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A tribute to the work and life of Dr Knud H. Krabbe: Advances in genetics, neuropathogenesis, therapies and clinical management of Krabbe's disease

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In June of 1916, an article in the Journal *Brain* described the clinical and neuropathological features of five infants affected with a diffuse familial sclerosis of the brain (Krabbe, 1916). The author was Knud Haraldsen Krabbe, an incipient and energetic young Danish neurologist. Educated in an academic environment since early infancy, Krabbe published his first scientific paper at the age of ten, a testament to his curious and investigative mind. After becoming a neurologist from the University of Copenhagen in 1909, Dr Krabbe became heavily interested in child neurology. He worked in various hospitals, including the National Hospital for Nervous Diseases in Queen's Square, Kommunehospitalet and Rigshospitalet in Copenhagen. He founded, and was editor-in-chief of the journal *Acta Psychiatrica Neurologica Scandinavica*, and became a loved and highly respected mentor for young researchers and physicians. In his later years, while suffering from Parkinson's disease, Dr Krabbe continued to perform his lifetime passion, scientific research, in a small laboratory associated with the Municipal Hospital in his native city of Copenhagen. Dr Krabbe died in 1961, without witnessing major advances in our understanding of the disease that eventually became his eponym.

We reach the advent of this one hundred year anniversary with a significant insight into the genetics of the disease, its neuropathogenesis, and the clinical management of affected children. In just the last ten years, we have witnessed a remarkable spur of reports that revealed new and exciting aspects of the mechanisms leading to brain pathology and tested new and powerful therapeutic tools. Born from the collective past and present efforts of a myriad of scientists across the world, we face the start of the new century for Krabbe's disease with an astonishing leverage of knowledge. These are exciting times when safer and more efficient treatments are starting to be envisioned.

This special issue of the Journal of Neuroscience Research is dedicated to honoring the life and work of Dr Krabbe, whose fundamental observations point the way for the important work of generations of scientists and physicians, to the memory of the many infants who suffered and are afflicted by this malady, and to the herculean work of the affected families, who in silence and with unbelievable love and faith, face the tremendous work of caring for their children. At a personal level, it has been my privilege and honor to organize this compendium of articles, with the goal of summarizing the current understanding of Krabbe's disease, its genetics, pathology, clinical management, and emerging therapies. I certain that Dr Krabbe would be proud of the efforts, passion, and findings that have been attained in

these hundred years, and would look, as I do, with high hopes and optimism to the future of treating Krabbe's disease.

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Biography

Knud H. Krabbe

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