

## Doctor of Philosophy (PhD) in **BIOMEDICAL SCIENCES - track in BIOMEDICAL INFORMATICS**

## **Overview:**

The Tulane University School of Medicine PhD in Biomedical Sciences - track in Biomedical Informatics provides students an academic foundation to become informatics leaders in medicine, biology, and public health. Students will have opportunities to translate classwork, critical research skills, and personal growth into real-world experience while collaborating with expert faculty across multiple domains and departments. Our well-funded and published faculty encompass multiple areas of informatics expertise:

- Translational science, genomics, multi-omics, and single cell and spatial sequencing
- Biomedical data science AI/machine learning/biostatistics
- Precision medicine and implementation science
- Bioinformatics, statistical genetics, and computational biology
- Learning healthcare systems clinical informatics

## **Curriculum:**

This 48-credit program combines coursework with seminars and journal clubs, and results in a research-focused dissertation that will prepare students for both academia and industry. Courses for the track in Biomedical Informatics include the following:

EPID 7810 Human Molecular Genetics (3)

BIMI 6100 Elements in Biomedical Informatics (4)

BIMI 6200 Introduction to Data Science for Biomedical Informatics (3)

BIMI 6300 Fundamental of Data Analytics (3)

BIMI 6400 Health Informatics in Biomedical Informatics (3)

BIMI 7100 Statistical Machine and Deep Learning in Biomedical Practice (3)

BIMI 7300 Biomedical Data Science with Cloud Computing (3)

BIMI 7500 Genomic Sequence and Omics Data Analysis (3)

BIMI 8500 Research Methodology of Biomedical Informatics (1)

## Tulane University and New Orleans, LA:

Tulane is ranked #44 in National Universities, and is located in beautiful New Orleans, LA. Students will be immersed in a world-class city with a vibrant and diverse culture. The unique combination of food, art, and music at an affordable cost of living makes New Orleans a premiere destination. Students of diverse research backgrounds are encouraged to apply, including biology, medicine, mathematics, biostatistics, engineering and computer science. Funding opportunities are available for top students.

To learn more about our program and how to apply, visit medicine.tulane.edu/biomedicalinformatics-genomics-division/phd-program