Professor Fritz Buchthal
Tribute to a Great Scientist and Teacher

Professor Fritz Buchthal, who will be remembered as one of the past half century’s greatest scientists, in the fields of both basic and applied neurophysiology, died in Santa Barbara, California, at the end of December. He was ninety-six.

Fritz Buchthal studied at the Universities of Freiburg, Berlin and Stanford. His earliest investigations concerned the contractile mechanism of heart and limb muscles. In 1933, to escape Nazi persecution, he left his laboratory in Berlin and went to Denmark where, at the University of Copenhagen, he was able to pursue his neurophysiological research. He was soon involved in setting up clinical departments of electromyography and electroencephalography at the Rigshospital. In 1943, he fled to Lund, in Sweden, where he continued to work in the field of muscular diseases. Two years later, he returned to Copenhagen and besides working in experimental neurophysiology, began teaching pupils from both Europe and the United States.

In 1972, he set up a new Institute of Neurophysiology, with superior technical resources, that attracted expert scientists in the spheres of biotechnology, and animal and brain experimental research, while the clinical departments were rebuilt in the new Rigshospital. From then, until 1977, Buchthal worked as a professor of neurophysiology and as Dean of the Faculty of Science and Medicine at Copenhagen University, and as Director of the Department of Clinical Neurophysiology at the Rigshospital.

In 1982, he was invited to set up the Laboratory of Neurophysiology at the National Institute of Health in Washington, where he carried out sophisticated investigations into the electrophysiological alterations of rare neuromuscular disorders.

The IRCCS C. Mondino Institute of Neurology in Pavia is greatly indebted to Professor Buchthal for the establishment of its electromyography laboratory (Italy’s first), where research into myopathies, myasthenia gravis, the sequelae of polio, amyotrophic lateral sclerosis and spinal atrophy was conducted in parallel with the investigations of Kugelberg and Welander, as well as into demyelinating neuropathies of immunological and toxic origin. Original research into sensory and motor functional neurostimulation was also performed there by Prof. Paolo Pinelli, his first pupil, in collaboration with Prof. Cesare Casella.

Paolo Pinelli