

# Frequently Asked Questions

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

**Q: What is The Duchossois Family Institute?**

**A:** The Duchossois Family Institute: Harnessing the Microbiome and Immunity for Human Health represents a broad, integrated effort to develop a “new science of wellness” based on how the human immune system, microbiome and genetics interact to maintain health. Bringing together a multidisciplinary team of scientists, physicians, data analysts and entrepreneurship specialists, The Duchossois (pronounced *DUCH-ah-swah*) Family Institute is designed to accelerate development of this new science. By providing centralized research and development platforms to support leading-edge technologies and services, the institute will identify, develop and disseminate practices and treatment methods that break new ground in improving health.

**Q: Why is this being established at the University of Chicago?**

**A:** The University of Chicago is a leader in immunology, genomic and microbiome research. University faculty have made important discoveries about their roles in food allergies, asthma, autoimmune diseases, neurological disorders and the effectiveness of cancer treatments. This research, coupled with big data expertise pioneered by the National Cancer Institute Genomic Data Commons, developed and operated by the university, puts the institution in a unique position to integrate these areas into a new science focused on longstanding health and the body’s natural ability to maintain wellness.

**Q: How will the Institute’s focus on the immune system promote health?**

**A:** Changes in disease incidence are making it clear that the immune system, trained over years of evolutionary history to fight pathogens, is now a factor in health conditions such as allergies, asthma and autoimmune diseases like lupus. University of Chicago faculty have been at the forefront of unwinding the relationship of the immune system to these and other conditions, such as celiac disease, diabetes and even Alzheimer’s disease. Our faculty researchers will look to integrate their knowledge of immunology with colleagues exploring the microbiome to understand the biological mechanisms at work.

**Q: What is the microbiome, and why does it impact my health?**

**A:** The microbiome is the community of bacteria, fungi, viruses and other microorganisms living in the body, primarily the digestive tract. A growing body of research shows the microbiome plays a crucial role in human health. With the number of microbial cells far outnumbering human cells in the body, the microbiome is incredibly complex and diverse depending on an individual’s genetic background, and interactions among microbes and their environment. Recent discoveries demonstrate that fine-tuning the microbial mix and how it interacts with the immune system can be powerful in maintaining well-being and preventing disease.

**Q: How is The Duchossois Family Institute being funded?**

**A:** It is funded by a \$100 million gift from The Duchossois Group Inc. CEO and Chairman Craig Duchossois, his wife, Janet Duchossois, and The Duchossois Family Foundation. The Chicago-area family has a deep and long-standing commitment to supporting science and medicine. The gift is among the most generous in the University of Chicago’s history and the largest single gift ever in support of the University of Chicago Medicine.

**Q: Who will lead the institute?**

**A:** T. Conrad Gilliam, PhD, dean for basic science in the university’s Biological Sciences Division, will lead efforts to launch the institute. He will oversee teams to develop research and development platforms, recruit additional faculty, evaluate research proposals and determine distribution of pilot awards and post-doctoral fellowships. In the first few years, he will work with Kenneth S. Polonsky, dean and executive vice president of medical affairs at the university, to designate or recruit a permanent leader.

**Q: How many people will the institute engage?**

**A:** That's one of the topics leaders of The Duchossois Family Institute will discuss during the launch period. The plan is to add faculty members to the many researchers and clinicians already involved across disciplines that collectively make up the "new science of wellness" at the University of Chicago. The Duchossois Family Institute will also establish an accelerator/incubator to spark and support new research initiatives across many disciplines, with commercialization specialists embedded to drive discovery to use and to market. These specialists will provide training to both scientists and students while identifying opportunities for partnerships with industry.

**Q: Who are the partners that are involved?**

**A:** Partners come from across the University of Chicago community and include:

- The Microbiome Center — A home for researchers from the University of Chicago, Marine Biological Laboratory, and Argonne National Laboratory who study how microbes interact with each other and their environments.
- Department of Human Genetics, Medicine, Surgery, Microbiology, Chemistry; Committee on Immunology and Institute for Molecular Engineering — Academic departments at the University of Chicago conducting basic, translational and clinical research in areas germane to the goals of The Duchossois Family Institute. Other departments will be involved in the coming months.
- The Polsky Center for Entrepreneurship and Innovation — An entity that drives venture creation and technology commercialization within the University of Chicago and the surrounding community.
- Center for Data-Intensive Science— A center pioneering translational data science and cloud computing technology to advance biology, medicine, and environmental research that designed and manages the National Cancer Institute's Genomic Data Commons—all national cancer genomic data.
- The Center for Research Informatics — Bioinformaticians, programmers and analysts who provide secure, standards-compliant, state-of-the-art technologies to access, share, and utilize clinical research data generated within the University of Chicago and partner institutions.
- Argonne National Laboratory in Lemont, Ill. — A multidisciplinary science and engineering research center managed by UChicago and the U.S. Department of Energy.
- Marine Biological Laboratory at Woods Hole, Mass. — A private, nonprofit corporation affiliated with UChicago that is dedicated to research and education in biological and environmental science.

**Q: What role does a business incubator/accelerator play in The Duchossois Family Institute?**

**A:** To accelerate discovery, The Duchossois Family Institute will feature a cadre of scientists dedicated to program development, translation and entrepreneurship of biomedical breakthroughs and technology. This business-oriented model will recruit non-tenure-track faculty with experience in both academic and industrial research to manage the new technologies, tools and infrastructure necessary to fast-track research. Coupled with embedded experts in intellectual property and commercialization affiliated with the Polsky Center for Entrepreneurship and Innovation, the University aims to reduce the time a product or service goes from concept to market.

**Q: Why is entrepreneurship such an important part of The Duchossois Family Institute's efforts?**

**A:** Embedding specialists from the Polsky Center for Entrepreneurship and Innovation is vital to the institute's success. Their expertise will help the institute's researchers, clinicians and trainees ensure their intellectual property is protected, aggressively licensed, and potentially spun off for business development, and reinvested to make the institute self-sustaining.