

RESEARCH EXPERIENCE FOR UNDERGRADUATES

# NANOTECHNOLOGY FOR BIOLOGY AND BIOENGINEERING

Participate in research in the rapidly growing area of nanobiotechnology - a place where biology, medicine, and engineering meet. Students engage in cutting-edge projects in the fields of engineered cancer therapies, stem cells and regenerative engineering, and diagnostic tool development.

- **Ten weeks of research in a graduate-level lab with faculty and graduate student mentoring.**
- **Paid stipend, housing, and travel allowance.**
- **Scientific and professional development seminars, social activities, networking, and journal club.**
- **Oral and poster presentation of research and symposium participation.**

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Must be a U.S. citizen or permanent resident.

Apply at [inbt.jhu.edu/reu](http://inbt.jhu.edu/reu)



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\*Pending 2019 renewal.



**JOHNS HOPKINS**  
INSTITUTE *for*  
NANOBIOTECHNOLOGY

# INSTITUTE FOR NANOBIOTECHNOLOGY

The Institute for NanoBioTechnology (INBT) is an exceptionally diverse, multidisciplinary team of faculty, researchers, and student experts. In a highly collaborative environment, this ambitious team uses its collective skills and knowledge to push research boundaries. Their results create **new knowledge and innovative technologies at the interface of nanoscience, engineering, and medicine.**

INBT's most promising research areas include

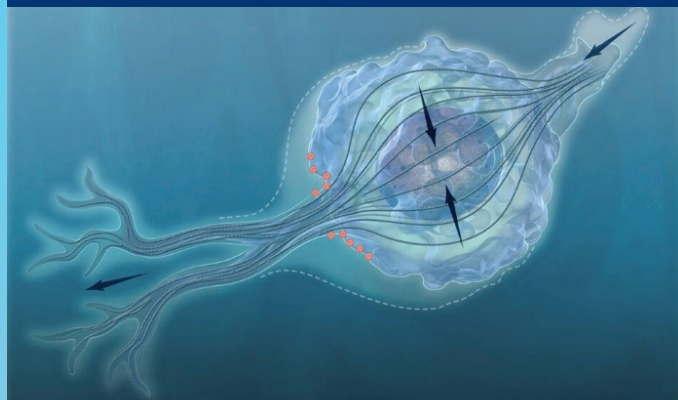
- **Engineering for Cancer Therapies:**  
Engineers and clinicians are studying normal and cancerous cells at a precise level of detail in a natural three-dimensional environment. Using an engineering approach provides a fresh perspective to diagnosing and treating cancer.
- **Stem Cells and Regenerative Engineering:**  
Researchers are innovating approaches to grow and manage stem cells to repair and regenerate various types of tissues, such as blood vessels, bone, cartilage, and muscles damaged by injury and disease.
- **Diagnostic Tools Engineered for Early Detection:**  
Scientists and engineers are developing new technologies to diagnose diseases quickly and from very small sample sizes. These devices (called "lab-on-a-chip technology") can detect minute changes to a single gene or chemical in the body.

## Key Areas

Nanotechnology

Bioengineering

Medicine



*INBT also houses the Physical Sciences-Oncology Center, which uses a trans-disciplinary, integrated approach to metastatic cancer.*



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For more information, visit [inbt.jhu.edu](http://inbt.jhu.edu)