From Judgement to Impact* (April 3, 2018)
- 2018 **"Collective Reasoning in Patents, Technology & Science through Surprise"** @ Santa Fe Institute in association with the workshop (March 13, 2018)
- 2018 **"The Wisdom of Politically Polarized Crowds"**, Conference talk @ International Conference for Computational Social Science, Northwestern University (July 14, 2018), Keynote @ The International Conference on Complex Networks or CompleNet, Northeastern University (March 7, 2018), Invited talk @ University of Pennsylvania, Annenberg School of Communication (February 27, 2018), Invited talk @ University of Chicago, Computational Social Science workshop (January 25, 2018).
- 2018 **"Big Science Communities and Nonreplicable Results"**, Invited talk @ LeBow College of Business, Drexel University (February 26)
- 2017 **"Human Computing: Crowd-Sourcing & Beyond"** @ China Computer Federation Conference, Advanced Disciplines Lectures on "Computation and Social Networks", Beijing (December 22, 2017)
- 2017 **"Social Limits to Understanding & Fluid Representations of Social and Semantic Networks"** @ Tsinghua Department of Computer Science (December 21, 2017)

- 2017 **"Computational STS"** @ Tsinghua Institute for Science, Culture & Society (December 18, 2017)
- 2017 **"(Soft) Social Limits to Understanding"** @ Santa Fe Institute in association with the workshop *The Limits of Understanding* (November 29-30, 2017)
- 2017 **"Algorithmic Abduction: Robots for Alien Reading"** @ Max Planck Institute for the History and Philosophy of Science workshop on *The Intelligence of Algorithms* (October 20, 2017)
- 2017 **"The Geometry of Meaning: Word Embeddings for Social and Cultural Insight"** @ Northwestern Quantitative Methods Workshop (October 9, 2017); University of Chicago, Digital Humanities Forum (October 6, 2017)
- 2017 **"How Society Thinks"** @ Amazon.com in association with a mini-conference I co-organized (with Neal Patel), *Radical Social Sciences and Humanities Foo* (October 11, 2017).
- 2017 **"Crossing Disciplinary Boundaries"** Opening remarks @ University of Chicago Social Science Division *Cross Disciplinary Boundaries* graduate student Conference (September 22, 2017)
- 2017 **"Discovering the Extent of Estimable Prediction (DEEP)"** @ Technology Watch / Horizon Scanning Meeting, Arlington, VA (September 19, 2017)
- 2017 **"The Geometry of Society & Culture"** @ American Sociological Association, Montreal, Quebec (August 14, 2017)
- 2017 **"Knowledge & Networks"** @ Tsinghua University, Sociology and Computer Science Department Joint Colloquium (June 5, 2017)
- 2017 **"Large Teams Develop Science and Technology; Small Teams Disrupt It"** @ Organizations & Markets Workshop, UChicago (April 18, 2017); American Sociological Association, Montreal, Quebec (August 12, 2017)
- 2017 **"To Provoke & Surprise"** @ Keynote at Stanford Literary Lab annual conference: *Micromegas: The very small, the very large, and the object of Digital Humanities* (April 14, 2017)
- 2017 **"Collaboration & Competition in Science"** @ Harvard Business School Workshop on the Production Function of Science (April 11, 2017)
- 2017 **"High-throughput Replication & Reliability"** @ University of Chicago, Computational Social Science Workshop (Jan. 19, 2017)
- 2017 **"How Science & Technology Think (and How to Think Better)"** @ UC Berkeley, Haas School of Business, Management of Organizations Group (Feb. 11, 2017); University of Michigan, Management & Organizations Group (Oct. 5, 2016)

- 2016 **"Modeling Discovery in Science & Technology"** @ University of Chicago Statistics Department Colloquium (Nov. 28, 2017)
- 2016 **"Social Context of Innovation"** panelist @ Centre for International Governance Innovation (CIGI) & McGill University Law School's Conference *Innovation in Context*. Videos: <https://www.cigionline.org/video-series/innovation-context> (Nov. 18, 2016)
- 2016 **"Designing Discovery: Hypergraph Models of Innovation for Science & Technology"** @ AAAI Symposium on *Accelerating Science: A Grand Challenge for AI* (Nov. 17, 2016)
- 2016 **"Millions of online book co-purchases reveal partisan differences in the consumption of science"** @ Chicago-Tsinghua Conference on Network Analysis of Online Behavior (June 10, 2016).
- 2017 **"How Science Thinks (and How to Think Better)"** @ Peking University, Center for Social Research (June 6, 2017); Models of Science, Technology and Innovation Conference, National Academy of Sciences (May 18, 2016); MIT Technology, Innovation, Entrepreneurship, and Strategic Management (TIES) seminar (April 4, 2016).
- 2016 **"User-Generated Images as Massively Distributed Sensors"** @ Vision Group, Toyota Technological Institute, Chicago (May 4, 2016)
- 2016 **"Prospective Sense-Making: Scaffolding Collective Imagination"** @ Santa Fe Institute group on evolution in biology and history (April 30, 2016)
- 2016 **"Reading the Community: Weighting and Searching Over Experimental Claims"** @ DARPA Big Mechanism Conference (March 21, 2016)
- 2016 **"Language, Communication & Knowledge"** @ Santa Fe Institute Working Group on the Evolution of Language (January 18, 2016)
- 2016 **"Communication & Knowledge: Collective Thinking, Discovery and Engagement"** @ Kellogg Management & Organizations (MORS) workshop, Northwestern University (October 7, 2015); University of Linköping, Sweden (February 18, 2016).
- 2016 **"How Science Thinks"** @ IIT Delhi, Computer Science Department (Sept. 14, 2016); Tsinghua Computer Science Department seminar (June 13, 2016); Max Planck Institute for the History of Knowledge, Berlin (February 11, 2016).
- 2015 **"From Big Data to Big Questions: Accelerating Science with the Provenance of Knowledge"** @ University of Washington Data Science Distinguished Speaker Series (December 9, 2015).
- 2015 **"A (Computational) Social Science of Thinking and Knowing at the University of Chicago"** @ Roots of Inquiry & Growth of Ideas: A Faculty Panel on Discovery in the Social Sciences, moderated by David Nirenberg (other

- panelists included James Heckman, Susan Goldin-Meadow, and Tara Zahra) to inaugurate the exhibit "125 Years of Big Ideas in the Social Sciences" (November 12, 2015).
- 2015 "**Love, Terror, Confusion...and Information**" @ Remmy Bumpo Theater; a Lecture in preface to Caryl Churchill's play, "Love and Information" as part of their *Between the Lines* series (October 11, 2015).
- 2015 "**Novelty in Collective Search & Discovery**" @ Santa Fe Institute Workshop on "Innovation as Search on a Space of Possibilities: Constructed or Discovered? Metaphorical Device or Analytical Construct?" (October 10, 2015).
- 2015 "**How Firm is Sociological Knowledge? Reanalysis of GSS findings with alternative models and out-of-sample data, 1972-2012**" @ Quantifying Science Satellite of the Conference on Complex Systems, Phoenix, Arizona (October 2, 2015).
- 2015 "**Can We Agree on Science? Measuring the Ideological Alignment of Science with Book Co-purchase Data**" @ Computational Social Science Summit, Northwestern Institute for Complex Organization and Kellogg (May 17, 2015); Microsoft Research, Boston (August 12, 2015); Computational Social Science Conference, Cornell University (September 12, 2015); Computational Social Science satellite of the Conference on Complex Systems (Keynote), Phoenix, Arizona (October 2, 2015); Computational Social Science workshop, University of Chicago (October 8, 2015).
- 2015 "**Faceting U.S. Science Funding**" with Dashun Wang @ National Science Foundation, Arlington, Virginia (July 10, 2015).
- 2015 "**Discovering the Extent of Estimable Prediction (DEEP)**" @ Basic Research Innovation and Collaboration Center (BRICC) and AFOSR, Arlington, Virginia (July 8, 2015).
- 2015 "**Inside the Discovery Cloud: Deep Text Mining for Cancer & Disease**" with Ishanu Chattopadhyay @ Computation Institute (May, 2015).
- 2015 "**How Science Thinks**" @ Booth School of Business, Decision Sciences Workshop (May, 15); Brigham Young University (March, 15); Santa Fe Institute (April, 15); Air Force Office of Scientific Research (AFOSR) Research Analytics Seminar (Sept. 10, 14); American Sociological Association (Aug. 18, 14); Keynote for Associated Publishers of Europe, Berlin (Jan. 27, 14).
- 2015 "**Ambiguity and Intellectual Engagement**" talk @ Cornell Sociology (Feb. 27, 2015); Columbia Sociology (Oct. 8, 2014); Stanford Conference on Computational Social Science (Aug. 15, 2014); the Booth School of Business, Organizations and Markets workshop (May 11, 2014); History and Philosophy of Science workshop, University of Chicago's (May, 2013); Princeton's Center for the Study of Social Organization (Dec., 2012); Chicago Colloquium on

- Digital Humanities and Computer Science (Nov., 2012); the American Sociological Association meeting in Denver (Aug, 2012).
- 2014 **"How Cities Think"** talk @ workshop on "Urban Science and Big Data" at the Radcliffe Center for Advanced Studies, Harvard University, Cambridge, MA (Dec. 15).
- 2014 **"Thinking Big with Big Data"** keynote @ the launch of Tencent Holding Company's (We-Chat, QQ) Internet & Society Institute, Beijing, China (July 25).
- 2014 **"How much Serendipity is there Science"** talk and panelist @ "Science and Serendipity: Happenstance and Other Factors Underlying Accidental Discoveries" Joint Speaker Event for University of Chicago Faculty and Argonne and Fermilab Scientists, Researchers and Engineers (May 21).
- 2014 **"Text as Data (About Thinking, Knowing, Feeling)"** @ University of Chicago Technology Day Conference (April 16).
- 2014 **"Discourse as Neural Network"** @ Alexander von Humboldt Institute for Internet and Society (Jan. 28).
- 2014 **"Expression and the reception of ideas"** Editorial Studies, Free University of Berlin (Jan. 27).
- 2014 **"How Science (as a System) Thinks"** Computation Institute Speaker Series: Inside The Discovery Cloud—Culture and Society (Jan. 15); Northwestern Institute for Complex Systems—NICO (Feb. 26); Stanford's Work, Technology and Organization (WTO) seminar (Apr. 13).
- 2014 **"Choosing the Next Experiment: Tradition, Innovation and Efficiency in the Selection of Scientific Ideas"** @ American Sociological Association (Aug. 18, 2014); IBM Services Research Symposium (Oct. 22, 2013); Rational Choice workshop, University of Chicago (Apr. 2013); Keynote, Innovation & Digital Scholarship Lecture Series, Oxford Internet Institute (Mar., 2013); Berkeley Innovation Seminar, UC Berkeley (Jan. 2013); Center for the Study of Social Organization, Princeton University (Dec, 2012).
- 2013 **"Knowledge Lab"** Computation Institute & CRI Student Engagement Lightning Talk (Nov. 1).
- 2013 **"Why Big Data needs Science Studies more than Science Studies needs Big Data"** @ the Society for the Social Studies of Science (4S), annual meeting, San Diego (Oct. 11).
- 2013 **"Choosing the Next Experiment: Collective Cognition and the Selection of Scientific Ideas"** @ John von Neumann Public Lecture in Complexity and Computation, Wisconsin Institutes for Discovery (Oct. 9).
- 2012 **"Choosing the Next Experiment: Measuring Tradition, Novelty and Global (In)efficiency in Scientific Investigations"** (poster) @ the National Academy

- of Sciences sponsored “SciSIP Principal Investigator’s Conference” in Washington, D.C. (Sep).
- 2012 **“Tradition, Innovation and Efficiency in Scientists’ Research Strategies”** @ “Intellectual and Institutional Innovation in Science” conference, organized by Thomas Heinz and Robert Münch of the University of Bamberg, and the German Federal Ministry of Education and Research; Bundesministerium für Bildung und Forschung (BMBF), Program: New Governance of Science in Berlin (Sep).
- 2012 **“Why the social sciences (often) don’t use big data”** @ the Department of Energy sponsored Institute for Computing in Science (ICiS) workshop, “Big Data and Long Tails: Addressing the Cyber-Infrastructure Challenges for Research on a Budget” in Park City (Aug).
- 2012 Speaker/panelist for AAUP (American Association of University Presses) panel on **“Policy Wars: University Presses in the Crossfire”**, organized by Alison Muddit, director of the University of California Press (Jun).
- 2012 **“Choosing the Next Experiment: Gains and losses for science and society”** @ NetSci Conference, Science of Science and Innovation Satellite Conference, Northwestern University (Jun).
- 2012 **“University opportunities for innovation and the knowledge economy”** @ Lamplighters, a conference for senior university administrators. Also co-organizing speaker/panelist for related “Innovation panel” at the same conference (Jun).
- 2012 **“Stable Scientific Strategies and the Unexamined Frontier of Knowledge”** @ National Science Foundation workshop on *The Promise and Perils of Transformative Research*, organized by Robert Frodeman and J. Britt Holbrook (Mar).
- 2011 **“Novelty, Metaknowledge and Models of Discovery”** @ the Indiana University speaker series on Networks and Complex Systems (Nov).
- 2011 **“Stability and Conformity in Scientists’ Research Strategies”** @ the Innovations, Organizations and Society Conference joint between University of Chicago-Northwestern (Oct).
- 2011 **“The Social Life of Ideas”** @ SciFoo Camp, Google (Aug).
- 2011 **“Local Attention to Disease and the Global Disparity of Health Knowledge”** @ the American Sociological Association in Las Vegas, Nevada (Aug).
- 2011 **“The Complex Network of Skill and Ideas”** @ workshop on *Measuring the Impacts of Federal Investments in Research*, sponsored by the Board on Science, Technology, and Public Policy of the National Research Council and the Committee on Science, Engineering, and Public Policy of the National

- Academy of Sciences, National Academy of Engineering, and Institute of Medicine (Apr).
- 2011 **"Creative Confidence in Building a Portfolio of Projects"** @ the Social Evidence and Theory Workshop, University of Chicago (Apr).
- 2011 **"The Effect of Technology on Scholarship"** @ the Disciplines and Technologies workshop at the Franke Institute (Apr).
- 2010 **"Science's Taste for Open Access"** @ American Sociological Association (Aug).
- 2010 **"Using the population of knowledge claims to identify (and mine) the limits of knowledge"** @ the inaugural Department of Energy Institute for Computing in Science (ICiS) workshop, "Integrating, Representing, and Reasoning over Human Knowledge: A Computational Grand Challenge for the 21st Century", SnowBird, Utah (Aug).
- 2010 **"The Google Effect on Science and Scholarship"** @ the Department of Physics Colloquium, University of Chicago.
- 2009 **"The Google Effect on Knowledge & Culture: By Broadening Individual Reach the Internet Narrows Global Understanding"** @ American Sociological Association (Aug '09), Innovations, Organizations and Society Conference joint between University of Chicago-Northwestern (Oct '09), Society for the Social Study of Science (Oct '09), Theory and Evidence workshop at the University of Chicago (Nov '09), Loyola Sociology Department (Mar '10), Columbia Sociology Department (Apr '10).
- 2009 **"Describing NSF Research Centers: A metaphysical approach"** @ Centers, Universities, and the Scientific Innovation Ecology: An NSF Workshop (Apr '09).
- 2009 **"Institutions and Science: the Influence of Internet and Industry"** @ the Society of Science Society Presidents, Washington, D.C. (Dec '08), University of Michigan Strategy Seminar (Mar '09), University of Chicago Harper Lecture, Chicago (Oct '09).
- 2008 **"ePublication and Attention in Science and Scholarship"** @ the Workshop on Economic Perspectives on Scholarly Communication in a Digital Age, University of Michigan (Sep. '08).
- 2008 **"Industry Collaboration and Secrecy in Academic Science"** @ the Emergence of Organization Conference at the University of Chicago (Nov '07), Harvard University Organizational Behavior seminar (Dec '07), Organizations & Markets workshop at the University of Chicago (Jan '08), Brigham Young University Sociology Seminar (Mar '08), and the American Sociological Association (Aug '08).

- 2007 **"Industry Collaboration and Theory in Academic Science"** @ the Organizational Behavior Workshops in the business schools at Columbia University (Apr '07) and University of Illinois at Urbana-Champaign (Apr '06), Northwestern Institute on Complex Systems (Mar '07), and the Science, Technology, Society and the State Workshop at the University of Chicago (Jan '06).
- 2006 **"Knowledge-Bases and the Sociology of Science"** @ the Computation Institute at the University of Chicago (Nov).
- 2005 **"Industry Collaboration and the Ethos of Academic Science: Novelty and Persistence in *Arabidopsis thaliana* research, 1974-2002"** @ the Harvard-MIT Economic Sociology Workshop (Sep); the Entrepreneurship Group at Harvard Business School (Sep); the International Conference for *Arabidopsis* Research meeting at the University of Wisconsin (Jun); the Organizations and Markets Workshop at the University of Chicago Business School (Apr); and the History, Philosophy and Sociology of Science Workshop at the University of Chicago (Apr).
- 2005 **"Nonprofit Research Institutes: From companies without products to universities without students"** @ the SSRC Capstone Conference on Philanthropy and the Nonprofit Sector in Florence (Mar).
- 2004 **"Public / Private Collaboration in *Arabidopsis thaliana* research, 1974-2002"** @ the Carnegie Institute of Washington's Division of Plant Biology, Stanford, California (Jun).
- 2003 **"Sharing the Harvest? The Uncertain Fruits of Public / Private Collaboration in Plant Biotechnology"** @ Cornell University's School of Industrial and Labor Relations (Nov), the University of Chicago's department of sociology (Nov), Georgia Institute of Technology's School of History, Technology and Society (Oct), and the University of Iowa department of sociology (Oct), SSRC Conference for the Corporation as a Social Institution and the SSRC Dissertation Workshop for the Program on Philanthropy and the Nonprofit Sector (Nov, 02).
- 2002 **"Harvesting Basic Bioscience: Firm Strategy Within the Organizational Ecology of Plant Biology and Biotechnology"** @ the Academy of Management session on Technology and Information Management (Aug).
- 2002 **"The Temporal Dynamics of Work: The Perception of Time among High Skilled Contingent Workers"** @ the Academy of Management section on Organization and Management Theory (Aug).
- 2002 **"Structures of Science and Trajectories of Technology: Organizations, Scientists and Intellectual Property Shaping the Frontiers of Plant Biology and Biotechnology"** (poster) @ American Sociological Association (Aug).

- 2001 **"The Market Community: The Migration of Relationships and Transformation of Community in the Temporary IT Labor Market"** @ SCANCOR seminar, Stanford University (Oct).
- 2001 **"By Motivation or Situation? Career Choices, Information Flows, and the Formation of Collective Identity in Venture Capital"** @ the Sociology of Culture workshop at Stanford University (Mar) and in 2002 at the American Sociological Association session on Organizations and Occupations (Aug).
- 2000 **"Intimate Valuation and the Experience of Contract Labor Markets"** @ the Institutions, Culture, Conflict, and Change Conference, Kellogg School of Management, Northwestern University (Nov).
- 2000 **"The Nature and Experience of Market-Spanning Networks in The Accelerated Contract Labor Market"** @ the American Sociological Association section on Economic Sociology (Aug).
- 2000 **"Duality in Action: A Longitudinal Study of Relationships and Attitudes"** (with Kathleen Valley and Tracy Thompson) @ the Academy of Management session on Organizational Behavior (Aug).

PODCASTS & VIDEO

- 2024 **["Cultural observatories, knowledge communities, and a life resplendent with ideas"](#)**. Origins Podcast "tracing the pivotal moments in the careers and lives of profound thought leaders in science, engineering, and design By Ryan McGranaghan. [Associated playlist!](#)
- 2024 **["Scientific Progress"](#)**. Artificiality: Minds Meeting Machines Podcast by Helen and Dave Edwards.
- 2023 **["Designing Innovative Research Ecosystems"](#)**. Future of Science Podcast by the DeSci Foundation.
- 2023 **["Failing for the Sake of Innovation"](#)**. The Journeys of Scholars Podcast by Adel Daoud.
- 2022 **["Surfing the Boundaries of Order and Chaos"](#)**. The LeaderFactor podcast with Timothy R. Clark..
- 2022 **["Is Scientific Progress Slowing?"](#)** Big Brains Podcast by the University of Chicago.
- 2021 **["Social Computing and Diversity by Design"](#)**. Complexity Podcast by Michael Garfield and the Santa Fe Institute.
- 2021 **["How We Do Science Determines What We Discover"](#)**. Bold Conjectures with Paras Chopra.

HONORS, FELLOWSHIPS, AND AWARDS

- 2021 **Outstanding Article Publication Award** (best paper published in the prior 3 years) from the American Sociological Association's section on Mathematical Sociology for "The Geometry of Culture: Analyzing the Meanings of Class through Word Embeddings."
- 2021 **Member, Philosophical Society of Washington** (Science).
- 2016 **Star-Nelkin Award** (best paper published in the prior two years) from the American Sociological Association's section on Science, Technology and Knowledge (SKAT) for "Tradition and Innovation in Scientists Research Strategies."
- 2015 **Facebook's Academic Program** (\$25,000 gift)
- 2014 **IBM Data Fellow** (\$70,000 gift)
- 2012-18 **Senior Fellow, Computation Institute**, University of Chicago.
- 2010 **Best Paper Award** (best paper published in the prior two years) from the American Sociological Association's section on Communication and Information Technology (CITASA) for "Electronic Publication and the Narrowing of Science and Scholarship."
- 2008 **Citation from the Council of Science Society Presidents** for "Improving our Understanding of the Role of the Internet in Scientific Communications."
- 2006-12 **Fellow, Computation Institute**, University of Chicago.
- 2002-04 **Social Science Research Council (SSRC) Fellow**, Program on the Corporation as a Social Institution.
- 2002-05 **SSRC Fellow**, Program on Philanthropy and the Nonprofit Sector.
- 2002-03 **MacArthur Scholar and Fellow** at the Stanford Center for International Security and Cooperation.
- 1998-02 **Jacob K. Javits Fellow** (4-year Department of Education Fellowship).
- 1997-98 **Stanford Graduate Fellow** in the Department of Sociology.
- 1994 **Valedictorian, Brigham Young University**: College of Social Sciences (and Anthropology Department); University Honors; Deans List.
- 1994— **Golden Key and Phi Kappa Phi Honor Societies**.

GRANTS

- 2024-25 Co-Principal Investigator (with PI Lav Varshney) on DARPA grant "**Modeling and Measuring Scientific Creativity**" (\$1,000,000)
- 2024 Co-Principal Investigator (with PI Dashun Wang) on Sloan Foundation grant "**Advancing the Field of Science of Science: Support for the 3rd Annual International Conference on the Science of Science and Innovation**" (\$250,000)
- 2022-23 Co-Principal Investigator and Research Director (with Erica Fuchs) on NSF grant "**National Network for Critical Technology Evaluation**" (\$5,000,000)
- 2020-25 Senior Personnel (PI Juan de Pablo) on NSF grant #2022023, NRT-HDR: "**AI-enabled Molecular Engineering of Materials and Systems (AIMEMS) for Sustainability**" (\$2,999,986).
- 2020-23 Co-Principal Investigator (with Ishanu Chattopadhyay) on DARPA Grant #W911NF2010302 titled "**Quantification of Cognitive Dissonance via Recursive Decision Forests**" (\$500,000).
- 2019-24 Co-Principal Investigator (with Dashun Wang, Brian Uzzi, Laszlo Barabasi, Ben Jones and Santo Fortunato), titled "**Dynamics, Predictability, and Uncertainty of Scientific Discovery and Advance**", Air Force Office of Scientific Research #FA9550-19-1-0354 under the Minerva program (\$5,300,000).
- 2018-21 Principal Investigator (with Dashun Wang) titled "**Teams: Innovation Engines for Science**", National Science Foundation # 1829366, Science of Science and Innovation Policy (\$550,000).
- 2018-21 Co-Principal Investigator (with Daniel Acuna and Konrad Kording) titled "**Optimizing Scientific Peer Review**", National Science Foundation #1800956, Science of Science and Innovation Policy (\$550,000).
- 2018-21 Principle Investigator on DARPA Grant # HR00111820006, titled "**Social MIND: Social Machine Intelligence for Novel Discovery**" in the program "Ground Truth" (\$2,000,000).
- 2017-20 Principal Investigator (with Gary Lupyan) on Sloan Foundation Grant "**The Impact of Programming Languages and Data Science Frameworks on Thinking, Software, and Science**" (\$750,000)
- 2016 Principal Investigator for "**International Symposium on the Science of Science**", March 22-23, 2016; National Science Foundation #1623809 (\$35,000).

- 2015-19 Co-Principal Investigator (with Adrian Johns and James Chandler) on Mellon Foundation Grant "**Algorithms, Models and Formalisms**" (\$797,000).
- 2015-19 Co-Principal Investigator (with Alberto Cambrosio, PI) "**Oncology's metaknowledge networks: an investigation of the collective dynamics of bio-clinical innovation**"; Canadian Institutes of Health Research (CIHR) (\$640,000).
- 2015-19 Co-Principal Investigator (with Boaz Keysar, PI) "**The Impact of Foreign Languages on Problem Solving: An Interdisciplinary Study of Language and Society**"; IBSS (Interdisciplinary Behavioral and Social Sciences Research) grant from NSF (\$900,000).
- 2015-17 Principal Investigator (with Dashun Wang) "**Discovering the Extent of Estimable Prediction (DEEP) in Science and Technology**"; Air Force Office of Scientific Research (FA9550-15-1-0162) (\$767,811).
- 2014-17 Co-Investigator (with Jason Owen-Smith, Julia Lane and Bruce Weinberg) "**The Institute for Research on Innovation & Science (IRIS)**" from the Sloan (\$1,200,000) and Kauffman (\$1,497,751) foundations.
- 2014-17 Senior Personnel on NIH BEST (Broadening Experience in Scientific Training), "**myCHOICE (CHicago Options-In-Careers Empowerment)**"
- 2014-16 Principal Investigator (with Julia Lane and Jordan Boyd-Graber) on NSF NCSES- (National Center for Science and Engineering Statistics) grant #1422902, "**Collaborative Research: Scaling Insight into Science: Assessing the value and effectiveness of machine assisted classification within a statistical system**" (\$500,000).
- 2014-17 Co-Investigator on DARPA grant #14145043, "**Big Machine Science**" in the Big Mechanism program (\$4,500,000).
- 2013-16 Principal Investigator on John Templeton Foundation "**Metaknowledge Network**" (\$5,300,000).
- 2013-16 Principal Investigator on NSF SciSIP (Science of Science and Innovation Policy) grant #1158803, "**Tracing Influence & Predicting Impact in Science**" (\$498,118).
- 2012-14 Co-Principal investigator (with Adrian Johns and James Chandler) on Mellon Foundation Grant "**Disciplines and Technologies**" (\$227,000).
- 2011 Organizer (with Ian Foster, Andrey Rzhetsky, Hod Lipson) of the Department of Energy's ICiS workshop: "**Accelerating Discovery: Human Computer Symbiosis 50 Years On**", Park City, Utah (\$100,000).

- 2010-12 Principal Investigator on NSF supplement to #0915730 (see below) for **"StarMetrics: Evaluating Scientists and Science"** (\$80,000).
- 2010 Organizer (with Ian Foster and Andrey Rzhetsky) of the Department of Energy's inaugural Institute for Computing in Science (ICiS) workshop: **"Integrating, Representing, and Reasoning over Human Knowledge: A Computational Grand Challenge for the 21st Century"**, SnowBird, Utah (\$100,000).
- 2009-12 Principal Investigator on NSF SciSIP (Science of Science and Innovation Policy) grant #0915730, **"Assessing and Predicting Scientific Progress through Computational Language Understanding"** (\$398,000).
- 2009-10 Program Leader on NIH supplementary award to #031672 (Andrey Rzhetsky, PI) **"Computer system for functional annotation of genomic data"** (\$134,998)
- 2009-11 Principal Investigator (with Andrey Rzhetsky and Ian Foster) on NIH EUREKA (Exceptional, Unconventional Research Enabling Knowledge Acceleration) grant #010132, **"Large-Scale Discovery of Scientific Hypotheses; Computation Over Expert Opinions"** (\$1,215,744).
- 2009-14 Co-Investigator (Diane Lauderdale, PI) on NIH Models for Infectious Disease Agent Study (MIDAS) Center #087729, **"Modeling MRSA in the community"** for the modeling of MRSA outbreaks and associated interventions in the community (\$2,400,000).
- 2008-11 Senior Personnel (Michael Papka, PI) on NSF Cyberinfrastructure grant #0821678, **"Petascale Active Data Store"** (\$1,500,000).
- 2008-09 **Research Opportunity Seed grant.** Vice President's Office for Research, The University of Chicago. (\$10,000).
- 2008-09 Principal Investigator on Health and health policy research for disadvantaged populations seed grant, Center for Health Administration, The University of Chicago, entitled **"Unequal Knowledge: Disparities between Burden of Disease and Bio-Medical Understanding."** (\$20,000).
- 2005-07 **Research Opportunity Seed grant.** Vice President's Office for Research, The University of Chicago. (\$9,680).
- 2005-06 **Instructional Improvement Grant.** Center for Teaching and Learning, The University of Chicago. (\$1,000).
- 2003-06 Co-Principal Investigator to NSF grant #0242971, **"Sharing the Harvest: The Uncertain Fruits of Private/Public Collaboration in Plant Biotechnology"** (\$169,000), March 1, 2003 through February 28, 2006. (Walter Powell, Principal Investigator.)
- 2001 **Stanford Graduate Research Opportunities Grant.** (\$5,000).

RESEARCH POSITIONS

- 2005— Research Associate. Ogburn-Stauffer Center for the Study of Social Organization, National Opinion Research Center (NORC).
- 2003-04 Researcher with Walter Powell, Stanford University. Worked on dissertation research and comparisons of plant biotechnology with human biotechnology.
- 1998-01 Research Assistant to Stephen Barley, Stanford University. Conducted interviews of technical contractors and participant observation in relevant work and community settings; coded and analyzed interviews and field notes.
- 1998-99 Research Assistant to Mark Granovetter, Stanford University. Developed relational database from archival data to explore social networks and career mobility in the early electricity industry.
- 1995-97 Research Associate to Kathleen McGinn, Harvard Business School. Performed social psychology experiments and analyzed experimental data, social networks, and interviews.
- 1995-97 Research Associate to George Wu, Harvard Business School. Gathered archival real estate data and analyzed it to examine seller behavior; Analyzed data on the structure of joint ventures.
- 1995-96 Research Associate to V.G. Narayanan, Harvard Business School. Wrote course notes on human motivation in markets and firms; Wrote case studies on accounting at Intel.
- 1994 Research Assistant, Dwight Israelsen, Economics Department, Brigham Young University. Gathered and analyzed archival data on frontier economy and demography.

TEACHING EXPERIENCE

- 2017 Instructor for “Augmented Intelligence” for MBA students at the Booth School of Business.
- 2010-17 Instructor for “Science, Culture & Society III,” the history of science in society from the founding of the Royal Society to the present.
- 2016 Co-instructor for “Cultural and Biological Evolution: Convergences, Contrasts, Controversies” with William Wimsatt.

- 2005-16 Instructor for "Content Analysis" for graduate students at the University of Chicago.
- 2012-15 Instructor for "Internet and Society," technical, policy, cultural and social issues associated with the rise of the Internet.
- 2013 Co-instructor for "Do Ideas Evolve?" with Jacob Foster, sponsored by the Mellon Foundation's Center for Disciplinary Innovation at the Franke Institute of Humanities.
- 2009 Instructor for short-course on "Social and Semantic Networks" at the University of Trento Summer School on *Networks and Innovation*.
- 2007-11 Instructor for "Social Structure and Change," an introduction to the empirical content of sociology for undergraduate sociology majors.
- 2005-11 Instructor for "The Sociology of Science" and "Introduction to Science Studies" for graduates and undergraduates at the University of Chicago.
- 2004-08 Instructor for "Self, Culture and Society," core undergraduate course on classics of political economy at the University of Chicago.
- 2000,05 Instructor for "Work, Organization, and Society" at Stanford University and the University of Chicago.
- 1999 Teaching Assistant to Mark Granovetter, "Economic Sociology," Stanford University. Taught section and graded.
- 1999 Teaching Assistant to W. Richard Scott, "Organizations and Public Policy," Stanford University. Taught section, gave invited lecture, and graded.
- 1996-97 Teaching Assistant to Kathleen Valley, "Negotiations," Harvard Business School. Graded and administered experiments.
- 1993-94 Teaching Assistant to F. Kent Nielsen, "History and Philosophy of Science" and "Philosophy 101," Brigham Young University. Gave invited lectures and graded.
- 1992-93 Co-founder, Executive Director and Faculty Member, Utah High School for the Performing and Fine Arts, Orem, Utah. Created academic program and curricula; taught classes in social sciences, established school's financial policies.

MENTORSHIP

Post-doctoral:

Jeff Lockhardt (Current), Ningzi Li (Current); Jamshid Sourati (2023) DePaul; Christopher Esposito (2023) UCLA; Fengli Xu (2023) Tsinghua University; Shahab Asoudeh (2019) McMaster University; Molly Lewis (2019) CMU; Alexander Belikov (2019) Paris; Lingfei Wu (2019) University of Pittsburgh;

Valentin Danchev (2018) Stanford University; Nandana Sengupta (2017) IIT Delhi; Feng Shi (2016) UNC Chapel Hill; Aaron Gerow (2016) University of London, Goldsmiths; Jacob Gates Foster (2014) UCLA.

Doctoral:

Peter (2023) Meta; Pedro Arroyo (2023) University of Chicago; Joshua Mausolf* (2019) Facebook; Pedro Aceves* (2018) Bocconi School of Business; James Murphy (2018); Chris Graziul (2016) University of Chicago; Misha Teplitskiy* (2016) University of Michigan; Peter McMahan* (2016) McGill University; Craig Tutterow* (2016) LinkedIn; Monica Lee (2015) Facebook; Jae-Mahn Shim (2013) City University of Seoul; Zack Kertcher (2009) Notre Dame University; Frank Smith (2006) University of Melbourne. *Chair

Masters:

Haohan Shi (2023); Hsingkeng Ling (2023); Hongkai Mao (2023); Shiyang Lai (2023); Khwan Kim (2020); Reid McIlroy (2018); Rodrigo Valdez (2018); Julian McLellan (2018); Federica Nocero (2015), Patrick van Kessel (2012); Kira Wilpone-Jordan (2012); Rachel Pierson (2012); Nolan Philips (2010); Allyson Grennille (2008); Kathryn McLellan (2007); Yven Lillian Destin (2007); Emily Mannix Wanderer (2006).

Undergraduates:

Jasmine Mithani (2017, Gender Studies); Susanna Tuan (2016); Nataly Rios (2016); Bryce Peppers (2016); Sam Taylor (2016); Sophia Rosenfeld (2016); Simone Aldredge (2015, Law & Letters); Gaelle Sharma (2014, HiPSS); Daniel Benner (2014, HiPSS); Anna Stapleton (2014); Bradford Rogers (2014); Emma Cervantes (2014); Hans Glick (2014); Edgar Quintana (2014); Isaac Dalke (2013); Mahmoud Bahrani (2012); Sally Lanar (2011); Ariel Weiser (2010); Basil Katz (2006, History).

PROFESSIONAL SERVICE

- 2019 Editor in Chief, *IEEE Journal of Social Computing*
- 2019 "Science of Science Symposium" (co-organizer with Jie Tang), UChicago-Tsinghua Conference
- 2019— Committee on Science and Innovation Leadership, National Academy of Sciences.
- 2016 International Symposium on Science of Science (co-organizer), Library of Congress, Washington DC, USA. March 2016. (<http://icss.ist.psu.edu/>)
- 2016 Models of Science, Technology and Innovation, National Academy of Sciences (scientific advisor), Washington, DC, USA. May 2016 (<http://modsti.cns.iu.edu>)

- 2015 “Quantifying Science” (co-organizer with Dashun Wang), (CCS’15 satellite)
Tempe, AZ, USA. October 2015
(<http://dashunwang.com/workshop/qs-ccs15/>)

Reviewer: *Science*, *Nature*, *Proceedings of the National Academy of Sciences*,
American Journal of Sociology, *American Sociological Review*, *Social Studies of
Science*, *Bulletin of Science & Technology Studies*, *PLOS ONE*.

COMMUNITY SERVICE

- 2017— Media Arts & Design Committee, University of Chicago
- 2017— Board of Computing Activities and Services (BCAS), University of Chicago
- 2016— Advisory Board, Neubauer Collegium for Culture & Society, University of
Chicago
- 2014— myCHOICE (CHicago Options-In-Careers Empowerment) Steering
Committee, Biological Sciences Division, University of Chicago
- 2016— “What’s Next?” Committee, Sociology Department, University of Chicago
- 2016— Member, Search Committee, Data Science Initiative, Biological Sciences
Division
- 2016— Member, Search Committee, Booth School of Business, Organizations &
Markets Group
- 2016-17 Member, Future of the Computation Institute (FCI) Committee, University
of Chicago
- 2016— Member, Crerar (Reconstruction) Working Group, University of Chicago
- 2015— Director of Computational Social Science Program, University of Chicago,
Division of Social Sciences
- 2015-18 Member, Board of Computing Activities and Services (BCAS), University of
Chicago
- 2015— Member, Media Arts & Design Committee, University of Chicago
- 2013-15 Member (and initial grant co-author), Big Ideas Generator (BIG) Faculty
Advisory Committee
- 2013-16 Director of Undergraduate Studies, University of Chicago Department of
Sociology
- 2012-13 Webpage Committee member, University of Chicago Department of
Sociology
- 2012 Chair, committee for NetSci Satellite Symposium on Networks: the Science
of Science and Innovation

- 2011-13 Research Computing Faculty Oversight Committee, University of Chicago
- 2011 Chair selection committee, Committee on Conceptual and Historical Studies of Science (chair)
- 2010 Faculty Search Committee, University of Chicago Department of Sociology
- 2010-12 Bamboo Faculty Advisory Board, Bamboo Project at the University of Chicago (funded by the Mellon Foundation).
- 2010-12 Webpage Committee Chair, University of Chicago Department of Sociology
- 2010 Acting undergraduate program chair, Department of Sociology, University of Chicago.
- 2007— Assisting Chicago Biomedical Consortium (CBC) evaluate its \$300 million dollar initiative supporting collaborative biomedical research between the University of Chicago, Northwestern, and University of Chicago in Illinois.
- 2007 Richard Saller Dissertation Prize Selection Committee, University of Chicago Division of Social Sciences.
- 2006— Faculty Advisory Committee to UChicagoTech, University of Chicago's Office of Technology & Intellectual Property.
- 2006-08 College Council, University of Chicago.
- 2006-08 Webpage Committee, University of Chicago Department of Sociology.
- 2005-08 Associate Editor, *American Journal of Sociology*.
- 2006,11 Chair Selection Committee, University of Chicago Department of Sociology.
- 2005 Harper and Mellon Fellow Selection Committee, University of Chicago Division of Social Sciences.
- 2005 Small Grants Selection Committee, University of Chicago Division of Social Sciences.
- 2004-05 Faculty Search Committee Member, University of Chicago Department of Sociology.
- 2002-03 Faculty Search Committee Member, Stanford Department of Sociology.
- 2001-02 Department Seminar Committee Co-Chair, Stanford Department of Sociology.
- 2000-01 Co-President of the Associated Sociology Graduate Students (ASGS) at Stanford University (department student organization).
- 1999-00 Graduate Admissions Committee Member, Stanford Department of Sociology.

PROFESSIONAL MEMBERSHIPS

- 2006— Member, **American Association for the Advancement of Science (AAA)**
- 2006— Member, **Society for the Social Study of Science (4S)**
- 1997— Member, **American Sociological Association**: Science, Knowledge and Technology; Mathematical Sociology; Communication & Information Technology; Economic Sociology; Organizations, Occupations and Work Section memberships.
- 1996— Member, **Academy of Management Association**: Organization and Management Theory and Organizational Behavior Section memberships.

RESEARCH AND TEACHING INTERESTS

Augmented, artificial and collective intelligence; innovation; science of science; complex systems; sociology of knowledge; computational social science; empirical epistemology; science and technology policy; data science; science, technology and society; history and philosophy of science; sociology of health/medicine; organizations; economic sociology; sociology of work; inequality; qualitative and quantitative methods—fieldwork, social & semantic embeddings and networks, content analysis, databases, natural language processing, machine learning.

PERSONAL INFORMATION

Age 53, married (Jeannie Elizabeth Young Evans).
Hobbies: 4, ages 27, 25, 21 and 15.