University of Manchester Research Institute (UMRI) Pump Priming Programme

Funded Proposals (2012)

Strengthening the Capacity for Archaeological Science at Manchester

Funding to support initiatives which will secure funding streams to support the costs of establishing and running a Centre for Archaeological Science.

Towards a rational design of formulation screens using peptide-based inhibitors of non-specific protein self association

Funding to meet the immediate need for novel approaches to stabilizing protein solutions for the next generation of therapeutics. The main aim of this work is to develop a toolkit based on rational design of small peptides as stabilization agents to be used in protein formulations.

Building Interdiscipliniarity in Attitude Research

Funding to foster interdisciplinary engagement, debate and research on attitudes which will also trial a new approach to building interdisciplinarity whilst doing research. By connecting and building interdisciplinary capacity the feasibility of bidding for an Attitudes research centre will be assessed.

Establishing the University of Manchester Campus as a Living Lab for Sustainability

Funding to develop the UoM campus as a living lab for energy and sustainability research

Design for Wellbeing: Ageing and Mobility in the Built Environment

Funding to bring together and build a strong, multi-disciplinary research team to lay the foundations for developing a large grant application in the area of "Design for Wellbeing". Ultimately, the research vision is to investigate design interventions for ageing, mobility and wellbeing that radically integrate the influences of city-wide processes on neighbourhood, street and home environments.

Automated breast cancer screening:

Funding for an interdisciplinary pilot study bringing together chemical imaging, cancer pathology and machine learning to produce a next generation healthcare technology.

BECKI: Building an online Bio-health Expertise Community: enhancing Knowledge exchange to promote Interdisciplinary Research

Funding to develop a web-based descriptive 'map' of bio-health researchers with computational/informatics expertise within the University. The aim is to help researchers enhance the quality and impact of their research by sign-posting them to potential interdisciplinary collaborators with analytical skills matching their project requirements.

Multidisciplinary Approach to Pleistocene Bone Taphonomy on Cayman Brac

Funding to support an interdisciplinary research team from Palaeontology (SEAES), Materials Science, MACE and the Faculty of Life Sciences to travel and to collect samples from a recently discovered Pleistoceneage (~120,000 year old) vertebrate assemblage from a cave deposit on Cayman Brac. The fossil material will immediately open up novel areas of research.

Multi-functional aptamer nano-biosensors: self-assembling peptidyl-oligonucleotide hydrogels for potential application in diagnostics and biomedicine

Funding to obtain proof-of-principle data towards the design and fabrication of novel DNA-aptamer based nano-biosensors using self-assembling peptidyloligonucleotide conjugates for the detection of (i) genetic abnormalities (at DNA level) as well as (ii) gene-expression profiling (at mRNA level) for potential application in molecular diagnostics and biomedicine.

Fostering Interdisciplinary Research building upon synergies in Water-Food-Energy

Funding to build momentum around the water@manchester and food@manchester communities towards developing interdisciplinary research proposals that can take a more systemic approach to addressing today's grand challenges.

Interdisciplinary Collaboration on Graphene Research and Innovation Systems

Funding to support a new interdisciplinary collaboration between the Manchester Institute of Innovation Research and the National Graphene Institute to explore research and practice interests related to graphene research and innovation.

Joint Industry Funding Workshops

Funding to identify, in collaboration with industry, a number of new areas for Joint Industry Funding (JIF) projects that lead to successful proposals for research in the area of nuclear science and engineering.

Disproportionality in the Professions: Working together to understand and respond to discrimination and prejudice

Funding to synthesise existing evidence on disproportionality research and regulatory activity and outcomes in at least five professions (medicine, law, pharmacy, policing and higher education) to help identify gaps in knowledge and establish similarities and differences in employment practices and approaches to regulation.

Exploring Issues in Semantics at the Intersection of Linguistics and Philosophy

Funding to prepare a major grant application for an externally funded project as the first step towards establishing a long term goal of establishing a Research Centre for interdisciplinary research in semantics

Exploiting New Opportunities in mHealth

Funding to connect with a wider range of research staff and bring them into the developing mHealth community in the University and to develop new areas of mHealth research, publicise the University's mHealth research externally and exploit the range of funding opportunities in mHealth, nationally and internationally.

Development of the Raman Spectroscopy Facilities in the University of Manchester

Funding to develop a world-class Raman spectroscopy facility and bring together users in the University to promote cross-fertilization of approaches in materials science, physics, chemistry, biology, medicine and engineering as well as to enhance efficiency of use through sharing of resources.