Information Technology Committee

February 6, 2025

UMass Chan MEDICAL SCHOOL

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What is the Information Technology Committee

The Information Technology Committee (ITC) is a collection of members from academic, research, healthcare and administrative functions in UMass Chan who are passionate about improving the technology ecosystem at UMass Chan.

The ITC mission statement is:

The Information Technology department will establish, maintain and continually improve the technology ecosystem, enabling UMass Chan' academic, research, healthcare and administrative functions to achieve their goals. IT strives to influence the culture of UMass Chan to embrace technological innovations, secure stewardship of data, and cost effectiveness



Information Technology Committee

Voting Members







Brent Antony



Eric Finnesgard

Omanand Koul

Honghuang Lin

Fiefan Liu

Katherine Fitzgerald

Melissa Fischer

Basic Science ITC Subcommittee



William Barnett **Basic Science ITC Co-Chair**



Job Dekker **Basic Science ITC Co-Chair**





Honghuang Lin **Clinical Science ITC Co-Chair**



Neil Marva **Clinical Science ITC Co-Chair**

Education ITC Subcommittee



Melissa Fischer Academic ITC Co-Chair



Mary Ellen Lane Academic ITC Co-Chair



Joan Vitello Academic ITC Co-Chair

ForHealth Consulting ITC Subcommittee



FHC ITC Chair

Who are the ITC Committee **Members**



ITC Subcommittees and Their Roles

Basic Science Subcommittee

Role:

- Advise IT on challenges and opportunities in support of the basic science research mission.
- Focuses on both tactical and strategic challenges in basic science research.

<u>Clinical Research Subcommittee</u>

Role:

- Facilitates broader input from different areas to support clinical research
- Ensures effective communications and decision-making within the clinical research community.

Education Subcommittee

Role:

- Promotes and supports the effective use of technology to enhance learning across UMass Chan Schools and Programs.
- Prioritizes, advances and communicates institutional and school-specific IT initiatives and requirements

ForHealth Subcommittee

Role:

- Oversees high-level initiatives and ensures transparency in planning and decision-making
- Identifies technology opportunities and challenges in support of ForHealth services and offerings





Information Technology Committee Progress





Clinical Research 4 Quadrant

High

Low

Pain	 Compliance with the new NIH Genomic Data Sharing Policy, effective January 25, 2025. Develop a streamlined process for storing clinical images and videos to facilitate future research. AI for note-taking for Zoom calls 	 Enable seamless data transfer between the clinical system and the academic institution. Create an efficient process for deidentifying clinical data. HIPAA compliance for HPC
Pain	 Deploy large language models (LLMs) within the clinical system and clinical decision support. Build infrastructure to support the development of prediction models based on EHR-integrated LLMs. Most updated information about facilities and resources 	 Establish large-scale GPU computing capabilities. GDPR compliance
	Address opportunistically now	Organize for opportunistic action
	Short Term	Long Term



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Basic Science 4 Quadrant

High Pain

Low Pain

 Security updates on running instruments Security software slowing down new laptops Network performance problems in research buildings GPUs for research applications Document IT costs with F&A agreement and clarify Prioritize now 	 Securing older systems running instruments Central NAS to back up research data Platforms to share research data (NIH requirement) GPU need growing long term Container requirement for frequently recomposed codes on HPC Training on use of HPC applications (e.g., AlphaFold) Organize for priority action
 Clarity on availability of MS CoPilot and cost Availability and curation of research software (e.g., AlphaFold and Schrodinger) No Real time status of HPC queues, including outage notices Remote access to lab managed systems Job failure on HPC cluster 	 Use of public LLMs that expose Chan IP Instrument integration to ELNs Persistence of ELN data Usability of ELNs Subject matter expertise support for IT enabled science

Short Term







Basic Research Prioritized IT recommendations requiring resourcing

Operational resourcing required

• Computing subject matter expertise

Capital resourcing required

- Central file storage for research data
- GPUs for research applications
- Securing older systems running instruments



Education Subcommittee

Top Priority: Central Data Lake for Academic and related data

Addresses Key Needs of the Academic Community

- Consolidates data from diverse systems into one central repository
- Enables effective analysis and concise summaries of learner feedback
- Offers functional dashboards for curricular mapping for both faculty and students
- Supports accreditation reporting and compliance
- Facilitates predictive modeling for Admissions (e.g., learner selection, performance forecasting)
- Provides accessible and comprehensive reporting across all academic data

Other priorities

- Slate administrative support
- GSN competency-based assessment
- Institutional educational program and session information and dissemination, participant tracking



Where do we go from here?

- Conclude identification of IT priorities for each subcommittee
- Identify IT resource requirements for each priorities
- Produce ITC report to be presented to Faculty and Executive Councils for review and approval





