



NCSA | National Center for
Supercomputing Applications

HEALTHCARE INNOVATION

Program Office

NCSA Healthcare Innovation is a recently established program office with the mission of facilitating NCSA's collaborative efforts that tackle the most pressing healthcare issues we face today. NCSA applies its expertise in data analysis, visualization, software tool development, simulation, security and advanced computing to enable research in areas including inherited diseases, cancer, infectious diseases, implant simulation, health disparities, nutrition, and healthcare delivery.

Healthcare Innovation is picking up the legacy of healthcare work at NCSA and forging new relationships with clinical, academic, and industry partners. Project highlights include accelerating genomic variant calling to drastically improve turn-around time for patient genetic tests, providing HIPAA-compliant cyberinfrastructure for clinical partners and researchers, developing software for executing AI approaches on multi-omic data and studying results through novel visual techniques, creating image annotation and workflow systems to perform deep learning analysis of multi-photonic images of cancer cells, and implementing mobile apps and cyberinfrastructure that support the management of COVID-19 testing.

Healthcare and HPC is an expanding field. The Healthcare Innovation program office looks forward to enabling the next advancements that will transform lives.

Image credit, top to bottom: H. Lewin, Institute for Genomic Biology UIUC; Automated Learning Group, NCSA, UIUC; Theoretical and Computational Biophysics Group, Beckman Institute UIUC; Advanced Visualization Lab, NCSA, UIUC; and S. Boppart, Beckman Institute, UIUC; Visual Analytics, NCSA UIUC.

