Letter to the Editor

To the Editor:

Thank you for sharing the letter from Dr. Polymeropoulos commenting on my essay entitled “The Identification of Alpha-Synuclein as the First Parkinson Disease Gene [1]” published in the Journal of Parkinson’s Disease. It is regrettable that his interpretation of the events I describe and my interpretation of those events appear to differ. The key to understanding the source of the differing interpretation lies in his rejection of my reference to a role for serendipity in the project. That is because nearly all of the intriguing serendipitous events that I described in my essay occurred early in the project, before he became involved – in fact, a prime example of what I described as serendipity was my decision to invite Dr. Polymeropoulos, a section chief in my Branch in the intramural NHGRI, to collaborate with me on the project rather one of the many other highly skilled molecular geneticists to whom I could have turned. I say this because of the completely unanticipated finding that the A53T mutation in the Contursi kindred appears to have originated in a region of Greece where Dr. Polymeropoulos had roots and personal connections with colleagues who knew of autosomal dominant Parkinson’s disease (PD) pedigrees in which, it turned out, the PD segregated with this same A53T founder mutation. We now know that mutations in alpha-synuclein are a very rare cause of hereditary PD and we could have searched for a very long time without uncovering other families with this mutation, or any alpha-synuclein mutation, to corroborate the initial observation. I do thank Dr. Polymeropoulos for correcting a factual error that I incorrectly attributed his initial focus on chromosome 4 to a mapping project for Wolfram syndrome rather than for Ellis van Creveld syndrome, an error for which I ask the readers’ indulgence given it has been over 20 years since these events unfolded. Other than this one factual error, I believe my essay is an accurate portrayal of the events leading from my being asked to speak at a national meeting proposing a role for human genetics in PD research to the identification of alpha-synuclein as the first PD gene.

Robert L. Nussbaum, MD
Chief Medical Officer, Invitae
Volunteer Clinical Faculty, Department of Medicine
University of California San Francisco