School of Architecture, Design and Interiors (SADI)

Title: Re-imagining Rural Healthcare: Digitally enabled design of services and products

Director of Studies: Drummond Masterton

Project details:

The Smart Design Research Centre at Falmouth University invites applications for a three-year full-time Doctoral studentship, to undertake practice-led research into the review and development of new products, systems and services to improve rural healthcare.

Healthcare in the United Kingdom is in need of new models of delivery and innovation in order to respond to pressures from an increasing volume and complexity of care needs. Rural contexts add specific healthcare challenges beyond that of the broader UK and Cornwall is no exception. The challenges of remote distributed communities, an ageing population, financial degradation and an underdeveloped transport network place great reliance both on local councils and unpaid carers.

As one of the first Counties in the UK to benefit from superfast broadband, Cornwall has great opportunities and digital infrastructure to develop innovative technology driven solutions that provide better access to healthcare networks and new models of direct delivery.

A combination of User Centered Design methods with digital skills in prototyping and/or 3D Computer Aided Design and 3D printing will enable the candidate to develop practice-based experiments that test and inform the research questions of the study.

Research questions might address: the ways in which additive manufacturing could provide rapid, bespoke aid solutions to enable prolonged independence; the role and development of user data-driven pre-emptive technologies, which may offer ways of increasing quality of life; how to provide mental health care services in sparsely populated areas.

Based in the School of Architecture, Design and Interiors at Falmouth University, the successful applicant will be part of a team of researchers currently working in the area of sustainable product design, multi-generational living and additive manufacturing. We expect research students to take a full and active role in the Research Centre and School, including taking part in regular workshops, conferences and seminars.

The Smart Design Research Centre has a track record in developing products to market in the healthcare sector, staff are currently contributing to the university's development of a multi-generational living project to facilitate prolonged independence. The Re-imagining Rural Healthcare PhD study will contribute transferable knowledge and capacity to this project.

The studentship commences September 2017. Knowledge and experience of 3D Computer Aided Design and 3D printing technologies will be an advantage. The PhD candidate will be

given freedom to develop his/her own dissertation topic within the wider remit of this project.

Applicants will be expected to demonstrate at interview:

- imaginative and viable preliminary ideas for research into this subject area
- an appreciation of the nature of PhD study and of both independent and collaborative research
- clear motivation for undertaking PhD study in Falmouth in this subject area
- evidence that you have, or can develop, the skills required to start the proposed research

For an informal discussion about the studentship, please email drummond.masterton@falmouth.ac.uk. For general enquiries, please contact Jemma Julian, Research and Development Support Officer via email at research@falmouth.ac.uk or by phone on 01326 255831.