

Parkinson's UK Edinburgh Branch Research Interest Group

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Newsletter March 2015 Issue No. 11

View from the Chair

A reminder that Professor Patrik Brundin will give the fourth Edinburgh Parkinson's Lecture on 22nd April 2015 at the Royal College of Physicians of Edinburgh. As usual, admission is free but by ticket only. This is a rare opportunity to hear one of the world's leading experts. Tickets are going fast, so make sure you book now!

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The Edinburgh Parkinson's Lecture 2015



Professor Patrik Brundin is to give the 2015 lecture, entitled

The battle against Parkinson's: the end of the beginning

7.15 pm, Wednesday 22nd April 2015, Royal College of Physicians, 9 Queen Street, Edinburgh.

Professor Brundin is Director of the Van Andel Research Institute's Center for Neurodegenerative Science in Grand Rapids, Michigan. USA.

Admission to the lecture is free of charge but by ticket only. Further details of the lecture and of the application procedure may be found on our web pages.

Recent Research Talks

On 24th January Julie Jones, Lecturer in Physiotherapy at Robert Gordon's University, Aberdeen, gave a talk entitled:

Physiotherapy – are we walking in the right direction?

Professor Dario Alessi FRS, of Dundee University, gave a talk on 28th February entitled:

Research into the Molecular Causes of Parkinson's: Exciting Progress Being Made by Dundee Groups

The venue for both talks was SCRM, courtesy of Dr Tilo Kunath. The powerpoint slides from both talks are available as downloads from our website.

Research News:

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New therapeutic principle for dyskinesia

Involuntary dyskinetic movements induced by treatment with levodopa (L-dopa) are a common problem for people with Parkinson's disease. Researchers at Karolinska Institutet and Lund University in Sweden seem to be close to a novel therapy for this distressing side effect. A treatment study published in the scientific periodical **Brain** shows that a drug that stimulates certain serotonin receptors in the brain counteracts the dyskinesia-causing effects of L-dopa.

The substance tested by the team, eltoprazine, is a so-called serotonin receptor agonist that targets receptor types 5-HT1A and 5-HT1B. Serotonin is a neurotransmitter involved in the regulation of many biological phenomena, such as satiation, sleep and mental wellbeing, as well as movement

The study included 22 patients with protracted and complicated Parkinson's disease and L-dopa-induced dyskinesia. In the four-way crossover study, patients were given a single tablet of placebo and eltoprazine 2.5, 5 and 7.5 mg, alongside a challenge dose of levodopa that was 1.5 times that of their usual L-dopa dose.

It was found that a 5 mg and 7.5 mg dose of eltoprazine both significantly reduced the patients' dyskinesia. At the same time, the preparation had no adverse impact on the anti-Parkinsonian effects of the L-dopa treatment. Other than a few patients having some transient episodes of nausea, dizziness and other minor symptoms the treatment was well tolerated

Sticky peptide may help Parkinson's patients

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*.

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).