

# Bristol Neuroscience Newsletter

October -  
November 2016



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## NIHR Biomedical Research Centre Success

University Hospitals Bristol NHS Foundation Trust, in partnership with the University of Bristol, has been awarded £21.8M over five years by the National Institute for Health Research (NIHR) to fund cutting-edge research. The Biomedical Research Centre (BRC) will come into being in April 2017 and will allow the two existing Biomedical Research Units (BRUs) to continue the world class

research they have been carrying out in the areas of Cardiovascular Disease and Nutrition, Diet and Lifestyle. Alongside this UH Bristol have been funded in three new themes – Surgical Innovation, Mental Health and Perinatal and Reproductive Medicine. The partnership is one of 20 NHS and university partnerships across Eng-

land to have been awarded funding; each BRC will host the development of new, ground-breaking treatments, diagnostics, prevention and care for patients in a wide range of diseases like cancer and dementia.



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## Health Research Strategy Committee

Professor Iredale, Pro Vice-Chancellor for Health, has created a new Health Research Strategy Committee with broad membership across the Faculties of Health and Biomedical Sciences including Deans, Faculty Research Directors, Heads of Schools and

the Elizabeth Blackwell Institute. The committee will be chaired by the new Director of Research for Health, Professor [Jeremy Tavaré](#). The Committee will debate and develop a unified health research and innovation strategy across the two faculties and take an overview of

its delivery by the Faculties and Schools with support from the Research and Enterprise Development team.



# EVENTS



## 9th International Neuroscience and Biological Psychiatry Conference

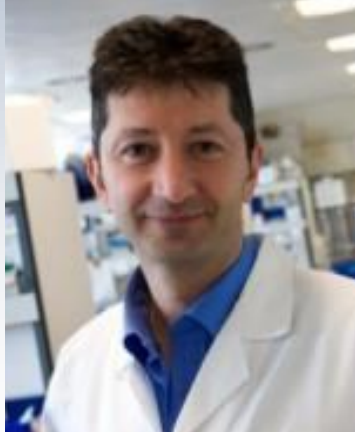
27 October 2016, 9.00 - 17.00. Guangdong Ocean University, Zhanjiang, China

## Astroglia in control of the central noradrenergic system

31 October 2016, 13.00 - 14.00. Anja Teschemacher (UoB), E29 Biomedical Sciences Building

## Applying for a Fellowship, Medical Faculties

1 November 2016, 10.00 - 13.00. Room 4.10, Helen Wodehouse Building, 35 Berkeley Square



## NIHR grant workshop

2 November 2016, 10.00 - 16.00. Simon Goodwin (RfPB Programme Manager for the South West), Royal Devon & Exeter Hospital, Wonford

## Careers Beyond Biomedical Research: Cancer Research UK

2 November 2016, 13.00 - 14.00. Tamsin Ashton (Research Engagement Manager, CRUK) and Richard Oakley (Senior Research Funding Manager, CRUK), LTI Chemistry Building



## Statistics Clinic - 2 November 2016

2 November 2016, 14.00 - 15.30. School of Mathematics SM4

## Artificial Minds Reading Group: 2 November 2016

2 November 2016, 15.00 - 17.00. Philosophy Library, Cotham House

**Ammar Al-Chalabi**, Professor of Neurology and Complex Disease Genetics, Director King's MND Care and Research Centre

3 November 2016, 16.00 - 17.00. Ammar Al-Chalabi (King's College London)



## The Noradrenergic Locus Coeruleus in Pain: a Double Edged Sword

7 November 2016, 13.00 - 14.00. Esther Berrocoso (University of Cádiz), E29, Biomedical Sciences Building

## GW4 Crucible – Healthy Living

7 November 2016

## International Neuroscience and Biological Psychiatry ISBS Symposium

9 November 2016, 9.00 - 17.00. San Diego, California, USA

## Beyond the glass ceiling

9 November 2016, 10.15 - 17.00. Profs John Iredale and Jane Norman, The Studio, Birmingham

## Careers Beyond Biomedical Research: Industry

Top to bottom: Anja Teschemacher, Senior Lecturer; Amar El-Chalabi; Esther Berrocoso, Neuropsychopharmacology and Psychobiology Research Group; Prof Jane Norman FMedSci

9 November 2016, 13.00 - 14.00. LT2 Chemistry Building

[Artificial Minds Reading Group: 9 November 2016](#)

9 November 2016, 15.00 - 17.00. Philosophy Library, Cotham House

[Clinical and scientific advances in complex regional pain syndrome](#)

10 November 2016, 9.30 - 17.00. Bailbrook House Hotel, Bath

[Heparan sulfates: dynamic master regulators in the glycocalyx](#)

11 November 2016, 12.00 - 13.00. Prof Jerry Turnbull (University of Liverpool), Lecture Theatre B, Dorothy Hodgkin Building

[The hunting of the Src's role in hyperalgesia and morphine tolerance](#)

14 November 2016, 13.00 - 14.00. Tim Hales (University of Dundee), E29 Biomedical Sciences Building

[Phase contrast: a different approach to the use of x-ray imaging for biomedical applications](#)

15 November 2016, 13.00 - 14.00. Prof Alessandro Olivo (University College London)

[Careers Beyond Biomedical Research: Scientific Sales and Marketing](#)

16 November 2016, 13.00 - 14.00. Rohit Chitnis (Sales Specialist, ThermoFisher) and Sanneke Kottier (Sales Representative, ThermoFisher), E29 Biomedical Sciences Building

[Statistics Clinic - 16 November 2016](#)

16 November 2016, 14.00 - 15.30. School of Mathematics SM3

[Brigstow @ the Botanic Garden](#)

16 November 2016, 14.00 - 17.00. Botanic Garden, Bristol

[Artificial Minds Reading Group: 16 November 2016](#)

16 November 2016, 15.00 - 17.00. Philosophy Library, Cotham House

[Feel It Festival: Exploring Pain & Breath through Performance](#)

17 - 20 November 2016. St Paul's Church, Bristol

[8th Annual 'Research, Audit & Quality Improvement' Day](#)

18 November 2016, 9.00 AM - 17.00. Engineers' House, Clifton

[Pivotal cardiovascular homeostatic role for C-type natriuretic peptide](#)

21 November 2016, 13.00 - 14.00. Adrian Hobbs (Queen Mary University of London), E29 Biomedical Sciences Building

[Identifying pathogenic T and B cells in multiple sclerosis](#)

22 November 2016, 13.00 - 14.00. Dr John Curnow (University of Birmingham)

[Careers Beyond Biomedical Research: Publishing and Editing](#)



From top: Jerry Turnbull, Tim Hales, Alessandro Olivo





23 November 2016, 13.00 - 14.00. Natasha Bray (Associate Editor, Nature Reviews –Neuroscience), E29 Biomedical Sciences Building

#### [Elizabeth Blackwell Institute Biomedical and Health Research Industry Day](#)

24 November 2016, 9.00 - 16.00. Wills Memorial Building

#### [Cabot Institute Annual Lecture 2016: Ideas to change the world](#)

25 November 2016, 18.00 - 19.45. Prof Tom Scott (Transforming our Energy), Dr Eric Morgan (Resilient and sustainable livestock) Prof Keri Facer (Connected Communities), Great Hall, Wills Memorial Building



#### [Clocks, Exercise, and Mental Health](#)

28 November 2016, 13.00 - 14.00. Hugh Piggins (University of Manchester), E29, Biomedical Sciences Building

#### [University Hospitals Bristol Research Showcase](#)

30 November 2016, 9.30 - 15.30. LTI, UH Bristol Education and Research Centre

#### [Careers Beyond Biomedical Research: Clinical Research](#)

30 November 2016, 13.00 - 14.00. Jason Parker (Senior Director of Technology, Quintiles) and Louise Peverley (Clinical Research Associate, PPD Winchester), E29 Biomedical Sciences Building



#### [Statistics Clinic - 30 November 2016](#)

30 November 2016, 14.00 - 15.30. School of Mathematics SM3

#### [Early Career Researchers' event / Annual Symposium and Stephen Frankel Lecture 2016](#)

1 December 2016, 9.00 - 17.00. Engineers' House, Clifton Down

#### [10th International Neuroscience and Biological Psychiatry Conference](#)

1 - 3 December 2016, Rio de Janeiro, Brazil



#### [Vascular Biology: Past, present and future](#)

2 December 2016, 9.00 - 18.00. Wills Hall

#### [Neural dynamics in the motor system during movement, sleep and brain-control training](#)

5 December 2016, 13.00 - 14.00. Andrew Jackson (University of Newcastle), E29 Biomedical Sciences Building

#### [PI3kinase and platelet hyperactivity](#)

12 December 2016, 13.00 - 14.00. Ingeborg Hers (UoB), E29, Biomedical Sciences Building

#### [Statistics Clinic - 14 December 2016](#)

14 December 2016, 14.00 - 15.30. School of Mathematics SM3

T-B: Natasha Bray; Keri Facer, Prof of Educational & Social Futures; Andrew Jackson, WT Senior Research Fellow; Ingeborg Hers, Reader in Pharmacology and Cell Signalling

**4th Caribbean Biomedical Research Days**

16 - 18 January 2017, St. Lucia

**Cannabis use across the EU: a ticket to Psychosis? & How does one prove a putative cause of schizophrenia when there is no animal model?**

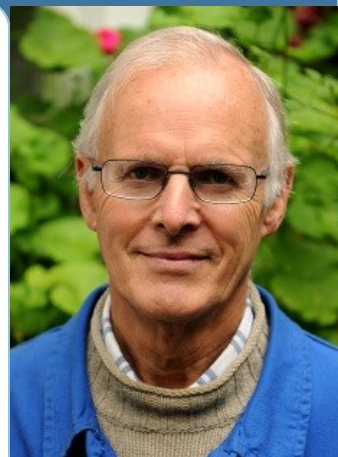
2 February 2017, 12.30 - 13.30. Prof Sir Robin Murray and Dr Marta Di Forti (King's College London), OS6 Oakfield House

**Excellence in Medicine Day**

24 February 2017, 10.00 - 16.30. Wills Memorial Hall

**ECNP Workshop on Neuropsychopharmacology for Junior Scientists in Europe**

9 March 2017, 9.30 - 17.00. Keynote: Heidi Johansen Berg (University of Oxford), Nice, France



From top: Prof Sir Robin Murray; Dr Marta di Forti; Heidi Johansen-Berg

## NEWS

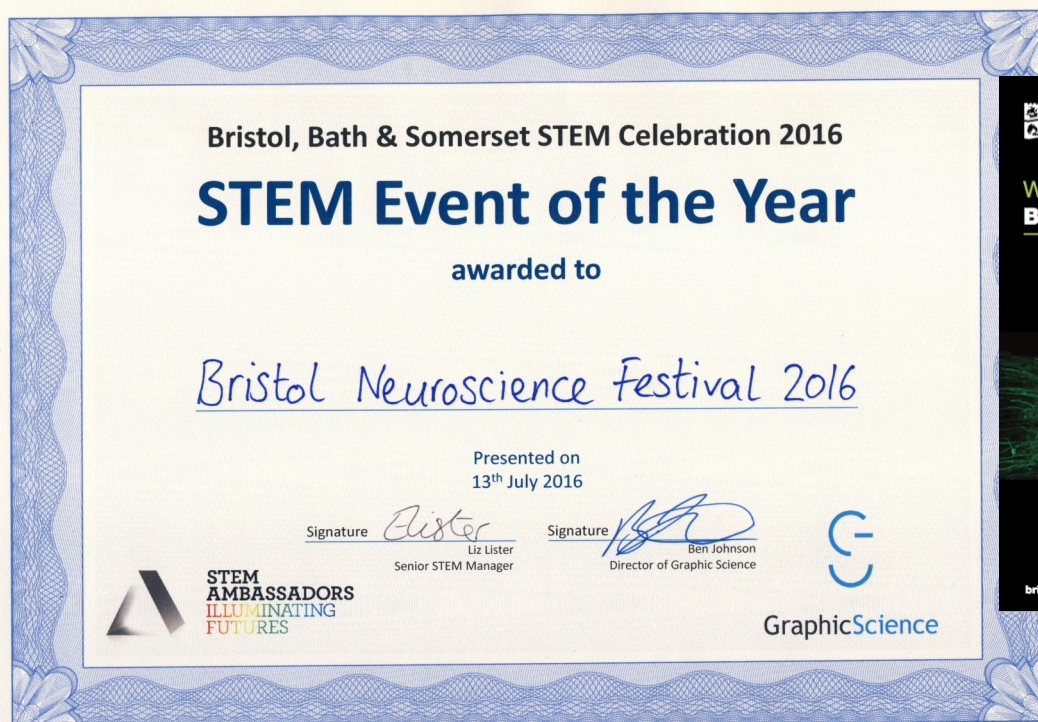
### Award for Neuroscience Festival

The Bristol **Neuroscience festival**, organised by the University of Bristol with support from the **Elizabeth Blackwell Institute**, has won the *STEM event of the Year* award. This award recognises an ex-

cellent science, technology, engineering and maths (STEM) enrichment activity which is run and/or substantially supported by STEM Ambassadors, and is awarded by **Graphic Science**, a communications

and education consultancy specialising in taking these subjects to a variety of audiences.

Many congratulations to the organising team!





## Funding Successes Part I



**Reader in Cognitive Neurophysiology** Dr [Matt Jones](#) has been awarded a £1.4M Wellcome Trust Senior Fellowship entitled *Decoding neural assemblies over multiple brain regions, extended experience and sleep-wake cycles*.



**Professor of Neuroscience** [Richard Apps](#) (PI) with Co-Res PI Dr [Nadia Cerminara](#) (Research Fellow) have been awarded a three-year £476k BBSRC grant entitled *Back to front: importance of cerebro-cerebellar interactions in goal-directed behaviour alongside industrial partner Takeda*, based in Cambridge.



**Professor of Systems Neuroscience** [Bridget Lumb](#) (PI) with co-applicants Dr Robbie Drake (Senior Research Associate), Prof [Richard Apps](#) and Dr [Tony Pickering](#) (Reader in Neuroscience) have been awarded a 2.5 year £400k MRC grant entitled *Contributions of prefrontal cortex mid-brain interactions to chronic pain*.



**Professor of Molecular Pharmacology** [Eamonn Kelly](#) (PI) with co-applicants Prof [Graeme Henderson](#)



(Pharmacology) and Dr [Kate Heesom](#) (Proteomics Facility) and Dr Bengt von Mentzer and Prof David Kendall from Pharmnovo AB (Industrial Partner) have been awarded a 3-year MRC grant of £488,174 entitled *MI-CA:Defining G protein- and arrestin-dependent signalling pathways of biased DOPr agonists and the relevance to their in vivo effects*.

**Sarah Barrett** (MSci in Pharmacology at Bristol) has been awarded a PhD studentship by the Society for Addiction to work with Dr Emma Robinson and Professor Graeme Henderson.

**Lecturer in Social and Community Medicine** Dr [Lindsey Sinclair](#) was awarded £9871 for a year project from Mason Medical Research Foundation: *The relationship between Alzheimer's disease, visual hallucinations, lewy body pathology and decreased occipital lobe perfusion*.

**Reader in Epidemiology** Dr [Nicola Wiles](#) received £162,237 for four years from NIHR HTA,; *ANTLER Antidepressants to prevent re-*

*lapse in depression*.

**Gestetner Professor of Translational Dementia** [Pat Kehoe](#) is a named collaborator (no funding associated) on a recently funded US\$3,352,238 NIH R01 led by Emory University to explore dietary and vascular mediated inflammation of the brain, its role in cognition and dementia and potential for intervention by modulation of the renin angiotensin system.

Pat has also received a US\$300k award from the Bright Focus Foundation for a proof of concept study for *Exploring ACE-2 as a novel therapeutic target for Alzheimer's disease*. If that wasn't enough, Alzheimer's Brain Bank UK provided him with £276k for *Brains for Dementia Research: Comprehensive Assessment Database (BDR-CAD) development and provision for BDR* which will deliver an expansion to their bespoke real-time data capture application used to support participant interviews in the ABBUK-funded Brains for Dementia Research (BDR) project and for its roll out and adoption in all 6 Centres involved in the BDR.



## MRC-KHIDI UK-Korea Partnering Award

The Medical Research Council (MRC) and the Korea Health Industry Development Institute (KHIDI) have awarded £10k for the UK-Korea Partnering Awards scheme to Chair of Neuroscience (Royal Society Wolfson Research Merit Award Holder) Prof [Kei Cho](#) and Prof Hyung-Jin Yoon, Department of Biomedical Engineering at

Seoul National University Hospital.

The overarching aim of the UK-Korea Partnering Awards scheme is to provide resources to biomedical and health researchers in the UK and Korea that will allow them to forge long-term collaborations. The Bristol team includes Profs [Stafford Lightman](#), [Richard Coward](#) and



Risto Kauppinen and  
Drs Liz Coulthard and  
Daniel Whitcomb.

We will aim to create a multidisciplinary and innovative research platform through a 'Forum' which will focus on 'Smart challenge of ageing' framework of research and application, seeking potential solutions for translation and treatment

## European Research Council Funding

Following the result of the referendum on 23 June 2016, the [International Team in Research Development](#) wish to confirm that there will be no immediate impact with regards to [Horizon 2020 funding](#). All existing grants will continue to run as normal and anything currently under submission or in the granting process will also continue as normal. As many of you will have read, we will continue to be an EU member state for

two more years at least  
and during this time we  
will be eligible to apply  
to each and every call  
under Horizon 2020.

If the UK does eventually withdraw from the EU then there is a possibility that we will have negotiated **associated status** to H2020, like other countries such as Norway and Israel. **Universities UK** will be leading discussions around this with the government, and Bristol will be fully engaged with this process as well as via the **Russell**

**Group.** If no agreement can be reached then this would likely mean the UK could no longer access H2020 funding but this would not come into effect until October 2018 at the earliest, based on current predictions.

In summary, in the short term it is very much business as usual and we would encourage everyone to continue to apply. If anyone has any concerns or questions, please do contact the [EU and overseas team](#).

## Bioinformatics

A new bioinformatics group has been created (led by [Tom Williams](#)) and a dedicated seminar series and wiki are being set up. Bioinfor-

matics expertise is available through Dr **Stephen Cross**, Research Assistant in Imaging, who has been in place since Feb 2016 thanks

to funding by the EBI. The post, based at the Wolfson Bioimaging Facility, is for two years, and it is anticipated that it will have a

demonstrable  
impact on re-  
search.





Bat without a cave © Vanderelst et al., eLife 2016

## Echo templates aid mental mapping in bats

Bats have excellent spatial memory and navigate with ease to important locations including roosts and foraging grounds. Research conducted by Dr [Marc Holderied](#) and colleagues suggests they use echolocation to observe and remember templates to help form a cognitive map of their

environment. They proposed that template-based place recognition might underlie sonar-based navigation, meaning the animals recognise places by remembering their echo signature, rather than their three-dimensional (3D) layout. To test this they built an 'artificial bat' which contained ultra-

sonic microphones and an ultrasonic speaker acting as ears and a mouth. The team then assessed the templates from the data and found that the echoes returning from each place were unique enough for them to be used to recognise the location.

[More info...](#)

## Stress hormone effects on the brain

It is thought that disturbances in the action of stress hormones play a key role in causing mental disorders, like major depression and post-traumatic stress disorder (PTSD). Learning to cope with stressful events is known to require changes in the expression of genes in the hippocampus. Such changes in gene expression are brought about by stress-induced glucocorticoid hormones acting via receptors that can directly bind to genes and alter their expres-

sion.

A BBSRC-funded study has found that the action of mineralocorticoid receptors (MRs) at the neuronal genome cannot be predicted based solely on receptor occupancy by glucocorticoid hormone. As a result the concept on tonic and feedback action, which over the past few decades has been cited in textbooks, may require some adjustment.

Prof [Hans Reul](#) together with Dr [Karen Mifsud](#) investigated the actual binding of MRs

and glucocorticoid receptors (GRs) to genes in the hippocampus after stress. They found the binding of MRs to genes was not constantly high but actually low under non-stress conditions and increased substantially after stress. GRs, however, followed the expectation that binding to target genes would be minimal under baseline conditions and increase dramatically after stress following the GR binding profile to glucocorticoids.

[More info...](#)

## Students' Awards for Outstanding Teaching

Dr Steve Fitzjohn (pictured top left in his finery), Teaching Fellow in Pharmacology, was awarded the Students' Award for Outstanding Teaching (Biomedical

Sciences) at the Bristol Teaching Awards. Dr [Daniel Whitcomb](#) (pictured bottom left), Lecturer in Translational Neuroscience, won the accolade for Health

Sciences. They both attended an Awards dinner on 7 June 2016 in Wills Hall where they were presented with their prizes.





## Translational Biomedical Research Centre

The TBRC is a new national centre unique in Europe. On 9 June 2016 the £6.2M Centre, funded by UoB, MRC and BHF, was opened by MRC Chief Science Officer Dr Declan Mulkeen and BHF Medical Director Prof Peter Weissberg.

Translational medicine takes *in vitro* lab science and aims to prove it has positive effects on a whole organism. Prior to human trials, new discoveries are tested in animals to ensure safety and beneficial health outcomes, e.g. to test new medical devices such as heart valves, vascular stents, joint replacement prostheses, instrumentation used for key-hole surgery, devices to deliver new drugs in patients

or to test novel drugs and stem cells.

TBRC will use experimental models highly relevant to human disease and anatomy to test approaches, devices or therapies in a state-of-the art animal hospital theatre operating at NHS standards. Results of any interventions will be tracked in living animals using scanners, which will allow researchers to develop new treatments and interventions whilst reducing the number of animals needed as they are able to monitor animals over time. During and after treatments animals will be treated by specialists who will ensure the highest standards of animal welfare and reproducibility of the

procedures.

The centre will also have a bio-bank on site which will reduce the future need for animal tissue samples.

TBRC will operate under the One Health concept that recognises the health of humans is connected to the health of animals and the environment, meaning that some research could benefit animals in equal measure. Veterinary clinicians will develop new methods to treat animals, which often could be as simple as adapting treatments already established in humans.

For further information, a meeting or a tour of the facility, contact [tbrc@bristol.ac.uk](mailto:tbrc@bristol.ac.uk).



## GW4 Building Communities

GW4 has invested an additional £350k into its [Building Communities programme](#), funding 11 new research communities. The programme aims to establish new, high-quality research communities and to help existing collaborations build on their work and secure long-term sustainable funding.

Funding from the latest round include a grant to Cardiff lead Derek Jones to create *Research Working Group on Brain Injury*, with Bristol collaborator Martin Bunage, Clinical Neuropsychologist and Senior

Lecturer in Experimental Psychology (pictured right).

GW4





Image © Michael Bok,  
University of Lund

## Mantis shrimp and eye rolling

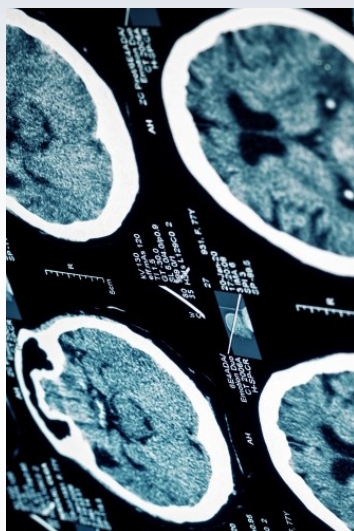
PhD student [Ilse Daly](#) from the [Ecology of Vision](#) research group, found the eye-rolling behaviour of mantis shrimp helps them see the world around them. Mantis shrimp are able to see the polarization of light, and by rolling their eyes they actively improve the polarization contrast of objects in their

marine environment.

The visual world of the mantis shrimp is staggeringly complex; they can use 12 different colour channels (humans use only three), and can see the polarization of light. Add to that the ability to actively enhance their vision using eye movements and there

are exciting implications for robotics. An automated visual system that can mimic the mantis shrimp eye could provide a low-power, high-performance piece of technology, with applications ranging from underwater exploration to materials analysis.

[More info...](#)



## Post-mortem Assessment Guidelines for VCI

Confirmation of the clinical diagnosis of most diseases that cause dementia depends on post-mortem examination of the brain. The finding of tissue damaged by impaired blood supply, or of widespread hardening of the arteries suggests that the cognitive impairment was caused by vascular disease. However, these abnor-

malities are also often found in combination with other dementing diseases such as Alzheimer's, and the contribution of different vascular abnormalities to cognitive impairment was difficult to quantify. A team of neuropathologists led by the [Dementia Research Group](#) has developed a set of Vascular Cognitive Impairment Neuro-

pathology guidelines (VCING) for assessing vascular pathologies in post-mortem brain tissue through the identification of a set of neuropathological determinants that can reproducibly be used to assign a low, intermediate or high likelihood that vascular disease contributed to cognitive impairment.

[More info...](#)

## Call for FDA to remove warning on varenicline

In 2005 varenicline was released as the first oral drug to aid with quitting smoking since bupropion in 1997. In 2009 the US Federal Drug Administration put a warning on it, following concerns over its neuropsychiatric safety and reports that some users were experiencing suicidal

behavior. Drs [Neil Davies](#) and [Kyla Thomas](#) described the current evidence regarding the causal relationship between varenicline and patient safety in *Addiction*, arguing that these neuropsychiatric signals were due to those people prescribed varenicline being at higher risk of adverse

events even before treatment. Recently-published trials and studies based on data analysis provided evidence the drug does not cause adverse neuropsychiatric events, causing the European Medicines Agency to lift its warning in April this year.

[More info...](#)

## Public Engagement

The Public Engagement team supports and promotes engagement beyond academia at UoB. They offer the following:

- Advice on developing engagement activities
- Help with funding applications for engagement, including as a route to impact in research grants
- Delivering teaching and training on engagement and impact
- Enabling sharing of good practice internally through an engagers' network and our annual En-

gage conference, as well as externally with other universities and engagement practitioners

- Co-ordinating a programme of grant-funded innovative engagement activities
- Ensuring engagement and impact are recognised and embedded in University structures and processes

Public engagement is an exciting and rewarding part of research, working out how best to communicate the ideas from research to stakehold-

ers, in ways that will help change lives for the better. The team is available to help researchers disseminate



their work to the wider community, assist in finding partners in industry, policy, healthcare etc., and provide support in achieving greater impact, both at grant application and reporting stages.

## Find a Clinical Research Study App

The Clinical Research Network Business Intelligence team has launched a new version of the public Open Data Platform *Find a Clinical Research Study* app.

The purpose of this app is to provide a tool for clinical research professionals to search for CRN Portfolio studies using specific parameters, such as specialty or study design. The search results then enable the user to view a publicly available, one-page summary of information about each study.

[The app can be downloaded online.](#)

The UK Clinical Trials Gateway remains the chosen NIHR platform for providing patients and the public with information about clinical research studies taking place in the UK.

In the new *Find a Clinical Research Study* app, you can search by:

- CPMS Study ID, IRAS ID, MRec, EUdraCT
- Study title or short name
- Research summary or inclusion/exclusion criteria keywords

Other search values include:

- Study design

- Open to new sites
- Eligibility
- Study Status
- Phase
- Specialties/sub specialties

The major difference between *Find a Study* v2 and its predecessor is that this version no longer features a “map search” function. This will be re-established at a later date, with other enhancements where appropriate.

If you have any questions or suggestions concerning the new app, contact [ODP@nihr.ac.uk](mailto:ODP@nihr.ac.uk)





## Consistency builds cohesion in animals

A recent study provides evidence for why consistency is advantageous in a real animal environment as opposed to in a theoretical model. The findings have shed light on attempts to understand how and why certain personality traits evolve over time or in situations. Project leader Dr [Christos Ioannou](#) confirmed that it isn't just *how* you act, but *how consistently* you do this that determines

the success and cohesiveness of the group. A wide range of animals (fish, locusts and zebras included) live in tightly-co-ordinated social groups. This can help them avoid predation and find food, but the collective co-ordination it requires can be a challenge. It is known that individual animals have distinct personalities and clear roles within social groups, which is important in co-ordinating the

group. Researchers are now finding that individuals also show clear differences in how consistent they are in those personalities. Some are predictable and consistent, while others may be more erratic. With consistent personalities making better leaders and followers, groups composed of consistent individuals are more cohesive, allowing the group to make better decisions. [More info...](#)



## Unravelling the biology of Parkinsonism

A joint Bristol-Queensland team have shown that a mutation impairs the ability to transport proteins correctly within cells. A reduction in these proteins could help to explain why the body loses nerve cells in the part of the brain responsible for producing dopamine, which helps control and co-

ordinate body movements and underpins parkinsonism. The researchers were able to pinpoint the role of a mutation in the VPS26A gene, which is known to be linked to parkinsonism. The results reveal that the VPS26 mutation cannot bind the cargo adaptor, SNX27, which impairs the cell's ability to transport a sub-set of cargo pro-

teins to their correct destinations. Some of these cargo proteins are already linked to Parkinson's disease, which affects one in 500 people in the UK. It provides additional insight into the molecular pathways involved in parkinsonism and provides new potential therapeutic targets. [More info...](#)



## External Engagements Part I

Prof [Graeme Henderson](#) gave a Plenary Lecture, *What makes the brain tick? New insights into poly drug use*, at a Research Matters symposium to celebrate the 30th Anniversary of the [Bristol Drugs](#)

[Project](#).

Dr [Nadia Cerminara](#) has joined the Editorial Board for *Scientific Reports*.

Dr [Liz Coulthard](#) was one of the country's leading female medics

who commented in the [Daily Mail](#) about their golden health rules.

Dr [Denize Atan](#) was one of the speakers at this year's successful [Soapbox Science](#) event in Bristol.



Graeme Henderson,  
Liz Coulthard and Denize Atan

## Funding Successes Part II

**Dr Catherine Pennington (Lecturer)** and co-project lead **Dr Liz Coulthard** were awarded a grant from BRACE for *Refining diagnosis and management of mild memory problems: a pilot study*, providing support for 2 sessions a week for her at consultant level over two years, totalling £42,677. The work will investigate how and why psychological issues impact on brain function, and will involve work with affected individuals to generate ideas for new therapies that could help. Catherine will combine this work with a new post as a cognitive neurology consultant with North Bristol Trust from August 2016.

**A BBSRC project grant** for £450k has been awarded to Professor of Neuroscience **Hans Reul** for the *Role of corticosteroid receptor DNA binding in stress-induced hippocampal gene transcription in relation to glucocorticoid and behavioural responses*. Alongside Dr Karen Mifsud (Senior Research Associate within the Neuro-Epigenetic Research Group) the award will allow the continuation of re-

search to obtain insight into how glucocorticoid hormones act on the brain after acute and chronic stressful challenges in a bid to help resolve stress-related psychiatric disorders like major depression, anxiety and post-traumatic stress disorder.

**A Wellcome Trust doctoral training award** for £1.8M has been allocated to Professor of Medicine **Stafford Lightman** to pursue *From synapses to systems in health and disease*. Co-applicants include Profs **Richard Apps** and **Zaf Bashir** and Drs **Conor Houghton** and **Krasimira Tsaneva-Atanasova**. Major advances in understanding neural dynamics require interdisciplinary approaches that span different neuroscience areas, but crucially depend on integration of experimental/clinical approaches with mathematical/computational expertise. The PhD programme is delivering a new generation of neuroscientists who are able to tackle these challenges. By developing cross-disciplinary expertise in state-of-the-art experimental

approaches combined with advanced analytical methods, capacity is being built in an area where academia, industry and government all recognise that there is a critical skills shortage in the UK and world-wide.

**Gachon University Gil Medical Centre** in South Korea awarded project lead Prof **Kei Cho** £145k over 30 months. This collaboration will have two aspects, comprising a translational neuroscience research project aimed at discovering new molecular targets for neurodegeneration, specifically involving Alzheimer's disease, and a pilot PhD training scheme between Bristol and Gachon.

**Professorial Research Fellow in Physiology** **Julian Paton** has been awarded an International Fellowship from the Royal Society of New Zealand of £150k for three years.

**Sarah Barrett (MSc Pharmacology)** has been awarded a PhD studentship by the Society for Addiction to work with Dr Emma Robinson and Prof Graeme Henderson.



the ROYAL  
SOCIETY of  
NEW ZEALAND  
TE APĀRANGI

In Bristol in 2013/14 more than 40% of patients referred to Improving Access to Psychological Therapies services did not engage with the service

## InPsyte HIT video on patient experiences

The [Psychological Therapies in Primary Care Health Integration Team](#) (InPsyTe HIT) have produced a [video](#) which explores patient experiences of cognitive behavioural therapy (CBT) and draws on the experiences of participants of the [CoBaIT](#) Trial. Whilst talking therapies such as CBT are effective treatments for depression, previous research has also shown that many peo-

ple do not complete it. The HIT explored the reasons why people drop out of CBT in primary care and aims to enable patients and health care professionals to have a more informed discussion about what to expect from CBT to improve patient engagement. The trial demonstrated that CBT, in addition to usual care including antidepressants, was an effective treatment, re-

ducing depressive symptoms and improving quality of life in people with depression that had not responded to treatment with antidepressants alone. The team have also produced a video to help improve uptake of the Bristol Wellbeing Therapies, part of Bristol's Improving Access to Psychological Therapies service, which helps people with anxiety or depression.

## Elizabeth Blackwell Awards



**Jonathan Rossiter** (Engineering) received a Confidence in Concept Award for *Implantable soft robotic device to treat vocal fold paralysis*.

Two case studies of previous EBI projects have recently been published:

[Computational neuroscience: from theory to practice](#) describes the work that Dr [Conor Houghton](#) (Engineering) pursued under an EBI [Senior Fel-](#)

[lowship](#). The award supported a substantial buyout of his teaching work, enabling him to get involved with and make considerable progress in a number of key research areas: Purkinje cells, Sleep, Decision-making and Learning in the perirhinal cortex. In addition to three papers already in preparation as a result of this work, Conor contributed to a successful bid for the renewal of the Neural Dynamics Wellcome

Trust PhD Programme

[‘Nudging’ clinicians toward better decisions](#) was a three month project undergone by Prof [Iain Gilchrist](#) (Experimental Psychology) under the EBI [Research for Health](#) scheme. Alongside colleagues at UH Bristol they studied the role of information flow in helping intensive care clinicians to make better decisions and achieve better outcomes for patients.



## Academic Promotion

**Marcus Drake** (right) is now Professor of Physiological Urology in the School of Clinical Sciences. Marcus was recently prominent

thanks to his role as Chief Investigator on a Commercial Phase III clinical trial (BESIDE) which appears to have had a beneficial effect

on urinary incontinence through a combination therapy of antimuscarinic and beta-3 agonist ([Eur Urol](#) & [Jour Urol](#)).



**What is this study?**

This is a study investigating whether brain blood flow autoregulation is preserved in hypertension. The study involves ~1 hour of screening at CRiC Bristol and ~2 hours on a

Thursday afternoon at the Bristol Heart Institute for an MRI scan of the head and chest during lower body negative pressure.

**Contact?**

If you are think you

might be eligible, please contact [Sandra Neumann](#) (t: 0117 342 1503) for more information.

See the website for [more studies](#) on blood pressure.

**High blood pressure?**

Research study looking for **volunteers** in the 35-60 year age range with high blood pressure

**Artificial Minds Reading Group**

The Artificial Minds Reading Group started meeting on 19 October 2016 in the philosophy library in [Cotham House](#). The group will meet here every Wednesday at 15:00 to discuss a wide range of philosophical issues associated with recent developments in artificial intelligence, robotics, technological neural enhancements, machine learning, virtual reality and more. They plan to discuss a range

of different issues including, but not limited to:

- What is artificial intelligence?
- What is artificial consciousness?
- Is the brain a computer?
- Should we let intelligent machines make morally significant decision?
- Should machines ever be given rights?
- Are we already cyborgs?
- To what extent is technological neural enhancement morally acceptable?
- Can machines create works of art?
- What can robotics tell us about the role of the body in shaping the mind?
- What does swarm robotics tell us about the nature of organisms?

All are very welcome to attend. For further information contact [Max Jones](#).

**Student Health Sciences Research Journal**

The *INSPIRE Student Health Sciences Research Journal* is produced by a team of student editors from Bristol, Exeter, Plymouth and Cardiff and plays a key part of a collaborative project under the national INSPIRE scheme funded by the Wellcome Trust and administered by the Academy of Medical Sciences.

The scheme aims to encourage student doc-

tors, dentists and vets to consider a career in research, and encourages publication of their work. Since the scheme began in 2013 the south-west INSPIRE partnership has supported more than 70 vacation studentships as well as prize awards. Together with local matched funding, this has enabled students to undertake research projects under the supervision of senior scientists and clinicians.

Following a competition in 2015, a team of seven senior editors came together to set up the journal from scratch in order to provide a platform for publication of student project results, as well as to have direct experience of academic peer review.

The first issue of the journal is [available online](#).





## Dementia HIT survey of public attitudes

The [Dementia Health Integration Team](#) (HIT) have had their first paper published. The aim of the study, *A cross-sectional investigation of public attitudes toward dementia in Bristol and South Gloucestershire using the approaches to dementia questionnaire*, was to carry out a survey of public attitudes toward people affected by dementia in Bristol and South Gloucestershire. To date, surveys of attitudes toward de-

mentia have largely been conducted using unvalidated materials or have focused on healthcare professionals supporting people affected by dementia. This is one of the first surveys of public attitudes towards dementia to use a validated questionnaire such as the approaches to dementia questionnaire (ADQ). The study provides a baseline of attitudes toward dementia, against which the De-

mentia HIT will be able to compare changes over time. This is important due to the emphasis in public health campaigns on improving attitudes toward dementia.

For a copy of the paper, contact [Jude Hancock](#) or [Richard Cheston](#). The HIT reviewed its progress over the past year; see [Bristol Health Partners](#) for details.



## Health Integration Teams (HITs) Annual Reviews

The [Integrated Pain Management HIT](#) aims to provide a fully integrated, multi-disciplinary, lifespan clinical service for chronic pain across the Bristol and Bath area. They have developed a single clinical pain database; each member trust captures their own data, but questionnaire consistency means similar information is now recorded across the NHS organisations. They are

also scoping a pilot multi-disciplinary pain assessment clinic, which will be trialed by the Bristol trusts.

The [Parkinson's and Other Movement Disorders HIT](#) develops advanced treatment services with a new regional Duodopa service at North Bristol Trust which is starting to assess patients for eligibility for this advanced treatment for Parkinson's. Their brain-

infused nerve growth factor trials are also progressing well.

The [Psychological Therapies in Primary Care HIT](#) aims to improve psychological care for patients with depression, anxiety and other common mental disorders.

The newly formed [Psychosis HIT](#) works to improve the services and lives of psychosis sufferers and their families.

The newly formed [Psychosis Health Integration Team](#) is a team of people who experience psychosis, their families and carers, academics, mental health professionals, commissioners, service providers and other experts. They are working together to improve the lives of people with psychosis in Bristol.

## A Picture of Health - illustrate your research

Researchers across UoB are invited to share images of their health research inspired by a series of six themes: growing up and growing older;

conflict; care and caring; consumption; green; wellbeing. The best images will be displayed in weekly themed collages on [Picture of Health](#) from Jan 2017. Free 1hr

[workshops](#) on Smartphone Photography will be held on 3 and 8 Nov 2016, 12:00 -13:00. Deadline for submissions is 2 December 2016.

## Funding Successes Part III

**The EPSRC has awarded a £2M grant** for the Centre for Predictive Modelling in Healthcare to Prof [Stafford Lightman](#) and Dr [John Terry](#) and CIs P Challenor, W Henley, M Richardson and [Krasimira Tsaneva-Atanasova](#). Many chronic disorders are diagnosed and managed based upon easily identifiable phenomena in clinically collected data. However, it is becoming increasingly understood that these clinical observables are not static, but rather a reflection of a highly dynamic and evolving system at a single snapshot in time. The qualitative nature of these criteria, combined with observational data which is incomplete and changes over time, results in the potential for non-optimal decision-making. The Centre brings together a team of mathemati-

cians, statisticians and clinicians with a range of industrial partners, patients and other stakeholders to focus on the development of new methods for managing and treating chronic health conditions using predictive mathematical models. This unique approach is underpinned by the expertise and breadth of experience of the Centre's team and innovative approaches to both the research and clinical translation.

**Prof [Seth Love](#)** was awarded £227k from Alzheimer's Research UK under their Network Accelerate Scheme. It will help build a network for the development, validation and implementation of new methods to measure vascular dysfunction in dementia over the next two years.

**Dr [Phil Clatworthy](#)** gained a Joint

British Association of Stroke Physicians and National Institute for Health Research Clinical Research Network Stroke Portfolio Development Award. This is a small grant of £2000 that will bring together a writing group consisting of internationally renowned researchers in the field of stroke related visual impairment. Led from Bristol, the group will develop a programme of research into assessment and treatment of visual problems after stroke.

**A Wellcome Trust** award has gone to Dr [Matt Jones](#) for *Updating cell assemblies*, £1.3M for five years.

**Prof [Andrew Dick](#)** received £60k from the National Eye Research Centre for *Transcriptional plasticity of microglia during intraocular inflammation* for three years.



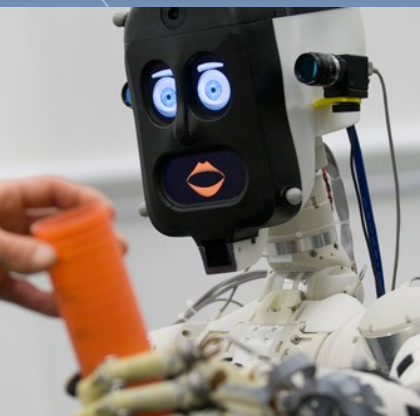
## Public Engagement Part II

**Dr [Laura Palmer](#)** was interviewed on BBC2's Victoria Derbyshire current affairs programme about [why brain banks exist](#) and what they do. The story was also covered by BBC news online.

**Dr [James Hodge](#)** participated in *Mutant Circus* and *Dr Fly and the mutants fly* and bee public engagement demonstrations with Guerrilla Science at the Secret Garden Party festival and The Port Elliot festival

2016 (28-31 July). His alter-ego, Dr Fly, also participated in the [Ugly bug circus Family Rave](#) held at Bristol's Trinity Centre on 11 September 2016.





BERT2, a humanoid robot assistant, hands something to a human



© RICE

## People favour expressive robots over efficient ones

Making an assistive robot partner expressive and communicative is likely to make it more satisfying to work with and lead to users trusting it more, even if it makes mistakes. On the flip side, giving robots human-like traits means users may lie to the robot in order to avoid hurting its feelings. A team from UoB and University College London experimented with a humanoid assistive robot helping users

to make an omelette. The robot was tasked with passing the eggs, salt and oil but dropped one of the polystyrene eggs in two of the conditions and then attempted to make amends. The aim of the study was to investigate how a robot may recover a users' trust when it makes a mistake and how it can communicate its erroneous behaviour to somebody who is working with it. The

study suggests that a communicative, expressive robot is preferable for the majority of users to a more efficient, less error prone one, despite it taking 50 per cent longer to complete the task. At the end the robot asked participants whether they would give it the job of kitchen assistant. Some were reluctant to answer and most looked uncomfortable.

[More info...](#)

## First RICE Professor of Old Age Psychiatry

Prof [Julian Hughes](#) has been announced as the first RICE Professor of Old Age Psychiatry in a collaboration between The Research Institute for the Care of Older People (RICE), the Royal United Hospitals Bath NHS Foundation Trust (RUH) and the

University of Bristol.

Having been appointed as a Fellow of the Royal College of Physicians of Edinburgh in February 2016, Julian was formally admitted to the Fellowship at a ceremony at the College in Edinburgh. He was also an

invited speaker at a conference in Paris of the Fondation M  d  ric Alzheimer to promote the theme *Social Sciences for Dementia*. His presentation concerned the ethical issues in connection with research in dementia.

## International Strategic Fund Award

Congratulations to Prof [Mervyn Miles](#) who was awarded £2,175 by UoB for *Observation with high-speed AFM of*

*the effect of beta amyloid on neuronal membranes with relevance to mechanisms of Alzheimer's Disease* with Morgan Rob-

inson (PhD student) and Prof Zoya Leonenko based at the University of Waterloo in Canada.

## Evolution of the Brain exhibit available for use

The [evolution of the brain exhibition](#) was created to illustrate how similarities and differences in the anatomy of the brain of different species. The

brains are mounted in matching cases to help emphasise the differences in size. The current collection includes invertebrates, fish, amphibians and reptiles,

birds and mammals. If you are interested in running an exhibition using the collection, please contact [Emma Robinson](#).

## European Society of Paediatric Endocrinology

Dr Katherine Hanton had her abstract entitled *Effects of eating rate on satiety hormones, meal enjoyment and memory for recent eating: An fMRI study* accepted for an oral presentation and as an electric post-

er for the 55th Annual Meeting of the European Society of Paediatric Endocrinology (ESPE 2016) held on 10-12 September 2016 in Paris. Kate has been working with Prof Julian Hamilton-Shield and Dr Elanor

Hinton on a functional MRI and eating behaviour study at the Clinical Research Imaging Centre (CRIC) as part of the Elizabeth Blackwell Institute for Health Research.



## Personality Disorders and Mental Health

Personality disorder (PD) affects about one in 20 people in the UK and up to 40 per cent of adult mental health service users. Most research in the field has taken place in clinical settings, and little is known about the health effects of PD in the general population.

A study led by the University of Bristol, in collaboration with the University of Melbourne, has for the first time provided a fuller understanding of the disease burden associated with personality disorders. Using data from an Australian community sample, the team tracked the health and social outcomes of people with personality disorder, 11 years after they were originally assessed for the presence of personality difficulties or personality

disorder. At the age of 24, personality disorder was already linked with social disadvantage, substance misuse and poor mental health. Eleven years later, the presence of personality pathology predicted the occurrence of anxiety and depression, as well as the absence of long-term relationships. What is most striking is that these associations were not due to pre-existing mental health, substance use or social problems.

People with personality disorder appear to be a distinctly vulnerable group with regards to future mental health and relationship problems. There is no doubt that future efforts to understand population health could be more successful if they took account of personality pathology. Furthermore, there

is a pressing need for early intervention, as well as innovative strategies to address the substantial disease burden experienced by people with PD.

Reference: Paul Moran (pictured right), Helena Romaniuk, Carolyn Coffey, Andrew Chanen, Louisa Degenhardt, Rohan Borschmann and George C Patton. *The influence of personality disorder on the future mental health and social adjustment of young adults: a population-based, longitudinal cohort study*. *The Lancet Psychiatry*. 3 (7), pp636-645.



# ELIZABETH BLACKWELL FUNDING

## EBI Workshops Funding

Support interdisciplinary workshops in health research at new or emerging interface between two or more disciplines. Applications reviewed all year.

## EBI Catalyst Fund

Pump priming awards support the most promising and ambitious ideas across the widest interdisciplinary boundaries. They will be identified largely through the running of [workshops](#) to explore new possibilities and identify the big questions. Applications reviewed all year.

## Returning Carers Scheme

To support academic staff across all faculties in re-establishing their independent research careers on return from extended leave (16 weeks or more) for reasons connected to caring (e.g. maternity leave, adoption leave, additional paternity leave, leave to care for a dependant.).

The deadline for applications is 30 April and 31 October each year.

## Clinical Primer Scheme

This scheme is aimed at exceptionally motivated clinically qualified medical and veterinary trainees who are at an early stage of their career and is designed to give them the chance to experience a world-class research environment for the first time. Applicants must either be fully-qualified medical doctors and will have started, or be ready to start, their specialist training OR have completed a degree in veterinary medicine or veterinary science; an intercalated degree or other research experience (e.g. undergraduate vacation project) is also desirable. All applicants should be entitled to work within the European Economic Area (EEA).

Deadline for applications is 15 December 2016.

## GW4 - Clinical Academic Training programme

The Wellcome Trust-funded GW4 Clinical Academic Training programme (GW4-CAT) is a new scheme that brings together the Universities of Bristol, Cardiff and Exeter in developing the next generation of clinical academics. Within the programme, exceptional early career medical, veterinary and dental graduates will have the chance to undertake an interdisciplinary PhD training in one of over 50 world-leading research groups in population health, cardiovascular sciences, neuroscience, mental health, infection, immunity & repair, cancer or molecular cell biology.

Deadline for applications is 25 November 2016.





# FUNDING OPPORTUNITIES

Funding opportunities cover travel grants, early-career researcher funds as well as major grants for up to £1M. Have a browse and see what possibilities are out there. This is NOT an exhaustive list– [Research Professional](#) has loads more options listed!

**\*Research Professional**

Set up via **Research Professional (RP)**, a full calendar of funding opportunities for Neuroscience research is [available online](#). Subscribing to a calendar will place the entries in your own calendar, which will automatically update according to pre-specified search criteria. Staff and students have **FREE** access to Research Professional online from all computers on the University network. You can create your own personalised funding opportunity e-mail alerts by registering with RP. Find out all about it on the [RED website](#).

## BRACE

[Research grants](#)

Closing Date: none

Award amount: £250,000

Support high quality research projects of any discipline that create knowledge on the risk factors and causes, effective diagnosis or treatment of Alzheimer's disease and other dementias.

## British Neuropathological Society

[Travel bursaries](#)

Closing Date: none

Award amount: £500

Enable researchers to attend international conferences or undertake research in other laboratories related to neuropathology. Where there is a call for posters or oral presentations, applicants are required to present a paper or poster. Applicants must have been a society member for at least one year or should be proposed by a BNS member, and must not hold a permanent NHS or university appointment.

## Dana Foundation

[Clinical neuroscience research grants](#)

Closing date: none

Award amount: US\$300,000

Fund researchers to set up controlled clinical studies in patients with a specific brain disease, based on promising animal studies suggesting that a specific therapy either treated the condition or prevented it from getting worse.

## NIHR CLAHRC West

[Training bursary scheme](#)

Closing date: 1 February, 1 June and 1 September Award amount: £600

Gives staff from the local NHS, health and social care sector the opportunity

to attend high quality research and evaluation training at half the price. Aims to promote wider engagement and improve skills in research and evidence in the CLAHRC West patch, particularly for those who have not previously had opportunities for this type of training.

### **International Foundation for Research in Paraplegia**

#### [Postdoctoral fellowships](#)

Closing Date: 31-Oct-16

Award amount: unspecified

Promote basic and clinical research relating to spinal cord injury and neuroregeneration. Fellowships are for young Swiss scientists who want to join an outstanding laboratory or clinic abroad, or young scientists from abroad who wish to work in Switzerland. The living allowance is worth up to CHF70,000 per year, and research and travel allowances are worth up to CHF9,000 per year.

### **International Foundation for Research in Paraplegia**

#### [Research grants](#)

Closing Date: 31-Oct-16

Award amount: CHF150,000

Aim to promote basic and clinical research related to spinal cord injury. Research projects may address all aspects of central nervous system and spinal cord lesions, nerve regeneration, trophic support of lesioned neurons, and functional changes induced by lesions, preferentially in mammals. Clinical research projects may be situated in the fields of diagnosis, acute lesion management including surgery, neurology, urology, rehabilitation, and other areas related to paraplegia.

### **NIHR**

[Efficacy and Mechanism Evaluation \(EME\) Programme - Commissioned call](#) - 16/61 Evaluation of new surgical procedures through the use of novel study designs

Closing date: 01-Nov-16

Award amount: unspecified

Funds clinical efficacy studies. The studies we support usually test if an intervention works as expected in a well-defined population or group of patients. The Programme also provides an opportunity to use clinical studies to understand disease or treatment mechanisms, which may in turn lead to improvements in health and patient care.

### **Hertie Foundation**

#### [Eric Kandel young neuroscientists prize](#)

Closing Date: 01-Nov-16

Award amount: €100,000

Recognises outstanding work in any field of neuroscience by European investigators under 40 years of age. Candidates must have demonstrated outstanding and independent scientific creativity and productivity, their work must have been published in leading journals and they must be nominated by their university or research institution or by an internationally recognised neuroscientist.

### **Alzheimer's Drug Discovery Foundation**

#### [Clinical trials for frontotemporal degeneration](#)

Closing date: 15-Nov-16

Award amount: US\$2M

Supports innovative clinical trials testing novel or repurposed drugs for frontotemporal degeneration and related disorders. The total budget of the call is USD 10 million and it aims to fund at least five projects over 10 years. Individual project budgets may range between USD 500,000 and USD 2m each over one to three years.

### **Association of British Neurologists**

[Clinical research training fellowship](#)

Closing date: 17-Nov-16

Award amount: unspecified

Supports trainees who wish to study an aspect of clinical neuroscience in depth leading to an MD or PhD degree. In addition to salary, reasonable travel costs, equipment and consumables can be awarded up to maximum £10,000 per year.

### **National Institute of Mental Health**

[BRAIN initiative: foundations of non-invasive functional human brain imaging and recording – bridging scales and modalities \(R01\)](#)

Closing date: 23-Nov-16

Award amount: US\$700,000

Encourages transformative discoveries that will lead to breakthroughs in understanding human brain function, specifically focusing on efforts that aim to revolutionise the understanding of the biological activity underlying, and bioinformatic content of, data collected using contemporary non-invasive functional brain imaging techniques.

### **National Institutes of Health**

[BRAIN initiative: non-invasive neuromodulation – mechanisms and dose and response relationships for targeted CNS effects \(R01\)](#)

Closing date: 23-Nov-16

Award amount: unspecified

Aims to better understand how existing non-invasive neuromodulation devices affect brain circuitry. Application budgets are not limited but need to reflect the actual needs of the proposed project. The maximum project period is four years.

### **National Science Foundation**

[Collaborative research in computational neuroscience programme](#)

Closing date: 19-Dec-16

Award amount: US\$250,000 pa

Supports collaborative activities that will advance the understanding of nervous system structure and function, mechanisms underlying nervous system disorders and computational strategies used by the nervous system. International components of collaborative projects may be funded in parallel by the participating agencies.



**Department of Health including NIHR**[Health services and delivery research programme – researcher-led workstream: 16/116, 16/115](#)

Closing date: 12-Jan-17

Award amount: unspecified

Supports research into the quality, appropriateness, effectiveness, equity and patient experience of health services. The workstream has a continued interest in the following research areas: dementia; surgical and implantable devices; primary care interventions; very rare diseases; long-term conditions in children; multimorbidities in older people.

**National Institute on Aging**[Role of peripheral proteostasis on brain ageing and on Alzheimer's disease \(R01\)](#)

Closing date: 12-Jan-17

Award amount: unspecified

Seeks to advance biomedical research on the role of peripheral proteostasis on brain structure and function during ageing and in Alzheimer's disease, facilitating the identification of molecular and cellular markers of normal brain ageing and brain ageing during pathological conditions. Application budgets are not limited but need to reflect the actual needs of the proposed project.

**European Academy of Neurology**[Tournament for neurologists in training](#)

Closing Date: 13-Jan-17

Award amount: unspecified

Enables neurologists to present papers on clinical related research or basic neurological science at the 2017 European Academy of Neurology congress in Amsterdam. PhD neurology students, residents of neurology or certified clinical neurologists, who have no more than three years practice since completing their training, and are working in Europe may submit abstracts.

**European Academy of Neurology**[Investigator awards](#)

Closing date: 13-Jan-17

Award amount: unspecified

Recognise the best poster or oral presentations on neurology at the academy's annual congress, to be held from 24 to 27 June 2017 in Amsterdam, Netherlands. 20 awards are available providing the winners with a registration to the academy's congress 2018 in Lisbon, Portugal.

**European Academy of Neurology**[Congress bursaries](#)

Closing date: 13-Jan-17

Award amount: unspecified

Enable young researchers to attend the academy's annual congress, to be held from 24 to 27 June 2017 in Amsterdam. A maximum of 300 bursaries are available, to cover the costs of congress registration, accommodation and admission to three half-day training courses.

**European Academy of Neurology**[Spring school for young neurologists](#)

Closing Date: 31-Jan-17

Award amount: acc + tuition + board

Will take place between 10 and 15 May 2017 in the Czech Republic, with lectures scheduled for four consecutive days on the subject of multiple sclerosis, inflammatory neuropathies and stroke. Contributions to the optimal organisation of neurological care, neurological services and postgraduate education throughout Europe will be presented. The programme includes a half-day trip to Prague.

**European Society for Traumatic Stress Studies**[Wolter de Loos award for distinguished contribution to psychotraumatology in Europe](#)

Closing Date: 01-Apr-17

Award amount: €1,000

Nominations are invited. The prize recognises an individual who has made a significant theoretical, clinical or research contribution to the field of psychotraumatology studies. The nominee must be based in an European or adjoining country and the nominating individual must be an ESTSS member. Self-nominations are accepted. The winner is expected to be present at the European Conference on Traumatic Stress to receive their award.

**European Society for Traumatic Stress Studies**[Young minds in psychotraumatology award](#)

Closing Date: 01-Apr-17

Award amount: €1,000

Nominations are invited. The prize recognises excellence in the traumatic stress field through service or research by an individual who has completed their training within the last 10 years. The nominating individual must be an ESTSS member. Self-nominations are acceptable. The winner is expected to be present at the European Conference on Traumatic Stress to receive their award.

**Federation of European Neuroscience Societies**[FENS regional meeting travel grants](#)

Closing date: 30-Apr-17

Award amount: €500

These allow young qualified researchers to attend the regional meeting to be held from 20 to 23 September 2017 in Pécs, Hungary.

## FEATURED PUBLICATION

### Individual Differences in Frequency of Inner Speech: Differential Relations with Cognitive and Non-cognitive Factors

Xuexhu Ren, Tengfei Wang and [Christopher Jarrold](#)

Frontiers in Psychology. [Available online.](#)

Inner speech plays a crucial role in behavioral regulation and the use of inner speech is very common among adults. However, less is known about individual differences in the frequency of inner speech use and about the underlying processes that may explain why people exhibit individual differences in the frequency of inner speech use. This study was conducted to investigate how individual differences in the frequency of inner speech use are related to cognitive and non-cognitive factors. Four functions of inner speech including self-criticism, self-reinforcement, self-management, and social assessment measured by an adapted version of Brinthaup's Self-Talk Scale were examined. The cognitive factors that were considered included executive functioning and complex reasoning and the non-cognitive factors consisted of trait anxiety and impulsivity. Data were collected from a large Chinese sample. Results revealed that anxiety and impulsivity were mainly related to the frequency of the affective function of inner speech (self-criticism and self-reinforcement) and executive functions and complex reasoning were mainly related to the frequency of the cognitive, self-regulatory function of inner speech (self-management).

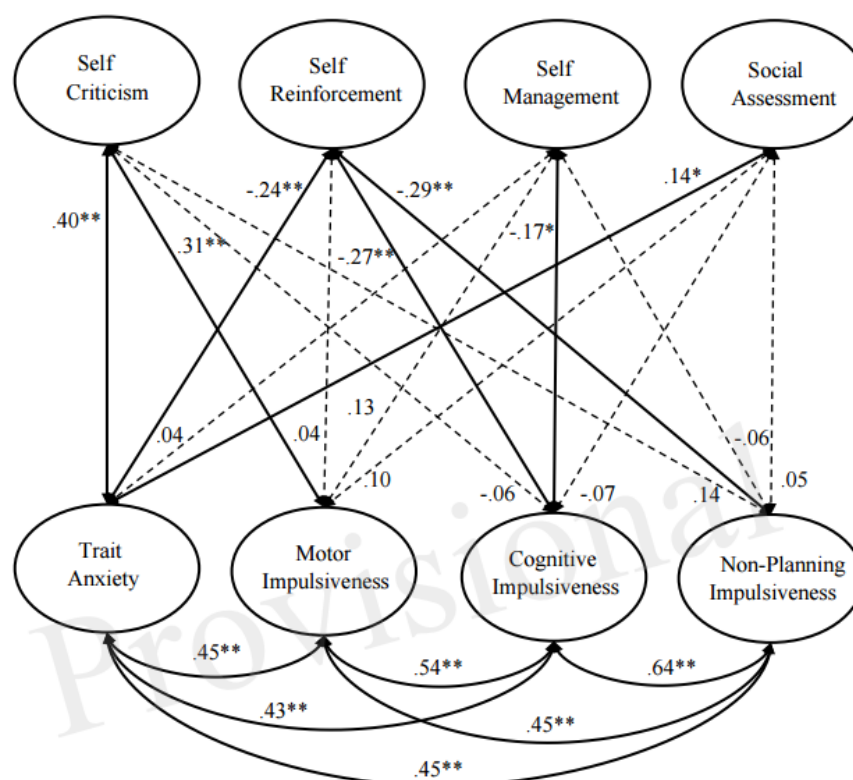


Illustration of the comprehensive correlation model including the four latent variables representing the four types of inner speech and another four latent variables representing trait anxiety, motor impulsiveness, cognitive impulsiveness, and non-planning impulsiveness. Self-criticism and selfreinforcement reflect mainly the affective regulatory function of inner speech; self-management reflects mainly the cognitive regulatory function of inner speech; social assessment reflects mainly the communicative function of inner speech. The dotted arrow means that the corresponding correlation was not significant (\*  $p < .05$ , \*\*  $p < .01$ ).



# CONTACT INFORMATION

## Bristol Neuroscience is run by a Steering Group:

### Director:

[Neil Scolding](#), Burden Professor of Clinical Neurosciences



- [Richard Apps](#), Professor of Neuroscience
- [Zaf Bashir](#), Professor of Cellular Neuroscience
- [Yoav Ben-Shlomo](#), Professor of Clinical Epidemiology
- [Catherine Brown](#), Theme Administrator
- [Kei Cho](#), Chair of Neuroscience (Royal Society Wolfson Research Merit Award Holder)
- [Rachel Churchill](#), Reader in Psychiatric Epidemiology
- [Liz Coulthard](#), Consultant Senior Lecturer
- [Jonathan Evans](#), Consultant Senior Lecturer
- [Iain Gilchrist](#), Professor of Neuropsychology
- [Matt Jones](#), Physiology & Pharmacology
- [Kevin Kemp](#), Research Collaborator; Research Associate
- [Stafford Lightman](#), Professor of Medicine
- [Astrid Linthorst](#), Professor of Neuroscience
- [Mike Mendl](#), Professor of Animal Behaviour and Welfare
- [Tony Pickering](#), Wellcome Trust Reader in Neuroscience
- [Hazel Phillips](#), RED Facilitator
- [Hans Reul](#), Professor of Neuroscience
- [Emma Robinson](#), Reader in Psychopharmacology
- Adam Tan, President of the student Neuroscience Society
- [Alastair Wilkins](#), Reader in Neurology
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<http://www.bristol.ac.uk/neuroscience>

