

# TECHNA SPECIAL PRESENTATION

## A vision for medical virtual and augmented reality from the Ottawa Hospital

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610 University Avenue

Robert Bell Auditorium, 6<sup>th</sup> floor room 604

### ABSTRACT

A new era of virtual and augmented reality technology is enabling a booming innovative landscape of medical applications. Following a review of key technological developments, we will present a comprehensive framework for navigating this new creative space including: classification of experiences as virtual reality (VR) or augmented reality (AR), stratification of medical VR/AR applications according to the role of the clinician or patient, and the methods of visualization and manipulation of medical images and models in a perspective 3D environment. Using this framework, several medical VR applications and initiatives under development at The Ottawa Hospital will be presented and discussed, highlighting new opportunities for personalized care, cross-discipline clinical collaboration and communication, and integration with existing radiotherapy and medical 3D printing programs.