Phillip P.A. Staniczenko MPhys DPhil (Oxon) pstaniczenko@brooklyn.cuny.edu
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** University of Oxford
First Class Honours, St. Anne's College

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, *in press*

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. Nature Communications, 14, 5276

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, 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., Thompson, P.R., **Staniczenko, P.P.A.**, Barrett, F., Hungerford, J. & Hurwitz, S. (2022). Quantifying interdependencies in geyser eruptions at the Upper Geyser Basin, Yellowstone National Park. Journal of Geophysical Research: Solid Earth, 127, e2021JB023749

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

2021

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.**, Kopp, J.C. & Allesina, S. (2013). The ghost of nestedness in ecological networks. Nature Communications, 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, C.-F. & 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 (*Crassostrea virginica*)

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 PI, $2,600
Phenology and the local stability of plant-pollinator interaction networks

2018 **Santa Fe Institute Working Group** PI, $20k
Next-generation ecological network theory and application

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
	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 B
2010	**David Ryan Prize** for distinguished work by a graduate student in Physics
2007	**Data Connection Prize** for the best use of software in 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 Biology	Columbia University
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 Richard Gilder Graduate School	American 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) Program	Brooklyn College, CUNY
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 Architecture	University of Maryland, CP
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	**Organizer** BIOL7910G: Biology Colloquium	Brooklyn College, CUNY
2020–PRESENT	Arrange seminar series and mark student summaries of talks	14 weeks
	Lecturer BIOL3030W: Scientific Writing Communicating science to decision-makers and the public	Brooklyn College, CUNY 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 Analysis	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 Introduction to Ecological Modelling, Graduate level	University College London 2 full days
	Lecturer Workshop on Networks in Ecology Beyond nestedness in ecological networks, Undergraduate level	Umeå 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 SERVICE

	Subject-Matter Editor Editorial Board, Ecological Monographs
2023–2024	**Reviewer for Ecological Society of America** Annual Meeting Session Proposals
	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 Grant
	Reviewer for NERC (UK) Standard Grant and New Investigator Scheme
2010–PRESENT	**Reviewer for over 100 manuscripts across 47 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, 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, Nonlinear Dynamics, Physical Review Letters, Physical Review Research, Physical Review E, Physical Review X, PRX Life, Journal of the Royal Society Interface

INSTITUTIONAL SERVICE

	Biology Program Nominations Committee	Graduate Center, CUNY
	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 postdoctoral researchers	University of Maryland, CP
	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 Park, NY Staniczenko lab research stall	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 Synthesis Center Writer, producer, and presenter of "Introduction to Ecological Networks"	Winter 2020
Panelist Postdoctoral Research Symposium, MD Session on Transitioning to a Faculty Position	13 Sept 2019
Panel Moderator Postdoctoral Research Symposium, MD Session on Transitioning to a Faculty Position	17 Sept 2018
Planning Committee Graduate Career Pathways Conference, MD Organised session on environmental policy, NGOs, and conservation	20 April 2018
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 Wilkinson Building	7–9 May 2009
Workshop Organiser Process in Physics and Art, Oxford	12 Feb 2009
Highschool Mentor Maths, ages 10–12, Cherwell School, Oxford	2008

TALKS

*INVITED

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 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

2016 18. Invasion speeds in microbial systems. Presentation to United States Department of Defence, 1 Nov 2016, The Johns Hopkins Applied Physics Laboratory, Laurel, MD

2015 17. *How will social and environmental change impact ecological communities and 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

2014 12. *Food webs and bipartite networks. Workshop on Grand Challenges in Ecosystems 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 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, UK

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

6. *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

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

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

2009 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

VISITS		
2017	Professor Berry Brosi Predicting plant-pollinator networks	Stanford University
2015	Professor Jason Tylianakis Predicting host-parasitoid networks	University of Canterbury, New Zealand
2009	Professor Brian Uzzi Robustness of ecological networks	Northwestern Institute 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 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 Markets Intern in equity research, semiconductor and oil & gas industries	London, UK Three months