

Alison Pischedda

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 Department of Biology
 Barnard College, Columbia University
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EDUCATION

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

ACADEMIC AND RESEARCH APPOINTMENTS

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

PUBLICATIONS

Google Scholar Profile (603 citations, h-index = 9):

<https://scholar.google.com/citations?user=Ucg3uIMAAA&hl=en&oi=ao>

Shahandeh MP, **Pischedda A** & Turner TL (2018) Male mate choice via cuticular hydrocarbon pheromones drives reproductive isolation between *Drosophila* species. *Evolution* 72: 123-135

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.

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.

Pischedda A, Shahandeh MP, Cochrane WG, Cochrane VA[†] & 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.

Pischedda A & Rice WR (2012) Partitioning sexual selection into its mating success and fertilization success components. PNAS 109: 2049-2053.

Pischedda A, Stewart AD & Little MK[†] (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.

Pischedda A, Stewart AD, Little MK[†] & Rice WR (2011) Male genotype influences female reproductive investment in *Drosophila melanogaster*. Proceedings of the Royal Society B 278: 2165-2172.

Long TAF, **Pischedda A** & Rice WR (2010) Remating in *Drosophila melanogaster*: Are indirect benefits condition-dependent? Evolution 64: 2767-2774.

Stewart AD*, **Pischedda A*** & Rice WR (2010) Resolving intralocus sexual conflict: Genetic mechanisms and time frame. Journal of Heredity 101: S94-S99.

*Co-first authors

Long TAF, **Pischedda A**, Nichols RV[†] & Rice WR (2010) The timing of mating influences reproductive success in *Drosophila melanogaster*: implications for sexual conflict. Journal of Evolutionary Biology 23: 1024-1032.

Long TAF, **Pischedda A**, Stewart AD & Rice WR (2009) A cost of sexual attractiveness to high-fitness females. PLoS Biology 7(12): e1000254.

Pischedda A & Chippindale AK (2006) Intralocus sexual conflict diminishes the benefits of sexual selection. PLoS Biology 4(11): e356.

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.

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.

[†]Undergraduate co-author

NON PEER-REVIEWED PUBLICATIONS

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

FORTHCOMING MANUSCRIPTS

Pischedda A*, Shahandeh MP* & Turner TL. The loci of evolution: Evidence that *Fas2* and *tilB* underlie differences in pupation site choice behavior between *Drosophila melanogaster* and *D. simulans*. *In review*. bioRxiv preprint: <https://doi.org/10.1101/494013>

*Co-first authors

Shahandeh MP, **Pischedda A** & Turner TL. The genetic architecture of male pheromone preference difference between *Drosophila melanogaster* and *D. simulans*. *In revision*.

INVITED BOOK CHAPTERS

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

Conference Presentations

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

Invited Talks

2018 Barnard College, Summer Research Institute Faculty Seminar
2018 Columbia University, Integrative Animal Behavior Seminar
2017 Mississippi State University, Department of Biological Sciences Seminar
2013 IISER Mohali (India), Department of Biological Sciences Seminar

CONFERENCE PRESENTATIONS

Contributed Conference 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 Conference 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

Barnard College: Course Instruction

- Senior Thesis Research / Guided Research & Seminar
- Animal Behavior
- Laboratory in Animal Behavior

University of California, Santa Barbara: Course Instruction

- Research Immersion in Molecular Biosciences
- Introduction to Research in the Life Sciences

Guest Lectures and Teaching Assistantships*University of California, Santa Barbara*

- Guest Lecturer: Molecular Evolution
- Guest Lecturer: Introduction to Research in the Life Sciences
- Teaching Assistant: Principles of Evolution
- Teaching Assistant: Advanced Biostatistics (graduate-level course)

Queen's University, Canada:

- Teaching Assistant: Evolutionary and Population Genetics
- Teaching Assistant: Biology of Sex
- Teaching Assistant: Data Management & Analysis

GRANTS, FELLOWSHIPS AND RECOGNITION

For convenience in this section, I treat Canadian and American dollars as equivalent.

Small Research Grants

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| 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:*

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| Genetics Society of America DeLill Nasser Award (\$1,000) | 2012 |
| NSERC 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 |
| Queen's University Graduate Student Conference Award (\$1,000) | 2004 |

Awards and Honors

U.S. National Academy of Sciences Kavli Frontiers of Science Fellow	2013, 2015
UCSB Lancaster Dissertation Award in Biological/Life Sciences	2011
Queen's University Department of Biology M.Sc. Thesis Prize	2006
Queen's University Dean's Honour List	2003

MEDIA COVERAGE

“Sperm Wars and Sexual Conflict: The evolutionary consequences of promiscuity”. Outreach talk presented at **Santa Barbara Museum of Natural History Science Pub, Santa Barbara, CA.**

“Fruit fly walks into a bar...” [The Last Word on Nothing](#)

“Beer science: Santa Barbara Museum of Natural History hosts monthly Science Pub at Dargan’s” [Santa Barbara News Press](#)

Pischedda A & Rice WR (2012) Partitioning sexual selection into its mating success and fertilization success components. [Proceedings of the National Academy of Sciences](#) 109: 2049-2053.

“The key to reproductive success: Coming last” [J. Experimental Biology: Outside JEB](#)

“The relative importance of pre and postcopulatory sexual selection” [PNAS In This Issue](#)

“Pischedda A & Rice WR. How much sexual selection occurs after mating?” Contributed conference talk presented at **Evolution 2011, University of Oklahoma, Norman, OK.**

“Why the best male doesn’t always win” [ScientificAmerican.com](#)

Long TAF, Pischedda A, Stewart AD & Rice WR (2009) A cost of sexual attractiveness to high fitness females. [PLoS Biology](#) 7(12): e1000254.

“Feminine beauty can be a curse” [Australian Broadcasting Corporation Science News](#)

“Some females too sexy for own good, fly study says” [National Geographic News](#)

“I’m too sexy for my species” [ScienceNOW](#)

Pischedda A & Chippindale AK (2006) Intralocus sexual conflict diminishes the benefits of sexual selection. [PLoS Biology](#) 4(11): e356.

“Do beautiful people always have beautiful babies?” [Popular Science](#) February 2007.

“Good mothers have bad sons” [Nature Reviews Genetics](#) December 2006.

“Most desirable mates may not sire prolific offspring” [ScientificAmerican.com](#)

“Sexiest parents deliver average offspring” [New Scientist](#)

“Sexual conflict opposes sexual selection” [The Scientist](#)

“Sexual selection comes at a cost” [PLoS Biology](#) (Synopsis)

Long TAF & Pischedda A (2005) Do female *Drosophila melanogaster* adaptively bias offspring sex ratios in relation to the age of their mate? [Proc. of the Royal Society B](#) 272: 1781-1787.”

“Why young lovers have sons” [ScienceNOW](#)

MENTORSHIP, SERVICE AND OUTREACH

Barnard College Undergraduate Research Mentorship & Supervision

<i>Student</i>	<i>Years</i>
Chelsea Sinclair	2019 - present
Ana-Maria Rodriguez Cuadrado	2018 – present
Abigail Gutierrez	2018 – present
Taylor Leong	2018 – 2019
Suriya Lisa	2018 – 2019
Nushrat Chowdhury	2018
Stacy Kanellopoulos	2018
Veronica Kovalcik	2018

Independent Project Supervision

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

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	

Grant Review

National Science Foundation: Division of Environmental Biology – Evolutionary Ecology

Service and Outreach

Barnard College Service

Committee on Honors	2019
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

Broader Service

Indo-American Kavli Frontiers of Science Symposium (US NAS) Organizing Committee. Irvine, CA	2015
UCSB EEMB Departmental Seminar Coordinator	2007 – 2009

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