The Division of Neuromuscular Medicine has a tradition of scientific discovery, especially in defining genetic mechanisms of nerve and muscle disorders. The program was started by Drs. Jun Kimura, Hans Zellweger, and Victor Ionasescu in the 1960s and 1970s. Dr. Zellweger, later joined by Dr. Ionasescu, initiated genetic research into the inherited neuropathies and muscular dystrophies. This has remained the cornerstone for the program over the past 60 years.
Hans Zellweger was appointed to the faculty in 1959 and founded the Division of Medical Genetics. In 1960, he started the Cytogenetics Laboratory which was one of the first clinical laboratories in the United States to study human chromosomal alterations.
Peter Bosch led the Adult Neuromuscular Program from 1972-1991.
Dr. Michael Shy brought the NIH funded Inherited Neuropathy Consortium (INC) of the Rare Disease Clinical Research Network to Iowa, which involves investigators at 20 universities around the world. The Charcot-Marie-Tooth (CMT) Clinic has attracted patients from 6 continents, 26 countries, and 49 of the 50 states in the US. Between 2012 and 2018 the INC has collectively identified 26 novel genetic causes known to initiate CMT. Upon arrival to the clinic, patients put a pin in this world map, or on a map of the United States, at the location of their home.
Rapid advancements in molecular pathogenesis of muscular dystrophy resulted from seminal contributions by Dr. Kevin Campbell in the early 1990s, with the discovery of the dystrophin-glycoprotein complex. Dr. Campbell along with Kathy Mathews and Steve Moore established the Paul D. Wellstone Muscular Dystrophy Cooperative Research Center, now in its fifteenth year of NIH funding.