

Poster List (presenting author underlined)

*Posters marked with a red asterisk are accompanied by an oral presentation during the day

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| 1* | Dopamine but not glutamate release is disrupted in Parkinson's patient-derived dopaminergic neurons due to impaired synaptic vesicle loading <u>Kaitlyn M L Cramb</u>, Iona Thomas-Wright, Humaira Noor, Sandor Szunyogh, Maria Claudia Caiazza, Ira Milosevic, Dayne Beccano-Kelly, Stephanie J Cragg, Richard Wade-Martins |
| 2 | Modelling Lewy Pathology in Differentially Vulnerable Cortical and Dopaminergic Neurons from Patients with Alzheimer's and Parkinson's Disease <u>Ajantha Abey</u>, Eden Mellor-Davis, Bryan Ng, Rachel Heon-Roberts, Becky Carlyle, Nora Bengoa-Vergniory, Richard Wade-Martins |
| 3 | Investigating BIN1 involvement in tau handling and extracellular vesicle secretion in human iPSC-microglia <u>Anne Hedegaard</u>, Maria K Karabova, Emma Mead, Theresa A Day, Basavaraj Hooli, Yaming Wang, William S James, Sally A Cowley |
| 4 | The neuropathological signature of REM sleep behaviour disorder in selectively vulnerable brainstem nuclei and the association with Parkinson's disease <u>Nita Alpin</u>, David A Menassa, Laura Parkkinen |
| 5 | Development of pre-clinical models for patient stratification in Parkinson's disease <u>Sarah H Ellwood</u>, Anna Lavayssiere, Sally A Cowley, Brent J Ryan, Michele T M Hu and Richard Wade-Martins |
| 6 | Monitoring Expression and Function of Voltage-Gated Calcium Channels in Stem Cell-Derived Neuronal Models of Parkinson's <u>Parnaz Sharifi</u>, Maria-Claudia Caiazza, Johanna Hoffman, Sophie Gibson, Fangjia Yang, Akansha Mehta, Elena Britti, Elliot Mock, Richard Wade-Martins |
| 7* | Exploiting our understanding of selective vulnerability of dopamine axonal subpopulations to identify $\alpha 2\delta$ as a promising target for Parkinson's <u>Katherine R Brimblecombe</u>, Adam Harris, Bethan O'Connor, Lucille Duquenoy, Rishi Anand, Emanuel Lopes, Bradley M Roberts, Lauren Burgeno, Mark Walton, Stephanie J Cragg |

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Targeting ATP_{13A2} to treat alpha-synuclein cellular pathology in iPSC-dopamine neuron models of Parkinson's Disease

Elena Britti, Nicole Li, Akansha Mehta, Rachel L Heon-Roberts, Nancy Ahuja, Jess Mark, Floriana Licitra, Joanna Wolak, William McGuinness, Brent J Ryan, Charmaine Lang, Richard Wade-Martins

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Characterisation and high-throughput quantification of alpha-synuclein pathology in Alzheimer's disease and dementia with Lewy bodies

Dominik Domanski, Robbie Allen, David A Menassa, Laura Parkkinen

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Over-expression of ATP_{13A2} rescues lysosomal dysfunction in Parkinson's induced pluripotent stem cell-derived dopamine neurons

Akansha Mehta, Nancy Ahuja, Elena Britti, Joanna Wolak, Charmaine Lang & Richard Wade-Martins

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Investigating the role of lysosomal calcium channels in Parkinson's Disease iPSC-derived Dopaminergic Neurons

Johanna L Hoffmann, Maria Claudia Caiazza, William McGuinness, Parnaz Sharifi, Stewart W Humble, Richard Wade-Martins

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Using CRISPRi Screens in Human iPSC-Derived Dopamine Neurons to Probe Endolysosomal Pathway Dysfunction in Parkinson's Disease

Gizem Onal, Hugo Fernandes, Victoria Lievens, Benedetta Carbone, Dehua Zhao, Lisa Mohamet, Brent J Ryan, Alastair Reith, and Richard Wade-Martins

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Stools and stool-derived extracellular vesicles from patients with Parkinson's disease show alpha-Synuclein species with seeding capacity

Livia Civitelli, Poppy Dorlandt-Stafford, Selene Lee, Elisabeth Dellar, Filip Scheperjans, Laura Parkkinen

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CRISPRi-Mediated Downregulation of α -Synuclein in human iPSC-Derived Dopaminergic Neurons to Investigate Parkinson's Disease Mechanisms

Ana Aragón-González, Chor Lai Lam, Hung-Ju Chueh, Benedict Tanudjojo and George K Tofaris

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Establishing mitochondrial function and mitophagy assays in iPSC-derived dopaminergic neurons

Amelia Smith, Rachel Heon-Roberts, Elena Britti, Sarah NJ Franks, Becky Carlyle, Brent J Ryan

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Optimisation of the protocol for the isolation of extracellular vesicles from stools in Parkinson's disease patients

Annabelle Bath, Darragh O'Brien, Michele T M Hu, Stephanie Fowler, Livia Civitelli

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Investigating the differential response of human iPSC-microglia to monomeric and fibrillary tau

Anna del Ser-Badia, Zeynep Baykam, Maria Kreger Karabova, Anne Hedegaard, William S. James, Sally A. Cowley

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Identifying mechanisms regulating α -synuclein degradation by CRISPR knockout screening

Andrew Castle, Rahel Lewin, Sarubini Kananathan, Fiona Menzies, Suchira Bose, Gopuraja Dharmalingam, and George K Tofaris

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Defining Proteomic Subtypes to understand The Heterogeneity of Parkinson's Pathophysiology

Rashmi Maurya, Sacha Gandhi, Alejo Nevado-Holgado, Donald Grosset, Laura Winchester

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Synthesis and validation of PROTACs for degradation of α -synuclein aggregates in cellular models of Parkinson's disease

Taniya Bhardwaj, Hung-Ju Chueh, Dmitry Zenko, Alexander Ignatyev, Massimiliano Travagli, George K Tofaris

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Dopamine replacement therapy modulates dopa decarboxylase, prolactin and AOC3 levels in Parkinson's disease

Ludo van Hillegondsberg, Shahzad Ahmad, Tanja Zerenner, Michael Lawton, Yoav Ben-Shlomo, Micah Fletcher, Karolien Groenewald, Avigail Taylor, Alexander Thompson, Michele T M Hu

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Correlating mitochondria phenotypic profiling with proteomics in a simulated drug screen to reveal drug-protein-functional axes

Sarah NJ Franks, Arkadiusz Nawrocki, Andrey Kormilitzin, Martin Larsen, Helle Bogetofte Barnkob, Brent J Ryan

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Extended follow-up of baseline PD subtypes

Michael Lawton, Yoav Ben-Shlomo, Donald G Grosset, Michele T M Hu

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Investigating Dysfunction in iPSC-Derived Medium Spiny Neurons from Parkinson's Patients with SNCA Triplication

Humaira Noor, Kaitlyn M L Cramb, Lahiru Handunnetthi, Richard Wade-Martins

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Investigating adenosine signalling in iPSC and mouse models of Parkinson's disease

Aishwarya Vedula, Ricardo Marquez Gomez, Kathryn Todd, Richard Wade-Martins, Joseph Morgan and Stephanie J Cragg

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The Levodopa Paradox in Parkinson's Disease: Causal Inference Analysis in the OPDC Cohort

Anahita Nodehi, Jorik Nonnekes, Tanja Zerenner, Michael Lawton, Lotte van de Venis, Bas Bloem, Michele T M Hu, Sirwan Darweesh, Yoav Ben-Shlomo

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3D Droplet Printing of a Human Cortico-striatal-dopamine Microcircuit to Model Parkinson's Disease

Oliver Curry, Ricardo Marquez Gomez, Linna Zhou, Hagan Bayley, and Richard Wade-Martins

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Pharmacological correction of excessive basal mitophagy by pathological levels of α -synuclein restores neuronal function in human dopaminergic neurons

Elliot D Mock, Benjamin Vallin, William McGuinness, Raman van Wee, Martha Lavelle, Benjamin Jenkins, Brent J Ryan, Richard Wade-Martins

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Sleep benefit in Parkinson's disease: a video analysis based reappraisal

Pietro-Luca Ratti, Nushara Wedasingha, Paulo Nunes-Ferreira, Stefano Scafa, Alessandro Puiatti

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Predicting level-2 cognitive outcomes and research clinic diagnosis of MCI and dementia in Parkinson's Disease from the MoCA

Tanja Zerenner, Sanjay G Manohar, Michael Lawton, Jamil Razzaque, Falah Al Hajraf, Karolien Groenewald, Ludo van Hillegondsberg, Tamir Eisenstein, Johannes C Klein, Yoav Ben-Shlomo, Michele T M Hu

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Central cholinergic degeneration in prodromal and early Lewy body disease: a link to present and future disease states

Tamir Eisenstein, Karolien Groenewald, Ludo van Hillegondsberg, Falah Al Hajraf, Tanja Zerenner, Michael Lawton, Yoav Ben-Shlomo, Ludovica Griffanti, Michele T M Hu, Johannes C Klein

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Constraints of a genome-first approach in the diagnosis of Parkinson's Disease

Dianne F Newbury, Alistair Pagnamenta, Ira Milosevic, Jenny C Taylor

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Differentiating Lewy body dementias through quantitative clinicopathology

Kristijan D Jovanoski, David A Menassa, Laura Parkkinen

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Extracellular vesicles as carriers of pathogenic α -synuclein in neurodegenerative diseases

Suman Dutta, Stelios Chatzimichail, Achillefs N Kapanidis and George K Tofaris

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Investigating Neuron–Microglia Interactions using a Human iPSC-based model for Parkinson's Disease

Hung-Ju Chueh, Antigoni Katsikoudi, Ana Aragón-González, Liezel Tamon, Ashwin Jainarayanan, Chor Lai Lam, Sally A Cowley, David Sims, George K Tofaris

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Investigating LRRK2 PD-related lysosomal dysfunction in iPSC-microglia

Anne S G Larsen, Sophie Farrow, Sally A Cowley

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Neural activity motifs and dopamine-acetylcholine dynamics in the striatum: insights from a mouse delayed-go reaching task

Teris Tam, Rasha Elghaba, Helen Collins, Kouichi Nakamura, Julien Carponcy, Guy Yona, Peter Magill

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Subsecond Striatal Dopamine and Acetylcholine Signalling Dynamics during a Delayed-Go Reaching Task in Dopamine-Intact and Parkinsonian Mice

Rasha Elghaba, Teris Tam, Helen Collins, Guy Yona, Kouichi Nakamura, Julien Carponcy, Peter Magill