Simulation Research in Gastrointestinal and Urologic Care:
Challenges and Opportunities

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Natcher Conference Center
Building 45, NIH Campus
This workshop will explore the research opportunities for the further adoption of simulation applications by expert clinicians. The care of gastrointestinal and urologic diseases is heavily dependent on the expert performance of interventional procedures. Procedural expertise in many fields has been shown to be enhanced by the use of simulation applications. The adoption of simulation as a method to develop new procedures and improve outcomes in gastrointestinal and urologic care has been limited, however. Although a small number of randomized controlled trials have shown the benefits of simulation when used in training programs, data on its value in improving clinical outcomes by specialists are incomplete. Research on the use of simulation applications to develop or assess new therapies, to improve the detection of disease, or to avoid or manage complications is largely unexplored.

The purpose of the workshop is threefold: (1) to explore and expand the basic research on the development and validity of simulation applications to diagnose and treat gastrointestinal and urologic disease; (2) to promote research on the use of simulation both to identify causes of error in detection and treatment and to assess methods to prevent complications and improve safety; and (3) to identify new methods to analyze the validity and usefulness of simulation applications in clinical care.

The research gaps and opportunities identified at the workshop will be incorporated into a published summary of the workshop, which will inform future funding initiatives by the NIDDK and NIBIB.