Stefano Allesina

Department of Ecology & Evolution and Computation Institute
University of Chicago, 1101 E. 57th st. Chicago, IL 60637
+1 (872) 226 3429 • ☎ +1 (773) 702 7825 • ✉ sallesina@uchicago.edu
allesinalab.uchicago.edu

Academic Appointments

Northwestern Institute on Complex Systems — **External Faculty**
Northwestern University — *2016–*

Dept. Ecology & Evolution — **Professor**
University of Chicago — *2014–*

Computation Institute — **Senior Fellow**
University of Chicago — *2014–2018*

Dept. Ecology & Evolution and Computation Institute — **Assistant Professor**
University of Chicago — *2009–2014*

NCEAS — **Postdoctoral Associate**
University of California Santa Barbara — *2007–2009*

Mercedes Pascual Laboratory — **Postdoctoral Fellow**
University of Michigan — *2005–2007*

Scott Peacor Laboratory — **Postdoctoral Fellow**
Michigan State University and NOAA — *2004–2005*

Education

Ph.D. — **Ecology**
Università di Parma, Italy — *2002–2005*
Advisor: Antonio Bodini

Laurea — **Environmental Sciences**
Università di Parma, Italy — *1995–2001*
Advisor: Alessandro Zaccagnini

Publications

Member and *Undergraduate Member* of the Allesina Lab. † Equal contribution.

Published papers

[1] *Maynard, D.S.*, Wootton, J.T., *Serván, C.A.* & **Allesina, S.** Reconciling empirical interactions and species coexistence. *Ecology letters*, 22:1028–1037 (2019).

[2] *Gibbs, T.*, *Grilli, J.* & **Allesina, S.** Effect of population abundances on the stability of large random ecosystems. *Physical Review E*, 98(2) (2018).

[3] *Serván, C.A.*, Capitán, J., *Grilli, J.*, Morrison, K. & **Allesina, S.** Coexistence of many species in random ecosystems. *Nature Ecology & Evolution*, 2(8):1237 (2018).

[4] *Maynard, D.S.*, *Serván, C.A.* & **Allesina, S.** Network spandrels reflect ecological assembly. *Ecology Letters*, 21(3):324–334 (2018).

[5] *Michalska-Smith, M.J.*†, *Sander, E.L.*†, Pascual, M. & **Allesina, S.** Understanding the role of parasites in food webs using the group model. *Journal of Animal Ecology*, 87(3):790–800 (2018).

[6] *Barabás, G.*†, *Michalska-Smith, M.J.*† & **Allesina, S.** Self-regulation and the stability of large ecological networks. *Nature Ecology & Evolution*, 1(12):1870 (2017).

[7] *Sander, E.L.*, Wootton, J. & **Allesina, S.** Ecological Network Inference From Long-Term Presence-Absence Data. *Scientific reports*, 7(1):7154 (2017).

[8] *Grilli, J.*, *Barabás, G.*, *Michalska-Smith, M.J.* & **Allesina, S.** Higher-order interactions stabilize dynamics in competitive network models. *Nature*, 548:210–213 (2017).

[9] *Grilli, J.*† & **Allesina, S.**†. Last name analysis of mobility, gender imbalance, and nepotism across academic systems. *Proceedings of the National Academy of Sciences of the United States of America*, 114:7600–7605 (2017).
Media Coverage includes: Nature, Corriere della Sera, Repubblica, La Stampa, Rai 3 TV.

[10] Levine, J., Bascompte, J., Adler, P. & **Allesina, S.** Beyond pairwise coexistence: biodiversity maintenance in complex ecological communities. *Nature*, 546:3376–3386 (2017).

[11] *Michalska-Smith, M.J.* & **Allesina, S.** And, not Or: Quality, Quantity in Scientific Publishing. *PLoS One*, 12(6):e0178074 (2017).

[12] *Grilli, J.*, Adorisio, M., Suweis, S., *Barabás, G.*, Banavar, J.R., **Allesina, S.** & Maritan, A. Feasibility and coexistence of large ecological communities. *Nature Communications*, 8:14389 (2017).

[13] Dee, L.E., **Allesina, S.**, Bonn, A., Eklöf, A., Gaines, S.D., Hines, J., Jacob, U., McDonald-Madden, E., Possingham, H., Schröter, M. et al. Operationalizing Network Theory for Ecosystem Service Assessments. *Trends in Ecology & Evolution*, 32:118–130 (2017).

[14] *Barabás, G.*, *Smith, M.J.* & **Allesina, S.** The effect of intra- and interspecific competition on coexistence in multispecies communities. *American Naturalist*, 188:E1–E12 (2016).

[15] *Grilli, J.*, Rogers, T. & **Allesina, S.** Modularity and stability in ecological communities. *Nature Communications*, 7:12031+ (2016).

[16] McCoy, S., Pfister, C. & **Allesina, S.** Ocean acidification affects competition for space: projections of community structure using cellular automata. *Proceedings of the Royal Society B: Biological Sciences*, 283:20152561 (2016).

[17] Masco, C., **Allesina, S.**, Mennill, D.J. & Pruett-Jones, S. Song overlapping: Distinguishing between intention and chance. *Bioacoustics*, 25:29–40 (2016).

[18] Suweis, S., *Grilli, J.*, Banavar, J., **Allesina, S.** & Maritan, A. Effect of Localization on the Stability of Mutualistic Ecological Networks. *Nature Communications*, 6:10179+ (2015).

[19] **Allesina, S.**, *Grilli, J.*, *Barabás, G.*, Tang, S., Aljadeff, J. & Maritan, A. Predicting the stability of large structured food webs. *Nature Communications*, 6:7842 (2015).

[20] *Barabás, G.* & **Allesina, S.** Predicting global community properties from uncertain estimates of interaction strengths. *Journal of the Royal Society Interface*, 12:20150218 (2015).

[21] *Sander, S.*, Wootton, J. & **Allesina, S.** What can Interaction Webs Tell Us About Species Roles? *PLoS Computational Biology*, 11:e10043330 (2015).

[22] Grilli, J., *Barabás, G.* & **Allesina, S.** Metapopulation persistence in random fragmented landscapes. *PLoS Computational Biology*, 11:e1004251 (2015).

[23] *Weinberger, C.J.*, Evans, J. & **Allesina, S.** Ten Simple (Empirical) Rules for Writing Science. *PLoS Computational Biology*, 11:e1004205 (2015).
Covered in The Chronicle of Higher Education.

[24] Borrelli, J., **Allesina, S.**, Amarasekare, P., Arditi, R., Chase, I., Damuth, J., Ginzburg, L., Holt, R., Logofet, D., Novak, M., Rohr, R., Rossberg, A., Spencer, M. & Tran, J. Selection on stability across ecological scales. *Trends in Ecology & Evolution*, 30:417–425 (2015).

[25] *Smith, M.J.*, *Sander, S.*, *Barabás, G.* & **Allesina, S.** Stability and feedback levels in food web models. *Ecology Letters*, 18(6):593–595 (2015).

[26] **Allesina, S.** & *Tang, S.* The stability-complexity relationship at age 40: a random matrix perspective. *Population Ecology*, 57(1):63–75 (2015).

[27] *Smith, M.J.*, *Weinberger, C.*, Bruna, E. & **Allesina, S.** The Scientific Impact of Nations: Journal Placement and Citation Performance. *PLoS ONE*, 9(10):e109195 (2014).
Covered in NPR Morning Edition.

[28] Wolkovich, E., **Allesina, S.**, Cottingham, K., Moore, J., Sandin, S. & de Mazancourt, C. Linking the green and brown worlds: The prevalence and effect of multi-channel feeding in food webs. *Ecology*, 95(12):3376–3386 (2014).

[29] *Tang, S.*, *Pawar, S.* & **Allesina, S.** Correlation between interaction strengths drives stability in large ecological networks. *Ecology Letters*, 17:1094–1100 (2014).

[30] *Staniczenko, P.P.A.*, *Smith, M.J.* & **Allesina, S.** Selecting Food Web Models using Normalised Maximum Likelihood. *Methods in Ecology and Evolution*, 5(6):551–562 (2014).

[31] *Tang, S.* & **Allesina, S.** Reactivity and Stability of Large Ecosystems. *Frontiers in Ecology and Evolution*, 2:art no. 21 (2014).

[32] Lortie, C., **Allesina, S.**, Aarssen, L., Grod, O. & Budden, A. With great power comes great responsibility: the importance of rejection, power, and editors in the practice of scientific publishing. *PLoS One*, 8(12):e85382 (2013).

[33] *Eklöf, A.*, *Tang, S.* & **Allesina, S.** Secondary Extinctions in Food Webs: a Bayesian Network Approach. *Methods in Ecology and Evolution*, 4(8):760–770 (2013).

[34] *Eklöf, A.*, Jacob, U., *Kopp, J.C.*, Bosch, J., Castro-Urgal, R., Chacoff, N., Dalsgaard, B., de Sassi, C., Galetti, M., Guimãrares Jr., P., Lomáscolo, S., Martin González, A., Pizo, M., Rader, R., Rodrigo, A., Tylianakis, J., Vázquez, D. & **Allesina, S.** The Dimensionality of Ecological Networks. *Ecology Letters*, 16(5):577–583 (2013).

[35] Parker, J., Lortie, C. & **Allesina, S.** Characterizing a Scientific Elite (B): Publication and Citation Patterns of the Most Highly Cited Scientists in Environmental Science and Ecology. *Scientometrics*, 94(2):469–480 (2013).

[36] *Staniczenko, P.P.A.*, *Kopp, J.C.* & **Allesina, S.** The Ghost of Nestedness in Ecological Networks. *Nature Communications*, 4(4):1391 (2013).

[37] Acuna, D., **Allesina, S.** & Kording, K. Future impact: Predicting scientific success. *Nature*, 489:201–202 (2012).
Media Coverage includes: Nature, The Chronicle of Higher Education, The Scientist, NPR.

[38] **Allesina, S.** Ecology: The more the merrier – News & Views. *Nature*, 487:175–176 (2012).

[39] **Allesina**†**, S.** & *Tang*†*, S.* Stability Criteria for Complex Ecosystems. *Nature*, 483:205–208 (2012).
Reviewed for F1000 by L. Forney & Z. Ma.

[40] **Allesina, S.** Modeling peer review: an agent-based approach. *Ideas in Ecology and Evolution*, 5:27–35 (2012).

[41] Bodini, A., Bondavalli, C. & **Allesina,S.** Cities as ecosystems: Functional similarities and the quest for sustainability. *Developments in Environmental Modelling*, 25:297–318 (2012).

[42] Bodini, A., Bondavalli, C. & **Allesina, S.** Cities as ecosystems: Growth, development and implications for sustainability. *Ecological Modelling*, 245:185–198 (2012).

[43] *Eklöf, A.*, Helmus, M., *Moore, M* & **Allesina, S.** Relevance of Evolutionary History For Food Web Structure. *Proceedings of the Royal Society B: Biological Sciences*, 279(1733):1588–1596 (2012).

[44] Lortie, C., Aarssen, L., Parker, J. & **Allesina, S.** Good news for the people who love bad news: an analysis of the funding of the top 1% most highly cited ecologists. *Oikos*, 121:1005–1008 (2012).

[45] Martin-González, A., **Allesina, S.**, Rodrigo, A. & Bosch, J. Drivers of compartmentalization in a Mediterranean pollination network. *Oikos*, 121:2001–2013 (2012).

[46] Melián, C., Alonso, D., **Allesina, S.**, Condit, R. & Etienne, R. Does sex speed up evolutionary rate and increase biodiversity? *PLoS Computational Biology*, 8(3):e1002414 (2012).

[47] **Allesina, S.** Predicting trophic relations in ecological networks: A test of the Allometric Diet Breadth Model. *Journal of Theoretical Biology*, 279(1):161–168 (2011).

[48] **Allesina, S.** Measuring nepotism through shared last names: The case of Italian academia. *PLoS ONE*, 6(8):e21160 (2011).
Media Coverage includes: Chicago Tribune, Science, Nature, Corriere della Sera, La Stampa, Radio24, Radio Rai, Rai 1 TV, ...
Reviewed for F1000 by A. Di Franco & J. Claudet.

[49] **Allesina, S.** & Levine, J. Reply to Ferrarini: Strengths and weaknesses of simple competition models. *Proceedings of the National Academy of Sciences of the United States of America*, 108(31):E346 (2011).

[50] **Allesina, S.** & Levine, J. A competitive network theory of species diversity. *Proceedings of the National Academy of Sciences of the United States of America*, 108(14):5638–5642 (2011).

Media Coverage includes: NPR, Cosmos Magazine, Clever Apes, ...
Reviewed for F1000 by H. Muller-Landau and by A. Gonzales.

[51] Baskerville, E., Dobson, A., Bedford, T., **Allesina, S.**, Anderson, T. & Pascual, M. Spatial guilds in the Serengeti food web revealed by a Bayesian group model. *PLoS Computational Biology*, 7(12):e1002321 (2011).

[52] *Rojas-Echenique, J.* & **Allesina, S.** Interaction rules affect species coexistence in intransitive networks. *Ecology*, 92(5):1174–1180 (2011).

[53] *Zook, A.E.*, *Eklöf, A.*, Jacob, U. & **Allesina, S.** Food webs: Ordering species according to body size yields high degree of intervality. *Journal of Theoretical Biology*, 271(1):106–113 (2011).

[54] **Allesina, S.**, Azzi, A., Battini, D. & Regattieri, A. Performance measurement in supply chains: New network analysis and entropic indexes. *International Journal of Production Research*, 48(8):2297–2321 (2010).

[55] Melián, C., Alonso, D., Vázquez, D., Regetz, J. & **Allesina, S.** Frequency-dependent selection predicts patterns of radiations and biodiversity. *PLoS Computational Biology*, 6(8):e1000892 (2010).
Reviewed for F1000 by B. Bolker.

[56] Parker, J., Lortie, C. & **Allesina, S.** Characterizing a scientific elite: The social characteristics of the most highly cited scientists in environmental science and ecology. *Scientometrics*, 85(1):129–143 (2010).
Covered in nature.com.

PRIOR TO UNIVERSITY OF CHICAGO.

[57] **Allesina, S.**, Bodini, A. & Pascual, M. Functional links and robustness in food webs. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 364(1524):1701–1709 (2009).

[58] **Allesina, S.** & Pascual, M. Googling food webs: Can an eigenvector measure species' importance for coextinctions? *PLoS Computational Biology*, 5(9):e1000494 (2009).
Media Coverage includes: NY Times Magazine "The 9th annual year in ideas", NY Times, Der Spiegel, BBC Worldservice "Science in Action", Wired, Slashdot, Radio24, ...

[59] **Allesina, S.** & Pascual, M. Food web models: A plea for groups. *Ecology Letters*, 12(7):652–662 (2009).

[60] Scotti, M., Bondavalli, C., Bodini, A. & **Allesina, S.** Using trophic hierarchy to understand food web structure. *Oikos*, 118(11):1695–1702 (2009).

[61] Bodini, A., Bellingeri, M., **Allesina, S.** & Bondavalli, C. Using food web dominator trees to catch secondary extinctions in action. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 364(1524):1725–1731 (2009).

[62] Dobson, A., **Allesina, S.**, Lafferty, K. & Pascual, M. The assembly, collapse and restoration of food webs. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 364(1524):1803–1806 (2009).

[63] **Allesina, S.**, Alonso, D. & Pascual, M. A general model for food web structure. *Science*, 320(5876):658–661 (2008).
Reviewed for F1000 by J. Bascompte and by C. Bang & J. Sabo.

[64] **Allesina, S.** & Pascual, M. Network structure, predator-prey modules, and stability in large food webs. *Theoretical Ecology*, 1(1):55–64 (2008).
Reviewed for F1000 by M. Holyoak.

[65] Lafferty, K., **Allesina, S.**, Arim, M., Briggs, C., De Leo, G., Dobson, A., Dunne, J., Johnson, P., Kuris, A., Marcogliese, D., Martinez, N., Memmott, J., Marquet, P., McLaughlin, J., Mordecai, E., Pascual, M., Poulin, R. & Thieltges, D. Parasites in food webs: The ultimate missing links. *Ecology Letters*, 11(6):533–546 (2008).

[66] Peacor, S., **Allesina, S.**, Riolo, R. & Hunter, T. A new computational system, DOVE (Digital Organisms in a Virtual Ecosystem), to study phenotypic plasticity and its effects in food webs. *Ecological Modelling*, 205(1-2):13–28 (2007).

[67] **Allesina, S.**, Bodini, A. & Bondavalli, C. Secondary extinctions in ecological networks: Bottlenecks unveiled. *Ecological Modelling*, 194(1-3 SPEC. ISS.):150–161 (2006).

[68] Bondavalli, C., Bodini, A., Rossetti, G. & **Allesina, S.** Detecting stress at the whole-ecosystem level: The case of a mountain lake (Lake Santo, Italy). *Ecosystems*, 9(5):768–787 (2006).

[69] Peacor, S., **Allesina, S.**, Riolo, R. & Pascual, M. Phenotypic plasticity opposes species invasions by altering fitness surface. *PLoS Biology*, 4(11):2112–2120 (2006).

[70] Scotti, M., **Allesina, S.**, Bondavalli, C., Bodini, A. & Abarca-Arenas, L. Effective trophic positions in ecological acyclic networks. *Ecological Modelling*, 198(3-4):495–505 (2006).

[71] **Allesina, S.** & Bodini, A. Food web networks: Scaling relation revisited. *Ecological Complexity*, 2(4):323–338 (2005).

[72] **Allesina, S.**, Bodini, A. & Bondavalli, C. Ecological subsystems via graph theory: The role of strongly connected components. *Oikos*, 110(1):164–176 (2005).

[73] **Allesina, S.**, Bondavalli, C. & Scharler, U. The consequences of the aggregation of detritus pools in ecological networks. *Ecological Modelling*, 189(1-2):221–232 (2005).

[74] **Allesina, S.** & Bodini, A. Who dominates whom in the ecosystem? Energy flow bottlenecks and cascading extinctions. *Journal of Theoretical Biology*, 230(3):351–358 (2004).

[75] **Allesina, S.** & Bondavalli, C. WAND: An ecological network analysis user-friendly tool. *Environmental Modelling and Software*, 19(4):337–340 (2004).

[76] **Allesina, S.** & Ulanowicz, R. Cycling in ecological networks: Finn's index revisited. *Computational Biology and Chemistry*, 28(3):227–233 (2004).

[77] **Allesina, S.** & Bondavalli, C. Steady state of ecosystem flow networks: A comparison between balancing procedures. *Ecological Modelling*, 165(2-3):221–229 (2003).

Unpublished papers

[78] *Maynard, D.S.*, *Miller, Z.R.* & **Allesina, S.** Predicting coexistence in experimental ecological communities. *bioRxiv*, page 598326 (2019).

Other publications

[79] **Allesina, S.** & *Wilmes, M. Computing Skills for Biologists — a Toolbox*. Princeton University Press, Princeton, NJ (2019). Textbook.

[80] **Allesina, S.** Food web stability, unapologetically – Book Review. *Ecology*, 94:2114–2115 (2013).

[81] *Eklöf, A.* & **Allesina, S.** Ecological Networks. In A. Hastings & L. Gross, editors, *Encyclopedia of Theoretical Ecology*, pages 470–478. U. California Press, Berkeley, CA (2012).

[82] **Allesina, S.** Learning R the Practical Way – Book Review. *Ecology*, 90:2335–2336 (2009).

[83] **Allesina, S.** Cycling and Cycling Indices. In S.E. Jorgensen & B. Fath, editors, *Encyclopedia of Ecology*, pages 812 – 819. Academic Press, Oxford (2008).

[84] **Allesina, S.** & Bodini, A. Ascendency. In S.E. Jorgensen & B. Fath, editors, *Encyclopedia of Ecology*, pages 254–263. Academic Press, Oxford (2008).

[85] Bodini, A., Bondavalli, C. & **Allesina, S.** *L'ecosistema e le sue relazioni. Idee e strumenti per la valutazione di impatto e ambientale e di incidenza.* Franco Angeli, Milan (2007). (The ecosystem and its relations. Ideas and tools for environmental impact assessment.) Textbook - In Italian.

Support

$150,000 Burroughs Wellcome Fund Foundation, PI: S. Allesina, five Co-PIs
Quantitative and Statistical Thinking in the Life Sciences: Quantitative Biology Fellowships *10/18 – 10/20*

$499,259 NSF NRT, PI: V. Prince, Co-PI S. Allesina & S. Palmer
NRT-IGE: Reproducibility and Rigor in Quantitative Biology: A Hands-on Approach *9/17 – 8/20*

$750,000 Human Frontier Science Program, PI: J. Kammenga & S. Allesina
Crossing the ultimate tipping point: predicting death in C. elegans *12/14 – 12/18*

$8,000 FACCTS, PI: S. Allesina & E. Thébault.
Spectral Characterization of Ecological Networks *2/14 – 2/15*

$599,244 NSF DEB #1148867, PI: S. Allesina
CAREER: Scientific Computing for a New Generation of Ecologists *9/12 – 8/18*

$449,817 James S. McDonnell Foundation, PI: S. Allesina Co-PI: J. Bergelson
Bacteria test biodiversity theories *8/10 – 7/14*

$240,073 NSF SMA SBE EAGER #1042164, PI: S. Allesina
Accelerating the pace of discovery by changing the peer review algorithm *8/10 – 7/14*

$636,000 NSF EF #0827493, PI: M. Pascual Co-PI: S. Allesina
The Spider and the Web: inference in ecological networks *9/08 – 8/14*

Service

University of Chicago

Director of Graduate Studies: Dept. Ecology & Evolution.

Faculty committee on graduate program: Computation Institute.

Faculty committee on graduate program: Dept. Ecology & Evolution.

Board of Computing Activities and Services: University of Chicago.

Faculty committee on computing services: Dept. Ecology & Evolution.

Faculty search committee: Dept. Ecology & Evolution (2009, 2012).

Faculty Review Board: The Triple Helix (undergrad. publication).

Editorial Board

PNAS
Guest Editor *2018*

PLoS Computational Biology
Deputy Editor *2017 –*

PLoS Computational Biology
Associate Editor *2015 – 2017*

Scientific Reports
Editor *2015 – 2017*

eLife
Guest Editor *2015*

Frontiers in Population Dynamics
Associate Editor *2013 –*

Frontiers in Computational Physics
Editor Reviewer *2013 –*

Journal of Complex Networks
Associate Editor *2012 – 2017*

PLoS Computational Biology
Guest Editor *2012-2015*

Faculty of 1000
Population Ecology *2011-2016*

Oikos
Subject Editor *2009 – 2017*

Reviewer

American Naturalist; Basic and Applied Ecology; Behavioral Ecology; Biological Reviews; Biology Letters; BioScience; Branco Weiss Fellowship; Briefings in Bioinformatics; Chaos; Ecography; Ecological Complexity; Ecological Engineering; Ecological Indicators; Ecological Modelling; Ecological Monographs; Ecology; Ecology Letters; Environmental Modelling & Assessment; Environmental Modelling & Software; Estuarine, Coastal and Shelf Science; European Physical Journal B; European Research Council; Fisheries Research; Journal of Animal Ecology; Journal of Mathematical Biology; Journal of Robust and Nonlinear Control; Journal of the Association for Information Science and Technology; Journal of Theoretical Biology; Journal of the Royal Society Interface; Marine Ecology Progress Series; Marsden Fund – Royal Society of New Zealand; Methods in Ecology & Evolution; Microsoft Research; National Science Foundation; Nature; Nature Communications; Nature Ecology & Evolution; Nature Methods; Nature Physics; NERC; Oikos; Philosophical Transactions of the Royal Society Series B; Physical Reviews E; Physical Reviews X; Physics Letters A; PLoS Biology; PLoS One; Proceedings of the National Academy of Sciences USA; Proceedings of the Royal Society Series B; Revue canadienne des sciences de l'information et de bibliothéconomie; Science; Science Advances; Scientometrics; Sinauer Publishing; The Social Science Journal; The Lancet Global Health; Theoretical Ecology; Theoretical

Population Biology; The Quarterly Review of Biology; Romanian National Council for Scientific Research; Scientific Reports; Trends in Ecology & Evolution; Trends in Parasitology; U. California Press; U. Chicago Press; U. Nebraska Omaha Internal Funding.

Panelist

National Science Foundation - June 2010.
National Science Foundation GRFP - January 2016.

Symposium Organizer

The Assembly and Disassembly of Ecological Networks: Restoration and Conservation at Multiple Trophic Levels: Organizers: Allesina and Pascual. Ecological Society of America 92^{th} annual meeting. San Jose (CA) Aug 2007.

Ecological Networks: Issues, advances and opportunities: Organizers: Kazanci and Allesina. Society for Mathematical Biology Annual Meeting. San Jose (CA) Aug 2007.

Summer School Organizer

Fourth BSD QBio @ MBL: MBL, Woods Hole (MA), Sept 2-9, 2018. Bootcamp on Quantitative Biology for all incoming BSD Students. Co-Directors: Prince, Palmer & Allesina.

Third BSD QBio @ MBL: MBL, Woods Hole (MA), Sept 10-16, 2017. Bootcamp on Quantitative Biology for all incoming BSD Students. Co-Directors: Prince, Palmer & Allesina.

Second BSD QBio @ MBL: MBL, Woods Hole (MA), Sept 6-14, 2016. Bootcamp on Quantitative Biology for all incoming BSD Students. Co-Directors: Palmer & Allesina.

First BSD QBio @ MBL: MBL, Woods Hole (MA), Sept 5-11, 2015. Bootcamp on Quantitative Biology for all incoming BSD Students. Co-Directors: Palmer & Allesina.

A primer in ecological networks: theory & data: Università di Parma June 15-20 2008. Organizers: Bodini, DeLeo, Allesina & Bondavalli.

Awards & Membership

U. Chicago Biological Sciences Division, Distinguished Investigator Award (2018).
NSF CAREER Award (2012).
NCEAS postdoctoral associate (2 years).
Italian Ministry of University - PhD Scholarship (3 years).
International Society for Ecological Modeling young researcher bursary.
Member of the Ecological Society of America (2005-).
Member of the British Ecological Society (2010-).

Mentoring

Graduate Students:
Si Tang (2010-2013), Elizabeth Sander (2012-2017) (with J.T. Wootton), Matthew Michalska-Smith (2013-2018), Carlos Marcelo Serván (2016-), Zach Miller (2017-)

Postdocs:
Anna Eklöf (2010-2012), Phillip Staniczenko (2011-2013), Samraat Pawar (2012-2013), György Barabás (2014-2016), Madlen Wilmes (2015), Jacopo Grilli (2015-2017), Daniel Maynard (2017-2019), Paula Lemos-Costa (2019-)

Undergraduates/Predoctoral:

Jose Rojas (2009-2010), Alex Zook (2009-2010), Philip Reinhold (2010-2011), M Moore (2010-2011), Jason Kopp (2011-2012), Matthew Smith (2012-2013), Michael Begun (2012-2013), Cody Weinberger (2013-2015), Theo Gibbs (2016-2018), Kevin Trickey (2017)

Teaching

Fundamentals of Biological Data Analysis — **D. Kondrashov & S. Allesina**
Undergraduate — *Fall 2018*

How can we understand the biosphere? — **S. Allesina & M. Kronforst**
Undergraduate — *Spring 2016, 2017, Winter 2018*

Computing Skills for Biologists — **S. Allesina**
Graduate — *Fall 2012, Winter 2013-*

Mini course BIOS 248 Scientific Computing for Ecologists — **S. Allesina, G. DeLeo, F. Ferretti**
Graduate, Stanford Universtity Hopkins Marine Station — *Oct 5-9 2015*

BSD Summer Research Program — **K. Gross & S. Allesina**
Graduate — *Summer 2012*

Evolution & Ecology — **S. Allesina & J. Coyne (2009 - 2012) & M. Kronforst (2013-2015)**
Undergraduate — *Winter 2010-2015*

Theoretical Ecology — **S. Allesina & G. Dwyer**
Graduate — *Fall 2009, Winter 2011*

Scientific Computing — **Abdus Salam ICTP, Trieste**
Spring College on the Physics of Complex Systems — *2014*

São Paulo School on Ecological Networks — **São Paulo, Brazil**
Summer School — *2011*

Biological Networks — **University of Fribourg, Switzerland**
Summer School — *2011*

Theoretical Ecology and Global Change — **Abdus Salam ICTP, Trieste**
Workshop — *2009*

Population Dynamics and Ecology — **University of Michigan**
Guest Lecture — *2006*

Ecosystem Networks Modeling — **University of Copenhagen, Denmark**
Summer School — *2006*

Ecosystem Modeling — **University of Copenhagen, Denmark**
Summer School — *2005*

Working Groups

Parasites and food webs: the ultimate missing link
NCEAS, Organized by K. Lafferty, A. Dobson and M. Pascual. — *2008–2009*

Ecological Problems Using Binary Matrices
NIMBioS, Organized by J. Landau and E. Connor. — *2009–2011*

The future of publishing in ecology, evolutionary biology, and environmental science
NCEAS, Organized by C. Lortie and J. Byrnes. — *2012*

Advancing theory and research on scientific synthesis
NCEAS, Organized by J. Parker and E. Hackett. *2012*

Spatio-Temporal Dynamics in Ecology
Lorentz Center, NL, Organized by A. Doelman, J. Huisman, J. van de Koppel and A. Zagaris. *2014*

sErvices
sDiv, DE, Organized by L. Dee and S. Gaines. *2015*

Inference on Networks: Algorithms, Phase Transitions, New Models and New Data
Santa Fe Institute, Organized by Cris Moore, Aaron Clauset, and Mark Newman. *2015*

Higher-Order Interactions: Experiments, Inference, and Models
Santa Fe Institute, Organized by Jacopo Grilli, Pamela Yeh, and Van Savage. *2019*

Talks & Seminars

May 22, 2019: *Biophysics Seminar, Massachusetts Institute of Technology*, Cambridge, MA.

May 21, 2019: *Graduate Science Education Seminar, Harvard Medical School*, Boston, MA.

May 17, 2019: *Center for Data and Computing, University of Chicago*, Chicago, IL.

May 2, 2019: *Epidemiology, University of Florida*, Gainesville, FA.

Apr 3, 2019: *Ecology & Evolutionary Biology, Yale University*, New Haven, CT.

Oct 7, 2018: *Stazione Zoologica Anton Dohrn*, Naples, Italy.

June 12, 2018: *NetSci 2018 (Satellite)*, Paris, France.

Feb 23, 2018: *Istituto Italiano di Cultura*, Chicago, IL.

Jan 25, 2018: *EvMorph Seminar, University of Chicago*, Chicago, IL.

Nov 16, 2017: *Georgia Institute of Technology*, Atlanta, GA.

Oct 26, 2017: *Massachusetts Institute of Technology*, Cambridge, MA.

Jul 13, 2017: *Society for Industrial and Applied Mathematics: Workshop on Network Science*, Pittsburgh, PA. *Plenary Speaker.*

Apr 1, 2017: *American Mathematical Society, Spring Central Sectional Meeting*, Bloomington, IN. *Keynote Speaker.*

Dec 14, 2016: *British Ecological Society Annual Meeting*, Liverpool UK. *Keynote Speaker.*

Oct 27, 2016: *Science at the Edge, Michigan State University*, East Lansing, MI.

Oct 12, 2016: *Computation in Science, University of Chicago*, Chicago IL.

Apr 14, 2016: *Mathematical Biosciences Institute*, Columbus, OH.

Feb 29, 2016: *Statistics Colloquium, University of Chicago*, Chicago, IL.

Feb 1, 2016: *Wildlife Ecology and Conservation Seminars, University of Florida*, Gainesville, FL.

Dec 11, 2015: *Santa Fe Institute*, Santa Fe, NM.

Nov 13, 2015: *DePaul University*, Chicago, IL.

Oct 8, 2015: *Stanford University*, Palo Alto, CA.

Sept 18-19, 2015: *Living systems: from interactions to critical behavior*, Venezia, Italy.

Aug 14, 2015: *Ecological Society of America Annual Meeting*, Baltimore, MD. *Contributed.*

Mar 12, 2015: *ETH Zürich*, Zurich, Switzerland. *E3B seminar series*

Dec 5, 2014: *6th Swedish Meeting in Mathematics in Biology*, Linköping, Sweden. *Keynote Speaker*

Nov 5, 2014: *Stony Brook University*, Stony Brook, NY. *Ginzburg Colloquim*
Oct 31, 2014: *University of Chicago*, Chicago, IL. *Computational Social Science Workshop*
Sept 19, 2014: *U. Illinois at Urbana-Champaign*, Urbana, IL. *Dept. Seminar*
Aug 10, 2014: *Sci Foo*, Google, Mountain View, CA.
July 10, 2014: *Center Interfacultaire Bernoulli, EPFL*, Lausanne, Switzerland. *Bernoulli Lecture*
May 5, 2014: *Marine Biological Lab*, Woods Hole, MA. *Dept. Seminar*
Dec 5, 2013: *University of California Davis*, Davis, CA. *Dept. Seminar*
Nov 13, 2013: *Food Webs: Science for Impact*, Giessen, Germany. *Keynote Speaker*
Oct 12, 2013: *Society of Population Ecology*, Sakai, Japan. *Keynote Speaker*
Apr 22, 2013: *University of Puerto Rico – Rio Piedras*, San Juan, Puerto Rico. *Invited*
Mar 14, 2013: *iDiv*, Leipzig, Germany. *Invited*
Nov 1, 2012: *University of Oxford*, Oxford, UK. *Invited*
Sept 24, 2012: *University of Umeå*, Umeå, Sweden. *Dept. Seminar*
Sept 14, 2012: *University of Michigan*, Ann Arbor, MI. *Invited*
June 23, 2012: *NetSci 2012*, Evanston, IL. *Invited*
June 7, 2012: *BioM&S Symposium 2012*, University of Guelph, CA. *Keynote speaker*
May 14, 2012: *University of Chicago*, Chicago IL. *Dept. Seminar*
Apr 26, 2012: *University of Amsterdam*, Amsterdam, the Netherlands. *Keynote speaker*
Apr 13, 2012: *University of Toronto - EEB Retreat*, Toronto, CA. *Keynote speaker*
Apr 6, 2012: *Case Western Reserve*, Cleveland, OH. *Invited*
Oct 23, 2011: *Chicago Humanities Festival*, Chicago, IL. *Invited*
Sept 15, 2011: *University of Sao Paulo*, Sao Paulo, Brazil. *Invited*
Sept 14, 2011: *University of Campinas, Brazil*, Campinas, Brazil. *Invited*
Sept 2, 2011: *Iowa State University*, Ames, IA. *Invited*
Sept 1, 2011: *Iowa State University*, Ames, IA. *Dept. Seminar*
Aug 8, 2011: *Ecological Society of America Annual Meeting*, Austin, TX. *Contributed.*
July 18, 2011: *International Environmetrics Society – Regional Meeting*, La Crosse, WI. *Invited*
June 2, 2011: *European Conference on Ecological Modeling*, Riva del Garda, Italy. *Contributed.*
Sept 7, 2010: *British Ecological Society Annual Meeting*, Leeds, UK. *Invited*
Jul 7, 2010: *Università di Parma*, Parma, Italy. *Invited*
Apr 29, 2010: *1st Spark Reception: Agent-based Modeling. University of Chicago*, Chicago, IL. *Invited*
Apr 22, 2010: *University of Michigan CSCS*, Ann Arbor, MI. *Invited*
Feb 16, 2010: *University of California Santa Barbara*, Santa Barbara, CA. *Dept. Seminar*
Feb 2, 2010: *University of Illinois at Chicago*, Chicago, IL. *Dept. Seminar*
Dec 9, 2009: *The Northwestern Institute on Complex Systems (NICO)*, Evanston, IL. *Invited*
Oct 9, 2009: *NCEAS Ecolunch*, Santa Barbara, CA.
Aug 4, 2008: *Ecological Society of America Annual Meeting*, Milwaukee, WI. *Contributed.*
May 5, 2008: *NCEAS Ecolunch*, Santa Barbara, CA.
April 16, 2008: *University of Chicago*, Chicago, IL. *Invited*

March 15, 2008: *Early Career Scientists Symposium*, Ann Arbor, MI. *Invited*
Aug 8, 2007: *Ecological Society of America Annual Meeting*, San Jose, CA. *Invited*
Aug 3, 2007: *Society for Mathematical Biology Annual Meeting*, San Jose, CA. *Invited*
Feb 20, 2007: *Università di Parma*, Parma, Italy. *Invited*
Feb 15, 2007: *Niels Bohr Institute - Center for Models of Life*, Copenhagen, Denmark. *Invited*
Aug 9, 2006: *Ecological Society of America Annual Meeting*, Memphis, TN. *Contributed.*
Jun 7, 2006: *University of Copenhagen*, Copenhagen, Denmark. *Invited*
Jun 5, 2006: *Università di Parma*, Parma, Italy. *Invited*
May 26, 2006: *Collegium Budapest, Institute for Advanced Study*, Budapest, Hungary. *Invited*
Nov 28, 2005: *Chesapeake Biological Laboratory, University of Maryland*, Solomons, MD. *Invited*
Aug 9, 2005: *Ecological Society of America Annual Meeting*, Montreal, Canada. *Contributed*
Sept 29, 2004: *Fourth European Conference on Ecological Modelling*, Bled, Slovenia. *Contributed*
Apr 24, 2004: *Peter Yodzis Colloquium - University of Guelph*, Guelph, Canada. *Contributed*

Skills

Languages: Italian, English
Computer Skills: C, python, R, LaTeX, Linux