

## SMS Spring 2023 Seminar Series

Friday Apr 28 | 3pm | Biodesign Auditorium

### Multi-Component Reactions – chemistry to build and enable both real and virtual AI-driven screening collections

The discovery and exploitation of complexity-generating multicomponent reactions (MCRs) is of pharmacological value in both real and virtual settings. This talk describes findings over the last 20 years employing MCRs to access new diversity space. The operational simplicity of protocols described enable ultra-high-throughput plate-based production of small molecules in a manner akin to printing. Screening results will demonstrate the clear value-adding proposition that MCR derived molecules offer in an academic setting for expeditious hit/probe generation and drug discovery in general.

#### Christopher Hulme, PhD

*Professor, University of Arizona*

Professor Hulme obtained his PhD under the tutelage of Professor Jack Baldwin at Oxford University and moved to the University of Arizona in 2007, after holding senior management positions at RPR, Amgen and Eli Lilly. In 2010, he was the founder of the South-West Center for Drug Discovery and Development and is now co-Director of the Arizona Center for Drug Discovery. Small molecule translational interests include Alzheimer's disease, glioblastoma, prostate and colon cancer and a theme throughout his career has been the discovery and optimization of multi-component reaction methodology toward proprietary compound collections. More recently, he founded Illuminos Therapeutics LLC, a start-up dedicated to developing a small molecule to treat Alzheimer's Disease and cognitive deficits that arise in Down Syndrome.

