



THE MIAMI PROJECT TO CURE PARALYSIS
AN INTERNATIONAL CENTER FOR SPINAL CORD INJURY RESEARCH

August 14th, 2016

Re: Medical School Application

Dear Medical School Admissions,

I am writing in support of Dr. Jeffrey Datto's application to your medical school program. Dr. Datto (Jeff) joined my laboratory more than 5 years ago after completing his undergraduate degree at John Hopkins and PhD from Thomas Jefferson. Although enrolled in a MD-PhD program, Jeff was unable to obtain his MD degree at that time due to a combination of unforeseen circumstances in the laboratory he was working in and other issues. After interviewing Jeff and hearing of his situation at the time I decided to give him a chance and bring him into my laboratory as a Research Associate to work on a project aimed at generating pre-clinical data for an Investigational New Drug application to the FDA to request permission to undertake Phase 1 clinical trials using autologous Schwann cell transplantation as a putative therapeutic for human spinal cord injury. Jeff worked very hard in his first year to learn a broad range of new histology and behavioral techniques and then implement them in acquiring and analyzing the data for this project over the ensuing two years. He worked collaboratively with a large team of other PhD and MD researchers and invested long hours into the tasks assigned to him (at least 12 hours per day and most weekends). In the first and subsequent year Jeff did have difficulty in communicating with me verbally, though Jeff would provide his input and responses from our meetings' discussions later in written form (emails). Jeff also did not adapt well to the stresses of work and had several incidences with other laboratory staff during this time. Despite these issues, Jeff always ensured that deadlines for the project were met and was very rigorous in the work he performed, allowing us to achieve FDA approval of the Phase 1 clinical trials at the end of 2012. I believe that Jeff is very honest and trustworthy and he has displayed a high level of responsibility in the tasks I have assigned to him – in these areas he is unparalleled among all the research staff that I have had in my laboratory to date. Jeff was also able to write project proposals for his own research ideas during this time and submitted fellowship applications to several Foundations seeking support for this work. Jeff has exhibited a solid comprehension of the theory associated with the research projects assigned to him and I would rate him as above-average in this capacity (top 50 percentile). Where Jeff has shined, however, is in his technical aptitude, showing a very good comprehension of motor functional testing methodologies and implementing a number of refinements that have provided publishable, important information for the field. He has also laid a foundation for our pre-clinical work in the generation of standard operating procedures for many of the outcome assessments we use that will be employed in many future studies.

Despite an initially rough first 2 years in the laboratory, I have noticed improvement in Jeff's behavior in the laboratory, in both maturity and his personal interactions. He is now more settled in life and has demonstrated improvements in his communication skills. Jeff now has no problems presenting in our regular lab meetings and in front of a large audience – he gave a lauded talk at The Miami Project Seminar Series in 2014. Jeff also is able to communicate well in his one-on-one meetings with me and share his ideas freely in verbal rather than written form. Jeff also has had fewer personal issues with laboratory staff over the last year and can interact with his colleagues, training several new lab staff and students on a variety of techniques. Jeff has focused most of his recent efforts on writing up research projects for publication. A manuscript entitled, "Female rats demonstrate enhanced neuroprotection and improved locomotor recovery following traumatic spinal cord injury compared to males", upon which he is the first author was published in the *Journal of Neurotrauma*. This work demonstrates the importance of gender on outcome after spinal cord injury and I expect it to have significant impact on the field. Jeff followed this work up with a perspective article entitled "Does being female provide a neuroprotective advantage following spinal cord injury?", which was published in the journal, *Neurological Regeneration Research*. In another paper published in *Datasets in Science*, "Use of

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the Catwalk Gait Device to assess differences in locomotion between genders in rats inherently and following spinal cord injury“, Jeff provided important foundation work on the locomotor behavior differences between male in female rats inherently and following spinal cord injury. Jeff has also completed drafts of two additional manuscripts that will soon be submitted. The first, upon which Jeff is the first author, has examined how pain influences motor recovery after spinal cord injury while the second, where Jeff is a co-author, evaluates the effectiveness of different devices for evaluating locomotor dysfunction in spinal cord injured animals. Currently Jeff's studies at the bench are focused on refining our Schwann cell injection parameters pre-clinically, including delivery strategies and dosing. Jeff has also been volunteering at Camillus House and Health at the food kitchen serving dinner to the homeless as well as shadowing neurosurgeons during their rounds for the SCI unit at the Miami VA hospital. Jeff has also been a volunteer at our Annual Miami Brain Fair that is a great avenue for introducing neuroscience to students in Miami-Dade County.

In sum, I would like to recommend Jeff for entrance into your medical school program. Jeff has an intense passion for attending medical school that I have not seen in the more than 200 students and researchers that I have written support letters for in the past 10 years – I am sure that this is what he wants in life. I have seen Jeff improve in the past 5 years since joining my group in his interactions and communication skills with others and he is very diligent and hard working. While I would not rate Jeff intellectually as among the most outstanding researchers I have trained, he is very honest, trustworthy and responsible and has a great attention to detail in the work he performs. If you have any further questions please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. Pearse' with a stylized flourish at the end.

.....
Damien D. Pearse Ph.D.

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