

## 2022-2023

# University Senior Faculty Award for Research, Scholarship, and Creative Activity



### Dr. Katherine McReynolds, Ph.D.

#### **Professor of Chemistry**

College of Natural Sciences & Mathematics

In Search of Sugar-Based Broad Spectrum Anti-Viral Agents as Future Pandemic Preventers

The goal of the McReynolds lab is to formulate a variety of glycopolymers as topically applied broad spectrum anti-viral agents. The world formulary currently lacks drugs that are active against multiple viruses/virus classes. Current anti-viral drugs are better classified as "one bug-one drug" compounds that are capable of acting against a single virus, or in many cases, one part of the viral life cycle of that virus. Then, when a new virus of concern emerges and spreads, there are no available drugs to prevent the spread or limit the degree of illness/death caused leading to global pandemics such as what we have experienced with HIV since 1981, and more recently, with SARS-CoV-2, first observed in late 2019.

#### February 6, 2024 • 4:00pm

University Union, Cottonwood Suite III

This event is co-hosted by the Research and Creative Activity Subcommittee and the Offices of Research, Innovation, and Economic Development.