

# Parkinson's UK Online Research Conference 2020: "Accelerating research and improving care"

Online (register for login details)

## Day 1 - Thursday 24 September

| Time   | Session 1 - Keynote speaker 1 (Plenary)   |
|--------|---|
| 9.15am | Log on and orientation (via welcome video)  |
| 9.30am | <b>Welcome and introduction</b><br>Dr Arthur Roach (Director of Research, Parkinson's UK)   |
| 9.40am | <b>Introducing Parkinson's Connect</b><br>Katherine Crawford (Director of Services, Parkinson's UK)                               |
| 10am   | <b>Keynote session: The involvement of glia and astrocytes in Parkinson's</b><br>Professor Glenda Halliday (University of Sydney) |
| 11am   | Tea break (posters and networking)  |

|         | Session 2a - Genetics of Parkinson's (Research stream)   | Session 2b - Clinical strategies for late-stage management (Healthcare stream)   |
|---------|--|--|
| 11.30am | <b>Welcome and introduction</b><br><u>Session chair:</u> Professor Huw Morris (University College London)  | <b>Welcome and introduction</b><br><u>Session chair:</u> Dr David Breen (The University of Edinburgh)  |
| 11.35am | <b>Monogenic forms of Parkinson's (alpha synuclein, LRRK2)</b><br>Professor Thomas Gasser (University of Tübingen)   | <b>Late-stage complications: motor</b><br>Professor Patricia Limousin (University College London)  |
| 11.55am | <b>Risk genes, GWAS studies and the International Parkinson's Genetics Consortium</b><br>Dr Andrew B. Singleton (National Institutes of Health (NIH), USA)                               | <b>Late-stage complications: non-motor</b><br>Professor K Ray Chaudhuri (King's College Hospital)  |
| 12.15pm | <b>Involvement of epigenetic changes in Parkinson's</b><br>Professor Marten P. Smidt (University of Amsterdam)   | <b>Palliative care</b><br>Dr Alison Yarnall (Newcastle University)   |
| 12.35pm | <b>Platform presentation: 'Finding new drug targets for Parkinson's using genetics – Mendelian randomization of the druggable genome'</b><br>Catherine Storm (University College London) | <b>Platform presentation: 'Does Parkinson's progression alter symptom priorities?'</b><br>Dr Martin Rumsby (Department of Biology, University of York) |
| 12.40pm | Lunchtime (posters and networking)   |  |

|        | Session 3a - Imaging and biomarkers (Research stream)   | Session 3b - Wearable technology and brain/vestibular stimulation (Healthcare stream)                                     |
|--------|---|---|
| 1.40pm | <b>Welcome and introduction</b><br><u>Session chair:</u> Dr Anthony Vernon (King's College London)  | <b>Welcome and introduction</b><br><u>Session chair:</u> Emma Lawton (Digital Strategist, Parkinson's UK)                 |
| 1.45pm | <b>Blood and CSF biomarkers in Parkinson's</b><br>Professor Paolo Calabresi (Fondazione Policlinico Universitario Agostino Gemelli, Italy)  | <b>Wearable technology: Modernising clinical research and practice</b><br>Professor Lynn Rochester (Newcastle University) |
| 2.05pm | <b>Novel CSF biomarker RT-QulC and its role in early diagnosis, monitoring disease progression and stratification</b><br>Dr Laura Parkkinen (Nuffield Department of Clinical Neurosciences, University of Oxford) | <b>Deep Brain Stimulation - strategies for management</b><br>Dr Ed Newman (Queen Elizabeth University Hospital, Glasgow)  |

|        |   |   |
|--------|---|---|
| 2.25pm | <b>Novel brain imaging biomarkers - phosphorus spectroscopy in energy dynamics and oxidative stress</b><br>Dr Tom Jenkins (Sheffield Institute for Translational Neuroscience (SITraN)) | <b>Brain stimulator (external) - vestibular stimulation</b><br>Professor David Wilkinson (University of Kent)   |
| 2.45pm | <b>Platform presentation: 'Peripheral Alpha-Synuclein Aggregates as Biomarkers for Parkinson's and Dementia with Lewy Bodies'</b><br>Dr Shu Chen (Case Western Reserve University, USA) | <b>Platform presentation: 'Using Actigraphy to Characterise the Relationship between Sleep, Quality of Life, and Depression in Parkinson's'</b><br>Dr Philip Mulryan (University College Cork, Ireland) |
| 2.50pm | <b>Tea break (posters and networking)</b>   |   |

|   |   |
|---|---|
| <b>Session 4a - Mechanisms of neurodegeneration and emerging therapeutic strategies (Research stream)</b> | <b>Session 4b - New and emerging drug therapies (Healthcare stream)</b> |
|---|---|

|        |   |   |
|--------|---|---|
| 3.20pm | <b>Welcome and introduction</b><br><u>Session chair:</u> Dr Sonia Gandhi (University College London)  | <b>Welcome and introduction</b><br><u>Session chair:</u> Professor David T Dexter (Associate Director of Research, Parkinson's UK)  |
| 3.25pm | <b>Mitochondrial dysfunction</b><br>Dr Heather Mortiboys (Sheffield Institute of Translational Neuroscience (SITraN))   | <b>New drugs in clinical development for treating motor and non-motor symptoms</b><br>Professor Oliver Bandmann (Sheffield Institute of Translational Neuroscience (SITraN))    |
| 3.45pm | <b>Synaptic dysfunction in Parkinson's</b><br>Dr Gabriele Kaminski Schierle (University of Cambridge)   | <b>New drugs in clinical development for neuroprotective approaches</b><br>Professor Tom Foltynie (National Hospital for Neurology & Neurosurgery, Queen Square)                |
| 4.05pm | <b>The immune system as a therapeutic target in Parkinson's</b><br>Dr Caroline Williams-Gray (University of Cambridge)  | <b>New treatments and approaches in pre-clinical development (trials and tribulations)</b><br>Dr Erwan Bezard (Institute of Neurodegenerative Diseases, University of Bordeaux) |
| 4.25pm | <b>Platform presentation: 'Human-specific transcriptomic profiling of ventral and dorsal midbrain dopamine neurons'</b><br>Dr Laura Parkkinen (Nuffield Department of Clinical Neurosciences, University of Oxford) | <b>Platform presentation: 'Novel compounds to modify mitochondrial deficits in Parkinson's models'</b><br>Christopher Hastings (University of Sheffield)                        |
| 4.30pm | <b>Tea break (posters and networking)</b>   |   |

|  |
|--|
| <b>Session 5 - Keynote speaker 2 (Plenary)</b> |
|--|

|        |   |
|--------|---|
| 5pm    | <b>Introduction</b><br>Dr Arthur Roach (Director of Research, Parkinson's UK)   |
| 5.05pm | <b>In situ conversion of astrocytes to dopaminergic neurons to reverse Parkinson's</b><br>Professor Xiang-Dong Fu (University of California, San Diego) |
| 6.05pm | <b>Closing statement, thanks and close</b><br>Dr Arthur Roach (Director of Research, Parkinson's UK)  |
| 6.15pm | <b>Day 1 Content Ends</b>   |

# Parkinson's UK Online Research Conference 2020: "Accelerating research and improving care"

Online (register for login details)

## Day 2 - Friday 25 September

| Time   | Session 6 - Keynote speaker 3 (Plenary)   |
|--------|---|
| 9.15am | Log on and orientation (via welcome video)  |
| 9.30am | <b>Welcome to day 2</b><br>Professor David T Dexter (Associate Director of Research, Parkinson's UK)  |
| 9.40am | <b>Parkinson's perspective</b><br>Dr Jonny Acheson (Leicester Royal Infirmary)  |
| 10am   | <b>Keynote session: Deferiprone - From bench to bedside (Translational approaches to developing therapeutics)</b><br>Professor David Devos (Lille University) |
| 11am   | Tea break (posters and networking)  |

|         | Session 7a - Parkinsonisms (Research stream)   | Session 7b - Stratification and early detection (Healthcare stream)   |
|---------|--|---|
| 11.30am | <b>Welcome and introduction</b><br><u>Session chair:</u> Dr Sonia Gandhi (University College London)                       | <b>Welcome and introduction</b><br><u>Session chair:</u> Dr David Breen (The University of Edinburgh)   |
| 11.35am | <b>Atypical Parkinsonisms - neuropathology</b><br>Professor James B. Rowe (Cambridge University Centre for Parkinson-Plus) | <b>Clinically stratifying Parkinson's in two large cohorts</b><br>Dr Michael Lawton (University of Bristol)   |
| 11.55am | <b>PSP - Diagnosis, clinical management and causes</b><br>Professor Huw Morris (University College London)                 | <b>Wearable technology for early diagnostics and stratification (inc. RBD)</b><br>Dr Christine Lo (Nuffield Department of Clinical Neurosciences, University of Oxford)   |
| 12.15pm | <b>Lewy-body dementia - Diagnosis, clinical management and causes</b><br>Dr Rimona Weil (University College London)        | <b>How to detect prodromal Parkinson's (Predict PD)</b><br>Dr Alastair Noyce (Wolfson Institute of Preventive Medicine, Queen Mary University London)   |
| 12.35pm | <b>Platform presentation: 'PSP perspective'</b><br>Michael McNiece   | <b>Platform presentation: 'Predicting outcome using patient reported outcomes (PROs) in the UK Parkinson's Disease Tissue Bank'</b><br>Rebecca Leslie (University of Southampton (BMBS) / Imperial College London (iBSc)) |
| 12.40pm | Lunchtime (posters and networking)   |   |

|        | Session 8a - Pre clinical modelling (Research stream)  | Session 8b - Use of devices, apps and machine learning (Healthcare stream)                                |
|--------|--|---|
| 1.40pm | <b>Welcome and introduction</b><br><u>Session chair:</u> Dr H el ene Plun-Favreau (UCL Institute of Neurology)     | <b>Welcome and introduction</b><br><u>Session chair:</u> Emma Lawton (Digital Strategist, Parkinson's UK) |
| 1.45pm | <b>Patient-derived cell lines: the pros and cons of various models</b><br>Dr Tilo Kunath (University of Edinburgh) | <b>Parkinson's UK devices and apps panel</b><br>Julie Dodd (Director of Transformation, Parkinson's UK)   |

|        |  |  |
|--------|--|--|
| 2.05pm | <b>Modelling alpha-synuclein pathology in vivo</b><br>Professor Donato Di Monte (German Centre for Neurodegenerative Diseases (DZNE))      | <b>The Critical Path for Parkinson's 3-DT project - getting digital devices across the regulatory hurdle</b><br>Dr Josh Cosman (Abbvie)  |
| 2.25pm | <b>Modelling Parkinson's in midbrain-like organoids</b><br>Professor Jens Schwamborn (University of Luxembourg)                            | <b>Novel approaches to integrated care (combining drug and digital therapy interventions)</b><br>Dr Paul Goldsmith (Closed Loop Medicine)  |
| 2.45pm | <b>Platform presentation: 'Defining the Mechanisms of VPS35 and LRRK2 Parkinson's in vivo'</b><br>Rachael Chandler (University of Reading) | <b>Platform presentation: 'The NeuroMotor Pen – An easily performed objective test of fine motor skill to support diagnosing Parkinson's'</b><br>Dr Rutger Zietsma (Manus Neurodynamica) |
| 2.50pm | <b>Tea break (posters and networking)</b>  |  |

| <b>Session 9a - Synaptic dysfunction (biomarkers and drug potential) (Research stream)</b> |  | <b>Session 9b - Healthy living (Healthcare stream)</b>  |
|--|--|---|
| 3.20pm   | <b>Welcome and introduction</b><br><i>Session chair:</i> Dr Heather Mortiboys (Sheffield Institute of Translational Neuroscience (SITraN))   | <b>Welcome and introduction</b><br><i>Session chair:</i> Julie Jones (Robert Gordon University)   |
| 3.25pm   | <b>Mechanisms of alpha-synuclein induced synaptopathy in Parkinson's</b><br>Dr Frank Hirth (King's College London)   | <b>The evidence base for the beneficial effects of exercise in Parkinson's</b><br>Fiona Lindop (University Hospitals of Derby & Burton NHS Foundation Trust)                          |
| 3.45pm   | <b>Neuronal mitochondrial dysfunction in Parkinson's and how this is influenced by astrocytes</b><br>Dr Amy Reeve (Wellcome Centre for Mitochondrial Research, Newcastle University) | <b>Probiotics in the treatment of Parkinson's</b><br>Dr Valentina Leta (King's College London)  |
| 4.05pm   | <b>Defects in synaptic function in Parkinson's</b><br>Professor Patrik Verstreken (VIB-KU Leuven Center for Brain & Disease Research, Belgium)                                       | <b>Glymphatic drainage of defective proteins through exercise and sleep</b><br>Dr Ian Harrison (University College London)  |
| 4.25pm   | <b>Platform presentation: 'Patient and public involvement - a better way of doing research'</b><br>Olive Smith and Rodney Wing (Research Support Network, Parkinson's UK)            | <b>Platform presentation: 'Neuropsychiatric differences and carer distress in Parkinson's, dementia with Lewy Bodies and Alzheimer's'</b><br>Dr Rachael Lawson (Newcastle University) |
| 4.30pm   | <b>Tea break (posters and networking)</b>  |   |

| <b>Session 10 - Keynote speaker 4 (Plenary)</b> |   |
|---|---|
| 5pm   | <b>Introduction</b><br>Professor David T Dexter (Associate Director of Research, Parkinson's UK)  |
| 5.05pm  | <b>Keynote session: Geroprotectors: time to change the way we treat older people?</b><br>Professor Ilaria Bellantuono (University of Sheffield) |
| 6.05pm  | <b>Closing statement, thanks and close</b><br>Professor David T Dexter (Associate Director of Research, Parkinson's UK)                         |
| 6.15pm  | <b>Day 2 Content Ends</b>   |

| <b>Bonus video session - The Parkinson's Virtual Biotech: Our projects</b> |  |
|--|--|
| Available on demand  | <b>Introduction</b><br>Dr Arthur Roach (Director of Research, Parkinson's UK)  |
|  | <b>Interview with Dr Richard Mead: "Novel Nrf2-KEAP1 inhibitors"</b><br>Dr Arthur Roach (Director of Research, Parkinson's UK) and Dr Richard Mead (Keapstone Therapeutics Limited)  |
|  | <b>Interview with Dr Heather Mortiboys: "Novel mitochondrial rescue compounds"</b><br>Dr Arthur Roach (Director of Research, Parkinson's UK) and Dr Heather Mortiboys (Sheffield Institute for Translational Neuroscience) |
|  | <b>Interview with Dr Neil Miller: "Novel mPTP inhibitors"</b><br>Dr Arthur Roach (Director of Research, Parkinson's UK) and Dr Neil Miller (NRG Therapeutics)  |

\* This programme has been accredited for 14 CPD hours by the RCN Centre for Professional Accreditation until 07/04/2021. Accreditation applies only to the educational content of the programme and does not apply to any product.

\* The Parkinson's UK Online Research Conference 2020 has been approved by the Federation of the Royal College of Physicians of the United Kingdom for 16 category 1 (external) CPD credits.