Assistant Professor City University of New York, Brooklyn College

staniczenkoresearch.net

RESEARCH	I develop novel mathematical and computational methods for modelling the effects of anthropogenic change on species interactions and ecosystem services		
EDUCATION 2007–2010	DPhil Doctorate in Condensed Matter Physics University of Oxford Department of Physics and Wolfson College Thesis title: Structure, dynamics, and robustness of ecological networks Examiners: Sir Professor Charles Godfray and Professor Roger Guimerà Supervisors: Professor Felix Reed-Tsochas, Dr Nick S. Jones, Professor Neil F. Johnson All conditions satisfied in 2011, degree awarded in 2013		
2003-2007	MPhys Undergraduate Master of Physics First Class Honours, St. Anne's College University of Oxford		
POSITIONS 2019—PRESENT	Assistant Professor Department of Biology City University of New York (CUNY) Brooklyn College and The Graduate Center, PhD Subprogram in Ecology, Evolutionary Biology, and Behavior (EEB); Affiliated Faculty, Science and Resilience Institute at Jamaica Bay (since 2022); Research Associate, Division of Invertebrate Zoology, American Museum of Natural History (since 2024)		
2016-2018	Research Fellow Social-Ecological Networks University of Maryland, College Park National Socio-Environmental Synthesis Center, with Professor Margaret Palmer		
2016	Postdoctoral Researcher Microbial invasion University of Maryland, College Park Department of Biology, with Professor Bill Fagan		
2013-2015	Research Fellow Environmental Risk University College London Centre for Biodiversity and Environment Research, with Dame Professor Georgina Mace		
2013	Consultant Scientist Urban Pollinators Project University of Bristol School of Biological Sciences, with Professor Jane Memmott		
2011-2013	Postdoctoral Researcher Ecological Networks University of Chicago Department of Ecology & Evolution, with Professor Stefano Allesina		
PUBLICATIONS MENTORED STUDENTS LAB MEMBER	25. Jarzyna*, M.A., Ohyama*, L., Economo, E.P., Gill, J., Hickerson, M.J., Mascarenhas, R., Okie, J.G., Qin, C., Rabosky, D.L., Staniczenko, P.P.A. & McGill, B.J. (2025). *Joint first authors. Emergence and dynamics of regional species pools. Global Ecology and Biogeography, 34, e70046		
2024	24. Anderson, C.R., Curtsdotter, A.R.K., Staniczenko, P.P.A. , Valdovinos, F.S. & Brosi, B.J. (2024). The interplay of binary and quantitative structure on the stability of mutualistic networks. Integrative and Comparative Biology, 64, 827–840		
2023	23. Staniczenko, P.P.A. & Panja, D. (2023). Temporal origin of nestedness in interaction networks. PNAS Nexus, 2, pgad412		
	22. French, C.M., Bertola, L.D., Carnaval, A.C., Economo, E.P., Kass, J.M., Lohman, D.J., Marske, K.A., Meier, R., Overcast, I., Rominger, A.J., Staniczenko, P.P.A. & Hickerson, M.J. (2023). Global determinants of insect mitochondrial genetic diversity.		

21. Graham, N.R., Krehenwinkel, H., Lim, J.Y., **Staniczenko, P.P.A.**, Callaghan, J., Andersen, J.C., Gruner, D.S. & Gillespie, R.G. (2023). Ecological network structure in response to community assembly processes over evolutionary time. Molecular Ecology,

Nature Communications, 14, 5276

 $32,\,6489 – 6506$

2023

20. Lue[‡], C.-H., Abram, P.K., Hrcek, J., Buffington, M.L. & **Staniczenko**, **P.P.A**. (2023). Metabarcoding and applied ecology with hyper-diverse organisms: recommendations for biological control research. Molecular Ecology, 32, 6461–6473

2022

19. Fagan, W.F., Swain, A., Banerjee, A., Ranade, H., <u>Thompson, P.R.</u>, **Staniczenko, P.P.A.**, Barrett, F., Hungerford, J. & Hurwitz, S. (2022). Quantifying interdependencies in geyser eruptions at the Upper Geyser Basin, Yellowstone National Park. <u>Journal of Geophysical Research</u>: Solid Earth, 127, e2021JB023749

2021

18. Zambrano, J., Arellano, G., Swenson, N.G., **Staniczenko, P.P.A.**, Thompson, J., & Fagan, W.F. (2022). Analyses of three-dimensional species associations reveal departures from neutrality in a tropical forest. Ecology, 103, e3681

17. Lue[‡], C.-H., Buffington, M.L., Scheffer, S., Lewis, M., Elliott, T.A., Lindsey, A.I.R., Driskell, A., Jandova, A., Kimura, M.T., Carton, Y., Kula, R.R., Schlenke, T.A., Mateos, M., Govind, S., Varaldi, J., Guerrieri, E., Giorgini, M., Wang, X., Hoelmer, K., Daane, K.M., Abram, P.K., Pardikes, N.A., Brown, J.J., Thierry, M., Poirié, M., Goldstein, P., Miller, S.E., Tracey, W.D., Davis, J.S., Jiggins, F.M., Wertheim, B., Lewis, O.T., Leips, J., Staniczenko, P.P.A. & Hrcek, J. (2021). DROP: Molecular voucher database for identification of *Drosophila* parasitoids. Molecular Ecology Resources, 21, 2437–2454

16. Guy*, T.J., Hutchinson*, M.C., Baldock, K.C.R., Kayser, E., Baiser, B., **Staniczenko, P.P.A.**, Goheen, J.R., Pringle, R.M. & Palmer, T.M. (2021). *Joint first authors. Large herbivores transform plant-pollinator networks in an African savanna. Current Biology, 31, 2964–2971

15. Losapio, G., Schöb, C., **Staniczenko, P.P.A.**, Carrara, F., Palamara, G.M., De Moraes, C.M., Mescher, M.C., Brooker, R.W., Butterfield, B.J., Callaway, R.M., Cavieres, L.A., Kikvidze, Z., Lortie, C.J., Michalet, R., Pugnaire, F.I. & Bascompte, J. (2021). Network motifs involving both competition and facilitation predict biodiversity in alpine plant communities. Proceedings of the National Academy of Sciences USA, 118, e2005759118

2020

- 14. Timm, C.M., Loomis, K., Stone, W., Mehoke, T., Brensinger, B., Pellicore, M., **Staniczenko, P.P.A.**, Charles, C., Nayak, S. & Karig, D. (2020). Isolation and characterization of diverse microbial representatives from the human skin microbiome. Microbiome, 8, 58
- 13. Thompson, P.R., Fagan, W.F. & **Staniczenko, P.P.A.** (2020). Predictor species: Improving assessments of rare species occurrence by modeling environmental co-responses. Ecology & Evolution, 10, 3293–3304
- 12. Alexander*, S.M., **Staniczenko***, **P.P.A.** & Bodin, Ö. (2020). ***Joint first authors.** Social ties explain catch portfolios of small-scale fishers in the Caribbean. Fish & Fisheries, 21, 120–131

2019

11. Baldock, K.C.R., Goddard, M.A., Hicks, D.M., Kunin, W.E., Mitschunas, N., Morse, H., Osgathorpe, L.M., Potts, S.G., Robertson, K.M., Scott, A.V., **Staniczenko, P.P.A.**, Stone, G.N., Vaughan, I.P. & Memmott, J. (2019). A systems approach reveals urban pollinator hotspots and conservation opportunities. Nature Ecology & Evolution, 3, 363–373

2018

10. **Staniczenko, P.P.A.**, Suttle, K.B. & Pearson, R.G. (2018). Negative biotic interactions drive predictions of distributions for species from a grassland community. Biology Letters, 14, 20180426

2017

9. **Staniczenko, P.P.A.**, Lewis, O.T., Tylianakis, J.M., Albrecht, M., Coudrain, V., Klein, A.-M. & Reed-Tsochas, F. Predicting the effect of habitat modification on networks of interacting species. (2017). Nature Communications, 8, 792

2017	8. Staniczenko, P.P.A. , Sivasubramaniam, P., Suttle, K.B. & Pearson, R.G. (2017). Linking macroecology and community ecology: Refining predictions of species distributions using biotic interaction networks. Ecology Letters, 20, 693–707	
	7. Bewick*, S., Staniczenko* , P.P.A. , Li, B., Karig, D. & Fagan, W.F. (2017). * Joint first authors. Invasion speeds in microbial systems with toxin production and quorum sensing. Journal of Theoretical Biology, 420, 290–303	
2016	6. Caravelli ^{‡,*} , F. & Staniczenko* , P.P.A. (2016). * Joint first authors. Bounds on transient instability for complex ecosystems. PLOS ONE, 11, e0157876	
2014	5. Staniczenko, P.P.A. , Smith, M.J. & Allesina, S. (2014). Selecting food web models using normalized maximum likelihood. Methods in Ecology & Evolution, 5, 551–562	
2013	4. Staniczenko, P.P.A. , <u>Kopp, J.C.</u> & Allesina, S. (2013). The ghost of nestedness in ecological networks. <u>Nature Communications</u> , 4, 1931	
2012	3. De Sassi, C., Staniczenko, P.P.A. & Tylianakis, J.M. (2012). Warming and nitrogen affect size structuring and density dependence in a host-parasitoid food web. Philosophical Transactions of the Royal Society B, 367, 3033–3041	
2010	2. Staniczenko, P.P.A. , Lewis, O.T., Jones, N.S. & Reed-Tsochas, F. (2010). Structural dynamics and robustness of food webs. Ecology Letters, 13, 891–899	
2009	1. Staniczenko, P.P.A. , Lee, CF. & Jones, N.S. (2009). Rapidly detecting disorder in rhythmic biological signals: A spectral entropy measure to identify cardiac arrhythmias. Physical Review E, 79:011915	
GRANTS 2025–2026	Hudson River Park x Research in the Classroom Grant PI, \$20k Microplastics, microbes, and water waves: Nanopore sequencing and urban environmental sensors for place-based applied ecological research	
2025 – 2027	National Parks Service Grant co-PI, \$69k Horseshoe Cove Marsh Loss Investigation	
2024-2025	Hudson River Park CUNY Visiting Scholars Award PI, \$10k Wave exposure at Gansevoort Peninsula and implications for the restoration success of the eastern oyster (<i>Crassostrea virginica</i>)	
	PSC-CUNY Research Award Cycle 55 PI, \$6k Measuring the effects of wind-driven waves on wetland erosion and the implications for smooth cordgrass (Spartina alterniflora) restoration in Jamaica Bay, NYC	
	Tow Research and Creativity Grant Phenology and the local stability of plant-pollinator interaction networks PI, \$2,600	
2018	Santa Fe Institute Working Group Next-generation ecological network theory and application PI, \$20k	
2016–2018	National Socio-Environmental Synthesis Center Fellowship PI, \$215k Predicting the effect of socioeconomic and environmental change on the structure of biotic interactions and the provision of ecosystem services (International Competition)	
2014-2015	British Ecological Society Large Grant PI, £20k How do food webs respond to bottom-up changes driven by habitat modification?	
2013–2015	AXA Postdoctoral Fellowship PI, €120k How accurately can we predict species extinction and reintroduction? Embracing ecological complexity to assess risk in ecosystems (International Competition)	
2007-2010	Doctoral Fellowship Awarded by the Helsinki University of Technology PI, \$80k Computational Complex Systems and Networks Research (International Competition)	

AWARDS 2023	Tow Mentoring award for undergraduate mentorship at Brooklyn College Excellence in Scholarly and Creative Achievement at Brooklyn College		
2022	Tow Mentoring award for undergraduate mentorship at Brooklyn College		
2022	CUNY STEM Pedagogy Institute Fellowship award to develop innovative approaches to teaching computational methods, \$5k		
2021	Roberta S. Matthews Center for Teaching and Learning Course Development Fellowship award to develop more inclusive undergraduate courses, \$2k		
	Faculty Fellowship Publication Program (FFPP)	award, \$4k	
	Certificate in Effective Online Teaching Practices from the Association of College and University Educators (ACUE)		
2014	Top Referee in 2014 Proceedings of the Royal Society	y B	
2010	David Ryan Prize for distinguished work by a gradua	te student in Physics	
2007	Data Connection Prize for the best use of software in	n an MPhys Thesis	
2006	Clayman Scholarship to work in quantitative finance	in NYC, \$10k	
SUPERVISION 2025-PRESENT	PhD committee Emily Leggat Department of Ecology, Evolution, and Environmental E	Columbia University Biology	
2024-PRESENT	PhD committee Mwihaki John Plant Sciences	New York Botanical Garden	
	PhD committee Jeremy Howland Plant Sciences	New York Botanical Garden	
	PhD committee Andrew Gaier Ecology, Evolutionary Biology, and Behavior	City College, CUNY	
	PhD committee Taylor Rubin Ecology, Evolutionary Biology, and Behavior	Queens College, CUNY	
	PhD committee Sulaimon Lawal Ecology, Evolutionary Biology, and Behavior	Queens College, CUNY	
2024	Undergraduate project mentor Ariella Weiner Staniczenko lab	Brooklyn College, CUNY	
2023-PRESENT	Undergraduate project mentor Adelia Honeywood Staniczenko lab	Brooklyn College, CUNY	
	PhD supervisor James Herlan Ecology, Evolutionary Biology, and Behavior	City College, CUNY	
2023	Undergraduate project mentor Alex Colasanti Staniczenko lab	Brooklyn College, CUNY	
2023-PRESENT	PhD committee Rhema Uche-Dike America Richard Gilder Graduate School	an Museum of Natural History	
2022	Undergraduate project mentor Torie Robinson Staniczenko lab	Brooklyn College, CUNY	
2021	Undergraduate project mentor Mitchell Borshch Brooklyn College Cancer Center	Brooklyn College, CUNY	
2021-2024	PhD committee Andriele Silva Biochemistry	Brooklyn College, CUNY	
2020-PRESENT	PhD committee Laura Boggess Plant Sciences	New York Botanical Garden	
2020-2024	PhD committee Connor French Ecology, Evolutionary Biology, and Behavior	City College, CUNY	

2020-PRESENT	PhD co-supervisor Grégoire Proudhom Department of Entomology	Czech Academy of Sciences
2020-2023	PhD committee Erica Johnson Ecology, Evolutionary Biology, and Behavior	City College, CUNY
	PhD committee Aislyn Keyes Ecology and Evolutionary Biology	University of Boulder Colorado
2020-2022	Postdoctoral research mentor Chia-Hua Lue Staniczenko lab	Brooklyn College, CUNY
2020	Undergraduate project mentor Chrismal Abraham Department of Computer and Information Sciences	Brooklyn College, CUNY
2019-2022	PhD committee Jennifer Zhu Ecology, Evolutionary Biology, and Behavior	Baruch College, CUNY
2019	NSF Summer REU mentor Quiana Berry Brooklyn Urban Ecology and Environment (BUEE) Pro	Brooklyn College, CUNY ogram
2019-2023	PhD committee Gonzalo Enrique Pinilla Buitrago Ecology, Evolutionary Biology, and Behavior	City College, CUNY
2018-2022	PhD committee Humberto Castillo Gonzalez Department of Plant Sciences and Landscape Architect	University of Maryland, CP ure
2018	Undergraduate project mentor Peter Thompson Department of Statistics	University of Maryland, CP
2017	Undergraduate project mentor Samantha Berman Department of Biology	University of Maryland, CP
2015	Undergraduate research intern Elise Damstra Staniczenko lab	University College London
2014-2015	PhD project mentor Teresa Attenborough Interdisciplinary Life Sciences	University College London
2014	PhD project mentor Andrew Maher Interdisciplinary Life Sciences	University College London
2013–2014	Postdoctoral research mentor Francesco Caravelli Staniczenko lab	University College London
	Master's project mentor Sameen Khan Department of Mathematics	University College London
TEACHING 2020-PRESENT	Organizer BIOL7910G: Biology Colloquium Arrange seminar series and mark student summaries of	Brooklyn College, CUNY talks 14 weeks
	Lecturer BIOL3030W: Scientific Writing Communicating science to decision-makers and the pub	Brooklyn College, CUNY lic 14 weeks
	Lecturer BIOL3083: Principles of Ecology Fundamental Topics in Ecology	Brooklyn College, CUNY 14 weeks
2019-PRESENT	Lecturer BIOL76001: Ecology Fundamental and Contemporary Topics in Ecology	Graduate Center, CUNY 14 weeks
	Lecturer BICM87001: Bioinformatics with practicum Scientific Computing for Biologists (4-week component)	Graduate Center, CUNY 14 weeks
2019-2020	Lecturer NSF Advanced Training Course Introduction to Social and Ecological Networks Analysi	SESYNC 5 full days
2019	Lecturer NSF Summer REU Statistics and Scientific Computing	Brooklyn College, CUNY 2 half days

	TEACHING II 2014	Lecturer NERC Advanced Training Short Course Unit Introduction to Ecological Modelling, Graduate level	iversity College London 2 full days	
		Lecturer Workshop on Networks in Ecology Un Beyond nestedness in ecological networks, Undergraduate level	meå University, Sweden 2 full days	
	2008-2010	Lecturer MSc Integrative Biosciences Quantitative Methods in Biology, Graduate level	University of Oxford 2 full days	
	2008-2009	Demonstrator MPhys Physics Introduction to C programming, Undergraduate level	University of Oxford 4 weeks	
	ACADEMIC	Subject-Matter Editor Editorial Board, Ecological Monographs		
	SERVICE	Reviewer for Ecological Society of America Annual Meeting Session Proposals		
2023 - 2024	Chair (Elected) Theoretical Ecology Section, Ecological Society of America			
	2022-2023	Vice-chair (Elected) Theoretical Ecology Section, Ecological Society of America		
	2021	Guest Associate Editor PLOS Computational Biology		
	2020-PRESENT	Panelist for NSF (USA) Grant proposal review, Division of Environmental Biology		
	2018-PRESENT	Recommender/Journal Editor Peer Community in Ecology		
	2018-2019	Executive Board Inclusive Ecology Section, Ecological Society of America		
	2014-PRESENT	Reviewer for NSERC (Canada) Strategic Projects Program		
		Reviewer for NSF (USA) Standard Grant and CAREER G	rant	

2010-PRESENT

Reviewer for NERC (UK) Standard Grant and New Investigator Scheme Reviewer for over 100 manuscripts across 49 peer-reviewed journals

Proceedings of the National Academy of Sciences USA, Nature Communications, Nature Ecology & Evolution, Nature Scientific Reports, Science Advances, PLOS Biology, PLOS Computational Biology, PLOS ONE, Proceedings of the Royal Society A, Proceedings of the Royal Society B, Biology Letters, Ecology Letters, Ecology, Ecology & Evolution, Frontiers in Ecology and Evolution, Frontiers in Plant Science, Methods in Ecology & Evolution, Environmental & Ecological Statistics, Theoretical Ecology, Ecological Modelling, Basic & Applied Ecology, Journal of Applied Ecology, Journal of Animal Ecology, Journal of Natural History, Molecular Ecology, Landscape & Urban Planning, Oikos, Global Change Biology, Ecography, Journal of Biogeography, Global Ecology & Biogeography, Diversity & Distributions, Biological Conservation, Current Biology, Journal of Theoretical Biology, Theory in Biosciences, Diversity, Complexity, PeerJ, Microbiome, Computer Methods and Programs in Biomedicine, npj Systems Biology and Applications, Nonlinear Dynamics, Physical Review Letters, Physical Review Research, Physical Review E, Physical Review X, PRX Life, Journal of the Royal Society Interface

INSTITUTIONAL	Biology Program Nominations Committee	Graduate Center, CUNY
SERVICE	EEB and Plant Sciences Strategy Committee	Graduate Center, CUNY
2019-Present	EEB Steering Committee	Graduate Center, CUNY
2020 – 2023	Chair, Committee on Review of Student Records	Brooklyn College, CUNY
	University Faculty Council	Brooklyn College, CUNY
2019 – 2020	Committee on Review of Student Records	Brooklyn College, CUNY
	University Faculty Senate	CUNY
2019	NSF Summer REU Selection Committee	Brooklyn College, CUNY
2018-2022	Special Member of the Graduate Faculty Department of Plant Science and Landscape Architecture	University of Maryland, CP
2017-2019	Equity, Diversity & Inclusion Committee Representative for faculty (Elected)	University of Maryland, CP
	Mentoring Sub-Committee Chair Designed a new Individual Development Plan for postdoc	University of Maryland, CP toral researchers
	University Senate Representative for postdoctoral researchers (Elected twice	University of Maryland, CP
2004-2005	Physics Joint Consultative Committee Undergraduate representative (Elected)	University of Oxford
OUTREACH	Presenter Release of the Fishes, Pier 40, Hudson River I Staniczenko lab research stall	Park, NY 23 October 2024
	Speaker Ask-a-Scientist, Pier 57, Hudson River Park, NY Conversation on research with the general public	3 October 2024
	Educational Video National Socio-Environmental Synth Writer, producer, and presenter of "Introduction to Ecolo"	
	Panelist Postdoctoral Research Symposium, MD Session on Transitioning to a Faculty Position	13 Sept 2019
	Panel Moderator Postdoctoral Research Symposium, M Session on Transitioning to a Faculty Position	ID 17 Sept 2018
	Planning Committee Graduate Career Pathways Confe Organised session on environmental policy, NGOs, and co	
	Judge Graduate Research Appreciation Day, University of Maryland 4 April 2018	
	Judge Graduate Research Appreciation Day, University	of Maryland 5 April 2017
	Exhibition Curator Transforming Space, Denys Wilkins	son Building 7–9 May 2009
	Workshop Organiser Process in Physics and Art, Oxfo	rd 12 Feb 2009
	Highschool Mentor Maths, ages 10–12, Cherwell School	l, Oxford 2008

TALKS *Invited	$38.\ ^*$ Complex networks and social-ecological systems. CUNY Climate Scholars Didactic, 10 Dec $2025,$ Zoom
2024	37. *Time: the final frontier of ecological networks. Symposium Speaker, Physics of Life, along the Northeast Corridor, 25 Oct 2024, CUNY Graduate Center, NY
2023	36. *Ecological networks—Mapping the tangled bank. MasterClass, three two-hour lectures and two two-hour computing practicals, 5–7 June 2023, Centre for Complex Systems Studies, Utrecht University, Netherlands
2022	35. *Integrating Empirical and Theoretical Approaches in Mutualistic Networks. Session moderator. Ecological Society of American Annual Meeting, 18 Aug 2022, Montreal, Canada
	34. *Predictive community ecology: putting networks to work. Departmental Seminar, 23 March 2022, Department of Biology, Queens College, City University of New York, NY
2021	33. *Decolonizing a traditional lecture-based course in ecology—my in-progress attempt. Seminar, 7 Oct 2021, Center for Teaching and Learning, Brooklyn College, City University of New York, NY
2020	32. *Predictive community ecology: putting networks to work. Departmental Seminar, 5 Feb 2020, Department of Ecology & Evolution, Stony Brook University, NY
2019	31. Reckless Ideas in Ecological Networks. Symposium Organiser and Speaker, 9–10 May 2019, The Center for the Study of Complex Systems, University of Michigan, MI
	30. *Predictive community ecology: putting networks to work. Departmental Seminar, 11 March 2019, Department of Biology, City College, City University of New York, NY
	29. *Predictive community ecology: putting networks to work. Session on Ecology, Evolutionary Biology, and Behavior, 14 Feb 2019, American Museum of Natural History, NY
2018	28. Modelling interaction frequencies and preferences in Drosophila-parasitoid communities using networks. Entomological Society of America Annual Meeting, 14 Nov 2018, Vancouver, Canada
	27. Predicting the effect of habitat modification on networks of interacting species. Ecological Society of America Annual Meeting, 8 Aug 2018, New Orleans, LA
	$26.\ ^*$ Predicting shifts in insect feeding interactions following deforestation. Departmental Seminar, 2 March 2018, Department of Entomology, University of Maryland, College Park, MD
2017	25. Multilayer conjugation networks. Presentation to United States Department of Defence, 21 Nov 2017, The Johns Hopkins Applied Physics Laboratory, Laurel, MD
	24. *Predictive community ecology: putting networks to work. Departmental Seminar, 9 Nov 2017, Center for Conservation Biology, Stanford University, CA
	23. *Networks and ecology. Departmental Seminar, 1 Sept 2017, Computation and Mathematics for Biological Networks Program, University of Maryland, College Park, MD
	22. *Refining predictions of species distributions using biotic interaction networks. Workshop, Novel Methods for Modelling Complex Dynamic Ecological Systems, 21 Aug 2017, Centre for Biodiversity and Conservation Science, University of Queensland, Australia
	$21.\ ^*$ Revealing the Causes and Consequences of Interaction Complexity using Gradient-Based Ecological Networks. Session moderator. Ecological Society of America Annual Meeting, $10\ \mathrm{Aug}\ 2017,$ Portland, OR

20. Refining predictions of species distributions using biotic interaction networks. Ecological Society of America Annual Meeting, 7 Aug 2017, Portland, OR

2016 19. *Predicting weighted ecological networks in human-modified habitats. Departmental Seminar, 11 Nov 2016, Department of Biological Sciences, University of Maryland Baltimore County, MD 18. Invasion speeds in microbial systems. Presentation to United States Department of Defence, 1 Nov 2016, The Johns Hopkins Applied Physics Laboratory, Laurel, MD 17. *How will social and environmental change impact ecological communities and 2015 ecosystem services? Departmental Seminar, 18 Nov 2015, National Socio-Environmental Synthesis Center, Annapolis, MD 16. *Predicting weighted ecological networks in human-modified habitats. Departmental Seminar, 20 Oct 2015, CABDyN Complexity Centre, Saïd Business School, University of Oxford, UK 15. Bounds on transient instability for complex ecosystems. Data Natives Meeting 2015, 15 May 2015, City University London, UK 14. *Predicting weighted ecological networks in modified environments. Departmental Seminar, 27 March 2015, London Institute of Mathematical Sciences, UK 13. *Reallocation of trophic interactions and the predictability of parasitoid-host food web structure in modified habitats. Departmental Seminar, 5 March 2015, School of Biological Sciences, University of Canterbury, Christchurch, New Zealand 12. *Food webs and bipartite networks. Workshop on Grand Challenges in Ecosystems 2014 and the Environment: Networks in Ecology and Evolution, 14 July 2014, Silwood Park, Imperial College London, UK 11. *Ecosystem services and the limits of our predictive capability. AXA Pop Day, 21 June 2014, AXA Headquarters, Paris, France 10. *Beyond nestedness: Using directed acyclic graphs to model bipartite matrices and networks. Workshop on Networks in Ecology, 20 May 2014, Umeå University, Sweden 9. Robustness of plant-pollinator communities in four UK cities. Meeting on Urban

7. *The ghost of nestedness in ecological networks. Complexity Seminar Series, 5 Nov 2013, Keble College, University of Oxford, UK

Pollination, 28 April 2014, Department of Biological Sciences, University of Bristol, UK 8. Ecological networks: There's method in the madness. Departmental Seminar, 3 Feb 2014, Centre for Biodiversity and Environment Research, University College London,

*Modelling and measuring progress in complex systems using directed acyclic graphs.
 Departmental Seminar, 24 Oct 2013, Institute for New Economic Thinking, University of Oxford, UK

5. *The ghost of nestedness in ecological networks. Departmental Seminar, 25 Feb 2013, Department of Genetics, Evolution and Environment, University College London, UK

4. A Bayesian framework for predicting quantitative food-web structure using species traits. Ecological Society of America Annual Meeting, 10 Aug 2011, Austin, TX

3. Structural dynamics and robustness of food webs. British Ecological Society Annual Meeting 2010, 7 Sept 2010, Leeds, UK

2. Local trophic adaptation requires a new approach to ecosystem robustness. NetSci '09 International Conference on Networks, 2 July 2009, Venice, Italy

1. An entropy-based algorithm to rapidly detect cardiac arrhythmias. Poster presentation. Houses of Parliament, 9 March 2009, London, UK

2013

2011

2010

2009

VISITS 2017	Professor Berry Brosi Predicting plant-pollinator networks		Stanford University
2015	Professor Jason Tylianakis Predicting host-parasitoid networks	University of Can	terbury, New Zealand
2009	Professor Brian Uzzi Robustness of ecological networks	Northwestern Institute	e on Complex Systems
	Professor Jennifer Dunne Food webs with trophic adaptation		Santa Fe Institute
2004	Professor Robert Jahn Financial market models		Princeton University
INDUSTRY 2007	23red Brand Communications Agency Consultant on a public sector advertising	g project	London, UK One week
	Nomura Investment Bank Global Markets Consultant in convertible bonds sales and research		London, UK Three months
2006	New Amsterdam Partners Asset Management Intern in quantitative research and portfolio management		New York City, USA Three months
2005	JP Morgan Investment Bank Global Intern in equity research, semiconductor		London, UK Three months