

Research Project Grants – June 2017

SCIENCES

Dr Christophe Aissa

University of Liverpool

Cubene: synthesis beyond strain

£53,719

Professor Richard Baines

University of Manchester

Is cryptochrome a magnetoreceptor?

£178,248

Professor Declan Bates

University of Warwick

Towards a comprehensive theory of feedback control for chemical reaction networks

£144,099

Dr Claudia Blindauer

University of Warwick

A quantitative framework linking extracellular zinc speciation and cell uptake

£342,867

Dr Will Branford

Imperial College London

Sculpting and training the artificial spin ice network

£216,470

Dr Stephen Brusatte

University of Edinburgh

Dissecting an evolutionary transition: how ancient crocs went from land to water

£234,982

Dr Michael Bryant

University of Leeds

Bio-inspired functional poro-elastic materials

£280,028

Dr Lyubov Chumakova

University of Edinburgh

Dynamic self-organization of stochastic intracellular transport

£234,122

Dr Edmund Cussen

University of Strathclyde

Dynamic correlations in new frustrated magnetic materials and new magnetic states of matter

£258,473

Professor Gideon Davies

University of York

Discovery, dissection and exploitation of sulfoquinavose metabolism

£245,571

Dr Caroline Dessent

University of York

Illuminating sunscreens: new approaches to a molecular understanding of photoprotection

£185,339

Professor Kishan Dholakia

University of St Andrews

Making the most of interference: new metrology applications of laser speckle

£178,395

Dr Julien Gautrot

Queen Mary, University of London

2D composites with controlled nano-mechanics for the culture of stem cells on liquid carriers

£245,677

Dr Katsuchihiro Goda

University of Bristol

Global earthquake resilience for natural-engineering-social interacting systems

£191,403

Dr Richard Grainger

University of Birmingham

Controlled release of reactive di- and triatomic molecules

£235,447

Dr Constanze Hesse

University of Aberdeen

Handle with care: material properties in vision and action control

£200,344

Dr Robert Hindges

King's College London

Defining the molecular diversity of specific synaptic interactions

£207,172

Professor Mark Hodson

University of York

Seeing earthworms in the dark

£107,574

Professor Michael Holdsworth

University of Nottingham

Why did a unique oxygen-sensing mechanism evolve in land plants?

£161,911

Dr Robert Jack

University of Bath

A self-consistent coarse-graining method for soft-matter systems

£272,762

Professor Jaroslaw Kedra

University of Aberdeen

The geometry of conjugation invariant norms on groups

£233,793

Dr Charlotte Kestner

University of Central Lancashire

Measurability and generalised measurability through fields and Fraïssé amalgams

£144,570

Dr Steven Lind

University of Manchester

Predicting leaping liquids: Increasing our understanding of the Kaye Effect

£95,440

Dr Jan Lindstrom

University of Glasgow

Evolutionary ecology and dynamics of pharyngeal microbial communities in humans

£131,509

Dr Louis Y P Luk

Cardiff University

Designing multifunctional organocatalytic artificial enzymes

£179,600

Professor Peter McClintock

Lancaster University

Conduction and selectivity between monovalent ions within the potassium channel

£275,830

Professor Fiona Meldrum

University of Leeds

An imaging approach to understanding confinement effects on crystallisation

£259,876

Dr Antonio Moro

Northumbria University

Dressing methods and complexity reduction for integrable networks models

£248,176

Professor Geoffrey Nash

University of Exeter

Biomimetic swimming using surface acoustic waves

£227,368

Professor Christoph Ortner

University of Warwick

The Nature of Interatomic Forces in Metallic Systems

£385,475

Dr Alessandro Pandini

Brunel University

An integrated computational-experimental method to redesign protein dynamics

£230,247

Dr Catherine Parr

University of Liverpool

Community assembly in old-growth tropical forest

£237,850

Dr Barry Porter

Lancaster University

The emergent self-aware data centre: autonomous software landscaping at scale

£252,890

Professor Christopher Reynolds

University of Essex

Using novel computational modelling approaches to address biased agonism at the Adenosine A1 receptor
£274,306

Professor Michael Ruzhansky

Imperial College London

Analysis on frame decompositions
£250,438

Professor Alfred William Rutherford

Imperial College London

Reconstructing the origin and evolution of oxygenic photosynthesis
£289,600

Dr Christopher Serpell

University of Kent

Hierarchical and emergent assembly through the marriage of DNA and peptides
£147,102

Dr Tom Sheppard

University College London

An iterative approach to the synthesis of polyols
£117,764

Dr Paul Smith

University of Nottingham

Mobilisation of lipophilic compounds from white fat: a role for voltage-gated Ca²⁺ influx?
£164,089

Dr Junwang Tang

University College London

Feasibility of continuous solar driven renewable fuel synthesis by a flow cell assembly
£292,257

Dr Ross Waller

University of Cambridge

Reinventing the nucleus: dinoflagellates provide a model for histone-independent mechanisms of nuclear genome maintenance and function
£237,188

Professor Matthew Wing

University College London

Search for dark photons and investigation of QCD using novel accelerator scheme
£318,272

Professor Dominic Wright

University of Cambridge

Main group pyridyl chiral reporter (py-CR) reagents
£164,397

Dr Anthony Yeates

Durham University

A variational approach to self-organisation in conducting fluids
£156,445

Dr Xiaolei Zhang

Queen's University Belfast

Atomic-level investigation on developing optimal pathways for liquid biofuels
£198,363

Dr Gan Zheng

Loughborough University

Massive signal and data cooperation for densified wireless networks
£199,163

HUMANITIES

Dr Hella Eckardt

University of Reading

Bridge over troubled water – ritual or rubbish found in Roman rivers
£154,945

Professor Robert Garner

University of Leicester

The Oxford Group and the emergence of animal rights: an intellectual history
£117,123

Professor John Gowlett

University of Liverpool

Palaeoanthropological research in Kilombe Caldera, Kenya
£284,127

Dr William Derek Hamilton

University of Glasgow

Setting artefacts free: an independent chronology for British Iron Age brooches
£257,648

Dr Thomas Kjeldsen

University of Bath

Mobilising historical flood data in support of modern flood risk assessments: the city of Bath
£121,788

Dr Christopher Pallant

Canterbury Christchurch University

A History of Smallfilms Animation Studio: from a barn, to Bagpuss and beyond
£118,155

Professor Martin Pickering

University of Edinburgh

Predictive processing during interaction in language and music
£115,310

Professor Christopher Scull

University College London

Lordship and landscape in East Anglia CE 400-800
£264,372

SOCIAL SCIENCES

Professor Nickie Charles

University of Warwick

Shaping inter-species connectedness: training cultures and the emergence of new forms of human-animal relations
£216,445

Professor Abby Ghobadian

University of Reading

Towards developing an empirically driven descriptive theory focusing on the formative phase of breakthrough technologies
£122,648

Professor Nick Hanley

University of St Andrews

Biodiversity offset markets for wetland conservation
£108,282

Professor Janet Hunter

London School of Economics

Money markets and trade in early industrialisation: Britain and Japan, 1760-1860
£188,488

Dr Margareta Jolly

University of Sussex

The business of women's words: purpose and profit in feminist publishing
£411,351

Professor Martin Jones

University of Cambridge

Crops, pollinators and people: the long-term dynamics of a critical symbiosis
£414,882

Dr Heather Rolfe

National Institute of Economic and Social Research

Evidence and perceptions in the post-Brexit immigration debate
£120,906

Dr Steven Stanley

University of Cardiff

Beyond personal wellbeing: mapping the social production of mindfulness in England and Wales
£214,376

Professor Joachim Stoeber

University of Kent

Development of childhood perfectionism: early indicators and parental factors
£298,259

Professor Richard Toyne

University of Exeter

The age of promises: manifestos, election addresses and political representation
£151,179

Professor Jonathan C K Wells

University College London

Age at marriage and human capital outcomes in mothers and offspring In Nepal
£324,480