Alison Pischedda

Assistant Professor
Department of Biology
Barnard College, Columbia University
3009 Broadway, New York, NY 10027

(212) 854-9865
apischedda@barnard.edu
http://pischeddalab.com

Degrees in Higher Education

Ph.D. – University of California, Santa Barbara
Department: Ecology, Evolution and Marine Biology
Date of Degree: 12/2010 (Dates attended: 9/2006 – 10/2010)
Advisor: William R. Rice
Dissertation title: Sexual selection and sexual conflict in a *Drosophila melanogaster* model system

M.Sc. – Queen's University (Ontario, Canada)
Department: Biology
Date of Degree: 6/2006 (Dates attended: 9/2003 – 11/2005)

B.Sc. (Honours), First Class Standing – Queen's University (Ontario, Canada)
Date of Degree: 5/2003 (Dates attended: 9/1999 – 4/2003)
Major: Biology

B.Sc – Queen's University (Ontario, Canada)
Date of Degree: 5/2002 (Dates attended: 9/1999 – 4/2002)
Major: Mathematics

Additional Professional Training

Postdoctoral Scholar – University of California, Santa Barbara
Department of Ecology, Evolution & Marine Biology
Dates: 11/2010 – 5/2016

Professional Experience in Higher Education

Assistant Professor – Barnard College, Columbia University
Department of Biology
Dates: 7/2017 – present

Affiliate Faculty – Barnard College, Columbia University
Department of Neuroscience and Behavior
Dates: 7/2019 – present

Affiliate Faculty – Columbia University
Department of Ecology, Evolution and Environmental Biology
Dates: 4/2021 – present

Academic and Professional Honors

Awards, Honors and Fellowships – External

2015. U.S. National Academy of Sciences Kavli Frontiers of Science Fellow
Awarded to "outstanding young scientists" by the US National Academy of Sciences
2013. U.S. National Academy of Sciences Kavli Frontiers of Science Fellow
Awarded to "outstanding young scientists" by the US National Academy of Sciences
2012. Genetics Society of America DeLill Nasser Award, $1,000
2006. Natural Sciences and Engineering Research Council of Canada (NSERC) Postgraduate Scholarship – Doctoral – International, $63,000 CAD
2006. NSERC Canadian Graduate Scholarship – Doctoral, $105,000 CAD (Declined)

Awards, Honors and Fellowships – Barnard College/Columbia University

2026. Gladys Brook Junior Faculty Excellence in Teaching Award, Barnard College
2024. Faculty Nominee, Emily Gregory Teaching Award, Barnard College
College-wide student-nominated teaching award
2023. Laboratory Safety Champion, Columbia University Environmental Health & Safety
2020. Tow Award for Innovative and Outstanding Pedagogy ($10,000; Barnard College)

Awards, Honors and Fellowships – Other Internal

2012. Doreen J. Putrah Conference Fellowship, $1,000 (UC Santa Barbara)
2011. Lancaster Dissertation Award in Biological/Life Sciences (UC Santa Barbara)
Awarded for best PhD dissertation between 2009 and 2011
2010. Rosati Dissertation Fellowship in Science & Engineering, $10,025 (UC Santa Barbara)
2009. Broida-Hirschfelder Fellowship, $8,000 (UC Santa Barbara Faculty Women's Club)
2008. Worster Award for Undergraduate Mentoring, $6,000 (UC Santa Barbara)
2006. Department of Biology MSc Thesis Prize (Queen's University)
Awarded for best Master's thesis for 2005-2006
2004. Graduate Student Conference Award, $1,000 CAD (Queen's University)

Grant Activity

Active Grants

American Association of University Women. $8,000
American Short-Term Research Publication Grant. Award Term: 7/1/2026 – 6/30/2027.
"*How does intralocus sexual conflict affect pre-mating and post-mating male fitness components?"*

Grants Submitted for Funding

National Science Foundation, Research in Undergraduate Institutions. $881,338
Directorate for Biological Sciences. Division of Environmental Biology, Evolutionary Processes Cluster. Award Term: 8/2026 – 7/2029.
"*Collaborative Research: RUI: Assessing the potential for adaptive evolution of male mate choice*". **PI: Alison Pischedda** ($753,474), Co-PI: Andrew Stewart, Canisius University ($128,864). Submitted 1/30/2026. Pending.

Prior Awards Now Terminated

7/2022 – 6/2024. Presidential Research Award, Barnard College. $49,997
"Investigating the potential for evolutionary changes in male mating preferences"

7/2021 – 6/2022. SAPL Supplement Grant, Barnard College. $12,000
"*The evolutionary significance of male mate choice*"

Publications

Google Scholar Profile

Peer-Reviewed Publications
*(Pischedda Lab members in blue, Lab in Animal Behavior (BIOL BC2281) students in green, * = corresponding author, † = undergraduate coauthor)*

2025 Lev A, Martinez IG† & **Pischedda A***. (2025) Longer matings increase male competitive fertilization success in *Drosophila melanogaster*. **Biology Letters** 21: 20250435.

2025 Shankar H†, Lev A, Halpern RS†, Hassan T†, Jiang M†, Martinez IM†, Robinson KL†, Subramaniam LE†, Zackai R† & **Pischedda A***. (2025) Exposure to rivals does not affect male mate choice in *Drosophila melanogaster*. **Ecology and Evolution** 15: e72284.

2025 Lev A, Gutierrez AI, Srinivasan AS†, Herrick CM†, Stewart AD & **Pischedda A***. (2025) Indirect fitness benefits can reinforce the direct fitness benefits of male mate choice. **Evolution** 79: 1271-1281.

2025 Martinez IG† & **Pischedda A***. (2025) Sexual conflict over mating duration in *Drosophila melanogaster*. **Animal Behaviour** 223: 123169.

2025 Freed GS†C, Martinez IG†C, Lev A, Anthony Cuadrado A-M† & **Pischedda A***. (2025) Genetic variation in male mate choice for large females in *Drosophila melanogaster*. **Ecology and Evolution** 15: e70794. CCo-first authors

2024 Stewart AD, Herrick CM†, Fitzgibbon TR†, Wehner JM†, Lev A, Venti PA† & **Pischedda A*** (2024) Life history changes associated with over 400 generations of artificial selection on body size in *Drosophila*. **Journal of Evolutionary Biology** 37: 851-861.

2023 Lev A† & **Pischedda A*** (2023) Male size does not affect the strength of male mate choice for high-quality females in *Drosophila melanogaster*. **Journal of Evolutionary Biology** 36: 1255-1265.

2023 Anastasio OE, Sinclair CS† & **Pischedda A*** (2023) Cryptic male mate choice for high-quality females reduces male postcopulatory success in future matings. **Evolution** 77: 1396-1407.

2021 Sinclair CS†, Lisa SF† & **Pischedda A*** (2021) Does sexual experience affect the strength of male mate choice for high-quality females in *Drosophila melanogaster*? **Ecology and Evolution** 11: 16981-16992.

2020 **Pischedda A*[c]**, Shahandeh MP[c] & Turner TL (2020) The loci of behavioral 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.[c]Co-first authors

2020 Shahandeh MP, **Pischedda A**, Rodriguez JM[†] & Turner TL (2020) The genetics of male pheromone preference difference between *Drosophila melanogaster* and *D. simulans*. **G3: Genes, Genomes, Genetics** 10: 401-415.

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

2017 **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.

2015 **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.

2014 **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.

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

2012 **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.

2011 **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.

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

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

2010 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.

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

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

2005 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.

2005 **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.

Invited Book Chapters

2026 **Pischedda A**, Stewart AD & Morrow EH. (2026) Sexual Conflict. Encyclopedia of Evolutionary Biology, 2nd edition. vol 4. pp 434-443. Russo C and Wolf J (eds.). Oxford: Academic Press.

2026 Stewart AD, Audet T & **Pischedda A**. (2026) Intraspecific Coevolutionary Arms Races. Encyclopedia of Evolutionary Biology, 2nd edition. vol 2. pp 240-251. Russo C and Wolf J (eds.). Oxford: Academic Press.

2016 **Pischedda A** & Stewart AD (2016) Sexual Conflict. Encyclopedia of Evolutionary Biology, 1st edition. vol 4. pp. 98-104. Kliman RM (ed.). Oxford: Academic Press.

2016 Stewart AD & **Pischedda A** (2016) Intraspecific Coevolutionary Arms Races. Encyclopedia of Evolutionary Biology, 1st edition. vol 2. pp. 270-276. Kliman RM (ed.). Oxford: Academic Press.

Courses Taught and Research Mentorship

Barnard College Courses

Senior Thesis Research & Seminar (BIOL BC3593/3594; Fall-Spring): 9 times from 2017-present
Guided Research & Seminar (BIOL BC3591/3592; Fall-Spring): 9 times from 2017-present
Animal Behavior (BIOL BC2280; Spring): 6 times from 2018-2026
Laboratory in Animal Behavior (BIOL BC2281; Fall): 7 times from 2018-present
Animal Behavior – 6-week Immersive and Remote (BIOL BC2280; Spring Block A): 2021

University of California, Santa Barbara Courses

Research Immersion in Molecular Biosciences (MCDB 161L): 2013, 2014
Introduction to Research in the Life Sciences (EEMB 4FS): 2010

Barnard College Thesis Projects Supervised (15 thesis projects total)

2025-2026
Lauren Edwards (Biology Senior Thesis)
Dahlia Reynolds (Neuroscience and Behavior Senior Thesis)

2024-2025
Harini Shankar (Biology Guided Research Thesis)

2023-2024
Isabella Martinez (Biology Senior Thesis)

2022-2023
Ashley Canizares (Biology Guided Research Thesis)
Grace Freed (Biology Guided Research Thesis)
Ananya Lahiri (Biology Guided Research Thesis)
Isabella Martinez (Biology Guided Research Thesis)

2021-2022
Mariel Correa-Maynard (Biology Guided Research Thesis)
Olivia Eliopoulos (Biology Senior Thesis)
Avigayil Lev (Environmental Science Senior Thesis)
2020-2021
Chelsea Sinclair (Neuroscience and Behavior Senior Thesis)
2019-2020
Abigail Gutierrez (Biology Guided Research Thesis)
Ana-Maria Anthony Cuadrado (Biology Guided Research Thesis)
2018-2019
Suriya Lisa (Neuroscience & Behavior Senior Thesis)

Barnard College Guided Research (BIOL BC3597) Students Mentored (24 students total)
2026-2027
Emma Barker (Fall)
Johanna Elton (Fall)
Jesslyn Chen (Fall)
2025-2026
Emma Barker (Spring)
Sophie Drechsler (Spring)
Jesslyn Chen (Fall + Spring)
2024-2025
Aanya Srinivasan (Fall)
Jesslyn Chen (Spring)
2023-2024
Harini Shankar (Spring)
Aanya Srinivasan (Spring)
Ananya Lahiri (Fall + Spring)
Eliza Tagle (Fall + Spring)
2021-2022
Ashley Canizares (Fall + Spring)
Ananya Lahiri (Fall + Spring)
Avigayil Lev (Fall + Spring)
Isabella Martinez (Fall + Spring)
Olivia Eliopoulos (Spring)
Grace Freed (Fall)
2020-2021
Mariel Correa-Maynard (Fall + Spring)
Olivia Eliopoulos (Fall + Spring + Summer A)
Grace Freed (Fall + Spring + Summer A)
2019-2020
Chelsea Sinclair (Fall + Spring)
Karolina Szenkiel (Fall + Spring)
Mariel Correa-Maynard (Spring)
Holly Doig (Spring)
Olivia Eliopoulos (Spring)
Aneeza Asif (Fall)
2018-2019
Abigail Gutierrez (Fall + Spring)

Taylor Leong (Fall + Spring)
Ana-Maria Anthony Cuadrado (Fall + Spring)
Suriya Lisa (Spring)
Chelsea Sinclair (Spring)
Nushrat Chowdhury (Fall)
Stacy Kanellopoulos (Fall)

2017-2018

Nushrat Chowdhury (Spring)
Abigail Gutierrez (Spring)
Stacy Kanellopoulos (Spring)
Taylor Leong (Spring)

Barnard College Summer Research Institute (SRI) Students Mentored (23 projects total)

2026 Emma Barker
Sophie Drechsler
Johanna Elton
2025 Lauren Edwards
Dahlia Reynolds
2024 Aanya Srinivasan
2023 Isabella Martinez
Eliza Tagle
2022 Ashley Canizares
Ananya Lahiri
Isabella Martinez
Grace Freed
2021 Mariel Correa-Maynard
Olivia Eliopoulos
Avigayil Lev
2020 Chelsea Sinclair
2019 Abigail Gutierrez
Ana-Maria Anthony Cuadrado
Chelsea Sinclair
2018 Nushrat Chowdhury
Abigail Gutierrez
Stacy Kanellopoulos
Suriya Lisa

Research Awards & Grants for Mentored Barnard Students

External

2023 Isabella Martinez: Sigma Xi Grant-in-Aid-of-Research, $905.
2021 Olivia Eliopoulos: Genetics Society of America Undergraduate Travel Award.
2020 Chelsea Sinclair: Animal Behavior Society Charles H. Turner Award.

Internal

2024 Harini Shankar: Barnard Biology Herbert Maule Richards Grant, $1662.
2022 Ashley Canizares: Con Edison Summer Grant.
2021 Mariel Correa-Maynard: Con Edison Summer Grant.
2019 Ana-Maria Anthony Cuadrado: Con Edison Summer Grant.
2018 Abigail Gutierrez: Con Edison Summer Grant.

Invited Talks and Presentations

Conference Presentations

2024 3rd Joint Congress on Evolutionary Biology (Society for the Study of Evolution Meeting). *Oral Presentation*.
2021 Animal Behavior Society Meeting. *Oral presentation*.
2021 Drosophila Research Conference (Genetics Society of America). *Poster + oral preview.*
2014 Drosophila Research Conference (Genetics Society of America). *Poster presentation.*
2013 Indo-American Kavli Frontiers of Science Symposium (US National Academy of Sciences). *Invited speaker.*
2012 Evolution (Society for the Study of Evolution Annual Meeting). *Poster presentation*.
2011 Evolution (Society for the Study of Evolution Annual Meeting). *Oral presentation.*
2010 Western Evolutionary Biologists Annual Meeting. *Oral presentation.*
2009 Western Evolutionary Biologists Annual Meeting. *Oral presentation.*
2006 Canadian Society for Ecology and Evolution Annual Meeting. *Poster presentation.*
2006 Evolution (Society for the Study of Evolution Annual Meeting). *Oral presentation.*
2006 Ontario Ecology and Ethology Colloquium. *Oral presentation.*
2004 Evolution (Society for the Study of Evolution Annual Meeting). *Oral presentation.*
2004 Ontario Ecology and Ethology Colloquium. *Oral presentation.*

Coauthored Conference Presentations

(Presentations by lab members in blue, coauthored presentations by collaborators in green)

2024 3rd Joint Congress on Evolutionary Biology (Society for the Study of Evolution Meeting). *Oral Presentation*. Andrew Stewart.
2023 Animal Behavior Society Twitter Conference. *Twitter Presentation*. Avigayil Lev.
2023 Midwest Ecology and Evolution Conference. *Poster Presentation*. Andrew Stewart.
2021 Animal Behavior Society Meeting. *Poster presentation.* Olivia Anastasio.
2014 Drosophila Research Conference (Genetics Society of America). *Poster.* Michael Shahandeh.
2013 Southern California Evolutionary Genetics and Genomics Meeting. *Poster.* Michael Shahandeh.

Invited College & University Seminars

2026 Hofstra University, Biology Department Seminar
2024 College of Staten Island, Center for Developmental Neuroscience Seminar
2024 Union College, Biology Department Seminar
2024 McMaster University, Biology DataLunch Seminar
2023 Barnard College, Junior Faculty Research Talk
2022 Baruch College, Department of Natural Sciences Seminars
2019 Brooklyn College, Department of Biology Seminar
2018 Barnard College, Science Pathways Scholars Program/Summer Research Institute Faculty Seminar
2018 Columbia University, University Seminar in the Integrative Study of Animal Behavior
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 East Carolina University, Department of Biology Seminar
2013 IISER Mohali (India), Department of Biological Sciences Seminar

Service to the College

General Service

Center for Engaged Pedagogy Faculty Lunch on Undergrad Mentoring, *Co-facilitator* 2025
R&D Science Center Renovation Project, *Design meeting participant* 2021 – 2024
Biology Department DEI Working Group, *Faculty member* 2020 – 2023
Barnard's "Welcome to Class" Video Series, *Featured Professor* 2021
New Faculty Orientation: Faculty Perspectives on Teaching Panel, *Panel Member* 2020
Empirical Reasoning Center Textbook Affordability Faculty Focus Group, *Participant* 2019
Barnard College "From the Faculty Lounge" Discussion Series, *Invited Speaker* 2018
Faculty Teller 2017 – 2018

Barnard Committee Service

Dean of the Library Search Committee, *Member* 2026 – 2027
Barnard Library and Archives Advisory Committee, *Member* 2025 – 2027
Committee on Honors, *Member* 2019 – 2020

Search Committees:

Ecology and Evolution Lecturer Search Committee (Biology), *Member* 2024 – 2025
Ecology Tenure Track Search Committee (Biology), *Member* 2022 – 2023
Organismal Bio + Physiology Lecturer Search Committee (Biology), *Member* 2019 – 2021
Cellular and Molecular Biology Lecturer Search Committee (Biology), *Member* 2018 – 2019
Organismal Bio + Physiology Lecturer Search Committee (Biology), *Member* 2018 – 2019
Computational Biology Tenure Track Search Committee (Biology), *Member* 2018
Microbiology Tenure Track Search Committee (Biology), *Member* 2017 – 2018

Student Advising:

2025-2026: 11 Biology major advisees
2024-2025: 11 Biology major advisees
2023-2024: 11 Biology major advisees
2022-2023: 8 Biology major advisees
2021-2022 (on SAPL leave): 1 Biology major advisee
2020-2021: 5 Biology major advisees
2019-2020: 6 major advisees (4 Biology; 2 Neuroscience and Behavior)
2018-2019: 5 major advisees (3 Biology; 2 Neuroscience and Behavior)

Service to the Profession

Ad hoc Journal Peer-Reviewer

American Naturalist
Animal Behaviour
Behavioral Ecology & Sociobiology
Biology Letters
BMC Evolutionary Biology
BMC Ecology & Evolution
Ecology and Evolution
Journal of Evolutionary Biology
Journal of Experimental Biology
Molecular Ecology
Nature Communications
Nature Ecology & Evolution
Oikos
PLoS Genetics

Evolution	PLoS ONE
G3: Genes | Genomes | Genetics	Proceedings of the Royal Society B
Journal of Ethology	Scientific Reports

Grant Review

National Science Foundation Panelist, Directorate for Biological Sciences
→ Division of Integrative Organismal Systems 2024
National Science Foundation Ad Hoc Reviewer
→ Division of Environmental Biology – Evolutionary Ecology 2021
→ Division of Environmental Biology – Evolutionary Processes 2016

Service to Scientific Societies

Society for the Study of Evolution (SSE)
SSE Faculty Judge: Hamilton Award for Outstanding Graduate Student Presentation at Evolution Conference 2024 2024
SSE Faculty Judge: Hamilton Award for Outstanding Graduate Student Presentation at Evolution Conference 2021 2021
SSE Faculty Mentor: Graduate Student-Faculty Networking Lunch 2021
SSE Faculty Mentor: Graduate Student-Faculty Networking Lunch 2020
Animal Behavior Society (ABS):
ABS Faculty Mentor: Virtual Mentoring Program 2021
ABS Session Moderator: ABS Conference 2021 2021
ABS Faculty Mentor: Virtual Mentoring Program 2020
US National Academy of Science (US NAS)
NAS Kavli Frontiers of Science Symposium Organizing Committee. Irvine, CA 2015

Professionally Related Community Service

Media Appearances

2025 BBC Studios & PBS NOVA. "Evolution". *Featured Scientific Contributor.*
Featured Scientist involved in filming of "Evolution", a 5-episode TV docuseries about the evolution of modern animals (Forthcoming in 2026). Featured on Episode 2: Reproduction.

2012 KZSB-AM 1290, Santa Barbara News Press Radio. "Tech Talk": *Invited Guest*
Interviewed for a segment about sexual selection and animal mating systems

Invited Public Speaking Events

2014 UCSB SACNAS (Society for Advancement of Hispanics/Chicanos and Native Americans in Science) Chapter. "*Navigating STEM while First-Gen*"
2012 Santa Barbara Museum of Natural History Science Pub. "*Sperm Wars and Sexual Conflict: The Evolutionary Consequences of Promiscuity*"

Current Memberships in Professional Societies

Animal Behavior Society
Society for the Study of Evolution