An Unexpected Injury Leads Two Brothers to Dedicate their Lives to Biomedical Research and Advocacy

Many factors can come into play when choosing a career path, but for identical twins Dr. Jason Carmel and David Carmel, a major turning point for both of them happened in 1999. Jason currently holds the position of Secretary/Treasurer on ASNR's Executive Committee, and we are pleased to have an opportunity to share their story.

Twenty four years ago, Jason was a medical student at Columbia University, and his brother David was preparing to enroll in the MBA program at Stanford University. David sustained a spinal cord injury diving into shallow water while in Mexico, and his neck was broken. "I was instantly paralyzed and couldn't move anything or feel anything from my chest down," David explained. The two brothers had always been close, and his accident ended up having a profound impact on both of their lives.



David was immediately taken to San Diego where he underwent emergency surgeries to stabilize his spine before being transported back home to New York City. Once there, he began the long process of rehabilitation. Not to be deterred by his injury, David completed his MBA as originally planned, and he chose to focus on health care. After graduation, David served as a White House Fellow, advising the Secretary of the Treasury on health care policy. Since then, he has held leadership positions at multiple biotechnology and therapeutics companies with the goal of bringing new therapies to patients. David currently serves as the Chief Growth and Innovation Officer at the Foundation for the National Institutes of Health, and he is also a Board Member of the New York State Life Science Advisory Board

The weight of the situation really hit home when Jason had a chance to see his brother shortly after his injury. Driven by a desire to help his brother, Dr. Jason Carmel completed his MD and PhD degrees, specializing in neurology and research on nervous system regeneration and recovery. "David's injury was the reason I wanted to focus my work in this area. I wanted to be able to have an impact," Jason remarked. In his roles as a neurologist and neuroscientist, Jason has helped many patients and made meaningful advances in our understanding of spinal cord plasticity and approaches that may facilitate recovery after spinal cord injury.

In line with ASNR's mission to improve the lives of people with neurological disorders through advances in basic and clinical research, Jason and David are each bringing their distinct backgrounds in clinical neuroscience and business, respectively, to move the needle forward in terms of advocacy and innovation to help improve the lives of people with spinal cord injury. They've lobbied for funding for spinal cord injury in New York State, and they have launched a business making a new kind of electrode array for spinal cord stimulation that is more flexible and allows a patient to move their neck more freely. They are hoping to test this new array soon in a large-scale clinical trial.

Jason and David were recently <u>featured in an article by Columbia University</u>, as well as on NBC's Today Show (<u>you can watch the full segment here</u>).