# Dr. Casey William Dunn Curriculum Vitae

#### 1 Position and Contact Information

Associate Professor

Dept. of Ecology and Evolutionary Biology

Brown University

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80 Waterman St.

Providence, RI 02906 USA

Phone: (401) 863-9806 Fax: (401) 863-2166

Email: casey\_dunn@brown.edu
Web sites: http://dunnlab.org/

http://creaturecast.org/

http://practicalcomputing.org/

Accounts: twitter - @caseywdunn

scholar.google.com – Casey Dunn bitbucket.org – caseywdunn vimeo.com – Casey Dunn

#### 2 Home address

Providence, RI

## 3 Education

| 2005 Ph.D. | Yale University, L | epartment of Ecology and | d Evolutionary Biology | (With Distinction) |
|------------|--------------------|--------------------------|------------------------|--------------------|
|------------|--------------------|--------------------------|------------------------|--------------------|

2003 M.S. Yale University, Department of Ecology and Evolutionary Biology 1999 B.S. Stanford University, Biological Sciences (Honors, Phi Beta Kappa)

## 4 Professional Appointments

| 2014-present  | Associate Professor   | Dept                                    | of Ecology a | and Evolutionary | Biology   | Brown University |
|---------------|-----------------------|---|--------------|------------------|-----------|------------------|
| 2014-DICSCIII | 11330Clate 1 101C3301 | , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | OI LCOIDEV ( | and Lybrahbriary | DIDIDE V. | DIOWII CHIVEISH  |

2010–2014 Manning Assistant Professor, Dept. of Ecology and Evolutionary Biology, Brown University

2008–2010 Assistant Professor, Dept. of Ecology and Evolutionary Biology, Brown University

2007–2008 Assistant Professor (Research), Dept. of Ecology and Evolutionary Biology, Brown Univer-

sity

2005–2007 Postdoctoral Fellow, Kewalo Marine Lab, University of Hawaii

# 5 Completed Publications

## a. Books/monographs

SHD Haddock and CW Dunn. (2010) Practical Computing for Biologists. 538 pages. Sinauer Associates. Sunderland, MA. http://practicalcomputing.org.

#### b. Chapters in books

Giribet, G, CW Dunn, GD Edgecombe, A Hejnol, MQ Martindale, and GW Rouse (2009) Assembling the spiralian tree of life (p 52-64) In: Animal Evolution. MJ Telford and DTJ Littlewood (eds). Oxford University Press.

Mills, CE, AC Marques, AE Migotto, DR Calder, C Hand, JT Rees, SHD Haddock, CW Dunn, and PR Pugh. (2007) Hydrozoa: Polyps, Hydromedusae, and Siphonophora. In: The Light & Smith manual: intertidal invertebrates from central California to Oregon, 4th edition. JT Carlton (ed). University of California Press.

#### c. Refereed journal articles

Haddock, SH, CW Dunn (2015) Fluorescent proteins function as a prey attractant: experimental evidence from the hydromedusa Olindias formosus and other marine organisms. Biology Open http://dx.doi.org/10.1242/bio.012138.

Church, SH, JF Ryan, CW Dunn (2015) Automation and Evaluation of the SOWH Test of Phylogenetic Topologies with SOWHAT. Systematic Biology http://dx.doi.org/10.1093/sysbio/syv055. BioRxiv preprint: http://dx.doi.org/10.1101/005264. Git code repository: https://github.com/josephryan/sowhat.

Laumer, CE, N Bekkouche, A Kerbl, F Goetz, RC Neves, MV Sørensen, RM Kristensen, A Hejnol, CW Dunn, G Giribet, K Worsaae (2015) Spiralian Phylogeny Informs the Evolution of Microscopic Lineages. Current Biology. http://dx.doi.org/10.1016/j.cub.2015.06.068.

Church, SH, S Siebert, P Bhattacharyya, CW Dunn (2015) The Histology of *Nanomia bijuga* (Hydrozoa: Siphonophora). J. Exp. Zool. (Mol. Dev. Evol.) http://dx.doi.org/10.1002/jez.b.22629. BioRxiv preprint: http://dx.doi.org/10.1101/010868.

Siebert, S, FE Goetz, SH Church, P Bhattacharyya, F Zapata, SHD Haddock, and CW Dunn (2015) Stem Cells in a Colonial Animal with Localized Growth Zones. EvoDevo. http://dx.doi.org/10.1186/s13227-015-0018-2. BioRxiv preprint: http://dx.doi.org/10.1101/001685. Git code repository: https://bitbucket.org/caseywdunn/siebert\_etal.

Salinas-Saavedra, M, TQ Stephenson, CW Dunn, MQ Martindale (2015) Par system components are asymmetrically localized in ectodermal epithelia, but not during early development in the sea anemone *Nematostella vectensis*. EvoDevo 6:20. http://dx.doi.org/10.1186/s13227-015-0014-6.

Helm, RR, S Tiozzo, MKS Lilley, F Lombard, CW Dunn (2015) Comparative muscle development of scyphozoan jellyfish with simple and complex life cycles. EvoDevo 6:11. http://dx.doi.org/10.1186/s13227-015-0005-7.

Dunn, CW, SP Leys, SHD Haddock (2015) The hidden biology of sponges and ctenophores. Trends in Ecology and Evolution 30:282-291. http://dx.doi.org/10.1016/j.tree.2015.03.003.

Reich, A, CW Dunn, K Akasaka, G Wessel (2015) Phylogenomic Analyses of Echinodermata Support the Sister Groups of Asterozoa and Echinozoa. PLoS One 10:e0119627. http://dx.doi.org/10.1371/journal.pone.0119627.

Gonzalez, VL, SCS Andrade, R Bieler, TM Collins, CW Dunn, PM Mikkelsen, JD Taylor, G Giribet (2015) A phylogenetic backbone for Bivalvia: an RNA-seq approach. Proceedings of the Royal Society B: Biological Sciences 282:20142332. http://dx.doi.org/10.1098/rspb.2014.2332.

Dunn, CW, G Giribet, GD Edgecombe, A Hejnol (2014) Animal Phylogeny and its Evolutionary Implications. Annual Review of Ecology, Evolution, and Systematics 45:371?395. http://dx.doi.org/10.1146/annurev-ecolsys-120213-091627.

Zapata, F, NG Wilson, M Howison, SCS Andrade, KM Jörger, Michael Schrödl, Freya E Goetz, Gonzalo Giribet, Casey W Dunn (2014) Phylogenomic analyses of deep gastropod relationships reject Orthogastropoda. Proceedings of the Royal Society B: Biological Sciences 281:1471-2954. http://dx.doi.org/10.1098/rspb.2014.1739. BioRxiv preprint: http://dx.doi.org/10.1101/007039. Git code repository: https://bitbucket.org/caseywdunn/gastropoda.

Dunn, CW (2014) Reconsidering the phylogenetic utility of miRNA in animals. PNAS 111:12576-12577. http://dx.doi.org/10.1073/pnas.1413545111.

Howison, M, F Zapata, EJ Edwards, and CW Dunn (2014) Bayesian genome assembly and assessment by Markov Chain Monte Carlo sampling. PLoS One 9:e99497. http://dx.doi.org/10.1371/journal.pone.0099497. arXiv preprint: http://arxiv.org/abs/1308.1388. Git code repository: https://bitbucket.org/mhowison/gabi. Example analysis report: https://web3.ccv.brown.edu/mhowison/gabi-report/.

Lopez, J, H Bracken-Grissom, A Collins, T Collins, K Crandall, D Distel, C Dunn, et al. (2014) Global Invertebrate Genomics Alliance (GIGA): Developing Community Resources to Study Diverse Invertebrate Genomes. Journal of Heredity 105:1-18. http://dx.doi.org/10.1093/jhered/est084

Ryan, JF, K Pang, CE Schnitzler, A Nguyen, RT Moreland, DK Simmons, BJ Koch, WR Francis, P Havlak, NISC Comparative Sequencing Program, SA Smith, NH Putnam, SHD Haddock, CW Dunn, TG Wolfsberg, JC Mullikin, MQ Martindale, AD Baxevanis (2013) The genome of the ctenophore *Mnemiopsis leidyi* and its implications for cell type evolution. Science 432:1242592. http://dx.doi.org/10.1126/science.1242592.

CW Dunn, M Howison, and F Zapata (2013) Agalma: an automated phylogenomics workflow. BMC Bioinformatics 14:330. http://dx.doi.org/10.1186/1471-2105-14-330. arXiv preprint: http://arxiv.org/abs/1307.6432. Git code repository: https://bitbucket.org/caseywdunn/agalma (software), https://bitbucket.org/caseywdunn/dunnhowisonzapata2013 (analyses).

Howison, M, F Zapata, CW Dunn (2013) Toward a statistically explicit understanding of *de novo* sequence assembly. Bioinformatics 29:2959-2963. http://dx.doi.org/10.1093/bioinformatics/btt525.

Siebert, S, PR Pugh, SHD Haddock, CW Dunn (2013) Re-evaluation of characters in Apolemiidae (Siphonophora), with description of two new species from Monterey Bay, California. Zootaxa 3702: 201-232. http://www.mapress.com/zootaxa/2013/f/zt03702p232.pdf. Accompanying video of new species available at https://vimeo.com/59928656.

Dunn, CW, X Luo, Z Wu (2013) Phylogenetic analysis of gene expression. Integrative and Comparative Biology 53:847-856. http://dx.doi.org/10.1093/icb/ict068. arXiv preprint: http://arxiv.org/abs/1302.2978. Git code repository: https://bitbucket.org/caseywdunn/sicb2013.

Helm, RR, S Siebert, S Tulin, J Smith, CW Dunn (2013) Characterization of differential transcript abundance through time during *Nematostella vectensis* development. BMC Genomics 14:266. http://dx.doi.org/10.1186/1471-2164-14-266. Git code repository: https://bitbucket.org/caseywdunn/helm\_etal\_2013.

Howison, M, N Sinnott-Armstrong, CW Dunn (2012) BioLite, a lightweight bioinformatics framework with automated tracking of diagnostics and provenance. 4th USENIX Workshop on the Theory and Practice of Provenance (TaPP12). https://www.usenix.org/system/files/conference/tapp12/tapp12-final5.pdf (peer-reviewed conference proceeding).

Smith, SA, NG Wilson, F Goetz, C Feehery, SCS Andrade, GW Rouse, G Giribet, CW Dunn (2011) Resolving the evolutionary relationships of molluscs with phylogenomic tools. Nature 480:364-367. http://dx.doi.org/10.1038/nature10526.

Siebert, S, MD Robinson, SC Tintori, F Goetz, RR Helm, SA Smith, N Shaner, SHD Haddock, CW Dunn (2011) Differential Gene Expression in the Siphonophore *Nanomia bijuga* (Cnidaria) Assessed with Multiple Next-Generation Sequencing Workflows. PLoS One 6(7): e22953. http://dx.doi.org/10.1371/journal.pone.0022953.

Edgecombe, GD, G Giribet, CW Dunn, A Hejnol, RM Kristensen, RC Neves, GW Rouse, K Worsaae, and MV Sørensen (2011) Higher-level metazoan relationships: recent progress and remaining questions. Organisms, Diversity, and Evolution 11:151-172. http://dx.doi.org/10.1007/s13127-011-0044-4.

Hejnol, A, M Obst, A Stamatakis, M Ott, G Rouse, G Edgecombe, P Martinez, J Baguñà, X Bailly, U Jondelius, M Wiens, WEG Müller, Elaine Seaver, WC Wheeler, MQ Martindale, G Giribet, and CW Dunn (2009) Assessing the root of bilaterian animals with scalable phylogenomic methods. Proc. R. Soc. B. 276:4261-4270. http://dx.doi.org/10.1098/rspb.2009.0896.

Cartwright, P, NM Evans, CW Dunn, AC Marques, MP Miglietta, P Schuchert, and AG Collins (2008) Phylogenetics of Hydroidolina (Hydrozoa: Cnidaria). Journal of the Marine Biological Association of the United Kingdom 88:1663-1672. http://dx.doi.org/10.1017/S0025315408002257.

Dunn, CW, A Hejnol, DQ Matus, K Pang, WE Browne, SA Smith, E Seaver, GW Rouse, M Obst, GD Edgecombe, MV Sørensen, SHD Haddock, A Schmidt-Rhaesa, A Okusu, RM Kristensen, WC Wheeler, MQ Martindale, and G Giribet (2008) Broad phylogenomic sampling improves resolution of the Animal Tree of Life. Nature 452:745-749. http://dx.doi.org/10.1038/nature06614. (Cover Article).

Smith, SA and CW Dunn (2008) Phyutility: a phyloinformatics tool for trees, alignments, and molecular data. Bioinformatics. 24:715-716. http://dx.doi.org/10.1093/bioinformatics/btm619. Code repository: https://code.google.com/p/phyutility.

Giribet, G, CW Dunn, GD Edgecombe, and GW Rouse (2007) A modern look at the Animal Tree of Life. Zootaxa 1668:61-79.

Oota, H, CW Dunn, WC Speed, AJ Pakstis, MA Palmatier, JR Kidd and KK Kidd (2007) Conservative evolution in duplicated genes of the primate Class I ADH cluster. Gene 392:64-76. http://dx.doi.org/10.1016/j.gene.2006.11.008.

Dunn, CW and GP Wagner (2006) The evolution of colony-level development in the Siphonophora (Cnidaria:Hydrozoa). Development, Genes, and Evolution. 216:743-754. http://dx.doi.org/10.1007/s00427-006-0101-8 (Cover Article).

Matus, DQ, K Pang, H Marlow, CW Dunn, GH Thomsen, and MQ Martindale (2006) Deep evolutionary roots for bilaterality in the metazoa. Proceedings of the National Academy of Sciences USA. 103:11195-11200. http://dx.doi.org/10.1073/pnas.0601257103.

Matus, DQ, RR Copley, CW Dunn, A Hejnol, H Eccleston, KM Halanych, MQ Martindale, and MJ Telford (2006) Broad Taxon and Gene Sampling Indicate that Chaetognaths Are Protostomes. Current Biology. 16:R575-R576. http://dx.doi.org/10.1016/j.cub.2006.07.017.

Dunn, CW, PR Pugh, and SHD Haddock (2005) Molecular phylogenetics of the Siphonophora (Cnidaria), with implications for the evolution of functional specialization. Systematic Biology 54:916-935. http://dx.doi.org/10.1080/10635150500354837 (Cover Article).

Dunn, CW (2005) The complex colony-level organization of the deep-sea siphonophore *Bargmannia elongata* (Cnidaria, Hydrozoa) is directionally asymmetric and arises by the subdivision of pro-buds. Developmental Dynamics 234:835-845. http://dx.doi.org/10.1002/dvdy.20483 (Cover Article).

Haddock, SHD, CW Dunn, PR Pugh and CE Schnitzler (2005) Bioluminescent and red-fluorescent lures in a deep-sea siphonophore. Science 309:263. http://dx.doi.org/10.1126/science.1110441.

Dunn, CW, PR Pugh, and SHD Haddock (2005) *Marrus claudanielis*, a new species of deep-sea physonect siphonophore (Siphonophora, Physonectae). Bulletin of Marine Science 76:699-714.

Haddock, SHD, CW Dunn, and PR Pugh (2005) A reexamination of siphonophore terminology and morphology, applied to the description of two new prayine species with remarkable bio-optical properties. Journal of the Marine Biological Association of the U.K. 85:695-707. http://dx.doi.org/10.1017/S0025315405011616.

Lynch, VJ, JJ Roth, K Takahashi, CW Dunn, DF Nonaka, G Stopper and GP Wagner (2004) Adaptive evolution of HoxA-11 and HoxA-13 at the origin of the uterus in mammals. Proceedings of the Royal Society B: Biological Sciences 271:2201-2207. http://dx.doi.org/10.1098/rspb.2004.2848.

### d. Non-refereed journal articles

Dunn, CW (2014) Keeping Mates Close and Competition Out in an Ocean Sponge, November 13, 2014. http://www.nytimes.com/2014/11/13/science/keeping-mates-close-and-competition-out-in-an-ocean-sponge html

Dunn, CW (2014) Fiery Bodies Under the Waves. New York Times, August 14, 2014. http://www.nytimes.com/2014/08/14/science/a-colonizing-fire-of-giant-plankton.html

Dunn, CW (2014) A Marine Magician's Vanishing Act. New York Times, May 28, 2014. http://www.nytimes.com/2014/05/28/science/a-marine-magicians-vanishing-act.html

Dunn, CW (2014) A Cloak of Near Invisibility in an Underwater World. New York Times, April 24, 2014. http://www.nytimes.com/2014/04/24/science/a-cloak-of-near-invisibility-in-an-underwater-world. html

Dunn, CW (2014) Two Urchins, Similar but Not. New York Times, February 26, 2014. http://www.nytimes.com/2014/02/26/science/two-urchins-similar-but-not.html

Dunn, CW (2014) Poisonous Prey Turned Into Hunter's Defense. New York Times, February 12, 2014. http://www.nytimes.com/2014/02/13/science/poisonous-prey-turned-into-hunters-defense.html

Dunn, CW (2014) Moving, Without Feet to Do So. New York Times, January 23, 2014. http://www.nytimes.com/2014/01/23/science/earth/moving-without-feet-to-do-so.html

Dunn, CW (2013) The Color of Royalty, Bestowed by Science and Snails. New York Times, October 9, 2013. http://www.nytimes.com/2013/10/09/science/the-color-of-royalty-bestowed-by-science-and-snails.html

Dunn, CW (2013) As 'Normal' as Rabbits' Weights and Dragons' Wings. New York Times, September 23, 2013. http://www.nytimes.com/2013/09/24/science/as-normal-as-rabbits-weights-and-dragons-wings.html

Dunn, CW (2013) Sex in Spoonworms. New York Times, September 16, 2013. http://www.nytimes.com/2013/09/17/science/creatures-strange-and-complex-in-colorful-detail.html (the text I wrote accompanies the video).

Dunn, CW (2013) Evolution: Out of the ocean. Current Biology 23:R242-R243. http://dx.doi.org/10.1016/j.cub.2013.01.067.

Dunn, CW (2009) Siphonophores. Current Biology 19:R233-R234. http://dx.doi.org/10.1016/j.cub.2009.02.009.

Haddock, SHD and CW Dunn (2005) The complex world of siphonohpores. JMBA Global Marine Environment 2005(2):24-25.

#### f. Abstracts

Dunn, CW (2013) The comparative biology of gene expression. Invited speaker for the symposium "Understanding First Order Phenotypes: Transcriptomics for Emerging Models" at the 2013 meeting for the Society of Integrative and Comparative Biology. Abstract S4-2.1. http://www.sicb.org/meetings/2013/SICB%202013%20abstracts.pdf.

Helm, RR and CW Dunn (2013) The evolution of direct development in Scyphozoa. A poster presented at the 2013 meeting for the Society of Integrative and Comparative Biology. Abstract P1.58. http://www.sicb.org/meetings/2013/SICB%202013%20abstracts.pdf.

#### g. Invited lectures

- Universidad Austral de Chile (Valdivia, Chile), Bowdoin College (Brunswick, Maine), University of Missouri, Evolution of First Nervous Systems II meeting (Whitney Laboratory for Marine Bioscience, Florida), 13th Annual Genome Symposium (New York University), Kyushu University (Fukuoka, Japan)
- American Museum of Natural History, Global Invertebrate Genomics Alliance (GIGA) workshop at Nova University (Fort Lauderdale, FL), meeting of the Centre National de Ressources Biologiques Marines, EMBRC (Villefranche, France), Brown Department of Ecology and Evolutionary Biology Seminar, Brown Computer Science Department Industrial Partners Program Symposium, Tree of Life Symposium at the 2013 meeting of the Society of Systematic Biologists (title: "Building trees with transcriptomes and analyzing transcriptomes with trees"), Brown EPSCoR Bioinformatics Workshop
- World Economic Forum Annual Meeting (Davos, Switzerland), Smithsonian Tropical Research Institute (Panama), Sars International Centre for Marine Molecular Biology (Bergen, Norway), Clark University, University of Miami, Stony Brook University, Applied Math at Brown University, University of Florida
- National Science Board, (Washington, DC), National Science Foundation (Washington, DC), Marine Biological Laboratory (Woods Hole, MA), Boston University (Boston, MA), Marine Observatory at Villefranche-sur-Mer (France), Smithsonian National Museum of Natural History Department of Invertebrate Zoology (Washington, DC), Smithsonian National Museum of Natural History Symposium "Next generation Sequencing: Transformative Technology for Biodiversity Science", keynote speaker at the Brown University Communicating Your Science Workshop, Rhode Island College
- Harvard University, University of Gothenburg (Sweden), Iowa State University, Brown University Wayland Collegium, Helicos BioSciences, National Academy of Science "Kavli Frontiers of Science" meeting, PopTech, University of Texas at Austin
- Yale University, University at Buffalo, LM University Munich, meeting of the German Research Foundation Priority Program "Deep Metazoan Phylogeny" at Humboldt University Berlin, University of Connecticut, Harvard University course OEB275r: "Phylogenetics in

the Era of Genomics", University of Rhode Island, Barcelona University, Brown MCB, invited speaker at the Society for Systematic Biologists symposium "Advances in Tree Reconstruction from Complex Data Matrices" in Moscow, Idaho

2008 University of Rochester, Friday Harbor Marine Laboratory, Woods Hole Oceanographic

Institute, New England Biolabs

2007 Harvard University, Roger Williams University

2005 University of Hawaii

#### i. Work in review

This section includes publicly available preprints.

Zapata, F, FE Goetz, SA Smith, M Howison, S Siebert, S Church, SM Sanders, CL Ames, CS McFadden, SC France, M Daly, AG Collins, SHD Haddock, CW Dunn, P Cartwright (preprint) Phylogenomic analyses support traditional relationships within Cnidaria. BioRxiv. http://dx.doi.org/10.1101/017632. Git code repository: https://bitbucket.org/caseywdunn/cnidaria2014.

#### 6 Academic Honors

| 2012      | Teaching with Technology Award (Brown University)                                  |
|-----------|--|
| 2011      | Alan T. Waterman Award (National Science Foundation)                               |
| 2010      | Named the Manning Assistant Professor of Ecology and Evolutionary Biology          |
| 2010      | PopTech Science and Public Leadership Fellow                                       |
| 2010      | Kavli Frontiers of Science Fellow (Sponsored by U.S. National Academy of Sciences) |
| 2006      | John Spangler Nicholas Prize (Yale University)                                     |
| 2000-2003 | NSF Graduate Research Fellowship (National Science Foundation)                     |
| 2000-2002 | Sterling Fellowship (Yale University)  |

# 7 Teaching

#### Courses

| 2015 Summer | Practical | Computing for | Biologists | Workshop, | Friday | Harbor Lab | s, University | of Washing- |
|-------------|-----------|---------------|------------|-----------|--------|------------|---------------|-------------|
|             | ton       |               |            |           |        |            |               |             |

2015 Summer Workshop on Molecular Evolution at the Marine Biological Laboratory (Woods Hole, MA)

2014 Summer Workshop on Molecular Evolution at the Marine Biological Laboratory (Woods Hole, MA)

2013 Fall Invertebrate Zoology (Biol 0410, 40 students)

2013 Summer Workshop on Molecular Evolution at the Marine Biological Laboratory (Woods Hole, MA)

2013 Spring Phylogenetic Biology (Biol 1425, 11 students)2012 Fall Invertebrate Zoology (Biol 0410, 37 students)

2012 Summer Workshop on Molecular Evolution at the Marine Biological Laboratory (Woods Hole, MA);

Guest lecture in: Bioinformatics: Biodiscovery By Computer at Summer@Brown (a high

school summer course)

2012 Spring EEB IGERT Course in Reverse Ecology (3 students); Guest lectures in: Analysis of Devel-

opment (Biol 1310), Topics in Science Communications: Science Journalism Practicum (Biol

0950B)

2011 Fall Invertebrate Zoology (Biol 0410, 34 students)

2011 Summer Workshop on Molecular Evolution at the Marine Biological Laboratory (Woods Hole, MA)

2011 Spring Practical Computing for Biologists NESCENT Academy at North Carolina State University

(co-taught with Steve Haddock)

2010 Fall Invertebrate Zoology (Biol 0410, 33 students)

2010 Spring Origins of Multicellularity and the Evolution of Germ Line (Biol 1940Y-So1, 14 students),

Directed Research/Independent Study (Biol 195, 1 students)

2009 Fall Invertebrate Zoology (Biol 0410, 18 students), Directed Research/Independent Study (Biol

195, 2 students)

2009 Spring Topics in Ecology and Evolutionary Biology (Biol 0244, 16 students, included field trip to

Belize), Directed Research/Independent Study (Biol 195, 1 student)

2008 Fall Topics in Ecology and Evolutionary Biology (Biol 0243, 16 students), Directed Research/Independent

Study (Biol 195, 2 student)

2008 Spring Directed Research/Independent Study (Biol 0195, 2 students)

2007 Fall Directed Research/Independent Study (Biol 0195, 1 students)

#### Advising-Postdoctoral researchers

2012–present Felipe Zapata2010–2011 Stephen Smith2009–2015 Stefan Siebert

#### Advising-Graduate students (primary advisor)

2015–present Cat Luria (co-advised with Jeremy Rich)

2013-present August Guang (Applied Math, co-advised with Chip Lawrence)

2013–present Catriona Munro 2008–2015 Rebecca Helm

#### Advising-Graduate student thesis committee member

2015–present Robert Lamb (Brown University, EEB)

2015-present Kara Pellowe-Wagstaff (Brown University, EEB)

2013–2014 Warren Francis (University of California at Santa Cruz)

2012–present Tara Fresques (Brown University, MCB)

2011–2012 Dereck Stefanik (Boston University) 2011–2012 Anna Ritz (Brown University, CS)

2011–2015 Ariel Camp (Brown University, EEB)

2010–2012 Arturo Ruiz Villanueva (Institute of Ecology, Xalapa, Mexico)

2010-present Cat Luria (Brown University, EEB)

| 2009-2014   | Adrian Reich (Brown University, MCB)                        |
|-------------|---|
| 2009-2014   | Ben Ewen-Campen (Harvard University, OEB)                   |
| 2009-2011   | John Cumbers (Brown University, MCB)                        |
| 2009-2015   | Steven Swartz (Brown University, MCB)                       |
| 2009-2013   | Henry Astley (Brown University, EEB)                        |
| 2008-2012   | Matt Ogburn (Brown University, EEB)                         |
| 2007-2009   | James Palardy (Brown University, EEB)                       |
| Advising–Fi | irst-year graduate advisory committees (Brown)              |
| 2013-2014   | Priya Nakka, Robert Lamb                                    |
| 2012-2013   | Lillian Hancock   |
| 2011        | Molecular and Cellular Biology (general)                    |
| 2011-2012   | Terry Dial, Chris Graves                                    |
| 2010-2011   | Ariel Camp  |
| Advising–R  | otating graduate students                                   |
| 2010        | Matthew Booker  |
| 2009        | Steven Swartz   |
| Advising–U  | ndergraduate students                                       |
| 2013-2013   | Rachel Kaplan (UTRA)  |
| 2013-2013   | Hannah Kerman (EPSCoR Surf)                                 |
| 2012-2015   | Sam Church (EPSCoR)   |
| 2012-2014   | Pathikrit Bhattacharyya (EPSCoR, Royce Fellow)              |
| 2012-2014   | Jessica Eason (EPSCoR)                                      |
| 2012-2013   | Served as a freshman advisor for joint Brown/ RISD students |
| 2012        | Robert Sandler (Royce Fellow)                               |
| 2012        | James Weis (Thesis reader)                                  |
| 2011-2012   | Natividad Chen (Science Center Fellow, UTRA)                |
| 2011-2012   | Norian Caporale-Berkowitz (Beckman Fellow)                  |

Cecelia Bahamon (Thesis reader)

Orla O'Brien (Thesis advisor)

Sophia Tintori (Thesis advisor)

Stephanie Spielman (Thesis reader)

Caitlin Feehery (participant on several projects)

2011

2010

2007-2010

2007-2010

2007-2010