



THE UNIVERSITY OF ARIZONA
COLLEGE OF MEDICINE PHOENIX

Biomedical Informatics

Overview

Biomedical Informatics is the science of collecting, representing, storing, retrieving and processing data and knowledge for the ultimate purpose of improving human health.

Clinical Informatics transforms healthcare through the design, implementation, and evaluation of advanced communication systems. By leveraging biomedical data, this specialty improves patient care, strengthens provider-patient relationships, and optimizes population health outcomes.

Clinical Informatics Fellowship

Accredited by the Accreditation Council for Graduate Medical Education (ACGME) in February 2015, the two-year Clinical Informatics Fellowship Program was launched in July 2015 by The University of Arizona College of Medicine – Phoenix, and was sponsored by Banner – University Medical Center Phoenix with its first cohort of two physician fellows. The program offers rotations across multiple healthcare systems, including Banner Health, the Phoenix VA Health Care System, Onvida Health, Dignity Health, Valleywise Health, Phoenix Children’s Hospital, Arizona Health Care Cost Containment System, and Honor Health. Fellows gain experience with leading EHR platforms (e.g., Oracle Health, Epic Health), complete online biomedical informatics training through Arizona State University College of Health Solutions, and are eligible for the Clinical Informatics subspecialty board examination upon graduation.

From 2017 to 2025, the program has successfully graduated 17 clinical fellows across 9 cohorts, many of whom have become leaders in applying informatics innovation to healthcare delivery, translational medicine, and digital health transformation. The program currently supports four fellows in the 2024–2026 and 2025–2027 cohorts, continuing its mission to train the next generation of physician Informaticians.

Clinical Informatics Grand Rounds

Held every third Tuesday from 12 pm to 1 pm (Arizona MST), our “Clinical Informatics Grand Rounds” brings together local, national, and global leaders from academia, industry, and healthcare, along with our fellows, to present topics in clinical informatics, AI, data science, large language models (LLMs), and biomedical innovation. This year-round series highlights emerging technologies and their applications in shaping advancement of healthcare as well as fostering innovation among trainees, faculty, and healthcare professionals.





Education in Clinical Informatics

The Department of Biomedical Informatics (BMI) at The University of Arizona College of Medicine – Phoenix (UA COM-P) is rapidly expanding through strategic leadership, active faculty recruitment, and growing strengths in data science, AI, and clinical translational science. In March 2026, Dr. Peipei Ping assumed the roles of BMI Department Chair and Chief AI & Data Science Officer at UA COM-P. Partnering with Clinical Informatics Program Director Dr. Vikeen Patel, their strategic vision positions the BMI department as a leader in biomedical innovation by integrating data science, clinical informatics, and AI-driven discovery.

BMI is actively recruiting faculty, research specialists, and trainees while fostering interdisciplinary collaborations across academic, clinical, industry, and community partners. Long term, BMI is committed to advancing AI-enabled and informatics-based strategies that improve healthcare quality, safety, and outcomes.

BMI's education efforts focus on:

- Developing innovative informatics and AI-based solutions for clinical care, biomedical discovery, and population health.
- Advancing clinical translational medical science through integrated data platforms and computational medicine.
- Expanding institutional capacity for patient-centered outcome studies and precision health.

Those interested in exploring a partnership with BMI for a Clinical Informatics career path can contact COMPHX-DBMI@email.arizona.edu.

Contact



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