



Stony Brook University

## Biomedical Informatics Graduate Program at Stony Brook University (The State University of New York at Stony Brook)

Stony Brook University, the flagship State University of New York, is a member of the prestigious Association of American Universities (AAU) and co-manager of the nearby Brookhaven National Laboratory (BNL). It is located on Long Island, close to New York City.

Biomedical Informatics (BMI) is an interdisciplinary field that investigates and explores the effective use of biomedical data, information and knowledge for scientific inquiry, problem-solving and decision-making, driven by efforts to improve human health. Stony Brook embeds BMI's computer engineering and applied sciences education in research and operations at a major medical center, where quantitative sciences have emerged at the very core of efforts to understand, prevent and treat diseases. The department is also part of the AI Institute and the Institute for Engineering-Driven Medicine at Stony Brook University.

The Department of Biomedical Informatics is dually housed in the School of Medicine and in the College of Engineering and Applied Sciences. Our students can access resources from both schools. Graduates can expect careers in academia, research institutions, hospitals, industry and government. Students also have opportunity for summer internships in major companies around New York City.

**Graduate Program:** we offer Ph.D. degrees and M.S. degrees in three tracks.

- **Clinical Informatics:** Enhancing the quality and efficiency of clinical workflows
- **Imaging Informatics:** Integrative analysis and management of biomedical images
- **Translational Bioinformatics:** Application of informatics methods to advance patient-related biomedical research, from clinical genomics to population health

**Research Interests:** BMI faculty conducts cutting-edge interdisciplinary research in Data Science, Machine Learning, Computer Vision, Medical Image Analysis, Systems Biology, Computational Biology and Bioinformatics, Clinical Informatics, Population Health, AI in Healthcare and Visualization. Research results are published in high impact journals and top-tier machine learning, vision and AI conferences. Potential research projects include but are not limited to deep learning for digital pathology, topological data analysis, radiomics and pathomics, graph neural networks and network analysis, multimodal and transferred learning, deep convolutional networks and generative models for radiology and pathology images, electronic health record, clustering and visualization of transcriptomics and genomics data.

More details: <https://bmi.stonybrookmedicine.edu/research/areas>

The application deadline for Spring 2021 is **Oct 15, 2020** for the Ph.D. program and **Nov 1, 2020** for the M.S. program.

More details about application

[https://bmi.stonybrookmedicine.edu/education/prospective\\_students](https://bmi.stonybrookmedicine.edu/education/prospective_students)

To apply, please go to: <https://graduateschool.stonybrook.edu/apply/>

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Our website: <https://bmi.stonybrookmedicine.edu>

