

Fact Sheet

The Duchossois Family Institute: Harnessing the Microbiome and Immunity for Human Health

The Duchossois Family Institute: Harnessing the Microbiome and Immunity for Human Health represents a broad, integrated effort to support the development of a “new science of wellness” based on understanding how the human immune system, microbiome and genetics interact to maintain health.

ABOUT THE DUCHOSSOIS FAMILY INSTITUTE

Research incubator/accelerator

A key component of The Duchossois Family Institute is the Research Incubator/Accelerator, which will support development, translation and entrepreneurship through several competitive programs.

- **Seed funding:** Funding grants will be administered to those projects deemed the most promising.
- **Student support:** Training grants will support graduate students and postdoctoral fellows working at the intersection of the microbiome, immunity and health to advance this new science in the future.
- **Grant acceleration:** Dedicated support will be provided to help with grant applications, which will increase the amount of time researchers can focus on their work and improve success in winning grants.
- **Dissemination:** Public relations expertise will be embedded to help draw public attention to this new science, accelerate translation to clinical and public use, and attract interest from additional philanthropic supporters.
- **Polsky Center for Entrepreneurship and Innovation:** A team skilled in intellectual property, marketing, licensing, and entrepreneurship will help advance the Institute toward a goal of sustainability over time.

Research and development platforms

The Duchossois Family Institute will set up several new discovery platforms.

- **Clinical biorepository and translational platform:** To maintain the growing library of samples that provide raw materials for research, informed by a standardized rubric.
- **Microbial cultivation and analysis:** To support the culturing, maintaining, analyzing and characterizing of microbial populations, especially the anaerobes prevalent in the human gut.
- **Next-generation biomarkers and metabolomics:** To develop molecular and physiological biomarkers for health, aging, and disease predisposition; immune targets for drug intervention; descriptions of immunological and microbial healthy states; metabolomic indicators; and small molecule probes for targeted therapy.
- **Medicinal chemistry:** To support faculty in the Department of Chemistry designing molecular probes used both as research tools and in new diagnostics and pharmaceutical interventions.
- **High-throughput microbial sequencing and analysis:** For world-class sequencing and analysis of microbiome DNA both on campus and at Argonne National Laboratory, with DNA sequencing of more complex organisms.
- **Data integration and analysis (Microbiome Data Commons):** To help researchers and clinicians with data management, integration, harmonization, and analytics.
- **Environmental data and sensors:** To serve as a clearinghouse for development and integration of sensors, monitors, and wearable technologies that can provide information about internal and external environments.

ABOUT THE DUCHOSSOIS FAMILY’S HISTORY WITH UCHICAGO

- Initial philanthropy: 1980, with the establishment of the Beverly E. Duchossois Cancer Fund established by Richard Duchossois in memory of his late wife.
- Total giving over 37 years: Prior to this year’s \$100 million gift, the family donated \$37 million, which includes a named professorship and several cancer research funds.
- That amount includes \$21 million given in 1994 to establish the Duchossois Center for Advanced Medicine (DCAM), the primary outpatient treatment center of the University of Chicago Medicine.
- Family members’ volunteer roles:
 - Craig Duchossois is a longtime trustee of the University of Chicago and the Medical Center Boards.
 - Janet Duchossois serves as a member of the University of Chicago Women’s Board.
 - Kimberly Duchossois is a University of Chicago Cancer Research Foundation board member.
 - Ashley Duchossois Joyce is a University of Chicago graduate and former member of the School of Social Service Administration Visiting Committee.