

Summary of Visit to Mayo 06/15/07

Promising SCI research is being overshadowed by a dark cloud. The outlook for obtaining funding for medical research is "dire" according to Dr. Moses Rodriguez at the Mayo Medical School in Rochester, Minnesota. The root of the problem is this: The National Institute of Health (NIH) is a major source of funding for medical research. In recent years, although the NIH budget has actually increased, a vast percentage of the appropriated funds has been diverted to bio-medical and AIDS research. Subsequently, a vastly shrinking percentage of research dollars are available for other research. In addition, very few of these projects are focused on spinal cord injury (SCI) research.

Research labs are closing every day at Mayo and other locations because funding is not available. Young, promising researchers are choosing other career paths where the outlook is not so bleak.

Dr. Rodriguez has been fortunate, however. His work has received additional funding, both public and private, and his research will continue for the foreseeable future. Dr. Rodriguez has developed antibodies that stimulate repair of the Central Nervous System. A culmination of more than two decades of work, this research holds great promise for people who have diseases and injuries that damage the CNS such as multiple sclerosis (MS) and SCI.

When a spinal cord is injured, there is often a combination of injury to the myelin sheath (the insulation around nerve cells) and cell death. One series of antibodies developed by Dr. Rodriguez that stimulates repair of the myelin sheath is very close to receiving FDA approval to move to human clinical trial in the MS patient model. Confident that approval to begin the clinical trials is imminent, Dr. Rodriguez is making plans to begin trials by the end of 2007. However it will take years before these trials are completed so that these antibodies might be available to all patients. If results are as expected, he theorizes chronic SCI could be next.

Although he was very clear his research is geared toward MS patients, he has a secondary interest in the chronic SCI model and feels his research will be translatable from MS to SCI. Already, another series of antibodies look promising to stimulate axonal regeneration. Asked about the scar formation in the chronic SCI as a barrier, he shared he does not believe it presents an insurmountable problem.

With continued funding, his research to develop antibodies that stimulate axon regeneration will move forward. Repair of the myelin sheath along with axonal regeneration look promising to lead to meaningful functional recovery for people with SCI.

It is clear we must continue to advocate and push for increased NIH and private funding for CNS research such as Dr. Rodriguez's lab and others are conducting.