# POST-POLIO HEALTH

Winter 2018 Volume 34 Number 1

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# PHI Awards \$100,000 Research Grant to Team from Academic Medical Center, University of Amsterdam

The Research Fund of Post-Polio Health International (PHI) has awarded its tenth grant to a team of researchers from Academic Medical Center Amsterdam in the Netherlands. The two-year, multicenter study will be led by Eric L. Voorn, PhD, and Frans Nollet, MD, PhD. Dr. Voorn is a Postdoctoral Researcher in the Department of Rehabilitation. Dr. Nollet is head of the Department of Rehabilitation and Amsterdam Movement Sciences.

The study, entitled "B-FIT! A guideline to individualized exercise in post-polio syndrome," will evaluate the effectiveness of a personally tailored aerobic training program according to the B-FIT training guideline on physical fitness, physical functioning and quality of life of individuals with PPS in the United States and the Netherlands, as well as evaluate patient and healthcare professional satisfaction with the use of the training guideline. B-FIT includes a training program that is highly personalized in that it is adapted to the individual's needs and capacities.

B-FIT was successfully applied in a pilot study in rehabilitation centers in the Netherlands, demonstrating its potential for clinical practice. However, a more comprehensive study was needed in order to determine the effectiveness of the B-FIT training program to improve physical fitness in those with PPS and determine its usability on a larger international scale.

The training program attempts to identify the optimal approach to exercise, finding a balance between improving physical fitness and preventing the overburdening of polio-affected muscles. If proven effective, the researchers hope the B-FIT training program will be able to assist healthcare professionals in the prescription of a personalized exercise program resulting in improved rehabilitation care for polio survivors.

Collaborating partners in the study include Burk Jubelt, MD, SUNY Upstate Medical University, Syracuse, New York; Susan Perlman, MD, University of California, Los Angeles; and Marinos Dalakas, MD, Thomas Jefferson University, Philadelphia, Pennsylvania. The study is expected to be concluded by the end of 2019.



Frans Nollet, MD, PhD, (left) and Eric L. Voorn, PhD

"We consider it a great honor to receive the PHI grant," said Dr. Nollet. "It will mean an important boost to continue and expand our PPS research."

#### **Previous Research Fund Grants**

Beginning with its first grant in 2001, PHI's Research Fund has awarded nearly half a million dollars for research dedicated to the management of neuromuscular respiratory insufficiency or the late effects of polio or to exploring historical, social, psychological and independent living aspects of long-term home mechanical ventilation or living with polio.

### The Ninth Award (2016)

"Cough Assist: use education needs, health service utilization and outcomes" Louise Rose, RN, MN, PhD, Associate Professor, Lawrence S. Bloomberg Faculty of Nursing, University of Toronto, Ontario, Canada, and Mika Nonoyama, RRT, PhD, Assistant Professor at the University of Ontario Institute of Technology

#### The Eighth Award (2014)

"Poliovirus genome in patients with post-polio syndrome (PPS): Defining virus mutations by novel genome sequencing methods and investigating possible treatments with antiviral antibodies and drugs" Antonio Toniolo, MD, FAMH, University of Insubria, Varese, Italy

#### The Seventh Award (2013)

"Effects of Whole Body Vibration on People with Post-Polio Syndrome" Carolyn Da Silva, PT, DSc, NCS, Texas Woman's University, Houston, Texas

#### The Sixth Awards (2011)

"Characteristics of poliomyelitis and post-polio patients among Jews and Arabs in Jerusalem" Zeev Meiner, MD, and Isabella Schwartz, MD, Hadassah Medical Center, Jerusalem, Israel

"The Role of Oral Glutathione in Improvement of Health Outcomes among Persons with Late Effects of Poliomyelitis" Claire Z. Kalpakjian, PhD, MS, University of Michigan, Ann Arbor

## The Fifth Award (2009)

"Persisting Noninfectious Fragments of Poliovirus in PPS Patients: Virus Detection and Susceptibility to Antiviral Drugs" Antonio Toniolo, MD, FAMH, University of Insubria, Varese, Italy

#### The Fourth Award (2007)

"Regulatory T Cells as a Biomarker of Post-Polio Syndrome" Rahnuma Wahid, PhD, University of Arkansas for Medical Sciences, Little Rock, Arkansas

#### The Third Award (2005)

"Timing of Noninvasive Ventilation for Patients with Amyotrophic Lateral Sclerosis" Noah Lechtzin, MD, MHS, Johns Hopkins University, Baltimore, Maryland

#### The Second Award (2003)

"Women with Polio: Menopause, Late Effects, Life Satisfaction and Emotional Distress" Claire Z. Kalpakjian, PhD, MS, University of Michigan, Ann Arbor

#### The First Award (2001)

"Ventilator Users' Perspectives on the Important Elements of Health-Related Quality of Life" Mark Tonack, MA, Dina Brooks, PhD, Roger Goldstein, MD, West Park Health Care Centre, Toronto, Canada; Audrey King, MA, The Center for Independent Living in Toronto

> More information about each grant can be found at www.polioplace.org/phi-funded-research