NOSHIR S. CONTRACTOR

Northwestern University 2145 Sheridan Road, Tech D241 Evanston IL 60208-3119

847-491-3669 | nosh@northwestern.edu http://nosh.northwestern.edu

Table of Contents

EDUCATION
EDUCATION ACADEMIC ADDOINTMENTS
ACADEMIC APPOINTMENTS
HONORS AND AWARDS
<u>Distinguished and Career Recognition</u>
Article and Book Awards
Top Paper Awards
Software Awards
Advisee Dissertation Awards
<u>PUBLICATIONS</u>
<u>Patents</u>
<u>Books</u>
Refereed Journal Articles
Book Chapters
Encyclopedia Entries and Short Essays
Book Reviews
Conference Proceedings
Monographs and Technical Reports
SOFTWARE DEVELOPMENT
CURRENTLY FUNDED RESEARCH
PREVIOUSLY FUNDED RESEARCH
KEYNOTE ADDRESSES AND DISTINGUISHED LECTURES
INVITED COLLOQUIA/LECTURES
CONFERENCE PRESENTATIONS
<u>TEACHING</u>
Northwestern University
University of Illinois at Urbana-Champaign
Jones International University
University of Southern California
PROFESSIONAL SERVICE
Editorial Activities
Workshop/Conference Organizer/Program Planner
Membership in Professional Associations
Advisory Board Appointments & Elected Offices
Association Committee Appointments & Elected Offices

Grant and Foundation Committees

External University Appointments

SELECTED UNIVERSITY SERVICE

Northwestern University

University of Illinois, Urbana-Champaign

University of Southern California

PUBLIC SERVICE

Consulting Activities

Selected Publications for Media and Popular Press

EDUCATION

Ph.D., Communication, University of Southern California, 1987.

Dissertation Title: A Dynamic Reformulation of Perceptions of Equity: Their Organizational Antecedents and Outcomes

M. A., Communication, University of Southern California, 1986.

B. Tech. Electrical Engineering, Indian Institute of Technology, Madras (Chennai),

1983. ACADEMIC APPOINTMENTS

2007–present Jane S. & William J. White Professor of Behavioral Sciences

Departments of Communication Studies, Industrial Engineering and Management Sciences, Management and Organizations, and Computer Science (By courtesy) Northwestern University

2019 - present Faculty Associate at the Institute for Policy Research

2010 - 2021 Faculty at Transportation Center
Northwestern University

2001-2007 Professor of Speech Communication
University of Illinois at Urbana-Champaign

1993-2001 Associate Professor of Speech Communication
University of Illinois at Urbana-Champaign

1987-1993 Assistant Professor of Speech Communication
University of Illinois at Urbana-Champaign

Other Appointments at University of Illinois at Urbana-Champaign:

- Director, Computing and Instructional Laboratories, Department of Speech Communication, 1987-2007
 - Director, Team Engineering Collaboratory, Department of Speech

Communication, 1991-2007

- Faculty, Department of Psychology, 1994–2007
 - Affiliate, Human Perception and Performance Group,

Return to content page ↑

Human-Computer Intelligent Interaction, Beckman Institute for Advanced Science and Technology, 2000-2007

- Beckman Associate, UIUC Center for Advanced Study, 2003-2004
- Faculty, Coordinated Science Laboratory, 2003-2007
- Director, Science of Networks in Communities (SONIC) Group, at the National Center for Supercomputing Applications, 2004-2007
- Resident Associate, UIUC Center for Advanced Study, 2005-2006
- Faculty, Graduate School of Library & Information Science, 2006-2007

HONORS AND AWARDS

Distinguished and Career Recognition

Executive Director, Web Science Trust, 2024-present

President, International Communication Association, 2022-2023

Fellow, Academy of Management, 2023

Fellow, Network Science Society, 2022.

Georg Simmel Award, International Network for Social Network Analysis (INSNA), 2022.

Fellow, The Association for Computing Machinery (ACM), 2019.

Fellow, American Association for the Advancement of Science (AAAS), 2019.

Lifetime Service Award, Organizational Communication and Information Systems Division, Academy of Management, 2019.

Distinguished Speaker Award, Organizational Communication and Information Systems Division, Academy of Management, 2019.

Distinguished Alumnus Award, Indian Institute of Technology, Madras, 2018.

Fellow, International Communication Association, 2015.

- Distinguished Scholar Award, National Communication Association, 2014.
- Outstanding Member Award, Organizational Communication Division, International Communication Association, 2000.
- Institute Gold Medal, in recognition of outstanding overall achievement during pursuit of Bachelor of Technology degree, Indian Institute of Technology, Madras, India, 1983.

Article and Book Awards

- Randall Harrison Outstanding Article Award (2022), Information Systems Division, International Communication Association
- Article of the Year Award (2021), Honorable Mention, Organizational Communication Division, National Communication Association
- Bill Eadie Distinguished Scholarly Article Award (2021), Applied Communication Division,
 National Communication Association, for "Organizational and individual innovation
 decisions in an interorganizational system: Social influence and decision-making
 authority" in Journal of Communication, 70(4), 497-521
- Bill Eadie Distinguished Scholarly Article Award (2021), Applied Communication Division,
 National Communication Association, for "Organizational and individual innovation
 decisions in an interorganizational system: Social influence and decision-making
 authority" in Journal of Communication, 70(4), 497-521
- Fellows Book Award (2021), International Communication Association, for <u>Theories of</u> <u>Communication Networks</u> (New York: Oxford University Press, 2003)
- Article of the Year Award (2015), Communication Theory and Methodology Division, Association for Education in Journalism and Mass Communication, for "Dynamic models of communication in an online friendship network" in Communication Methods and Measures 8 (2014): 223-243
- Outstanding Scholarly Edited Book Award (2014), Organizational Communication Division,
 National Communication Association, for "Emergence of multidimensional social
 networks" in Handbook of Organizational Communication, edited by Linda L. Putnam
 and Dennis Mumby (Thousand Oaks, CA: Sage, 2014), 451-474
- Ernest Bormann Research Book Award (2013), Group Communication Division, National Communication, for "<u>Understanding groups from a network perspective"</u> in Research methods for studying groups and teams: A Guide to approaches, tools, and technologies,

- edited by Marshall Scott Poole and Andrea Hollingshead (New York: Taylor & Francis/Routledge, 2012), 284-310
- Article of the Year Award (2012), Organizational Communication Division, National Communication Association, for "A structurational approach to the evolution of organizational networks" in Human Communication Research 37 (2011): 404-433
- Ernest Bormann Research Award (2006), Group Communication Division, National Communication Association for "The network perspective on small groups: Theory and research" in Theories of small groups: Interdisciplinary perspectives, edited by Marshall Scott Poole and Andrea Hollingshead (Newbury Park, CA: Sage, 2005), 277-312

Outstanding Book Award (2003), Organizational Communication Division, National Communication Association, for <u>Theories of Communication Networks</u> (New York: Oxford University Press, 2003)

Top Paper Awards

- Top 4 Paper Award (2021), Organizational Communication Division, International Communication Association, for Gómez-Zará, D., DeChurch, L. A., & Contractor, N. (2021, May). Do I Know You? The Effects of Social Capital on Self-Assembled Groups. Paper presented at the 71st Annual International Communication Association (ICA) Conference, Virtual.
- Top 4 Paper Award (2020), Group Communication Division, National Communication Association, for Wang, Y., Zhang, J., Ding, Z., DeChurch, L. A., & Contractor, N. S. (2020, November). *Dynamics of processes and performance of teams using enterprise social media*. Paper presented at the 106th Annual Convention of the National Communication Association (NCA), Virtual.
- Honorable Mention Award (2020) for Gómez-Zará, D., Guo, M., DeChurch, L. A., & Contractor, N. (2020, April). <u>How displaying team diversity information influences preferences for heterophily.</u> *In Proceedings of the 2020 ACM Conference on Human Factors in Computing Systems (CHI'20)*, Honolulu, HI.
- Best Paper Award and Best Social Entrepreneurship Paper Award (2019), Entrepreneurship Division, Academy of Management, for *Where does innovation come from? Exploring the dynamic processes of organizing and managing social entrepreneurship and innovation.* Paper presented at the Academy of Management Annual Conference, Boston, MA.
- Top 4 Paper Award (2017), Organizational Communication Division, International Communication Association, for Fu, J. S., Shumate, M., & Contractor, N. S. (2017, May). Collective innovation adoption across interorganizational systems: Organizational boundary, social networks, and decision-making status. Paper presented at the 67th

- Annual Conference of the International Communication Association, San Diego, CA.
- Top Paper Award (2016), for Wang, M., Huang, Y., Contractor, N., Fu. Y., & Chen, W. (2016, May).

 A network approach for understanding and analyzing product co-consideration relations in engineering design. Paper presented at the 14thInternational Design Conference, Cavtat-Dubrovnick, Croatia.
- Top Paper Award (2015), for Murase, T., Asencio, R., McDonald, J., Poole, M. S., DeChurch, L. A., & Contractor, N. S. (2015, November). The effect of entrainment of group processes on multiteam system effectiveness. Paper presented at the Annual Convention of the National Communication Association (NCA), Las Vegas.

- Best Conference Poster Award (2015), for Asencio, R., Huang, Y., DeChurch, L., Contractor, N., Sawant, A., & Murase, T. (2015, July). The MyDreamTeam builder: A recommender system for assembling & enabling effective teams. Poster presented at the Interdisciplinary Network Conference for Group Research (INGRoup) Annual Conference, Pittsburgh, PA.
- Top Paper Award (2013), for "McCusker, J. P., Shaikh, A., Contractor, N., Courtney, P., Lee, J., Morgan, G., Tatalovich, Z., Thomas, C., & L. McGuinness, D. L. (2013). Towards next generation health data exploration: A data cube-based investigation into population statistics for tobacco IT innovation. *Proceedings of the Hawaii International Conference On System Sciences (HICSS)*.
- Top Paper Award (2011), for Keegan, B., Ahmed, M. A., Williams, D., Srivastava, J., & Contractor, N. (2011, June). Sic transit gloria mundi virtuali? Promise and peril in the computational social science of clandestine organizing, ACM Web Science Conference 2011, Koblenz, Germany.
- Top 3 Paper Award (2011), Organizational Communication Division, International Communication Association, for Huang, M., Barbour, J., Su, C., & Contractor, N. S. (2010, June). Why would you save your files in a group folder? A multilevel analysis of contextual influences on information provision to work group digital databases. 60th Annual Conference of the International Communication Association, Singapore.
- Carolyn Dexter Paper Award Finalist (2010), for Huang, M., Huang, Y., Ognyanova, K., Margolin, D., Shen, C., & Contractor, N. S. (2010, August). The effects of diversity and repeat collaboration on team performance in distributed nanoscientist teams, Academy of Management Annual Conference, Montreal, Canada.
- Top Paper Award (2009), for Wang, J., & Contractor, N. (2009, July). *Knowledge seeking and provision in work teams across multiple knowledge areas: A network formulation to test and extend transactive memory theory,* Fourth Annual INGRoup Conference, Colorado Springs, CO.

- Top 3 Paper Award (2008), for Whitbred, R., Fonti, F., Contractor, N., & Steglich, C. (2008, November). From micro-actions to macro-structure: A structurational approach to the evolution of organizational networks. 94th Annual Convention of the National Communication Association (NCA), San Diego, CA.
- Top 3 Paper Award (2000), Organizational Communication Division, International Communication Association, for Contractor, N., Wasserman, S., & Faust, K. (2000, June). Testing multi-level, multi-theoretical hypotheses about networks in 21st century organizational forms: An analytic framework and empirical example. International Communication Association annual convention, Acapulco, Mexico.

- Top 3 Paper Award (1998), International Communication Association, for Contractor, N. S., Whitbred, R., Fonti, F., Hyatt, A., Jones, P., & O'Keefe, B. (1998, July). Self-organizing communication networks in organizations: Validation of a computational model using exogenous and endogenous theoretical mechanisms. Paper presented at the meeting of the International Communication Association, Jerusalem, Israel.
- Top 3 Paper Award (1997), for Hyatt, A., Contractor, N., & Jones, P. M. (1997, May).

 Computational organizational network modeling: Strategies and an example. Paper presented at the meeting of the International Communication Association, Montreal, Canada.
- Top 3 Paper Award (1988), Organizational Communication Division, International Communication Association, for Eisenberg, E. M., Contractor, N. S., & Monge, P. R. (1988). Semantic networks in organizations. Paper presented at the Annual Conference of the International Communication Association, New Orleans, LA.

Software Awards

Honorable Mention, IMS Global Consortium Learning Impact Award (2017), Nebula

Advisee Dissertation Awards

- Dissertation Committee, Sophia Fu, Winner of the 2020 Outstanding Dissertation Research, Association for Chinese Communication Studies
- Dissertation Committee, Sophia Fu, Winner of the Gabriel G. Rudney Memorial Award for Outstanding Dissertation in Nonprofit and Voluntary Action Research, Association for Research on Nonprofit Organizations and Voluntary Action, 2020
- Dissertation Committee, Sophia Fu, Winner of the W. Charles Redding Dissertation Award, International Communication Association, 2019

- Dissertation Committee, Sophia Fu, Winner of the Gerald R. Miller Outstanding Dissertation Award, National Communication Association, 2019
- Dissertation Adviser, Jacqueline Ng, Best Dissertation Award Finalist, Technology & Innovation Management Division, Academy of Management, 2019.
- Dissertation Adviser, Aaron Schecter, Hackman Outstanding Dissertation Award, Interdisciplinary Network of Group Research (INGRoup), 2018.
- Dissertation Committee, Sophia Fu, Winner of the Doctoral Dissertation Research Improvement Grant, Decision, Risk, and Management Sciences Division, National Science Foundation, 2017

- Dissertation Adviser, Jacqueline Ng, Finalist at the Institute for Operations Research and Management Science (INFORMS) Organization Science Dissertation Proposal Competition, 2017.
- Dissertation Adviser, Alina Lungeanu, Graduate Dissertation Award, Northwestern University School of Communication, 2016.
- Dissertation Adviser, Sophia Sullivan, Finalist, Alvah H. Chapman Jr. Outstanding Dissertation Award, Network of Leadership Scholars of the Academy of Management, 2015.
- Dissertation Adviser, Mengxiao Zhu, Honorable Mention, Richard Hackman Dissertation Award, Interdisciplinary Network for Group Research (INGRoup), 2014.
- Dissertation Adviser, Brooke Foucault-Welles, Special Mention Recognition for Dissertation, Communication & Technology Division, International Communication Association, 2013.
- Dissertation Co-Adviser, David Huffaker, Winner of the Dordick Dissertation Award, Communication & Technology Division, International Communication Association, 2010.
- Dissertation Adviser, Edward Palazzolo, Honorable Mention, Redding Dissertation Award Competition, Organizational Communication Division, International Communication Association, 2004.

PUBLICATIONS

Patents

Contractor, N., Gado, H., & Sawant, A. (2020). Systems and Methods for Automatically Identifying Specific Teams of Users to Solve Specific and Real-Time Problems. *U.S. Patent No. 10,795,896.* Evanston, IL: U.S. Patent and Trademark Office.

Books

- National Academies of Sciences, Engineering, and Medicine, Division of Behavioral and Social Sciences and Education, Board on Behavioral, Cognitive, and Sensory Sciences, & Committee on a Decadal Survey of Social and Behavioral Sciences for Applications to National Security. (2019). A Decadal Survey of the Social and Behavioral Sciences: A Research Agenda for Advancing Intelligence Analysis. National Academies Press.
- Ahmad, M. A., Shen, C., Srivastava, J., and Contractor, N. S. (Eds.). (2014). <u>Predicting real world behaviors from virtual worlds data.</u> Cham: Springer International Publishing.
- O'Hara, K., Contractor, N. S., Hall, W., Hendler, J. A., & Shadbolt, N. (2013). Web Science:

 <u>Understanding the emergence of macro-level features on the World Wide Web.</u> Now Foundations and Trends®, 4(2-3), 103-267. doi:10.1561/1800000017

Return to content page ↑

- Steinfield, C., Pentland, B. T., Ackerman, M., & Contractor, N. (Eds.) (2007). Communities and Technologies 2007. Proceedings of the Third Communities and Technologies Conference, London: Springer London.
- Monge, P. R., & Contractor, N. (2003). *Theories of communication networks*. New York: Oxford University Press.

Refereed Journal Articles

- Lane, J. N., Leonardi, P. M., Contractor, N. S., & DeChurch, L. A. (2023). <u>Teams in the Digital Workplace: Technology's Role for Communication, Collaboration, and Performance.</u>
 Small Group Research, 0(0).
- Harris-Watson, A. M., Larson, L. E., Lauharatanahirun, N., DeChurch, L. A., & Contractor, N. S. (2023). <u>Social Perception in Human-AI Teams: Warmth and competence predict receptivity to AI teammates.</u> *Computers in Human Behavior*, 107765.
- Sha, Z., Cui, Y., Xiao, Y., Xiao, Y., Stathopoulos, A., Contractor, N., Du, Y., & Chen, W. (2023). <u>A network-based discrete choice model for decision-based design.</u> *Design Science*, 9, e7.
- Lungeanu, A., Whalen, R., Wu, Y. J., DeChurch, L. A., & Contractor, N. S. (2022). <u>Diversity, networks, and innovation: A text analytic approach to measuring expertise diversity.</u>

 Network Science, 1-29. doi:10.1017/nws.2022.34

- Schecter, A., Hohenstein, J., Larson, L., Harris, A., Hou, T. Y., Lee, W. Y., ... & Jung, M. (2023). <u>Vero: An accessible method for studying human—AI teamwork.</u> *Computers in Human Behavior*, *141*, 107606.
- Gómez-Zará, D., Das, A., Pawlow, B., & Contractor, N. (2022). <u>In search of diverse and connected teams: A computational approach to assemble diverse teams based on members' social networks.</u> *PloS one, 17*(11), e0276061.
- Lungeanu, A., Mesmer-Magnus, J. R., Niler, A. A., DeChurch, L. A., & Contractor, N. S. (2022).

 Organizing for Mars: A Task Management Perspective on Work within Spaceflight

 Multiteam Systems. *Human Factors*, 00187208221129939.

- Hsieh, K. Y., Xiao, P., Contractor, N., & Wang, L. (2022). <u>Online community's recognition and continued participation in idea competitions.</u> *Decision Sciences*. https://doi.org/10.1111/deci.12578
- Peters, E., Boyd, P., Cameron, L. D., Contractor, N., Diefenbach, M. A., Fleszar-Pavlovic, S., ... & Stephens, K. K. (2022). <u>Evidence-based recommendations for communicating the impacts of climate change on health</u>. *Translational Behavioral Medicine*, *12*(4), 543-553.
 - Lungeanu, A., DeChurch, L. A., & Contractor, N. S. (2022). <u>Leading teams over time through space: Computational experiments on leadership network archetypes.</u> The Leadership Quarterly, 101595. https://doi.org/https://doi.org/10.1016/j.leaqua.2021.101595
- Cui, Y., Ahmed, F., Sha, Z., Wang, L., Fu, Y., Contractor, N., & Chen, W. (2022). <u>A Weighted Statistical Network Modeling Approach to Product Competition Analysis</u>. *Complexity*, 2022.
- Rager, S., Leung, A., Pinegar, S., Mangels, J., Poole, M. S., & Dontractor, N. (2021). Groups, governance, and greed: The Access World Model. Computational and Mathematical Organization Theory. https://doi.org/10.1007/s10588-021-09352-x
- Das, A., Gómez-Zará, D., & Contractor, N. (2021). <u>Forming diverse teams based on members'</u> <u>social networks: A genetic algorithm approach. Studies in Computational Intelligence</u>, 346–357. https://doi.org/10.1007/978-3-030-65351-4 28

- Kaven, E., Kaven, I., Gómez-Zará, D., DeChurch, L., & Contractor, N. (2021). <u>Assessing how team task influences team assembly through network analysis. Studies in Computational Intelligence</u>, 322–334. https://doi.org/10.1007/978-3-030-65351-4_26
- Wu, Y. J., Antone, B., Srinivas, A., DeChurch, L., & Contractor, N. (2021). <u>Teamwork in the time of COVID-19: Creating, dissolving, and reactivating network ties in response to a crisis.</u> Journal of Applied Psychology, 106(10), 1483–1492. https://doi.org/10.1037/apl0000969
- Gomez-Zara, D., DeChurch, L. A., & Contractor, N. (2021). Do I know you? The effects of social capital on self-assembled groups. In *Academy of Management Proceedings* (Vol. 2021, No. 1, p. 14637). Briarcliff Manor, NY 10510: Academy of Management.
- Wagner, C., Strohmaier, M., Olteanu, A., Kiciman, E., Contractor, N. & Eliassi-Rad, T. (2021). <u>Measuring algorithmically infused societies</u>. *Nature* (2021). doi:10.1038/s41586-021-03666-1
- Lungeanu, A., McKnight, M., Negron, R., Munar, W., Christakis, N. A., & Contractor, N. S. (2021).

- <u>Using Trellis</u> software to enhance high-quality large-scale network data collection in the field. Social Networks, 66:171-184. doi:10.1016/j.socnet.2021.02.007
- Birkett, M., Melville, J., Janulis, P., Phillips, G., Contractor, N., & Hogan, B. (2021). <u>Network Canvas: Key decisions in the design of an interviewer-assisted network data collection software suite</u>. *Social Networks*, 66:114-124. <u>doi: 10.1016/j.socnet.2021.02.003</u>
- Schecter, A., Nohadani, O., Contractor, N. (2021). <u>A Robust Inference Method for Decision</u>

 <u>Making in Networks.</u> *Management Information Systems Quarterly, 46*(2),
 713-738.
- Bi, Y., Qiu, Y., Sha, Z., Wang, M., Fu, Y., Contractor, N., & Chen, W. (2021). Modeling Multi-Year

 <u>Customers' Considerations and Choices in China's Auto Market Using Two-Stage</u>

 <u>Bipartite Network Analysis.</u> Networks and Spatial Economics, 21, 365-385,

 <u>doi:10.1007/s11067-021-09526-9</u>
- Niler, A. A., Mesmer-Magnus, J. R., Larson, L. E., Plummer, G., DeChurch, L. A., & Contractor, N. S. (2020). <u>Conditioning team cognition: A meta-analysis</u>. *Organizational Psychology Review, 11*(2):144-174. doi.org/10.1177/2041386620972112
- Cedeno-Mieles, V., Hu, Z., Ren, Y., Deng, X., Contractor, N., Ekanayake, S., Epstein, J. M., Goode, B. J., Korkmaz, G., Ramakrishnan, C N., Saraf, P., & Self, N. (2020). <u>Data analysis and</u>

- modeling pipelines for controlled networked social science experiments. *PLoS ONE*, 15(11). doi: 10.1371/journal.pone.0242453
- Whalen, R., Lungeanu, A., DeChurch, L. A., & Contractor N. (2020). <u>Patent Similarity data and innovation metrics</u>. *Journal of Empirical Legal Studies*, *17*(3), 615-639. <u>doi:</u> 10.1111/jels.12261
 - Lazer, D. M. J., Pentland, A., Watts, D. J., Aral, S., Athey, S., Contractor, N., Freelon, D., Gonzalez-Bailon, S., King, G., Margetts, H., Nelson, A., Salganik, M. J., Strohmaier, M., Vespignani, A., & Wagner, C. (2020). <u>Computational social science: Obstacles and opportunities</u>. *Science*, *369*(6507), 1060–1062. <u>doi: 10.1126/science.aaz8170</u>
- Fu, J. S., Shumate, M., & Contractor, N. (2020). <u>Organizational and individual innovation</u> decisions in an interorganizational system: Social influence and decision-making <u>authority</u>. *Journal of Communication*, 70(4), 497-521. <u>doi.org/10.1093/joc/igaa018</u>
- Xie, J., Bi, Y., Sha, Z., Wang, M., Fu, Y., Contractor, N., Gong, L. & Chen, W. (2020). <u>Data-Driven Dynamic Network Modeling for Analyzing the Evolution of Product Competitions</u>. *Journal of Mechanical Design*, 142(3): 031112. <u>doi.org/10.1115/1.4045687</u>
- Mell, J. N., DeChurch, L. A., Contractor, N., & Leenders, R. (2020). <u>Identity asymmetries: An experimental investigation of social identity and information exchange in multiteam systems.</u> *Academy of Management Journal, 63*(5), 1561-1590. <u>doi:</u>
- Return to content page ↑

 10.5465/amj.2018.0325
- Cedeno-Mieles, V., Hu, Z., Ren, Y., Deng, X., Adiga, A., Barrett, C., Contractor, N., Ekanayake, S., Epstein, J. M., Goode, B. J., Korkmaz, G., Kuhlman, C. J., Machi, D., Macy, M. W., Marathe, M. V., Ramakrishnan, N., Ravi, S. S., Saraf, P., & Self, N. (2020). Networked experiments and modeling for producing collective identity in a group of human subjects using an iterative abduction framework. Social Network Analysis and Mining, 10(1), 11. https://doi.org/10.1007/s13278-019-0620-8
- Contractor, N. (2020). On Writing in Communication and Media Studies | A "Modest Proposal" on Writing That Is Not Modest Enough. International Journal Of Communication, 14, 4. https://ijoc.org/index.php/ijoc/article/view/13987/2921
- Hogan, B., Janulis, P., Phillips II, G., Melville, J., Mustanski, B., Contractor, N., & Birkett, M.(2019).

 <u>Assessing the stability of ego-centered networks over time using the digital</u>

 <u>participant-aided sociogram tool Network Canvas.</u> *Network Science*, 1-19. <u>doi:</u>

 10.1017/nws.2019.27
- Hilbert, M., Barnett, G., Blumenstock, J., Contractor, N., Diesner, J., Frey, S., González-Bailón, S., Lamberson, P.J., Pan, J., Peng, T. W., Shen, C. C., Smaldino, P. E., Atteveldt, W. V., Waldher, A.,

- Zhang, J., Zhu, J. J. H. (2019). <u>Computational communication science: A methodological catalyzer for a maturing discipline</u>. *International Journal of Communication, 13*(0), 23. https://ijoc.org/index.php/ijoc/article/view/10675
- Larson, L., Wojcik, H., Gokhman, I., DeChurch, L., Bell, S., & Contractor, N. (2019). <u>Team</u>
 <u>performance in space crews: Houston, we have a teamwork problem.</u> *Acta Astronautica*,
 161, 108–114. doi: 10.1016/j.actaastro.2019.04.052
- Kim, M. J., Lee, C., & Contractor, N. S. (2019). <u>Seniors' usage of mobile social network sites:</u>

 <u>Applying theories of innovation diffusion and uses and gratifications</u>. *Computers in Human Behavior*, *90*, 60-73. doi:10.1016/j.chb.2018.08.046
- Gómez-Zará, D., Andreoli, S., DeChurch, L. A., & Contractor, N. S. (2019). <u>Descubriendo</u> colaboradores en línea: Formando equipos interdisciplinarios en una universidad <u>argentina</u>. <u>Cuadernos</u>. info, 0(44), 21–41
- Mukherjee, S., Huang, Y., Neidhardt, J., Uzzi, B., Contractor, N., (2019). <u>Prior shared success predicts victory in team competitions.</u> *Nature Human Behaviour, 3*, 74-81. doi:10.1038/s41562-018-0460-y
- Leonardi, P., & Contractor, N. S. (2018, Nov-Dec). <u>Better people analytics: Measure who they know, not just who they are</u>. *Harvard Business Review,* 70–81. https://hbr.org/2018/11/better-people-analytics#comment-section
- Lungeanu, A., Carter, S. R., DeChurch, L. A., & Contractor, N. S. (2018). How team interlock

- ecosystems shape the assembly of scientific teams: A hypergraph approach. *Communication Methods and Measures, 12*(2-3), 174-198. doi:10.1080/19312458.2018.1430756
- Sha, Z., Huang, Y., Fu, J. S., Wang, M., Fu, Y., Contractor, N., & Chen, W. (2018). <u>A network-based approach to modeling and predicting product co-consideration relations</u>. *Complexity*, 2018(3), 1–14. https://doi.org/10.1080/19312458.2018.1430756
- Hendler, J. A., Hall, W., & Contractor, N. (2018). <u>Web science: Now more than ever</u>. IEEE Computer, *51*(6), 12–17. <u>doi:10.1109/MC.2018.2701637</u>
- Schecter, A., Pilny, A., Leung, A., Poole, M. S., & Contractor, N. (2017). <u>Step by step: Capturing the dynamics of work team process through relational event sequences</u>. *Journal of Organizational Behavior*, 2017, 1–19. <u>https://doi.org/10.1002/job.2247</u>
- Wax, A., DeChurch, L., & Contractor, N. (2017). <u>Self-organizing into winning teams:</u>
 <u>Understanding the mechanisms that drive successful collaborations.</u> *Small group*

- research, 48(6), 665-718. doi:10.1177/1046496417724209
- Norton, W. E., Lungeanu, A., Chambers, D. A., & Contractor, N. (2017). <u>Mapping the growing discipline of dissemination and implementation science in health</u>. *Scientometrics*, 112(3), 1367–1390. doi:10.1007/s11192-017-2455-2.
- Wang, M., Chen, W., Huang, Y., Contractor, N. S. and Fu, Y. (2016). <u>Modeling customer preferences using multidimensional network analysis in engineering design</u>. *Design Science*, *2*, 2012-2028. doi:10.1017/dsj.2016.11.
- Pilny, A., Schecter, A., Poole, M. S., & Contractor, N. (2016). <u>An illustration of the relational event model to analyze group interaction processes</u>. *Group Dynamics: Theory, Research, and Practice:*Special Issue on Statistical Methods, *20*(3), 181-195. doi:10.1037/gdn0000054
- Ghasemian, F., Zamanifar, K., Ghasem-Aqaee, N., & Contractor, N. (2016). <u>Toward a better</u> <u>scientific collaboration success prediction model through the feature space expansion.</u> *Scientometrics*, *108*(2), 777-801. doi: 10.1007/s11192-016-1999-x
- Leenders, R. T. A. J., Contractor, N. S., & DeChurch, L. A. (2016). <u>Once upon a time:</u>

 <u>Understanding team processes as relational event networks</u>. *Organizational Psychology Review*, *6*(1), 92–115. doi: 10.1177/204138661557831
- Zhang, C., Phang, C. W., Zeng, X., Wang, X., Xu, Y., Huang, Y., & Contractor, N. (2015). <u>Circadian rhythms in socializing propensity</u>. *PLoS ONE*, *10*(9), e0136325. doi: 10.1371/journal.pone.0136325
- Carter, D. R., Asencio, R., Wax, A., DeChurch, L. A., & Contractor, N. S. (2015). <u>Little teams, big data: Big data provides new opportunities for teams theory.</u> *Industrial and*
- Return to content page ↑

 Organizational Psychology, 8(4), 550-555. doi: 10.1017/iop.2015.82
- Tiropanis, T., Hall, W., Crowcroft, J., Contractor, N., & Tassiulas, L. (2015). <u>Network science, web science and internet science: Comparing interdisciplinary areas</u>. *Communications of the ACM*, *58*(8), 76-82. doi:10.1145/2699416
 - Foucault Welles, B., & Contractor, N. S. (2015). <u>Individual motivations and network effects: A multi-level analysis of the structure of online social relationships</u>. *Annals of the American Academy of Political and Social Science, 659,* 180-190. doi: 10.1177/0002716214565755
- Carter, D., DeChurch, L. A., Braun, M., & Contractor, N. (2015). <u>Social network approaches to leadership: An integrative conceptual review</u>. *Journal of Applied Psychology, 100*(3), 597. doi:10.1037/a0038922
- Sullivan, S. D., Lungeanu, A., DeChurch, L. A., & Contractor, N. S. (2015). <u>Space, time, and the</u> development of shared leadership networks in multiteam systems. *Network Science*,

- Contractor, N. S., & DeChurch, L. A. (2014). <u>Integrating social networks and human social</u> motives to achieve social influence at scale. *Proceedings of the National Academy of Sciences*, *111*(Supplement 4), 13650–13657.
- Foucault Welles, B., Vashevko, A., Bennett, N., & Contractor, N. (2014). <u>Dynamic models of communication in an online friendship network.</u> *Communication Methods and Measures*, 8(4), 223-243. doi:10.1080/19312458.2014.967843
- Lungeanu, A., & Contractor, N. S. (2014). <u>The effects of diversity and network ties on innovations: The emergence of a new scientific field</u>. *American Behavioral Scientist*, 59(5), 548-564. doi:10.1177/0002764214556804
- Foucault Welles, B., Rousse, T., Merrill, N., & Contractor, N. (2014). <u>Virtually friends: An exploration of friendship claims and expectations in immersive virtual worlds</u>. *Journal for Virtual Worlds Research*, 7(2), 1-15.https://doi.org/10.4101/jvwr.v7i2.7024
- Lungeanu, A., Huang, Y., & Contractor, N. S. (2014). <u>Understanding the assembly of interdisciplinary teams and its impact on performance</u>. *Journal of Informetrics*, 8(1), 59–70.doi: 10.1016/j.joi.2013.10.006
- Tiropanis, T., Hall, W., Shadbolt, N., De Roure, D., Contractor, N., & Hendler, J. (2013). <u>The Web Science Observatory</u>. *Intelligent Systems, IEEE, 28*(2), 100–104. doi:10.1109/MIS.2013.50
- Huang, M., Barbour, J., Su, C., & Contractor, N. (2013). Why do group members provide information to digital knowledge repositories? A multilevel application of transactive memory theory. Journal of the American Society for Information Science and Technology, 64(3), 540-557. https://doi.org/10.1002/asi.22805

- Contractor, N. (2013). <u>Some assembly required: Leveraging Web science to understand and enable team assembly.</u> *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences, 371*(1987), 20120385–20120385. doi:10.1098/rsta.2012.0385
- Zhu, M., Huang, Y., & Contractor, N. S. (2013). <u>Motivations for self-assembling into project</u> <u>teams.</u> *Social Networks*, *35*(2), 251–264.https://doi.org/10.1016/j.socnet.2013.03.001
- Huang, Y., Shen, C., & Contractor, N. (2013) <u>Distance matters: Exploring proximity and homophily in virtual world networks</u>. *Decision Support Systems*, *55*(4), 969–977. https://doi.org/10.1016/j.dss.2013.01.006
- Keegan, B., Gergle, D., & Contractor, N. (2013). <u>Hot off the Wiki: Structures and dynamics of Wikipedia's coverage of breaking news events.</u> *American Behavioral Scientist, 57*(5), 595-622. https://doi.org/10.1177/0002764212469367

- Contractor, N. S., DeChurch, L. A., Carson, J. B., Carter, D., & Keegan, B. (2012). <u>The topology of collective leadership</u>. *The Leadership Quarterly, 23*(6), 994-1011.https://doi.org/10.1016/j.leaqua.2012.10.010
 - Contractor, N. S., Whitbred, R. C., Fonti, F., & Steglich, C. (2012). <u>Understanding the ties that bind: A longitudinal investigation of the evolution of a communication network.</u> *Western Journal of Communication*, *76*(4), 333-357. doi: 10.1080/10570314.2012.674172
- Schatz, B., Marsh, C., Gustafson, D., Patrick, K., Krishnan, J., Kumar, S., & Contractor, N. (2012).

 Research challenges in measuring data for population health to enable predictive modeling for improving healthcare. ACM SIGHIT Record, 2(2), 36–41.doi: 10.1145/2384556.2384561
- Mathur, S., Poole, M. S., Peña-Mora, F., Hasegawa-Johnson, M., & Contractor, N. (2012). <u>Detecting interaction links in a collaborating group using manually annotated data.</u> *Social Networks*, *34*(4), 515–526. https://doi.org/10.1016/j.socnet.2012.04.002
- Murase, T., Doty, D., Wax, A., DeChurch, L. A., & Contractor, N. S. (2012). <u>Teams are changing.</u> <u>time to "think networks."</u> *Industrial and Organizational Psychology: Perspectives on Science & Practice*, 5, 41-44.https://doi.org/10.1111/j.1754-9434.2011.01402.x
- van de Wijngaert, L., Bouwman, H., & Contractor, N. (2012). <u>A network approach toward literature review.</u> *Quality & Quantity, 48*(2), 623–643. https://doi.org/10.1007/s11135-012-9791-3
- Zhang, Z., Zhang, Z., Jain, R., Zhuang, Y., Contractor, N., ... Hauptmann, A. G. (2012). Societally connected multimedia across cultures. Journal of Zhejiang University Science C, 13(12), 875–880. doi:10.1631/jzus.C1200279

- Keegan, B., Ahmad, M. A., Williams, D., Srivastava, J., & Contractor, N. (2011). What can gold farmers teach us about criminal networks? XRDS: Crossroads, The ACM Magazine for Students, 17(3), pp. 11-15. http://doi.acm.org/10.1145/1925041.1925043
- Williams, D., Contractor, N., Poole, M. S., Srivastava, J., & Cai, D. (2011). <u>The virtual worlds exploratorium: Using large-scale data and computational techniques for communication research.</u> *Communication Methods and Measures, 5*(2), 163-180. https://doi.org/10.1080/19312458.2011.568373
- Wang, J., Huffaker, D. A., Treem, J. W., Fullerton, L., Ahmad, M. A., Williams, D., Poole, M. S., & Contractor, N. (2011). Focused on the prize: Characteristics of experts in massive multiplayer online games. First Monday, 16(8).https://doi.org/10.5210/fm.v16i8.3672
- Whitbred, R., Fonti, F., Steglich, C., & Contractor, N. (2011). <u>From microactions to macrostructure and back: A structurational approach to the evolution of organizational</u>

- <u>networks.</u> *Human Communication Research, 37*(3), 404-433. https://doi.org/10.1111/j.1468-2958.2011.01404.x
- Castells, M., Monge, P., & Contractor, N. (2011). <u>Prologue to the special section: Network multidimensionality in the digital age</u>. *International Journal of Communication*, *5*, 6.https://ijoc.org/index.php/ijoc/article/view/1103
 - Contractor, N., Monge, P., & Leonardi, P. M. (2011). <u>Multidimensional networks and the dynamics of sociomateriality: Bringing technology inside the network.</u> *International Journal of Communication*, *5*, 39. https://ijoc.org/index.php/ijoc/article/view/1131
- Su, C., & Contractor, N. (2011). <u>A multidimensional network approach to studying team</u>
 members' information seeking from human and digital knowledge sources in consulting firms. Journal of the American Society for Information Science and Technology, 62(7), 1257-1275. https://doi.org/10.1002/asi.21526
 - Falk-Krzesinski, H. J., Contractor, N., Fiore, S. M., Hall, K. L., Kane, C., Keyton, J., Klein, J., Spring, B., Stokols, D., & Trochim, W. (2011). Mapping a research agenda for the science of team science. Research Evaluation, 20(2), 145-158. doi:10.3152/095820211X12941371876580
- Falk-Krzesinski, H. J., Börner, K., Contractor, N., Fiore, S. M., Hall, K. L., Keyton, J., Spring, B., Stokols, D., Trochim, W., & Uzzi, B. (2010). <u>Advancing the science of team science</u>. *Clinical and Translational Sciences*, *3*(5), 263-266. doi:10.1111/j.1752-8062.2010.00223.x
- Börner, K., Contractor, N., Falk-Krzesinski, H. J., Fiore, S. M., Hall, K. L., Keyton, J., Spring, B., Stokols, D., Trochim, W., & Uzzi, B. (2010). <u>A multi-level systems perspective for the science of team science.</u> *Science Translational Medicine, 2*(49), 24-49. doi: 10.1126/scitranslmed.3001399

- Tian, Y., Srivastava, J., Huang, T., & Contractor, N. (2010). <u>Social multimedia computing.</u> *Computer, 43*(8), 27-36. doi:10.1109/MC.2010.188
- Mahmassani, H. S., Chen, R. B., Huang, Y., Williams, D., & Contractor, N. (2010). <u>Time to play?</u>

 <u>Activity engagement in multiplayer online role-playing games</u>. *Transportation Research Record: Journal of the Transportation Research Board, 2157*(1), 129-137.

 doi:10.3141/2157-16
- Su, C., Huang, M., & Contractor, N. (2010). <u>Understanding the structures, antecedents and outcomes of organisational learning and knowledge transfer: A multi-theoretical and multilevel network analysis</u>. *European Journal of International Management, 4*(6), 576-601.
- Yuan, C., Fulk, J., Monge, P., & Contractor, N. (2010). <u>Expertise directory development, shared</u> task interdependence, and strength of communication network ties as multilevel

- predictors of expertise exchange in transactive memory work groups. Communication Research, 37(1), 20-47. doi: 10.1177/009365020351469.
- Varda, D., Forgette, R., Banks, D., & Contractor, N. (2009). <u>Social network methodology in the study of disasters: Issues and insights prompted by post-Katrina research.</u> *Population Research & Policy Review, 28*(1), 11-29. https://doi.org/10.1007/s11113-008-9110-9
- Contractor, N. (2009). <u>The emergence of multidimensional networks</u>. *Journal of Computer-Mediated Communication, 14*(3), 743–747. doi: 10.1111/j.1083-6101.2009.01465.x
- Lazer, D., Pentland, A., Adamic, L., Aral, S., Barabasi, A. L., Brewer, D., Christakis, N., Contractor, N., Fowler, J., Gutman, M., Jebara, T., King, G., Macy, M., Roy, D., & Van Alstyne, M. (2009). <u>Life in the network: The coming age of computational social science</u>, *Science*, *323* (5915), 721-723. doi:10.1126/science.1167742
- Contractor, N., Wasserman, S., & Faust, K. (2006). <u>Testing multitheoretical, multilevel</u>
 <a href="https://example.com/https:/
- Palazzolo, E. T., Serb, D., She, Y., Su, C., & Contractor, N. S. (2006). <u>Coevolution of communication and knowledge networks in transactive memory systems: Using computational models for theoretical development.</u> *Communication Theory, 16*(2), 223-250.
- Katz, N., Lazer, D., Arrow, H., & Contractor, N. (2004). <u>Network theory and small groups</u>. *Small Group Research*, *35*(3), 307-332.
- Contractor, N. S., & Monge, P. R. (2002). <u>Managing knowledge networks.</u> *Management Communication Quarterly, 16*(2), 249-258.

- Fesenmaier, J., & Contractor, N. (2001). <u>The evolution of knowledge networks: An example for rural development</u>. *The Journal of the Community Development Society, 32*(1), 160-175.
- Pollock, T., Whitbred, R. A., & Contractor, N. (2000). <u>Social information processing and job characteristics: A simultaneous test of two theories with implications for job satisfaction.</u> *Human Communication Research*, *26*(2), 292-330.
- Contractor, N. S. (1999). <u>Self-organizing systems research in the social sciences: Reconciling the metaphors and the models</u>. *Management Communication Quarterly*, *13*(1), 154–166.
- Heald, M., Contractor, N., Koehly, L. M., & Wasserman, S. (1998). <u>Formal and emergent predictors of coworkers' perceptual congruence on an organization's social structure.</u> *Human Communication Research*, 24(4), 536-563.

- Ehrlich, M. C., & Contractor, N. S. (1998). "Shock" meets "community service": J.C. Corcoran at KMOX. Journal of Radio Studies 5(1), 22-35.
- Hyatt, A., Contractor, N., & Jones, P. M. (1997). <u>Computational organizational network</u> <u>modeling: Strategies and an example.</u> *Computational and Mathematical Organizational Theory*, *2*(4), 285-300.
- Contractor, N. S., Seibold, D. R., & Heller, M. A. (1996). <u>Interactional influence in the structuring of media use in groups: Influence of members' perceptions of group decision support system use</u>. *Human Communication Research*, 22(4), 451-481.
- Contractor, N. S., & Seibold, D. R. (1993). <u>Theoretical frameworks for the study of structuring processes in group decision support systems: Adaptive structuration theory and self-organizing systems theory.</u> *Human Communication Research, 19*(4), 528-563.
- Contractor, N., & Ehrlich, M. (1993). <u>Strategic ambiguity in the birth of a loosely coupled organization: The case of a \$50-million experiment.</u> *Management Communication Quarterly, 6*(3), 251-281.
- Michaelson, A., & Contractor, N. (1992). <u>Structural position and perceived similarity.</u> *Social Psychology Quarterly, 55*(3), 300-310.
- Monge, P. R., Cozzens, M. D., & Contractor, N. S. (1992). <u>Communication and motivational predictors of the dynamics of organizational innovation</u>. *Organization Science*, *3*(2), 250-274.
- Waterman, D., Schechter, R., & Contractor, N. (1991). <u>Overcoming barriers to the live arts: Can the media compensate?</u>. *Journal of Cultural Economics*, *15*(2), 19-40.
- Rice, R., & Contractor, N. S. (1990). Conceptualizing effects of office information systems: A

- methodology and application for the study of alpha, beta and gamma change. Decision Science, 21(2), 301-317.
- Contractor, N. S., Singhal, A., & Rogers, E. M. (1988). <u>Metatheoretical perspectives on satellite</u> <u>television and development in India.</u> *Journal of Broadcasting & Electronic Media, 32*(2), 129-148.
- Cozzens, M. D., & Contractor, N. S. (1987). <u>The effect of conflicting information on media skepticism.</u> *Communication Research, 14*(4), 437-451.
- Contractor, N. S., Fulk, J., Monge, P. R., & Singhal, A. (1986). <u>Cultural assumptions that influence</u>

- the implementation of communication technologies. Vikalpa, 11(4), 287-300.
- Twyman, M., Newman, D. A., DeChurch, L., & Contractor, N. (2022). <u>Teammate invitation</u> <u>networks: The roles of recommender systems and prior collaboration in team assembly.</u> *Social networks, 68,* 84-96.

Book Chapters

- Chen, W., Ahmed, F., Cui, Y., Sha, Z., & Contractor, N. (2022). <u>Data-Driven Preference Modelling in Engineering Systems Design</u>. In *Handbook of Engineering Systems Design* (pp. 1-34). Cham: Springer International Publishing.
 - Jones, J. M., Carter, D. R., & Contractor, N. S. (2022). <u>A Network Approach to Studying Team Functioning</u>. In Stephenson J. Beck, Joann Keyton, Marshall Scott Poole (Ed.), *The Emerald Handbook of Group and Team Communication Research* (pp. 89–108). Emerald.
- Pendergraft, J. G., Carter, D. R., Trainer, H. M., Jones, J. M., Schecter, A., Shuffler, M. L.,
 DeChurch, L., Contractor, N. (2020). <u>Supporting Spaceflight Multiteam Systems</u>
 <u>throughout Long-Duration Exploration Missions: A Countermeasure Toolkit</u>. In L. Landon,
 S. Kelley, & E. Salas (eds.), Psychology and Human Performance in Space Programs,
 Research at the Frontier. Abingdon, UK: CRC Press.
- Mesmer-Magnus, J., Lungeanu, A., Harris, A., Niler, A., DeChurch, L. A., Contractor, N. (2020).

 <u>Working in Space: Managing Transitions between Tasks.</u> In L. Landon, S. Kelley, & E. Salas (Eds.), *Psychology and Human Performance in Space Programs, Extreme Application*. (pp. 179-203): CRC Press.
- Antone, B., Lungeanu, A., Bell, S. T., De Church, L. A., & Contractor, N. (2020). <u>Computational Modeling of Long-Distance Space Exploration: A Guide to Predictive and Prescriptive Approaches to the Dynamics of Team Composition</u>. In L. Landon, S. Kelley, & E. Salas (Eds.), *Psychology and Human Performance in Space Programs, Research at the Frontier*. (pp. 107-130): CRC Press
- Contractor, N. (2019). How can computational social science motivate the development of

- theories, data, and methods to advance our understanding of communication and organizational dynamics?. In Foucault Welles, B. & González-Bailón, S. (Eds.), *The Oxford Handbook of Networked Communication*. https://doi.org/10.1093/oxfordhb/9780190460518.013.7
- Twyman, M., & Contractor, N. (2019). <u>Team Assembly</u>. In K. L. Hall, A. L. Vogel, & R. T. Croyle (Eds.), Strategies for Team Science Success: Handbook of Evidence-Based Principles for Cross-Disciplinary Science and Practical Lessons Learned from Health Researchers (pp.

- 217–240). Springer International Publishing. Available online.
- DeChurch, L. A., Bufton, G. M., Kay, S. A., Velez, C. V., & Contractor, N. S. (2019). Organizational learning and multiteam systems. In J. L. Argote & J. Levine (Eds.), Handbook of Group and Organizational Learning, Oxford University Press.
- Schecter A., Contractor N. (2017) <u>Understanding and assessing collaborative processes through relational events.</u> In: von Davier A., Zhu M., Kyllonen P. (Eds.), *Innovative Assessment of Collaboration. Methodology of Educational Measurement and Assessment* (pp. 223-231). Cham: Springer International Publishing.
 - Contractor, N., & Forbush, E. (2017). <u>Networks.</u> In C. R. Scott & L. K. Lewis, (Eds.), <u>The international encyclopedia of organizational communication</u>, (Vol. 22, pp. 1–25). Hoboken, NJ, USA: John Wiley & Sons, Inc. DOI: 10.1002/9781118955567
- Zhu, M., Kuskova, V., Wasserman, S., & Contractor, N. (2016). <u>Correspondence analysis of multirelational multilevel networks</u>. In E. Lazega & T.A.B. Snijders (Eds.), *Multilevel Network Analysis for the Social Sciences* (pp. 145-172). Cham: Springer International Publishing.
- Huang, Y., Weng, C., Lee, B., & Contractor, N. (2015). <u>Semantic and social spaces: Identifying keyword similarity with relations.</u> In E. Bertino & S. Matei (Eds.), *Roles, trust, and reputation in social media knowledge markets* (pp. 47–55). Computational Social Science Series. Cham: Springer International Publishing.
- Ahmad, M. A., Shen, C., Srivastava, J., & Contractor, N. (2014). On the problem of predicting real world characteristics from virtual worlds. In A. Ahmad, C. Shen, J. Srivastava, & N. contractor (Eds.), *Predicting real world behaviors from virtual world data* (pp. 1–18). Cham: Springer International Publishing.
- Shumate, M., & Contractor, N. (2014). <u>Emergence of multidimensional social networks.</u> In L.L. Putnam & D. Mumby (Eds.), *Handbook of organizational communication* (pp. 451-474). Thousand Oaks, CA: Sage.
- Margolin, D., Ognyanoya, K., Huang, M., Huang, Y., & Contractor, N. (2012). <u>Team formation and performance on Nanohub: A network selection challenge in scientific communities.</u> In B. Vedres & M. Scotti (Eds.), *Networks in social policy problems* (pp. 80–100). Cambridge,

UK: Cambridge University Press.

Contractor, N., & Su, C. (2012). <u>Understanding groups from a network perspective.</u> In A. Hollingshead & M. S. Poole (Eds.), *Research methods for studying groups and teams: A guide to approaches, tools, and technologies* (pp. 284-310). New York: Taylor & Francis/Routledge.

- Poole, M. S., & Contractor, N. S. (2011). <u>Conceptualizing the multiteam system as an ecosystem of networked groups</u>. In Zaccaro, S.J., Marks, M.A., & DeChurch, L.A. (Eds.), *Multiteam Systems: An organizational form for dynamic and complex environments* (pp. 193-224). New York: Routledge Academic.
- Pathak, N., Mane, S., Srivastava, J., Contractor, N., Poole, S., & Williams, D. (2008). <u>Analysis of social networks and group dynamics from electronic communication.</u> In Kargupta, H., Han, J., Yu, P.S., Motwani, R., & Kumar, V. (Eds.), *Next generation of data mining* (377-397). Chapman and Hall.
- Hollingshead, A., & Contractor, N. (2006). <u>New media and small group organizing.</u> In L.A. Lievrouw & S. Livingstone (Eds.), *The handbook of new media (student edition)* (pp. 114-133). London: Sage.
- Katz, N., Lazer, D., Arrow, H., & Contractor, N. (2005). <u>The network perspective on small groups:</u>

 <u>Theory and research.</u> In Poole, M. S. & Hollingshead, A.B. (Eds.), *Theories of small groups: Interdisciplinary perspectives* (pp. 277-312). Newbury Park, CA: Sage.
- Contractor, N. S., & Monge, P. R. (2003). <u>Using multi-theoretical multilevel models to study adversarial networks</u>. In R. Breiger, K. Carley, & P. Pattison (Eds.), *Dynamic social network modeling and analysis: Workshop summary and papers* (pp. 324-344). Washington, D.C.: National Research Council.
- Hollingshead, A. B., & Contractor, N. S. (2002). <u>New media and organizing at the group level.</u> In S. Livingstone & L. Lievrouw (Eds.), *Handbook of new media* (pp. 221-235). London: Sage.
- Contractor, N. (2002). <u>New media and organizing: Introduction</u>. In S. Livingstone & L. Lievrouw (Eds.), *Handbook of new media* (pp. 201-205). London: Sage.
- Contractor, N., & Baldwin, C. (2001). <u>Adoption of communication technologies and the evolution of communication networks in organizations.</u> In V. Burton, D. Herr, & T. Finnegan (Eds.), *Wayfarer: Charting advances in social science computing* (CD). Urbana, IL: University of Illinois Press.
- Monge, P. R., & Contractor, N. S. (2001). <u>Emergence of communication networks</u>. In F.M. Jablin & L.L. Putnam (Eds.), *The new handbook of organizational communication* (pp. 440-502). Newbury Park, CA: Sage.

- Shapiro, M. A., Lang, A., Hamilton, M., & Contractor, N. S. (2001). <u>Information Systems Division:</u> <u>Intra-Personal, Meaning, Attitude and Social Systems.</u> In W. Gudykunst (Ed.), *Communication yearbook, 24* (pp. 17-49). Newbury Park: Sage.
 - Contractor, N., & Bishop, A. P. (2000). Reconfiguring community networks: The case of

- <u>PrairieKNOW.</u> In T. Ishida (Ed.), *Digital cities: technologies, experiences, and future perspectives: Lecture notes in computer science* (pp. 151-164). Berlin: Springer-Verlag.
- Contractor N., Zink, D., & Chan, M. (1998). IKNOW: A tool to assist and study the creation, maintenance, and dissolution of knowledge networks. In Toru Ishida (Ed.), Community computing and support systems, lecture notes in computer science, 1519 (pp. 201-217). Berlin: Springer-Verlag.
- Contractor, N., & O'Keefe, B. J. (1997). <u>The politics of information systems: Rational designs and organizational realities.</u> In B. Davenport Sypher (Ed.), *Case studies in organizational communication: Perspectives on contemporary work life* (pp. 203-218). New York: The Guilford Press.
- Contractor, N. S., & Whitbred, R. (1997). <u>Decision development in work groups: A comparison of contingency and self-organizing systems perspectives.</u> In G. Barnett & L. Thayer (Eds.), Organizational communication: Emerging perspectives (pp. 83-104). New York: Ablex.
- Contractor, N. S., & Grant, S. (1996). <u>The emergence of shared interpretations in organizations:</u>

 <u>A self-organizing systems perspective</u>. In J. Watt & A. VanLear (Eds.), *Cycles and dynamic processes in communication processes* (pp. 216-230). Newbury Park, CA: Sage.
- Contractor, N. (1994). <u>Self-organizing systems perspective in the study of organizational communication.</u> In B Kovacic (Ed.), *New approaches to organizational communication* (pp. 39-66). Albany, NY: SUNY Press.
- Seibold, D., Heller, M. A., & Contractor, N. (1994). <u>Group Decision Support Systems (GDSS):</u> <u>Review, taxonomy, and research agenda.</u> In B Kovacic (Ed.), *Organizational communication: New perspectives* (pp. 143-168). Albany, NY: SUNY Press.
- Contractor, N. S., Singhal, A., & Rogers, E. M. (1993). <u>Satellite television and development in India: A utopian, dystopian, neutral, and contingency view</u>. In K. S. Nair & S. A. White (Eds.), *Perspectives on development communication*. Thousand Oaks, CA: Sage.
- Seibold, D., & Contractor, N. (1993). Commentary on "<u>Issues for a theory of high-speed</u> management" by D. Cushman & E. King. In *Communication yearbook, 16* (pp. 237-246). Newbury Park, CA: Sage.
- Contractor, N. S., & Eisenberg, E. M. (1990). <u>Communication networks and new media in organizations</u>. In J. Fulk & C. W. Steinfield (Eds.), *Organizations and communication technology* (pp. 143-172). Newbury Park, CA: Sage.

Monge, P. R., & Contractor, N. S. (1988). <u>Communication networks: Measurement techniques.</u> In C. H. Tardy (Ed.), *A Handbook for the study of human communication: Methods and instruments for observing, measuring, and assessing communication processes* (pp. 107-138). Norwood, NJ: Ablex.

Encyclopedia Entries and Short Essays

- Lungeanu, A., DeChurch, L. A., & Contractor, N. S. (2022). Collective leadership. In G. R. Goethals, S. T. Allison, & G. J. Sorenson (Eds.), SAGE *Encyclopedia of Leadership Studies*.
- Contractor, N., Cornelli, F., Thompson, L., Smith, N., Uzzi, B., ... Wang, D. What science can tell us about building great teams. (2019, November 19). Retrieved December 2, 2019, from Kellogg Insight website:

 https://insight.kellogg.northwestern.edu/building-leading-great-teams-research
- Contractor, N. (2003). Peer-to-Peer. In S. Jones (Ed.), *Encyclopedia of New Media*. (pp. 367-369). Thousand Oaks, CA: Sage.
- Contractor, N. (1999). Tecnologia e "collettiaperti" Il Sole 24 Ore (Italian Financial Daily).
- Monge, P. R., & Contractor, N. (1996). Communication networks. In A. Kuper & J. Kuper (Eds.), *The Social Science Encyclopedia Edition 2* (pp. 128-130). London: Routledge.
- Monge, P. R., & Contractor, N. (1996). Communication research (revision of original by Gerald Miller). In A. Kuper & J. Kuper (Eds.), *The Social Science Encyclopedia Edition 2 (pp. 130-132)*. London: Routledge.

Book Reviews

- Contractor, N. (2001). Review of *Small Worlds: The Dynamics of Networks Between Order and Randomness* by Duncan J. Watts, Princeton: Princeton University Press, 1999. *Chance*, 14(4), (pp. 33-36).
- Contractor, N. (1994). Review of Complexity The emerging science at the edge of order and chaos by M. Mitchell Waldrop, Simon & Schuster Paperbacks, 1992. Journal of Communication, 44(3), (pp. 135-136).
- Contractor, N. (1994). Review of *Complexity Life at the edge of chaos* by Roger Lewin, The University of Chicago Press, 1992. *Journal of Communication*, 44(3), (pp. 135-136).
- Contractor, N. (1994). <u>Review of *The origins of order* by Stuart A. Kauffman,</u> Oxford University Press, 1993. *Journal of Communication, 44*(3), (pp. 135-136).
- Contractor, N. (1992). Review of Research and Reflexivity edited by F. Steier. Journal of

Contractor, N. S. (1992). Review of A Self-Renewing Society: The Role of Television and Communications Technology by N. D. Batra. Journalism Quarterly, 69, (pp. 227-228).

Conference Proceedings

- Modi, N., Lungeanu, A., DeChurch, L. A., & Contractor, N. (2022). Promoting Cross-Boundary Collaborations for Breakthrough Discoveries. In *Academy of Management Proceedings* (Vol. 2022, No. 1, p. 17260). Briarcliff Manor, NY 10510: Academy of Management.
- Hohenstein, J., Larson, L. E., Hou, Y. T.-Y., Harris, A. M., Schecter, A., Dechurch, L., Contractor, N., & Jung, M. F. (2022). <u>Vero: A method for remotely studying human-ai collaboration</u>. *Proceedings of the Annual Hawaii International Conference on System Sciences*. https://doi.org/10.24251/hicss.2022.030
- Antone, B., Lungeanu, A., DeChurch, L. A., Bell, S. T., & Contractor, N. S. (2021). Re-pairing to Repair: A Countermeasure that Enhances Crew Relations in Deep Space. In *Proceedings of the International Astronautical Congress, IAC* (Vol. 1). International Astronautical Federation, IAF.
- Tyagi, A., Góméz-Zará, D., & Contractor, N. S. (2020). <u>How do friendship and advice ties emerge?</u>

 <u>A case study of graduate student social networks</u>. In Proceedings of the 2020 IEEE/ACM

 International Conference on Advances in Social Networks Analysis and Mining

 (ASONAM), Virtual.
- Tanaka, K., DeChurch, L. A., & Contractor, N. S. (2020). <u>The impact of network acuity on information sharing under communication delays in space multiteam systems</u>. <u>Proceedings of the International Astronautical Congress.</u>
- Gómez-Zará, D., DeChurch, L. A., & Contractor, N. S., (2020). <u>A taxonomy of team-assembly systems: Understanding how people use technologies to form teams.</u> In *Proceedings ACM Hum.-Comput. Interact.* 4, CSCW2, Article 181 (October 2020), 35 pages. https://doi.org/10.1145/3415252
- Kaven, E., Kaven, I., Gómez-Zará, D., DeChurch, L. A., & Contractor, N. S. (2020). <u>Assessing How Team Task Influences Team Assembly Through Network Analysis</u>. In *Proceedings of Complex Networks and Their Applications IX*, 322-334. Springer International Publishing. doi: 10.1007/978-3-030-65361-4 26
- Das, A., Gómez-Zará, D., DeChurch, L., & Contractor, N. (2020). <u>Forming Diverse Teams Based on Members' Social Networks: A Genetic Algorithm Approach.</u> In *Proceedings of Complex*

- *Networks and Their Applications IX,* 346-357. Springer International Publishing. doi: 10.1007/978-3-030-65361-4_28
- Gómez-Zará, D., Guo, M., DeChurch, L., & Contractor, N. (2020). <u>The impact of displaying diversity information on the formation of self-assembling teams.</u> In *Proceedings of the 2020 ACM Conference on Human Factors in Computing Systems (CHI'20)*. doi: 10.1145/3313831.3376654
- Ichhaporia, R., Gómez-Zará, D., DeChurch, L., & Contractor, N. (2020). <u>A Network Approach to the Formation of Self-assembled Teams.</u> In *Proceedings of Complex Networks and Their Applications VIII*, 969–981. Springer International Publishing. doi: 10.1007/978-3-030-36683-4_77
- Antone, B., Gupta, A., Bell, S., DeChurch, L., & Contractor, N. (2019). <u>Testing Influence of Network Structure on Team Performance Using STERGM-Based Controls.</u> In *Proceedings of Complex Networks and Their Applications VIII*, 1018–1030. Springer International Publishing. doi: 10.1007/978-3-030-36683-4_81
- Shchecter, A., & Contractor, N. (2019). Uncovering latent archetypes from digital trace sequences. In *Proceedings of the 40th International Conference on Information Systems* (ICIS 2019).
- Harris, A. M., Gómez-Zará, D., DeChurch, L. A., & Contractor, N. S. (2019). <u>Joining together online: The trajectory of CSCW scholarship on group formation.</u> In *Proc. ACM Hum.-Comput. Interact.*, 3(CSCW), 27. https://dx.doi.org/10.1145/3359250
- Cedeno-Mieles, V., Hu, Z., Deng, X., Ren, Y., Adiga, A., Barrett, C., Ekanayake, S., Korkmaz, G., Kuhlman, C. J., Machi, D., Marathe, M. V., Ravi, S. S., Goode, B. J., Ramakrishnan, N., Saraf, P., Self, N., Contractor, N., Epstein, J. M., & Macy, M. W. (2019). Mechanistic and Data-Driven Agent-Based Models to Explain Human Behavior in Online Networked Group Anagram Games. In Proceedings of the 2019 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), Vancouver, BC.
- Gómez-Zará, D., Paras, M., Twyman, M., Lane, J. N., DeChurch, L. A., & Contractor, N. S. (2019, May). Who would you like to work with?. In Proceedings of the 2019 ACM Conference on Human Factors in Computing Systems (CHI'19). doi:10.1145/3290605.3300889
- Cedeno-Mieles, V., Ren, Y., Hu, Z., Deng, X., Contractor, N., Ekanayake, S., Epstein, J.M., Goode, B.J., Kuhlman, C.J., Machi, D., Macy, M.W., Marathe, M.V., Mortveit, H.H., Ramakrishnan, N., Saraf, P., Self, N. (2018). Proceedings of the Winter Simulation Conference, Gothenburg, Sweden.
- DeChurch, C., & Contractor, N. S. (2018). <u>Using Network Science to Discover the Grand Masters</u> of the Florentine Renaissance. In L. M. Aiello, C. Cherifi, H. Cherifi, R. Lambiotte, P. Lio, &

- L. M. Rocha (Eds.), *Proceedings of the 7th International Conference on Complex Networks and Their Applications* (pp. 358–360).
- Sha, Z., Bi, Y., Wang, M., Stathopoulos, A., Contractor, N., Fu, Y., & Chen, W. (2019). Comparing utility-based and network-based approaches in modeling customer preferences for engineering design. In *Proceedings of the Design Society: International Conference on Engineering Design*, 1(1):3831-3840.
- Ren, Y., Cedeno-Mieles, V., Hu, Z., Deng, X., Adiga, A., Barrett, C., ... Macy, M. W. (2018).

 <u>Generative modeling of human behavior and social interactions using abductive analysis</u>.

 2018 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), 413–420.
- Mukherjee, A., Xiao, P., Wang, Li., & Contractor, N. (2018). <u>Does the opinion of the crowd</u> <u>predict commercial success? Evidence from Threadless</u>. *Proceedings of the Academy of Management, Chicago*, IL.
- Foote, J., & Contractor, N. (2018). <u>The behavior and network position of peer production</u> <u>founders</u>. *International Conference on Information (iConference 2018),* Bol. 10766, 99-106
- Li, Y., Sun, Y., & Contractor, N. (2017). <u>Graph mining assisted semi-supervised learning for fraudulent cash-out detection</u>. *Proceedings of the 2017 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining 2017*, 546–553. New York, NY, USA: ACM. https://doi.org/10.1145/3110025.3110099
- Ng, J., Leonardi, P. M., DeChurch, L. & Contractor, N. (2017). <u>Teaming at the limit: Enhancing team effectiveness with enterprise social media affordances.</u> *Proceedings of the Academy of Management*, Atlanta, GA.
 - Sha, Z., Wang, M., Huang, Y., Contractor, N., Fu, Y., & Chen, W. (2017). <u>Modeling product</u> <u>co-consideration relations: A comparative study of two network models.</u> *Proceedings of the International Conference on Engineering Design (ICED)*, Vol. 6, No. DS87-6, 317-326.
- Whalen, R., & Contractor, N. (2016). <u>Measuring innovation: Citation measures of knowledge translation, integration, diffusion and scope.</u> *Proceedings of the Academy of Management*, Vol. 2016, No. 1, (p. 16352).
- Lungeanu, A., & Contractor, N. (2016). <u>Assembly mechanisms of emerging interdisciplinary scientific teams and their impact on performance.</u> *Proceedings of the Academy of Management*, Vol. 2016, No. 1, (p. 14388).

- Wang, M., Sha, Z., Huang, Y., Contractor, N., Fu, Y., & Chen, W. (2016). Forecasting technological impacts on customers' co-consideration behaviors: A data-driven network analysis approach.

 Proceedings of ASME 2016 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference, Charlotte, NC.
 - Schecter, A. & Contractor, N. (2016). <u>Modeling the joint dynamics of relational events and individual states.</u> *Proceedings of the 2016 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, ASONAM 2016*, San Francisco, CA.
- Whalen, R., Huang, Y., Tanis, C., Sawant, A., Uzzi, B., & Contractor, N. (2016). <u>Citation distance:</u>

 <u>Measuring changes in scientific search strategies.</u> *Proceedings of the 25th International Conference on World Wide Web, WWW '15 Companion,* Montreal, Canada.
- Hogan, B., Melville, J. R., Philips, G. L., Janulis, P., Contractor, N., Mustanski, B. S., & Birkett, M. (2016). Evaluating the paper-to-screen translation of participant-aided sociograms with high-risk participants. Proceedings of CHI Conference on Human Factors in Computing Systems, San Jose, CA.
 - Pilny, A., Keegan, B., Foucault Welles, B., Riedl, C., Lazer, D., Radford, J., Ognyanova, K., DeChurch, L., Macy, M., Contractor, N., & Meleis, W. (2016). <u>Designing online experiments:</u> Citizen Science Approaches to Research. *Proceedings of the ACM Conference on Computer Supported Cooperative Work (CSCW), S*an Francisco, CA.
- Lungeanu, A., Sullivan, S., Contractor, N., & Wilensky, U. (2015). <u>A Computational model of team assembly in emerging scientific fields.</u> *Proceedings of the Winter Simulation Conference*, Huntington Beach, CA.
- Wang, M., Chen, W., Huang, Y., Contractor, N. S., & Fu, Y. (2015). <u>A multidimensional network approach for modeling customer-product relations in engineering design.</u> *Proceedings of the ASME International Design Engineering Technical Conferences and Computers and Information in Engineering Conference (IDETC/CIE)*, Boston, MA.
- Whalen, R., & Contractor, N. (2015). <u>Patent application citations and the examination process: a network-based date-sensitive method to analyze patent applications.</u> Proceedings of the Law & Big Data Workshop at the International Conference on Artificial Intelligence and Law, San Diego, CA.
- Schecter, A. & Contractor, N. (2015). <u>Forming and performing: How group structure evolves in successful multiteam systems.</u> *Proceedings of the Academy of Management, Vol. 2015, No. 1, (p. 11306).*
- Neidhardt, J., Huang, Y., & Contractor, N. (2015). <u>Team vs. team: Success factors in a multiplayer online battle arena game.</u> *Proceedings of the Academy of Management*, Vancouver,

Canada.

- McDonald, J. D., Dechurch, L. A., Asencio, R., Carter, D. R., Mesmer-Magnus, J. R., & Contractor, N. S. (2015). <u>Team task switching: A conceptual framework for understanding functional work shifts</u>. *Proceedings of the International Annual Meeting of the Human Factors and Ergonomics Society (HFES)*, Vol. 2015-January, 1157-1161. doi: 10.1177/1541931215591179
- Schecter, A., Leenders, R. T., DeChurch, L. A., & Contractor, N. (2014, January). The signatures of success in teams & multiteam systems. *Proceedings of the Academy of Management,* Vol. 2014, No. 1, (p. 16509).
- DeChurch, L. A., Carter, D., Zaccaro, S. J., & Contractor, N. S. (2014). <u>Leadership and governance approaches for complex cooperative settings.</u> *Proceedings of the NATO Human Factors and Medicine Panel. Effective Inter-Agency Interactions and Governance in Comprehensive Approaches to Operations.* Stockholm, Sweden.
- Huang, Y., Ye, W., Bennett, N., & Contractor, N. (2013). <u>Functional or social? Exploring teams in online games.</u> *Proceedings of the 2013 conference on Computer Supported Cooperative Work (CSCW)*, 399-408.
- Sullivan, S., Pierce, C. S., Leonardi, P. M., & Contractor, N. (2013). <u>Explaining idea sharing mechanisms: Linking diversity and network factors to explore creative teams</u>. *Proceedings of the Academy of Management Annual Conference*, Orlando, FL.
- Xu, B., Huang, Y., Kwak, H., & Contractor, N. (2013). <u>Structures of broken ties: Exploring unfollow behavior on Twitter</u>. *Proceedings of the 2013 conference on Computer Supported Cooperative Work (CSCW)*, 871-876. San Antonio, Texas, USA.
 - Xu, B., Huang, Y., & Contractor, N. (2013). <u>Exploring Twitter networks in parallel computing environments</u>. *Proceedings of the Conference on Extreme Science and Engineering Discovery Environment (XSEDE): Gateway to Discovery*. doi:10.1145/2484762.2484811
- Ahmad, M., Keegan, B., Roy, A., Williams, D., Srivastava, J., & Contractor, N. S. (2013). <u>Guilt by association? Network based propagation approaches for gold farmer detection.</u>

 Proceedings of the 2013 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining.
- McCusker, J. P., Shaikh, A., Contractor, N., Courtney, P., Lee, J., Morgan, G., Tatalovich, Z., Thomas, C., & L. McGuinness, D. L. (2013). <u>Towards next generation health data exploration: A data cube-based investigation into population statistics for tobacco IT innovation.</u> *Proceedings of the Hawaii International Conference On System Sciences (HICSS)*.

Keegan, B., Gergle, D., & Contractor, N. (2012). <u>Staying in the loop: Structure and dynamics of Wikipedia's breaking news collaborations</u>. *Proceedings of the 8th International Symposium on Wikis and Open Collaboration: WikiSym 2012*, Linz, Austria.

- Keegan, B., Gergle, D., & Contractor, N. (2012). <u>Do editors or articles drive collaboration?</u>

 <u>Multilevel statistical network analysis of wikipedia coauthorship.</u> In S. Poltrack & C. Simone (Eds.), *Proceedings of the CSCW '12 Computer Supported Cooperative Work* (pp. 427–436). New York, USA: ACM. doi:10.1145/2145204.2145271
- Ahmad, M., Borbora, Z., Srivastava, J., & Contractor, N. (2012). <u>Love all, trust a few: Link prediction for trust and psycho-social factors in MMOs</u>. In S. J. Yang, A. M. Greenberg, & M. Endsley (Eds.), *Lecture Notes in Computer Science: Vol. 7227. Social Computing, Behavioral Cultural Modeling and Prediction 5th International Conference (SBP)* (pp. 123–130). Berlin: Springer. doi:10.1007/978-3-642-29047-3
- McGuinness, D. L., Lebo, T., Ding, L., McCusker, J. P., Shaikh, A. R., Moser, R. P., et al. (2012).

 <u>Towards semantically enabled next generation community health information portals:</u>

 <u>The PopSciGrid pilot</u>. *Proceedings of the 45th Hawaii International Conference on System Sciences (HICSS)*, 2752–2760. IEEE. doi:10.1109/HICSS.2012.605
- Ahmad, M. A., Keegan, B., Williams, D., Srivastava, J., & Contractor, N. (2011). <u>Trust among rogues? A hypergraph approach for comparing clandestine trust networks in MMOGs.</u>

 Proceedings of the 5thInternational AAAI Conference on Weblogs and Social Media, 10-17.
- Fazel-Zarandi, M., Devlin, H. J., Huang, Y., & Contractor, N. (2011). Expert recommendation based on social drivers, social network analysis, and semantic data representation.

 Proceedings of the 2ndInternational Workshop on Information Heterogeneity and Fusion in Recommender Systems, 41-48.
- Keegan, B., Gergle, D., & Contractor, N. (2011). <u>Hot off the Wiki: Dynamics, practices and structures in Wikipedia's coverage of the Tōhoku catastrophes.</u> *Proceedings of WikiSym11*, 105-113.
- Ahmad, M., Keegan, B., Sullivan, S., Williams, D., Srivastava, J. & Contractor, N. (2011). <u>Illicit bits:</u>

 <u>Detecting and analyzing contraband networks in massively multiplayer online games</u>. *Proceedings of 2011 IEEE International Conference on Social Computing*.
 - Ahmad, M.A., Keegan, B., Sullivan, S., Williams, D., Srivastava, J., & Contractor, N. (2011). <u>Towards analyzing adversarial behavior in clandestine networks.</u> Proceedings *from the 2011 AAAI Workshop on Applied Adversarial Reasoning and Risk Modeling*, 75-76.
- Keegan, B., Ahmed, M.A., Williams, D., Srivastava, J., & Contractor, N. (2010). <u>Dark gold:</u>
 <u>Statistical properties of clandestine networks in massively multiplayer online games.</u>

Proceedings of 2010 IEEE Second International Conference on Social Computing, 201-208.

Ahmad, M.A., Borbora, Z., Srivastava, J., & Contractor, N. (2010). Link prediction across multiple

- <u>social networks</u>. Proceedings of the 2010 IEEE International Conference on Data Mining Workshops, 911-918.
- Courtney, P., Shaikh, A. R., Contractor, N., McGuinness, D. L., Ding, L., Augustson, E. M., Blake, K., Morgan, G. D., Moser, R., Willis, G., & Hesse, B. W. (2010). Consumer health portal: An informatics tool for translation and visualization of complex, evidence-based population health data for cancer prevention and control. *Proceedings of the 138th American Public Health Association*.
- Shaikh, A. R., Contractor, N., Moser, R., Morgan, G. D., Courtney, P. K., E. M. Augustson, A. M. Pilsner, & Hesse, B. W. (2009). PopSciGrid: Using cyberinfrastructure to enable data harmonization, collaboration, and advanced computation of nationally representative behavioral, demographic, and economic data. Proceedings of the 137th Annual Public Health Association.
- Huang, Y., Zhu, M. Wang, J. Pathak, N., Shen, C., Keegan, B., Williams, D., & Contractor, N. (2009). The formation of task-oriented groups: exploring combat activities in online games. Proceedings of the 2009 International Conference on Computational Science and Engineering, IEEE Computer Society, 4, 122-127.
- Contractor, N. (2009). <u>Understanding & enabling networks in digital government</u>. Proceedings of the 10th Annual International Conference on Digital Government Research. ACM International Conference Proceeding Series, 390, 364-365.
- Ahmad, M.A., Keegan, B., Srivastava, J., Williams, D., & Contractor, N. (2009). Mining for gold farmers: Automatic detection of deviant players in MMOGs. Proceedings of the 2009 International Conference on Computational Science and Engineering, 4, 340-345.
- Huffaker, D., Wang, J., Treem, J., Ahmad, M. A., Fullerton, L., Williams, D., Poole, M. S., & Contractor, N. (2009). <u>The social behaviors of experts in massive multiplayer online role-playing games.</u> *Proceedings of the 2009 International Conference on Computational Science and* Engineering, *4*, 326-331.
- Neumeyer, X., Contractor, N., & Ehmann, K. (2008). Collaboration Networks in Micromanufacturing, *Proceedings of the 3rd International Conference on Micromanufacturing*, Pittsburgh, PA.
- Huang, Y., Contractor, N., & Yao, Y. (2008). CI-KNOW: Recommendation based on social

- <u>networks</u>, *Proceedings of DG.O 2008 Annual conference for Digital Government*, Montreal, Canada.
- Contractor, N., & Green, H. D. (2007). <u>Cyberinfrastructure knowledge networks on the web a</u> recommender system for locating resources in a knowledge network. *Proceedings of the 8th Annual International Digital Government Research Conference*, 256–257, Philadelphia, PA, USA: Digital Government Society of North America.

- Steinfield, C., Pentland, B. T., Ackerman, M., & Contractor, N. (Eds.) (2007). *Communities and Technologies 2007*. Proceedings of the Third Communities and Technologies Conference, London: Springer London.
 - Patel, J., Gupta, I., & Contractor, N. (2006). <u>JetStream: Achieving predictable gossip</u> <u>dissemination by leveraging social networks principles.</u> *Proceedings of the 5thIEEE International Symposium on Network Computing and Applications (IEEE NCA06).*
- Pathak, N., Mane, S., Srivastava, J., & Contractor, N. S. (2006). <u>Knowledge perception analysis in a social network</u>. *Proceedings of the 6th SIAM International Conference on Data Mining (SDM 06)*.
- Contractor, N., & Leischow, S. (2005). <u>Cyberinfrastructures for Public Health.</u> Proceedings of the 2005 National Conference on Digital Government Research, 13–14. Atlanta, Georgia, USA: Digital Government Society of North America.
- Contractor, N., Bishop, A. P., & Zink, D. (1999). <u>PrairieKNOW: A tool to assist the study, creation, and growth of community networks.</u> In H-J. Bullinger & J. Ziegler (Eds.), *Proceedings of HCI International '99 (the 8thInternational Conference on Human-Computer Interaction): Volume 2,* (pp. 447-451). Mahwah, NJ: Lawrence Erlbaum.
- Jacobs, J. L., Dorneich, M. C., Jones, P. M., O'Keefe, B. J. & Contractor, N. (1997). <u>SPOT: Using collaborative technologies for developing collaborative technologies.</u> *Proceedings of the 1997 IEEE International Conference on Systems, Man, and Cybernetics, 1*, 690-695, Orlando, FL.
- Jones, P. M., Chin, G., Lucenti, M., Kim, H-J., Stigberg, D., Sherman, G., Contractor, N., O'Keefe, B. J., Whitbred, R., Grobler, F., Case, M., Heckel, J., Lu, S. C-Y. & Ganeshan, R. (1997).

 <u>CITYSCAPE: Civil infostructure technology system for collaborative analysis, prediction, and evaluation.</u> *Proceedings of the 1997 IEEE International Conference on Systems, Man, and Cybernetics*, *3*, 2223-2227, Orlando, FL.
- Jones, P. M., Contractor, N., O'Keefe, B., Lu, S., Case, M., Lawrence, P., & Grobler, F. (1995).

 <u>Workflow and cooperative problem solving in civil infrastructure management</u>.

 Proceedings of the IEEE 1995 International Conference on Systems, Man, and Cybernetics,
 5, 4575-4580, Vancouver, British Columbia, Canada.

- Jones, P. M., Contractor, N., Lu, S. C-Y., & O'Keefe, B. J. (1994). Intelligent collaborative support for engineering design. Proceedings of the 12th Triennial Congress of the International Ergonomics Association (IEA '94), 4, 80 82, Toronto, Ontario.
- Jones, P. M., Contractor, N., O'Keefe, B., & Lu, S. C-Y. (1994). <u>Competence models and self-organizing systems: Towards intelligent, evolvable, collaborative support.</u>

 Proceedings of the IEEE 1994 International Conference on Systems, Man, and

Cybernetics, 1, 367-372, San Antonio, TX.

Case, M., Contractor, N., Jones, P. M., Lu, S. C-Y., & O'Keefe, B. J. (1992). <u>Team engineering analysis and modeling: Toward a normative model of team interaction</u>. *Proceedings of the IEEE International Conference on Systems, Man, and Cybernetics*, Chicago IL.

Monographs and Technical Reports

- Contractor, N. S., et al. (2016). <u>3D Netscope Intro and Walkthrough</u>, SONIC Lab, Northwestern University and Syndio Inc., 1-15.
- Contractor, N. S., Young, L., & Pieterson, W. (2011). Mapping community-based information networks to enable the Chicago Climate Action Plan: A case study of the South Chicago Community. Chicago, IL: Northwestern University.
- Contractor, N., Pieterson, W., Young, L., Hsieh, Y. L., & Wang, H. (2010). Mapping community-based information networks to enable the Chicago Climate Action Plan: A case study of the North Kenwood/Oakland community. Chicago, IL: Northwestern University.
- Provan, K., & Contractor, N. (2007). <u>Understanding and managing stakeholder networks.</u> In National Cancer Institute, *Greater than the Sum: Systems Thinking in Tobacco Control. Tobacco Control Monograph No. 18.* Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute. NIH Pub. No. 06-6085.
- Bajcsy, R., Rubin P., Bertenthal, B., Bimber, B., Contractor, N., Finholt, T., Franklin, K., Liberman, M., Mebane, W., Pearce, C., Scacchi, W., Teitelbaum, B., & Urban M. (2004). Cyberinfrastructure-mediated interaction. Report of the NSF Workshop on Cyberinfrastructure for the Social Sciences.

SOFTWARE DEVELOPMENT

NU Team Recommender: Team recommender system for Northwestern University scholars. SONIC Research Group, Northwestern University, 2014-present.

- Technical Support Unit Influence Strategy Wizard: Recommender system for scaling up health innovations in Bihar, India. SONIC Research Group, Northwestern University, 2014-present.
- *My Dream Team*: Team Recommender System. SONIC Research Group, Northwestern University, 2013-present.
- 6DoS: Six Degrees of Separation: Web based game to understand routing of messages via networks. SONIC Research Group, Northwestern University, 2013-present.

- VIVO Recommender: Recommending teams for scientific research. SONIC Research Group, Northwestern University, 2012-present
- Semantic Recommender: Semantic Web Cyberinfrastructure for Inquiring Knowledge Networks on the Web. SONIC Research Group, Northwestern University, 2011-present
- C-IKNOW: Cyberinfrastructure for Inquiring Knowledge Networks on the Web People Recommender system. SONIC Research Group, Northwestern University, 2007-2010.
- IKNOW: Inquiring Knowledge Networks on the Web . SONIC Research Group at the National Center for Supercomputing Applications at the University of Illinois at Urbana-Champaign, 1997-2007
- Blanche: A computational modeling environment for network evolution. University of Illinois at Urbana-Champaign, 1997-2007

CURRENTLY FUNDED RESEARCH

- Government of India: *Center of Excellence in Sports Analytics, IIT Madras* (2021-2026, \$485,000). Co-Principal Investigator.
- National Aeronautics and Space Administration: NASA TEAMSTAR: Composing Teams with TEAMSTAR: Tool for Evaluating And Mitigating Space Team Risk (2021-2024, \$1,200,000). Award number 80NSSC21K0925. Principal Investigator
- National Science Foundation: *Towards a unified theory of regulatory functions and networks across biological and social systems* (2021-2024, \$1,239,819.00). Unfunded Collaborator.
- National Science Foundation: *The Next Normal for Teaming: Transitioning Out of COVID-19* (2021-2024, \$600,000). Principal Investigator
- National Science Foundation: *Natural experiments with online games: Support, impact and mitigation during the Covid-19 Pandemic* (2020-2021, \$196,800). Consultant

- National Science Foundation: *Teaming in the Time of Covid-19: Understanding how technology affordances can enable collaboration during sudden workplace disruption* (2020-2021, \$120,000). Award Number SES-2027572 and SES-2052366. Principal Investigator
- National Aeronautics and Space Administration: *Measuring and Predicting Performance for Individuals Teams and Systems in Interdependent Crew Tasks MAPPITS ICT* (2020-2021, \$30,000). Principal Investigator

- National Aeronautics and Space Administration: *Prescriptions Optimally Learned Assessing Risk in Space* (2020-2021, \$30,000). Principal Investigator
- National Institutes of Health: Simulation Modeling to Understand and Address HIV Disparities in Racial Ethnic and Sexual Minority Populations (2020-2023, \$1,614,060). Award Number 1R01MD014703-01A1. Co-Principal Investigator
- National Science Foundation: *Collaborative Research: A Hierarchical Multidimensional Network-based Approach for Multi-Competitor Product Design* (2020-2023, \$484,538).

 Award number CMMI-2005661. Co-Principal Investigator
- Defense Advanced Research Projects Agency (DARPA) (via Smart Information Flow Technologies): SCHNEIDER: System for Counterfactual Human Network Evaluation of Individual Differences, Errors, and Residuals. (2019-2020, \$159,932). Principal Investigator.
- Army Research Laboratory: Macro Signatures of Success in Human Autonomy Teams. (2019-2021, \$1,500,000). Principal Investigator.
- National Institutes of Health: *SCISIPBIO: Understanding And Assembling Dream Teams to Conduct Clinical and Translational Science.* (2019-2022, \$997,132). Award UL1RR024146-06S2 and UL1RR025741. Co-Principal Investigator.
- National Science Foundation: Safe Bets and Risky Propositions Leveraging Rich data to Understand Scientific Diversity, Impact, and Potential of Teams. (2019-2022, \$699,990). Award number SMA-1856090. Principal Investigator.
- Army Research Laboratory: Wearable Devices for Monitoring Social Networks. (2019-2021, \$750,000). Award number W911NF1920088. Co-Investigator.
- National Science Foundation: Workshop on Human Technology Partnerships and the Changing Nature of Work. (2019-2020, \$50,000). Principal Investigator.
 - Army Research Laboratory: The Signatures of Success in Human-Agent Teams. (2019-2020,

\$139,061). Award number W911NF1920140. Principal Investigator.

- Facebook, Inc: *Isolation and Social Media in and out of- This World.* (2019-2020, \$50,000). Co-Principal Investigator
- National Aeronautics and Space Administration (subcontract from University of Georgia): FUSION: Facilitating Unified Systems of Interdependent Organizational Networks. (2018-2021, \$308,049). Co-Investigator.

- Defense Advanced Research Projects Agency (DARPA) (via Virginia Polytechnic Institute and State University): *BUZZ: Scalable, Interactive Simulations of Online Social Behavior.* (2017-2021, \$319,986). Principal Investigator
- Defense Advanced Research Projects Agency (DARPA) (via Raytheon BBN Technologies): ACCESS

 Agent-based Causal simulator with Cognitive, Environmental, and Social System factors.

 (2017-2020, \$302,162). Principal Investigator.
- National Institutes of Health (subcontract from University of California, Los Angeles): *Team Dynamics, Networks, and Assembly (Team DNA).* (2016-2021, \$525,247). Award number 1R01GM112938-01. Co-Investigator.
- National Institutes of Health: netCanvas: Development, Hardening, and Dissemination of a Software Suite for the Collection of Complex Network and Contextual Data in HIV and Drug Research. (2016-2021, \$3,012,132). Award number R01DA042711. Co-Principal Investigator.
- National Aeronautics and Space Administration: *SCALE: Shared Cognitive Architectures for Long-term Exploration*. (2015-2021, NNX15AM26G, \$1,682,829). Award number NNX15AM26G. Co-Principal Investigator.
- National Aeronautics and Space Administration: *CREWS: Crew Recommender for Effective Work in Space*. (2015-2020, NNX15AM32G, \$1.05 million). Award number NNX15AM32G. Principal Investigator.
- National Aeronautics and Space Administration: *Team Task Switching in Astronaut Crews on the International Space Station: Integrating Multiteam Membership, Multiteam Systems, Multitasking & Multidimensional Networks to Monitor & Enable Functional Work Shifts in Astronaut Crews*. (2015-2020, NNX15AK73G, \$1.05 million). Award number NNX15AK73G. Co-Principal Investigator.

National Institutes of Health: Multilevel Influences on HIV and Substance use in a YMSM (young men who sleep with men) Cohort - RADAR. (2014-2020, 1U01DA036939-01, \$8,697,386). Award number 1U01DA036939-01. Co-Investigator.

PREVIOUSLY FUNDED RESEARCH

- National Aeronautics and Space Administration: A US-Russian Collaborative Proposal for Data Collection in HERA: The Relationship between Composition, Interpersonal Relations, and Team Effectiveness in Space Crews. (2016-2019, \$399,989). Co-Principal Investigator.
- Army Research Office: ANN SONIC NICO Workshop on Brain Science and Social Networks. (2018-2019, \$15,000). Principal Investigator.

- Bill & Melinda Gates Foundation: Novel Approaches to Measuring Demand-side Community Perceptions and Barriers to Family Planning via Social Network Analysis in Kenya (2015-2018, OPP1135005, \$136,803). Co-Principal Investigator.
- National Science Foundation: *CHS: Medium: Collaborative Research: Understanding Online Creative Collaboration over Multidimensional Networks.* (2015-2018, IIS-1514427, \$374,619). Principal Investigator.
- Northwestern University Office of the Provost: *Creating Your Dream Team: Using Technology to Form Effective Project Design in STEM (MDT)*. (2017-2018, \$49,988). Principal Investigator.
- National Institutes of Health: *Modeling Scientific Workforce Dynamics Using Social Network Analysis*. (2015-2018, U01GM112623-01, \$1.5 million). Co-Principal Investigator.
- Army Research Laboratory (subcontract from BBN Technologies): *Integrated Research Center for Network Sciences Collaborative Technology Alliance* (2009-2018, cooperative agreement number W911NF-09-2-0053, \$628,905). Principal Investigator.
- National Institutes of Health via UCLA: *Team DNA*. (2016-2017, 1R01GM112938-01, \$122,099.00). Co-Principal Investigator.
- National Institutes of Health National Institute on Drug Abuse (NIDA): NetCanvas:

 Development, Hardening, and Dissemination of a Software Suite for the Collection of
 Complex Network and Contextual Data in HIV and Drug Research (2016-2017,
 R01DA042711). Co-Principal Investigator.
- Northwestern University Office of the Provost: Fostering Effective Online Discussion in Higher Education With 'Nebula,' a Graphical Interface for Discussion Boards. (2016-2017, \$36,980). Co-Principal Investigator.

- Army Research Office: Socio-Cognitive Networks: Theory & Data Driven Approaches for Understanding the Assembly and Interaction Networks of High Performance Teams. (2014-2017, W911NF-14-1-0686, \$45,187). Principal Investigator.
- National Science Foundation: *Multidimensional Network Analysis for Analyzing and Predicting Complex Customer-Product Relations in Engineering Design*. (2014-2017, CMMI-1436658, \$501,444). Co-Principal Investigator.
- National Institutes of Health, National Center for Research Resources: *Annual Science of Team Science Conference* (2011-2017, 5R13TR000046-04, \$50,000). Award number: 1R01GM137410-01. Principal Investigator.
- DARPA via Virginia Polytechnic Institute and State University: Montage: Capturing Collective

- *Identity through Multidisciplinary Modeling and Experimentation* (2016-2018, D17AC00003 01, \$43,658). Co-Principal Investigator.
- The National Institutes of Health's National Center for Advancing Translational Sciences (2015-2017, TL1TR001423). Member, NUCATS TL1 Executive Leadership Committee.
- National Institutes of Health/NHRR: *Northwestern University Clinical and Translational Sciences Institute (NUCATS)* (2008-2016, \$705,711). Subcontract from Feinberg School of Medicine. Investigator.
- National Research Foundation of Korea: Effects of Intrinsic and Extrinsic Motivation on Flow Experience of Social Network Sites for Seniors and the Moderating Role of Anxiety Attachment. (2015-2016, NRF-2015S1A5A2A03049328, \$57,005,000 Korean Won). Co-Principal Investigator.
- National Science Foundation: SCC-SBE: Research Coordination Network on Leveraging Computational Social Science for Understanding Virtual Organizations (2012-2015, OCI-1244747, \$484,971). Principal Investigator.
 - Army Research Institute: *The Coevolution of Multi-Dimensional Dynamic Networks of Multi-Team Systems Related to Organization Effectiveness: Theory Development and Empirical Tests* (2012-2015, W5J9CQ-12-C-007, \$847,050). Co-Principal Investigator.
- National Science Foundation: *SoCS: Leveraging Shared Social Interest in a Content Centric Internet* (2012-2015, CNS-1211375, \$750,000). Co- Principal Investigator.
- National Science Foundation: *NetSE: Large: Collaborative Research: Contagion in Large Socio-communication Networks* (2010-2015, CNS-1010904, \$474,711) Principal Investigator.

- Virginia Polytechnic Institute and National Institute of General Medical Sciences Prime (Eubank): Synthetic Information Systems for Better Informing Public Health Policymakers (2011-2015, 2U01GM070694-09, \$16,780). Investigator.
- Bill & Melinda Gates Foundation: *Knowledge Networks for Scaling Up Impact* (2013-2014, 21640 & 1084322, \$997,539). Principal Investigator.
- National Science Foundation: EAGER: Collaborative Research: FLASH! Fueling Learning Alliance in Sustainability in Higher Education: Using social media and networks for science (2012-2014, 1241324, \$141,944). Principal Investigator.
- National Science Foundation: *EAGER: Collaborative Research: Some assembly required: Understanding the Emergence of Teams and Ecosystems of Teams* (2012-2014, 1249137, \$123,847). Principal Investigator.

- National Science Foundation: *CDI-Type II: Collaborative Research: Groupscope: Instrumenting Research on Interaction Networks in Complex Social Contexts* (2010-2014, BCS-0940851, \$252,518) Principal Investigator.
- National Science Foundation: Collaborative Research: Coupled Models of Diffusion and Individual Behavior over Extremely Large Social Networks (2009-2014, 0904356, \$267,201) Principal Investigator.
- Army Research Laboratory (subcontract from University of Illinois Urbana-Champaign):

 Information Network Academic Research Center: An Integrated Approach towards
 Information Integration, Modeling, Retrieval, and Discovery (2009-2014, \$650,002)
 Investigator with Principal Investigator Jiawei Han.
- National Science Foundation: RAPID: Collaborative Research: 3dWomen: Exploring Three Decades of Women's Groups in Sustainable Development and the Impact of Social Media on Women's Professional Networks (2012-2013, 1240008, \$98,360). Principal Investigator.
- National Institute of Health and National Center for Research Resources: *Multidisciplinary Clinical and Translational Science (MCTS) Program (supplement)* (2011-2013, 5UL1RR025741-04S3 Greenland, \$200,000). Principal Investigator.
- Air Force Research Laboratory (subaward from University of Southern California): *The Virtual World Observatory: Identifying Real World (RW) Characteristics from Virtual Behavior* (2009-2013, contract FA8650-10-C-7010, \$513,836) Investigator with Principal Investigator Dmitri Williams.
- Oncofertility Consortium through the National Institute of Health (2011). Oncofertilty: The

- Fertility Preservation for Women (NIH: 5UL1DE019587), Evaluation Committee.
- National Science Foundation: Supplement to Social Networking Tools to Enable Collaboration in the Tobacco Surveillance, Epidemiology, and Evaluation Network (TSEEN) (2010-2011, IIS- 0535214, \$150,000). Principal Investigator.
- National Science Foundation: VOSS: Understanding and Enabling Network Dynamics in Virtual Communities (2008-2012, IIS-0838564, \$299,269) Co-Principal Investigator, collaborative proposal with Brian Uzzi and Luis Amaral (Northwestern University), and Peter Monge (University of Southern California).
- National Science Foundation: *DHB Virtual Worlds: An Exploratorium for Theorizing and Modeling the Dynamics of Group Behavior* (2007-2012, IIS-0841483, \$620,755)

 Principal Investigator on collaborative proposal with Scott Poole (University of Illinois at Urbana-Champaign), Jaideep Srivastava (University of Minnesota) and Dmitri Williams (University of Southern California).

- Global Philanthropy Project: *Understanding and Enabling Networks to Advance the Chicago Climate Action Plan (CCAP)* (2009-2011, \$100,000) Principal Investigator.
- The John D. and Catherine T. MacArthur Foundation: *Mapping, Understanding and Enabling the Digital Media Learning (DML) Knowledge Networks: An Exploratory Investigation* (2007-2011, \$140,000) Principal Investigator.
- National Science Foundation: Collaborative Research: Social Networking Tools to Enable Collaboration in the Tobacco Surveillance Epidemiology, and Evaluation Network (TSEEN) (2007-2010, 0836262, \$575,624) Principal Investigator.
- Army Research Institute: *Virtual World Exploratorium* (2008-2010, W91WAW-08-C-0106/P00004, \$923,156) Principal Investigator with Scott Poole (University of Illinois), Jaideep Srivastava (University of Minnesota), and Dmitri Williams (University of Southern California).
- National Cancer Institute (subcontract from University of Texas Health Science Center, San Antonio TX): *Analysis, Visualization & Interpretation of the Redes en Accion Cancer Network* (2007-2010, \$166,226) Principal Investigator.
- National Science Foundation: CRI: IAD A Pressing Need for Observation, Facilitation and Computer Support of Group Interactions for Advancing United States National Priorities Homeland Security and Economic (2007-2010, 0709249).
 - National Science Foundation, ITR: *IT-Based Collaboration Framework for Preparing Against, Responding to, and Recovering from Disasters Involving Critical Physical Infrastructures,* (2004-2010, 0427089, \$2,370,000) Co-Principal Investigator in collaboration with Professors

- Feniosky Pena-Mora, Gene E. Robinson, and Indranil Gupta (University of Illinois Urbana-Champaign), and Andrea Hollingshead (University of Southern California).
- National Cancer Institute: Population Sciences Grid (2008-2009, 0836262, \$75,000).
- National Science Foundation (subcontract from Purdue University): *Network Recommender System for nanoHUB* (2008-2009, \$50,000).
- National Institute of Health (subcontract from University of Texas San Antonio): *Mapping, Understanding and Enabling the Redes en Accion Latino Cancer Network* (2007-2008, \$56,000) Principal Investigator.
- National Science Foundation: *C-IKNOW Cyberinfrastructure Tools to Enable Knowledge Network Discovery, Diagnosis and Design* (2007-2009, 0753047, \$199,619) Principal Investigator.
- National Science Foundation: *Collaborative Research: DHB Virtual Worlds: An Exploratorium for Theorizing and Modeling the Dynamics of Group Behavior* (2007-2008, 0729505).

- National Science Foundation: Social Networking Tools to Enable Collaboration in the Tobacco Surveillance, Epidemiology, and Evaluation Network (TSEEN) (2005-2008, IIS- 0535214, \$808,089). Principal Investigator on collaborative proposal with Katy Börner (Indiana University), Tom Finholt (University of Michigan), and Gary Giovino (Roswell Park Cancer Center, Buffalo, NY).
- National Cancer Institute (supplement from NCI to NSF): *Tobacco Informatics Grid (TobIG):*Development of Prototype to Demonstrate Distributed Collaboration and Data Analysis within the Tobacco Research Community (2006-2007, IIS-0535214, \$400,000) Principal Investigator.
- National Center for Supercomputing Applications: *GroupScope: Instrumenting Research on Interaction of Individuals in Complex Settings* (2006-2007, \$69,347) Principal Investigator on team including Marshall Scott Poole, Feniosky Pena-Mora, Klara Nahrstedt, David Forsyth, and Margaret Fleck.
- National Science Foundation: Collaborative Research: Mapping and Analyzing Emergent Multiorganizational networks in the Hurricane Katrina Response (2006-2007, SBE-0555115, \$140,000) Principal Investigator on collaborative proposal with Carter Butts (University of California, Irvine).
- National Science Foundation: *Instrumenting behaviors and attitudes in virtual worlds* (2006-2007, IIS 0628036, \$155,851) Co-Principal Investigator on collaborative proposal with Dmitri Williams (University of Illinois at Urbana-Champaign) and Dan Hunter (University of Pennsylvania).

- National Cancer Institute (subcontract from Battelle Memorial Institute): Socio-technical Specifications for the Design of a Cyberinfrastructure for a Tobacco Control Informatics Grid (2005-2006, \$50,000).
 - National Science Foundation, Workshop on: The Role of Social Network Research in Enabling Cyberinfrastructure and the Role of Cyberinfrastructure in Enabling Social Network held November 3-5, 2005 at the National Center for Supercomputing Applications, University of Illinois at Urbana-Champaign, (2005-2006, SCI-0533892, \$50,000) Principal Investigator with Co-Principal Investigator Katy Börner (Indiana University).
- National Science Foundation: 2006 International Workshop and Conference on Network Science, held May 2006 at Indiana University, Bloomington, IN. (2005-2007, SES-0532387, \$77,714) Co-Principal Investigator with Laszlo Barabasi (University of Notre Dame), Katy Börner, Alex Vespignani, and Stan Wasserman (Indiana University).
- Rockefeller Foundation: *Mapping cultural and network assets in three Chicago communities* (2005, CC 035, \$100,000) Principal Investigator in collaboration with Dr. Alaka Wali (Field Museum, Chicago).

- University of Illinois Food Security Initiative: A Social Network Perspective to Analyze Food Security (2003-2005, \$60,000) Principal Investigator.
- National Science Foundation: Digital Government: Workshop on US-Hungarian Research Collaborations to Address the Challenges of 21st Century Society. (2003-2005, 0341928, \$97,702) Principal Investigator on collaborative proposal with Anthony Stefanidis (University of Maine).
- University of Illinois Silicon, Carbon, Culture Initiative: Walking through Knowledge Networks (2003, \$30,000) Principal Investigator on collaborative proposal with Professors Narendra Ahuja and Michael Twidale.
- National Science Foundation: SGER: Knowledge Networks and Emerging Heterarchies in Rebuilding New York (2002-2003, 0233449, \$42,908) Principal Investigator on collaborative proposal with David Stark (Columbia University).
- National Aeronautics and Space Administration: *Modeling 21st Century Project Teams: Integrating Workflow and Knowledge Network Models of Organizing* (2002-2003, No. 02-NASA-C-1513, \$100,000) Principal Investigator on collaborative proposal with Ray Levitt (Stanford University).
- European Union Information Society & Technology Program (subcontract from LUISS University, Rome): Developing web-based knowledge asset mapping tools to study the use of communication technologies in organizations (2002-2003, €7000) Principal Investigator.

- Center for Human Resource Management: *Using Technologies to Support and Enhance Organizational Knowledge Networks* (2002-2003, \$10,000) Principal Investigator with Andrea Hollingshead.
- Hewlett Packard Mobile Initiative Grant Program: *Using mobile technologies* (2001-2002, \$140,760) Investigator with Principal Investigator Win-Mei W. Hwu.
- National Science Foundation: *Co-evolution of Knowledge Networks and 21st Century Organizational Forms: Computational Modeling and Empirical Testing* (1999-2003, 9980109, \$1,500,000) Principal Investigator.
- UIUC Chief Information Officer: Multi-university course on Communication Technologies and New Forms of Organizing, (1999-2000, \$10,000) Principal Investigator.
- UIUC Educational Technologies Board: *Virtual Digital Portfolio* (1998-1999, \$6,000) Principal Investigator.
- Committee on Institutional Cooperation: A Curriculum in Communication and the Global Workplace (1998-1999, \$10,000) Principal Investigator.

- Steelcase, Inc.: The Effects of Cooperative and Competitive Physical Environments and Communication on Negotiation Outcomes in Ultimatum and Communication Games (1996-1998, \$96,586) Consultant with Principal Investigators: Peter Monge, Janet Fulk, and Arthur Baskin.
- National Science Foundation: *The Sustainable Management of Civil Infrastructure: A Methodology and Testbed to Bridge Information Technology and Application* (1994-1999, ECS-9422730, \$1,268,403) Co-Principal Investigator.
- Advanced Learning Technologies in Higher Education, University of Illinois: A Curriculum in Organizational Communication and Technology Applications of Advanced Collaboration Tools to Support Cooperative Learning and Shared Instruction in Communication Studies, (1997, \$52,600) Principal Investigator with Barbara O'Keefe.
- National Center for Supercomputing Applications, Software Development Group: *Development of a Collaboration Workbench for the NCSA Software Development Group* (1996-1997,\$49,722)

 Principal Investigator with Barbara O'Keefe and Patricia Jones.
- Machine Tool Agile Manufacturing Research Institute: *Evaluation of a virtual organization* (1996-1997, \$35,000) Principal Investigator with Barbara O'Keefe and Patricia Jones.
- Annenberg Center for Communication: *Interactive Communication and Computing for Virtual Work Communities* (1995-1997, \$160,970) Co-Principal Investigator.

- UIUC Educational Technologies Board: *Support for Asynchronous Learning Networks in Speech Communication* (1995-1996, \$5,540) Co-Principal Investigator.
- Sloan Center for Asynchronous Learning Environments: *Collaboration Support for Senior Design Teams in Engineering, (*1995-1996, \$56,202) Principal Investigator with Peter DeLisle, Elizabeth Faye, Barbara O'Keefe.
- U.S. Department of Education: *Adaptive Network Library Interface* (1991, R197D10033, \$6,000) Co-Principal Investigator.
- Apple Computer's Advanced Technology Group: *Modeling the Use of Groupware as a Self-organizing System* (1990, \$205,000) Principal Investigator.

KEYNOTE ADDRESSES AND DISTINGUISHED LECTURES

2023

Contactor, N. (April 25, 2023) People Analytics: Using Digital Exhaust to Leverage Network Insights in the Algorithmically Infused Workplace. *Distinguished lecture at Hong Kong Baptist University Department of Computer Science*, Virtual.

Return to content page ↑

- Contractor, N. (March 17, 2023) Workshop on Web Science for Development. *Keynote speaker at International Institute of Information Technology Bangalore Workshop on Web Science for Development*, Bengaluru, India.
- Contractor, N. (February 15, 2023) People Analytics: Using Digital Exhaust to Leverage Network Insights in the Algorithmically Infused Workplace. *Distinguished lecture at Stanford University Organizational Behavior Seminar*, Stanford, CA.
 - Contractor, N. (February 10, 2023) People Analytics: Using Digital Exhaust from the Web to Leverage Network Insights in the Algorithmically Infused Workplace. *Keynote talk at the International School and Conference on Network Science*, Buenos Aires, Argentina.

- Contractor, N. (October 22, 2021) Reimagining Theories and Methods to Understand and Enable the Algorithmically Infused Changing Nature of Work. *Distinguished lecture at the Shanghai Jiao Tong University*, Virtual.
- Contractor, N. (August 30, 2021) Reimagining Theories and Methods to Understand and Enable the Algorithmically Infused Changing Nature of Work. *Distinguished lecture at the Seoul National University International Scholars Seminar Series*, Virtual.

- Contractor, N. (August 24, 2021). Reimagining Theories and Methods to Understand and Enable the Algorithmically Infused Changing Nature of Work. *Keynote address at the National University of Singapore Global Research Forum 2021*, Virtual.
- Contractor, N. (May 29, 2021). People Analytics: Using Digital Exhaust from the Web to Leverage Network Insights in the Workplace. *Keynote address at the 1st Workshop on Computational Methods in Social Sciences (The 71st ICA Annual Conference Regional Hub China)*, Virtual.
- Contractor, N. (May 20, 2021). Designing and Keeping Great Teams: Lessons from Preparing for Mars What can PLM Professionals Learn from This? *Keynote address at the PLM Road Map & PDT Spring 2021*, Virtual.
- Contractor, N. (April 20, 2021). Emerging Communication Architectures and the Changing Nature of Work. *Keynote address at the* 9th International Conference 'Comparative Media Studies in Today's World' (CMSTW), St. Petersburg, Russia, Virtual.

2020

Contractor, N. (October 24, 2020). Teaming in the Time of Covid-19. *Keynote address at the* ICA-Affiliated *New Media International (Virtual) Conference*.

Return to content page ↑

Contractor, N. (February 13, 2020). People Analytics: Using Digital Exhaust to Leverage Network Insights in the Workplace. Keynote address at <u>Workshop on Web Science for Development at The International Institute of Information Technology</u>, Bangalore, India.

- Contractor, N. (December 9, 2019). People Analytics: Using Digital Exhaust to Leverage Network Insights in the Workplace. *Keynote address at the <u>International conference on "Network Science in Economics and Finance"</u>, Ahmedabad, India.*
- Contractor, N. (November 23, 2019). Keynote address at the <u>2019 Annual V2V Summit</u>, Chicago, IL.
- Contractor, N. (October 17, 2019). Trust and Artificial Intelligence. Keynote address at the National Intelligence Science and Technology Committee (NISTC) meeting, Washington, DC.
- Contractor, N. (October 8, 2019). Understanding and Enabling the Future of Work. *Keynote address at <u>The Connected Commons</u>*, Williamsburg, VA.
- Contractor, N. (September 30, 2019). A Decadal Survey of the Behavioral and Social Sciences: A

- Research Agenda for Advancing Intelligence Analysis. Keynote address at the SBS Decadal Survey Report Launch, Washington, DC.
- Contractor, N. (August 26, 2019). Understanding and Enabling the Future of Work. *Keynote address at the 2019 International Conference of Social Computing*, Beijing, China.
- Contractor, N. (August 12, 2019). People Analytics: Understanding and Enabling the Future of Work. Keynote address at the Organizational Communication & Information Systems (OCIS) plenary session at the 79th Annual Meeting of the Academy of Management, Boston, MA, USA.
- Contractor, N. (June 18, 2019). Decadal Survey Vision. *Keynote address at the Social Science Research & Intelligence Workshop at the Academy of the Social Science in Australia*, Canberra, Australia.
- Contractor, N. (February 26, 2019). People Analytics: Understanding and Enabling the Future of Work. Keynote address at the Robert Bosch Center for Data Science and Artificial Intelligence Webs Science Symposium at the Indian Institute of Technology Madras, Chennai, India.
- Contractor, N. (January 4, 2019). Relational Analytics: Transforming the future of work. *Keynote address at the International School and Conference on Network Science (NetSci-X),* Santiago, Chile.

2018

Contractor, N. (February 16, 2018). Combining Big Data and Conventional Methods. *Keynote address at the Computational Communication Science conference*, Hanover, Germany.

- Contractor, N. (October 10, 2017). Welcome and open plenary speaker at the Atlanta Conference on Science and Innovation Policy, Atlanta, GA.
- Contractor, N. (July 1, 2017). Leveraging Computational Social Science to address Grand Societal Challenges. *Keynote address at the Web Science Summer School*, St. Petersburg, Russia.
- Contractor, N. (June 15, 2017). Some Assembly Required: Organizing in the 21st Century.

 *Plenary speaker in a session titled Organizing and Organizations, at the Collective Intelligence Conference, New York University's Tandon School of Engineering, Brooklyn, NY.
- Contractor, N. (April 26, 2017). Building and Leveraging Powerful Social Networks. *Keynote address at 5th Annual Network Leadership Training Academy. Center on Network Science at the University of Colorado,* Denver, CO.

Contractor, N. (March 13, 2017). Creating Effective Teams. Keynote address at "Assembly required. Organizing in the 21st century". Center for Technological and Pedagogical Innovation (CITEP) conference at the University of Buenos Aires, Buenos Aires, Argentina.

2016

- Contractor, N. (December 1, 2016). Leveraging Computational Social Science to Address Grand Societal Challenges. *Keynote address at the 3rd GESIS Computational Social Science Winter Symposium*, Cologne, Germany.
- Contractor, N. (June 30, 2016). Leveraging Web/Internet/Network Sciences (WINS) to address Grand Societal Challenges. *Keynote address at the Web Science Summer Institute,* Koblenz, Germany.
- Contractor, N. (May 16, 2016). Building and Leveraging Powerful Social Networks. *Keynote address at the University of Colorado, Denver's 4th Annual Network Leadership Training Academy*, Denver, CO.
- Contractor, N. (March 28, 2016). Leveraging Computational Social Science to address Grand Societal Challenges. *Distinguished Lecture in the Educational Testing Services (ETS) Seminar Series*, Princeton, NJ.

Return to content page ↑

- Contractor, N. (March 13, 2016). The Science of Team Science. Keynote address at the "Intra and interorganizational conditions for interorganizational research cooperation."

 University of Bremen, in collaboration with the MARUM Center for Marine Environmental Sciences at Bremen University
- Contractor, N. (March 4, 2016). Leveraging Computational Social Science to address Grand Societal Challenges. *Lambda Pi Eta Choice Scholar Lecture at the University of California Santa Barbara*, Santa Barbara, CA.
- Contractor, N. (February 15, 2016). Team Science for the 21st Century. *Evening Speaker, 3rd Kavli Symposium on Science Journalism,* Washington, DC.
- Contractor, N. (February 6, 2016). Reflections: Lessons learned. *Plenary Speaker, 22nd Annual Organization Science Winter Conference: Innovations & Organizations*, Park City, UT.

2015

Contractor, N. (September 24, 2015). Leveraging Computational Social Science to Address Grand Societal Challenges. *Kameshwar C. Wali Lecture in the Sciences & Humanities at Syracuse University,* Syracuse, NY.

- Contractor, N. (August 27, 2015). Leveraging Computational Social Science to address Grand Societal Challenges. *Keynote address at the IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining,* Paris, France.
- Contractor, N. (June 18, 2015). Leveraging Computational Social Science to address Grand Societal Challenges. *Distinguished Lecture at North Carolina State University's Laboratory for Analytic Sciences*, Raleigh, NC.
- Contractor, N. (June 15, 2015). Data, Network, and Crowd Science: Laura Norén, Noshir Contractor, and Wei Wang Discuss How Social Data Is Changing Network and Communication Science with Online Collaborative Methods. *Speaker at the Big Boulder Initiative*, Boulder, CO.
- Contractor, N. (June 9, 2015). Leveraging Computational Social Science to address Grand Societal Challenges. *Distinguished Lecture at the Vienna University of Technology's PhD School Series "Current Trends in Computer Science"*, Vienna, Austria.
- Contractor, N. (June 2, 2015). Leveraging Computational Social Science to address Grand Societal Challenges. *Keynote at NetSci Computational Social Science Conference*, Zaragoza, Spain.
- Contractor, N. (May 28, 2015). Leveraging WINS (Web/Internet/Network Science) to address Societal Challenges. *Keynote at the 2nd International Conference on Internet Science*, Brussels, Belgium.

- Contractor, N. (April 29, 2015). Leveraging Network Science to address Great Societal Challenges. *Keynote at the ARS' 15 International Workshop "Large Networks and Big Data"*, Anacapri, Italy.
- Contractor, N. (March 10, 2015). Leveraging Computational Social Science to address Grand Societal Challenges. *Distinguished Lecture at the Machine Learning and Data Analytics Symposium,* Doha, Qatar.
- Contractor, N. (February 22, 2015). The Science of Team Science. *Keynote address at the Network for Pancreatic Organ Donors with Diabetes Annual Meeting,* St. Pete Beach, FL.
- Contractor, N. (February 20, 2015). Building Powerful Personal and Professional Networks.

 Distinguished Lecture at the Chicago Collaboration for Women in STEM, Naperville,
 IL.

2014

Contractor, N. (October 22, 2014). Leveraging Computational (e)Social Science to address Grand Societal Challenges. *Keynote address at the 10thIEEE International Conference on*

- eScience, Guarujá, Sao Paulo, Brazil.
- Contractor, N. (September 5, 2014). Leveraging Network Science to address grand societal challenges. *Inaugural lecture of the Elihu Katz Colloquia on Communication and Media Studies*. Annenberg School for Communication, University of Pennsylvania.
- Contractor, N. (August 4, 2014). Toward a Network Science of Digital Data in Organizations.

 *Plenary Speaker, Communication and Information Systems Division, Academy of Management, Philadelphia.

2013

- Contractor, N. (December 13, 2013). Some assembly required: Organizing in the 21st century *Keynote at the 3rdIndian Academy of Management Conference*, Indian Institute of Management, Ahmedabad, India.
- Contractor, N. (October 19, 2013). Can big data motivate new theories & methods? *Plenary Speaker, 2013 International Conference on Advanced Media Technologies and Education (AMTE 2013)*, Shanghai.
- Contractor, N. (October 1, 2013). Some assembly required: Organizing in the 21st Century. Keynote presentation at the 14th IFIP Working Conference on Virtual Enterprise PRO-VE'13 in Dresden, Germany.
- Contractor, N. (September 23, 2013). Leveraging social networks for science communication.

 *Plenary speaker at the National Academy of Sciences' Arthur M. Sackler colloquium on

Return to content page ↑

the Science of Science Communication II.

- Contractor, N. (September 6, 2013). Some assembly required: Organizing in the 21st Century. *Keynote at the 2013 International Cyber Security Strategy Congress,* Leuven, Belgium.
- Contractor, N. (August 27, 2013). Some assembly required: Organizing in the 21st Century. *Opening keynote address at the 11thInternational Conference on Business Process Management*, Beijing.
- Contractor, N. (July 26, 2013). Some assembly required: Organizing in the 21st Century. *Closing keynote address at the 2013 Big Ten Development Conference*, Evanston, IL.
- Contractor, N. (June 6, 2013). Some assembly required: Organizing in the 21st Century. *Keynote address at the International School and Conference on Network Science*, Copenhagen.

2012

Contractor, N. (December 16, 2012). Some assembly required: Organizing in the 21st Century.

- Keynote address at the 2012 ASE/IEEE International Conference on Social Informatics in Washington DC.
- Contractor, N. (November 16, 2012) Some assembly required: Organizing in the 21st Century. Keynote at the 1st China National Conference on Social Computing (NCSC 2012) in Beijing.
- Contractor, N. (November 9, 2012) The Future of Team Science. *Keynote address at the Dr. Harold Burdette Annual Fall conference on Team Science: History, Theory, &* Concept, Indiana University-Purdue University Indianapolis.
- Contractor, N. (October 28, 2012). The assembly of multi-team systems. *Dinner keynote at the Advancing the Science of Multiteam Systems meeting* in Varenna, Italy.
- Contractor, N. (October 26, 2012). Some assembly required: Organizing in the 21st Century. *Opening keynote at the 1st Michigan State University Cyberinfrastructure (CI) Days conference*. East Lansing, MI.
- Contractor, N. (September 24, 2012). Some assembly required: Organizing in the 21st Century.

 Opening plenary address at HUBUB 2012 the annual HubZero Conference, Indianapolis, IN.
- Contractor, N. (September 10, 2012). Some assembly required: Organizing in the 21st Century. Keynote address at the Digital Research 2012 conference, Oxford University, Oxford, UK.

- Contractor, N. (April 26, 2012). Some assembly required: Organizing in the 21st century. *Plenary address at Society for Industrial and Applied Mathematics (SIAM) International Conference on Data Mining*. Anaheim, CA.
- Contractor, N. (April 5, 2012). Some assembly required: Organizing in the 21st Century. *Keynote address at Crossroads Seminar Series*, George Washington University, Washington, DC.

- Contractor, N. (October 24, 2011). From Understanding to Enabling Networks: Using Web Science to Enhance Recommender Systems. *Keynote address at the 5th ACM Conference on Recommender Systems*, Chicago, IL.
- Contractor, N. (October 11, 2011). Understanding and Enabling Collaboration in 21st Century Teams. *Plenary address at CIC CIO Tech Forum*, University of Illinois at Urbana-Champaign, Champaign, Illinois.

- Contractor, N. (October 7, 2011). Using Web Science to Understand and Enable 21st Century Multidimensional Networks. *Keynote address at 3rd International Conference on Social Informatics*, Singapore.
- Contractor, N. (June 8, 2011). From disasters to WoW: Using web science to understand and enable 21st century multidimensional networks. *Keynote address at 22nd annual ACM conference on hypertext and hypermedia*, Eindhoven, The Netherlands.
- Contractor, N. (May 20-21, 2011). Social and knowledge network-building to advance global health decision-making. *Keynote lecture at Advancing Global Health Decision-Making Conference*, Rutgers University, New Brunswick, NJ.
- Contractor, N. (May 16-17, 2011). Enabling and understanding networks in virtual organizations. Keynote address at National Science Foundation, "Toward a Science of Virtual Organizations" University of Central Florida, Orlando, FL
- Contractor, N. (January 24, 2011). *Understanding and Enabling Networks. Keynote at Etmaalvoor de Communicatiewetenschap,* University of Twente, Enschede, Netherlands.

2010

- Contractor, N. (Aug 25, 2010). Using web science to understand and enable society. *Keynote address at the Inauguration of the Brazilian Institute for Web Science,* Rio de Janeiro, Brazil.
- Contractor, N. (October 6, 2010). Using web science to understand and enable society. *Keynote address at the conference*, World Wide Consortium (W3C), Belo Horizonte, Brazil.

- Contractor, N. (September 13, 2010). Some assembly required: Understanding and enabling team assembly. *Honorary Professor Lecture, Fudan University's School of Management*, Shanghai, China.
- Contractor, N. (August 21, 2010). Some assembly required: Understanding and enabling team assembly. *Keynote address at 2010 IEEE Second International Conference on Social Computing (SocialCom)*, Minneapolis, MN.
- Contractor, N. (August 12, 2010). Understanding and enabling team science. *Opening keynote at the First Annual National VIVO Conference*: Enabling National Networking of Scientists, New York, NY.
- Contractor, N. (July 21-24, 2010). Some assembly required: Understanding and enabling team assembly. Keynote address at the GESIS 50th anniversary celebration Leibniz -InstitutfürSozialwissenschaften Institute Day, Cologne, Germany.

- Contractor, N. (June 9-11, 2010). Using network science to understand and enable team assembly. *Keynote address at Lausanne Workshop on Multi-Disciplinary Approach to Complexity, Networks, & Geosimulations*, University of Lausanne, Lausanne, Switzerland.
- Contractor, N. (June 1, 2010). Some assembly required: Leveraging web science to understand and enable team assembly. *Keynote address at Extended Semantic Web Conference ESWC 2010*, Heraklion, Greece.
- Contractor, N. (March 31, 2010). Computational modeling to advance theory construction in the social science. *Keynote address at the 2010 International Conference on Social Computing, Behavioral Modeling, and Prediction*, Bethesda, MD.

2009

- Contractor, N. (November 12, 2009). Leveraging powerful networks to address health challenges. *Keynote address at the Young Adult Alliance, Building bridges and collaborations* annual meeting, Lance Armstrong Foundation, Austin, TX.
- Contractor, N. (October 24, 2009). Understanding and enabling team assembly. *Plenary speaker* at the International National Science Foundation Workshop on Connected Multimedia, Hangzhou, China.
- Contractor, N. (April 25, 2009). Understanding and enabling team assembly. *Closing keynote at the Annual Meeting of the Society of Behavioral Medicine*, Montreal, Canada.
- Contractor, N. (April 24, 2009). Understanding and enabling team assembly. *Invited plenary speaker, Studying Society in a Digital World,* Princeton University, Princeton, NJ.
- Contractor, N. (March 24, 2009). Global Technologies and Networked Communities. Opening

Return to content page ↑

keynote speaker, Ceremony of the NU-Qatar campus, Doha, Qatar.

- Contractor, N. (March 20, 2009). Leveraging web science to understand and enable society. Keynote address at the 1st Web Science conference: Celebrating the 20th anniversary of the Web, Athens, Greece.
- Contractor, N. (February 2, 2009). Understanding and enabling networks to advance engineering education. *Keynote address at Annual National Science Foundation Engineering Education Awardees Conference*, Reston, VA.

Contractor, N. (November 6, 2008). Using networks to mobilize for global events. *Keynote speaker at Milan World Expo 2015 launch*, Milan, Italy.

2007

Contractor, N. (2007) Keynote address, Australian National Digital Collections Conference.

2006

- Contractor, N. (June 29, 2006). From Disasters to WoW: Enabling Communities with Cyberinfrastructure. *Keynote address at the 2ndInternational e-Social Science Conference*, Manchester, UK.
- Contractor, N. (May 1, 2006). From Disasters to WoW: Enabling Communities with Cyberinfrastructure. *Van Zelst Distinguished Lecture*, Northwestern University, Evanston, IL.
- Contractor, N. (February 2, 2006). From Disasters to WoW: Enabling Communities with Cyberinfrastructure. *Walter Fisher Distinguished Lecture*, Annenberg School of Communication, USC, Los Angeles, CA.

2005

- Contractor, N. (August 16, 2005). Social Networks and Distributed Communities of Practice. Keynote address at Workshop on Sustaining Distributed Communities of Practice at the International Centre for Governance and Development, University of Saskatchewan, Saskatoon, Canada.
- Contractor, N. (June 14, 2005). Socio-technical challenges in designing 21st cyberinfrastructure to enable networks in communities. *Keynote address at the 2nd International Communities & Technologies conference*, Milan, Italy.
- Contractor, N. (March 28, 2005). Co-evolution of knowledge networks in 21st century

- organizational forms. 15th Annual Wayne Thompson Distinguished Lecture at Western Illinois University, Macomb, IL.
- Contractor, N. (March 14, 2005). ICT support in emergency management. *Keynote address at the eGovernment der Oesterreichischen Computer Gesellschaft* conference, Vienna, Austria.

- Contractor, N. (November 24, 2004). *Co-evolution of knowledge networks in 21st century organizational forms*. Visiting Professor Distinguished Lecture, University of Science and Technology of China, Hefei, China.
- Contractor, N. (May 18, 2004). *Coevolution of knowledge networks and 21st century organizational forms*. Plenary lecture at the 2004 Understanding Complex Systems: Networks conference, Urbana, IL.
- Contractor, N. (April 30, 2004). Designing knowledge networks for organizational change. Keynote speaker at the "Network of Networks," National Institutes of Health, Rockville, MD.

2003

- Contractor, N. (November 14, 2003). Emergence of Communication Networks in the 21st Century. Keynote speaker at the Inauguration of CITÉ de l'Université de Montréal Interdisciplinary Research Centre on Emerging Technologies at the University of Montreal, Montreal, Canada.
- Contractor, N. (October 17, 2003). Communication Technology in Organizations. *Distinguished lecture at Università Cattolica del Sacro Cuore*, Milan, Italy.
- Contractor, N. (June 11, 2003). Co-evolution of Multi-dimensional Networks. *Keynote address at Multi-level Network Analysis of the co-operation between firms*, University of Surrey, Surrey, United

2002

Contractor, N. (April 22, 2002). The power of the network: Technology and new organizational forms. Keynote address at the National Laboratory of Tourism and e-commerce Forum on Technology and Change, Urbana, IL.

2001

Contractor, N. (May 2, 2001). Collaborative knowledge in the e-Economy. *Keynote address to Workshop on Collaborating in the e-Economy: Legacies, Practices, and Prospects,*

Return to content page ↑

University of Technology, Sydney, Australia.

Contractor, N. (April, 2001). The use of technologies to support and reconfigure Human Resource functions in 21st century organizational forms. *Keynote speaker at the Spring Roundtable on Human Resource Management and the Web: Evolution or Revolution?*Center for Human Resource Management, Oak Brook, IL.

2000

- Contractor, N. (August, 2000). Communication through knowledge networks and the future of organizational structures. *Keynote address, Association of Indiana Convention and Visitors Bureau 2000 Annual Educational Conference*, Merrillville, IN.
- Contractor, N. (March 2000). Studying and using communication networks in the 21st century. Keynote address at the Workshop for Network of Communication Researchers in Thailand, Chulalongkon University, Bangkok, Thailand.
- Contractor, N. (February, 2000). Emergence of communication networks: A self-organizing systems perspective. *Keynote address at the Finnish Speech Communication Association Conference*, Helsinki, Finland.

1999

- Contractor, N. (July, 1999). Social capital and knowledge capital in network forms of organizing. Keynote address at workshop on Laboratorio di Knowledge Management: Il contributo delle tecnologie al knowledge management organized by Instituto RSO (Institute for Action Research on Organizations and Systems). Sede Fiat, Centro Incontini, Marentino, Torino, Italy.
- Contractor, N. (June, 1999). Using technologies to build productive relationships. *Keynote address, McKinsey & Co.'s "Mini-Oxford.*" British Library Conference Centre, London.
- Contractor, N. (April, 1999). Self-organizing systems research in the social sciences. *Keynote address, Texas Conference on Organizations*, Kerrsville, TX.
- Contractor, N. (February, 1999). Communication skills in the 21st century. *Keynote address, The Communication Conference: Setting the Standards for the 21st Century,* hosted by McKinsey & Co.'s Global Client Communications Practice, Berlin, Germany.

INVITED COLLOQUIA/LECTURES

Contractor, N. (2023, October). People Analytics: Using Digital Exhaust from the Web to Leverage Network Insights in the Algorithmically Infused Workplace. Presentation at the Ivan Preston Colloquium, Madison, Wisconsin.

Return to content page ↑

Contractor, N. (2023, July). People Analytics: Using Digital Exhaust from the Web to Leverage Network Insights in the Algorithmically Infused Workplace. Presentation at the Summer Institute in Computational Social Science (SICSS-Beijing 2023), Beijing, China.

- Contractor, N. (2023, March). People Analytics: Using Digital Exhaust to Leverage Network Insights in the Algorithmically Infused Workplace. Keynote Speaker at Global Pervasive Computational Epidemiology (GPCE) Spring Meeting: Research Integration, Virtual
- Contractor, N. (2023, March). Al Shock: The Future of Economy, Organizations, Work, and Management Education. Panelist at Korean Academic Society of Business Administration, Virtual
- Contractor, N. (2023, March). People Analytics: Using Digital Exhaust From The Web to Leverage Network Insights in the Algorithmically Infused Workspace. Speaker at CUDAN Open Lab Seminar, Virtual
- Contractor, N. (2023, March). Ask the Experts Network Analysis/Dynamic Networks. Panelist at the Consortium for the Advancement of Research Methods and Analysis at Texas Tech University, Virtual
- Contractor, N. (2022) Leveraging Collaborative Networks. Speaker at the Road to Leadership Symposium at Northwestern University, Virtual
- Contractor, N. (2021, November). People Analytics: Using Digital Exhaust From The Web to Leverage Network Insights in the Algorithmically Infused Workspace. Speaker at the Hong Kong Baptist University, Virtual Meeting
- Contractor, N. (2021, November). Data-driven Network Science for Modeling Design Preferences and Designing Effective Teams. Speaker at the Segal Design Institute, Northwestern University, Evanston, IL
 - Contractor, N. (2021, August). <u>Increasing Awareness about Network Awareness in Scientific Networks.</u> Speaker at the U.S. National Academies of Sciences, Engineering, and Medicine Committee for Addressing Inaccurate and Misleading Information about Biological Threats through Scientific Collaboration and Communication, Virtual Meeting.
- DeChurch, L. A. & Contractor, N. (2021, July). Teaming in a Virtual World. Speaker at the Northwestern Medicine Executive Leadership Group Virtual Conference, Virtual Meeting.
- Contractor, N. (2021, June). The Next Normal for Teaming: Transitioning Out of COVID-19.

Speaker at the Business Advisory Council Meeting of the Northwestern University Transportation Center, Evanston, IL.

- Contractor, N. (2021, April). <u>People Analytics: Using Digital Exhaust from the Web to Leverage</u>

 <u>Network Insights in the Workplace.</u> Speaker at the Virtual Visit to the Department of Industrial and Systems Engineering at the University of Minnesota, Virtual Meeting.
- Contractor, N. (2021, March). People Analytics: Using Digital Exhaust from the Web to Leverage Network Insights in the Workplace. Speaker at the National Institute of Industrial Engineering, Virtual Meeting
- Contractor, N. (2021, March). Networking like a star during a crisis. Speaker at Master of Science (MSC) in Communication program Webinar, Northwestern University, Evanston, IL.
- Contractor, N. (2021, March). <u>People Analytics: Understanding & Enabling the Future of Work on Earth and in Space.</u> Speaker at the Institute for Analytical Sociology International Roundtable on Computational Social Science, Virtual Meeting.
- Contractor, N. (2021, March). Missions to Mars: Understanding and Preparing Teams for the Future. Speaker at the IllinoisX Space Technology, Virtual Meeting
- Contractor, N. (2021, February). Metatheoretical perspectives on satellite television and development in India: What we learned and did not learn from SITE to inform digital media in contemporary India. Speaker at the Vikram Sarabhai Birth Centenary Tribute, Virtual Meeting.
- Contractor, N. (2021, January). Teaming in the time of COVID-19: What Astronauts can teach us about working together. Speaker at Midday@McCormick, Virtual Meeting.
- Contractor, N. (2020, December). Understanding Consumer Behavior in Digital Environments Panel. Speaker at the Digital Marketing and Computer Science Workshop Northwestern University and Adobe Research, Virtual Workshop.
- Contractor, N. (2020, November). Using Digital Traces to Leverage Network Insights During COVID-19 Today and in Space in the Future. Speaker at the Virtual Brown Bag Series Department of Organization and Human Resources, School of Management, University of Buffalo, Buffalo, NY.
- Contractor, N. (2020, November). <u>People Analytics: Using Digital Exhaust from the Web to Leverage Network Insights in the Workplace.</u> Speaker at Global HR Forum 2020, Grand Walkerhill Seoul, Virtual Meeting.
- Contractor, N. & DeChurch, L.A. (2020, October). <u>Teaming in the Time of Covid-19:</u>
 <u>Reconfiguration of Workplace Communication Networks.</u> Speaker at the Interdisciplinary Network for Group Research 2020, Virtual Meeting.

- and Research on Astronauts Can Teach Us About Working Together When We Are Apart. Speaker at Northwestern Kellogg School of Management Webinar, Northwestern University, Evanston, IL.
- Contractor, N. (2020, July). Understanding and Leveraging Networks. Speaker at Master of Science (MSC) in Communication program Webinar, Northwestern University, Evanston, IL.
- Contractor, N. (2020, May). (Re-)pairing Teams for the Moon. Speaker at MORS Brownbag Series, Northwestern University, Evanston, IL.
- Contractor, N. & DeChurch, L. A. (2020, May). <u>Teaming in the Time of COVID-19: What Astronauts Can Teach us About Working Together</u>, online lecture for <u>Northwestern Emeriti Organization</u>
- Contractor, N. (2020, February). Some Assembly Required: Organizing in the 21st century. University of Santa Barbara, Santa Barbara, CA.
- Contractor, N. (2019, September). Employee Networks and Retail Management. <u>Roundtable</u> <u>discussion at Santa Fe Institute</u>, San Francisco, CA.
- Contractor, N. (2019, May). A Decadal Survey of the Behavioral and Social Sciences: A Research Agenda for Advancing Intelligence Analysis. Panelist at the *Advisory Committee (AC)* to the Directors for Social, Behavioral, and Economic Sciences (SBE) National Science Foundation, Alexandria, VA.
- Contractor, N. (2019, April). People Analytics: Understanding and Enabling the Future of Work. Speaker at *Northeastern University's Network Science Institute*, Boston, MA.
- Contractor, N. (2019, March). Leveraging the Next Decade of Computational Social Science to Address Grand Societal Challenges. Speaker at *University of Michigan's Survey Research Center (SRC) Seminar Series*, Ann Arbor, MI.
- Contractor, N. (2019, January). Avances y proyecciones de Computational Social Sciences. Presenter at the *Universidad del Desarrollo Facultad de Gobierno*, Santiago, Chile.
- Contractor, N. (2018, November). Complementarity of the Network Sciences: distinctions, tensions and synergies across SNA, NS and the other system sciences. Panel member at the North American Regional Social Networks (NASN) Conference of the International Network for Social Network Analysis (INSNA), Washington, D.C.
- Contractor, N. (November 10, 2018). Pursuing Grant-Funded Research in Communication: Challenges and Opportunities across the Discipline. *Session speaker for the Research*

- Contractor, N. (November 10, 2018). Scholarly Recess: Professional Development for Students and Junior Scholars. Session speaker for the Group Communication Division at the National Communication Association Convention, Salt Lake City, UT.
- Contractor, N. (October 17, 2018). Social isolation: A challenge in and out of this world. Session speaker at Amazon's All Boats Rise? Social Capital, Promise and Peril, session: No One is an (I)Land, Seattle, WA.
- Contractor, N. (October 18, 2018). Inhaling digital exhaust data from Enterprise Social media to understand and enable teaming. Presentation at *Inaugural Case Workshop on Digital Innovation*, Case Western Reserve University, Cleveland, OH.
- Contractor, N. (May 21, 2018). Some Assembly Required: Teaming in the 21st Century.

 Presentation at Computational Social Science Luncheon, Northwestern University,
 Evanston, IL.
- DeChurch, L. A., & Contractor, N. S. (April 20, 2018). Deep space teamwork. Presentation at *COMMFEST2018*, Northwestern University, Evanston, IL.
- Contractor, N. (April 16, 2018). Leveraging Computational Social Science to Address Grand Societal Challenges. *Northwestern University IPR Colloquium*, Evanston, IL.
- Contractor, N. (October 27, 2017). Leveraging Computational Social Science to Address Grand Societal Challenges. Case Western Weatherhead School of Management's Interdepartmental Research Seminar (jointly sponsored by Design & Innovation and Organizational Behavior), Cleveland, OH.
- Contractor, N. (October 18, 2017). Some assembly required: Leveraging computational social science to understand and enable team assembly. *Invited lecture at Sciences Po organized by the Centre de Sociologie des Organisations*, Paris, France.
- Contractor, N. (May 18, 2017). Leveraging Computational Social Science to Address Grand Societal Challenges. *Gerald P. Mohrmann Memorial Lecture at the Institute for Social Sciences*, UC Davis, Sacramento, CA.
 - Contractor, N. (February 21, 2017). <u>Testing Multitheoretical, Multilevel Hypotheses about Networks.</u> *Prevention Science Methodology Group (PSMG) at the Center for Prevention Implementation Methodology*, Feinberg school of medicine, Northwestern University, IL.
- Contractor, N. (February 13, 2017). Bridging the Boundary, while Minding the Seams: Boundary Propensities in Multiteam Systems. *Center for Work, Technology, and Organization, Management Science & Engineering*, Stanford University, CA.

- Contractor, N. (September 9, 2016). Leveraging Computational Social Science to Address Grand Societal Challenges. *Department of Computer Science and Automation Seminar Series*. Indian Institute of Science, Bangalore, India.
- Contractor, N. (April 27, 2016). Potenciando la Ciencia de Redes para abordar los grandes retos sociales. *Programa La UBA para el Siglo XXI en la Universidad de Buenos Aires,* Buenos Aires, Argentina.
- Contractor, N. (April 13, 2016). Some Assembly Required: Organizing in the 21st Century.

 Computer Science Research Group Talk at the University of California Santa Barbara,
 Santa Barbara, CA.
- Contractor, N. (January 15, 2016). Leveraging Network Science to Address Grand Societal Challenges. *Interdisciplinary Committee on Organizational Studies (ICOS) & Digital Future Lecture Series at the University of Michigan,* Ann Arbor, MI.
- Contractor, N. (October 26, 2015). Some Assembly Required: Organizing in the 21st Century. *Clinical and Translational Science Talk at the University of Florida,* Gainesville, FL.
- Contractor, N. (July 9, 2015). Leveraging Computational Social Science to address grand societal challenges. *Vienna Summer School on Digital Humanities*, Vienna University of Technology. Vienna, Austria.
- Contractor, N. (Feb 27, 2015). Using computational social science to address grand societal challenges. *Brown bag presentation at the Northwestern University's Office for Sponsored Research staff meeting*, Evanston, IL.
- Contractor, N. (October 15, 2014). Leveraging Computational Social Science to address grand societal challenges. *Information Science Colloquium Series co-sponsored by Yahoo!*Cornell University, Ithaca, NY.
- Contractor, N. (August 15, 2014). Leveraging Computational Social Science to address grand societal challenges. *New Computational Sociology Conference*, Stanford University. Palo Alto, CA.
- Contractor, N. (April 4, 2014). Leveraging Computational Social Science to address grand societal challenges. *Department of Communication*, University of California, Santa Barbara.
- Contractor, N. (March 3, 2014). Leveraging Computational Social Science to address grand societal challenges. *Annenberg Research Seminar*. Annenberg School for Communication & Journalism, University of Southern California, Los Angeles.
- Contractor, N. (February 27, 2014). Some assembly required: Organizing in the 21st century. *Physics and Astronomy Complex Systems Seminar Series*, Northwestern University

- Contractor, N. (February 17, 2014). Utilizing the Science of Social Networks to Increase Public Understanding. *Ready.Set.Go: Turning Great Researchers into Great Communicators* seminar series, Northwestern University.
- Contractor, N. (December 10, 2013). Some assembly required: Organizing in the 21st century. Faculty of Management Studies, Higher School of Economics Distinguished Lecture Series, Moscow, Russia.
- Contractor, N. (December 9, 2013). Some assembly required: Organizing in the 21st century. Internet Studies (LINIS) and the Sociology of Education and Science Laboratory (SLON) Distinguished Lecture Series, Higher School of Economics, St. Petersburg, Russia.
- Contractor, N. (November 18, 2013). Scholarship in team science. SINAInnovations: Leading a New Era of Discovery. Icahn School of Medicine at Mount Sinai, New York.
- Contractor, N. (November 14, 2013). Networks and networlds. Forum on computer science everywhere: Exploring collaborations between computer science and other disciplines, McCormick School of Engineering, Northwestern University.
- Contractor, N. (October 30, 2013). Some assembly required: Organizing in the 21st Century. Featured speaker at *Northwestern University Transportation Center's Business Advisory Council (BAC)* meeting.
- Contractor, N. (February 8, 2013). Some assembly required: Organizing in the 21st century.

 Kellogg Attitudes Motivation and Processing (KAMP) Speaker Series, Kellogg School of Management, Northwestern University.
- Contractor, N. (December 6, 2012). *Some assembly required: Organizing in the 21st century.* Seminar series in the Department of Informatics at the University of Zurich.
 - Contractor, N. (December 2, 2012) *Some assembly required: Organizing in the 21st Century*. Colloquium series at Northwestern University Qatar, Doha, Qatar.
- Contractor, N. (September 26, 2012). *Team assembly in online games.* Guest lecture at the Fudan School of Business, Shanghai, China.
- Contractor, N. (September 21, 2012). Some assembly required: Organizing in the 21st century. Presentation at the LUISS Business School, Rome, Italy.
 - Contractor, N. (September 17, 2012). Studying teams at the hyperedge. Presentation at the European Union funded Innovation Sustainability Technology (INSITE) workshop titled "Networks' emergence and sustainability" at Ca' Foscari University of Venice, Italy.

Contractor, N. (August 21, 2012). Presented at the 2012 Summer Social Webshop on Technology

Return to content page ↑

Mediated Social Participation, University of Maryland, College Park, MD. http://www.cs.umd.edu/hcil/webshop2012/index.shtml

- Contractor, N. (July 9, 2012). *Network theories and methods in web science*. Tutorial presented at the 4th Web Science Summer School, Leiden, Netherlands. https://www.lorentzcenter.nl/index.php?pntType=ConPagina&id=828&conBestandId=10 12&pntHandler=DownloadAction
- Contractor, N. (July 4, 2012). Social network theories and methods. Tutorial presented at the School on Networks in Biology, Social Science and Engineering organized as part of the Indian Institute of Science Mathematics Initiative, Bangalore, India. http://math.iisc.ernet.in/~imi/NBSSEWS.php
- Contractor, N., & Srivastava, J., (June 25, 2012). *Network science models and computational methods*. Tutorial presented at the Army Research Laboratory, under the auspices of the Network Science: Collaborative Technology Alliance (NS-CTA), Aberdeen Proving Ground, MD.
- Contractor, N. (June 16, 2012). Facilitated a networking exercise at *Women Networking For Sustainability: Celebrating The Past & Envisioning The Future,* held concurrently with the Rio+20 United Nations Conference on Sustainable Development, Rio de Janeiro, Brazil.
- Contractor, N. (May 31-June 1, 2012). Participated in the National Advisory Committee meeting for the Active Aging Research Center, Madison, WI.
- Contractor, N. (May 17, 2012). The role of networks in the assembly of effective teams.

 Presentation at a National Cancer Institute meeting on The Role of Health Care Teams in Cancer Care, Bethesda, MD.
- Contractor, N. (April 27, 2012). Presentation on Social Network Analysis and Application panel, University of Missouri, Colombia, MO.
- Contractor, N. (March 21, 2012). Some assembly required: Organizing in the 21st Century.

 Presentation at the UC Davis Clinical and Translational Science Center's Translation Science Seminar, Sacramento, CA.
- Contractor, N. (October 16, 2011). *Traces in a tangled web.* Chicago Humanities Festival, Chicago, IL.
- Contractor, N. (September 30, 2011) Using web science to understand and enable 21st century

- networks. Presentation at the Workshop on Information in Networks (WIN), New York University's Stern School of Business, New York, NY. http://winworkshop.net/index.php
- Contractor, N. (August 24, 2011). *Understanding and enabling large socio-communication networks*. Summer Social Webshop (@Webshop2011), University of Maryland, College

- Park, MD. http://www.cs.umd.edu/hcil/webshop2011/index.shtml
- Contractor, N. (2011). Workshop on Social Network concepts and Analysis Techniques. University of Trento, Trento, Italy.
- Contractor, N. (June 2, 2011). Conducting social network analysis at the petascale level: Challenges and Opportunities, *Annual Workshop on Network Science*, Virginia Tech.
- Contractor, N. (May 23, 2011). Some assembly required: Organizing in the 21st Century. *Profiting from the New Web Conference*. Royal Society, London.
- Contractor, N. (October 2-4, 2010). Using web science, internet science and network science to understand and enable society. European Science Foundation Meeting on the *Future Internet and Society*, Acquafredda di Maratea, Italy.
- Contractor, N. (September 25-29, 2010). Some assembly required: Leveraging Web Science to understand and enable team assembly. Royal Society 350th Anniversary Conference on Web Science, London.
- Contractor, N. (April 29, 2010). Some assembly required: Understanding and enabling team assembly. *Network Business Initiative Special Seminar*, Harvard Business School, Boston, MA.
- Contractor, N. (April 16, 2010). Using network science to understand and enable team assembly *Pennsylvania State Network Science Day*, University Park, PA.
- Contractor, N. (November 13, 2009). Comparing actor-oriented modeling and machine learning approaches to understanding network dynamics . 2nd Meeting on Methodology for Empirical Research on Social Interactions, Social Networks and Health, Harvard University, Cambridge, MA.
- Contractor, N. (November 4, 2009). Understanding and enabling team assembly. *Booth School of Business Colloquium*, University of Chicago, Chicago, IL.
- Contractor, N. (October 8, 2009). Understanding and enabling team assembly. *Mary Junck Research Colloquium*, University of North Carolina, Chapel Hill, NC.
- Contractor, N. (August 21, 2006). Social network methods and tools to advance public health.

- Invited lecture at National Institutes of Health Road Map Summit on Methodology & Technology, Rockville, MD.
- Contractor, N. (February 8, 2007). Science of networks in communities related to the future of digital learning and media, MacArthur Foundation, Chicago, IL.
- Contractor, N. (January 29, 2007). Semantic web and social network analysis. Open Grid Forum

- workshop on Semantic Web, Social Networks & Web 2.0, Chapel Hill, NC.
- Contractor, N. (April, 2006). From Disasters to WoW: Enabling communities with cyberinfrastructure. NASA Goddard Information Science & Technology Colloquium Series, Goddard Space Flight Center, Greenbelt, MD.
- Contractor, N. (April 4, 2006). From Disasters to WoW: Enabling Communities with Cyberinfrastructure.mms://video.dis.purdue.edu/general/noshircontractor.wmv, Purdue University, Hammond, IN.
- Contractor N. (October 28, 2005). *Utilizing social network analysis to understand transnational advocacy networks*. Ford foundation forum on "Transnational Advocacy in Communication and Information Policy," New York, NY.
- Contractor, N. (August 22, 2005). *European e-Government research seen from the outside*. Panel of International Digital Government Research, Copenhagen, Denmark.
- Contractor, N. (May 2, 2005). *Co-evolution of knowledge networks and 21st century forms of organizing.* MeshForum 2005, Audio version of presentation featured under IT conversations: http://www.itconversations.com/shows/detail235.html Chicago, IL.
- Contractor, N. (April 28, 2005). *Co-evolution of knowledge networks and 21st century cyberinfrastructure*. Invited luncheon speaker at the Centers of Excellence in Cancer Communication Research Grantees Meeting, St. Louis, MO.
- Contractor, N. (April 25, 2005). *Co-evolution of knowledge networks and 21st century cyberinfrastructure*. Indiana University's Talk Series on Networks and Complex Systems. Bloomington, IN.
- Contractor, N. & Schiller, D. (April 22, 2005). *Age of Networks: Social, cultural and technological connections.* Colloquium hosted by UIUC Department of Speech Communication, Urbana, IL.
- Contractor, N. (April 18, 2005). *Co-evolution of knowledge networks and 21st century organizational forms.* UIUC College of Education Seminar Series, Champaign, IL.

- Contractor, N. (April 15, 2005). *Networks in the public interest*. UIUC transnational seminar series, Urbana, IL.
- Contractor, N. (April 5, 2005). *Co-evolution of knowledge networks and 21st century organizational forms*. <u>U</u>IUC Center for Global Studies, Champaign, IL.
- Contractor, N. (March 23, 2005). *Co-evolution of knowledge networks in 21st century organizational forms*. Colloquium at the Rotterdam School of Management, Erasmus University, Rotterdam, Netherlands.

- Contactor, N. (March, 2005). *Cyberinfrastructure for the Social Sciences*. NSF Workshop panel at Airline Center, Warrenton, VA.
- Contractor, N. (March 1, 2005). Social network concepts & metrics. Guest lecturer in course titled "Visualizing & Navigating Knowledge Networks" offered by UIUC's Department of Electrical & Computer Engineering and Graduate School of Library & Information Science, Urbana, IL.
- Contractor, N., Wali, A., & Severson, R. (February 25, 2005). *Mapping cultural and network assets in three Chicago communities*. Rockefeller foundation workshop on Cultural dimensions of transnational communities: Understanding and mapping cultural networks and assets, New York, NY.
- Contractor, N. (2004, November 20, 2004). *The role of networks in crisis management*. 4th Asia-Pacific Symposium on Press and Scientific and Social Progress: Science-Technology, Media & Major Crisis Management, Beijing, China.
- Contractor, N. (November 18, 2004). *Visioning a cyberinfrastructure for transnational digital government research*. EU-US electronic government research collaboration meeting, Technical University of Delft, Delft, Netherlands.
- Contractor, N. (December 3, 2004). *Co-evolution of knowledge networks in 21st century organizational forms*. Nanyang Technological University, Singapore.
- Contractor, N. (December 1, 2004). *Co-evolution of knowledge networks in 21st century organizational forms*. United Nations University, Macau, China.
- Contractor, N. (November 30, 2004). *Co-evolution of knowledge networks in 21st century organizational forms*. Department of Communication, City University of Hong Kong, Hong Kong.
- Contractor, N. (November 22, 2004). *Co-evolution of knowledge networks in 21st century organizational forms*. Department of Communication, Peking University, Beijing, China.

- Contractor, N. (October 29, 2004). *Challenges, opportunities, and strategies for fostering transnational collaboration on e-Government research: The Budapest Workshop*. <u>EU/NSF collaboration on digital government research</u>. E.2004 eChallenges, Vienna, Austria.
- Contractor, N. (September 24, 2004). *Using technologies to support and enhance organizational knowledge networks*. <u>Center for Human Resource Management (CHRM)</u>
 Roundtable on Communication Strategies to Drive Results, Oak Brook, IL.
- Contractor, N. (September 22, 2004). *Role of knowledge networks in fostering community*. UIUC's Cross-campus initiative on the Ethnography of the University, Urbana, IL.

- Contractor, N. (August 31, 2004). *Challenges, opportunities, and strategies for fostering transnational collaboration on e-Government research*. <u>NSF-Delegation panel on e-Government research in the US.</u> eGov 2004, Zaragoza, Spain.
- Contractor, N. (May 14, 2004). *Principles of network management*. Invited presentation at the "Connect and Develop: Managing Networks of Innovation," Mack Center for Technological Innovation at the Wharton School of Management, University of Pennsylvania, Philadelphia, PA.
- Contractor, N. (May 7, 2004). *Theories of communication networks*. Invited presentation jointly sponsored by the University of Trieste's Faculty of Communication Sciences and Faculty of Economics and Statistics, Trieste, Italy.
- Contractor, N. (April 24, 2004). Coevolution of knowledge networks and policy formation in 21st century organizational forms. Invited presentation at the "Voice and citizenship: Re-thinking theory and practice in political communication" symposium. Organized by the Department of Communication, University of Washington, Seattle, WA.
- Contractor, N. (April 2, 2004). How policy shapes networks and networks shape policy. Institute for Communication Research/Ford Policy Series, University of Illinois at Urbana-Champaign, Champaign, IL.
- Contractor, N. (March 24, 2004). *Multi-theoretical multilevel models to study the co-evolution of knowledge networks*. Invited presentation jointly sponsored by the Central European University's Departments of Sociology and Psychology, Budapest, Hungary.
- Contractor, N. (March 5, 2004). *Coevolution of knowledge networks in 21st century organizational forms*. Department of Marketing Proseminar, University of Illinois at Urbana-Champaign, Champaign, IL.
- Contractor, N. (March 3, 2004). *Enabling entrepreneurial networks*. Coleman Entrepreneurship Center, DePaul University, Chicago, IL.

- Contractor, N. (December 5, 2003). *Using social network analysis to leverage tobacco control networks*. U.S. National Cancer Institute, Bethesda, MD.
- Contractor, N. (December 2, 2003). Participant, Panel on *Modeling al-Qa'ida*. Sponsored by U.S. Government, Washington, D.C.
- Contractor, N. (November 25, 2003). *Networks in the interest of society*. Center for Information Technology Research in the Interest of Society, University of California at Berkeley, Berkley, CA. http://www.citris.berkeley.edu/
- Contractor, N. (April 25, 2003). Multi-theoretical multi-level models for the emergence of

knowledge networks. Leeds School of Business, University of Colorado at Boulder, CO.

- Contractor, N. (October 20, 2003). *Multi-theoretical multilevel models for the study of knowledge networks,* Bocconi University, Milan.
- Contractor, N. (June 5, 2003). *Defense Science and Technology*, Laboratory talk, Farnborough, Hampshire, United Kingdom.
- Contractor, N. (March 26, 2003). *Networks vs. hierarchy: Implications for learning & development*. Chief Learning Officers Forum sponsored by Executive Development Associates, Atlanta, GA.
- Contractor, N. (March 4, 2003). *Electronic surveillance and the "dual-effects" hypothesis*. Guest lecture, Professor Christian Sandvig's course titled "Internet Policy," Urbana, IL.
- Contractor, N. (January 8, 2003). Leveraging knowledge networks in a global economy. Tata International Ltd., Mumbai, India.
- Contractor, N. (December, 20, 2002). Participant in a roundtable discussion on *Criteria for credit* in a collaborative world. UIUC Center for Advanced Study, Urbana, IL.
- Contractor, N. (November 4, 2002). *Co-evolution of knowledge networks and 21st century organizational forms*. National Center for Digital Government Seminar Series, Kennedy School of Government, Harvard University, Cambridge, MA.
- Contractor, N. (November 1, 2002). *Multi-theoretical multi-level models (MTML) for understanding the emergence of knowledge networks*. <u>MIT Organizational Studies Group Seminar Series</u>, Cambridge, MA.
- Contractor, N. (September 25, 2002). Constructing knowledge networks. Brown bag series of the

- Office for Information Management, College of Commerce and Business Administration, University of Illinois at Urbana-Champaign, Champaign, IL.
- Contractor, N. (July 29, 2002). p* Techniques for multi-theoretical multilevel social network analysis. Workshop on Statistical theory of Dynamically Emerging Social Groups. Rensselaer Polytechnic Institute, Troy, NY.
- Contractor, N. (May 30, 2002). Social mechanisms that facilitate the creation and maintenance of virtual networks among government agencies. Workshop on "Developing a Basic Research Agenda for Digital Governance." Kennedy School of Government, Harvard University, Cambridge, MA.
- Contractor, N. (May 27, 2002). *Co-evolution of communication and knowledge networks in the emergence of social capital.* Workshop on "The ambivalent relationship between Social Capital and IT," Amsterdam, Netherlands.

- Contractor, N. (May 23, 2002). *Multi-level, multitheoretical approach to retrieval and allocation of information in knowledge networks*. Colloquium at the University of Amsterdam, Netherlands.
- Contractor, N. (April 11, 2002). *Multi-level, multitheoretical approach to retrieval and allocation of information in knowledge networks*. Colloquium presented as part of the Groups and Organization (GO) series at the School of Decision and Social Sciences, Carnegie Mellon University, Pittsburgh, PA.
- Contractor, N. (April 10, 2002). *Multi-level, multitheoretical approach to retrieval and allocation of information in knowledge networks*. Colloquium presented at the Katz School of Business, University of Pittsburgh, Pittsburgh, PA.
- Contractor, N. (March 22-23, 2002). *Organizational Warfare*. U.S. Department of Defense workshop, organized by the Naval Postgraduate School, Monterey, CA.
- Contractor, N. (March 6-7, 2002). *Granting Organizations of the Future*. NSF workshop, organized by the Center for Technology in Government, SUNY, Albany, NY.
- Contractor, N. (April, 2001). *Co-evolution of knowledge networks and 21st century organizational forms*. Invited presentation as part of the Impact Series: Explorations of the impact of new information technology on arts, culture, politics, and society, supported by the Office of the Provost, University of Arizona, Tucson, AZ.
- Contractor, N. (March, 2001). *Communication network analysis workshop*. Sponsored by Finland University Network for Communication Sciences at the University of Jyväskylä, Jyväskylä, Finland.
- Contractor, N. (February, 2001). H.323-based videoconferencing in the educational environment.

Presented at the 2EAST: New technology series, Northwestern University, Evanston, IL.

- Contractor, N. (October, 2000). *Social networks and distributed intelligence*. Invited presentation as part of the Sawyer Seminar on Heterarchies, supported by the Andrew W. Mellon Foundation and the Institute for Social and Economic Research and Policy (ISERP) at Columbia University, New York, NY.
- Contractor, N. (October, 2000). Social network formulations of knowledge and distributed intelligence. Invited presentation at the workshop on Heterarchies: Distributed Intelligence and the Organization of Diversity, Santa Fe Institute, Santa Fe, NM.
- Contractor, N. (June, 2000). *Managing social and intellectual capital*. Workshop for Korean advertising executives sponsored by the University of Illinois, Champaign-Urbana, Champaign, IL.

Return to content page ↑

Contractor, N. (March, 2000). *Emergence of communication networks*. Brown bag presentation for the Social Psychology Division, Department of Psychology, University of Illinois at Urbana-Champaign, Champaign, IL.

Contractor, N. (March, 2000). *Communication network analysis*. Workshop for Communication scholars in Thailand hosted by the Faculty of Communication Arts, Chulalongkorn University, Bangkok, Thailand.

Contractor, N. (February, 2000). *Co-evolution of knowledge networks and 21st century organizational forms*. Tieto 2000: Professional Forum on New Information Technologies, Helsinki, Finland.

Contractor, N. (January, 2000). Invited address to the "Forum on New Technologies in Information and Communication for the XXIth Century", hosted by Barcelona University (UB) and the Technical University of Catalunya (UPC), Barcelona, Spain.

Contractor, N. (December, 1999). Advanced collaboration tools to support multi-university distributed learning in organizational communication. Video-conference presentation to a dozen university locations in the United Kingdom participating in the colloquia series sponsored by the Scottish Higher Education Funding Council.

Contractor, N. (November, 1999). *Communications in the global enterprise*. Invited presentation to the External Advisory Board of the University of Michigan's Program in Manufacturing, Ann Arbor, MI.

Contractor, N. (November, 1999). HR implications for virtual organizations. Invited presentation at the Noon Seminar series, Department of Human Resource Education, University of Illinois at Urbana-Champaign, Champaign, IL.

Contractor, N. (August, 1999). *Collaborative learning: Experiences from a graduate course on globalization*. Invited presentation to the Video Working Group of the Committee on Institutional Cooperation (CIC), State College, PA.

Contractor, N. S., Zink, D., & Chan, M. (June, 1998). *IKNOW: A tool to assist and study the creation, maintenance, and dissolution of knowledge networks*. Invited presentation at the First Kyoto Meeting on "Social Interaction and Communityware," Kyoto, Japan.

Contractor, N. (March, 1998). *Knowledge and Distributed Intelligent*, National Science Foundation at University of California, Santa Barbara, CA.

Contractor, N. (March, 1998). Social & *Ethical Dimensions of Knowledge Networking*, National Science Foundation at University of California, Santa Barbara, CA.

Contractor, N. (1998). Web Lab, and National Science Foundation, Washington, D.C. Return to

content page ↑

- Contractor, N. (1998). Digital Governance, National Science Foundation, Alexandria, VA.
- Contractor, N. & Monge, P. R. (November, 1997). *Theoretical mechanisms for dynamic modeling of communication networks*. School of Communication, Stanford University, Palo Alto, CA.
- Contractor, N. (October, 1997). Knowledge networks in virtual organization: conceptual rationale and software demonstration. School of Information, University of Michigan, Ann Arbor, MI.
- Contractor, N. (October, 1997). *Self-organizing communication networks in organizations*. Wharton School of Management, University of Pennsylvania, Philadelphia, PA.
- Contractor, N. (September, 1997). *Self-organizing communication networks in organizations*, Department of Communication, University of Maryland, College Park, MD.
- O'Keefe, B., Contractor, N., & Zaritsky, R. (April, 1997). *Educational technologies at the team engineering collaboratory*. Andersen Consulting Educational, St. Charles, IL.
- Contractor, N., & O'Keefe, B. (February, 1997). The use of technologies to support learning communities. UIUC Faculty Retreat, Urbana, IL.
- Contractor, N. (February, 1997). Report on Active X, Java, and other web-based technologies.

 Sponsored by UIUC Educational Technologies Board, Urbana, IL.

- Contractor, N. (December, 1996). *Unintended consequences of new information technologies:*The case of the Internet. Indian Petro-Chemicals Limited, Vadodara, India.
- Contractor, N. (December, 1996). *The Internet and Global Organization*. Indian Institute of Management, Ahmedabad, India.
- Contractor, N., & O'Keefe, B. (November, 1996). *Project CITY: An Illustration of the TEAM Methodology.* Department Colloquium, Department of Communication, University of Arizona, Tucson, AZ.
- Contractor, N. (October, 1996). *The Emergence of Communication Networks.* Department of Communication, Purdue University, Hammond, IN.
- Contractor, N. (April, 1996). *Unintended consequences of new information technologies: The case of the Internet*. Guest lecturer in Professor Lillian Hoddeson's UIUC undergraduate course on history of technologies, Urbana, IL.
- Contractor, N. (April, 1996). *Computational Organizational Theories*. Guest lecturer at UIUC's Institute for Communication Research Proseminar, Urbana, IL.

- Contractor, N. (January-April, 1996). Special topics in social networks. Guest lecturer at a graduate seminar on Communication Networks at the Annenberg School of Communication, University of Southern California, Los Angeles, CA.
- Contractor, N. (March, 1996). *Computational Organizational Theories*. Workshop at Arizona State University, Phoenix, AZ.
- Contractor, N. (February, 1996). *Unintended consequences of new information technologies: The case of the Internet*. American Center, United States Information Service (USIS), New Delhi, Delhi, India.
- Contractor, N. (February, 1996). *Unintended consequences of new information technologies: The case of the Internet*. Institute for Electrical and Electronic Engineers (IEEE), Baroda, India.
- Contractor, N. (February, 1996). *Communication technologies and re-engineering the workplace.* Federation of Industries, Baroda, India.
- Contractor, N. (February, 1996). *Technological enhancements to workgroup effectiveness*. Institute for Electrical and Electronic Engineers (IEEE), Baroda, India.
- Contractor, N., O'Keefe, B. J., & Hollingshead, A. B. (November, 1995). *Beyond E-mail: An advanced workshop for electronic research and pedagogy.* Short course offered at the meeting of the Speech Communication Association, San Antonio, TX.

- Contractor, N. (July, 1995). *Technological enhancements to work group effectiveness*. Workshop for MBA students from the Kymmene Corporation, Milan, Italy.
- Suarez, Selena; Gomez-Zara, Diego; DeChurch, Leslie; & Contractor, Noshir. (2021) Let's team up! Understanding how people form teams using online platforms. Paper presented at *The 16th Annual INGRoup Conference*.

CONFERENCE PRESENTATIONS

- Churchill, E., Contractor, N., Massimi, M. (2022 October). Human-Computer Interaction at Work. [Panelist]. Lambert Conference on the Future of Human-Computer Interaction + Design, Evanston, IL, United States.
- Modi, N., Lungeanu, A. Dechurch L. Contractor, N. (2022 May). Funding Cross-Boundary Teams to Promote Breakthrough Scientific Discoveries: Case Study in Clinical and Translational Science. [Conference Presentation]. 72nd Annual International Communication Association (ICA) Conference, Paris, France.

- Mohammed, S., Schillinger, D., Contractor, N., Fiore, S., Shah, J., Shuffler, M. (2021, November 4). The Future is Here: Human-Robot Teaming. [Panelist]. The 16th Annual Interdisciplinary Network for Group Research Conference, Virtual.
- Antone, B., Lungeanu, A., DeChurch, L. A., Bell, S. T., & Contractor, N.S. (2021 October 25).

 Re-pairing to Repair: A Countermeasure that Enhances Crew Relations in Deep Space.

 [Conference presentation]. Proceedings of the International Astronautical Congress,

 Virtual.
- DeChurch, L. A., Lungeanu, A., & Contractor, N.S. (2021 September). Leadership nei team isolati in condizioni estreme. [Conference presentation]. Congresso Nazionale AIP sezione per le Organizzazioni, Verona, Italy.
- Contractor, N. (2021, August 2). Unraveling the sequential structural signatures of success in human agent teams. [Conference presentation]. The 81st Annual Meeting of the Academy of Management, Virtual.
- Góméz-Zará, D., DeChurch, L. A., & Contractor, N. (2021, August 1). Do I know you? The effects of social capital on self-assembled groups. [Conference presentation]. The 81st Annual Meeting of the Academy of Management, Virtual.
- Suarez, Selena; Gomez-Zara, Diego; DeChurch, Leslie; & Contractor, Noshir. (2021, July 15-17) Let's team up! Understanding how people form teams using online platforms. Paper

- presented at The 16th Annual INGRoup Conference.
- Modi, N., Lungeanu, A., DeChurch, L. A., & Contractor, N. (2021, July 9). Science of Team Science: Searching for boundary-crossing collaborations. [Conference presentation]. 12th Annual Science of Team Science Conference, Virtual
- Modi, N., Lungeanu, A., DeChurch, L. A., Contractor, N. (2021, July 5 10). Hard to recruit but worth trying: Searching for cross-boundary collaborations in science. [Conference presentation]. Networks 2021: A Joint Sunbelt and NetSci Conference, Virtual.
- Tanaka, K., DeChurch, L. A., & Contractor, N. (2021, July 6). Knowing is not Enough: How Network Awareness and Acuity are Associated. [Conference presentation]. Networks 2021: A Joint Sunbelt and NetSci Conference, Virtual.
- Aral, S., Azhar, A., Contractor, N., Teevan, J. (2021, June 25). The Future of the Web and Society [Panelist]. The 13th Association for Computing Machinery (ACM) Web Science Conference 2021, Virtual.
- Modi, N., Lungeanu, A., DeChurch, L. A., & Contractor, N. (2021, June 7-11). Science of Team Science: Searching for boundary-crossing collaborations. [Conference presentation]. Networks 2021: A Joint Sunbelt and NetSci Conference, Virtual.

- Antone, B., DeChurch, L.A., Morton, D., Bell, S., & Contractor, N. (2021, April 15-17). A Network-Based Method to Recommend Optimal Team Compositions for Space Exploration [Conference Presentation]. The 36th Society for Industrial and Organizational Psychology (SIOP) Annual Conference, Virtual.
- Contractor, N. (2021, April 15-17). The Future of Team Composition: Robots, Cyber Teams and Decision-Support Systems [Panelist]. The 36th Society for Industrial and Organizational Psychology (SIOP) Annual Conference, Virtual.
- Contractor, N. (2021, April 15-17). Human–Agent Teams Will Revolutionize the Future of Work: Implications for Industrial-Organizational Psychology [Panelist]. The 36th Society for Industrial and Organizational Psychology (SIOP) Annual Conference, Virtual.
- Chackoria, J.J., Nyberg, B.B., Vasquez, M., Bell, S.T., DeChurch, L.A., Contractor, N., Gushin, V., & Vinokhodova, A. (2021, April 15-17). Perceived Similarity Predicts Viable Relationships and Team Performance [Poster Presentation]. The 36th Society for Industrial and Organizational Psychology (SIOP) Annual Conference, Virtual.

- Johnson, M., Gokhman, I., DeChurch, L.A., Bell, S.T., Contractor, N. (2021, April 15-17). Talking About Mars: Team Communication Dynamics and Decision Quality in Space Crews [Poster Presentation]. The 36th Society for Industrial and Organizational Psychology (SIOP) Annual Conference, Virtual.
 - Harris-Watson, M. A, DeChurch, L.A., Xue, H., Contractor, N. (2021, April 15-17). Your next coworker could be a robot: What "type" will it be? [Conference Presentation]. The 36th Society for Industrial and Organizational Psychology (SIOP) Annual Conference, Virtual.
- Contractor, N. (2021, February 11). Pairing Teams for, and (Re)pairing Teams during Long-Duration Space Exploration [Paper Presentation]. Panelist in DeChurch, L. (Chair), Understanding and Enabling Human Travel to the Moon and Mars, Panel discussion conducted at the annual meeting of the American Association for the Advancement of Science (AAAS), Virtual.
- Contractor, N. (2021, February 10). *Teaming in the Time of COVID-19: What Astronaut crews can teach us about "re-pairing" our relationships* [Conference Presentation]. Society for Personality and Social Psychology Preconference: Bringing Intragroup Processes back to Social Psychology, Virtual.
 - Christian, S., Lougheed, G., Larson, L., DeChurch, L., & Contractor, N. (2021, February 2). Revisionist Histories: Reflected Themes from the ISS and SIRIUS Space Missions [Poster Presentation]. NASA Human Research Program Investigators' Workshop, Virtual.

- Antone, B., Gruest, V., Gupta, A., DeChurch, L., Bell, S., & Contractor, N. (2021, February 3). *Team Performance in Space Crews* [Conference Presentation]. NASA Human Research Program Investigators' Workshop, Virtual.
- Izadinia, N., DeChurch, L., Waechter, A., & Contractor, N. (2021, February 3). *Measuring and Predicting Performance for Individuals, Teams, and Systems in Interdependent Crew Tasks (MAPPITS-ICT)* [Conference Presentation]. NASA Human Research Program Investigators' Workshop, Virtual.
- Johnson, M., Gokhman, I., Bell, S., DeChurch, L., & Contractor, N. (2021, February 3). *Talking about Mars: Team Communication Dynamics and Decision Quality in Space Crews* [Conference Presentation]. NASA Human Research Program Investigators' Workshop, Virtual.
- Tanaka, K., DeChurch, L., Baimenova, A., & Contractor, N. (2021, February 4). Network Routing Task Performance Among Space Crew with Human Mission Support VS. Automated Mission Support in Space Multiteam Systems [Conference Presentation]. NASA Human Research Program Investigators' Workshop, Virtual.

- Antone, B., Lungeanu, A., DeChurch, L., Bell, S., & Contractor, N. (2021, February 4). A Successful Crew Composition Countermeasure Validated in HERA [Conference Presentation]. NASA Human Research Program Investigators' Workshop, Virtual.
- Lungeanu, A., DeChurch, L., & Contractor, N. (2021, February 4). SCALE-ing Crew Shared Mental Models: A Computational Model [Conference Presentation]. NASA Human Research Program Investigators' Workshop, Virtual.
- Wu, Y. J., Antone, B., Srinivas, A., DeChurch, L. A., & Contractor, N. S. (2021, January 29). *Social Network Churn Within and Between Teams in Times of COVID-19* [Conference Presentation]. The Third North American Social Networks Conference (NASN), Virtual
- Góméz-Zará, D., Ichhaporia, R., DeChurch, L. A., & Contractor, N. S. (2020, November 19-22). *Do I know you? The effects of offline social capital in self-assembled teams online* [Paper presentation]. The Virtual 106th Annual Convention of the National Communication Association (NCA).
- Wang, Y., Zhang, J., Ding, Z., DeChurch, L. A., & Contractor, N. S. (2020, November 19-22).

 <u>Dynamics of processes and performance of teams using enterprise social media</u> [Paper presentation]. The Virtual 106th Annual Convention of the National Communication Association (NCA).
- DeChurch, L. A., & Contractor, N. S. (2020, November 19-22). <u>Signatures of Success in Human Agent Teams</u>. Panelist in Welles, B. F. (Chair), Team Communication Research in the Age of Artificial Intelligence, Panel discussion conducted at the Virtual 106th Annual

Convention of the National Communication Association.

- Izadinia, N., DeChurch, L. A., Waechter, A., Contractor, N. (2020, November 7-13).

 Optimization-based Metrics Of Multilevel Performance In Multiteam Systems [Paper presentation]. Virtual Institute for Operations Research and the Management Sciences (INFORMS) Annual Meeting 2020.
- Góméz-Zará, D., Ichhaporia, R., DeChurch, L. A., & Contractor, N. S. (2020, September 25-27). *Do I know you? The effects of social capital on self-assembled teams* [Poster presentation]. Virtual Organizational Communication Mini-Conference [OCMC]
 - Izadinia, N., DeChurch, L. A., Waechter, A., Contractor, N. S.(2020, September 25-27). New metrics for evaluating individual and team performance in multiteam systems [Poster presentation]. Virtual Organizational Communication Mini-Conference (OCMC).
- Tanaka, K., DeChurch, L. A., & Contractor, N. S. (2020, September 25-27). *Positional and dispositional factors that predict who commits social network routing errors and who learns from them [Conference presentation]*. Virtual Organizational Communication Mini Conference (OCMC)

- Wu, Y. J., Antone, B., Chan, C. Leonardi, P., DeChurch, L., & Contractor, N. S. (2020, September 25-27). Status and Network Mobilization in Organizations During the Times of COVID-19 [Poster presentation]. Virtual Organizational Communication Mini-Conference (OCMC).
- Tanaka, K., DeChurch, L. A., & Contractor, N. S. (2020, September 17-25). Positional and dispositional factors that predict who commits social network routing errors and who learns from them [Conference presentation]. the International School and Conference on Network Science (NetSci), Virtual
- Contractor, N. (2020, August 7-11). Unravelling the sequential structural signatures of success in human agent teams. [Conference presentation]. Academy of Management Annual Meeting 2020
- Contractor, N. (2020, August 7-11). <u>Using AI to turbocharge organizational network analysis</u> [Conference presentation]. Academy of Management Annual Meeting 2020
- Zurek, M., Harris, A. M., Johnson, J., N. S., DeChurch, L. A., & Contractor, N. S. (2020, July 13-17). Bridging analog environments: Comparison of group dynamics and cohesion between the human exploration research analog (HERA) and over-wintering Antarctic stations [Conference presentation]. Virtual sunbelt conference of the International Network for Social Network Analysis (INSNA).
- Johnson, J., Zurek, M., Contractor, N. S., & DeChurch, L. A. (2020, July 13-17). *The social network ecology of small groups in isolated and confined environments* [Conference presentation]. Virtual sunbelt conference of the International Network for Social Network Analysis (INSNA).

- Antone, B., Néray, B., Munar, W., Koskinen, J., & Contractor, N. S. (2020, July 13-17). *Missing tie imputation in sparse networks with ego-centric responses* [Conference presentation]. Virtual sunbelt conference of the International Network for Social Network Analysis (INSNA).
- Lungeanu, A., Whalen, R., Wu, Y. J., DeChurch L. A., & Contractor N. S. (2020, July 13-17). *Text and networks: Mapping changes in the expertise diversity of patent teams* [Conference presentation]. Virtual sunbelt conference of the International Network for Social Network Analysis (INSNA).
- Tanaka, K., DeChurch, L. A., & Contractor, N. S. (2020, July 13-17). *Origins of network acuity:* Who has an ability to efficiently use their awareness of the group communication network [Conference presentation]. Virtual sunbelt conference of the International Network for Social Network Analysis (INSNA).
- Contractor, N. (2020, July). Research Roadmap. Panelist at the 12th ACM Web Science Conference 2020, Online (organized by the University of Southampton).

- Antonne, B., DeChurch, L. A., Bell, S., & Contractor, N. S. (2020, April 21-25). <u>Re-Pairing Teams</u> for <u>Long-Duration Space Exploration</u>. Society for Industrial and Organizational Psychology (SIOP) 2020, Virtual Conference.
- Antone, B., Gruest, V., DeChurch, L. A., Bell, S., & Contractor, N. S. (2020, January). *Team performance in long duration space missions: SIRIUS '19* [Paper presentation]. NASA Human Research Program Investigators' Workshop, Galveston, TX, United States.
 - Lungeanu, A., DeChurch, L. A., & Contractor, N. S. (2020, January). *Leadership networks and shared mental models: Leading teams over time through space* [Poster presentation]. NASA Human Research Program Investigators' Workshop, Galveston, TX, United States.
- Antone, B., Lungeanu, A., Bell, S. T., DeChurch, L. A., & Contractor, N. S. (2020, January). *Crew recommender for effective work in space (project crews): Validation & countermeasure development* [Poster presentation]. NASA Human Research Program Investigators' Workshop, Galveston, TX, United States.
- Izadinia, N., DeChurch, L. A., Waechter, A., & Contractor, N. S. (2020, January).

 Optimization-based metrics for evaluating individual and team performance in spaceflight multiteam systems [Poster presentation]. NASA Human Research Program Investigators' Workshop, Galveston, TX, United States.
- DeChurch, L. A., Tanaka, K., & Contractor, N. S. (2020, January). The impact of network acuity on information sharing under communication delays in space multiteam systems [Paper presentation]. NASA Human Research Program Investigators' Workshop, Galveston, TX.
- Plummer, G., DeChurch, L. A., Mesmer-Magnus, J. R., Johnson, J., & Contractor, N. S. (2020, January). *In a world of their own... team cognition in long-term cohabitating teams*

- [Paper presentation]. NASA Human Research Program Investigators' Workshop, Galveston, TX, United States.
- Bingenheimer, J., Lungeanu, A., Sedlander, E., Contractor, N., Gichangi, P., Rimal, R., & Munar, W. (2019, November). How attitudes and beliefs spread to influence contraceptive use in two whole networks in Coastal, Kenya [Paper presentation]. The American Public Health Association (APHA)'s 2019 Annual Meeting and Expo, Philadelphia, PA.
- DeChurch, L. A., Gokhman, I. A., Plummer, G., Vazquez, M., Bell, S. & Contractor, N. S. (2019, October). *Deciding on mars: The effects of isolation on autonomous team decision-making* [Paper presentation]. The 70th International Astronautical Congress, Washington, D.C, United States.
- DeChurch, L.A., Gruest, V., Lungeanu, A., & Contractor, N.S. (2019, October). *Leadership topologies in space explorer teams* [Paper presentation]. The 7th International Workshop

- in Social Network Analysis, Vietri sul Mare, Italy.
- Antone, B., Zhang, D., Li, H., Zhang, T., Kudaravalli, A., Xu, Y., DeChurch, L.A., Leonardi, P., & Contractor, N.S. (2019, October). *Predictive extension to ERGMs and applications in real-time monitoring of organizational social networks* [Paper presentation]. The 7th International Workshop in Social Network Analysis, Vietri sul Mare, Italy.
- Lungeanu, A., DeChurch, L. A., & Contractor, N. S. (2019, August). *Leading teams over time through space* [Poster presented]. *Academy of Management (AoM)*, Boston, MA, United States.
- Larson, L. E., Gokhman, I., Wojcik, H., DeChurch, L. A., Bell, S., & Contractor, N. (2019, July). Collective intelligence & dynamic regulation in teams [Paper presentation]. The 14th Interdisciplinary Network for Group Research (INGRoup) annual meeting, Lisbon, Portugal.
- Larson, L. E., Niler, A., Pendergraft, J., Carter, D. R., & DeChurch, L. A. (2019, July). Development and evaluation of an experiential learning activity for multiteam leaders. In J. G. Pendergraft, Mohan, G., & Carter, D. R. (co-chairs), Facilitating multiteam system performance in high-stakes practical contexts [Symposium]. The 14th Interdisciplinary Network for Group Research (INGRoup) annual meeting, Lisbon, Portugal.
 - Harris, A. M., Niler, A., DeChurch, L., Mesmer-Magnus, J., & Contractor, N. S. (2019, July). *The experience of working in teams in space* [Poster presentation]. The *14th Interdisciplinary Network for Group Research* (INGRoup) Annual Meeting, Lisbon, Portugal.
 - Lungeanu, A., DeChurch, L. A., & Contractor, N. S. (2019, June). *Leading teams over time through space* [Poster presentation]. XXXIX Sunbelt Conference of the International Network for Social Network Analysis (INSNA), Montreal, Quebec, Canada.

- Lungeanu, A., Park, P., DeChurch, L. A., & Contractor, N. S. (2019, June). Leveraging simulations to improve the functioning of multiteam systems [Poster presentation]. 9th annual congress of the European Association of Work and Organizational Psychology, Turin, Italy.
- DeChurch, L. A., Larson, L. E., Gokhman, I., Wojcik, H., Bell, S., & Contractor, N. S. (2019, June). Can we get along long enough to get to Mars? Team performance over time [Poster presentation]. The 9th annual congress of the European Association of Work and Organizational Psychology, Turin, Italy.
- Gómez-Zará, D., Parra, D., Arreondo, C., & Contractor, N. S. (2019, May). The role of organizations and individuals in online collective action: A network analysis of social movements frames promoted on Twitter [Paper presentation]. The 69th annual International Communication Association (ICA) Conference, Washington, D.C, United

States.

- DeChurch, L. A. (2019, April). Panelist in E.A. McCune (Chair), *Translating complexity: From science to practice*. Panel discussion conducted at the 34th annual meeting of the Society for Industrial and Organizational Psychology, National Harbor, MD.
- DeChurch, L. A. (2019, April). Co-Chair for, *Failure is not an option: Discovering the dynamics of space teams*. Symposium presented at the 34th annual meeting of the Society for Industrial and Organizational Psychology, National Harbor, MD.
- Vazquez, M., Outland, N., Bell, S. T., DeChurch, L. A., & Contractor, N. S. (2019, April). *Examining interpersonal compatibility using fsQCA across two samples* [Paper presentation]. The 34th annual meeting of the Society for Industrial and Organizational Psychology, National Harbor, MD, United States.
- Gokman, I., DeChurch, L. A., Plummer, G. K., Bell, S. T., & Contractor, N. S., (2019, April). *Team information sharing and decision making over time* [Paper presentation]. The 34th annual meeting of the Society for Industrial and Organizational Psychology, National Harbor, MD, United States.
- Contractor, N.S., DeChurch, L.A., Kozlowski, S., & Johnson, J. (2019, February). *Missions to Mars: Understanding and preparing teams for the future* [Panel presentation]. The annual meeting of the American Association for the Advancement of Science (AAAS),

 Washington, D.C, United States.
 - Lazer, D., Contractor, N.S., Watts, D., González-Bailón, S., & Pentland, A.S. (2019, February). Computational social science: The next decade. Moderator at the Annual Meeting of the American Association for the Advancement of Science (AAAS), Washington, D.C.
- Gómez-Zará, D., Paras, M. Schecter, A., DeChurch, L.A., & Contractor, N.S. (2019, January). *Using relational event modeling for understanding team formation mechanisms in teams*

- assembled online [Paper presentation]. The International School and Conference on Network Science (NetSci-X), Santiago, Chile.
- Contractor, N. S., Antone, B., Lungeanu, A., Bell, S. T., & DeChurch, L. A. (2019, January). Validating models of team composition decisions for long-duration space exploration [Poster presented]. Presented at 2019 NASA Human Research Program Investigators' Workshop Annual Conference, Galveston, TX.
 - DeChurch, L. A., Lungeanu, A., Park, P., & Contractor, N.S. (2019, January). *CREST: Crew recommender for effectively switching tasks* [Poster presentation]. 2019 NASA Human Research Program Investigators' Workshop Annual Conference, Galveston, TX.
 - DeChurch,, L. A., Niler, A. A., Mesmer-Magnus, J. R., & Contractor, N. S. (2019, January). Task

- management in space multiteam systems [Poster presentation]. Presented at 2019 NASA Human Research Program Investigators' Workshop Annual Conference, Galveston, TX.
- Gokhman, I.A., Plummer, G., DeChurch, L. A., Bell, S. T., Vazquez, M. & Contractor, N. S. (2019, January). *Crew information sharing and decision making over time* [Poster presentation]. 2019 NASA Human Research Program Investigators' Workshop Annual Conference, Galveston, TX.
 - DeChurch, L. A., Rudra, K. & Contractor, N. S. (2019, January). *Using interaction data to predict interpersonal relationships in space multiteam systems* [Poster presentation]. 2019 NASA Human Research Program Investigators' Workshop Annual Conference, Galveston, TX.
 - Contractor, N. S., DeChurch, L. A., Larson, L.E., Gokhman, I. A., Wojcik, H., & Bell, S. T. (2019, January). *Collective Intelligence In Space Crews* [Poster presentation]. 2019 NASA Human Research Program Investigators' Workshop Annual Conference, Galveston, TX.
- Larson, L. E., Gomez-Zara, D., DeChurch, L. A., Bell, S. T., & Contractor, N. S. (2019, January).

 Informal leadership In space crews [Poster presentation]. 2019 NASA Human Research
 Program Investigators' Workshop Annual Conference, Galveston, TX.
- Schultz, M., DeChurch, L. A., & Contractor, N. S. (2019, January). *Networks as filters: Selective information transmission in conversations aboard Skylab* [Poster presentation]. 2019

 NASA Human Research Program Investigators' Workshop Annual Conference, Galveston, TX.
- Lungeanu, A., DeChurch, L. A., & Contractor, N. S. (2019, January). *The emergence and development of crew shared mental models: An agent-based model* [Poster presentation]. 2019 NASA Human Research Program Investigators' Workshop Annual Conference, Galveston, TX.
- Izadinia, N., DeChurch, L. A. Contractor, N. S., & Waechter, A. (2019, January). *Using optimization methods to benchmark performance in space teams* [Poster

- presentation].2019 NASA Human Research Program Investigators' Workshop Annual Conference, Galveston, TX.
- Tanaka, K., Ennab, N., DeChurch, L. A., & Contractor, N. S. (2019, January). *Antecedents and outcomes of network acuity in space multiteam systems* [Poster presentation]. 2019

 NASA Human Research Program Investigators' Workshop Annual Conference, Galveston, TX.
 - Mesmer-Magnus, J. R., Niler, A. A., Plummer, G., DeChurch, L. A. & Contractor, N. S. (2019, January). *Team cognition in context: A meta-analysis* [Poster presentation]. 2019 NASA Human Research Program Investigators' Workshop Annual Conference, Galveston, TX.

- Plummer, G., DeChurch, L. A., Mesmer-Magnus, J. R., Johnson, J. & Contractor, N. S. (2019, January). *The development Of crew shared cognition* [Poster presentation]. 2019 NASA Human Research Program Investigators' Workshop Annual Conference, Galveston, TX.
- Schecter, A. & Contractor, N.S. (2019, January). A dynamic *sequence model of information* sharing processes in virtual teams [Paper presentation]. The Hawaiian International Conference for System Sciences, Wailea, HI, United States.
- Mattarelli, E., Schecter, A., Hinds, P., Contractor, N.S., Lu, C., & Topac, B. (2018, December). *How co-creation processes unfold and predict submission quality in crowd-based open innovation* [Paper presentation]. The International Conference on Information Systems, San Francisco, CA, United States.
- Niler, A.A., Mesmer-Magnus, J.R., Plummer, G., Larson, L.E., DeChurch, L.A., & Contractor, N.S. (2018, November). *Team context, team cognition, and team performance: A meta-analysis* [Paper presentation]. The 104th National Communication Association Annual Convention, Salt Lake City, UT, United States.
- Moody, J., Contractor, N., Phillips, N., Young, L. (2018, November). Complementarity of the Network Sciences: distinctions, tensions and synergies across SNA, NS and the other system sciences. Panel member at the North American Regional Social Networks (NASN) Conference of the International Network for Social Network Analysis (INSNA), Washington, D.C.
- Lungeanu, A., Park, P., DeChurch, L. A., & Contractor, N. S. (2018, November). *Deep space collaboration: Impact of latency and social networks on collaborative work* [Paper presentation]. The 104th National Communication Association Annual Convention, Salt Lake City, UT, United States.
- Gómez-Zará, D., Andreoli, S., DeChurch, L., & Contractor, N.S. (2018, October). How can we assemble better interdisciplinary teams? The "My Dream Team" experience at the Universidad of Buenos Aires [Paper presentation]. Contemporary Developments on Media, Culture and Society: Argentina and America Latina, Buenos Aires, Argentina.

- Contractor, N. S. (2018, August). Some assembly required: teaming in the 21st century [Paper presentation]. The Innovations in Teaching Teamwork PDW Workshop, Academy of Management Conference (AoM), Chicago, IL, United States.
- Contractor, N. S. (2018, August). *Multi-theoretical multilevel models of networks* [Paper presentation]. The Introduction to Social Network Analysis PDW Workshop, Academy of Management Conference (AoM), Chicago, IL, United States.
 - Ng, J. & Contractor, N.S. (2018, August). xSocial media & team collaboration: How the @mention feature facilitates and constrains teamwork [Paper presentation]. The

- Academy of Management Conference (AoM), Chicago, IL, United States.
- Contractor, N.S. (2018, August). *Facilitator.* Teaching Social Networks PDW Workshop at the Academy of Management Conference (AoM), Chicago, IL, United States.
- Contractor, N.S. (2018, August). *Respondent*. How Advances in Digital Technologies Reconfigure Organizational Coordination Processes Showcase Symposium at the Academy of Management Conference (AoM), Chicago, IL, United States.
- Lungeanu, A., Park, P., DeChurch, L., & Contractor, N. (2018, June). *Deep space collaboration: Impact of social networks on task switching in collaborative work* [Paper presentation].

 The International School and Conference on Network Science, NetSci 2018 Satellite Workshop, Paris, France.
- Tanaka, K., DeChurch, L., & Contractor, N. (2018, May). *Origins of omission and commission errors in perceptions of group communication networks* [Paper presentation]. The 68th Annual ICA conference, "Voices," Prague, Czech Republic.
- Schultz, M., DeChurch, L., & Contractor, N. (2018, May). Communicating through space and over time [Paper presentation]. The 68th Annual ICA conference, "Voices," Prague, Czech Republic.
- Park, P., Lungeanu, A., DeChurch, L. A., & Contractor, N.S. (2018, June). *Deep space collaboration: Impact of latency and social networks on collaborative work* [Paper presentation]. The XXXVIII Sunbelt Conference of the International Network for Social Network Analysis (INSNA), Utrecht, the Netherlands.
- Tanaka, K., Jha, S., Gado, H., Twyman, M. D., DeChurch, L. A., & Contractor, N. S. (2018, June). 6-DoS (Six degrees of separation): A web-based platform to conduct small-world experiments [Paper presentation]. The XXXVIII Sunbelt Conference of the International Network for Social Network Analysis (INSNA), Utrecht, Netherlands.

- Mesmer-Magnus, J., Niler, A., DeChurch, L. A., & Contractor, N. S. (2018, May). Working and leading the way to Mars: How work affects shared leadership [Paper presentation]. The 3rd Interdisciplinary Perspectives on Leadership Symposium, Chania, Greece.
- Contractor, N. S. (2018, May). Why inhaling digital exhaust is taking organizational performance and the science of communication and technology to new highs. Presented on a panel titled "Professor as entrepreneur: opportunities and risk" at the 68th The Annual Conference of the International Communication Association (ICA), "Voices," Prague, Czech Republic.

- Tanaka, K., DeChurch, L., & Contractor, N. (2018, May). Origins of omission and commission errors in perceptions of group communication networks [Paper presentation]. The 68th The Annual Conference of the International Communication Association (ICA), "Voices," Prague, Czech Republic.
- Schultz, M., DeChurch, L., & Contractor, N. (2018, May). Communicating through space and over time [Paper presentation]. The 68th The Annual Conference of the International Communication Association (ICA), "Voices," Prague, Czech Republic.
- Balkundi, P., Burt, R., Contractor, N. S., Leonardi, P., Rizzuto, T., & Ng, J. (2018, April). Life in the network: From people analytics to relational analytics. In a Panel Symposium conducted at the Society for Industrial and Organizational Psychology (SIOP) Annual Conference, Chicago, IL, United States.
- Ng, J., DeChurch, L. A., & Contractor, N. S. (2018, April). *Information sharing in online teams:*How interventions improve information processing [Poster presentation]. The Society for Industrial and Organizational Psychology (SIOP) Annual Conference, Chicago, IL, United States.
 - Twyman, M., Newman, D., DeChurch, L. A., & Contractor, N. S. (2018, April). *Inviting your next teammate: Algorithms & acquaintances* [Poster presentation]. The Society for Industrial and Organizational Psychology (SIOP) Annual Conference, Chicago, IL, United States.
- Niler, A.A., Mesmer-Magnus J. R., DeChurch, L. A., & Contractor, N. S. (2018, April). *Working alone & together: Understanding the factors that affect work transitions* [Poster presentation]. The Society for Industrial and Organizational Psychology (SIOP) Annual Conference, Chicago, IL, United States.
- Gokhman, I., Plummer, G. K., DeChurch, L. A., Vazquez, M., Bell, S. T., & Contractor, N. S. (2018, April). *Development and validation of a team information sharing assessment battery* [Poster presentation]. The Society for Industrial and Organizational Psychology (SIOP) Annual Conference, Chicago, IL, United States.
- Contractor, N.S., DeChurch, L.A., Bell, S.T., Olenick, J., Dishop, C., Bedwell, W., ... Niler, A. (2018, April). A Question of time: Multidisciplinary approaches to understanding team dynamics