

## Alison Pischedda

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Department of Biology  
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### EDUCATION

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<b>Ph.D. – Ecology, Evolution and Marine Biology</b>	2010
<i>NSERC Postgraduate Scholar</i>	
University of California, Santa Barbara	
Advisor: William Rice	
<b>M.Sc. – Biology</b>	2005
Queen’s University, Kingston, Ontario, Canada	
Advisor: Adam Chippindale	
<b>B.Sc. (Honours) – Biology</b>	2003
<b>First Class Standing</b>	
Queen’s University, Kingston, Ontario, Canada	
<b>B.Sc. – Mathematics</b>	2002
Queen’s University, Kingston, Ontario, Canada	

### ACADEMIC AND RESEARCH APPOINTMENTS

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<b>Assistant Professor</b>	2017 – present
Department of Biology, Barnard College, Columbia University	
<b>Parental Leave</b>	2016 – 2017
<b>Postdoctoral Scholar</b>	2010 – 2016
Department of Ecology, Evolution & Marine Biology (EEMB)	
University of California, Santa Barbara	
Advisor: Thomas Turner	
<b>Research Assistant</b>	2005 – 2006
Department of Biology, Queen’s University	
Advisor: Adam Chippindale	

### PUBLICATIONS

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**Google Scholar Profile** (675 citations, h-index = 10):  
<https://scholar.google.com/citations?user=Ucg3ulMAAAAJ&hl=en&oi=ao>

**Pischedda A\***, Shahandeh MP\* & Turner TL (2020) The loci of evolution: Evidence that *Fas2* and *tilB* underlie differences in pupation site choice behavior between *Drosophila melanogaster* and *D. simulans*. *Molecular Biology and Evolution* 37: 864-880.  
<https://doi.org/10.1093/molbev/msz274>

\*Co-first authors

- Shahandeh MP, **Pischedda A**, Rodriguez JM<sup>†</sup> & Turner TL (2020) The genetics of male pheromone preference difference between *Drosophila melanogaster* and *Drosophila simulans*. G3: Genes, Genomes, Genetics 10: 401-415. <https://doi.org/10.1534/g3.119.400780>
- Shahandeh MP, **Pischedda A** & Turner TL (2018) Male mate choice via cuticular hydrocarbon pheromones drives reproductive isolation between *Drosophila* species. Evolution 72: 123-135. <https://doi.org/10.1111/evo.13389>
- Pischedda A** & Chippindale AK (2017) Direct benefits of choosing a high-fitness mate can offset the indirect costs associated with intralocus sexual conflict. Evolution 71: 1710-1718. <https://doi.org/10.1111/evo.13240>
- Pischedda A**, Friberg U, Stewart AD, Miller PM & Rice WR (2015) Sexual selection has minimal impact on effective population sizes in species with high rates of random offspring mortality: An empirical demonstration using fitness distributions. Evolution 69: 2638-2647. <https://doi.org/10.1111/evo.12764>
- Pischedda A**, Shahandeh MP, Cochrane WG, Cochrane VA<sup>†</sup> & Turner TL (2014) Natural variation in the strength and direction of male mating preferences for female pheromones in *Drosophila melanogaster*. PLOS ONE 9(1): e87509. <https://doi.org/10.1371/journal.pone.0087509>
- Pischedda A** & Rice WR (2012) Partitioning sexual selection into its mating success and fertilization success components. PNAS 109: 2049-2053. <https://doi.org/10.1073/pnas.1110841109>
- Pischedda A**, Stewart AD & Little MK<sup>†</sup> (2012) Male x female interaction for a pre-copulatory trait, but not a post-copulatory trait, among cosmopolitan populations of *Drosophila melanogaster*. PLOS ONE 7(3): e31683. <https://doi.org/10.1371/journal.pone.0031683>
- Pischedda A**, Stewart AD, Little MK<sup>†</sup> & Rice WR (2011) Male genotype influences female reproductive investment in *Drosophila melanogaster*. Proceedings of the Royal Society B 278: 2165-2172. <https://doi.org/10.1098/rspb.2010.2272>
- Long TAF, **Pischedda A** & Rice WR (2010) Remating in *Drosophila melanogaster*: Are indirect benefits condition-dependent? Evolution 64: 2767-2774. <https://doi.org/10.1111/j.1558-5646.2010.00997.x>
- Stewart AD\*, **Pischedda A**\* & Rice WR (2010) Resolving intralocus sexual conflict: Genetic mechanisms and time frame. Journal of Heredity 101: S94-S99. <https://doi.org/10.1093/jhered/esq011>  
\*Co-first authors
- Long TAF, **Pischedda A**, Nichols RV<sup>†</sup> & Rice WR (2010) The timing of mating influences reproductive success in *Drosophila melanogaster*: implications for sexual conflict. Journal of Evolutionary Biology 23: 1024-1032. <https://doi.org/10.1111/j.1420-9101.2010.01973.x>
- Long TAF, **Pischedda A**, Stewart AD & Rice WR (2009) A cost of sexual attractiveness to high-fitness females. PLOS Biology 7(12): e1000254. <https://doi.org/10.1371/journal.pbio.1000254>
- Pischedda A** & Chippindale AK (2006) Intralocus sexual conflict diminishes the benefits of sexual selection. PLOS Biology 4(11): e356. <https://doi.org/10.1371/journal.pbio.0040356>

Long TAF & **Pischedda A** (2005) Do female *Drosophila melanogaster* adaptively bias offspring sex ratios in relation to the age of their mate? Proceedings of the Royal Society B 272: 1781-1787. <https://doi.org/10.1098/rspb.2005.3165>

**Pischedda A** & Chippindale A (2005) Sex, mutation and fitness: asymmetric costs and routes to recovery through compensatory evolution. Journal of Evolutionary Biology 18: 1115-1122. <https://doi.org/10.1111/j.1420-9101.2005.00915.x>

†Undergraduate co-author

## NON PEER-REVIEWED PUBLICATIONS

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**Pischedda A**, Cochrane VA, Cochrane WG & Turner TL (2014) Genetic dissection of courtship song variation using the *Drosophila* Synthetic Population Resource. bioRxiv: <http://dx.doi.org/10.1101/006643>

## INVITED BOOK CHAPTERS

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**Pischedda A\*** & Stewart AD (2016) Sexual Conflict. In Kliman RM (ed.), Encyclopedia of Evolutionary Biology. vol 4. pp. 98-104. Oxford: Academic Press.

Stewart AD\* & **Pischedda A** (2016) Intraspecific Coevolutionary Arms Races. In Kliman RM (ed.), Encyclopedia of Evolutionary Biology. vol 2. pp. 270-276. Oxford: Academic Press.

\*Invited author

## INVITED RESEARCH TALKS

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### Conference Presentations

2013 “Battle of the Sexes”. Indo-American Kavli Frontiers of Science Symposium (US National Academy of Sciences). Agra, India.

### Invited Seminars

2019 Brooklyn College, Department of Biology Seminar  
2018 Barnard College, Summer Research Institute Faculty Seminar  
2018 Columbia University, Integrative Animal Behavior Seminar  
2017 Mississippi State University, Department of Biological Sciences Seminar  
2017 Texas A&M University, Department of Biology Seminar  
2016 University of Missouri, Division of Biological Sciences Seminar  
2016 Central Florida University, Department of Biology Seminar  
2015 California State University Fresno, Department of Biology Seminar  
2014 Cornell University, Department of Neurobiology and Behavior Seminar  
2013 IISER Mohali (India), Department of Biological Sciences Seminar

## CONFERENCE PRESENTATIONS

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### Contributed Talks:

- 2011 Evolution (Society for the Study of Evolution Annual Meeting). Norman, OK.
- 2010 Western Evolutionary Biologists Annual Meeting. Irvine, CA.
- 2009 Western Evolutionary Biologists Annual Meeting. Berkeley, CA.
- 2006 Evolution (Society for the Study of Evolution Annual Meeting). Stony Brook, NY.
- 2006 Ontario Ecology and Ethology Colloquium. St. Catharines, Ontario, Canada.
- 2004 Evolution (Society for the Study of Evolution Annual Meeting). Fort Collins, CO.
- 2004 Ontario Ecology and Ethology Colloquium. Mississauga, Ontario, Canada.

### Contributed Posters:

- 2016 Evolution (Society for the Study of Evolution Annual Meeting). Austin, TX.
- 2014 Drosophila Research Conference (Genetics Society of America). San Diego, CA.
- 2012 Evolution (Society for the Study of Evolution Annual Meeting). Ottawa, Canada.
- 2006 Canadian Society for Ecology and Evolution Annual Meeting. Montreal, Canada.

## TEACHING EXPERIENCE

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### Barnard College: Course Instruction

Senior Thesis Research & Seminar (full-year)	2017-2021
Guided Research & Seminar (full-year)	2017-2021
Animal Behavior	2018-2021
Laboratory in Animal Behavior	2018-2020

### University of California, Santa Barbara: Course Instruction

Research Immersion in Molecular Biosciences	2013, 2014
Introduction to Research in the Life Sciences	2010

## UNDERGRADUATE RESEARCH MENTORSHIP

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### Barnard College

<i>Student</i>	<i>Years</i>	<i>Current Position</i>
Holly Doig	2020 – present	
Olivia Eliopoulos	2020 – present	
Mariel Correa-Maynard	2020 – present	
Chelsea Sinclair	2019 – present	
Karolina Szenkiel	2019 – 2020	Lopatkin Lab, Barnard College
Aneeza Asif	2019	Barnard Study Abroad, UK
Ana-Maria Rodriguez Cuadrado	2018 – 2020	
Abigail Gutierrez	2018 – 2020	Medical Scribe, CityMD
Taylor Leong	2018 – 2019	
Suriya Lisa	2018 – 2019	MD Student, Georgetown University
Nushrat Chowdhury	2018	Medical Scribe, CityMD Urgent Care
Stacy Kanellopoulos	2018	Analyst, Mitsubishi UFJ Financial Group

*Student Thesis Mentorship and Supervision*

Abigail Gutierrez (Biology Guided Research &amp; Seminar Thesis, 2019-2020)

Ana-Maria Rodriguez Cuadrado (Biology Guided Research &amp; Seminar Thesis, 2019-2020)

Suriya Lisa (Neuroscience and Behavior Senior Thesis, 2018-2019)

**University of California, Santa Barbara**

<i>Student</i>	<i>Years</i>	<i>Position After Graduation</i>
Sayeh Akhavan	2015 – 2016	MD Student, A. T. Still University
Alexandra Lamoureux	2014 – 2016	Lab Operations, Invitae Genetic Testing
Nastaran Hosseinipour	2014 – 2015	Ophthalmology Scribe, Los Angeles
Susanne Tilk	2013 – 2014	PhD Student, Stanford University
Lauren Leahy	2011 – 2012	Researcher, Monterey Bay Aquarium
Taylor James	2011 – 2012	MD Student, Georgetown University
Jaime Guzman	2011 – 2012	Research Assistant, University of California Riverside
Melissa Maher	2011 – 2012	Analytical Chemist, Simbol Materials
Veronica Cochrane	2010 – 2011	PhD Student, Oregon Health & Science University
Monica Little	2008 – 2011	Senior Regulatory Affairs Associate, Amgen
Jenna Castle	2008 – 2009	Master's Student, University of California Santa Barbara
Selkat deJong	2008 – 2009	Sheriff's Fingerprint Examiner, San Diego Sheriff
Stephanie Roy	2008 – 2010	Master's Student, Loyola Marymount University
Juliet Oshiro	2008	PhD Student, University of California Santa Cruz
Ruth Nichols	2008	PhD Student, Swedish University of Agricultural Sciences

**GRANTS, FELLOWSHIPS AND RECOGNITION****Awards and Honors**

Tow Award for Innovative and Outstanding Pedagogy	2020
U.S. National Academy of Sciences Kavli Frontiers of Science Fellow <i>Awarded to "outstanding young scientists" by the US NAS</i>	2015
U.S. National Academy of Sciences Kavli Frontiers of Science Fellow	2013
UCSB Lancaster Dissertation Award in Biological/Life Sciences <i>Best Ph.D. dissertation in the life sciences from 2009-2011</i>	2011
Queen's University Department of Biology M.Sc. Thesis Prize <i>Best M.Sc. thesis in Biology for 2005-2006</i>	2006
Queen's University Dean's Honour List	2003

**Small Research Grants**

Sigma Xi Grant-in-Aid of Research (\$1,000)	2008
UCSB Science and Engineering Research Grant (\$1,000)	2008
UCSB Undergrad Research & Creative Activities Grant (with R. Nichols; \$420)	2008

**Fellowships***External:*

Genetics Society of America DeLill Nasser Award (\$1,000)	2012
NSERC (Natural Sciences and Engineering Research Council of Canada) Postgraduate Scholarship – Doctoral – International (\$63,000)	2006
NSERC Canadian Graduate Scholarship – Doctoral (\$105,000 – Declined)	2006

*Internal:*

UCSB Doreen J. Putrah Conference Fellowship (\$1,000)	2012
UCSB Rosati Dissertation Fellowship in Science & Engineering (\$10,025)	2010
UCSB Faculty Women's Club Broida-Hirschfelder Fellowship (\$8,000)	2009
UCSB Worster Award for Undergraduate Mentoring (with R. Nichols; \$6,000)	2008
UCSB EEMB Block Grant (\$24,313)	2006
UCSB EEMB Regents Graduate Fellowship (\$1,825)	2006
Queen's University Graduate Student Conference Award (\$1,000)	2004

## PROFESSIONAL SERVICE AND OUTREACH

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### Grant Review

National Science Foundation  
 Division of Environmental Biology – Evolutionary Ecology (full proposal)

### Journal Peer Review

American Naturalist	Molecular Ecology
Animal Behaviour	Nature Communications
BMC Evolutionary Biology	Nature Ecology & Evolution
Ecology and Evolution	Oikos
Evolution	PLOS Genetics
G3: Genes, Genomes, Genetics	PLOS ONE
Journal of Ethology	Proceedings of the Royal Society B
Journal of Evolutionary Biology	Scientific Reports
Journal of Experimental Biology	

### Broader Service

Graduate Student-Faculty Networking Lunch: Evolution Community Resources for Early Career Researchers (ECR <sup>2</sup> )	2020
Faculty Mentor: Animal Behavior Society Virtual Mentoring Program	2020
Indo-American Kavli Frontiers of Science Symposium (US NAS) Organizing Committee. Irvine, CA	2015
UCSB EEMB Departmental Seminar Coordinator	2007 – 2009

### Barnard College Service

Committee on Honors	2019 – 2020
Organismal and Physiology Lecturer Search Committee (Bio Department)	2019 – 2020
Cellular and Molecular Lecturer Search Committee (Bio Department)	2018 – 2019
Organismal and Physiology Lecturer Search Committee (Bio Department)	2018 – 2019
Computational Biology Search Committee (Biology Department)	2018
Microbiology Search Committee (Biology Department)	2018
Faculty Teller	2017 – 2018

### Barnard College Student Advising

4 Major Advisees (Biology)	2020 – 2021
6 Major Advisees (4 Biology; 2 Neuroscience and Behavior)	2019 – 2020
5 Major Advisees (3 Biology; 2 Neuroscience and Behavior)	2018 – 2019

**Outreach**

Invited Speaker, Barnard College From the Faculty Lounge Series	2018
Invited Speaker: UCSB SACNAS (Society for Advancement of Hispanics/Chicanos and Native Americans in Science)	2014
Invited Guest: "Tech Talk". KZSB-AM 1290, Santa Barbara News Press Radio	2012
Invited Speaker: Santa Barbara Museum of Natural History Science Pub	2012
Volunteer Scientist: Let's Talk Science Partnership Program	2004 – 2005