CURRENT RESEARCH
Exploiting new technologies for treatment avenues for previously untreatable conditions

Several diseases of the nervous system are progressive and untreatable, robbing humans of their function, their intellect or their mobility. Alzheimer’s disease is the most common neurodegenerative disorder in the United States and the sixth most common cause of death in the United States, afflicting over five million individuals. This number is rising daily. Despite its prevalence, we lack effective therapies for stopping or slowing degeneration of the disease. What should be the “Golden Years” become the years of challenge and chronic care.

Spinal cord injuries, on the other hand, tend to afflict people at a young age, and result in decades of impaired function and chronic medical illness. Therapies to restore neurological function are lacking.

Dr. Mark Tuszynski is trying to identify useful therapies to have a major impact on these tragic and currently untreatable diseases of the nervous system. He is applying cutting-edge technologies, including gene therapy and stem cell therapy, to disorders such as Alzheimer’s disease, spinal cord injury and ALS. Using gene therapy to deliver potent growth factors to the nervous system, he aims to prevent or reduce cell loss in Alzheimer’s disease and ALS. Using the remarkable biology of neural stem cells, he aims to form new neural connections across sites of severe spinal cord injury to restore function after even chronic injury. And using the techniques of modern neuroscience, he aims to understand basic mechanisms through which the brain codes for new memories. Findings from some of this work have already moved into human clinical trials, and more potential therapies are in the pipeline for first in human clinical trials in Alzheimer’s disease, ALS.

Read More at benefunder.com/