Wayne State University School of Medicine, Department of Physical Medicine and Rehabilitation, Oakwood are pleased to announce the award of the Rehabilitation Research Experience for Medical Students (RREMS) Program Award to Christopher Jackson, MS for his research with The Role of Rehabilitation in Potentiating the Effects of Human Neural Progenitor Cells in Severe Spinal Cord Injury. Mr. Jackson’s academic background includes a Bachelor of Arts in Biochemistry and Kinesiology from Occidental College, Los Angeles, California and a Masters of Science in Athletic Training from Montana State University-Billings. The purpose of Mr. Jackson’s study is to determine the effectiveness of human olfactory progenitor cells, therapeutic exercise and environmental enrichment on recovery of a rat model of severe spinal cord injury. The goals are to see if human progenitor stem cells derived from the nasal olfactory mucosa are safe and can facilitate repair of an injured spinal cord and improve functional recovery (walking, swimming, balancing, etc.) in rats. If this study is successful it could eventually lead to human clinical trials with olfactory stem cells. When asked what made him interested in this area of research, Mr. Jackson explained, “My interest in spinal cord research came from working as an athletic trainer prior to coming to medical school. As an athletic trainer I unfortunately had to provide emergency care for two high school athletes who had suffered cervical spine injuries; one of which required extensive medical treatment and rehabilitation. Seeing one of the athletes that I cared for struggle through his rehabilitation made me realize that I wanted to be involved in research in order to improve the care that he and other patients can receive.”

Mr. Jackson is working with his mentor, Jay M. Meythaler, Professor and Chair of Wayne State University School of Medicine, Department of Physical Medicine and Rehabilitation, Oakwood along with Jean Peduzzi-Nelson, PhD, Associate Professor and Director of Research with Wayne State University School of Medicine, Department of Physical Medicine and Rehabilitation-Oakwood, who focuses on the use of neural progenitors cells in the recovery of numerous neurological conditions, such as severe spinal cord injury and traumatic brain injury. Mr. Jackson shared why he chose to work with Dr. Peduzzi-Nelson and her inspiration with this project, “I choose to work with her because of my interest in neurology and rehabilitation medicine. I also admired the fact that her research examined both the effectiveness of stem cell treatment and common rehabilitative practices such as therapeutic exercise and environmental enrichment. This was very appealing because, as future physician, research that mimics the conditions that will be encountered in the clinics and
used with patients is very exciting.” Mr. Jackson hopes to broaden his research and elaborated on what he hopes to learn through this experience, “I hope to gain a better insight into the field of experimental rehabilitation research and expand my knowledge on the treatment of spinal cord injuries. I also hope to gain insight to the process of pre-clinical research that needs to be done prior to human clinical trials can start. Before medical school, I was only interested in the human clinical trials. However, soon after school started, I realized that without the efforts of scientists, like Dr. Peduzzi-Nelson, those clinical tests can never, ever happen.

When asked what motivates him to do research, Mr. Jackson eagerly shares, “I am motivated to do research by my desire to not only provide care to others but to make the care I will eventually providing better. There is always room for improvement in all aspects of life and it just takes a little extra effort.” His specific interest in the area of athletic rehabilitation comes from personal experience. “My interest in athletic rehabilitation comes from experiences as a collegiate athlete and athletic trainer. Throughout my life I have been both a patient, suffering musculoskeletal injuries and neurological concussions, and a health care provider for these same conditions. I choose to move on from athletic training and into medical school in order better increase my abilities to treat patients whose ailments were beyond my ability to treat.” His long term goals and plans in the area of academic medicine are inspiring, and include a passion for teaching: “I plan on being involved in academic medicine for many, many years to come. I hope to integrate research and teaching into my future career in order to learn from others and improve the care that I can provide.” Mr. Jackson’s experiences in research at Wayne State University have inspired him to continue his pursuit of life-long-learning and are found in his expression of gratitude, “I would just like to thank everyone that I have had the pleasure to work with here at Wayne State University over the past year. Wayne State University has provided me with so many opportunities, and I am so excited to be here for at least another three years and eventually return the favor for everything that is place has given me!” Join us in celebrating the accomplishments of Mr. Christopher Jackson and his pioneering work in the area of severe spinal cord injury.