

## Research Project Grants November 2017

### Science

Dr Karl Bates

University of Liverpool

*Bones in motion: a new integrated experimental-computational approach to understanding the evolution of human locomotion*

£249,045

Dr Kate Britton

University of Aberdeen

*Integrative approaches to late Pleistocene herbivore ecology, ranging and diet*

£260,519

Dr Julio Cesar Bueno de Andrade

University of Exeter

*Moments of L-functions in function fields and random matrix theory*

£282,167

Professor Nigel Burroughs

University of Warwick

*Mechano-sensing of a molecular machine*

£360,478

Dr Vijay Chudasama

University College London

*Understanding how the microenvironment of a protein can dictate the course of bioconjugation*

£154,274

Professor Ilan Davis

University of Oxford

*Elucidating the functions of mRNA stability regulation in synaptic plasticity*

£244,770

Professor John Doonan

Aberystwyth University

*The cellular basis of ecosystem engineering by sphagnum peatmoss*

£257,956

Dr Agapi Emmanouilidou

University College London

*Exotic forms of matter in molecules driven by free-electron lasers*

£180,939

Professor Boris Gaensicke

University of Warwick

*Evolved planetary systems: a unique window into the composition of other worlds*

£159,772

Dr Malte Christian Gather

University of St Andrews

*Lighting up the brain: organic LEDs as light sources for optogenetics*

£328,203

Dr Duncan Greig

University College London

*Identification and analysis of speciation genes in yeast*

£183,775

Dr Randa Herzallah

Aston University

*Control of behavioural dynamics*

£180,078

Professor Peter W H Holland

University of Oxford

*Extreme molecular evolution in an extreme environment: homeobox genes gone awry*

£179,630

Dr Abusaleh Jabir

Oxford Brookes University

*Monitor: a self-reparable memristive gas sensor array*

£234,992

Professor Keith Jones

University of Southampton

*Understanding meiotic drive: how Mendel's law is cheated in oocytes*

£171,337

Professor Jane Kaye

University of Oxford

*Biomodifying technologies: governing converging research in the life sciences*

£340,240

Professor Syma Khalid

University of Southampton

*Combining quantum and classical methods to study bacterial membrane enzymes*

£126,931

Dr Istvan Kiss

University of Sussex

*Bayesian inference and approximations of high-dimensional network models*

£301,665

Professor Stefan Krause

University of Birmingham

*Plastic rivers: fate and transport of microplastics in rivers*

£284,974

Professor Mark Leake

University of York

*Probing the shape of DNA by twisting, pulling and 'seeing' single molecules*  
£245,669

Dr Crispin Little

University of Leeds

*Macroevolution in Boreal Ocean Jurassic-Cretaceous methane seep communities*  
£191,157

Dr Emma McCabe

University of Kent

*Ferroelectricity: new mechanisms and materials by combined experiment and theory*  
£96,975

Dr Alistair McCormick

University of Edinburgh

*Surpassing evolution to enhance photosynthesis using algal CO<sub>2</sub> superchargers*  
£349,148

Dr James McCutcheon

University of Leicester

*Neural and peripheral generation of a specific appetite for protein*  
£194,257

Dr William McGeown

University of Strathclyde

*An investigation of the neural bases of hypnosis and suggestibility*  
£144,243

Dr Abbie C McLaughlin

University of Aberdeen

*Investigation of novel hexagonal perovskite oxide ion conductors*  
£149,398

Professor Thomas Mock

University of East Anglia

*Molecular underpinnings of adaptive evolution in diatoms of polar oceans*  
£236,623

Dr Lisa Mol

University of the West of England

*Ballistic damage of stone heritage structures in conflict area*  
£199,745

Dr Daniel Mulvihill

University of Glasgow

*Fundamental mechanical behaviour of nano and micro structured interfaces*  
£281,479

Professor David Murphy

University of Bristol

*How does the one-humped Arabian camel survive in the desert without drinking?*  
£318,415

Dr Dianne Newbury

Oxford Brookes University

*Speaking backwards – sdrawkcaB gnikaepS*  
£232,412

Professor Kim Plunkett

University of Oxford

*Language mediated attention in infancy*  
£42,099

Professor Alban Potherat

Coventry University

*The non-linear states of convection in the Earth core*  
£297,852

Professor Stephen D Price

University College London

*Studies of radical-surface chemistry of relevance to the interstellar medium*  
£177,961

Dr David Rippin

University of York

*Archival polar photography – unearthing the forgotten record of glacier change*  
£316,607

Dr Misha Rudnev

University of Bristol

*Geometry, combinatorics and algebra of sum-products*  
£176,247

Dr Michail Stamatakis

University College London

*From molecules to chemical reactors by boosting kinetic Monte-Carlo*  
£274,554

Professor Alexander Strohmaier

University of Leeds

*Mathematical analysis of Casimir interactions*  
£174,962

Professor Mark Van Rossum

University of Edinburgh

*Energy limited neural plasticity: learning with minimal changes*  
£179,632

Dr Craig Walling

University of Edinburgh

*Testing the evolutionary basis of the longevity response to dietary restriction*  
£287,841

Professor David Whitmore

University College London

*Can individual cells in culture tell the time of year?*  
£183,372

Professor Sivaramesh Wigneshweraraj

Imperial College London

*Molecular analysis of a bacterial metabolic break*  
£199,425

Dr Gerald Williams

University of Essex

*Searching for gems in the landscape of cyclically presented groups*  
£177,486

Professor Semir Zeki

University College London

*Social influences on aesthetic judgements and their neural basis*  
£279,869

## Humanities

Professor Gregory Currie

University of York

*Learning from fiction: a philosophical and psychological study*  
£342,223

Dr Oliver Harris

University of Leicester

*Beyond the three age system: mapping a history of materials, 3000–600CE*

£221,898

Professor Patricia Owens

University of Sussex

*Women and the history of international thought*

£286,503

Dr Tamara Rathcke

University of Kent

*Does language have groove? Sensorimotor synchronisation for the study of linguistic rhythm*

£203,349

Professor Li Wei

University College London

*Early childhood bilingualism: effects on brain structure and function*

£305,748

## Social sciences

Dr Eleanore Hargreaves

University College London

*A longitudinal study of primary children's journey at the 'bottom' of the class*

£258,077

Dr Keith Hyams

University of Warwick

*Anthropogenic global catastrophic risk: the challenge of governance*

£189,985

Dr Chris Jones

Aston University

*Tax havens and emerging market multinational enterprises*

£121,590

Professor Duncan McVicar

Queen's University Belfast

*Zero hours contracts: characteristics, prevalence and impacts on workers*

£125,276

Professor Anna Morcom

Royal Holloway, University of London

*Music, money and power: an economic anthropology of music*

£299,904

Professor Fiona Ross

University of Reading

*Women in type: a social history of women's role in type-drawing offices, 1910–90*

£161,821

Professor Jonathan Tonge

University of Liverpool

*An evaluation of historical and contemporary debates on lowering the voting age*

£119,740