Advances in science and technology have given way to the fascinating and growing fields of neuroscience and other disciplines that explore technology and its effect on the brain. Discoveries in these fields are opening doors to potential treatment of previously intractable disorders, and spurring ethical questions about whether it is permissible (or possible) to alter memories, enhance cognition, or read a mind.

Illinois Tech’s B.S. in Biology/B.S. in Psychology program is an excellent academic and research pathway for students interested in neuroscience, brain science, or cognitive science. Illinois Tech’s program is one of the only dual-degree programs of its kind in the country. Because it is firmly grounded in science and research, Illinois Tech’s program is distinct from other similar types of degrees that center on liberal arts, giving it added value in the marketplace.

In this rigorous program you will receive a thorough education in both biology and psychology, and thus will be prepared for a wider variety of careers in either field, or at the intersection of the two. And because this degree is offered jointly through Illinois Tech’s College of Science and Lewis College of Human Sciences, you will discover a diverse range of hands-on, interdisciplinary research opportunities. Such research is typically connected with post-grad work in this field—and Illinois Tech students experience it as undergraduates.

This program provides excellent preparation for the MCAT, graduate school, or tech positions in a variety of fields. These include medicine, public health, genetic counseling or related areas, neuroscience, brain science, and cognitive science, among others.

B.S. Biology/B.S. Psychology Program at Illinois Tech

Illinois Tech’s Bachelor of Science in Biology/Bachelor of Science in Psychology is ideal for pre-health students (pre-M.D., pre-clinical psychology, or psychiatry) who are interested in neurological or behavioral issues. If you plan to pursue graduate school in studies at the nexus of biology and psychology—such as neuroscience, brain science, or cognitive science—this dual degree offers competitive foundational preparedness.

Research—Even As an Undergrad!

Undergraduates at Illinois Tech get the opportunity to work on major research right from the start. You might conduct work at nearby Argonne National Laboratory, participate in a professor’s research lab, or collaborate on a project at an area medical school. Our new Elevate program consists of summer courses that allow all undergraduates to experience research early in their careers at Illinois Tech (the summer after your first year, or the summer before your first year for transfer students). The College of Science also offers $5,000 Undergraduate Summer Research stipends to select students.

Research on the Edge

Just a few areas of Illinois Tech faculty research expertise in biology, psychology, and interrelated disciplines include:

- Cell and cancer biology
- Computational genomics
- Population genetics and evolution
- Pathogenic bacteria
- Tissue structure and biomechanics
- Genetic therapy
- Clinical psychology
- Rehabilitation and mental health counseling
- Industrial organizational psychology
- Behavioral health and wellness
- Social network analysis

“Between the academic rigor and a growing campus community, I can’t help but feel that Illinois Tech is the perfect place for me to achieve my goals. The courses provide me with a well-rounded education, and the professors make the subject matter interesting and engaging. I have enjoyed the variety of classes offered, ranging from genetics to psychology, and I feel that I have a strong foundation for my future in the field of neuroscience.”

—Nadyah Mohiuddin
(Biology/Psychology 4th Year)
Chicago

For the past two years Nadyah has worked as a research assistant in Associate Professor of Psychology Arlen Moller’s lab. She volunteers with a board-certified hematologist-oncologist and works as a scribe. The public relations chair for the American Medical Students Association, Nadyah also was part of a medical brigade of Illinois Tech students who provided medical services to people in Peru through the MEDLIFE program.
Be an Innovator—IPRO and Project-Based Learning

In Illinois Tech’s signature Interprofessional Projects (IPRO) Program, you’ll work with students from various majors to solve real-world problems. This hands-on collaborative experience gives our students a big advantage after graduation.

Recent IPROs involving biology and psychology include:

• User interfaces for novel computer-aided drug design tools
• Innovating solutions to global health and well-being challenges via user-centered design methods
• Innovating assistive technology solutions for neuromuscular rehabilitation and physical therapy
• Creating a reliable sports players’ statistical performance evaluation methodology
• Applying mobile technology to enhance psychological research on depressive symptoms

Study It—And Get Involved

Illinois Tech offers a variety of student group chapters for students interested in medical careers, including:

• American Medical Student Association
• Pre-Dental Society
• MEDLIFE (Medicine, Education, and Development for Low-Income Families Everywhere)

Opportunity Awaits

While advanced degrees for medical scientists typically lead to a higher median pay (estimated at $80,530 in 2016), the U.S. Bureau of Labor Statistics forecasts a 14 percent growth in jobs for medical scientists generally from 2012–2022 (this includes neuroscientists and other professions involving investigative and clinical work aimed at improving human health).

“...I found opportunities to be involved in student organizations, conduct research on a debilitating disease, work, participate in international medical brigades, volunteer at the nearby hospitals, and live in a diverse city that has so much to offer.”

— Evelyn Thomas (Biochemistry ’17)

Faculty Excellence

Kathryn Spink
B.S. Michigan Technological University
Ph.D. Michigan State University

Kathryn Spink was the first recipient of the IIT Board of Trustees Undergraduate Teaching Award and received the Excellence in Teaching Award from the National Society of Leadership and Success. She is director of the Pre-Health professions program and a senior lecturer in biology. Spink is faculty advisor of the Illinois Tech branch of MEDLIFE (Medicine, Education, and Development for Low-Income Families Everywhere), an international humanitarian organization.

Arlen Moller
B.A. Cornell University
Ph.D. University of Rochester

Associate Professor of Psychology Arlen Moller’s lab researches how virtual environments, technology, and financial incentives can impact human behavior and health. One study looked at how online fantasy sports fans might convert their couch-potato habits into improved fitness. In 2017 Moller was granted a United States patent for the process of incorporating real-world physical activity into online fantasy sports games.

“...I want to pursue a Ph.D. in neuroscience, and a dual degree in biology and psychology is a stepping stone to get there. I was able to participate in undergraduate research during my freshman year, which gave me a lot of useful lab skills and made me more confident in lab settings. I studied abroad during my junior year. Both have given me opportunity and life experiences that I am thankful to have.”

— Sydney Lamerand (Biology/Psychology 3rd Year) Collegeville, Pennsylvania

Sydney was a recipient of a College of Science Summer Research Stipend. She is a member of Colleges Against Cancer, works at the Cognitive Neurology and Alzheimer’s Disease Center, and is in the Alpha Sigma Alpha sorority.

TAKE A VIRTUAL TOUR

Visit us now! Log on to www.iit.edu/virtualtour to view a cool online virtual tour of our buildings, labs, open spaces, and more!