

Nancy Vranich (James Millonig, Principal Investigator)

"Spinal Cord Proliferation and Differentiation: The Role of Neural Tube Closure" - Completed

The NJCSCR support for the above listed project expired as of July 2006. This support was integral to the conducting of my doctoral thesis project. This project is largely finished, and I expect that the manuscripts will be submitted and my graduation will be complete by the end of the 2007 academic year.

The funding provided to me by the NJCSCR has greatly impacted by professional development as a scientist. It has afforded me the opportunity to attend and present my work on this project at the Society for Neuroscience (San Diego, 2004), the Northeastern Society for Developmental Biology (Woods Hole, 2006), and the Society for Developmental Biology (Ann Arbor, 2006). My attendance at these meetings has not only enhanced my abilities as a scientist through

intimate interaction with my peers, but has also afforded me the opportunity to attend important career seminars that have greatly impacted decisions regarding my career.

This funding has not precipitated additional research funding at this time. I expect that a manuscript describing the project funded by the NJCSCR grant awarded me will be submitted for publication by the end of the academic year. This grant has also enabled our group to start a mouse genetics project aimed at identifying quantitative trait loci that act to modify the incidence or severity of neural tube defects. This new area of research will be the subject of future NIH grant applications to be submitted by Dr. James Millonig.

I feel that the grant awarded me by NJCSCR has had a great impact on the Department of Neuroscience and Cell Biology, and Rutgers University and the University of Medicine & Dentistry, as it is evidence that the graduate students and faculty of these institutions carry out research successfully in the competitive and progressive field of spinal cord injury. The honor of having NJCSCR funding sets our departmental faculty and graduate students apart from other regional institutions, and makes the scientific community at Rutgers and UMDNJ more collaborative, and thus strengthened. Our research group, composed primarily of mouse and human geneticists, looks forward to increased collaborations with fellow NJCSCR-supported researchers of diverse neuroscience backgrounds in the future. This enhanced collaborative effort will greatly speed advances in our understanding and treatment of disease and injury of the spinal cord.

04-2901