

Curriculum Vitae
Daniel B. Larremore
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Contact Information

BioFrontiers Institute
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Google Scholar: [here](#)
Github: [here](#)

Research Interests

- Network science (dynamics, structure, inference, applications)
- Recombinant genetics and evolution of the malaria parasite *P. falciparum*.
- The science of science: formation and evolution of patterns in academic science.

Education

University of Colorado Boulder , Department of Applied Mathematics Ph.D in Applied Mathematics. Advisor: Juan G. Restrepo “Critical Dynamics in Complex Excitable Networks”	May, 2012
University of Colorado Boulder , Department of Applied Mathematics M.S. in Applied Mathematics	December, 2009
Washington University in St. Louis , School of Engineering and Applied Science B.S. in Chemical Engineering, <i>cum laude</i>	May, 2005

Academic Positions

University of Colorado <i>Assistant Professor, BioFrontiers Institute</i> <i>Assistant Professor, Computer Science</i>	Boulder, CO 2017 - Present 2017 - Present
Santa Fe Institute <i>Omidyar Fellow</i>	Santa Fe, NM 2015 - 2017
Harvard School of Public Health , Center for Communicable Disease Dynamics Postdoctoral Fellow with Caroline Buckee (HSPH) and Aaron Clauset (Colorado)	Boston, MA 2012 - 2015
University of Colorado <i>Research Assistant with advisor Juan G. Restrepo (Colorado)</i> <i>Research Assistant and Mentor, MCTP Program - NSF DMS-060228</i>	Boulder, CO 2009 - 2012 June 2010 - May 2011

Industry Experience

Gambro Blood Component Technologies <i>Research and Development Engineer</i> <i>Engineering Intern II</i> <i>Engineering Intern I</i>	Lakewood, CO 2005 - 2007 Summer 2005 Summer 2004
Barry Z. Cynamon Consulting <i>Scientific and Technical Consultant</i>	San Francisco, CA 2016 - 2017

Peer-Reviewed Publications

1. V. Agrawal, A. B. Cowley, W. L. Shew, **D. B. Larremore**, J. G. Restrepo, Q. Alfaori. “Robust information capacity requires strong and balanced excitatory and inhibitory synapses.” *Chaos* 28 103115 (2018). [\[link\]](#)
2. **D. B. Larremore***, C. De Bacco*, C. Moore. “A physical model for efficient ranking in networks.” *Science Advances* 4(7) eaar8260 (2018). [\[link\]](#)
3. † Bailey K. Fosdick*, **D. B. Larremore***, Joel Nishimura*, Johan Ugander*. “Configuring random graph models with fixed degree sequences.” *SIAM Review*, 60 (2) 315-355. (2018). [\[link\]](#)
4. S. F. Way, A. C. Morgan, A. Clauset*, **D. B. Larremore***. “The misleading narrative of the canonical faculty productivity trajectory.” *Proceedings of the National Academy of Sciences, USA* 114 (44) E9216-E9223 (2017). [\[link\]](#) [Also accepted at *ICWSM 2017*, social science track (non-archival).]
5. **D. B. Larremore***, L. Peel*, A. Clauset. “The ground truth about metadata and community detection in networks.” *Science Advances* 3(5) e1602548 (2017).
6. C. De Bacco, E. A. Power, **D. B. Larremore**, C. Moore. “Community detection, link prediction, and layer interdependence in multilayer networks.” *Physical Review E* 95 042317 (2017).
7. S. F. Way, **D. B. Larremore**, A. Clauset. “Gender, Productivity, and Prestige in Computer Science Faculty Hiring Networks.” *Proceedings of the 2016 World Wide Web Conference (WWW)* 1169-1179, (2016).
8. **D. B. Larremore**, S. A. Sundararaman, W. Liu, W. R. Proto, A. Clauset, D. E. Loy, S. Speede, L. J. Plenderleith, P. M. Sharp, B. H. Hahn, J. C. Rayner*, and C. O. Buckee*. “Ape parasite origins of human malaria virulence genes.” *Nature Communications*, 6, 8368 (2015).
9. A. Clauset, S. Arbesman, **D. B. Larremore**, “Systematic inequality and hierarchy in faculty hiring networks.” *Science Advances*, 1, e1400005 (2015).
10. A. K. Bei, A. Diouf, K. Miura, **D. B. Larremore**, U. Ribacke, G. Tullo, E. L. Moss, D. E. Neafsey, R. F. Daniels, A. E. Zeituni, I. Nosamiefan, S. K. Volkman, A. D. Ahouidi, D. Ndiaye, T. Dieye, S. Mboup, C. O. Buckee, C. Long, and D. F. Wirth., “Immune characterization of *P. falciparum* parasites with a shared genetic signature in a region of decreasing transmission.” *Infection and Immunity*, 83(1), 276 (2014).
11. **D. B. Larremore**, A. Clauset, and A. Z. Jacobs, “Efficiently inferring community structure in bipartite networks.” *Physical Review E*, 90(1), 012805 (2014).
12. **D. B. Larremore**, W. L. Shew, E. Ott, F. Sorrentino, and J. G. Restrepo, “Inhibition causes ceaseless dynamics in networks of excitable nodes” *Physical Review Letters*, 112, 138103 (2014).
13. **D. B. Larremore**, A. Clauset, and C. O. Buckee, “A network approach to analyzing highly recombinant malaria parasite genes.” *PLOS Computational Biology* 9(10) e1003268 (2013).
14. **D. B. Larremore*** and D. Taylor*, “Social Climber attachment in forming networks produces phase transition in a measure of connectivity.” *Physical Review E* 86 031140 (2012).
15. **D. B. Larremore**, M. Y. Carpenter, E. Ott, and J. G. Restrepo, “Statistical properties of avalanches in networks.” *Physical Review E* 85, 066131 (2012).
16. **D. B. Larremore**, W. L. Shew, E. Ott, and J. G. Restrepo, “Effects of network topology, transmission delays, and refractoriness on the response of coupled excitable systems to a stochastic stimulus.” *Chaos* 21, 025117 (2011).
17. **D. B. Larremore**, W. L. Shew, J. G. Restrepo, “Predicting criticality and dynamic range in complex networks: effects of topology.” *Physical Review Letters* 106, 058101 (2011).

*equal contribution

† alphabetical author order

Submitted or In-Press Publications

18. S. F. Way, A. C. Morgan, **D. B. Larremore***, A. Clauset*, “Productivity, prominence, and the effects of academic environment.” *Submitted* (2018).
19. **D. B. Larremore**. “Estimating the overlap between two malaria parasites' *var* repertoires.” *Submitted* (2018). Available [here](#) via bioRxiv.org.

20. † A. Berdahl*, C. Brelsford*, C. De Bacco*, M. Dumas*, V. Ferdinand*, J. A. Grochow*, L. Hébert-Dufresne*, Y. Kallus*, C. P. Kempes*, A. Kolchinsky*, **D. B. Larremore***, E. Libby*, E. A. Power*, C. A. Stern*, B. D. Tracey*. “Dynamics of beneficial epidemics.” *Submitted* (2018). Available [here](#) via arXiv.org.
21. A. K. Bei, **D. B. Larremore**, K. Miura, A. Diouf, N. K. Baro, R. F. Daniels, A. Griggs, E. L. Moss, D. E. Neafsey, A. B. Deme, M. Sy, S. Schaffner, A. D. Ahouidi, D. Ndiaye, T. Dieye, S. Mboup, C. O. Buckee, S. K. Volkman, C. A. Long, D. F. Wirth, “Plasmodium falciparum population genetic complexity influences expression dynamics and immune recognition among highly related genotypic clusters.” *Submitted* (2018).

* equal contribution

† alphabetical author order

Perspectives, Essays, and Other Publications

1. **D. B. Larremore**, A. C. Morgan, A. Clauset. “More Inclusive Scholarship Begins With Active Experimentation.” *The Chronicle of Higher Education*, 1 November, 2017. [invited letter] [\[link\]](#)
2. **D. B. Larremore**, A. Clauset. “Why predicting the future is more than just horseplay.” *The Christian Science Monitor*, 24 April, 2017. [contributed essay] [\[link\]](#)
3. A. Clauset, **D. B. Larremore**, R. Sinatra. “Data-driven predictions in the science of science.” *Science* 355, 477-480 (2017). [invited perspective piece]
4. D. E. Geer Jr. and **D. B. Larremore**, “Progress is Infectious.” *IEEE Security & Privacy* 10(6) p. 94-95 (2012). [monthly column of D. E. Geer Jr.]
5. † A. Berdahl*, U. Bhat*, V. Ferdinand*, J. Garland*, K. Ghazi-Zahedi*, J. Grana*, J. A. Grochow*, E. Hobson*, Y. Kallus*, C. P. Kempes*, A. Kolchinsky*, **D. B. Larremore***, E. Libby*, E. A. Power*, B. D. Tracey*. “On the records.” (2017) Available [here](#) via arXiv.org.

* equal contribution

† alphabetical author order

Book Chapters

D. B. Larremore, W. L. Shew, J. G. Restrepo, “Critical Dynamics in Complex Networks” *Criticality in Neural Systems*. Ed. Dietmar Plenz & Ernst Niebur. NY: Wiley, 365-392, 2014.

Funding

“Academic hiring networks and scientific productivity across disciplines.” 2016-2019
 PI, with Mirta Galesic (co-PI; Santa Fe Institute) and Aaron Clauset (PI; Colorado)
 SMA 1633747. NSF SBE, \$550,000.

“Models of Infections Disease Agents Study Center for Communicable Disease Dynamics”
 Consultant, with Marc Lipsitch (PI; Harvard School of Public Health).
 NIH NIGMS, \$11,279,771 2015-2019

“Network Assortativity” collaboration grant
 Proposer, with Bailey Fosdick (Colorado State), Joel Nishimura (Arizona State), and
 Johan Ugander (Microsoft Research)
 Amer. Mathematical Soc. (AMS) Mathematical Research Communities, \$2,250 2014

Invited Talks

- “Which community detection method is best?”
 Analysis and Interpretation of Connectomes, *HHMI Janelia*, Ashburn, VA. May 22, 2018

• “A physical model for efficient ranking in networks.” Applied Math Seminar, <i>UNC Chapel Hill</i> , Chapel Hill, NC.	Apr 11, 2018
• “A physical model for efficient ranking in networks.” Duke Network Analysis Center seminar, <i>Duke University</i> , Durham, NC.	Apr 10, 2018
• “Gender, prestige, and productivity in academic hiring networks and career trajectories.” Annenberg School of Communication, <i>University of Pennsylvania</i> , Philadelphia, PA.	Feb 13, 2018
• “Large-scale structures in networks: hidden communities and latent hierarchies.” Network Science School, <i>NetSciX</i> , Hangzhou, China.	Jan 5, 2018
• “The assembly of prestige and status in networks.” Omidyar Network Applied Complexity Meeting, Santa Fe Institute, Santa Fe, NM.	Dec 12, 2017
• “A physical model for efficient ranking in networks.” Physics Colloquium, U Arkansas, Fayetteville.	Nov 17, 2017
• “A physical model for efficient ranking in networks.” Center for the Study of Complex Systems Seminar, U Michigan.	Nov 9, 2017
• “Gender, prestige, and productivity in academic hiring networks and career trajectories.” NSF-FAST: Machine Learning for Discovery Science, Yerevan, Armenia.	Oct 20, 2017
• “Gender, prestige, and productivity in academic hiring networks and career trajectories.” Workshop on Gendered Creative Teams, <i>Central European Univ.</i> , Budapest, Hungary	May 25, 2017
• “Gender, prestige, and productivity in academic hiring networks and career trajectories.” Seminar, Berkeley Institute for Data Science, <i>UC Berkeley</i> , Berkeley, CA	Mar 17, 2017
• “The assembly of prestige and status in networks.” Influence, Complexity and Networks, <i>Dialog Group</i> , Austin, TX	Feb 23, 2017
• “The ground truth about metadata and community detection in networks.” Networks Seminar, <i>University of Houston</i> , Houston, TX	Oct 28, 2016
• “Networks and the evolution of malaria's virulence in humans and apes.” Network Frontiers Workshop, <i>Northwestern Univ. Inst. of Complex Systems</i> , Evanston, IL	Dec 7, 2015
• “Networks in two acts: faculty hiring hierarchies and malaria's evolving virulence.” Arts & Sciences Seminar, <i>Clarkson University</i> , Potsdam, NY	Nov 13, 2015
• “Networks and the evolution of malaria's virulence in humans and apes.” Mathematics Colloquium, <i>Clarkson University</i> , Potsdam, NY	Nov 12, 2015
• “Networks, inference, and the evolution of malaria's virulence in humans and apes.” Mechanical Engr. Seminar, <i>University of New Mexico</i> , Albuquerque, NM	Nov 6, 2015
• “Complex networks, rapid genetic recombination, and tricky malaria antigens.” Mathematics Colloquium, <i>Western New England University</i>	Nov 7, 2014
• “Efficiently inferring community structure in bipartite networks.” Seminar at Network Science and Graph Algorithms Program, <i>ICERM, Brown University</i>	Mar 4, 2014

Other Invited Talks and Presentations (unsupported)

• Paper Unwind: “The misleading narrative of the canonical faculty productivity trajectory” <i>CompleNet</i> , Boston, MA	March 4, 2018
• “Estimating the entropy of activity in excitable networks” Special Session: Emergent Phenomena in Discrete Models, <i>Joint Mathematics Meeting</i> , San Diego, CA	Jan 12, 2018
• “A physical model for efficient ranking in networks” Special Session: Network Science, <i>Joint Mathematics Meeting</i> , San Diego, CA	Jan 12, 2018
• “The ground truth about metadata and community detection in networks” Special Session: Theory, Practice, and Applications of Graph Clustering, <i>Joint Mathematics Meeting</i> , San Diego, CA	Jan 11, 2018
• “The dynamics of beneficial epidemics.” Dynamics of/on Complex Networks Satellite Symp., <i>NetSci 2017</i> , Indianapolis, IN	June 20, 2017
• “Gender, prestige, and productivity in faculty hiring networks.”	

Quantifying Success Satellite Symposium, <i>NetSci 2016</i> , Seoul, Korea	June 1, 2016
• “A complex networks approach to malaria’s genetic recombination dynamics.”	
Minisymposium, <i>SIAM Conf. on Applications of Dynamical Systems (DS15)</i> , Snowbird, UT	May 15, 2015
• “Using networks to analyze rapid genetic recombination in malaria parasites.”	
Dynamics & Complex Systems Seminar, <i>Applied Math, University of Colorado Boulder</i>	April 9, 2015
• “Ceaseless critical dynamics in excitable networks with inhibitory nodes.”	
Information, Self-Organizing Dynamics, and Synchronization on Complex Networks, (ISODS) Satellite Symposium, <i>NetSci 2014</i> , Berkeley, CA	June 3, 2014
• “Critical dynamics in balanced excitable networks: neuronal avalanches, dynamic range, and ceaseless activity.”	
Dynamics & Complex Systems Seminar, <i>Applied Math, University of Colorado Boulder</i>	Feb 28, 2013
• “Critical dynamics in balanced excitable networks: neuronal avalanches, dynamic range, and ceaseless activity.”	
Seminar, <i>Center for Complex Network Research, Northeastern University</i>	Feb 5, 2013
• “Predicting criticality and dynamic range in complex networks: effects of topology.”	
Minisymposium, <i>SIAM Conf. on Applications of Dynamical Systems (DS11)</i> , Snowbird, UT	May 23, 2011

Contributed or Submitted Talks and Presentations

• ASTMH Annual Meeting – poster, <i>New Orleans, LA</i>	October 31, 2018
• d3.js Boulder Meetup, <i>Boulder, CO</i>	August 30, 2018
• Int’l Conf. on Computational Social Science (IC2S2), <i>Northwestern University</i>	July 14, 2018
• NetSci, <i>Paris, France</i>	June 15, 2018
• Genetic Epidemiology of Malaria – poster [best poster award], <i>Sanger Institute, UK</i>	June 13, 2018
• CompleNet, Network Science Institute at Northeastern University, <i>Boston, MA.</i>	March 5, 2018
• Dynamical Systems Seminar, CU Boulder, <i>Boulder, CO.</i>	Nov 2, 2017
• StatOptML Seminar, CU Boulder, <i>Boulder, CO.</i>	Sept 12, 2017
• NetSci, <i>Indianapolis, IN.</i>	June 21, 2017
• Complex Systems Summer School, Santa Fe Institute, <i>Santa Fe, NM.</i>	June 14, 2017
• YConf, YCombinator Research, <i>San Francisco, CA.</i>	June 10, 2017
• Santa Fe Science Writers’ Workshop, Santa Fe Institute, <i>Santa Fe, NM.</i>	May 2, 2017
• Outside In seminar, Santa Fe Institute, <i>Santa Fe, NM.</i>	October 19, 2016
• Conference on Complex Systems (CCS), <i>Amsterdam, NL</i>	September 22, 2016
• SIAM Network Science (SIAM NS16), <i>Boston, MA</i>	July 15, 2016
• Int’l Conf. on Computational Social Science (IC2S2), <i>Northwestern University</i>	June 24, 2016
• NetSci, <i>Seoul, Korea</i>	June 2, 2016
• Int’l Conf. on the Science of Science, <i>Library of Congress, Washington D.C.</i>	April 7, 2016
• Los Alamos Rotary Club, <i>Los Alamos, NM</i>	March 15, 2016
• NetSci, <i>Zaragoza, Spain</i>	June 3, 2015
• Freeman Symposium, <i>Harvard T. H. Chan School of Public Health</i>	April 10, 2015
• Boston Area Parasitology Symposium (BAPS), <i>Boston, MA</i>	December 8, 2014
• Defeating Malaria: from genes to the globe – poster <i>Harvard School of Public Health</i>	December 2, 2014
• ASTMH – poster, <i>New Orleans, LA</i>	November 4, 2014
• Harvard Channing Network Science Seminar, <i>Boston, MA.</i>	October 31, 2014
• NetSci – poster [best poster award], <i>Berkeley, CA</i>	June 4, 2014
• BioMalPar/EVIMalar, <i>EMBL, Heidelberg, Germany</i>	May 13, 2014
• Network Frontiers Workshop, <i>NICO, Northwestern University</i>	December 6, 2013
• ASTMH – poster, <i>Washington D.C.</i>	November 15, 2013
• Oxford Tropical Network, <i>KEMRI, Kilifi, Oxford-Wellcome Trust, Kenya</i>	October 1, 2013
• Networks Journal Club, <i>OCLAM, Oxford University, UK</i>	March 8, 2013
• Dynamics Days – poster, <i>University of Colorado Boulder</i>	January 3, 2013
• Freeman Symposium, <i>Harvard School of Public Health</i>	December 14, 2012
• Ph.D. Dissertation Defense, <i>University of Colorado Boulder</i>	April 5, 2012
• Front Range Applied Mathematics Student Conference, <i>Univ. of Colorado Denver</i>	March 3, 2012

- Dynamics Days – poster, *University of Maryland* January 3, 2012
- Comprehensive Examination, *University of Colorado Boulder* September 27, 2011
- Front Range Applied Mathematics Student Conference, *Univ. of Colorado Denver* March 5, 2011
- Dynamics Days 2011, *Duke University* January 6, 2011
- Complex and Dynamical Systems Seminar, *University of Colorado Boulder* October 20, 2010
- Nonlinear Dynamics of Networks (NTD10) – poster, *University of Maryland* April 4, 2010
- Complex and Dynamical Systems Seminar, *University of Colorado Boulder* April 1, 2010
- Front Range Applied Mathematics Student Conference, *Univ. of Colorado Denver* March 6, 2010
- Dynamics Days 2010 – poster, *Northwestern University* January 3, 2010

Awards, Affiliations, Accreditations

- Genetic Epidemiology of Malaria – Best Poster June, 2018
- NIH “Protecting Human Research Participants” – certification June, 2016
- Network Science Society – Member 2014 - present
- American Mathematical Society – Member 2014 - present
- American Society of Tropical Medicine and Hygiene – Member 2013 - present
- National Postdoctoral Association – Member 2012 - present
- Society of Industrial and Applied Mathematics – Member 2008 - present
- NetSci 2014 – Best Poster June, 2014
- “Inhibition causes ceaseless...” – *Physical Review Letters* Editors’ Suggestion April, 2014
- Arts and Sciences Dean’s Teaching Assistant Fellowship Spring 2010
- Dynamics Days 2010 – Best Poster January, 2010
- Lead Teaching Assistant, Dept. of Applied Mathematics 2009 - 2010

Advising

PhD Students

- Tzu-Chi Yen 2018 - present

PhD Rotation Students

- Sierra Jech, IQBiology January, 2019
- Phillip Benson, IQBiology January, 2019
- Dieu My Nguyen, IQBiology January, 2018
- Michael Smallegan, IQBiology January, 2018

Masters Students

- K. Hunter Wapman, M.S. Computer Science, Colorado 2019 - present
- Marshall Y. Carpenter, M.S. Applied Math, Colorado 2012
(Co-adv: Juan G. Restrepo, NSF MCTP)

Undergraduate Students

- Suchita Lulla, University of Colorado Boulder 2018 - present
- Katie Younglove, University of Colorado Boulder, NSF REU 2018 - present
- Suyog Soti, University of Colorado Boulder 2018 - present
- Aparajithan Venkateswaran, University of Colorado Boulder, NSF REU 2018 - present
- Robert Steele, University of Colorado Boulder Spring 2018
- Phuc Nguyen, Macalester College Summer 2017
Santa Fe Institute, NSF REU Co-adv: Cris Moore and Caterina De Bacco
Inferring Hierarchy Structure from Rankings Uncertainty.
- Maya Banks, Carleton College Summer 2017
REU Santa Fe Institute, Co-adv: Cris Moore and Caterina De Bacco
Emergence of Hierarchy in Complex Networks.

High School Students

- William McKinnon, High School Student, Santa Fe Institute July & August, 2016
- Kat Wicks, High School Student, Santa Fe Institute 2015 - 2016

Teaching

University of Colorado Boulder

- CSCI 4802/5802 (Data Science Team) Boulder, CO, USA Spring 2019
- CSCI 5352 (Network Analysis and Modeling) Fall 2018
- CSCI 3022 (Intro to Data Science with Probability and Statistics) Fall 2018
- CSCI 3022 (Intro to Data Science with Probability and Statistics) Spring 2018
- [new course] CSCI 3022 (Intro to Data Science with Probability and Statistics) Fall 2017

Santa Fe Institute - Complex Systems Summer School

- Networks & Hierarchies Santa Fe, NM, USA June 25-26, 2018

University of Michigan

- Comp. Soc. Sci. Workshop (Communities, hierarchies: large-scale network structure) Ann Arbor, MI, USA Nov 10, 2017

Harvard School of Public Health

- *Lecturer – CB399 Introduction to Modeling Infectious Disease* (networks) Boston, MA, USA July 24 & 27, 2014

Kenya Medical Research Institute (KEMRI)

- *Lecturer – TModNet Modeling Workshop* (networks in genetics & epidemiology) Kilifi, Kenya October 3, 2013

University of Colorado - Predoctoral

- *Instructor of Record – APPM 2350*, Calculus III (Multivariable Calculus) Boulder, CO, USA Spring 2012
- *Instructor of Record – APPM 2350*, Calculus III (Multivariable Calculus) Fall 2011
- *Lead Teaching Asst. – Applied Mathematics* 2009 - 2010
- *Teaching Asst. – APPM 1360*, Calculus II Fall 2009
- *Teaching Asst. – APPM 2360*, Ordinary Differential Equations Spring 2009
- *Teaching Asst. – APPM 2350*, Calculus III (Multivariable Calculus) Fall 2008
- *Teaching Asst. – APPM 2350*, Calculus III (Multivariable Calculus) Summer 2008
- *Teaching Asst. – APPM 2360*, Ordinary Differential Equations Spring 2008
- *Teaching Asst. – APPM 2350*, Calculus III (Multivariable Calculus) Fall 2007

Referee Work

Grant Review

- National Science Foundation - Science of Science and Information Policy (SciSIP)
- National Science Foundation - Division of Mathematical Sciences - Dynamical Systems (DMS)

Journals

- ACM Transactions on Knowledge Discovery from Data (TKDD)
- Europhysics Letters (EPL)
- IEEE Security and Privacy
- Journal of Complex Networks
- Journal of Machine Learning Research (JMLR)
- Journal of Statistical Mechanics: theory and experiment (JSTAT)
- Journal of the Association for Information Science and Technology (JASIST)
- Malaria Journal
- Methods in Ecology and Evolution

- Nature Scientific Reports
- Nature Microbiology
- Physical Review Letters (PRL)
- Physical Review X (PRX)
- Physical Review E (PRE)
- Physica A
- PLoS Biology
- PLoS Computational Biology
- PLoS Neglected Tropical Diseases
- PLoS ONE
- Proceedings of the National Academy of Sciences of the USA (PNAS)
- Science Advances

Conferences

- Program Committee, NetSci 2019
- Program Committee, ICWSM Workshop: Beyond Online Data: Tackling Challenging Social Science Questions
- Program Committee, 4rd Int'l Conf. on Computational Social Science (IC2S2 2018)
- Program Committee, 9th Int'l Conf. on Complex Networks (CompleNet 18)
- Program Committee, NetSciX 2018 - Shanghai
- Program Committee, 27th Int'l World Wide Web Conf. (WWW18)
- Program Committee, 3rd Int'l Conf. on Computational Social Science (IC2S2 2017)
- Program Committee, NetSci 2017
- Program Committee, 26th Int'l World Wide Web Conf. (WWW17)
- Program Committee, SIAM Network Science 2016 - 2018 (NS16, NS17, NS18)
- Program Committee, 9th Int'l Conf. on Web Search and Data Mining (WSDM 2016)
- Subreviewer, AAAI Conference on Artificial Learning (AAAI 2014)

University and Professional Service

Conferences, Workshops, Speaker Series (Organizer or co-organizer)

- *Statistical Inference for Network Models* June 11, 2018
Paris, France, Satellite Symposium of NetSci 2018.
Organized with Tina Eliassi-Rad, Bailey Fosdick, and Aaron Clauset.
- *Statistical Inference for Network Models* June 19, 2017
Indianapolis, Indiana, Satellite Symposium of NetSci 2017.
Organized with Tamara Broderick, Bailey Fosdick, and Aaron Clauset.
- *Slice of Science* 2016 - 2017
Santa Fe, NM. Ongoing Santa Fe Institute talk series.
Organizer
- *Statistical Inference for Network Models* May 31, 2016
Seoul, Korea, Satellite Symposium of NetSci 2016.
Organized with Bailey Fosdick, Abigail Z. Jacobs, and Aaron Clauset.
- *Statistical Inference for Network Models* June 1, 2015
Zaragoza, Spain, Satellite Symposium of NetSci 2015.
Organized with Leto Peel, Abigail Z. Jacobs, and Aaron Clauset.
- *Applied Network Science at Longwood Seminar Series, at Harvard School of Public Health.* 2014 - 2015
Boston, MA, monthly seminar for network research with biological, public health, or medical application.
Conceived and organized with John Platis.
- *Statistical Inference for Network Models* June 2, 2014
Berkeley, CA, Satellite Symposium of NetSci 2014
Organized with Leto Peel, Abigail Z. Jacobs, and Aaron Clauset.
- *Harvard School of Public Health Infectious Disease Epidemiology Seminar Series* 2014

- Boston, MA
Organized with William Hanage.
- *Mathematics Research Community Workshop on Network Science* June 24-30, 2014
Snowbird, UT
Assisting Aaron Clauset, Mason Porter, & David Kempe.
 - *TModNet Modeling Workshop* (networks in genetics & epidemiology) Oct 3, 2013
Kenya Medical Research Institute (KEMRI), Kilifi, Kenya.
Organized with Caroline O. Buckee
 - *Front Range Applied Mathematics Student Conference* March 14, 2009
University of Colorado Denver.
Organized with Daniel N. Kaslovsky, Anne Dougherty, *et al.*
 - *SLAM Graduate Student Chapter Speaker Series* Spring 2009
University of Colorado Boulder.
Co-organized with Daniel N. Kaslovsky.

PhD Thesis Committees

Emerson Grey, Chem/Bio Engineering. Adv: Prashant Nagpal	Expected 2021
Ignacio Tripodi, Computer Science. Adv: Robin Dowell	Expected 2021
Allison Morgan, Computer Science. Adv: Aaron Clauset	Expected 2021
Kathleen Finlinson, Computer Science, Adv: Juan G. Restrepo	Expected 2020
Antony Pearson, Applied Mathematics, Adv: Manuel Lladser	Expected 2020
Richard Carter Tillquist, Applied Mathematics, Adv: Manuel Lladser	Expected 2020
Anna Broido, Computer Science. Adv: Aaron Clauset	Expected 2019
Lee Korshoj, Chem. & Biol. Engr. Adv: Anushree Chatterjee and Prashant Nagpal	Expected 2019
Amir Ghasemian, Computer Science. Adv: Aaron Clauset	2018
Jean-Gabriel Young, Physics, Université Laval, Adv: Louis Dube	2018

Undergraduate Thesis Committees

Mark Wilmes, Computer Science. Adv: Daniel Larremore	Expected 2019
Maxine Hartnett, Computer Science. Adv: Elizabeth Bradley	Expected 2019
Brandon Zink, Computer Science. Adv: Rhonda Hoenigman	Expected 2019

Institutional Committees

- Colorado, Computer Science, Undergraduate Curriculum Committee 2018 - present
- Colorado, Interdisc. Quant. Biol. Program (IQBio), Academic Advising Committee 2018 - present
- Colorado, BioFrontiers Institute, Council (Formerly called Task Force) 2017 - present
- Colorado, Interdisc. Quant. Biol. Program (IQBio), Curriculum Committee 2017 - present
- Colorado, BioFrontiers Institute, Social Committee (BioFunTiers) 2017 - 2018
- Colorado, Interdisciplinary Quant. Biol. Program (IQBio), Grad. Admissions 2017 - 2018
- Santa Fe Institute, Complex Systems Summer School Admissions 2016 - 2017
- Santa Fe Institute, Omidyar Fellowship Review & Selection 2015 - 2016
- Colorado, Office of Discrimination and Harassment Review 2010 - 2012
- Colorado, SIAM Graduate Student Chapter 2008 - 2010

Outreach

- “What it is to be a Scientist” May 4, 2016
Santa Fe Institute
Keynote, SFI High School Prize for Scientific Excellence
- “What it is to be a Scientist” 2016-2018
Santa Fe Institute
REU Program Mentorship

Other Service & Outreach

March for Science - Santa Fe

Lead Organizer

Live radio appearance - Honey Harris - KBAC 98.1 Santa Fe, NM	Santa Fe, NM
Live radio appearance - Ira Gordon - KBAC 98.1 Santa Fe, NM	April 22, 2017
Recorded radio appearance - Gillian Sutton - KRSN 107.1/1490 Los Alamos, NM	March 21, 2017
Live radio appearance - Rita Daniels - KNCE 93.5 Taos, NM	March 24, 2017
Live radio appearance - Richard Eeds - KVSF 101.5 Santa Fe, NM	April 18, 2017
Live Radio appearance - Honey Harris - KBAC 98.1 Santa Fe, NM	April 19, 2017
Recorded radio appearance - KSFR 101.1 public radio, Santa Fe, NM	April 19, 2017
	April 20, 2017
	April 24, 2017

New Mexico Corrections / Penitentiary of New Mexico

Volunteer math teacher and tutor

Santa Fe, NM
January 2016 - May 2017

Santa Fe Alliance for Science

Science fair judge

Santa Fe, NM
2015 - 2017

Greater University Service Foundation, Inc.

Director

Co-founder and Secretary

St. Louis, MO
2008 - present
2006 - 2008

The Boulder County AIDS Project

Volunteer math tutor; grocery packing and delivery.

Boulder, CO
2005 - 2011