Dr. Nazira El-Hage

Associate Professor

Center of Personalized Nanomedicine

Institute for NeuroImmune Pharmacology

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

Dr. Nazira El-Hage received her Ph.D. in Microbiology and Immunology from the University of Kentucky in 2002, followed by one year of post-doctoral training in the Department of Virology and four years as a Research Scientist in the Department of Neuroscience at the same institution. In 2007, she joined the Department of Pharmacology and Toxicology as an Assistant Professor at Virginia Commonwealth University School of Medicine, and in 2014 she moved to Florida International University Herbert Wertheim College of Medicine as an Associate Professor in the Department of Immunology. Her long-term goal is to understand the underlying mechanism(s) in the enhanced pathogenesis of HIV-1 in order to provide a better understanding for the design of candidate antiviral therapies targeting these effects in infected, and in a drug-abusing individuals.Dr. El-Hage’s research focuses on the:

* **Role of autophagy in the interlinked epidemics between HIV/NeuroAIDS and substance abuse in the central nervous system.**
* **Role of mu-opioid receptor (MOR) splice variants and the HIV co-receptor, CCR5, in HIV-1-cellular binding and entry in the context of drug abuse and antiretroviral therapy.**
* **Development of nanotechnology drug delivery system targeting HIV-1 latency in drug abusing individuals.**
* **Neurological consequences of ZIKA virus and mechanism(s) mediating viral-induced pathology in the central nervous system.**

**Publications:**

1. Dever SM, Rodriguez, M and **El-Hage N** (2016).β-adrenergic receptor gene expression in HIV-associated neurocognitive impairment and encephalitis: implications for MOR-1K subcellular localization. Journal of NeuroVirol. PMID: 27400929
2. Dever SM, Rodriguez M, Lapierre J, Costin B and **El-Hage, N** (2015). Differing roles of autophagy in HIV- associated neurocognitive impairment and encephalitis with implications for morphine co-exposure. Front Microbiol.6:653. PMID: 26217309
3. **El-Hage N**, Rodriguez M, Dever SM, Masvekar RR, Gewirtz DA and Shacka JJ (2015). HIV-1 and morphine regulation of autophagy in microglia: Limited interactions in the context of HIV-1 infection and opioid abuse J Virol. 89:1024-1035. PMID: 25355898
4. DeMarino C, Schwab A, Pleet M, Mathiesen A, Friedman J, **El-Hage N** and Kashanchi F (2016). Biodegradable Nanoparticles for Delivery of Therapeutics in CNS Infection. J Neuroimmune Pharmacol. PMID: 27372507
5. Rodriguez M, Kaushik A, Lapierre J, Dever SM, **El-Hage N** and Nair M (2016). Electro-Magnetic Nano-Particle Bound Beclin1 siRNA Crosses the Blood-Brain Barrier to Attenuate the Inflammatory Effects of HIV-1 Infection *in Vitro*. Journal NeuroImmune Pharmacol. PMID: 27287620
6. Kaushik A, Jayant R, Nikkhah-Moshaie R, Bharadwaj V, Roy U, Huang Z, Ruiz A, Yndart A, Atluri V, **El-Hage N**, Khalili K, and Nair MP (2016). Magnetically guided central nervous system delivery and toxicity evaluation of magneto-electric nanocarriers. Scientific Reports. PMID: 27143580

**Complete List of Published Work in My Bibliography**:

<http://www.ncbi.nlm.nih.gov/sites/myncbi/nazira.elhage.1/bibliography/41075730/public/?sort=date&direction=ascending>