

Research Role Profile		
Job Title:	tle: Research Fellow A in Digital Health Technology, Brain Function, Sleep and Circadian Rhythms in Dementia	
Responsible to:	Head of research group, or principal investigator	
Responsible for:	Not applicable	

Job Summary and Purpose:

To undertake research in accordance with the specified research project(s) under the supervision of the principal investigator.

Main Responsibilities/Activities

To undertake a range of research activities within a specified research area, assuming responsibility for specific areas of projects and making use of new research techniques and methods, in consultation with the research award holder or supervisor. This may include fieldwork, interviews, laboratory experimentation, critical evaluation and interpretation, computer-based data analysis and evaluation or library research.

Using initiative and creativity to identify areas for research develop new research methods and extend the research portfolio. Analysing and interpreting results of own research. Write up results and prepare papers for submission to appropriate journals and conferences, and other outputs as required and/or appropriate. Attend appropriate conferences for the purpose of disseminating research results of personal development. The post holder may also contribute to writing bids for research grants and will contribute to collaborative decision making with colleagues in areas of research.

Continually to update knowledge and develop skills and translate knowledge of advances in the area into research activity.

To plan and manage own research activity in collaboration with others. To carry out administrative tasks associated with specified research funding, for example risk assessment of research activities, organisation of project meetings and documentation. Implementation of procedures required to ensure accurate and timely formal reporting and financial control.

To contribute to teaching in the Faculty by carrying out student supervision and/or demonstrating within the post holder's area of expertise and under the direct guidance of a member of departmental academic staff, as appropriate.

The post holder may occasionally be required to supervise more junior research staff.



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Person Specification

The post holder must have:

A doctoral degree in a relevant discipline (although individuals who have almost completed a doctoral degree may be appointed). Consideration may also be given to individuals who do not hold a doctoral degree but have required skills based on a number of years experience in specified / relevant fields

The post holder will have authority over some aspects of project work and must be capable of providing academic judgement, offering original and creative thoughts and be able to interpret and analyse results.

Relationships and Contacts

Direct responsibility to the principal investigator or academic supervisor. The post holder may be asked to serve on a relevant Faculty committee. There may be additional reporting and liaison responsibilities to external funding bodies or sponsors. The post holder may work on original research tasks with colleagues in other institutions.

Special Requirements

To be available to participate in fieldwork as required by the specified research project

All staff are expected to:

- Positively support equality of opportunity and equity of treatment to colleagues and students in accordance with the University of Surrey Equal Opportunities policy.
- Help maintain a safe working environment by:
 - Attending training in Health and Safety requirements as necessary, both on appointment and as changes in duties and techniques demand
 - Following local codes of safe working practices and the University of Surrey Health and Safety Policy
- Undertake such other duties within the scope of the post as may be requested by your Manager.



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Addendum

This document provides additional information relating to both specific aspects of the post/faculty and any post specific person specification criteria. The information contained within this document should always be read in conjunction with the accompanying generic Job Purpose.

Job Title: Research Fellow A in Digital Health Technology, Waking Function, Sleep and Circadian Rhythms in Dementia

Background Information/Relationships

This Research Fellow post is funded by the UK Dementia Research Institute (UKDRI principally funded by the UK Medical Research Council. The UK DRI mission is to find new ways to diagnose, treat, prevent and care for people living with dementia.

The post is located within the Surrey Sleep Research Centre (SSRC) at the University of Surrey, led by Prof Derk-Jan Dijk. The SSRC conducts multidisciplinary research on the function of sleep and circadian rhythms using a wide range of techniques and methodologies including novel digital health technologies, advanced data analysis, mathematical modelling and machine learning approaches.

The SSRC undertakes a wide range of research studies across the 'bench to bedside' spectrum. The overall research theme of the SSRC is regulation and function of sleep and circadian rhythms. The research is enabled by our excellent clinical and support staff and state-of-the art clinical and biomedical research facilities.

This project focuses on the application of digital health technology to study the contribution of sleep and circadian disturbance to brain function, neuropsychiatric symptoms and behaviour in people living with dementia. The postholder will be responsible for developing or evaluating and implementing technology for longitudinal assessment in the home environment of people living with dementia. The postholder will contribute to all aspects of the research project, from methodology development, data acquisition to data analysis. The postholder will liaise with researchers within the SSRC, the School of Mathematics & Physics and tha AI institute, as well as the wider Care-Research & Technology program.

Person Specification

This section describes the sum total of knowledge, experience & competence required by the post holder that is necessary for standard acceptable performance in carrying out this role. This is in addition to the criteria contained within the accompanying generic Job Purpose.

Qualifications and Professional Memberships	Essential/ Desirable
A higher research degree (PhD) in a relevant subject	Essential



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Technical Competencies (Experience and Knowledge) This section contains the level of competency required to carry out the role (please refer to the competency framework for clarification where needed and the Job Families Booklet).	Essential/ Desirable
Experience of technology/device evaluation and implementation to assess brain function	Essential
Significant analytical skills, including programming and comprehensive data analysis approaches	Essential
Excellent written and verbal communication skills with an ability to write project deliverables and give presentations on the completed work	Essential
Willing to participate in data acquisition	Essential
Experience of data acquisition in humans	Desirable

Key Responsibilities

This document is not designed to be a list of all tasks undertaken but an outline record of any faculty/post specific responsibilities. This should be read in conjunction with those contained within the accompanying generic Job Purpose.

- 1. Evaluate or develop and implement new technologies/tools for the longitudinal assessment of brain function, symptoms and behaviour in dementia.
- 2. Analyse data collected with these technologies and sleep and circadian rhythm data to understand their interrelationship.
- 3. Prepare regular internal project reports and contribute to the completion of project deliverable reports
- 4. Contribute to data acquisition.
- 5. Report research results at national and international scientific meetings
- 6. Attend face-to-face meetings with other members of the Imperial-Surrey consortium
- N.B. The above list is not exhaustive.