# NATALIE PILAKOUTA, PhD

Centre for Biological Diversity • School of Biology • University of St Andrews Sir Harold Mitchell Building 306 • St Andrews, KY16 9TZ • United Kingdom

Email: np84@st-andrews.ac.uk • Tel: +44 (0)1334 463587 • Website: www.nataliepilakouta.com

#### **EMPLOYMENT**

2023-	Lecturer, University of St Andrews
2019–2023	Lecturer, University of Aberdeen (maternity leave from February 2021 to March 2022)
2016-2019	Postdoctoral Researcher, University of Glasgow
2011-2013	Teaching Fellow, Graduate Teaching Center, Yale University

#### **ACADEMIC QUALIFICATIONS**

2017	PhD in Evolutionary Biology, University of Edinburgh (Supervisor: Dr Per Smiseth)
2013	MSc in Ecology & Evolutionary Biology, Yale University (Supervisor: Prof Suzanne Alonzo)
2010	BSc in Environmental Science, State University of New York at Brockport (GPA: 4.00/4.00)

#### **HONOURS & AWARDS**

2023	Nominee, Early Career Researcher Excellence Award, University of Aberdeen
2022	Scientists with Impact, Society of Experimental Biology (SEB)
2019	Runner up, John Maynard Smith Prize, European Society for Evolutionary Biology (ESEB)
2019	Early Career Researcher Prize, Scottish Universities Life Sciences Alliance (SULSA)
2016	Doctoral Researcher Award in the Life Sciences (1st place in the UK), ABTA
2016	Best Student Talk (1st place), Scottish Conference on Animal Behaviour

#### **RESEARCH GRANTS**

2021	Royal Society Research Grant (£15,526)	
2019	ECR Award, Scottish Universities Life Sciences Alliance (£3,000)	
2018	Wellcome Trust Institutional Strategic Support Fund, University of Glasgow (£3,063)	
2017	Godfrey Hewitt Mobility Award, European Society for Evolutionary Biology (£1,511)	
2016	Student Research Award, American Society of Naturalists (£1,580)	
2014	Student Research Grant, Animal Behavior Society (£1,580)	
2012	Pierce Fund, Yale University (£2,370)	
2012	Graduate Research Fund, Yale University (£2,370)	

#### TRAVEL GRANTS

2022	Early Career Conference Grant, The Association of Commonwealth Universities (£2,000)
2019	Early Career Exchange Grant, Scottish Universities Life Sciences Alliance (£4,000)
2019	Travel Grant, The Company for Biologists (£350)
2016	Travel Grant, International Society for Behavioral Ecology (£800)
2015	Training and Travel Grant, British Ecological Society (£500)
2014–2016 (3×)	Conference Participation Grant, Royal Entomological Society (£1200)
2014, 2015	James Rennie Bequest Travel Grant, University of Edinburgh (£770)
2014	Conference Travel Grant, International Union for Biological Sciences (£300)

#### PREREGISTERED STUDIES

Pottier P, Dougherty LR, Vasudeva R, Berger D, Domenech BC, Cole B, Drobniak SM, Graziano M, Lupold S, Meena A, Nakagawa S, **Pilakouta N**, Ramm SA, Schou MF, Simões P, Svensson E, Tuni C, Fricke C (2023) Evolution of reproductive success in response to changing temperatures: a meta-analysis. OSF: osf.io/4b38s

## MANUSCRIPTS IN REVIEW OR IN REVISION

- [22] Sidhu K, Zafeiri S, Malcolm C, Caplat P, Lancaster L, **Pilakouta N**. Heatwaves during early development have long-term consequences for parental care in adulthood. In revision for <u>Animal Behaviour</u>.
- [21] **Pilakouta N**, Vega-Trejo R, de Boer RA, Fitzpatrick JL. Parental care and inbreeding depression help explain patterns of inbreeding avoidance in animals. In revision for <u>Behavioral Ecology</u>.

[20] **Pilakouta N**, Patterson C. Effects of parental care on the magnitude of inbreeding depression: a metaanalysis in fishes. Revised and resubmitted to American Naturalist.

#### JOURNAL ARTICLES

- [19] **Pilakouta N,** Sellers L, Barratt R, Ligonniere A (2023) The consequences of heatwaves for animal reproduction are timing-dependent. <u>Functional Ecology</u> (in press)
- [18] **Pilakouta N**, Humble JL, Hill IDC, Arthur J, Costa APB, Smith BA, Kristjánsson BK, Skúlason S, Killen SS, Lindström J, Metcalfe NB, Parsons KJ. (2023) Testing the predictability of morphological evolution in contrasting thermal environments. <u>Evolution</u> 77:239-253.
- [17] **Pilakouta N**, O'Donnell PJ, Crespel A, Levet M, Claireaux M, Humble JL, Kristjánsson BK, Skúlason S, Lindström J, Metcalfe NB, Killen SS, Parsons KJ (2023) A warmer environment can reduce sociability in an ectotherm. <u>Global Change Biology</u> 29:206-214.
- [16] **Pilakouta N**, Killen SS, Kristjánsson BK, Skúlason S, Lindström J, Metcalfe NB, Parsons KJ. Geothermal stickleback populations prefer cool water despite multigenerational exposure to a warm environment. <u>Ecology and Evolution</u> 13:e9654.
- [15] **Pilakouta N**, Baillet N (2022) Effects of temperature on mating behaviour and mating success: a meta-analysis. <u>Journal of Animal Ecology</u> 91:1642-1650.
- [14] **Pilakouta N**, Alund M (2021) Sexual selection and environmental change: what do we know and what comes next? <u>Current Zoology</u> 67:293-298.
- [13] Campbell CS, Adams CE, Bean CW, **Pilakouta N**, Parsons KJ (2021) Evolvability under climate change: bone development and shape plasticity are heritable and correspond with performance in Arctic charr (*Salvelinus alpinus*). Evolution & Development 23:333-350.
- [12] **Pilakouta N**, Killen SS, Kristjánsson BK, Skúlason S, Lindström J, Metcalfe NB, Parsons KJ (2020) Multigenerational exposure to elevated temperatures leads to a reduction in standard metabolic rate in the wild. <u>Functional Ecology</u> 34:1205-1214.
- [11] Parsons KJ, McWhinnie K, **Pilakouta N**, Walker L (2019) Does phenotypic plasticity initiate developmental bias? <u>Evolution & Development</u> 22:56-70.
- [10] **Pilakouta N**, Hanlon EJH, Smiseth PT (2018) Biparental care is more than the sum of its parts: evidence for synergistic effects on offspring fitness. <u>Proceedings of the Royal Society B</u> 285:20180875.
- [9] **Pilakouta N,** Smiseth PT (2017) Female mating preferences for outbred versus inbred males are conditional upon the female's own inbreeding status. <u>Animal Behaviour</u> 123:369–374.
- [8] **Pilakouta N**, Correa MA, Alonzo SH (2017) Predation risk influences heterospecific mating preference in the green swordtail. <u>Ethology</u> 123:95–104.
- [7] **Pilakouta N,** Smiseth PT (2016) Maternal effects alter the severity of inbreeding depression in the offspring. <u>Proceedings of the Royal Society B</u> 283:20161023.
- [6] **Pilakouta N**, Halford C, Racz R, Smiseth PT (2016) Effects of contest experience and contest outcome on female reproductive decisions and offspring fitness. <u>American Naturalist</u> 188:319–328.
- [5] **Pilakouta N**, Sieber D, Smiseth PT (2016) Sibling competition does not exacerbate inbreeding depression in the burying beetle *Nicrophorus vespilloides*. <u>Journal of Evolutionary Biology</u> 29:704–710.
- [4] **Pilakouta N**, Richardson J, Smiseth PT (2016) If you eat, I eat: resolution of sexual conflict over feeding from a shared resource. <u>Animal Behaviour</u> 111:175–180.
- [3] **Pilakouta N**, Jamieson S, Moorad JA, Smiseth PT (2015) Parental care buffers against inbreeding depression in burying beetles. <u>Proceedings of the National Academy of Sciences</u> 112:8031–8035.
- [2] **Pilakouta N**, Richardson J, Smiseth PT (2015) State-dependent cooperation in burying beetles: parents adjust their contribution towards care based on both their own and their partner's size. <u>Journal of Evolutionary Biology</u> 28:1965–1974.

[1] **Pilakouta N**, Alonzo SH (2014) Predator exposure leads to a short-term reversal in female mate preferences in the green swordtail, *Xiphophorus helleri*. Behavioral Ecology 25:306–312.

#### POPULAR SCIENCE ARTICLES

**Pilakouta N** (2018) Are two parents better than one? Yes, but only if you're a burying beetle. The Conversation.

#### SELECTED PRESS COVERAGE

Edinburgh Evening News Science News The Daily Telegraph
EurekAlert Science Newsline The Press and Journal

Evening Times ScienMag The Sun

Financial Times Scottish Daily Mail The Sunday Post Herald Sun The Australian The Times

MetroThe GuardianThe Washington PostNews LetterThe Health SiteWestern Morning NewsPhys.orgThe Herald

Science Daily The Highland Times

#### **RADIO INTERVIEWS**

BBC World Service – Newsday BBC Good Morning Scotland UBC1 Radio

#### **PLENARY TALKS**

2022 Animal Science Conference, Newcastle University, UK

2021 European Meeting for PhD Students in Evolutionary Biology (EMPSEB), Ireland

2019 British Ecological Society (BES) Undergraduate Summer School, UK

#### **INVITED SEMINARS**

2023	University of St Andrews, UK
2023	University of Edinburgh, UK
2022	University of the West of Scotla

2022 University of the West of Scotland, UK 2022 University College Cork (UCC), Ireland

2020 Uppsala University, Sweden

2019 University of Illinois Urbana-Champaign, USA

2019 University of Edinburgh, UK
2019 James Hutton Institute, UK
2019 University of Glasgow, UK
2019 University of Aberdeen, UK

2018 Swiss Federal Institute of Aquatic Science and Technology (Eawag), Switzerland

2016 University of Stirling, UK

#### **INVITED CONFERENCE TALKS**

2023 Society for Experimental Biology Conference, Edinburgh, UK

#### CONTRIBUTED CONFERENCE TALKS

2023	Behaviour Meeting, Bielefeld, Germany (scheduled)
2022	British Ecological Society (BES) Meeting, Edinburgh, UK
2022	International Society for Behavioral Ecology (ISBE), Sweden
2020	A i-ti f th Ct f f A i 1 D-1 i (A C A D) Winton

2020 Association for the Study of Animal Behaviour (ASAB) Winter Meeting

2020 British Ecological Society (BES) Meeting (virtual)

2019 European Society for Evolutionary Biology (ESEB) Meeting, Turku, Finland

2019 Society for Experimental Biology (SEB) Meeting, Seville, Spain

2019 Association for the Study of Animal Behaviour (ASAB) Easter Meeting, York, UK
2018 International Conference on Stickleback Behavior and Evolution, Kyoto, Japan
2017 Association for the Study of Animal Behaviour (ASAB) Winter Meeting, London, UK
2017 European Society for Evolutionary Biology (ESEB) Meeting, Groningen, The Netherlands

2016 International Society for Behavioral Ecology (ISBE) Meeting, Exeter, UK

2016 Scottish Conference on Animal Behaviour (SCAB), Stirling, UK

2015	European Society for Evolutionary Biology (ESEB) Meeting, Lausanne, Switzerland
2015	European Meeting for PhD Students in Evolutionary Biology (EMPSEB), Stirling, UK
2015	Scottish Conference on Animal Behaviour (SCAB), St Andrews, UK
2014	European Meeting for PhD Students in Evolutionary Biology (EMPSEB), Belgium
2014	Ecology and Behaviour Meeting, Montpellier, France
2014	Scottish Conference on Animal Behaviour (SCAB), Edinburgh, UK

#### **EDITORIAL WORK & PEER REVIEW**

#### **Editorial Boards**

Journal of Animal Ecology, Associate Editor (2023–) Journal of Evolutionary Biology, Associate Editor (2023–) Journal of Thermal Biology, Associate Editor (2023–) Functional Ecology, Associate Editor (2020–) Current Zoology, Guest Editor (2020–2021)

## Grant Panels and Peer Review College Memberships

NERC Peer Review College, Member (2023–)

NERC Pushing the Frontiers, Moderating Panel Member (2022)

BES Peer Review College, Member (2020–)

#### Peer Review - Journal Articles

Acta Ethologica Frontiers in Zoology American Naturalist Functional Ecology

Animal Behaviour Global Ecology and Biogeography

Behavioral Ecology Heredity
Behavioral Ecology and Sociobiology Insect Science

Conservation Physiology Journal of Animal Ecology

Current Zoology Journal of Comparative Physiology B Ecological Entomology Journal of Evolutionary Biology

Ecology and Evolution

eLife

Journal of Fish Biology

Journal of Thermal Biology

Entomologia Experimentalis et Applicata

Environmental Entomology

Environmental Pollution

Ethology

PLOS One

PNAS

EvolutionProceedings of the Royal Society BEvolution LettersRoyal Society Open ScienceEvolutionary BiologyThe Science of Nature

#### Peer Review - Research Grants

British Ecological Society (BES)

French National Research Agency (ANR)

Icelandic Research Fund

Leverhulme Trust

Natural Environment Research Council (NERC)

Natural Sciences and Engineering Research Council of Canada (NSERC)

#### STUDENT SUPERVISION & MENTORING

2020–	University of Aberdeen: 2 PhD students (Amber Chatten, Karendeep Sidhu), 2 MSc students (Claudia Hayward, Eirini Meligoniti, Ava Searles, Anais Baillet), 8 BSc students (Lorelei
	Sellers, Shannon Harvey, Emma Cassellis, Rebecca Barratt, Alice Ligonniere, Charlotte
	Malcolm, Stamatia Zafeiri, Charlotte Patterson, Nikki Watt), 3 research assistants (Zoe Wright,
	Veronika Ljungberg, Euan Young)
2016-2019	University of Glasgow: 2 MSc students (Laura Downie, William Wood), 8 BSc students
	(Moray Swanson, Susanne Krabbendam, Patrick O'Donnell, Jessica Curle, Ashleigh Campbell,
	Deborah Davy, Isabel Baruque Fisk, Timothy Ho)
2014-2016	University of Edinburgh: 2 MSc students (Tom Ratz, Rita Racz), 5 BSc students (Beth Hanlon,
	Daniel Sieber, Cerian Halford, Jon Richardson, Seonaidh Jamieson)

2012–2013 **Yale University:** 1 BSc student (Maria Correa)

## POSTGRADUATE EXAMINATION

2023	Internal examiner for PhD viva (Max Tschol), University of Aberdeen
2022	External examiner for PhD viva (Floriane Leseur), University College Cork
2022	First-year PhD examination (Jodie Young), University of Aberdeen
2020-	First-year PhD examination (Anders Poulsen Charmouh), University of Aberdeen
2020-	First-year PhD examination (Ieuan Jones), University of Aberdeen

Internal examiner for PhD viva (Aoife Leonard), University of Aberdeen

#### **TEACHING EXPERIENCE**

2019

2022

2023	Course Contributor, Practical Skills in Animal Behaviour, University of Aberdeen
2023	Course Coordinator, Diversity of Life 2, University of Aberdeen
2021	Course Contributor, Environmental Physiology, University of Aberdeen
2020-2023	Course Coordinator, Behavioural Ecology and Conservation, University of Aberdeen
2020	Course Contributor, Field Skills in Animal Behaviour, University of Aberdeen
2020	Course Contributor, Principles in Animal Physiology, University of Aberdeen
2019	Guest Lecturer, Behavioural Ecology, University of Glasgow
2018	Marker, Zoology MRes Programme, University of Glasgow
2018	Guest Lecturer, Behavioural Ecology, University of Glasgow
2017	Guest Lecturer, Vertebrate Life, University of Glasgow
2016	Guest Lecturer, Behavioural Ecology, University of Edinburgh
2015	Teaching Assistant, Demonstrator Induction Course, University of Edinburgh
2014-2016	Demonstrator, Behavioural Ecology, University of Edinburgh
2013-2015	Marker, Origin and Diversity of Life, University of Edinburgh
2013-2014	Demonstrator, Origin and Diversity of Life, University of Edinburgh
2013	Teaching Fellow, Introduction to Evolution and Ecology, Yale University
2011-2012	Teaching Fellow, Principles of Evolution, Ecology, and Behavior, Yale University
2011	Teaching Fellow, Animal Behavior, Yale University

## TEACHING WORKSHOPS & SEMINARS ATTENDED

2020	Learning & Teaching in Higher Education, University of Aberdeen
2019	Research-led Teaching in the Life Sciences, University of Glasgow
2016	Designing Courses, University of Edinburgh
2016	Designing and Delivering Lectures, University of Edinburgh
2016	Introduction to Academic Practice, University of Edinburgh
2015	Interactive & Flipped Lectures in the Biosciences, University of Edinburgh
2013	Teaching Forum: Online Teaching & Student Learning, Yale Teaching Center
2011	Changing the Way We Teach Undergraduate Biology, Yale Teaching Center
2011	Preparing Future Science Faculty (lecture series), Yale Teaching Center
2011	Teaching Writing (workshop series), Yale College Writing Center

The Case for Multiple-choice and Other Automated Assessments, University of Aberdeen

### TEACHING WORKSHOPS & SEMINARS DELIVERED

2013	Teaching with Technology, Yale Teaching Center
2013	Lecture Observation Series, Yale Teaching Center
2013	Science Education Journal Club, Yale Teaching Center
2012	Leading Effective Discussions in the Classroom, Yale Teaching Center
2011–2013	Fundamentals of Teaching in the Sciences (workshop series), Yale Teaching Center
2011, 2012	Leading Effective Review Sessions, Yale Teaching Center
2011	Engaging Students in the Science Classroom, Yale Teaching Center

## TEACHING ACCREDITATION

2016	Associate Fellow, UK Higher Education Academy
2013	Certificate in College Teaching Preparation, Yale University

#### SYMPOSIUM & CONFERENCE ORGANISATION

2023	Symposium primary organiser, Behaviour Conference, Germany
2019	Symposium primary organiser, ESEB Congress, Finland
2014-2015	Conference co-organiser, 21st European Meeting for PhD Students in Evolutionary Biology, UK

## **PROFESSIONAL ACTIVITIES**

2023	Delivered PGR workshop on "Getting your first job post-PhD", University of Aberdeen
2022	Moderating Panel Member, Pushing the Frontiers research grants, NERC
2022–	Executive Board Member, Anthony and Margaret Johnson Centre for Doctoral Training
2022-	Plagiarism Officer, University of Aberdeen
2019	Shortlisting for Academic Fellowship posts, University of Aberdeen
2019	Interview panel for Undergraduate Summer Scholarship, University of Glasgow
2018-2019	Co-organiser, Physiology and Life History Group, University of Glasgow
2018	Interview panel for Research Assistant post, University of Glasgow
2018	Presenter, Postgraduate Statistics Group, University of Glasgow
2015	Co-organiser, PhD Peer Group, School of Biological Sciences, University of Edinburgh
2014-2015	Mentor for first-year PhD students, PhD Peer Group, University of Edinburgh
2010–2013	Mentor for female undergraduate students in the sciences, Women in Science at Yale (WISAY)

## PUBLIC ENGAGEMENT & SCIENCE OUTREACH

2019	Pint of Science, Glasgow, UK
2017-2019	I'm a Scientist, Careers Zone (online event for public engagement: imascientist.org.uk)
2015-2019	Letters to a Pre-Scientist (pen pal programme: www.prescientist.org/)
2016	Science on a Summer's Evening, College of Science and Engineering, University of Edinburgh
2015	Event coordinator, Edinburgh International Science Festival, UK
2015	Wild About Scotland Bus, Edinburgh Zoo, UK
2014–	STEM Ambassador, Science, Technology, Engineering and Mathematics Network, UK
2014	I'm a Scientist, Animal Behaviour Zone (imascientist.org.uk)
2013	Science fair judge, Hooker Elementary School, New Haven, CT, USA

## PROFESSIONAL DEVELOPMENT

2023	Preparing for Impact in REF2028, University of Aberdeen
2023	Connecting with Industry, University of Aberdeen
2022	Pastoral Guidance and Support training, University of Aberdeen
2021	Supervisor Training, University of Aberdeen
2020	Learning & Teaching in Higher Education, University of Aberdeen
2019	Managing Research Teams, University of Glasgow
2019	Leading & Managing Projects, University of Glasgow
2019	Fellowship Writing Workshop, SULSA
2018	Bioinformatics for DNA and RNA Sequence Analysis, PR Informatics
2017	Advanced Graphics in R, Jumping Rivers
2016	Introduction to Academic Practice (HEA accreditation), University of Edinburgh