Expression of interest for post-doctoral data scientist: comparison of hive sensor technologies for the evaluation of honeybee colony health. Supervised by Prof Andrew Barron and Dr Theo Colin, Macquarie University, Sydney.

We invite expressions of interest for a post-doctoral position to determine the accuracy, cost-benefits and usefulness of hive sensor technologies for commercial beekeeping.

# About the project:

Evaluating the health of bee colonies is crucial to predict pollination efficiency and prevent colony losses. Traditional methods beekeepers rely on to evaluate hive health are highly labour intensive, and demand opening hives and disturbing the bees. A range of sensor based tools have come onto the market promising different types of data on bee hives, such as weight and internal temperature. We need to objectively test these methods to explore the quality of the data and establish what it shows about hive health. Our Objective is to compare different commercially available hive sensor systems against our gold-standard laboratory methods of monitoring honey bee colony health.

# About the applicant:

Candidates should have a background in data science, in particular those specialised in the analysis of large datasets. Demonstrated experience with analysing large, complex empirical datasets is essential. Beekeeping experience and an interest in apiculture is desirable project.

# About the position:

The position will be based at Macquarie University (<https://www.mq.edu.au/>), in the greater Sydney Region, starting in December 2024. Salary will be at the Australian Academic Level A or B scale, depending on previous experience. A successful post-doctoral candidate will join a large and dynamic team of researchers comprising other post-doctoral researchers and PhD students focusing on social insects, cognition, neuroscience and bee health. Project leads for this project are Pr. Andrew Barron (<https://scholar.google.com/citations?user=ah1jBk4AAAAJ&hl=en>), an experienced cognition and bee health researcher and Dr Theotime Colin (<https://scholar.google.com/citations?user=VqbyR_4AAAAJ&hl=en>). The position is offered for one year initially, with an option to extend pending performance review.

Potential candidates are invited to send an expression of interest in the form of a cover letter detailing relevant experiences and a CV to Pr. Andrew Barron: andrew.barron@mq.edu.au