



## Nadine Kabbani, PhD

Associate Professor, School of Systems Biology

### Education

PhD, Pharmacology, Pennsylvania State College of Medicine

### Key Interests

Neuroscience | Proteomics | Cell Imaging | Addiction | Development | Receptor | Science Policy | Dopamine | Nicotine

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### SELECT PUBLICATIONS

- › N. Kabbani & R. A. Nichols, Beyond the channel: metabotropic signaling by nicotinic receptors. *Trends Pharmacol Sci* 39(4), 354-366 (2018).
- › J. R. King *et al.*, Ionotropic and metabotropic mechanisms of allosteric modulation of  $\alpha 7$  nicotinic receptor intracellular calcium. *N Mol Pharmacol* 93(6), 601-611 (2018).
- › J. R. King *et al.*, Identification and characterization of a G protein-binding cluster in  $\alpha 7$  nicotinic acetylcholine receptors. *J Biol Chem* 290(33) (2015).
- › N. Kabbani, Not so cool? Menthol's discovered actions on the nicotinic receptor and its implications for nicotine addiction. *Front Pharmacol* 23 (2013).

### Research Focus

The primary products of the genome are large number of expressed proteins dubbed the proteome, which codifies molecular organization in cells. Our research centers on identifying and characterizing proteome interaction networks for the dopamine and nicotinic acetylcholine receptors in order to better understand the function and regulation of these receptor systems in various types of cells.

### Current Projects

- Delineating the role of the nicotinic acetylcholine receptor in synaptic growth and nerve regeneration
- Examining spatial and temporal calcium signals in cytoskeletal growth
- Identification and characterization of receptor interactions
- Investigating the role and function of ligand gated channel interaction with GTP binding proteins