

OUR NEWS

**Scottish Borders
Support Group**
www.bordersparkys.org.uk

May 2024

**Written By
Group Members**

RESEARCH NEWS BY MICHAEL RAMSAY

As part of World Parkinson's Day, an event was held in Edinburgh on the 23rd of April to highlight recent Parkinson's Research in Scotland. A lot of interesting and exciting new developments were presented, some using the latest technology from stem cells to artificial intelligence.

In the morning the talks were all about research that is increasing the understanding of the basic mechanisms in the brain that cause the disease. Several of the talks were about understanding genetic mutations that are known to be found in people with Parkinson's, and the effect of these changes in the patient's genes on the biochemistry of dopamine producing cells in the brain. The idea is that if we know what the proteins that are produced from these specific genes do in the brain cells, then it might be possible to design drugs that will block or reverse that effect. Professor Dario Alessi from the University of Dundee presented his team's recent work looking into a mutation in the gene for a protein called LRRK2. LRRK2 is an enzyme and Prof. Alessi's team has now identified the proteins that LRRK2 reacts with and what role these proteins play in the cell. Knowing this, the next step is to understand what happens if this is disrupted.

One presenter Dr Katheryn Bowles from the UK Dementia Research Institute in Edinburgh, spoke about research into a recently identified gene that appears to protect people against developing Parkinson's. Large studies of the genetic differences between people have shown that some individuals have 2, 3 or even 4 copies of a gene called LRRC37A2 and that the more copies you have the less likely you are to develop PD. Dr Bowles showed results that demonstrate LRRC37A2 protects the brain against inflammation. This work could open up a whole new line of attack against the disease.

Another researcher from Edinburgh, Professor Tilo Kunath, showed how his team has been able to re-create in the lab how the protein alpha-synuclein clumps together in brain cells to form Lewy bodies that are found in most people with Parkinson's. They do this by creating stem cells from skin cells, and then grow these stem cells into dopamine producing brain cells. (Stem cells are cells that can be made to develop into any cell in your body.) With this, they are now looking into how these clumps of alpha-synuclein result in the death of dopamine producing brain cells, and how to prevent that.

Pink-1 is a protein known to be associated with PD. Using artificial intelligence software, Dr Muratil Mugit's laboratory in Dundee has discovered which part of another protein called Pink-1 interacts with other proteins in the cell to remove damaged mitochondria. Mitochondria are the parts of a cell that provides energy, like a battery. Drugs that stimulate Pink-1 activity could be a treatment by helping remove damaged mitochondria, and clinical studies are being started by Abbvie (a US pharma company) to see if this is an effective treatment.

After lunch, the presentations were more focused on how people with Parkinson's can get actively involved with research by making politicians and the public at large more aware of the patients' needs.

Dr Tom Ross from the Neuroprogressive and Dementia Network at NHS Scotland talked about two programs they are running called Partners in Research and Permission to Contact. The first is a Patient and Public Involvement (PPI) program, where patients, carers and family can help researchers understand the realities of living with PD. This can help them design better studies that are more suited to PD patients. Permission to Contact is a way of registering interest in participating in clinical studies. Clinical investigators can then contact you to see if you would be interested in participating in a specific study. Information on both these programs will be on the table at our next meeting.

Parkinson's UK presented a report called Scotland Can't Wait, that they have produced. This is aimed at the politicians in Holyrood to point out the current state of resourcing within the NHS supporting PD patients and where the gaps are. At the meeting there was a lot of discussion about what is needed here. One suggestion was to ask anyone seeking our vote in the upcoming elections what they plan to do about support for Parkinson's services in the NHS, to try to increase awareness of our needs.

It was encouraging to hear all these amazing scientists talk about their innovative work and the progress they are making toward one day finding a way to cure this disease.

COMING UP...

THANK YOU

Susan Foster and her team for yet another most generous donation from their Gifts for Giving/Presents Galore fund raiser weekend at Springwood Kelso.



HAWICK TOWN HALL 29TH. May 10.30am – 3pm

Ability Borders
Borders Older People's Forum

Information stands by 25 organizations, including Parkinson's, HAPI from Katherine Elliot Centre, NHS Borders Team, Social Security, Men's/Woman's shed, Book Trust, Local area co-ordinators for older people, to name just a few.

THE SCOTTISH RIGS AND PARKINSON'S RESEARCH

If you didn't manage to join in the research morning or the people with Parkinson's questions and answer afternoon, at the Royal College of Physicians of Edinburgh you can pick up Micks report at the BGH meeting or request a copy from Anne 01450 377 338 also check out You Tube.

MONTHLY MEETING

Borders General Hospital meeting on 27th May 2pm – 4pm

Michael Ramsay will give a talk on the research.

Borders General Hospital meeting on 24th June 2pm – 4pm

We are delighted to have Katherine Fletcher visiting, Katherine is a RESEARCH COMMUNICATIONS LEAD working on the current research programs that are being funded by Parkinson's UK

HAWICK YOUNG FOLK'S SUPPORT PARKINSON'S

Paula Elliot, Siobhan Petrie and her husband Gavin former R.F.C rugby Player are all running the Edinburgh-Half-Marathon on May 26th.

Paula is not new to fund raising for Parkinson's as she has run the Half-Marathon twice before on behalf of her Mum and uncle.

Donations can be made at: www.gofundme.com/f/raising-funds-for-parkinsons

SUMMER OUTING

THURSDAY 15TH August to BISLEY AT BRAIDWOOD For Beautiful walks, delicious food, and trying your hand at Virtual Reality Shooting, specially requested by our members. Bookings to Gary/Anne 01450 377 338 or book at your BGH visit.

As mentioned in last month's NL do let us know if you would like to visit the Parkinson's Research Centre in Edinburgh and/or Museum of Flight at East Fortune. This is your support group so let us know where you would like to visit.

MORE INFORMATION

We're the Parkinson's support and research charity. Help us find a cure and improve life for everyone affected by Parkinson's.

For more information, contact Gary Hattie

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Free* confidential helpline **0808 800 0303**.

Monday to Friday 9am–8pm, Saturday 10am–2pm. Interpreting available. Text phone 0800 111 4204.

*Calls are free from UK landlines and most mobile networks.

Visit us online at parkinsons.org.uk
Drop us a line at

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DISCLAIMER

Though we try to get all information correct sometimes we, ok, Gary, gets it wrong, for all those deliberate mistakes Gary apologises, an thanks you for your help in spotting them!