CV

Jacinta D Kong

Last updated 04 May 2021

Research and teaching appointments

- Teaching and Research Fellow Department of Zoology, School of Natural Sciences.
 Trinity College Dublin, Dublin, Ireland
 5.2019 - Present
- Research Assistant

Intraspecific variation in mechanistic species distribution modelling, The University of Melbourne, Australia 5.2018-12.2018

- Comparative Animal Physiology tutor (Second Year undergraduate) School of BioSciences, the University of Melbourne, Australia 2017–2018
- Ecology in Changing Environments tutor (Third Year undergraduate)
 School of BioSciences, the University of Melbourne, Australia
 2016–2018
- Comparative Animal Physiology residential tutor, University College, the University of Melbourne, Australia 2017–2018
- First Year Chemistry residential tutor
 St John's College, the University of Queensland Australia
 8.2014 10.2014
- First Year Biology tutor (Science Learning Centre tutor), the Faculty of Science, the University of Queensland, Australia 2012
- Peer Assisted Study Session leader: first year statistics
 The Peer Assisted Study Session office and the School of Mathematics and Physics, the University of Queensland Australia
 8.2012 – 10.2012
- Peer Assisted Study Session leader: first year ecology
 The Peer Assisted Study Session office, the University of Queensland Australia 2011 – 2012
- Volunteer laboratory technician. Animal husbandry. White Evolutionary Physiology Laboratory, the University of Queensland $3.2012-10.2012\,$

Qualifications

Doctor of Philosophy (Science)

The University of Melbourne, Australia

Title: Predicting ectotherm life cycles under a variable climate: Physiological diversity of matchstick grasshopper eggs and their ecological and evolutionary implications

1.2015 – completed 14 Aug 2019, conferred 5.10.2020

Bachelor of Science (Honours Class I, University Medal)

The University of Queensland, Australia

Title: The effect of temperature on the relationship between metabolic rate and mass: Tests of the Metabolic Theory of Ecology

Conferred 6.12.2013

Bachelor of Science The University of Queensland, Australia

Conferred 17.12.2012

Refereed journal articles

- Kong JD, Hoffmann AA, Kearney MR. (2019) Linking thermal adaptation and life-history theory explains latitudinal patterns of voltinism. Philosophical Transactions of the Royal Society B: Biological Sciences. 374(1778). DOI: 10.1098/rstb.2018.0547
- Kearney MR, Deutscher J, **Kong JD**, Hoffmann AA. (2018) Summer egg diapause in a matchstick grasshopper synchronises the life cycle and buffers thermal extremes. Integrative Zoology. 13(4): 437–449. DOI: 10.1111/1749-4877.12314
- Maino JL, Kong JD, Hoffmann AA, Barton MG, Kearney MR. (2016) Mechanistic models for predicting insect responses to climate change. Current Opinion in Insect Science. 17: 81 86. DOI: 10.1016/j.cois.2016.07.006
- Kong JD, Axford JK, Hoffmann AA, Kearney MR. (2016) Novel applications of thermocyclers for phenotyping invertebrate thermal responses. Methods in Ecology and Evolution. 7(10): 1201 1208. 2016. DOI: 10.1111/2041-210X.12589

Research highlights

ORCID

Google scholar H-index: 4 (GS) Total citations: 52

- Ecology/evolution studies in some of the best journals in their respective disciplines, including Methods in Ecology and Evolution and Philosophical Transactions of the Royal Society B
- Methods in Ecology and Evolution video explaining the use of thermocyclers as efficient incubators [see 1 above]. Altmetric score: 21
- Influential paper on the use of mechanistic species distribution modelling for predicting ectotherm responses to climate change in Current Opinion in Insect Science [see 2 above]. Altmetric score: 6

I have peer reviewed for:

- Global Change Biology
- Entomologia Experimentalis et Applicata
- Methods in Ecology and Evolution
- Nature Ecology and Evolution
- Ecological Entomology
- The Canadian Entomologist
- Environmental Entomology
- Journal of Fish Biology
- Current Zoology
- Scientific Reports
- Conservation Physiology

Research grants or awards

TOTAL: \$13 750 AUD :australia:

- \$2 500 AUD. 6.2018 Holsworth Wildlife Research Endowment Equity Trustees Charitable Foundation & the Ecological Society of Australia
- \$300 AUD. 12.2018 2nd runner up student presentation
 Australian and New Zealand Society for Comparative Physiology and Biochemistry, Australia
- **\$500 AUD**. 8.2018 Student Travel Grant Australian Entomological Society, Australia
- \$1 500 AUD. 2018 Science Abroad Travelling Scholarship Faculty of Science, the University of Melbourne, Australia
- \$950 AUD. 2018 FH Drummond Travel Award School of BioSciences, the University of Melbourne, Australia
- \$1 500 AUD. 2018 School of BioSciences Travelling Scholarship School of BioSciences, the University of Melbourne, Australia
- **\$6 000 AUD**. 6.2018 Holsworth Wildlife Research Endowment Equity Trustees Charitable Foundation
- **\$500 AUD**. 6.2018 Three Minute Thesis (3MT) People's Choice Winner The University of Queensland Undergraduate Research Conference

Other Awards and Scholarships

- \$13 541 AUD. 2018 Research Training Program Scholarship, Australian Government
- \$26 682 AUD. 2017 Research Training Program Scholarship, Australian Government
- **\$200 AUD**. 2017 Runners-up in the Sustainability Prize photo competition, Graduate Student Association, the University of Melbourne

- \$26 288 AUD. 2016 Australian Postgraduate Award, Australian Government
- \$25 849 AUD. 2015 Australian Postgraduate Award, Australian Government
- 2014. 2013 University Medal, the University of Queensland, Australia
- 2010 2013 Dean's Commendation for Academic Excellence (formerly Dean's Commendation for High Achievement), the Faculty of Science, the University of Queensland, Australia

Teaching contributions and course development

2020

- Lecturer & course development: Statistics and computation for biologists (BYU22S01). 2nd year undergraduate. Trinity College Dublin. Developed course lectures and practical material, implemented reproducible workflow for online exams. Adapted for remote delivery. Module co-ordinator.
- Lecturer & course development: Animal Diversity I (ZOU330003). 3nd year undergraduate. Trinity College Dublin. Developed course lectures and practical material. Module co-coordinator. Adapted for remote delivery.
- Lecturer & course development: Animal Diversity II (ZOU330004). 3nd year undergraduate. Trinity College Dublin. Developed course lectures and practical material. Adapted for remote delivery.

2019

- Lecturer & course development: Statistics and computation for biologists (BYU22S01). 2nd year undergraduate. Trinity College Dublin. Developed course lectures and practical material, implemented reproducible workflow for online exams.
- Lecturer & course development: Animal Diversity I (ZOU330003). 3nd year undergraduate. Trinity College Dublin. Developed course lectures and practical material. Acting module co-coordinator.
- Lecturer & course development: Animal Diversity II (ZOU330004). 3nd year undergraduate. Trinity College Dublin. Developed course lectures and practical material.

2017

- Guest lecturer: 2rd year Comparative Animal Physiology, Uni Melbourne
- Course development: 2nd year Biostatistics, Uni Melbourne. Evaluated course context and provided feedback.

2016

• Guest lecturer: 2rd year Comparative Animal Physiology, Uni Melbourne

Conference presentations and invited talks

2021

• Energetic turnover explains the inflexibility of upper thermal tolerances in ectotherms. Irish Ecological Association Meeting, University College Cork, Ireland

2019

- Detangling the complex problem of climate adaptation of insects living in a seasonal world
- Victorian Biodiversity Conference, University of Melbourne, VIC, Australia
- Local adaptation of thermal responses generates voltinism patterns of matchstick grasshoppers, Warramaba (Orthoptera: Morabidae), along a latitudinal gradient
- British Ecological Society Annual Meeting, Belfast, N. Ireland, UK

2018

- Selection against overwintering shapes thermal performance curves for development
- Australian and New Zealand Society for Comparative Physiology and Biochemistry Conference, Monash University, VIC, Australia
- Environmental and developmental drivers at the egg stage generate divergent life cycles in wingless arid zone grasshoppers (Orthoptera: Warramaba).
- Australian Entomological Society Conference, Alice Springs, N.T., Australia
- The egg stage drives life cycle adaptation to climate in the widely distributed matchstick grasshoppers (Vandiemenella and Warramaba, Orthoptera: Morabidae)
- 'The height, breadth and depth of physiological diversity: variation across latitudinal, altitudinal and depth gradients' Animal Biology Satellite Meeting, Florence, Italy, Society for Experimental Biology
- Microclimate-driven mechanistic models to examine clinal adaptation at the egg stage in a parthenogenetic grasshopper
- Society for Experimental Biology Annual Conference, Florence, Italy

2017

- Does variation in egg developmental responses to temperature generate divergent life-cycles in a genus of flightless grasshoppers (Warramaba spp.)?
- School of BioSciences Postgraduate Symposium, the University of Melbourne, Parkville, Australia
- Egg development drives life cycles in Warramaba spp. grasshoppers
- Australian and New Zealand Society for Comparative Physiology and Biochemistry Conference, Daintree Rainforest Observatory, QLD, Australia
- Mechanistic models for understanding and predicting insect responses to climate change
- Australian Entomological Society Conference, Terrigal, N.S.W., Australia

2016

- Predicting insect egg development under variable climates
- School of BioSciences Postgraduate Symposium, the University of Melbourne, Parkville, Australia
- Predicting egg development in the parthenogenetic grasshopper Warramaba virgo (Orthoptera: Morabidae)
- Australian and New Zealand Society for Comparative Physiology and Biochemistry Conference, Western Sydney University, N.S.W., Australia

2015

- Novel applications of thermocyclers for high-throughput phenotyping of invertebrate thermal response
- Australian and New Zealand Society for Comparative Physiology and Biochemistry Conference, Fowler's Gap, N.S.W., Australia

2013

- Every Breath You Take Links Metabolism and Ecology
- Three Minute Thesis, Undergraduate Research Conference, the University of Queensland, Australia The University of Queensland
- Every Breath You Take Links Metabolism and Ecology. Summer Research Introduction Session 2013, invited by the Office of Undergraduate Education, the University of Queensland, Australia
- Flying foxes and you: Exploring the exposure of society to so-called "rats with wings"
- Bachelor of Science Welcome Day, invited by the Faculty of Science, the University of Queensland, Australia

2012

- Flying foxes and you: Exploring the exposure of society to so-called "rats with wings"
- Advanced Study Program in Science Student Conference, the University of Queensland, Australia

2011

- Female-biased dispersal in the Eastern Water Dragon (Physignathus lesueurii lesueurii)
- Advanced Study Program in Science Student Conference, the University of Queensland, Australia

Professional service and affiliations

- 2015 Present Member: Australian and New Zealand Society for Comparative Physiology and Biochemistry (ANZSCPB)
- 2019 Present Member: British Ecological Society (BES) & Irish Ecological Association (IEA)
- 2018 Member: Royal Society of Victoria (RSV)
- 2017 Present Member: Society for Experimental Biology (SEB)
- 2015 2020 Member: Australian Entomological Society (AES)
- 2019 2020 Member: European Society for Evolutionary Biology (ESEB)
- 2017 2018 President, BioSciences Postgraduate Society, the University of Melbourne
- 2016 2017 Vice President, BioSciences Postgraduate Society, the University of Melbourne

Professional development qualifications

• 26/01/2021 Epigeum Research Integrity Course

Community outreach and communication

2021

- Contributor to the Trinity Walton Club, Trinity College Dublin
- Mentor for Irish Ecological Association mentoring meeting. 7th January
- The Socio-Economic Theory of Animal Abundance. April Fools blog post for EcoEvo@TCD. 1st April

2020

- Profiled on Humans of BioSciences by the School of BioSciences, the University of Melbourne, Australia.
 Website & Twitter. 17th December
- Guest interview with Newstalk radio, Ireland. 14th January

2019

- Mentor for BES Women in Science Mentoring Program
- Home and Away: 3 part blog series for EcoEvo@TCD
 - Home and Away: Would a Rosella by any other name smell as sweet (online 1 Nov)
 - Home and Away: Monotreme mistakes (online 22 Nov)
 - Home and Away: Australian expats (online 12 Dec)
- Victorian Biodiversity Conference Volunteer, Melbourne, Australia

2018

- Big Ideas in Macrophysiology. Report on the 2018 Animal Biology Satellite Meeting, Florence Italy. Society for Experimental Biology Magazine
- The University of Melbourne Open Day Volunteer, the University of Melbourne, Melbourne, Australia

2017

- The University of Melbourne Open Day Volunteer, the University of Melbourne, Melbourne, Australia
- Session Chair, BioSciences Postgrad Symposium, the University of Melbourne, Australia
- Victorian Biodiversity Conference Volunteer, Melbourne, Australia
- Blog post for Graduate Student Association, University of Melbourne on the biodiversity photo competition

2016

- Session Chair, BioSciences Postgrad Symposium, the University of Melbourne, Australia
- Novel applications of thermocyclers for characterising invertebrate thermal responses. Video for Methods in Ecology and Evolution

2015

- The University of Melbourne Open Day Volunteer, the University of Melbourne, Melbourne, Australia
- The Real Life of a Research Student. Science Undergraduate Research Journal (SURJ), Issue 2. The University of Queensland, Australia

• Jacinta on Zoology & Research. Interview with BITE BACK, Black Dog Institute, Australia. 31st August. Link likely broken

2014

- Brisbane Open House Volunteer, Brisbane Open House, Brisbane, Australia
- Student Chaperone for the International Baccalaureate World Student Conference, the University of Queensland, Australia
- Moreton Bay Research Station Open Day Assistant, Moreton Bay Research Station, Brisbane, Australia

2013

• Science Mentor to Science Undergraduate Students, appointed by the Faculty of Science, the University of Queensland, Australia

2012

• Moreton Bay Research Station Open Day Assistant, Moreton Bay Research Station, Brisbane, Australia