Northwestern | Chemistry of Life Processes Institute

CLP-CORNEW INNOVATION AWARD PROGRAM

The Chemistry of Life Processes (CLP) Institute provides funding for early-stage, high-risk, high-reward research that is essential to advancing biomedical discovery.

The CLP Executive Advisory Board annually selects a few exceptional faculty-led projects to receive Cornew Innovation Awards ($20,000-50,000). These awards have sparked new discoveries that push the boundaries of science and medicine, such as:

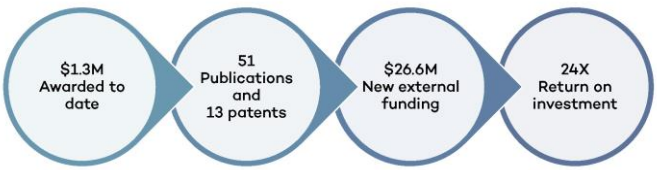
- The first-ever drug for ALS (Lou Gehrig's disease) that targets upper motor neurons in the brain and spinal cord to facilitate movement
- A more effective diagnostic for screening early-stage lung cancer
- Next generation-biosensors that detect pathogens in water and in the bloodstream
- New insights into the earliest stages of fertilization and embryonic development

CLP- Cornew Innovation Awards enables researchers to collect the preliminary data needed for successful application for federal grant awards to catalyze innovation at Northwestern.

Recent Innovation projects are speeding the development of new protein-informed drugs and diagnostics, including:

- Development of therapeutics that specifically target mutant proteins in human cancer.
- A specialized high-throughput screening process to discover intracellular therapeutics to treat "undruggable" targets
- A platform for the next generation of gene delivery

AWARD METRICS



To become a sponsor the CLP-Cornew Innovation Awards Program. please contact

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Clp-Cornew Innovation Awardee Testimonials

"The mechanism of this award is to support people who have big ideas to get initial data. Later, I will use those data to not only apply for bigger grants but to translate those discoveries into potential new therapies. This is a very important initial step."

— *Xiaoyu Zhang, PhD | Assistant Professor of Chemistry | 2022 Award 'Elucidating the Essentiality and Druggability of Cancer Acquired Cysteines for Developing Cancer-specific Therapy'.*

"CLP creates an environment where great minds unite. Everyone has a unique strength, and combining those strengths through awards like these is the key to moving the field forward. The brain is very complex. Neurodegenerative diseases are very complex, so that's why we need to approach them from multiple different angles."

— *Hande Ozdinler, PhD | Associate Professor of Neurology | 2021 Award 'The Proteoform Landscape of TDP-43 Pathology in ALS Brain'.*

"These kinds of mechanisms are super useful for more high-risk, high-reward projects. Incentivizing new and ambitious projects pushes people who want to work together over the hump to make it happen."

— *Joshua Leonard, PhD | Associate Professor of Chemical and Biological Engineering | 2021 Award 'A Platform Enabling Self-Assembling Synthetic Viral Nanoparticles for Gene Delivery'.*

"The Cornew Award gave us a jumpstart in executing this dream vision that we had been chatting about. Because it's such a high-risk project, this is the perfect mechanism to start pursuing basic initial steps to determine how feasible it is and how to get it to work. Just having that support gave us the momentum to pursue this wacky idea."

— *Neha Kamat, PhD | Assistant Professor of Biomedical Engineering | 2019 Award 'Programming Vesicles to Detect and Record Environmental Signals in Biological Fluids'.*

"CLP allows for this intersection of interdisciplinary scientists. It is extremely enabling to combine my synthetic biology expertise with [Thomas] Meade's chemistry and surface science expertise. That wouldn't be possible otherwise. If we're successful with our proof of concept, CLP has lots of infrastructure to help us move this forward to an actual application in the field. That's really exciting."

— *Keith Tyo, PhD | Associate Professor of Chemical and Biological Engineering | 2021 Award 'Protein Circuit-based Diagnostics with Improved Sensitivity and Quantitative Power'.*