POSITION DESCRIPTION

PhD Opportunity in Psychology / Computational Neuroscience

Expanding the body perception box in adolescent girls

Cairnmillar Institute, Melbourne

The Project

Do you want to work on a project that combines psychology, neuroscience, and virtual reality (VR) to make a real difference in young people's lives? We are seeking an exceptional PhD candidate to fill a fully funded PhD student position as part of an exciting international project funded by the Tiny Blue Dot Foundation. The project will explore how the brain processes body image - and how these processes can go wrong in conditions involving body image disturbance (BID). You'll combine novel methods such as computational modelling of experimental tasks, and state-of-the-art brain models (based upon predictive coding, the Bayesian brain) to better understand how young people see and feel about their bodies. Then, you'll help develop a new VR-based body illusion (like stepping into a full-body avatar) to directly target these brain mechanisms and potentially improve BID.

What You'll Be Doing

- Designing and running experiments with adolescent girls.
- Helping create and test a VR-based intervention for body image.
- Learning how to use advanced brain-inspired models to analyse behaviour.
- Working with a Participatory Advisory Panel (PAP) of young people with lived experience, making sure the research is grounded and relevant.
- Writing up your findings as a thesis, peer-reviewed papers, sharing at conferences, and developing your academic career.

Who We're Looking For

You don't need to be an expert in VR or computational modelling already - we'll support you to build those skills. As essentials, you should have:

- A strong Honours or Master's degree (or equivalent) in psychology, cognitive neuroscience, computer science, or a related area.
- A real interest in self-perception, body image, mental health, or how the brain works.
- Curiosity, motivation, and a willingness to learn new approaches.
- Good research and communication skills.

- Experience of working independently and as part of an interdisciplinary team.

It's a bonus (but not essential) if you have:

- Experience with VR or programming (Python, R, MATLAB).
- Experience working with young people or clinical groups.
- Past publications on a related topic in peer-reviewed journals.

The Research Environment

You'll be based at the Cairnmillar Institute in Melbourne, and collaborating closely with world-leading experts at University of Melbourne, University College London (UCL) and the University of York.

The Cairnmillar Institute (CMI) is one of Australia's largest higher education providers specialising in psychology, counselling, and psychotherapy. We combine a strong tradition of professional training with a growing focus on research excellence in mental health and wellbeing. CMI has a vibrant community of staff and students, and a busy in-house psychology clinic that provides real-world opportunities for applied and translational research. Our research strengths include embodied neuroscience, body image and eating disorders, interoception, clinical psychology, and innovative therapies.

The project involves collaboration with researchers at the University of Melbourne, University College London (UCL) and the University of York. These world-leading institutions bring exceptional expertise in computational psychiatry, neuroscience, and body image research, offering an outstanding environment for doctoral researcher development.

You'll work as part of a dedicated project team, including:

- Two postdoctoral researchers.
- A supportive PhD supervision team.
- Local and international collaborators.

Details

- **Start date:** Early 2026 (flexible)
- **Duration:** 3–4 years max (full-time only)

- **Funding:** Full tuition waiver (up to 4 years – approximately AUD $31,752.00 total domestic fee waiver) and living allowance stipend (currently AUD $39,655 per year pro rata for 2026) provided for up to 3 years.

How to Apply

Send us:

1. A cover letter outlining your research interests and suitability for this project (addressing the essential and desirable aspects mentioned above).
2. Academic transcripts and a CV including details of academic qualifications and research experience.
3. Contact details of at least two referees able to comment on your academic and professional abilities (these need not be the same person).

For more information or an informal discussion contact:
Associate Professor Paul Jenkinson (Project Lead) – paul.jenkinson@cairnmillar.edu.au