**Myosotys Rodriguez, Ph.D.**

**Postdoctoral Research Associate**

Center of Personalized Nanomedicine

Institute for NeuroImmune Pharmacology

Email: [myrodrig@fiu.edu](mailto:myrodrig@fiu.edu)

Dr. Myosotys Rodriguez is a Postdoctoral Research Associate in Dr. Nazira El-Hage laboratory at the Center of Personalized Nanomedicine, Institute of NeuroImmune Pharmacology, Department of Immunology of Florida International University, Miami, Florida. Dr. Rodriguez obtained her Ph.D. in cellular and molecular biology, with expertise in HIV-1 neuropathology within the context of opioid abuse, from the Universidad Central del Caribe, Puerto Rico. She has worked as a visiting graduate research assistant with the group of Dr. Kurt Hauser at Virginia Commonwealth University, Richmond, Virginia. Currently, her research in Dr. Nazira El-Hage laboratory examines the role of autophagy in the pathogenesis of HIV-neurodegenerative disorders. The main goals of her research are:

* To determine whether imbalances in autophagy alter HIV-induced astroglia metabolic dysfunctions and learning impairment.
* To develop effective delivery and on-demand controlled release of siBeclin1 using magneto-electric nanoparticles (MENPs) to attenuate HIV in vitro and in vivo.

**Recent Publications:**

1. **Rodriguez M**, Kaushik A, Lapierre J, Dever SM, El-Hage N, Nair M. [Electro-Magnetic Nano-Particle Bound Beclin1 siRNA Crosses the Blood-Brain Barrier to Attenuate the Inflammatory Effects of HIV-1 Infection in Vitro.](http://www.ncbi.nlm.nih.gov/pubmed/27287620) J Neuroimmune Pharmacol. 2016 Jun 10. [Epub ahead of print] PubMed PMID: 27287620.
2. Dever SM, **Rodriguez M**, El-Hage N. [β-Adrenergic receptor gene expression in HIV-associated neurocognitive impairment and encephalitis: implications for MOR-1K subcellular localization.](http://www.ncbi.nlm.nih.gov/pubmed/27400929) J Neurovirol. 2016 Jul 11. [Epub ahead of print] PubMed PMID: 27400929.
3. Dever SM, **Rodriguez M**, Lapierre J, Costin BN, El-Hage N. Differing roles of autophagy in HIV-associated neurocognitive impairment and encephalitis with implications for morphine co-exposure. Front Microbiol. 2015 Jul 6; 6: 653. doi: 10.3389/fmicb.2015.00653. eCollection 2015. PubMed PMID: 26217309
4. El-Hage N, **Rodriguez M**, Dever SM, Masvekar RR, Gewirtz DA, Shacka JJ. HIV-1 and morphine regulation of autophagy in microglia: limited interactions in the context of HIV-1 infection and opioid abuse. J Virol. 2015 Jan 15; 89(2):1024-35. doi: 10.1128/JVI.02022-14. Epub 2014 Oct 29. PubMed PMID: 25355898
5. El-Hage N, **Rodriguez M**, Podhaizer EM, Zou S, Dever SM, Snider SE, Knapp PE, Beardsley PM, Hauser KF. Ibudilast (AV411), and its AV1013 analog, reduce HIV-1 replication and neuronal death induced by HIV-1 and morphine. AIDS. 2014 Jun 19; 28(10):1409-19. doi: 10.1097/QAD.0000000000000291. PubMed PMID: 24732776

**Personal Web link:** <https://www.researchgate.net/profile/Myosotys_Rodriguez>