



COLUMBIA UNIVERSITY
IRVING MEDICAL CENTER

PARKINSON NEWSLETTER

Summer 2018

In Memoriam: The Great Contributions of Dr. Robert E. Burke

By **Dr. Un J Kang, MD**
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Chief, Division of Movement Disorders



Dr. Robert E. Burke

Dr. Robert E. Burke, who devoted his entire career to Parkinson's disease research and patient care, died early this year. Dr. Burke was the Alfred & Minnie Bressler Professor of Neurology and Pathology & Cell Biology and director of the Laboratories for Research in Parkinson's Disease and Related Disorders at Columbia University's Parkinson's Foundation Center of Excellence. He was trained at Columbia and stayed here for 35 years as a faculty member. Dr. Burke was an exemplary physician-scientist who took care of patients with movement disorders, such as Parkinson's disease (PD) and dystonia. He passionately believed in furthering research into PD, toward a better understanding of the disease and the development of more effective therapies. Initially, Dr. Burke devoted his efforts to understanding how dopamine neurons in the substantia nigra in PD brains die. He discovered a particular type of cell death, called programmed cell death, was critical in dopaminergic neurons' demise, and he experimented with molecules such as glial-derived neurotrophic factor (GDNF) to prevent the cell death. GDNF was used subsequently for gene therapy trials for PD, but its effect was limited due to difficulty of delivering it in sufficient amounts in the correct locations. Subsequent work led him to discover that the axons—connections that stretch out from the substantia nigra to the striatum and deliver dopamine—degenerate early in the disease process of PD. Most recently, he had been experimenting with treatments that can be delivered to the brain by gene therapy to prevent axonal degeneration.

Dr. Burke contributed his expertise nationally for PD patients in advisory capacities for the National Parkinson Foundation and Parkinson's Disease Foundation (two organizations that merged to form the current Parkinson's Foundation), Michael J. Fox Foundation for Parkinson Research, World Parkinson Congress, and Parkinson Unity Walk. Dr. Burke was also a dedicated educator who trained generations of movement disorders specialists and researchers who are carrying on with his mission of finding a cure for PD. His colleagues at the CUIMC PF Center are continuing his work to develop new approaches to treat PD, educate the next generation of experts, and provide excellent care to patients. We are eternally grateful to Dr. Burke for his insight, dedication, and generosity to his colleagues and the PD patient community.

Support Groups!



The Department of Neurology currently hosts two support groups:
PD Patient Support Group. Meets the last Tuesday of every month. For more information and to register please contact Elizabeth Delaney, LSMW at 212-305-5779.

Deep Brain Stimulation (DBS) support group. The next meeting is 7/27/2018. For information regarding the next DBS meeting, please contact Linda Winfield, RN at 212-305-1303.

2018 Long Island Optimism Walk

September 22, 2018
Marjorie R. Post Community
Massapequa, NY 11758

Check-in: 9:00 am
Walk: 10:00 am
Register: Call APDA at
917-829-1027



Center Spotlight! : New York Movement Disorders Brain Bank

Discussions surrounding end-of-life care and wishes, including brain donation, are often challenging and left to the family. However, planning ahead is important as such conversations can actually ease distress.

Brain donation is a gift of hope for future generations afflicted with a devastating neurodegenerative disease. Our Center for Parkinson's Disease and Other Movement Disorders has a commitment to diagnose and treat common and uncommon movement disorders. As part of our commitment, we are constantly searching for improved treatments for our patients. Still, many of the disorders we treat have no known cause, and we have no means to slow down their worsening. Biochemical and histochemical analysis of brain tissue donated by people with movement disorders may provide the key to understanding the cause and treatment of these disorders.

We understand that this is a very private and delicate subject. In considering donation, you consider taking part in the advancement in our understanding of Parkinson's disease and other movement disorders. Once you have carefully considered brain donation, we would be glad to discuss this with you.

If you would like to learn more about brain donation you can contact our Brain Donation Coordinator, [Darya Tomishon at 212-305-5779](#).



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Should you be interested in discussing how you can help support our clinical, research, and patient care activities, please contact Matt Reals, Senior Director of Development, at 212-304-7203 or mr3134@columbia.edu

The Doctor Is In with Dr. Oren Levy

*Monthly Question with CUIMC
Movement Disorders specialist*



Q: What are some of the benefits of participating in PD research?

A: Participation in PD research is an incredible gift and contribution towards improving the understanding and care of PD. The need for trial participation is underscored by the inability of many clinical trials to be completed due to insufficient enrollment. These are potential treatments that could not be evaluated because there weren't enough patients that joined the trial! Furthermore, many studies have found that clinical trial participants generally do better, regardless of treatment. While we are not sure why this happens, possible explanations are increased medical attention and positive effects of active engagement.

If you have a question regarding Parkinson's and its treatment that you would like featured in the next newsletter, please e-mail your question to Elizabeth Delaney, LMSW at movementdisorders@columbia.edu

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"Don't count the days, make the days count."

-Muhammad Ali, diagnosed with PD in 1984