

# CV

Jacinta D Kong

16 December 2020

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## 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
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## 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

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## Refereed journal articles

See [Publications](#)

- 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

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## Research highlights

[Google scholar](#)

H-index: 4 (GS)

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]

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
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## 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

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

2016

- Guest lecturer: 2nd year Comparative Animal Physiology, Uni Melbourne
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## Conference presentations and invited talks

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 (Vandiemena 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

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## 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
- 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

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## Community outreach and communication

- 2020 Guest interview with Newstalk radio, Ireland
- 2019 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).  
3 part blog series for [EcoEvo@TCD](http://www.ecoevoblog.com) <http://www.ecoevoblog.com>
- 2018 Big Ideas in Macrophysiology. 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](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
- 2015 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 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