New Research Study of Syrinx Damage

Thanks in large part to the tireless efforts of our volunteers and the generosity of our donors, Conquer Chiari is proud to announce a new research grant at the Conquer Chiari Research Center at the University of Akron.

The project, titled Molecular Biology Assessment of Syringomyelia, is a one year, $67,000 grant to Nic Leipzig, PhD to conduct research in nerve damage and healing and to specifically look at the molecular processes that are involved in syringomyelia. The work will characterize the fundamental process of nerve damage, which is presently not well understood. Dr. Leipzig will utilize state of the art cellular tools to reveal this process. It is hoped that results from this study will help the development of treatment strategies to restore nerve function damaged by syringomyelia. With this funding, Dr. Leipzig joins the CCRC team at the University of Akron to conduct this important work.

According to Rick Labuda, Executive Director of Conquer Chiari, “This project is an important, and exciting, first step in what is likely a long path in helping those who have nerve damage from syrinxes. Millions of dollars have been spent in developing tools and techniques in an attempt to treat complete, traumatic spinal cord injury. While many of these have failed in cases of total paralysis, it is our strategy to apply these techniques, where applicable, in cases of syrinx caused damage, with the hope that since the spinal injury is not as severe, that they will be effective. To do this, we must first understand, at a fundamental level, what syrinx related nerve damage entails. Dr. Leipzig is an expert in this area and has worked extensively on developing novel materials and techniques to restore nerve function.”

Dr. Leipzig added, “I am excited to apply my novel approaches to nerve regeneration to syringomyelia and participate in this important project.”

Dr. Nic D. Leipzig is the Assistant Professor of Chemical and Biomolecular Engineering at the University of Akron. He is from Fairbanks, Alaska and crisscrossed North America for his graduate and post-graduate work. He completed his post-doctoral training in Chemical Engineering and Applied Chemistry at the University of Toronto, Toronto, ON. Dr. Leipzig earned a Ph.D. in Bioengineering at Rice University, Houston, TX. His thesis focused on “Growth factor effects on single chondrocyte biomechanics and gene expression”. He has authored numerous publications focusing on stem cell research. Dr. Leipzig very much enjoys the pursuit and acquirement of new knowledge and looks forward to the many challenges that lay ahead.