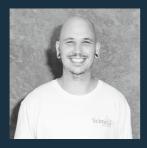
# **Dr Zac Wylde**Evolutionary Ecologist



- **C** 0416462673 **★** wyldescience.com **(** 08/05/1988

  - ☆ Zachariah Wylde in Dr Zac Wylde

#### **Profile**

By trade I am an evolutionary biologist, a field that is strongly underpinned by complex statistical reasoning and experimental design. I have a wealth of experience in writing formal scientific publications but am also passionate about data science. My research and teaching background has armed me with a thorough and data driven approach to conducting science in whatever capacity that might be. I am currently a postdoctoral researcher at UNSW working with Professor Russell Bonduriansky on nongenetic effects in *Folsomia candida*.

- Skilled in data cleaning, transformation and complex statistical analysis using R with over 8 years experience. During my professional career I have worked with interdisciplinary teams to wrangle, analyse, and visualise many different types of large experimental datasets. I have particularly strong experience in multi-level mixed models but have also worked with R markdown (created my own website) and online repositories (i.e., github).
- R programming course: Advanced, University of Sydney 2022.
- Well-developed organisational and written communication skills, demonstrated through the management of six interdisciplinary projects that have all resulted in quality publications.
- Strong oral communication skills with experience presenting at national and international conferences but also in science outreach to the public.
- Strong interpersonal skills having worked with diverse teams and stakeholders in academia but also in industry and hospitality (experience for hospitality not listed here but available upon request).

#### **Professional Experience**

**Postdoctoral Fellow,** *University of New South Wales* 03/2023 – present | Sydney, Australia

- Examining potential for nongenetic effects to accumulate over generations.
- Potential for rescue of negative maternal effects over multiple generations.
- Co supervision of two honours students.

### **Experimentalist,** *Scimita Ventures*

01/2022 – present | Sydney, Australia

- Responsible for the research, design, and implementation of experiments supporting the teams' efforts to rigorously test the feasibility and efficacy of solutions within our development pipeline.
- Collate, organise, and analyse data from experimental findings to communicate within our team and to external clients.
- Manage projects and time independently.

**Postdoctoral Researcher,** *Western Sydney University* ☑ 07/2021 – 01/2022 | Sydney, Australia

- Data analyses
- Preparation and writing of scientific publications
- Co-supervision of a Masters student

#### Experimentalist (fixed term contract),

Scimita Ventures 🛮

02/2021 - 07/2021 | Sydney, Australia

- Experience in agile operations
- Collaboration with various stakeholders including engineers, data scientists, and entrepreneurs.
- Technology research and development
- Experimental design, implementation & statistical analyses

**Postdoctoral Researcher,** *University of New South Wales* 12/2019 – 12/2020 | Sydney, Australia

- Employed by my PhD supervisor to conduct further experiments.
- Write up publications that were extensions from my PhD studies.

#### **Tutor & Lab demonstrator,**

University of New South Wales

02/2015 - 08/2019 | Sydney, Australia

- Taught several courses at multiple levels within the Biological Sciences:
  - Ecology, sustainability & environmental science
  - Evolutionary and physiological ecology
  - Ecology & sustainability
  - Field course & research techniques for Evolution

#### **Publications**

A comparison of two methods for estimating measurement repeatability in morphometric studies,

Ecology & Evolution ☑ 06/01/2021

An assay and comparison of repeatability for morphometric studies.

#### **Skills**

Experimental design and implementation,
Complex statistical analyses in R language,
Scientific peer review, Strong interpersonal skills,
Google cloud computing, Regression modelling,
Data visualisation, Agile practices,
Formal scientific publication, Writing of grant proposals,
Scientific outreach, Computer Aided Design, 3D printing

#### **Education**

#### PhD in Evolutionary Biology,

*University of New South Wales* 01/2015 – 02/2020 | Sydney, Australia

\*Thesis: The role of the environment in the evolution of reproductive strategies

#### Master of Science in Biology (First Class Honours),

University of Auckland

01/2013 - 05/2014 | Auckland, New Zealand

\*Thesis: The community ecology, behaviour and biology of New Zealand carrion flies

#### Postgraduate Diploma Biological Sciences (Merit),

University of Auckland

02/2012 – 02/2013 | Auckland, New Zealand Advanced study and specialisation in biological sciences

#### Bachelor of Science (Major in Biology),

University of Auckland 02/2007 – 03/2012 | Auckland, New Zealand

#### References

**Available Upon Request** 

## Condition dependence of phenotypic integration and the evolvability of genitalic traits in a neriid fly,

Biology Letters 🛮

26/02/2020

An analyses of morphological integration and the evolvability of traits.

## Effects of condition and sperm competition risk on sperm allocation and storage in neriid flies,

Behavioural Ecology ☑ 01/02/2020

An assay of reproductive allocation strategies and the description of a new technique using confocal microscopy to track the competing ejaculates in a fly.

## Perceived dominance status affects chemical signalling in the neriid fly Telostylinus angusticollis,

Animal Behaviour ☑

01/12/2019

A manipulation of male perceived social status and the chemical analysis of signalling pheromones.

## Parental breeding age effects on descendants' longevity interact over 2 generations in matrilines and patrilines, *PLOS Biology* ☑

25/11/2019

A landmark study examining the nongenetic inheritance patterns of lifespan over multiple generations

## Ontogenetic timing as a condition-dependent life history trait: High-condition males develop quickly, peak early, and age fast, Evolution ☑

09/01/2017

A collaboration looking at developmental timing and life-history.

#### **Scientific Outreach**

Boiling point podcast; "Fun with bedbugs."

Boiling point podcast; "First generation academics and studying on a budget - We need to talk!" ☑

Registered expert on the panel for Metafact, Platform where the public can ask experts to verify facts or claims to help stop the spread of misinformation

Boiling point podcast; August 9th 2020. "Age is a bitch." ☑

The Conversation; August 11th 2020. "Can ageing really be 'treated' or 'cured'? An evolutionary biologist explains." ☑

Australasian Evolution Society blog; April 11th 2016. "The ties that bind; Grand-parental qualities affect the lifespan of descendants." ☑