Dr. Fonti Kar (she/her)

Women in Data Science Worldwide

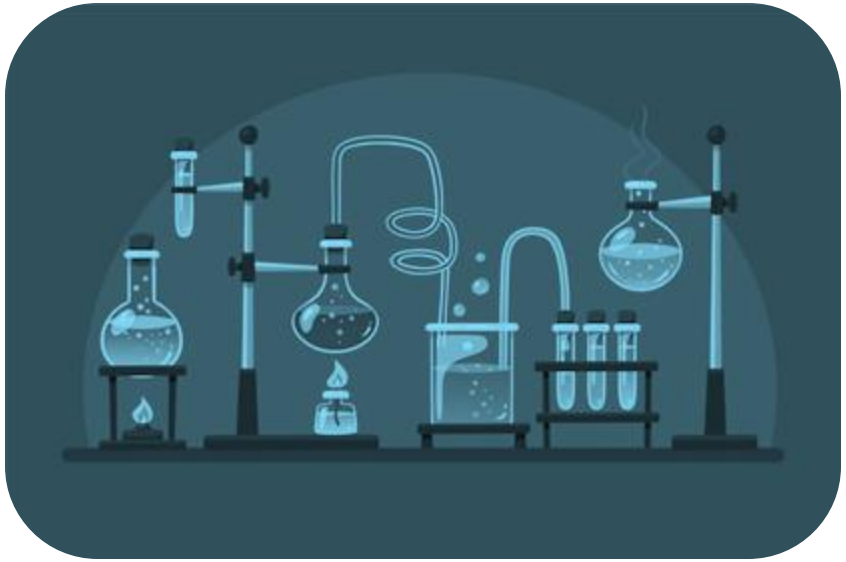
@ Australian Data Science Network

I never thought I'd be a data scientist...

2024

it takes a village

- mum-run classes
  (Chinese, English, Math and Art)
- fostered **curiosity** and **interest** across all subjects
- subjects didn't feel "**gendered**"



high school

The Rotary National Science + Technology Forum

"geek camp"

- patient Chemistry teacher
- opportunities for underrepresented people to explore STEM subjects early on

undergrad

follow your interests

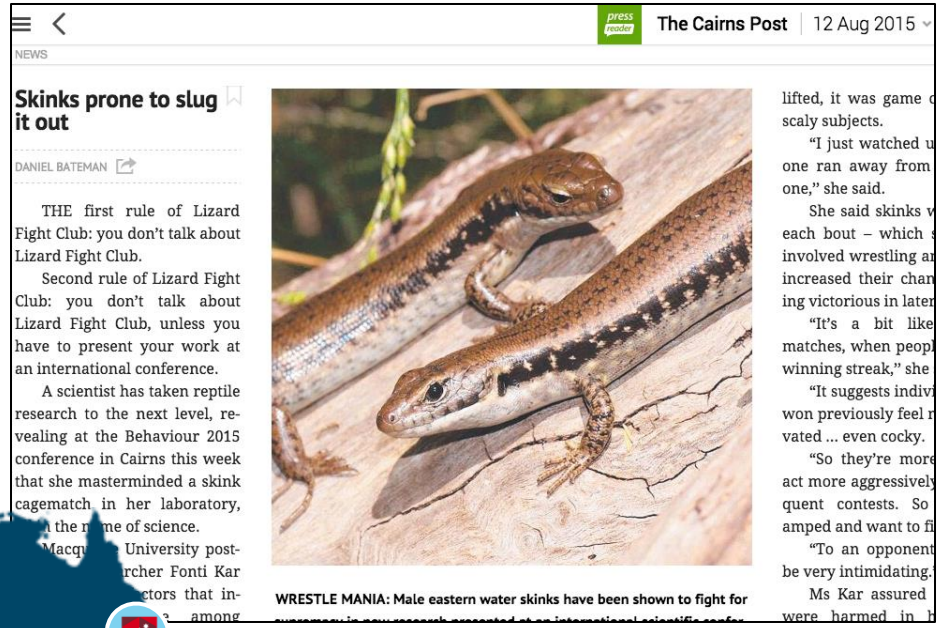
- intro to **R programming**
- biology + statistics
- inspiring instructor/mentors

"work with nice people"

masters

"work with nice people"

- behavioural ecology + animal cognition
- R stats + git



press reader The Cairns Post | 12 Aug 2015

NEWS

Skinks prone to slug it out

DANIEL BATEMAN

THE first rule of Lizard Fight Club: you don't talk about Lizard Fight Club.

Second rule of Lizard Fight Club: you don't talk about Lizard Fight Club, unless you have to present your work at an international conference.

A scientist has taken reptile research to the next level, revealing at the Behaviour 2015 conference in Cairns this week that she masterminded a skink cagematch in her laboratory, [illegible] the name of science.

[illegible] Macqu[illegible] University post-[illegible]rcher Fonti Kar [illegible]ctors that in- [illegible] among

WRESTLE MANIA: Male eastern water skinks have been shown to fight for [illegible]

lifted, it was game [illegible] scaly subjects.

"I just watched u[illegible] one ran away from [illegible] one," she said.

She said skinks [illegible] each bout – which [illegible] involved wrestling a[illegible] increased their chan[illegible] ing victorious in later [illegible]

"It's a bit like [illegible] matches, when peopl[illegible] winning streak," she [illegible]

"It suggests indiv[illegible] won previously feel r[illegible] vated ... even cocky.

"So they're more [illegible] act more aggressively [illegible] quent contests. So [illegible] amped and want to fi[illegible]

"To an opponent [illegible] be very intimidating."

Ms Kar assured [illegible] were harmed in h[illegible]

masters

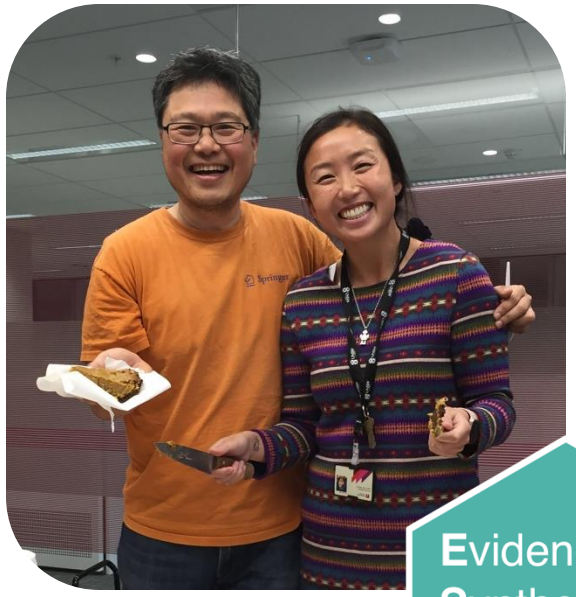
"work with nice people"

- behavioural ecology + animal cognition
- R programming + git

phd

try everything

- major leveling up 📈
- evolutionary biology + ecophysiology



Evidence Synthesis Hackathon
eshackathon.org

postdoc

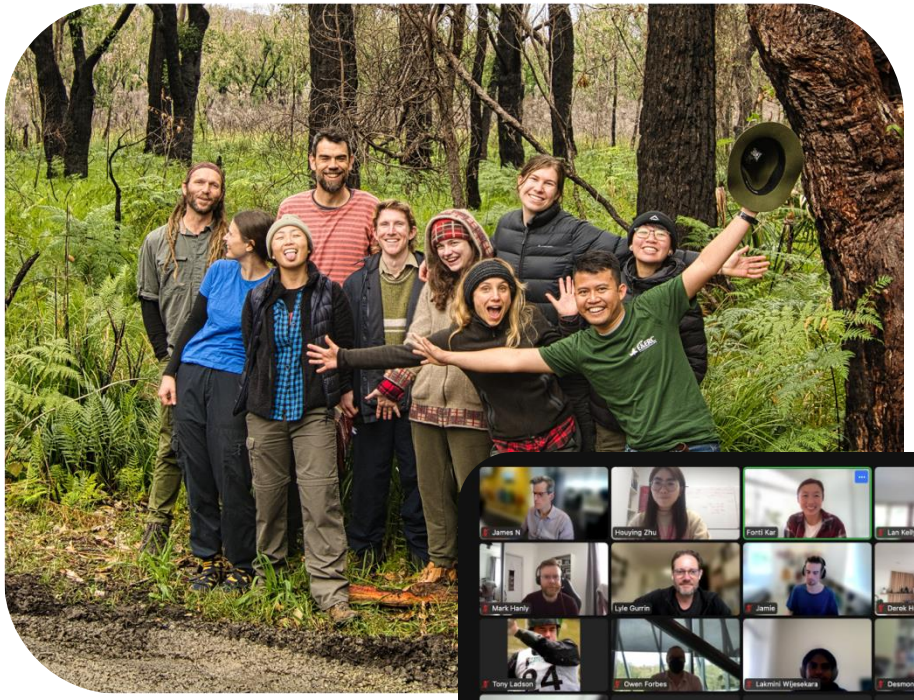
- bushfires +COVID-19

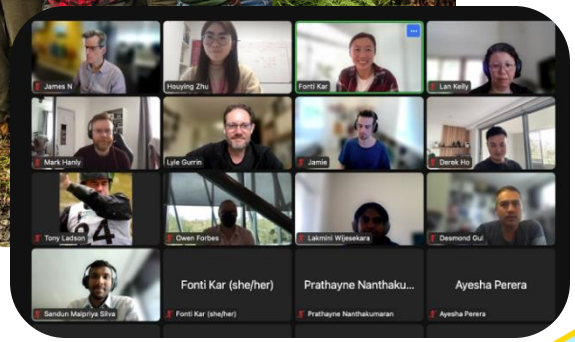
trust your ability

postdoc

trust your ability

- bushfires + COVID-19
- pivot to R programming

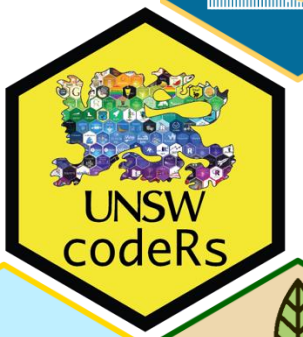


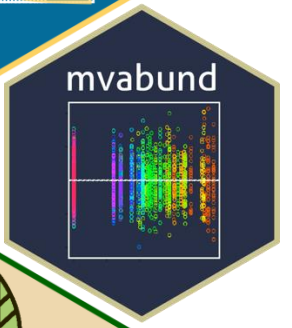


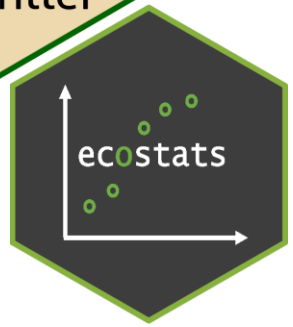
postdoc

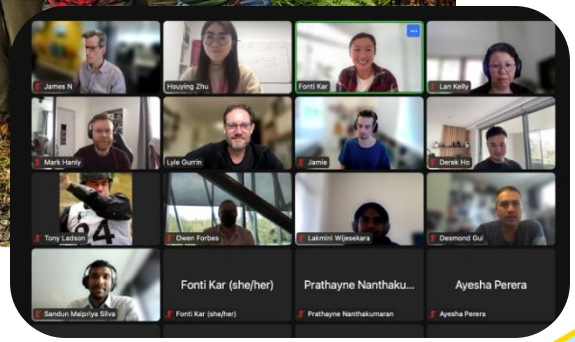
trust your ability

- bushfires +COVID-19
- pivot to R programming
- package/library development









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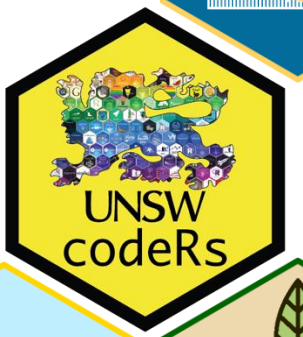
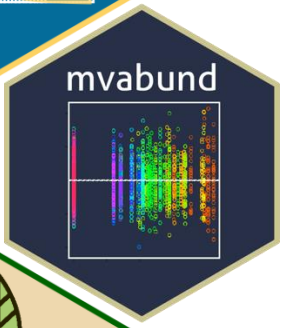
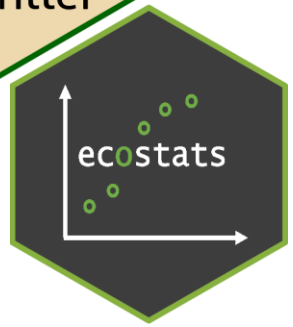






industry

teamwork dreamwork

- fully remote
- solving data science problems
- conservation biology

Quantifying species range and overlap with fire-burned areas using concave hulls

Calculating range overlap is an efficient way to estimate the impact of natural disasters on biodiversity. Here we'll use curated datasets to compute concave hulls to visualise the spatial distribution of *Apidae* (Bees) and *Daviesia* (Bitterpeas) and their overlap with burned areas of the Black Summer fires of 2019-2020.

EUKARYOTA | ANIMALIA | PLANTAE | SUMMARIES | MAPS | R

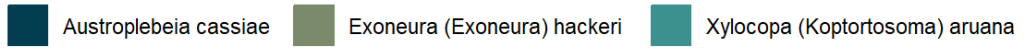
Author

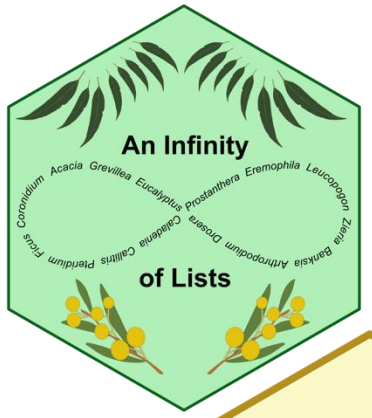
Fonti Kar
Margot Schneider

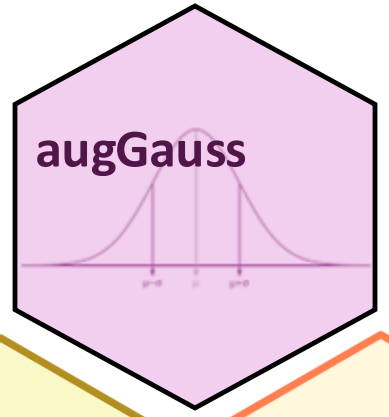
Date

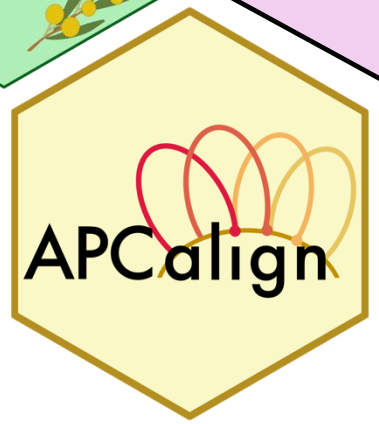
11 April 2023

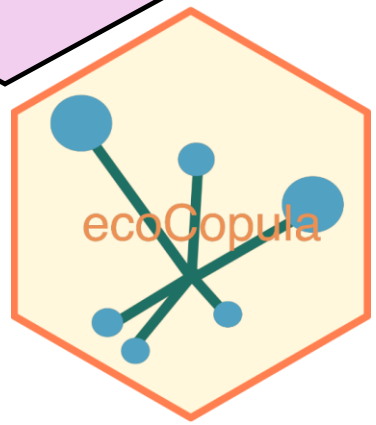
INVERTEBRATES AUSTRALIA









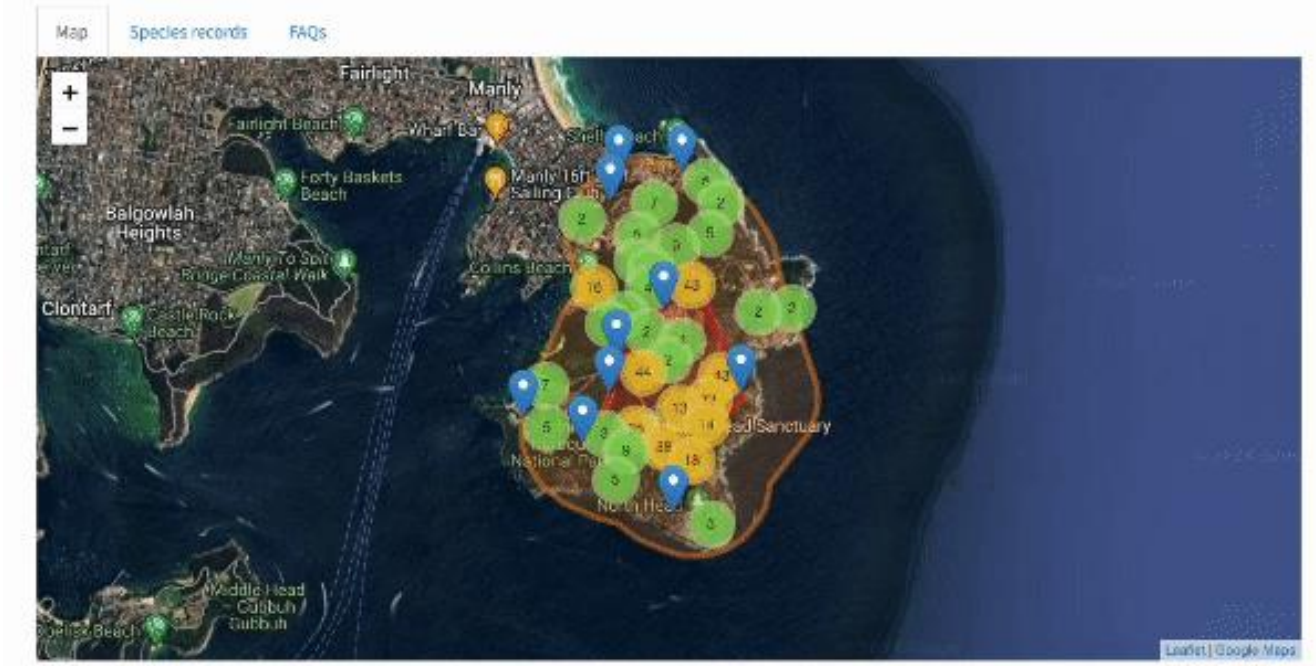


- collaborate with more women 🤷‍♀️ 🤷‍♀️ 🤷‍♀️
- R packages + Shiny applications
- responsibilities 📈

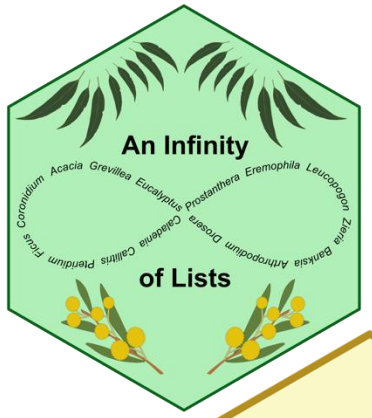
by day 🌞

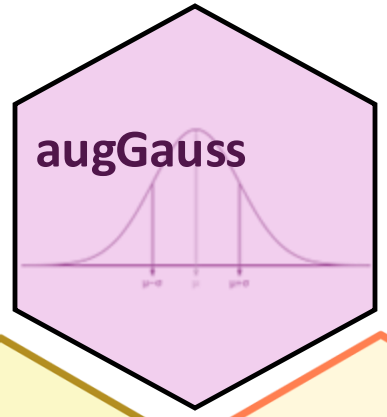
postdoc 2.0

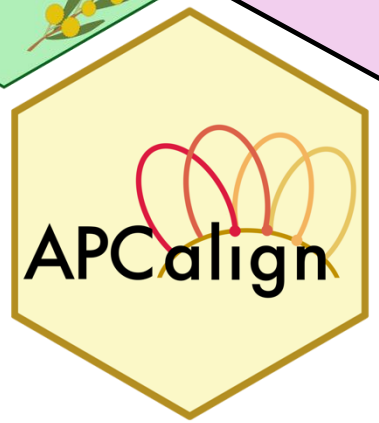
bet on yourself

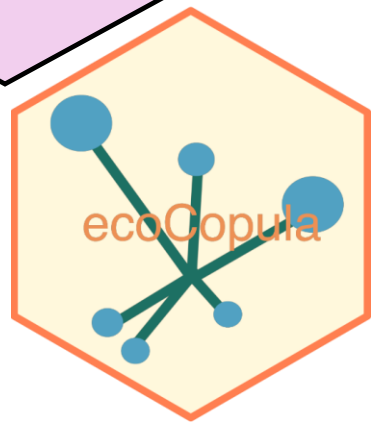


There have been 382 species observed (247 genera; 101 families) with 143 collections of 59 species and 1898 photographic or audio records of 370 species. Of the 382 species observed, 280 are considered native to Australia.









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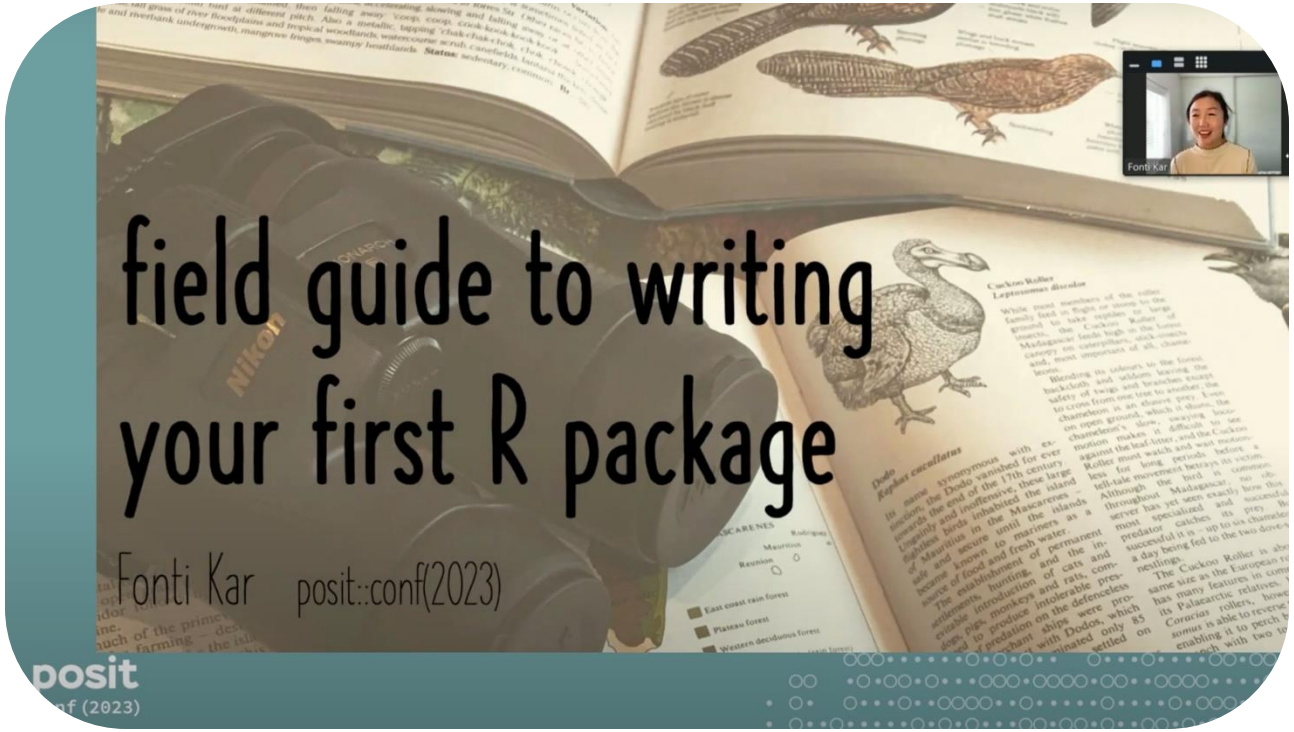
- R packages + Shiny applications
- responsibilities 📈
- international data science conferences

by day 🌞

postdoc 2.0

bet on yourself



- leading a small team
- work with passionate people
- contribute to something good

by night

analytics manager

do mildly scary things

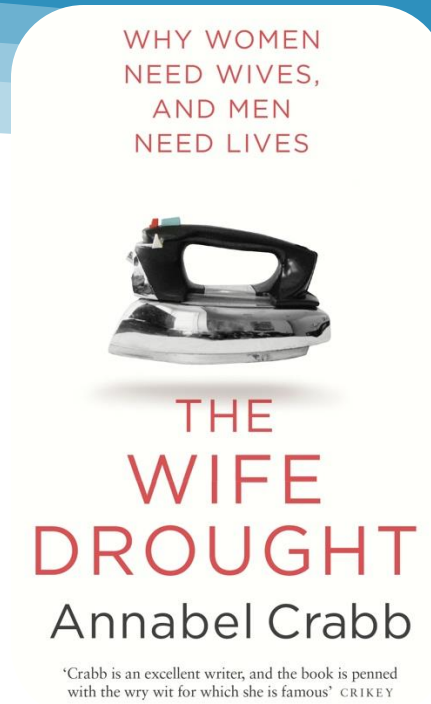
INVERTEBRATES AUSTRALIA

what are our wins?

- celebrating + showcasing diversity
- increased public awareness
- increased support for women

what are works-in-progress?

- address the "wife drought"
- support needs to be diversified



thank you!

Women in Data Science Worldwide

AUSTRALIAN DATA SCIENCE NETWORK

UNSW SYDNEY