10th National Bioethics Conference

A pre-conference training and peer engagement workshop

On

Artificial Intelligence (AI) in Healthcare: Learning together towards responsible AI

Being co-hosted by
Indian Institute of Technology Madras (IITM),
Forum for Medical Ethics Society (FMES) and *Indian Journal of Medical Ethics (IJME)*, and
Christian Medical College Vellore (CMC Vellore)

Date: Tuesday-Wednesday, January 28-29, 2025 | **Mode:** In-person
Venue: Seminar Hall, Block-1, Department of Biotechnology, IIT Madras, TN, India
Time: 0900 to 1730hrs

WORKSHOP SESSION PLAN

Day 1 | Tuesday, January 28, 2025	
Time & duration	**Session theme, faculty and synopses**
Session I **0900 – 0930 hrs** **(30 mins)**	**Registration** **Health-AI technologies in context: Setting the stage**
0930 – 0945 hrs **(15 mins)**	**Welcome and Introduction |**
	Welcome, Introduction to the workshop and to the co-organisers [Representatives of the Co-organisers of the workshop: IITM, FMES-IJME, and CMC Vellore]
Session II **0945 – 1115 hrs** **(90 mins)**	**Inaugural session |** **Knowing health-AI technologies horizons in our context: Opportunities and challenges**
0945 – 1015 hrs (30 mins)	**Inaugural speech 1 |** **AI and digital technologies development in academic settings and beyond: An Overview of AI in Healthcare – A Clinician's perspective [Presentation]** **Krishnan Ganapathy** The Director of Apollo Telemedicine Networking Foundation & Apollo Tele Health Services, Chennai; Distinguished Professor, Tamil Nadu Dr. MGR Medical University Chennai; Distinguished Visiting Professor, IIT Kanpur and Emeritus Professor, National Academy of Medical Sciences.
1015 – 1045 hrs (30 mins)	**Inaugural speech 2 |** **Guardrails for safeguarding privacy in health-AI technology space: Do we need newer thinking? [Presentation]** **Madhav Deshpande,** Computer scientist, former advisor to the Obama Administration, four decades of experience in computer science space in public and private sectors.

1045 – 1100 hrs (15 mins)	**Open floor: Moderated Q & A, speaker-audience engagement**
1100 – 1115 hrs (15 mins)	**Tea break**
Session III **1115 – 1245 hrs** **(90 mins)**	**Learnings from health-AI technology development cases |** **Opportunities and challenges in Health diagnostics-AI technology**
1115 – 1140 hrs (25 mins)	**Case 1 | AI model for precise detection of gestation age to predict pre-term birth: Responding to the issue of pre-term births, reducing maternal and child mortality in India: What, how, and why? [Presentation]** **Session faculty: Himanshu Sinha** Professor, Department of Biotechnology, IIT Madras. In collaboration with clinical partners, the Translational Health Science and Technology Institute, are analysing the GARBH-Ini cohort, a hospital-based observational pregnancy cohort to study multidimensional correlates of preterm birth in India.
1140 – 1205 hrs (25 mins)	**Case 2 | AI models to diagnose congenital disabilities: Responding to and addressing miscarriages [Presentation]** **Session faculty: Suresh Seshadri, IITM** Professor of Practice, Department of Medical Sciences & Technology at IIT Madras; Director, Mediscan Systems, Chennai, TN, India. Dr Seshadri is a pioneer in diagnostic ultrasound imaging in India. He was instrumental in establishing fetal medicine as a speciality through the Foetal Care Research Foundation (FCRF), a non-profit organisation focused on specialised care in foetal medicine.
1205 – 1230 hrs (25 mins)	**Case 3 | AI assisted bio-photonics for medical diagnosis [Presentation]** **Session faculty: Sujatha N, IITM** Professor, Department of Applied Mechanics at IIT Madras. Dr Sujatha's research focuses on developing non-invasive tools based on optical principles for disease diagnosis.
1230 – 1245 hrs (15 mins)	**Open floor: Moderated Q & A, speaker-audience engagement**
1245 – 1345 hrs (60 mins)	**Lunch break, time for networking and side-bar meetings for the workshop participants and faculty and other members**
Learnings from health-AI technology deployment cases (Part 1) **(Part 2 is on Day 2 | Session IX)**	
Session IV **1345 – 1500 hrs** **(75 mins)**	**Clinical health-AI technologies: Experiences from the ground**

1345 – 1415 hrs (20 mins + 10 mins for discussion)	**Case 1 | Widely deployed and used AI healthcare interventions in clinical care settings: Opportunities and challenges [Presentation]** **Session faculty: Balu Krishna Sasidharan,** Professor & Head, Department of Radiation Oncology at CMC Vellore. Currently, he heads the Quantitative Image Analyses and Artificial Intelligence Lab (QIRAIL) and leads clinical side of AI projects on quantitative imaging and prognostic models.
Governance matters towards responsible health-AI technology (Part 1) **(Part 2 is on Day 2 | Session X)**	
1415 – 1445 hrs (30 mins)	**AI Governance framework for India: An indigenous approach rooted in the broader 'less than perfect' ecosystem of AI development and deployment in India [Presentation]**
	Session faculty: Shambhavi Naik and Bharath Reddy Takshashila Institution, Bangalore, KA, India, an independent centre for research and education in public policy. Shambhavi Naik is the Head of Research and the chairperson of the Advanced Biology programme. Bharath Reddy is an Associate Fellow of the High-Tech Geopolitics programme, and Rijesh Panicker is a Fellow of the High-Tech Geopolitics programme.
1445 – 1500 hrs (15 mins)	**Open floor: Moderated Q & A, speaker-audience engagement (Governance Part 1)**
1500 – 1515 hrs (15 mins)	**Tea break**
Session V **1515 – 1730 hrs (135 mins)**	**Health-AI technologies | Legal and regulatory landscape of India** **Health-AI players navigating through the quagmire to meet legal and regulatory obligations [Presentation]**
1515 – 1600 hrs (45 mins)	**Session faculty: Krishna Ravi Srinivas,** Adjunct Professor at NALSAR University of Law, Hyderabad; Consultant with Research and Information System (RIS) in Developing Countries and Managing Editor of a journal titled Asian Biotechnology and Development Review (ABDR); affiliated with the Science, Technology & Innovation Program, RIS; and affiliated to the Centre for Responsible AI at IIT Madras.
1600 – 1700 hrs (60 mins)	**The DPDP Act 2023 and appreciating interfacing of law, regulations, ethics and human rights: A deep dive [Presentation]** **Session faculty: Shivangi Rai and Shefali Malhotra** Centre for Health Equity, Law & Policy (C-HELP), Indian Law Society (ILS), Pune, MH, India. The C-HELP team has a long-standing deeper engagement with the legal and regulatory frameworks related to data, privacy, and related matters which has direct bearing on the government's digital health mission, AI health care technologies and their interfacing.
1700 – 1730 hrs (30 mins)	**Open floor: Moderated Q & A, speaker-audience engagement**

End of the Day 1	
Day 2 | January 29, 2024	
Session VI **0930 – 1015 hrs** **(45 mins)**	**Multistakeholder perspectives regarding backend processes, challenges, and opportunities:** **Insights from pan-Indian empirical research [Presentation]**
	Session faculty: Amrita Sengupta and Shweta Mohandas The Centre for Internet and Society (CIS) is a non-profit organisation that undertakes interdisciplinary research on internet and digital technologies from policy and academic perspectives. Amrita Sengupta (Research and Programme Lead), is a Research and Programme Lead at CIS. Her research interests and work lie in the areas of gender and technology, digital cultures, ethics in research methods, digital access, algorithmic biases and tech design, and sustainability and tech. Shweta Mohandas (Researcher), is a Researcher at the CIS. Her areas of work and interest include Artificial Intelligence, Privacy, and Digitisation of Healthcare and India's policies around these thematics.
Ethics matters and its interfacing with law, regulations, and India's commitments to UN conventions	
Session VII **1015 – 1100 hrs** **(45 mins)**	**ICMR's Ethical Guidelines for Application of Artificial Intelligence in Biomedical Research and Healthcare, 2023 [Presentation]** **Session faculty: Roli Mathur,** Scientist G, Head, ICMR-Bioethics Unit, Bengaluru, KA, India
1100 – 1115 hrs (15 mins)	**Open floor: Moderated Q & A, speaker-audience engagement**
1115 – 1130 hrs **(15 mins)**	**Tea break**
Session VIII **1130 – 1245 hrs** **(75 mins)**	**AI health care technologies: Critical insights from ethics and human rights perspectives [Presentation]**
1130 – 1230 hrs (60 mins)	**Session faculty:** **Manjulika Vaz,** a Social Scientist with over two decades of work with the social development sector. She is presently a researcher and faculty member, Health and Humanities Division, St John's Research Institute at the St John's National Academy of Health Sciences, Bangalore, KA, India.; **Sunita Sheel,** an anthropologist and a bioethicist by training; and Secretary General, Forum for Medical Ethics Society (FMES); Working Editor, Indian Journal of Medical Ethics (IJME), Pune-Mumbai, MH, India. **Sayantan Datta,** Assistant Professor of Practice at the Centre for Writing and Pedagogy, Krea University, and an award-winning science journalist. They are a neuroscientist by training. Both have long standing engagement with bioethics, justice, equity matters and their interfacing with laws, regulations and human rights commitments in health research, public health, biomedical research, policies, and programs.
1230 – 1245 hrs (15 mins)	**Open floor: Moderated Q & A, speaker-audience engagement**

1245 – 1345 hrs (60 mins)	**Lunch break, time for networking and side-bar meetings for the workshop participants and faculty and other members**
Learnings from health-AI technology deployment cases (Part 2)	
Session IX **1345 – 1430 hrs (45 mins)**	**Public health-AI technologies: Experiences from the ground**
1345 – 1410 hrs	**Case 2 | AI interventions to respond to pressing public health matters: Maternal and child health [Presentation]** **Session faculty: Amrita Mahale** Director of Product & Innovation at ARMMAN, where she is responsible for creating a human-centred, data-driven and evidence-based innovation process across ARMMAN's portfolio of programs in maternal & child health that have served over 50 million women. Previously, she was the Head of Ideation & Incubation at Wadhwani AI. She holds a B.Tech in Aerospace Engineering from IIT Bombay and a MS in Aeronautics & Astronautics from Stanford University.
1410 – 1430 hrs (20 mins)	**Open floor: Moderated Q & A, speaker-audience engagement** **Learnings from health-AI technology deployment cases (Part 1 &2)**
Governance matters towards responsible health-AI technology (Part 2)	
Session X **1430 – 1515 hrs (45 mins)**	**AI Healthcare Technologies: relevance to governance systems for AI healthcare technologies – A critical perspective [Presentation]**
	Session faculty: Ms. Anita Gurumurthy Anita Gurumurthy is a founding member and executive director of *IT for Change (ITfC)* where she leads research on the platform economy, data and AI governance, democracy in the digital age, and feminist frameworks on digital justice. Anita actively engages in national and international advocacy on digital rights and contributes regularly to academic and media spaces.

Closing session **1530 – 1600 hrs (30 mins)**	➢ **Open feedback, critical comments from the faculty and the participants;** ➢ **Suggestions on the way forward** ➢ **Vote of thanks**
End of the workshop | Wednesday, January 29, 2025	