

## Research Project Grants – November 2016

### SCIENCES

**Professor Steve Armes**

*University of Sheffield*

In situ SAXS studies of micellar nucleation during block copolymer syntheses  
£161,051

**Professor Malcolm Bennett**

*University of Nottingham*

Watching plants drink: imaging where, when and how roots take up water  
£283,147

**Dr Zara Bergstrom**

*University of Kent*

Neurocognitive mechanisms underlying retrieval-induced updating of face memories  
£191,067

**Professor Steven Bramwell**

*University College London*

Spin ice spintronics: surface and thin film probes of emergent electromagnetism  
£482,452

**Dr Mark Burnley**

*University of Kent*

Emergent properties of the fatiguing neuromuscular system  
£160,189

**Professor Michael Carpenter**

*University of Cambridge*

Magnetoelastic coupling behaviour and multiferroicity of magnetic iron oxide and sulphide minerals  
£219,851

**Dr Yin Chen**

*University of Warwick*

Biochemical and structural characterisation of a unique Rieske oxygenase CntA  
£181,768

**Professor Lesley Cohen**

*Imperial College London*

Microwave induced Andreev bound states  
£216,563

**Dr William Curran**

*Queen's University Belfast*

The importance of social context in interpreting and generating laughter  
£123,378

**Professor Brendan Davies**

*University of Leeds*

A new dimension for plants  
£247,555

**Professor Andrew Ellis**

*University of Leicester*

The building blocks of gas hydrates  
£126,560

**Professor Maurice Elphick**

*Queen Mary, University of London*

From starfish to sex: the origins of kisspeptin signalling  
£113,015

**Dr Geoffrey Evatt**

*University of Manchester*

The lost meteorites of Antarctica  
£258,599

**Dr David Ferrier**

*University of St Andrews*

Determining major general regulatory mechanisms in the ParaHox gene cluster  
£167,184

**Professor Matthew Gaunt**

*University of Cambridge*

New concepts for activity based protein profiling (ABPP)  
£119,318

**Dr Andrew Gillis**

*University of Cambridge*

Development of gill arch appendages: insights into the origin of paired fins  
£170,844

**Dr Diego Gómez-Nicola**

*University of Southampton*

Understanding the dynamics and diversity of microglia in the healthy and ageing brain  
£236,866

**Professor Julie Gray**

*University of Sheffield*

How do plants restrict stomatal entry routes following pathogen attack?  
£82,693

**Professor Patrick Haggard**

*University College London*

Processes and precursors of volition: comparing endogenous and exogenous action decisions in the human brain  
£220,328

**Dr Helmut Hauser**

*University of Bristol*

Computing with spiders' webs – an inspiration for new sensors and robots  
£264,745

**Professor Paul Hibbard**

*University of Essex*

Depth-cue combination in complex natural scenes  
£71,714

**Dr James Hodge**

*University of Bristol*

Optogenetic imaging and remote control of fly electrical clock  
£210,844

**Dr Andrew Hudson**

*University of Leicester*

Development of a sensor to quantify cellular concentrations of heme  
£201,752

**Dr Robert Hughes**

*Royal Holloway, University of London*

Memory and language: a perceptual-motor approach to verbal sequence learning  
£149,397

**Professor Hon Wai Lam**

*University of Nottingham*

Remote functionalisation by the chain walking of allylmetal species  
£180,351

**Dr Ellouise Leadbeater**

*Royal Holloway, University of London*

The evolution of cognition: "intelligence" in the wild  
£249,516

**Dr Tung Chun Lee**

*University College London*

Mechanism of catalysis inside nanoreactors  
£225,179

**Professor Stefan Maier**

*Imperial College London*

Topologically protected flexural waves in thin elastic plates  
£270,855

**Dr Svetlana Makovets**

*University of Edinburgh*

Proteolysis-dependent regulation of telomerase catalytic subunit  
£174,381

**Dr Stephen Mansell**

*Heriot-Watt University*

Enabling N<sub>2</sub> and hydrocarbon activation using first row transition metals  
£106,406

**Dr Jason McEwen**

*University College London*

Illuminating the dark Universe with novel 3D spherical informatics methods  
£323,389

**Professor Jane Mellor**

*University of Oxford*

Defining the fundamental nature of antisense transcription  
£139,816

**Dr Patrick Mesquida**

*King's College London*

Are collagen fibrils ladders for cells?  
£107,268

**Professor Russell Morris**

*University of St Andrews*

Metallorganic frameworks as anode materials for high performance batteries  
£105,312

**Professor Richard Napier**

*University of Warwick*

Self-organising carbon nanosensors for imaging morphogenic gradients in plants  
£309,063

**Professor Hugh Nimmo**

*University of Glasgow*

Temperature perception in plants by a splicing factor-clock transcript module  
£167,018

**Dr Charles O'Hara**

*University of Strathclyde*

Main group element enhancement of transition metal C-H bond activation chemistry  
£220,527

**Professor David Procter**

*University of Manchester*

Asymmetric copper-catalysed multicomponent assembly of high value amines  
£163,225

**Professor Aleksandr Pukhlikov**

*University of Liverpool*

Birational geometry of higher-dimensional Fano varieties of higher index  
£76,646

**Dr David Reby**

*University of Sussex*

Voice and sex stereotypes: a developmental perspective  
£222,515

**Dr Victor Sans Sangorin**

*University of Nottingham*

Advanced molecular materials based on 3D-printed polymeric ionic liquids  
£161,448

**Dr Evelyn Sernagor**

*Newcastle University*

A novel approach to functional classification of retinal ganglion cells  
£274,437

**Professor Mike Shipman**

*University of Warwick*

Oxetane enhanced macrocyclisation technology: macrocyclic peptides made easy  
£243,135

**Professor Lucia Sivilotti**

*University College London*

Spatially resolved optical patch clamp of single ion channels  
£207,280

**Professor Austin Smith**

*University of Cambridge*

Delimiting the stem cell phase boundary via time normalisation  
£224,408

**Dr Tyler Stevenson**

*University of Aberdeen*

Identification of the photoreceptor for light detection in the avian brain  
£246,909

**Professor Patrick Unwin**

*University of Warwick*

Lab-on-a-tip: real-time nanoscale analysis of living cells  
£102,460

**Professor Tim Vogels**

*University of Oxford*

The cooperative brain: multipartite plasticity for entwined cortical functions  
£169,663

**Professor Jemma Wadham**

*University of Bristol*

Sub-ice weathering: a missing link in the global silicon cycle?  
£261,904

**Dr Andrea Waeschenbach**

*Natural History Museum*

Molecules meet fossils – an integrated approach to studying palaeodiversity  
£350,090

**Dr Shengfu Yang**

*University of Leicester*

Investigation of combustion chemistry using superfluid helium nanodroplets  
£137,884

**Dr Ozgur Yazaydin**

*University College London*

Engineering of electric field controlled molecular gates in porous materials  
£110,235

**HUMANITIES****Dr Chris Cummins**

*University of Edinburgh*

Bilingualism, pragmatic enrichment and reasoning biases  
£128,487

**Professor Alison Donnell**

*University of Reading*

Caribbean literary heritage: recovering the lost past and safeguarding the future  
£412,750

**Dr Rebekah Higgitt**

*University of Kent*

Metropolitan science: places, objects and cultures of practice and knowledge in London, 1600–1800  
£368,663

**Professor Jason König**

*University of St Andrews*

Mountains in ancient literature and culture and their post-classical reception  
£186,123

**Dr Jim Phillips**

*University of Glasgow*

Employment, politics and culture in Scotland, 1955–2015  
£215,596

**Professor Stephen Read**

*University of St Andrews*

Theories of paradox in fourteenth-century logic: edition and translation of key texts  
£155,655

**Dr Lizzie Seal**

*University of Sussex*

Race, racialisation and the death penalty in England and Wales, 1900–65  
£117,700

**SOCIAL SCIENCE****Professor Stephen Case**

*Loughborough University*

Exploring the language barrier to engagement in youth justice assessment interview practice  
£111,912

**Dr Peter Flugel**

*SOAS, University of London*

Jaina prosopography: monastic lineages, networks and patronage  
£284,410

**Dr Benjamin Yong**

*University of Hull*

Legal advice to legislatures – supporting a professionalising legislature  
£68,567