

Grant #2015 I-03
Bio - Rick Schnellmann, PhD

I have been a member of the MUSC faculty since 2001 and am currently a Distinguished University Professor and Eminent Scholar. I have consistently maintained a successful research operation involving both basic and translational research in renal injury, renal repair and regeneration, renal aging, nephrotoxicity and diabetic nephropathy. In addition we have research projects that focus on mitochondrial biogenesis, homeostasis and injury. I have been continuously funded from extramural sources, during my postdoctoral fellowship, early career development, and throughout my career by the NIH and other funding agencies. I am respected in my field and have published >170 manuscripts in peer reviewed journals as well as 19 book chapters. I have been an invited speaker at more than 100 professional seminars and symposia, and have served as conference chair and co-chair for many of these. I have trained 18 doctoral students, 3 MS students and 15 postdoctoral fellows. I am excited about this project because it addresses a disease, spinal cord injury, that does not have good drug therapy options. We have proposed a novel drug target, mitochondrial biogenesis, that when stimulated will restore mitochondrial function, decrease neuronal injury and promote recovery of function and behavioral outcomes. Finally, the drug used in this application, formoterol, is a FDA-approved drug and could be easily be repurposed to treat spinal cord injury.