

HKUMed Teaching and Learning Expo:

Harnessing AI to Revolutionize Health Sciences Education

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Adopting AI and Digital Tools in Medical Education



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Abstract

Medicine has evolved tremendously in the last century and medical education needs to evolve as well to ensure timely, efficient, and safe healthcare for our patients. Traditional textbooks and lectures are still widely used as the most common way of teaching, but these methods are insufficient in the contemporary and complicated clinical world – especially for acquiring and ensuring the technical skills needed in medicine.

Many new methods have evolved for teaching and assessing technical skills. Virtual-reality simulators, 3D-printed models, head-mounted displays etc. offer patient-safe training opportunities and artificial intelligence is being used to provide essential feedback to new trainees and even aid in the certification process without need of busy and potentially biased faculty. However, just as the treatment of patients needs to rely on solid scientific evidence, the implementation of new training and assessment methods should be done based on best available medical education research.

In this keynote lecture, Professor Lars Konge will focus on how AI and Digital Tools can be used to acquire and ensure technical skills in medicine. His talk will be filled with specific and practical examples from recent publications in the surgical field and beyond. Furthermore, he will present areas where more innovation is needed and where we must work together to gather necessary additional evidence.

Biography

Lars Konge is a certified cardio-thoracic surgeon, consultant at the Copenhagen Academy for Medical Education and Simulation (CAMES) Rigshospitalet, and a professor of medical education at the University of Copenhagen and at the University of Southern Denmark. He has a Ph.D. in assessment and his main research areas are simulation-based training and certification of technical skills. Professor Konge is one of the world's most active researchers in medical education and has published more than 400 papers in international peer-reviewed journals.