

**APPLICANT/FELLOW BIOGRAPHICAL SKETCH****USE ONLY FOR INDIVIDUAL PREDOCTORAL and POSTDOCTORAL FELLOWSHIPS. DO NOT EXCEED FOUR PAGES.**

NAME OF APPLICANT/FELLOW Lauren A. O'Donnell		POSITION TITLE Postdoctoral Fellow	
eRA COMMONS USER NAME LODONNELL			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Delaware	B.S. in Agriculture	1996-2000	Animal Science/ Agricultural Biotechnology
University of Pennsylvania	Ph.D.	2000-2006	Cell & Molecular Biology

**A. Positions and Honors**

ACTIVITY/OCCUPATION	BEGINNING DATE (mm/yy)	ENDING DATE (mm/yy)	FIELD	INSTITUTION/COMPANY	SUPERVISOR/ EMPLOYER
Postdoctoral Fellow	11/06	present	Viral Immunology	Fox Chase Cancer Center	Glenn F. Rall, Ph.D.
Adjunct Professor	08/05	05/07	Chemistry	Philadelphia University	Jeffrey T. Ashley, Ph.D.

**Academic and Professional Honors**

American Society for Microbiology Annual Philadelphia Infection and Immunity Forum: Best Poster Presentation (2007)

Greenwald Fellowship (Fox Chase Cancer Center; 2006-present)

Penn Center for AIDS Research Best Poster Abstract in HIV Pathogenesis (2005)

Pre-doctoral trainee on Department of Microbiology NIH Training Grant in HIV Pathogenesis (2003-2005)

Pre-doctoral trainee on University of Pennsylvania Cell and Molecular Biology Training Grant (2000-2002)

State of Delaware Center for Agricultural Biotechnology Fellowship (2000)

American Society of Animal Science Award (1999-2000)

University of Delaware Science and Engineering Research Fellowship (1999)

Golden Key National Honor Society (1999)

Alpha Zeta (Agricultural Honor Society) (1997-2000)

State of Delaware Carvel Agriculture Scholarship (1996-2000)

University of Delaware Honors Program Scholarship (1996-2000)

Society for Neuroscience, Member

International Society of Neurovirology, Member

American Society for Virology, Member

**B. Publications**

- O'Donnell, LA, Agrawal, A, Sabnekar, P, Dichter, MA, Lynch, DR, Kolson DL. Apelin, an endogenous neuronal peptide, protects hippocampal neurons against excitotoxic injury. (2007) *Journal of Neurochemistry*. In Press.
- Wan, Q, Douglas, SD, Wang, X, Kolson, DL, O'Donnell, LA, Ho, WZ. Morphine Up-regulates Functional Expression of Neurokinin-1 Receptor in Neurons. (2006) *Journal of Neuroscience Research*. 84(7): 1588-1596.
- O'Donnell, LA, Agrawal, A, Jordan-Sciutto, KL, Dichter, MA, Lynch, DR, Kolson, DL. HIV-induced

neurotoxicity: Roles for activation of N-Methyl-D-Aspartate receptor subtypes 2A and 2B and the calcium activated protease calpain by a cerebrospinal fluid-derived HIV-1 strain. (2006) *Journal of Neuroscience*; 26(3): 981-90

4. O'Donnell, LA, Clemmer, JA, Czymbek, K, Schmidt, CJ. Marek's disease virus VP22: subcellular localization and characterization of carboxyl terminal deletion mutations. (2002) *Virology*; 292(2): 235-40

## Abstracts

O'Donnell, LA, Rose, RW, Skipworth, JD, Nicolas, E, Rall, GF. 2007. Interferon-gamma signaling in neurons: Classical pathways or new roads to viral clearance? Gordon Conference: Viruses and Cells.

O'Donnell, LA, Rose, RW, Skipworth, JD, Nicolas, E, Rall, GF. 2007. Interferon-gamma signaling in neurons: Classical pathways or new roads to viral clearance? 16<sup>th</sup> Annual Philadelphia Infection and Immunity Forum.

O'Donnell, LA, Agrawal, A, Sabnekar, P, Dichter, MA, Lynch, DR, Kolson DL. 2006. The G-protein coupled receptor APJ mediates survival signaling in hippocampal neurons and protects against HIV-induced neurotoxicity. The 7th International Symposium on NeuroVirology.

White, MG, Kolson, L, Sabnekar, P, Chodroff, RA, O'Donnell, LA, Wang, Y, Akay, A, DL, Jordan-Sciutto, KL. 2006. The role of astrocytes and the integrated stress response in HIV-infected macrophage induced neurotoxicity. The 7th International Symposium on NeuroVirology.

O'Donnell, LA, Agrawal, A, Lynch, DR, Dichter, MA, Giudetti, P, Schwarcz, R, Jordan-Sciutto, KL, Kolson, DL. 2005. HIV-Induced Neurodegeneration: Role for the Kynurenine Metabolic Pathway and NMDA Receptor Activation. Society for Neuroscience 35<sup>th</sup> Annual Meeting.

O'Donnell, LA, Agrawal, A, Lynch, DR, Dichter, MA, Schwarcz, R, Jordan-Sciutto, KL, Kolson, DL. 2005. HIV-Induced Neurodegeneration: Role for the Kynurenine Metabolic Pathway and NMDA Receptor Activation. Penn Center for AIDS Research 7<sup>th</sup> Annual Retreat

O'Donnell, LA, Agrawal, A, Dichter, MA, Lynch, DR, Kolson, DL. 2005. Mechanisms of HIV-induced neurodegeneration: Role of NMDA Receptor Subunits in Communicating Neuronal Cell Death. Conference of Retroviruses and Opportunistic Infections.

O'Donnell, LA, Dichter, MA, Kolson, DL. 2004. Role of AKT in neuroprotection against HIV-induced apoptosis. American Society for Virology 2004 Annual Meeting.

O'Donnell, LA, Sabnekar, P, Agrawal, A, Kolson DL. 2004. APJ and Apelin interactions: Downstream effects in primary cortical and hippocampal neurons endogenously expressing APJ. The 6th International Symposium on NeuroVirology.

O'Donnell, LA, Agrawal, A, Kolson, DL. 2003. APJ/Apelin Signal Transduction is Neuroprotective Against HIV-induced Apoptosis: Examinations using the Human NT2.N Neuronal System. Conference on Retroviruses and Opportunistic Infections.

O'Donnell, LA, Sabnekar, P, Agrawal, A, Kolson, DL. 2003. Single-cell RNA Profiling of TUNEL reactive neurons in AIDS dementia. The 5th International Symposium on NeuroVirology and the HIV Molecular & Clinical NeuroScience Workshop

O'Donnell, LA, Chen, W, Sulcove, J, Agrawal, A, Kolson, DL. 2002. Potential neuroprotective role of APJ/Apelin interactions: Protection against HIV-induced apoptosis. Conference on Viral and Host Genetic Factors Regulating HIV/CNS Disease.

Chen, W, O'Donnell, LA, Frank, I, Ozdener, H, Kolson, DL. 2002. HIV-1 induced neuronal apoptosis: mechanisms, pathways, and protection. 4<sup>th</sup> International Symposium on Neurovirology.