New cures begin with people—individuals living with disease and the clinicians and scientists working to make them better. For nearly two decades, the Chemistry of Life Processes Institute (CLP) has pushed the boundaries of science and technology to bring life-saving drugs and diagnostics to people faster. With 65 faculty spread across 19 departments representing chemistry, life sciences, engineering, and medicine, CLP draws world-class talent from across both Northwestern campuses to advance human health.

**CONVERGING STRENGTHS TO SECURE LARGE-SCALE FUNDING**

To accelerate development of new therapeutics and diagnostics, CLP has convened a Scientific Advisory Committee, comprised of medical researchers and CLP leadership to identify clinically relevant areas for pilot funding over the next five years. These CLP-Feinberg School of Medicine (FSM) Convergence Initiatives will combine basic science strengths and resources with clinical expertise to exponentially increase the impact of Northwestern research on health and disease.

To bolster collaboration between CLP researchers and medical researchers, CLP will host a series of internal Convergence Workshops. These workshops will foster development of “dream teams” to target therapeutic and diagnostic development in areas of highest clinical need.

Convergence initiatives will become the focus of Institute resources and support for a period of two to three years, with the goal that they become self-sustaining through new large-scale federal and foundation funding.

Potential target areas for CLP-FSM convergence research include:
- Aging and Metabolic Diseases
- Cancer Epigenetics
- Cardiovascular Disease
- Neurodegenerative Disease
- Nephrology
- RNA Therapeutics
- Transplant Biology and Liver Cirrhosis
- Urology/Visceral Pain

**BUILDING GLOBAL PARTNERSHIPS**

Tackling the biggest challenges in human health and disease requires strong ties between Northwestern chemists, life scientists, engineers, and clinicians, as well as partnerships with other world-leading institutions. To raise global awareness of CLP research and technology development and spark new global initiatives, CLP will organize an annual Symposium where CLP faculty and invited speakers will present new approaches and methods for drug and diagnostics discovery.

CLP will also launch a Visiting Scholars Program to enable biomedical researchers to spend time in CLP labs to learn advanced methods and stimulate new joint research projects.

These strategies will initially rely upon institutional funding for support, with the goal of eventually obtaining corporate sponsorship for each of these activities.
SECURING LARGE-SCALE FUNDING FOR LONG-TERM IMPACT

CLP-FSM Convergence Initiatives will catalyze novel ideas for understanding disease that will attract sustainable, large-scale funding from both federal agencies and foundations.

CLP faculty are renowned for their expertise in development of new technologies and methods to make, model, and measure biologically important molecules that play a critical role in health and disease. This expertise, coupled with CLP staff expertise in developing team science research programs and grant applications, has resulted in major federally-funded interdisciplinary biomedical research awards for Northwestern. These include federal funding of a 10-year, $23 million Physical Sciences-Oncology Center (PSOC), a joint venture with Northwestern’s Lurie Cancer Center. The PSOC has produced groundbreaking insights into epigenetic mechanisms for regulating gene expression, developed new methods for imaging cellular changes, and discovered new approaches to cancer diagnosis.

The CLP-FSM Convergence Initiatives will expand the boundaries of biomedical innovation through the application of unique Northwestern technologies and approaches. These innovations will speed the delivery of more effective treatments and diagnostics to people living with disease.

TRAINING TOMORROW’S BIOMEDICAL INNOVATORS

One of the hallmarks of CLP is its innovative approach to training students at the interface of chemistry and biology. To grow the impact of the Institute’s interdisciplinary research programs, the Institute is seeking support for a highly competitive Convergence Fellows Program. The two-year postdoctoral fellowship will be awarded to a cohort of outstanding postdoctoral associates who will learn new approaches to complex diseases from dual mentors (a basic researcher and a clinician).

Fellows will gain experience translating their innovations from the lab bench into society and acquire skills highly valued by the most prestigious academic institutions, pharmaceutical and biomedical companies, and research centers in the world.

SUPPORTING BLUE-SKY RESEARCH

To grow the innovation ecosystem at Northwestern, CLP supports high-risk, high-reward collaborative research through its annual Cornew Innovation Awards. With the generous support of its highly engaged Executive Advisory Board, $1 million in innovation awards has returned $23 million in new external funding for collaborative faculty projects.

To support CLP-FSM Convergence Initiatives please contact:

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