

## Highlights:

- Three highly prestigious grants awarded to Physiology PIs
- Donation campaign collects hundreds of books to rebuild Iraqi library
- Brain tumour biobank earns prime time on RTE News.

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# Physiology News

## New Funding: SFI Research Centre and H2020 ITNs

On the beginning of May three major projects were funded in the Department.

**Prof David Henshall** and his collaborators secured one of the 4 SFI-funded research centres in Ireland. The centre (FUTURE-NEURO) received over €7Mi in funding.

Later that day, **Prof Annette Byrne** and **Dr Tobias Engel** secured €3.8Mi and €3.4Mi in

funding respectively as coordinators in two H2020-funded Innovative Training Networks (ITN) named GLL-OTRAIN and PurinesDX.

Congratulations as well to **Dr Irene Llorente-Folch** on being awarded a Postdoctoral fellowship from the Irish Research Council.



Left to right: Dr Tobias Engel, Prof David Henshall, Prof Jochen Prehn and Dr Alice O'Farrell, representing Prof Annette Byrne

## New Faces

The *Physiology News* Team would like to offer a warm-hearted welcome to all new-joiners in the past 6 months or so:

**Anna Bot (Ania)** has recently joined Prof David Henshall's group as visiting scientist from Warsaw, Poland. She has recently successfully completed her PhD. Well done, Ania!

**Dr Anna Matveeva** has joined Prof Jochen Prehn's lab as a postdoc. Her project focuses on the abnormal function of the apoptotic pathway in cancer patients. Anna studied Physics in St Petersburg and completed her PhD in Heidelberg on mathematical modelling of epigenetic networks. She then worked on computation modelling to study oxidative stress in normal and cancerous cells.

**Dr Antonella Poggiani** joined Dr Tobias Engel's group as a research assistant.

**Catherine Sirafim** is currently undertaking a rotation as part of her first year in RCSI's StAR PhD Programme in Prof David Henshall's lab.

**Fernanda Rossato** is a visiting scientist from Brazil working in Prof David Henshall's group for 6 months. She is doing a PhD in the pharmacology at the Federal University of Santa Maria, with a focus on neuroinflammation in epilepsy.

**James Morgan (Jimmy)** joined the department as a research assistant in Dr Tobias Engel's group.

**Jesus Merchan Rubira** is a visiting scientist who has recently joined Dr Tobias Engel's lab group for 6 months. He is based in the Centro Biología Molecular in Madrid.

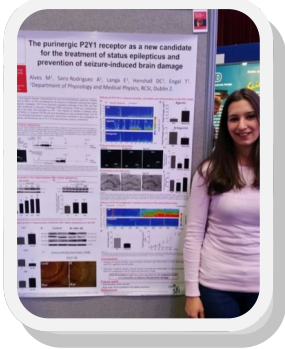
**Mayara Lutchemeyer de Freitas** is a visiting scientist from Brazil who will be working in Prof David Henshall's group for 6 months. She is currently doing a PhD in pharmacology at the Federal University of Santa Maria. Her PhD project researches the role of the thromboxane recep-

tor in PTX induced seizures.

**Dr Michael Fichtner (Micha)** is a postdoc who recently joined Prof Prehn's group. He studied Biochemistry in Halle/Saale in Germany and then completed his PhD at the University Medical Centre Hamburg-Eppendorf. His research investigated the involvement of the B-cell antigen receptor in Non-Hodgkin lymphomas.

**Rebecca Monaghan** and **Sarah Cooper** joined the department as Research Assistants at Beaumont hospital.

**Dr Simon Furney**. Finally we are delighted to welcome Dr Furney to the Department of Physiology as a StAR lecturer. His research interests include Next Generation Sequencing, Cancer Bioinformatics, Cancer Genomics and Genomic Medicine. Dr Furney has recently returned to Ireland having spent a number of years abroad in leading research institutes in London, Barcelona and Manchester.



Mariana Alves, winner of the best poster prize (Category PG2+) during RCSI Research Day, on February 9<sup>th</sup>.



Alessandra Di Grande, winner of the best poster prize at the Blood Cancer Network meeting on June 9<sup>th</sup> in Dublin.

## Conference contributions

◇ **RCSI Research Day 2017**, 9 February. **PG2+ Category poster prize** went to Mariana Alves.

Oral presentation: 'Thesis in 3' – Federico Lucantoni, Post Doctoral Category – Dr Sinead Kinsella. Poster Presentations: Dr Catriona Dowling, Dr Edward Beamer, Dr Ian Miller, Dr Niamh Connolly, Dr Ozlem Aslan, Dr Steven Carberry, Adam Lafferty, Aidan Kenny, Alessandra Di Grande, Aoife Campbell, Elizabeth Brindley, Franklin Lincoln, Louise Walsh, Mariana Alves, and Mariangela Meyer.

◇ **IACR Annual Meeting**, 22-24 February – Kilkenny, Ireland. Oral presentations: Dr. Catriona Dowling, Dr Ian Miller, Cíara Dunphy and Louise Walsh.

Poster presentations: Dr Manuela Salvucci, Dr Steven Carberry, Adam Lafferty, Alessandra Di Grande, and

Mariangela Meyer.

◇ **Keystone Symposia - Tumor Metabolism: Mechanisms and Targets (X3)**, 5-9 March – Whistler, Canada. Poster presentations: Dr Heiko Dussmann, Dr Irene Llorente-Folch, Dr Manuela Salvucci, Ciara Dunphy, and James Kealy.

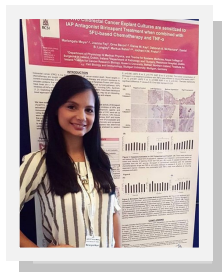
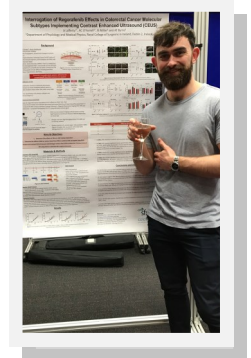
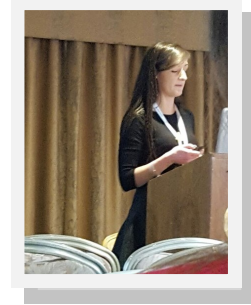
◇ **AACR Annual Meeting 2017**, 1-5 April – Washington DC. Poster presentations: Dr Catriona Dowling, Dr Ian Miller.

◇ **BNA 2017 Festival of Neuroscience**, 10-13 April – Birmingham, UK. Poster presentations: Aidan Kenny, Aoife Campbell and Mariana Alves.

◇ **International Conference on Alzheimer's and Parkinson's diseases**, 29 March–2 April, Vienna, Austria. Oral presentation: Dr Niamh Connolly.

◇ **Blood Cancer Network Ireland Meeting**, 9 June, Dublin, Ireland. **Best poster presentation winner** Alessandra Di Grande.

Well done everyone!



## Submitted theses, Vivas and Graduations!

Congratulations to **Dr Rana Raoof** for submitting her PhD thesis on April 27<sup>th</sup> and successful *Viva* on June 27<sup>th</sup>.



Rana's work investigated the potential of extracellular miRNAs as

novel biomarkers of temporal lobe epilepsy in clinical samples.

Well done to now **Dr Sergej Susdalezew** on his successful *Viva* on May 26<sup>th</sup>. His work used an *in vitro* approach to characterize the cleavage of tRNAs by angiogenin in ALS.

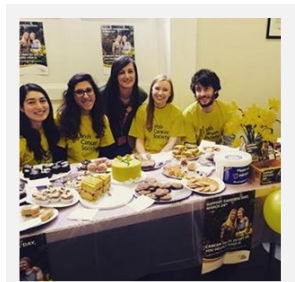
Finally congratulations to **Dr Philip O'Halloran** who received his PhD degree on June 8<sup>th</sup> at RCSI Conferring ceremony.



## Reaching out

Our team was also busy with outreach and charity activities. **Dr Helena Bonner** coordinated two workshops for Transition Year students which include hands-on practicals, lectures and discussions delivered

to 14-16 year old students who are currently considering their career options. The events were well received by the pupils.



On Daffodil Day, **Dr Catriona**



**Dowling** was one of the organisers of a cake sale in aid of the Irish Cancer Society. Several members of the department contributed with baked goods which collected over **€800** in donations! **Well done!**

## Rising from the Ashes

Earlier this year **Rana Raoof**, PhD candidate in **Prof David Henshall's** group, initiated a campaign entitled "**Let it be a Book, Rising from the Ashes**". Rana and her colleague **Amenah Dhannoon** aimed to collect used books to be donated to the library of the University of Mosul, destroyed in the ongoing Battle of Mosul,

which started on October last year.

The campaign was huge success with the collection of hundreds of books which will be



now shipped to Iraq.



Picture: **Amenah Dhannoon** and **Rana Raoof**, campaign leaders.

## Physiology on the News

On May 25<sup>th</sup> the launching of Ireland's first **Brain Tumour Biobank** featured on RTE 6pm News. The biobank, lead by **Prof Jochen Prehn** and scientists at Beaumont Hospital will boost brain cancer research in Ireland.

More information can be



found on <http://braintumourireland.com/>



*"The main goal (of the book donation campaign) is to rebuild the library of Mosul Medical College (...). This will be the best answer to terrorism (...).—Rana Raoof talking about the success of the donation campaign.*

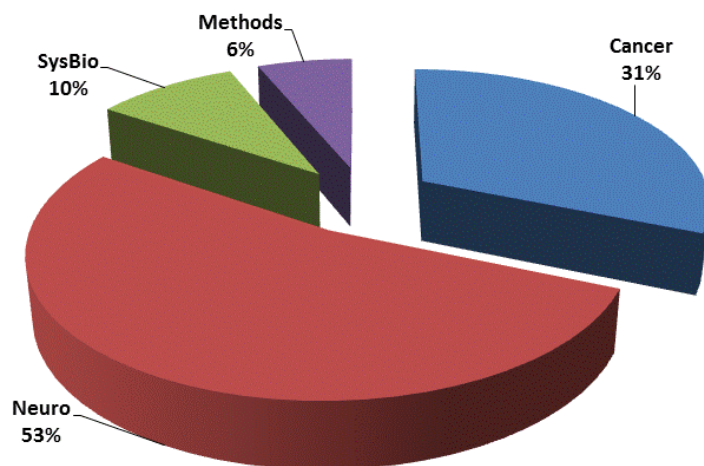




## Our Publications

In the last 6 months our department has produced a total of 32 publications with an average impact factor of 5.5.

**Many congratulations to all authors and collaborators!**



Journals	Number	Impact factor
Nature Reviews Cancer	1	34.244
EMBO Journal	1	9.6
Cancer Research	1	9.329
Cell Death and Differentiation	1	8.184
Molecular Neurodegeneration	1	6.56
Neuropsychopharmacology	1	6.399
Bioinformatics	1	5.766
British Journal of Cancer	1	5.569
Cell Death Disease	2	5.378
Scientific Reports	4	5.228
BBA Molecular Cell Research	1	5.128
Neuropharmacology	1	5.106
Molecular Therapy - Nucleic Acids	1	5.048
Oncotarget	2	5.008
Journal of Biological Chemistry	1	4.573
Molecular and Cellular Neuroscience	1	3.734
Frontiers in Neuroscience	1	3.398
Neurochemistry International	1	3.385
Neuroscience	1	3.327
PLoS One	1	3.234
Journal of Neuro-Oncology	1	3.07
Expert Review of Gastroenterology & Hepatology	1	2.546
Epilepsy Currents	1	2.333
Neurochemical Research	1	2.125
Journal of Theoretical Biology	1	2.049
Neuroscience Letters	1	2.026
Oncology Research	1	1.79
Methods in Molecular Biology	1	0.79
<b>Average:</b>		<b>5.533</b>

## Publications list (January-June/2017)

### January

Brennan GP, et al. *Neurosci Lett* pii: S0304-3940(17)30027-7.

Byrne AT, et al. *Nat Rev Cancer* 17: 254-68.

Hantusch A, et al. *Cell Death Differ* 24:192-192.

Ichikawa N, et al. *Cell Death Dis* 8:e2556.

Li B, et al. *Cancer Res* can-res.2546.2016.

Mooney CM, et al. *Sci Rep* 7:41517.

O'Farrell AC, et al. *PLoS One* 12:e0169964.

Petit EI, et al. *Neuropsychopharmacology* 42:1349-60.

Quinlan S, et al. *Methods Mol Biol* 85-91.

Tivnan A, et al. *J Neurooncol* 131:1-9.

### February

Beamer E, et al. *Front Neurosci* 11:21.

Dwane L, et al. *J Biol Chem*

292:3543-51.

Engel T, et al. *Biochim Biophys Acta - Mol Cell Res* 1864:255-66.

Engel T, et al. *Mol Neurodegener* 12:21.

Haunsberger SJ, et al. *Bioinformatics*. btw660.

Henshall DC *Epilepsy Curr* 17:43-7.

König H-G, et al. *Sci Rep* 7:42006.

Stepien M, et al. *Br J Cancer* 116:688-96.

### March

D'Orsi B, et al. *Neurochem Int* pii: S0197-0186(17)30036-0.

Mohelnikova-Duchonova B, et al. *Sci Rep* 7:43812.

Reschke CR, et al. *Mol Ther - Nucleic Acids* 6:45-56.

Tivnan A, et al. *Oncotarget* 8:16605-20.

Verma V, et al. *Oncol Res* [Epub ahead of print].

### April

Reynolds JP, et al. *Neurochem Res* [Epub ahead of print]

Rodriguez-Alvarez N, et al. *Neuropharmacology* 116:351-63.

Schomburg L & Hughes DJ. *Expert Rev Gastroenterol Hepatol* 1-3.

Schwamborn R, et al. *Mol Cell Neurosci* 80:148-58.

Zuurbier L, et al. *Oncotarget* [Epub ahead of print].

### May

Hauser RM, et al. *Neurosci* 1 [Epub ahead of print].

Rajman M, et al. *EMBO J*. e201695748.

Sturrock M, et al. *J Theor Biol* 424:55-72.

### June

Düßmann H, et al. *Cell Death Dis* 8(6): e2853.

Raoof R, et al. *Sci Rep* 7: 3328.

## Physiology News

### Team

Dr Helena Bonner  
Dr Isabela Aparicio  
Ms Lizzie Brindley  
Dr Manuela Salvucci

Please send us your suggestions, comments and criticisms!

e-mail: [physiolnews@rcsi.ie](mailto:physiolnews@rcsi.ie)

[www.systemsmedicineireland.ie](http://www.systemsmedicineireland.ie)

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