

Parkinson's UK Edinburgh Branch Research Interest Group

PARKINSON'S^{UK}
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Newsletter November 2014 Issue No. 10

View from the Chair

We are delighted to announce that Professor Patrik Brundin has agreed to give the fourth Edinburgh Parkinson's Lecture on 22nd April 2015 at the Royal College of Physicians of Edinburgh, thereby maintaining the high standard of expert speakers that the Lecture has attracted since its inception in 2012. As usual, admission is free but by ticket only. Details will be available in due course via our web page. We also have an interesting programme of ERIG meetings planned for the coming season.

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Patrik Brundin is the inaugural holder of the Jay Van Andel Endowed Chair in Parkinson Research at the Van Andel Institute, Grand Rapids, Michigan, USA. He has more than 30 years of experience studying neurodegenerative diseases, Parkinson's disease pathogenesis and therapeutic neural grafting into people with Parkinson's disease. He is one of the top cited researchers in the field of neuroscience with nearly 300 publications on Parkinson's disease and related topics.

Forthcoming Research Talks

On 24th January 2015, Julie Jones, Lecturer in Physiotherapy at Robert Gordon's University, Aberdeen, will give a talk on physiotherapy and Parkinson's.

On 28th February 2015, Professor Dario Alessi FRS, of Dundee University, will give a talk on current research into Parkinson's at Dundee. The venue for both talks is SCRM, courtesy of Dr Tilo Kunath. Please notify me by email if you would like to take part (ken@edinburghparkinsons.org)

WPC Scientific Update

On Saturday 8th November we ran a meeting based on the WPC Scientific Updates transmitted as webcasts over the three days 30th Sept – 2nd Oct 2014. For details, see <http://www.edinburghparkinsons.org/wpc-scientific-update/> We screened some of the content at our meeting and discussed some of the implications. The meeting took place at the Centre for Regenerative Medicine, courtesy of Dr Tilo Kunath. A summary of the event will be available shortly on our web page.

Research News:

...finding a strategy to inhibit Drp1 could be a potential treatment...

Blocking mitochondrial fission

A study led by a researcher from Plymouth University in the UK, has discovered that the inhibition of a particular mitochondrial fission protein could hold the key to potential treatment for Parkinson's Disease (PD). The findings of the research are published in the 5th November 2014 edition of *Nature Communications*.

The research team found that when a particular mitochondrial fission protein (GTPase dynamin-related protein-1 — Drp1) was blocked using either gene-therapy or a chemical approach in experimental models of PD in mice, it reduced both cell death and the deficits in dopamine release — effectively reversing the PD process. The results suggest that finding a strategy to inhibit Drp1 could be a potential treatment for PD.

Effects of high-risk Parkinson's mutation may be reversible

Researchers from the University of Sheffield have found vital new evidence on how to target and reverse the effects caused by one of the most common genetic causes of Parkinson's.

Mutations in a gene called LRRK2 carry a well-established risk for Parkinson's disease, although the basis for this link is unclear.

The team, led by Parkinson's UK funded researchers Dr Kurt De Vos from the Department of Neuroscience and Dr Alex Whitworth from the Department of Biomedical Sciences, found that certain drugs could fully restore movement problems observed in fruit flies carrying the LRRK2 Roc-COR Parkinson's mutation.

These drugs, deacetylase inhibitors, target the transport system and reverse the defects caused by the faulty LRRK2 within nerve cells. The study was published on 15 October 2014 in *Nature Communications*.

Parkinson's UK Appoints Dr Arthur Roach as Director of Research & Development

Dr Arthur Roach has been appointed as Research Director at Parkinson's UK, bringing with him over 25 years' experience directing research in Parkinson's and other neurodegenerative conditions at universities, hospitals, and pharmaceutical and biotechnology companies around the world.

Arthur will spearhead collaboration between Parkinson's medical research and industry. He'll provide leadership to the Parkinson's UK research programme, which currently totals £20 million and spans 90 research projects both in the UK and internationally.

Web site

The Edinburgh Branch web site is at www.edinburghparkinsons.org and the Research Interest Group page is www.edinburghparkinsons.org/research-interest-group/

Any queries should be directed to the Editor and Chair of the Research Interest Group, [Ken Bowler](mailto:ken@edinburghparkinsons.org) by email to ken@edinburghparkinsons.org

Parkinson's UK is the operating name of the Parkinson's Disease Society of the United Kingdom. A charity registered in England and Wales (258197) and in Scotland (SC037554).