

Curriculum vitae

Jacinta Dara Kong

13th September 2020

Teaching and Research Fellow,

Trinity College Dublin, Ireland

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Research and teaching appointments

Teaching and Research Fellow

5.2019 – Present

Department of Zoology, School of Natural Sciences. Trinity College
Dublin, Dublin, Ireland

Research Assistant

5.2018 – 12.2018

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

Comparative Animal Physiology tutor

2017– 2018

Second Year undergraduate. School of BioSciences, the University
of Melbourne, Australia

Ecology in Changing Environments tutor

2016– 2018

Third Year undergraduate. School of BioSciences, the University
of Melbourne, Australia

Comparative Animal Physiology residential tutor

2017– 2018

University College, the University of Melbourne, Australia

First Year Chemistry residential tutor

8.2014 – 10.2014

St John's College, the University of Queensland Australia

First Year Biology tutor

2012

Science Learning Centre tutor, the Faculty of Science, the
University of Queensland, Australia

Peer Assisted Study Session leader: first year statistics

8.2012 – 10.2012

The Peer Assisted Study Session office and the School of
Mathematics and Physics, the University of Queensland Australia

Peer Assisted Study Session leader: first year ecology

2011 – 2012

The Peer Assisted Study Session office, the University of
Queensland Australia

Volunteer laboratory technician

3.2012 – 10.2012

Animal husbandry. White Evolutionary Physiology Laboratory, the
University of Queensland

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 05.10.2020

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

4. **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](https://doi.org/10.1098/rstb.2018.0547)

3. 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](https://doi.org/10.1111/1749-4877.12314)

2. 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](https://doi.org/10.1016/j.cois.2016.07.006)

1. **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](https://doi.org/10.1111/2041-210X.12589)

Research highlights

Google scholar: <https://scholar.google.com/citations?user=637pv-sAAAAJ&hl=en>

H-index: 4

Total citations: 39

- 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]
- 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]

Peer review

- 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

Research grants or awards

TOTAL: \$13 750 AUD

6.2018	Holsworth Wildlife Research Endowment Equity Trustees Charitable Foundation & the Ecological Society of Australia	\$2 500 AUD
12.2018	2nd runner up student presentation Australian and New Zealand Society for Comparative Physiology and Biochemistry, Australia	\$300 AUD
8.2018	Student Travel Grant Australian Entomological Society, Australia	\$500 AUD
2018	Science Abroad Travelling Scholarship Faculty of Science, the University of Melbourne, Australia	\$1 500 AUD
2018	FH Drummond Travel Award School of BioSciences, the University of Melbourne, Australia	\$950 AUD
2018	School of BioSciences Travelling Scholarship School of BioSciences, the University of Melbourne, Australia	\$1 500 AUD

6.2015	Holsworth Wildlife Research Endowment Equity Trustees Charitable Foundation	\$6 000 AUD
2013	Three Minute Thesis (3MT) People's Choice Winner The University of Queensland Undergraduate Research Conference	\$500 AUD

Other Awards and Scholarships

2018	Research Training Program Scholarship Australian Government	\$13 541 AUD
2017	Research Training Program Scholarship Australian Government	\$26 682 AUD
2017	Runners-up in the Sustainability Prize photo competition Graduate Student Association, the University of Melbourne	\$200 AUD
2016	Australian Postgraduate Award Australian Government	\$26 288 AUD
2015	Australian Postgraduate Award Australian Government	\$25 849 AUD
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 (BYU22SC01). 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). 3rd year undergraduate. Trinity College Dublin. Developed course lectures and practical material. Acting module co-coordinator. Adapted for remote delivery.
- **Lecturer & course development:** Animal Diversity II (ZOU330004). 3rd year undergraduate. Trinity College Dublin. Developed course lectures and practical material. Adapted for remote delivery.

2019

- **Lecturer & course development:** Statistics and computation for biologists (BYU22SC01). 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). 3rd year undergraduate. Trinity College Dublin. Developed course lectures and practical material. Acting module co-coordinator.
- **Lecturer & course development:** Animal Diversity II (ZOU330004). 3rd 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

2020 – many registered conferences cancelled/postponed

- *Grasshoppers have cute faces*
PostDoc Papers, Trinity College Dublin, Dublin, 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 spp.).*
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
2019 - present	Member: British Ecological Society & Irish Ecological Society
2018	Member: Royal Society of Victoria, Australia
2017 - Present	Member: Society for Experimental Biology
2015 - 2020	Member: Australian Entomological Society
2017 - 2018	President, BioSciences Postgraduate Society, the University of Melbourne
2016 - 2017	Vice President, BioSciences Postgraduate Society, the University of Melbourne

Community outreach and communication

1.2020	Guest interview with Newstalk radio, Ireland
2019	<i>Home and Away: Would a Rosella by any other name smell as sweet</i> (online 1 Nov). <i>Home and Away: Monotreme mistakes</i> (online 22 Nov). <i>Home and Away: Australian expats</i> (online 12 Dec). 3 part blog series for EcoEvo@TCD http://www.ecoevoblog.com
8.2018	<i>Big Ideas in Macrophysiology</i> . Report on the 2018 Animal Biology Satellite Meeting, Florence Italy. Society for Experimental Biology Magazine https://www.sebiology.org/digital-magazine/autumn-2018/#p=18
2016, 2017	Session Chair, BioSciences Postgrad Symposium, the University of Melbourne, Australia
2017/19	Victorian Biodiversity Conference Volunteer, Melbourne, Australia
2015/17/18	The University of Melbourne Open Day Volunteer, the University of Melbourne, Melbourne, Australia
2017	Blog post for Graduate Student Association, University of Melbourne on the biodiversity photo competition
2016	Novel applications of thermocyclers for characterising invertebrate thermal responses. Video for Methods in Ecology and Evolution. https://youtu.be/uXzEfvr_hoE

- 2015 *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 2015
- 2014 Brisbane Open House Volunteer, Brisbane Open House, Brisbane, Australia
- 2014 Student Chaperone for the *International Baccalaureate World Student Conference*, the University of Queensland, Australia
- 2012/14 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