Research at Illinois

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Research is defined as systematic study directed toward fuller scientific knowledge or understanding of the subject studied. Research is classified as either basic or applied according to the objectives.

**Basic research** is defined as systematic study directed toward fuller knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications toward processes or products in mind.

**Applied research** is defined as systematic study to gain knowledge or understanding necessary to determine the means by which a recognized and specific need may be met.

**Transformative research** is defined as research driven by ideas that have the potential to radically change our understanding of an important existing scientific or engineering concept or leading to the creation of a new paradigm or field of science or engineering. Such research is also characterized by its challenge to current understanding or its pathway to new frontiers.
Why is Research at Illinois unique?

• Faculty that are doing research in practically every area of engineering and physics
• Working on fundamental problems with **broad application and broad impact**
• The opportunity for interdisciplinary research including many interdisciplinary labs/institutes across campus
  • Beckman Institute (BI)
  • Coordinated Science Laboratory (CSL)
  • Institute for Genomic Biology (IGB)
  • Materials Research Laboratory (MRL)
  • Micro and Nanotechnology Laboratory (MNTL)
  • National Center for Supercomputing Applications (NCSA)
The Graduate Experience at Illinois

- Challenging and exciting learning environment, with motivated students
- Access to world-class faculty and state-of-the-art facilities
- Opportunities for teaching, mentoring, training in specialized areas
- Entrepreneurial atmosphere
- Great place to live as a graduate student!
- Excellent record of placement and wide success after graduation, in academia, industry, and government positions
- Large alumni network
- Lifelong friends and colleagues
- A real opportunity to contribute to your field and society
Mentoring Undergraduates in Science and Engineering (MUSE)

Become a research mentor to an undergraduate engineering student

• Develop mentoring skills
• Develop people skills
• Build a community with other mentors
• Gain an assistant for your research work
• Build your resume

For more information, visit the MUSE website at http://muse.engineering.illinois.edu or contact: nmamaril@illinois.edu