Editorial

Thomas G. Beach, MD, PhD, FRCPC, Charles H. Adler, MD, PhD, FAAN, and Simon Stott, PhD, recipients of the Parkinson Prize 2022

Bastiaan R. Bloem and Lorraine V. Kalia

The *Journal of Parkinson's Disease* is proud to announce the two articles that have won this year's **Parkinson Prize**, recognizing these outstanding contributions to the advancement to Parkinson's disease (PD) research. Recipients of the award are co-authors Thomas G. Beach, MD, PhD, FRCPC, Banner Sun Health Research Institute, and Charles H. Adler, MD, PhD, Mayo Clinic Arizona (basic research article) and Simon Stott, PhD, Cure Parkinson's (clinical research article).

The winning papers are:

Beach, Thomas G.; Adler, Charles H.; Sue, Lucia, I; Shill, Holly A.; Driver-Dunckley, Erika; Mehta, Shyamal H.; Intorcia, Anthony J.; Glass, Michael J.; Walker, Jessica E.; Arce, Richard; Nelson, Courtney M.; Serrano, Geidy E. (2021) Vagus Nerve and Stomach Synucleinopathy in Parkinson's Disease, Incidental Lewy Body Disease, and Normal Elderly Subjects: Evidence Against the Body-First Hypothesis *J Parkinsons Dis*, **11**, 1833-1843.

McFarthing, Kevin; Buff, Susan; Rafaloff, Gary; Dominey, Thea; Wyse, Richard K.; Stott, Simon R. W. (2020) Parkinson's Disease Drug Therapies in the Clinical Trial Pipeline: 2020 *J Parkinsons Dis*, **10**, 757-774.

These papers were selected by members of the *Journal of Parkinson's Disease*'s Editorial Board from among 392 articles published in the 2020 and 2021 volumes. Awardees will receive a commemorative trophy and a cash award of $1,000 (per article).

The Parkinson Prize will continue as an annual award.

"The entire Editorial Board is delighted to formally recognize these important contributions to the literature on PD, and is honored to have the opportunity to publish such significant work in the *Journal of Parkinson's Disease*," state Editors-in-Chief Bastiaan Bloem, MD, PhD, FRCPE, and Lorraine Kalia, MD, PhD, FRCPC.

IMPORTANCE OF THE WORKS

The study by Beach, Adler and their colleagues builds on findings from over the past 15 years on the systemic nature of PD. There is much debate on whether PD begins with alpha-synuclein spread from the CNS to the periphery or from the periphery to the CNS. The data presented provide very strong evidence that the majority of patients with PD likely have a CNS synucleinopathy at the onset with spread in a rostro-caudal fashion to the periphery. Most other research in this field has not used autopsy confirmed cases of PD and rarely has peripheral synuclein been found without CNS alpha-synuclein. This study should help move the field forward with greater emphasis placed on PD being, in many cases, a "brain-first" disorder. The question remains whether the "body-first" hypothesis retains viable, alongside the now well underpinned "brain-first" hypothesis; there is certainly supportive epidemiological and animal model evidence for the body-first" hypothesis, but human autopsies have failed to find more than isolated cases where synucleinopathy is restricted to the periphery.

"This work has only been possible through the skilled assistance of many vital individuals over the years, particularly our Pathology Technicians, headed by Mr. Anthony Intorcia, our Coordinator, Lucia Sue, and our Neuropathology Laboratory Director, Dr. Geidy Serrano," commented Prof. Beach. Prof Adler added, "It is an honor to receive this award and I would like to thank the many collaborators I have in the Arizona Study of Aging and Neurodegenerative Disorders as well as the support of the Michael J. Fox Foundation, Mayo Clinic, and Banner Health."

The clinical article by Dr. Stott and colleagues is a recurring annual report, with patient-researcher Kevin McFarthing as the lead author, for the *Journal of Parkinson's Disease*'s special section "Clinical Trial Highlights." This report provides the Parkinson's community (both patients, clinicians and researchers alike) with an overview of the drug development pipeline for new therapies for PD. It is among the most widely downloaded and read papers published by our journal. The team of authors, which includes people living with Parkinson's and care partners, hopes that this will stimulate further engagement and interest in the clinical trial process, resulting in greater patient involvement and faster future developments.

"My co-authors and I are extremely proud to have won the Parkinson Prize," commented Dr. Stott, "and we would like to thank the editorial team at *Journal of Parkinson's Disease* for this honour. We are very pleased that the drug development pipeline report has garnered the attention that it has. It is a very exciting time for Parkinson's research, and we look forward to producing future versions of the report as the pipeline develops."

2022 PARKINSON PRIZE RECIPIENTS

Thomas G. Beach MD, PhD, FRCPC, is Director of Neuroscience at Banner Sun Health Research Institute (BSHRI) in Sun City, Arizona. He was trained in neuroscience and neuropathology at the University of British Columbia (UBC) and did clinical training at UBC, New York Medical College and St. Louis University. He was appointed Assistant Professor at UBC in 1993, moving to Phoenix, Arizona in 1997, when he assumed directorship of the Civin Laboratory for Neuropathology and AZSAND. Dr. Beach has been the recipient of multiple grants and awards from agencies including the National Institutes of Health, Alzheimer's Association, the state of Arizona and the Michael J. Fox Foundation for Parkinson's Research. He has been an author on more than 400 publications listed by the US National Library of Medicine. Additionally, he has served industry as a consultant and as a neuropathology core leader for several imaging-to-autopsy FDA-licensing clinical trials. His research is focused on elucidating early neuropathological stages and biomarkers of normal human aging, PD, Alzheimer's disease and other neurodegenerative diseases. His studies center on the structural and neurochemical changes of the human central and peripheral nervous system, through autopsy, biopsy and neuroimaging.

Charles H. Adler, MD, PhD, received his PhD in pharmacology and his MD from the New York University School of Medicine. He did his neurology residency at the University of Pennsylvania and a fellowship in movement disorders at the Graduate Hospital/University of Pennsylvania in Philadelphia. He then joined the staff at Mayo Clinic in Scottsdale, Arizona.

Dr. Adler has received numerous grants to investigate the diagnosis and treatment of movement disorders, such as PD, essential tremor, dystonia, restless leg syndrome, as well as chronic traumatic encephalopathy (CTE). He currently serves as Sec-

Angelo; Martinez-Martin, Pablo; Timmermann, Lars; Dafsari, Haidar S. Subthalamic Stimulation Improves Quality of Sleep in Parkinson Disease: A 36-Month Controlled Study (2021) *J Parkinsons Dis*, **11**, 323-335

Knudsen, Karoline; Fedorova, Tatyana D.; Horsager, Jacob; Andersen, Katrine B.; Skjaerbaek, Casper; Berg, Daniela; Schaeffer, Eva; Brooks, David J.; Pavese, Nicola; Van den Berge, Nathalie; Borghammer, Per Asymmetric Dopaminergic Dysfunction in Brain-First versus Body-First Parkinson's Disease Subtypes (2021) *J Parkinsons Dis*, **11**, 1677-1687

REFERENCES

[1] Beach TG, Adler CH, Sue LI, Shill HA, Driver-Dunckley E, Mehta SH, Intorcia AJ, Glass MJ, Walker JE, Arce R, Nelson CM, Serrano GE (2021) Vagus Nerve and Stomach Synucleinopathy in Parkinson's Disease, Incidental Lewy Body Disease, and Normal Elderly Subjects: Evidence Against the Body-First Hypothesis. *J Parkinsons Dis* **11**, 1833-1843.

[2] McFarthing K, Buff S, Rafaloff G, Dominey T, Wyse RK, Stott SRW (2020) Parkinson's Disease Drug Therapies in the Clinical Trial Pipeline: 2020. *J Parkinsons Dis* **10**, 757-774.

[3] Erb ML, Moore DJ (2020) LRRK2 and the Endolysosomal System in Parkinson's Disease. *J Parkinsons Dis* **10**, 1271-129.

[4] Borsche M, Pereira SL, Klein C, Gruenewald A (2021) Mitochondria and Parkinson's Disease: Clinical, Molecular, and Translational Aspects. *J Parkinsons Dis* **11**, 45-60.

[5] Padmanabhan S, Lanz TA, Gorman D, Wolfe M, Joyce A, Cabrera C, Lawrence-Henderson R, Levers N, Joshi N, Ma TC, Liong C, Narayan S, Alcalay RN, Hutten SJ, Baptista MAS, Merchant K (2020) An Assessment of LRRK2 Serine 935 Phosphorylation in Human Peripheral Blood Mononuclear Cells in Idiopathic Parkinson?s Disease and G2019S LRRK2 Cohorts. *J Parkinsons Dis* **10**, 623-629.

[6] Compta Y, Revesz T (2021) Neuropathological and Biomarker Findings in Parkinson's Disease and Alzheimer's Disease: From Protein Aggregates to Synaptic Dysfunction. *J Parkinsons Dis* **11**, 107-121.

[7] Cheong JLY, de Pablo-Fernandez E, Foltynie T, Noyce AJ (2020) The Association Between Type 2 Diabetes Mellitus and Parkinson's Disease. *J Parkinsons Dis* **10**, 775-789.

[8] Fearon C, Fasano A (2021) Parkinson's Disease and the COVID-19 Pandemic. *J Parkinsons Dis* **11**, 431-444.

[9] Jost ST, Chaudhuri KR, Ashkan K, Loehrer PA, Silverdale M, Rizos A, Evans J, Petry-Schmelzer JN, Barbe MT, Sauerbier A, Fink GR, Visser-Vandewalle V, Antonini A, Martinez-Martin P, Timmermann L, Dafsari HS (2021) Subthalamic Stimulation Improves Quality of Sleep in Parkinson Disease: A 36-Month Controlled Study. *J Parkinsons Dis* **11**, 323-335.

[10] Knudsen K, Fedorova TD, Horsager J, Andersen KB, Skjaerbaek C, Berg D, Schaeffer E, Brooks DJ, Pavese N, Van den Berge N, Borghammer P (2021) Asymmetric Dopaminergic Dysfunction in Brain-First versus Body-First Parkinson's Disease Subtypes. *J Parkinsons Dis* **11**, 1677-1687.