

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 <i>Northwestern University</i>	External Faculty 2016–
Dept. Ecology & Evolution and Computation Institute <i>University of Chicago</i>	Professor 2014–
Dept. Ecology & Evolution and Computation Institute <i>University of Chicago</i>	Assistant Professor 2009–2014
NCEAS <i>University of California Santa Barbara</i>	Postdoctoral Associate 2007–2009
Mercedes Pascual Laboratory <i>University of Michigan</i>	Postdoctoral Fellow 2005–2007
Scott Peacor Laboratory <i>Michigan State University and NOAA</i>	Postdoctoral Fellow 2004–2005

Education

Ph.D. <i>Università di Parma, Italy</i> Advisor: Antonio Bodini	Ecology 2002–2005
Laurea <i>Università di Parma, Italy</i> Advisor: Alessandro Zaccagnini	Environmental Sciences 1995–2001

Publications

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

Published papers.....

- [1] Sander, E.L.†, Michalska-Smith, M.J.†, Pascual, M. & **Allesina, S.** Understanding the role of parasites in food webs using the group model. *Journal of Animal Ecology*, (in press) (2017).
- [2] Barabás, G.†, Michalska-Smith, M.J.† & **Allesina, S.** Self-regulation and the stability of large ecological networks. *Nature Ecology & Evolution* (2017).
- [3] Sander, E.L., Wootton, J. & **Allesina, S.** Ecological Network Inference From Long-Term Presence-Absence Data. *Scientific reports*, 7(1):7154 (2017).
- [4] Grilli, J., Barabás, G., Michalska-Smith, M.J. & **Allesina, S.** Higher-order interactions stabilize dynamics in competitive network models. *Nature*, 548:210–213 (2017).

- [5] 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.
- [6] Levine, J., Bascompte, J., Adler, P. & Allesina, S. Beyond pairwise coexistence: biodiversity maintenance in complex ecological communities. *Nature*, 546:3376–3386 (2017).
- [7] Michalska-Smith, M.J. & Allesina, S. And, not Or: Quality, Quantity in Scientific Publishing. *PLoS One*, 12(6):e0178074 (2017).
- [8] Grilli, J., Adoriso, M., Suweis, S., Barabás, G., Banavar, J.R., Allesina, S. & Maritan, A. Feasibility and coexistence of large ecological communities. *Nature Communications*, 8:14389 (2017).
- [9] 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).
- [10] 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).
- [11] Grilli, J., Rogers, T. & Allesina, S. Modularity and stability in ecological communities. *Nature Communications*, 7:12031+ (2016).
- [12] 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).
- [13] Masco, C., Allesina, S., Mennill, D.J. & Pruett-Jones, S. Song overlapping: Distinguishing between intention and chance. *Bioacoustics*, 25:29–40 (2016).
- [14] 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).
- [15] 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).
- [16] Barabás, G. & Allesina, S. Predicting global community properties from uncertain estimates of interaction strengths. *Journal of the Royal Society Interface*, 12:20150218 (2015).
- [17] Sander, S., Wootton, J. & Allesina, S. What can Interaction Webs Tell Us About Species Roles? *PLoS Computational Biology*, 11:e10043330 (2015).
- [18] Grilli, J., Barabás, G. & Allesina, S. Metapopulation persistence in random fragmented landscapes. *PLoS Computational Biology*, 11:e1004251 (2015).
- [19] 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.
- [20] 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).

- [21] *Smith, M.J., Sander, S., Barabás, G. & Allesina, S.* Stability and feedback levels in food web models. *Ecology Letters*, 18(6):593–595 (2015).
- [22] *Allesina, S. & Tang, S.* The stability-complexity relationship at age 40: a random matrix perspective. *Population Ecology*, 57(1):63–75 (2015).
- [23] *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.
- [24] *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).
- [25] *Tang, S., Pawar, S. & Allesina, S.* Correlation between interaction strengths drives stability in large ecological networks. *Ecology Letters*, 17:1094–1100 (2014).
- [26] *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).
- [27] *Tang, S. & Allesina, S.* Reactivity and Stability of Large Ecosystems. *Frontiers in Ecology and Evolution*, 2:art no. 21 (2014).
- [28] *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).
- [29] *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).
- [30] *Eklöf, A., Jacob, U., Kopp, J.C., Bosch, J., Castro-Urgal, R., Chacoff, N., Dalsgaard, B., de Sassi, C., Galetti, M., Guimãraes Jr., P., Lomáscolo, S., Martín 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).
- [31] *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).
- [32] *Staniczenko, P.P.A., Kopp, J.C. & Allesina, S.* The Ghost of Nestedness in Ecological Networks. *Nature Communications*, 4(4):1391 (2013).
- [33] *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.
- [34] *Allesina, S.* Ecology: The more the merrier – News & Views. *Nature*, 487:175–176 (2012).
- [35] *Allesina[†], S. & Tang[†], S.* Stability Criteria for Complex Ecosystems. *Nature*, 483:205–208 (2012).
Reviewed for F1000 by L. Forney & Z. Ma.

- [36] **Allesina, S.** Modeling peer review: an agent-based approach. *Ideas in Ecology and Evolution*, 5:27–35 (2012).
- [37] Bodini, A., Bondavalli, C. & **Allesina, S.** Cities as ecosystems: Functional similarities and the quest for sustainability. *Developments in Environmental Modelling*, 25:297–318 (2012).
- [38] Bodini, A., Bondavalli, C. & **Allesina, S.** Cities as ecosystems: Growth, development and implications for sustainability. *Ecological Modelling*, 245:185–198 (2012).
- [39] 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).
- [40] 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).
- [41] Martin-González, A., **Allesina, S.**, Rodrigo, A. & Bosch, J. Drivers of compartmentalization in a Mediterranean pollination network. *Oikos*, 121:2001–2013 (2012).
- [42] 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).
- [43] **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).
- [44] **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.
- [45] **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).
- [46] **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.
- [47] 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).
- [48] *Rojas-Echenique, J.* & **Allesina, S.** Interaction rules affect species coexistence in intransitive networks. *Ecology*, 92(5):1174–1180 (2011).
- [49] *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).
- [50] **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).

[51] 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.

[52] 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.

[53] **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).

[54] **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, . . .

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

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

[57] 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).

[58] 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).

[59] **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.

[60] **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.

[61] 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).

[62] 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).

- [63] **Allesina, S.**, Bodini, A. & Bondavalli, C. Secondary extinctions in ecological networks: Bottlenecks unveiled. *Ecological Modelling*, 194(1-3 SPEC. ISS.):150–161 (2006).
- [64] 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).
- [65] Peacor, S., **Allesina, S.**, Riolo, R. & Pascual, M. Phenotypic plasticity opposes species invasions by altering fitness surface. *PLoS Biology*, 4(11):2112–2120 (2006).
- [66] 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).
- [67] **Allesina, S.** & Bodini, A. Food web networks: Scaling relation revisited. *Ecological Complexity*, 2(4):323–338 (2005).
- [68] **Allesina, S.**, Bodini, A. & Bondavalli, C. Ecological subsystems via graph theory: The role of strongly connected components. *Oikos*, 110(1):164–176 (2005).
- [69] **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).
- [70] **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).
- [71] **Allesina, S.** & Bondavalli, C. WAND: An ecological network analysis user-friendly tool. *Environmental Modelling and Software*, 19(4):337–340 (2004).
- [72] **Allesina, S.** & Ulanowicz, R. Cycling in ecological networks: Finn's index revisited. *Computational Biology and Chemistry*, 28(3):227–233 (2004).
- [73] **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**.....
- [74] *Maynard, D.S., Serván, C.A. & Allesina, S.* Network spandrels reflect ecological assembly. *Ecology Letters*, (in review) (2017).
- [75] *Gibbs, T., Grilli, J. & Allesina, S.* Effect of population abundances on the stability of large random ecosystems. *Physical Review X*, (in review) (2017).
- [76] *Serván, C.A., J.A., C., Grilli, J., Morrison, K. & Allesina, S.* Coexistence in random ecosystems. *Science*, (in preparation) (2017).
- Other publications**.....
- [77] **Allesina, S.** Food web stability, unapologetically – Book Review. *Ecology*, 94:2114–2115 (2013).
- [78] *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).
- [79] **Allesina, S.** Learning R the Practical Way – Book Review. *Ecology*, 90:2335–2336 (2009).
- [80] **Allesina, S.** Cycling and Cycling Indices. In S.E. Jorgensen & B. Fath, editors, *Encyclopedia of Ecology*, pages 812 – 819. Academic Press, Oxford (2008).

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

[82] 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

\$499,259 NSF NRT, PI: V. Prince, Co-PI S. Allesina & S. Palmer <i>NRT-IGE: Reproducibility and Rigor in Quantitative Biology: A Hands-on Approach</i>	9/17 – 8/20
\$750,000 Human Science Frontier Program, PI: J. Kammenga & S. Allesina <i>Crossing the ultimate tipping point: predicting death in C. elegans</i>	12/14 – 12/17
\$8,000 FACCTS, PI: S. Allesina & E. Thébault. <i>Spectral Characterization of Ecological Networks</i>	2/14 – 2/15
\$599,244 NSF DEB #1148867, PI: S. Allesina <i>CAREER: Scientific Computing for a New Generation of Ecologists</i>	9/12 – 8/18
\$449,817 James S. McDonnell Foundation, PI: S. Allesina Co-PI: J. Bergelson <i>Bacteria test biodiversity theories</i>	8/10 – 7/14
\$240,073 NSF SMA SBE EAGER #1042164, PI: S. Allesina <i>Accelerating the pace of discovery by changing the peer review algorithm</i>	8/10 – 7/14
\$636,000 NSF EF #0827493, PI: M. Pascual Co-PI: S. Allesina <i>The Spider and the Web: inference in ecological networks</i>	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.....

Oikos

Subject Editor 2009 –

Journal of Complex Networks

Associate Editor 2012 –

Frontiers in Population Dynamics

Associate Editor 2013 –

Frontiers in Computational Physics

Editor Reviewer 2013 –

PLoS Computational Biology

Associate Editor

2015 –

Scientific Reports

Editor

2015 –

eLife

Guest Editor

2015

PLoS Computational Biology

Guest Editor

2012-2015

Faculty of 1000

Population Ecology

2011-2016

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; 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 92th 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.....

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

NSF CAREER Award.

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-), Carlos Marcelo Serván (2016-)

Postdocs:

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

Undergraduates/Predocctoral:

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-), Kevin Trickey (2017-)

Teaching

How can we understand the biosphere?

Undergraduate

S. Allesina & M. Kronforst
Spring 2016, 2017, Winter 2018

Introduction to Scientific Computing for Biologists

Graduate

S. Allesina
Fall 2012, Winter 2013-

Mini course BIOS 248 Scientific Computing for Ecologists

Graduate, Stanford University Hopkins Marine Station

S. Allesina, G. DeLeo, F. Ferretti
Oct 5-9 2015

BSD Summer Research Program

Graduate

K. Gross & S. Allesina
Summer 2012

Evolution & Ecology

Undergraduate

S. Allesina & J. Coyne (2009 - 2012) & M. Kronforst (2013-2015)
Winter 2010-2015

Theoretical Ecology

Graduate

S. Allesina & G. Dwyer
Fall 2009, Winter 2011

Scientific Computing

Spring College on the Physics of Complex Systems

Abdus Salam ICTP, Trieste
2014

São Paulo School on Ecological Networks

Summer School

São Paulo, Brazil
2011

Biological Networks <i>Summer School</i>	University of Fribourg, Switzerland 2011
Theoretical Ecology and Global Change <i>Workshop</i>	Abdus Salam ICTP, Trieste 2009
Population Dynamics and Ecology <i>Guest Lecture</i>	University of Michigan 2006
Ecosystem Networks Modeling <i>Summer School</i>	University of Copenhagen, Denmark 2006
Ecosystem Modeling <i>Summer School</i>	University of Copenhagen, Denmark 2005

Working Groups

Parasites and food webs: the ultimate missing link <i>NCEAS, Organized by K. Lafferty, A. Dobson and M. Pascual.</i>	2008–2009
Ecological Problems Using Binary Matrices <i>NIMBioS, Organized by J. Landau and E. Connor.</i>	2009–2011
The future of publishing in ecology, evolutionary biology, and environmental science <i>NCEAS, Organized by C. Lortie and J. Byrnes.</i>	2012
Advancing theory and research on scientific synthesis <i>NCEAS, Organized by J. Parker and E. Hackett.</i>	2012
Spatio-Temporal Dynamics in Ecology <i>Lorentz Center, NL, Organized by A. Doelman, J. Huisman, J. van de Koppel and A. Zagaris.</i>	2014
sERVICES <i>sDiv, DE, Organized by L. Dee and S. Gaines.</i>	2015
Inference on Networks: Algorithms, Phase Transitions, New Models and New Data <i>Santa Fe Institute, Organized by Cris Moore, Aaron Clauset, and Mark Newman.</i>	2015

Talks & Seminars

- 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, L^AT_EX, Linux