Title of Project:
“Development of allosteric modulators of acetylcholine efficacy for the treatment of neurological disorders”

Name of PI: William Messer

Target or pathway: M₁ muscarinic receptor

Therapeutic area: Neurological disorders, exploratory

Therapeutic hypothesis: Enhancement of M₁ muscarinic receptor activity could be particularly helpful in promoting behavioral flexibility in neurological disorders such as schizophrenia and autism spectrum disorders. In addition, compounds that enhance the efficacy (maximal activity) of acetylcholine could be useful in restoring cholinergic signaling deficits as found in schizophrenia.

Type of technology: Small molecule positive allosteric modulators of acetylcholine efficacy

Stage of project (examples): Hit validation

Differentiation from existing approaches:

Patent filled: Y/N

Novel NME: Y/N

Partnering goals: Seeking funding to advance synthetic chemistry plan as well as validate new therapeutic indications

Contact details (note: we could also encourage PIs to list their tech transfer officer here like I have below):

PI: William Messer
william.messer@utoledo.edu
Professor
Department of Pharmacology and Experimental Therapeutics
University of Toledo
419-383-1958

Technology Transfer Representative: Stephen Snider
Stephen.Snyder@utoledo.edu
Associate Vice President for Technology Transfer
Technology Transfer and Commercialization Process
University of Toledo
419-530-6225