



Submit your application online at apply.dbmi.pitt.edu.

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University of Pittsburgh

School of Medicine

Biomedical Informatics Training Program

A National Library of Medicine-funded training program since 1987

Admissions

We admit graduate students and postdoctoral fellows and associates from a variety of disciplines and backgrounds, including health sciences, biology, computer science, information science, and engineering. Visit our Web site at www.dbmi.pitt.edu/training-programs.

Also visit our Why DBMI @ Pitt resource with links to our faculty and key research initiatives at www.dbmi.pitt.edu/new-faculty-information.

Life in Pittsburgh

Recently named one of the top restaurant cities in the US, Pittsburgh is an easy and enjoyable place to live and study. Affordable cost of living, easy access to downtown cultural attractions, lively neighborhoods, and the beautiful Western Pennsylvania countryside give Pittsburgh the amenities of a large city with the expense and ease of a small college town. For more information on life in Pittsburgh, go to www.dbmi.pitt.edu/new-faculty-information and click on "Why Pittsburgh".



About Us

A national leader in biomedical informatics, The University of Pittsburgh Biomedical Informatics (BMI) Training Program offers outstanding training for students who want to conduct innovative research at the intersection of biomedicine and computing. Having recently celebrated its 30th anniversary, the Pitt BMI program has trained national leaders in academia, industry, and government. Our broad research portfolio, driven by our active participation in national research consortia, provides numerous opportunities for student research at all levels:

- The **Center for Casual Discovery** (CCD), one of twelve national Big Data to Knowledge (BD2K) Centers, explores the development of innovative algorithms for developing graphical models of causation in large datasets and the application of these tools to biomedical data.
- **PaTH Clinical Data Research Network** (CDRN), one of thirteen national CDRNs of PCORnet, is focused on building a Learning Health System (LHS) for the Mid-Atlantic region. It is comprised of Geisinger Health System, Johns Hopkins University, Penn State College of Medicine, Lewis Katz School of Medicine at Temple University, the University of Pittsburgh, UPMC, and the University of Utah.
- **Accrual of patients to Clinical Trials** (ACT) network is a nationwide network of sites that share EHR data to significantly increase participant accrual to the nation's highest priority clinical trials. It is funded by NCATS' Clinical and Translational Science Awards (CTSA) program that supports efforts to solve system-wide translational research problems to improve the success of U.S. clinical trials.
- **PA cares for Us**, one of eight Regional Medical Centers, is enrolling 175,000 participants for the Cohort Program of President Obama's Precision Medicine Initiative (PMI). The PMI Cohort Program is a landmark longitudinal research effort that aims to engage 1 million or more U.S. participants to revolutionize how disease is prevented and treated based on individual differences in lifestyle, environment and genetics.
- The **Center for Health Informatics for the Underserved** (CHIU) was founded in 2010 to address the challenges of delivering healthcare in low-resource setting, both nationally within the U.S. as well as internationally, through health informatics. The center is currently working on projects in Ethiopia, Ghana, Honduras, and Malawi, and offers training opportunities through an area of concentration in Global Health Informatics.
- The **Center for Clinical Research Informatics** (CCRI) is focused on the application of informatics for the reuse of clinical, mobile health, and research data to enable clinical, translational, and informatics research. CCRI is integral component of several national research networks that include PA cares for Us, the PaTH CDRN, and the ACT network.
- The **Center for Clinical Informatics** (CCI) is focused on the application of informatics to inform clinical decision support and patient decision support systems. Funded projects include developing a knowledgebase of drug-drug interactions, readmission prediction modeling, and developing intelligent EMR systems with learning and adaptive components.
- As the informatics resource for the **Models of Infectious Disease Agent Study** (MIDAS) Research Network, the Informatics Services Group develops informatics infrastructure to support research in infectious disease epidemiology.

Other active research areas cover the spectrum of biomedical informatics research, from basic research to clinical, translational, and population informatics.

Genomics, Proteomics, and Microbiomics
Systems Biology and Computational Biology
Translational Bioinformatics
Clinical Predictive Modeling
Clinical Informatics
Geroinformatics
Pathology Informatics
Health Informatics for the Underserved

Comparative Effectiveness Research
Data-Driven Modeling of Usual Clinical Care
Pharmacoepidemiology
Public Health Informatics and Biosurveillance
Datamarts and Repositories
Human Computer Interaction and Evaluation
Imaging Informatics

Highlights

WORLD-CLASS FACULTY. With 37 core faculty members from which to choose, you'll find research projects in almost every area of biomedical informatics. Many of our faculty members are established, highly funded researchers, while others are energetic emerging leaders.

INTEGRATED CORE CURRICULUM. The tightly integrated core curriculum provides graduate students with a broad knowledge of the field and superb training in research methods. Courses build on each other to help students quickly develop a comprehensive view of the field.

RESEARCH FOCUSED. Graduate students and postdoctoral fellows work closely with faculty mentors in a highly dynamic and collaborative environment. For graduate students, mentored research training begins during the first year of study.

GENEROUS FUNDING. Generous funding packages are available to eligible candidates through a variety of mechanisms, including a training grant from the National Library of Medicine at the National Institutes of Health. Funding covers both tuition and a living stipend.

PROFESSIONAL DEVELOPMENT. Outside the formal curriculum, professional development events help graduate students and postdoctoral fellows to advance their career goals. Learn to write a grant, network with alumni, and discover the ins and outs of working in industry. Let us help you to take the next step.

A COMMITMENT TO DIVERSITY. Our program welcomes students from diverse backgrounds who enter the program with an array of skills and interests. We help you to tailor your program to provide a unique training experience individualized to your specific needs.

ENTREPRENEURSHIP OPPORTUNITIES. Pittsburgh's Health Data Alliance brings researchers from the University of Pittsburgh together with data and support from the University of Pittsburgh Medical Center to develop technologies that can open new markets while improving pressing problems in health and disease. Students and researchers can work with the PHDA through its Center for Commercial Applications for Healthcare Data, which is housed in DBMI and run by our faculty and invests in research results with commercial potential.



Degree Programs

Graduate students in the BMI Training Program pursue certificate, master's, or doctoral study. Our program is designed to combine rigorous and in-depth research training with flexibility to tailor your program with elective courses from across the University. When you pursue your graduate studies in the BMI Training Program, you will join a highly selected and accomplished group.

Postdoctoral Program

The BMI Training Program also accepts postdoctoral fellows and associates for advanced research training. Enhance your research training and gain the additional skills you need for a successful academic career. Be part of a vibrant community of young researchers developing innovative research programs at the forefront of biomedical informatics.

PROGRAMS IN A NUTSHELL

CERTIFICATE	MASTER'S	PHD	POSTDOCTORAL FELLOW OR ASSOCIATE
Biomedical informatics certificate	MS, biomedical informatics or intelligent systems	PhD, biomedical informatics or intelligent systems	Nondegree program
15 credits (7 credits of core courses)	36 credits (23 credits of core courses)	72 credits (26 credits of core courses)	No course work
Certificate Research project	Master's thesis	PhD thesis	Postdoctoral research project
Part time or full time	Part-time or full-time	Full-time	Full-time
	Funding available for eligible candidates	Funding available for eligible candidates	Funding available for eligible candidates