

## Executive Certificate Program

# Artificial Intelligence for Physicians & Healthcare Management

Artificial Intelligence (AI) is transforming the global healthcare landscape, from clinical diagnostics and operations to workforce management and medical education. This program equips physicians and healthcare leaders to understand, evaluate, and implement AI solutions that advance institutional missions while upholding ethical, regulatory, and patient-care standards. Over seven interactive, expert-led sessions, participants will explore how to use AI effectively, understand healthcare trends, identify opportunities, mitigate risks, establish governance, and, most importantly, lead in their institutions, driving positive change with AI.

- Location:** 100% Online, Synchronous (Live interactive sessions with leading experts)
- Dates:** July 11, 2026 – August 22, 2026
- Audience:** Physicians, nurses, administrative leadership of medical schools, hospitals, and healthcare systems
- Tuition:** \$1,900
- Frequency:** Offered quarterly
- Contact:** Jonathan Southgate, Director of Executive Education  
[jsouthga@umd.edu](mailto:jsouthga@umd.edu) or +1 (240) 712-9407

### Who is this for:

This quarterly program is for anyone asking any of the following questions:

- *How can I use AI tools in my everyday life as a provider?*
- *How can I make my organization AI-literate to help prepare for a new world in healthcare?*
- *How can we build more structure around the various AI initiatives currently underway at my hospital/institution?*
- *How can I be a leader who helps manage the change AI is bringing to healthcare practice?*

## [Register Now](#)

### Program Goals:

Participants will leave equipped with the knowledge and tools to:

1. Understand core AI capabilities, use cases, and technological foundations relevant to healthcare.
2. Responsibly use state-of-the-art AI tools
3. Evaluate potential risks, including bias, data integrity, and regulatory compliance, and design strategies to mitigate them.
4. Develop governance models and implementation strategies for ethical and responsible AI adoption.
5. Lead institutional change by aligning AI initiatives with mission, culture, and workforce readiness.

*Saturday, July 11, 2026 | 10:00 AM - 11:30 AM EST*

## Capabilities and Use Cases of AI in Healthcare

This session provides a comprehensive foundation for understanding AI's transformative impact on healthcare delivery, education, and administration. Participants will explore how AI enhances clinical decision-making, diagnostics, imaging, patient flow, and predictive analytics, as well as how it supports institutional research and operations.

### Topics:

- Overview of machine learning, natural language processing, and GenAI in healthcare contexts
- Case studies from hospitals, medical schools, and public health systems
- Identifying high-impact areas for AI integration in academic medicine
- Leadership roles in aligning AI strategy with institutional priorities



### **Balaji Padmanabhan, PhD**

Dr. Padmanabhan serves as Associate Dean of Strategic Initiatives and Dean's Professor of Decisions, Operations & Information Technologies. With over 25 years in data science, AI/machine learning, and business analytics, he deeply understands how complex systems and modelling can bring measurable impact to healthcare organisations.

*Saturday, July 18, 2026 | 10:00 AM - 11:30 AM EST*

## AI Tools in Healthcare

A practical exploration of the technology ecosystem supporting AI in healthcare. Participants will gain hands-on experience with key AI platforms and understand the AI vendor ecosystem in healthcare.

### Topics:

- Overview of general-purpose AI tools (ChatGPT, Gemini, Claude) and specialized tools (ChatGPT for Health, OpenEvidence, etc.)
- Hands-on demonstration of using general-purpose AI tools
- Demo capabilities of more recent specialized AI tools, such as ChatGPT for Health and OpenEvidence
- Evaluating vendors and open-source tools



### **Kunpeng Zhang ("KZ"), PhD**

KZ is an Associate Professor in information & decision science, whose research applies scalable machine learning, natural language processing and social network analytics to business and healthcare "big-data" problems. Having taught and built analytics systems in healthcare settings, he brings strong technical and operational insight into the deployment of AI projects.

*Saturday, July 25, 2026 | 10:00 AM - 11:30 AM EST*

## **Risks, Ethics, and Trust**

AI adoption in healthcare introduces new ethical and governance challenges. This session explores data privacy, algorithmic bias, transparency, and patient safety, while highlighting global and regional regulatory frameworks that shape responsible AI deployment.

### **Topics:**

- Ethical frameworks and accountability in AI
- HIPAA, FDA, and emerging EU AI Act implications
- Managing bias and ensuring fairness in healthcare algorithms
- Building institutional trust through transparency and explainability



### **Margrét Bjarnadóttir, PhD**

Dr. Bjarnadóttir is an Associate Professor of Management Science & Statistics. Her research centers on large-scale healthcare datasets, optimisation modelling, and decision support in clinical settings.

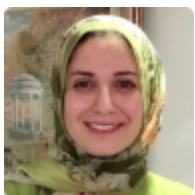
*Saturday, August 1, 2026 | 10:00 AM - 11:30 AM EST*

## **Governance and Policy**

This session focuses on establishing institutional frameworks for AI governance that uphold ethics, compliance, and long-term oversight. Participants learn how to define decision rights, data stewardship, and performance monitoring structures.

### **Topics:**

- Building a governance model aligned with institutional mission and values
- Defining accountability and reporting structures
- Integrating AI oversight into existing compliance and ethics processes
- Developing transparent communication policies for AI adoption



### **Hala Jassim AlMossawi, BDS, MSc, MSHCA**

Hala is a global health executive with over 24 years' experience leading programme strategy, systems strengthening, and implementation in health-care contexts worldwide. Her leadership in health-systems governance, policy, and large-scale implementation makes her well-suited to guide institutional frameworks for AI oversight.

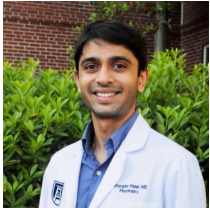
*Saturday, August 8, 2026 | 10:00 AM - 11:30 AM EST*

## **Clinical AI Implementation and the Future of the AI-Augmented Physician**

This session focuses on the practical implementation of AI in clinical workflows from the physician's perspective. Much of the challenge in healthcare AI is not the models themselves but how they integrate into real-world clinical environments and what the research says about that currently.

### **Topics:**

- How clinicians actually use AI
- AI copilots in clinical decision making
- AI for documentation, chart review, triage
- Lessons from building medical AI products



**Bhargav Patel, MD, MBA** Dr. Bhargav Patel is a physician-leader, entrepreneur, and medical AI researcher shaping the future of healthcare at the intersection of medicine, data science, and technology. As the former Medical Director and later Chief Medical Officer at Sully.ai, Dr. Patel led the development of clinician-support tools used across millions of patient visits, bridging clinicians, engineers, and executives to translate AI from concept to clinical reality. Dr. Patel's academic journey includes training at Brown University, the Medical College of Georgia, Vanderbilt University, and an MBA in Healthcare Management from the University of Arizona.

*Saturday, August 15, 2026 | 10:00 AM - 11:30 AM EST*

## **Emerging Issues in Healthcare**

This session examines frontier trends in healthcare management, regulatory frameworks, and the commercialization of healthcare products and their implications for medical education and patient engagement.

### **Topics:**

- Business of Life Sciences
- Regulatory frameworks and approval processes
- Commercialization of biologics, medical devices, and pharmaceuticals
- Future policy and societal considerations for AI in medicine



### **Wendy Sanhai, PhD**

Dr. Sanhai is a Visiting Professor of Practice at the Smith School and a recognised leader in healthcare and global health, having held senior roles across academia, federal agencies, industry, and consulting. With deep experience in life sciences strategy, regulatory affairs, and public-private partnerships, she is particularly well placed to navigate the frontier of healthcare innovation.

*Saturday, August 22, 2026 | 10:00 AM - 11:30 AM EST*

## AI for Medical Questions, Decision-Making, and Treatment Recommendations

This session will explore how AI can support medical question-answering, clinical decision-making, and treatment recommendations across care settings.

### Topics:

- Practical opportunities and limitations of AI
- Real-world applications from collaborations with leading healthcare systems
- Considerations for using AI responsibly in patient care.



### Soroush Saghafian, Ph.D.

Soroush will be joining the faculty of the Robert H. Smith School of Business in Summer 2026. Previously he founded and served as the director of the Public Impact Analytics Science Lab (PIAS-Lab) at Harvard, which is devoted to advancing and applying the science of analytics for solving societal problems that can have public impact.

### Certificate

(with the option to earn Continuing Education Units):

