



Research Fellow – Victorian Heart Hospital

Department/Unit	Design
Faculty/Division	Art, Design & Architecture
Classification	Level B
Work location	Monash Medical Centre, Clayton campus
Date document created or updated	April 2018

Organisational Context

Everyone needs a platform to launch a satisfying career. At Monash, we give you the space and support to take your career in all kinds of exciting new directions. You'll have access to quality research, infrastructure and learning facilities, opportunities to collaborate internationally, as well as the grants you'll need to publish your work. We're a university full of energetic and enthusiastic minds, driven to challenge what's expected, expand what we know, and learn from other inspiring, empowering thinkers. Discover more at www.monash.edu.

The Faculty of Art, Design & Architecture

Monash Art Design and Architecture (MADA) is an open, connected community of creative thinkers, makers and professional practitioners who tackle urgent issues together and with others. We are dissolving the boundaries between disciplines to create new space to imagine real change and envisage the possibilities of the future. We place connection and creativity at the centre of teaching and research, and deploy this as a force for change in the world.

In Melbourne, art, design and architecture are leading influences on the city's internationally recognised cultural dynamism, exhibited through significant collecting and exhibiting institutions, commercial galleries and innovative cultural production. Within this rich milieu, MADA is a vibrant centre of rigorous creative practice, encompassing architecture, design and fine art integrated with traditional scholarship. MADA advocates the essential role of creative practice in quality of life and proposes and develops models for future communities that are culturally enriched and environmentally sustainable.

The faculty comprises 80 academic faculty members and casual lecturers, 42 professional staff and more than 1,500 students. It offers vibrant and creative programs across core subject areas: Fine Art, Visual Arts, Art History and Curating, Communication Design, Industrial Design, Architecture, Interior Architecture and Urban Planning & Design (forthcoming 2018/19). Disciplines are offered as single or double undergraduate, masters by coursework, or research degrees. MADA graduates have a sense of purpose, a global outlook, and the skills and confidence to make positive change – to their own lives, and to the lives of those around them. To learn more about MADA, please visit our website: monash.edu/mada.

The department of design is reimagining its long history in the fields of industrial, interior and communication design to forge new student pathways, promote play-based learning, and drive interdisciplinary research collaborations. This new trajectory breaks open emergent areas of practice that run between traditional design disciplines including the collaborative fields of service, interaction, game and experience design. Framed by the capacity of design to amplify the impact of research, the department's practice-based research approach is grounded by collaborations with faculties across Monash, specifically through partnerships with Medicine, Health Services, Information Technology, Engineering, Business and Arts.

This position is part of an exciting new initiative between the Faculty of IT, MADA and the Faculty of Medicine to assemble a multi-disciplinary team of Design, IT and Clinical researchers, expert in the fields of UX/UI Design, IT and Medicine. The focus of collaboration is on human-medical system interfaces, developing and designing unique control methods for clinicians working with medical imaging systems in the 'no touch' sterile environments.

This collaboration is a first step towards the expectation of the state of the art facility showcasing translated research from Monash University that is being built in the Victoria Heart Hospital that is scheduled to complete in 2020. To meet the timeframe, this core team of researchers is being assembled and located at the Monash Medical Centre to start working with stakeholders in cardiology to identify challenges to inform innovation in the delivery timeframe. This will allow the teams involved to learn into the space, understand challenges, issues, and potential while starting the iterative innovation cycle and proof points of success.

Position Purpose

A Level B research-only academic is expected to carry out independent and/or team research within the field in which they are appointed and to carry out activities to develop their research expertise relevant to the particular field of research.

The Design Research Fellow, appointed by the Faculty of Art, Design & Architecture, will be focused on creating compelling user experience and Interface designs informed by clinical needs, context, emerging healthcare trends and technology innovations to ensure the solutions the team proposes are compelling and support the high level objectives of the clinical staff in the above mentioned cardiac care contexts. They will also work closely and in direct collaboration with the equivalent post-doctoral appointee undertaking software engineering research. Both of these appointees will work under the direct supervision of the key clinical staff, whilst the overarching direction of the research will be governed by a specialist steering committee.

The initiative acts a stepping stone for embedding post-doctoral design, IT and engineering within a busy clinical environment. The expectation is that as the embedded individuals become familiar with clinical cardiology practice and our ongoing translational research interests. The integration of diverse disciplines within the clinical environment should also lead to the emergence of creative methods for use of technology within the healthcare setting. The role will be primarily based at Monash Medical Centre (MMC), Clayton.

Reporting Line: The position reports to Prof James Cameron. Monash Heart (at MMC Clayton)

Supervisory responsibilities: Not applicable

Financial delegation: Not applicable

Budget responsibilities: Not applicable

Key Responsibilities

Specific duties required of a Level B research-only academic may include:

1. Ethnographic research to uncover insights to drive user (centred) experience design
2. Develop overviews using design methodology to understand user experience, context of use, technology drivers to support research that creates better experience that fulfil and anticipate real user and clinical needs.
3. Literature reviews
4. Facilitate workshops
5. Development of prototypes and visualisations
6. User and other testing of developed designs
7. Documentation of design research, and of testing and research outcomes
8. Writing of reports, presentations and academic papers
9. Delivery of verbal presentations
10. Writing additional grant applications

Key Selection Criteria

Education/Qualifications

1. The appointee will have:
 - A doctoral qualification in the relevant discipline area or equivalent qualifications or research experience

Knowledge and Skills

2. Experience in UX/UI, including with interdisciplinary and industry collaboration, translational research coordination, solution development for testing
3. Three years' of relevant industry experience. Experience in the medical related field, human medical system interfaces, developing and designing control methods for clinicians working with medical imaging systems, would be highly regarded
4. Understanding of, expertise in and capacity to further investigate research for the design of gestural interfaces and other 'no touch' digital technologies
5. The ability to work and as part of an inter-disciplinary research team, positively contributing to meetings, committees and forums and working in a collegiate manner with other staff in the workplace
6. High level organisational skills, with demonstrated capacity to establish and achieve goals both independently and in a team context
7. Experience in successfully undertaking co-design methods appropriate for engaging end users and other stakeholders in the process of designing
8. Capability in negotiating the integration of design with appropriate interdisciplinary research methods to lead to evidence-based research and translational research outcomes
9. Experience in generating intellectual property in the form of utility and design patents within the medical device clinical field
10. A willingness to comply with relevant Human Research Ethics Committee (HREC) and patient confidentiality requirements

Other Job-Related Information

- Travel to other campuses of the University may be required
- There may be a requirement to work additional hours from time to time
- There may be peak periods of work during which taking of leave may be restricted

Legal Compliance

Ensure you are aware of and adhere to legislation and university policy relevant to the duties undertaken, including: Equal Employment Opportunity, supporting equity and fairness; Occupational Health and Safety, supporting a safe workplace; Conflict of Interest (including Conflict of Interest in Research); Paid Outside Work; Privacy; Research Conduct; and Staff/Student Relationships.