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- 94.Wm. LeRoy Heinrichs, MD, PhD, Patricia Youngblood, PhD, Richard Shavelson, PhD, Parvati Dev, PhD with the SLS Ad Hoc Committee on Surgical Simulation: Harry Hasson, MD, Rick Satava, MD, Elspeth McDougall, MD, Paul Wetter, MD Proficiency: An Objective Metric for ACGME Clinical Competencies Abstract 14<sup>th</sup> Annual SLS —San Diego, CA Sept. 2005
- 95.W. L. Heinrichs, MD, PhD, Patricia Youngblood, PhD, Richard Shavelson, PhD, Parvati Dev, PhD Proficiency as the Objective Metric of Technical Surgical Competency on the LTS2000 and the Hysteroscopy Trainer. Abstract 33<sup>rd</sup> Annual AAGL Meeting Chicago, IL, Nov. 2005
- 96. Youngblood P, Harter P, Srivastava S, Heinrichs L, Kaufman M, Dev P. Evaluation of Virtual Learning Environments of Emergency Medicine and First Responder Training, Games for Health, Baltimore, MD, October 2005
- 97. Gehorsham. R, Kaufman M, Kusumoto L, Heinrichs L, Youngblood P, Harter P, Weiss E, Srivastava S, Dev P. Application of Multiplayer Game Technology to Team-based Training of Medical First Responders, Games for Health, Baltimore, MD, October 2005
- 98. Kusumoto L, Heinrichs WL. Multi-player, Online, Role-playing Games (MORGs)  $2^{\rm nd}$  Annual SUMMIT/TATRC West Workshop on Immersive and Simulation-based Learning, January 23, 2006, Long Beach, CA
- 99. Heinrichs, WL, Criterion-based Assessment, Invited presentation in Panel on Important Characteristics of Simulation Training, a. Assessment TATRC'S  $6^{\text{TH}}$  Annual Advanced Medical Technology Review "Enabling Technologies for Simulation: Impact and Influence on Medical Training and Education" January 24, 2006 Long Beach, CA
- 100. Heinrichs, WL, in 'Haptics Wars: The Odyssey Continues' . . . Invited participant in the  $6^{\rm th}$  TATRC Day Seminar, Montgomery K., Long Beach, CA January 24, 2006
- 101.Heinrichs WL. Educational Technologies Improve Behavioral Healthcare. Invited presentation in Panel on Technologies of Behavioral Health, B. Wiederhold, PhD, at MMVR2006, Long Beach, CA, January 25-7, 2006
- 102. Heinrichs WL, Lukoff B, Youngblood P, Shavelson R. Multidisciplinary Plenary Session (Gynecology, General Surgery,

- Urology): Competency Issues and it's Assessment Metrics: Invited Speaker: Objective Assessment of Surgical Skills. 15th Annual Meeting of the Society of Laparoendoscopic Surgeons, Boston, MA, September 6-9, 2006
- 103. Youngblood P, Heinrichs WL, Fellander-Tsai L, Hedman L, Dev P, (Sept. 25, 2006), High School First Responders Practice in Virtual Worlds to Save Lives in the Real World, presentation at the Third Annual Games for Health Conference, Baltimore, MD, USA
- 104. Heinrichs WL, Youngblood P, Creutzfield J, Fellander-Tsai L, Hedman L, Dev P, SiMErgency: A case study of teaching the 'new' CPR to High School students with a multi-player, online simulation (MMOS) *Invited presentation accepted for Serious Games Summit*, Wash. D.C. October 30, 2006
- 105. W. LeRoy Heinrichs, Margaret Krebs, Pat Molholt, Steve Senger, Kevin Smith, Patricia Youngblood, Parvati Dev. Simulation, Visualization and Immersive Telepresence for Medical Education: Can we build a Virtual Hospital for students? December 06, 2006, Fall 2006 Internet2 Member Meeting, Wash. DC
- 106. Creutzfeld J, Hedman L, Medin C, Wallin CJ, Hendrick A, Youngblood P, Heinrichs WL, Fellander-Tsai L. Implementing Virtual Worlds for Systematic Training of Pre-hospital CPR in Medical School, Medicine Meets Virtual Reality, Long Beach, CA, Feb. 5-8, 2007
- 107. Heinrichs WL, Youngblood P, Cornelius C, Dev P. A Simple Durometer for Quantifying the 'Haptic Memory' of Surgeons. Presentation: Medicine Meets Virtual Reality, Long Beach, CA, Feb. 5-8, 2007
- 108. Creutzfeldt J, L Hedman, C Medin, C-J Wallin, A Hendrick, P Youngblood, W L Heinrichs, L Felländer-Tsai; Effects of repeated CPR training in Virtual Worlds on medical students performance. MMVR2008, Jan. 28, 2008, Long Beach, CA
- 110. Heinrichs WL, P Dev, S-Y Kung, R Cheng, P Youngblood, L Kusumoto, A Hendrick; Design and Implementation of Rule-based Medical Models; MMVR2008, Jan. 28, 2008, Long Beach, CA
- 111. Youngblood P, PM Harter, WL Heinrichs, P Dev, L Kusumoto, A Hendricks; Evaluation of 'Virtual Worlds' Mass Casualty Simulation Exercises for Training and Assessing Hospital Staff; MMVR2008, Jan. 28, 2008, Long Beach, CA
- 112. Garg D, R Fong, M Fagan, M Lemyre, B Liedstrand, C Cornelius, WL Heinrichs; A Surgical Simulator for Intra-corporeal Suturing Utilizing the SPRING Platform. Poster—MMVR2008, Jan. 28, 2008, Long Beach, CA
- 113. Yellapragada, B, Dev P, Heinrichs WL. Pilot Study: CPR Training in Virtual Worlds: Second Life. Student report submitted in partial fulfillment of High School Graduation requirements The Harker School, San Jose, CA Nov. 2008
- 114. Heinrichs WL, Dev P, Youngblood P, Kusumoto L, Hendrick A.

Emergency Patient Care Is Improved by Training in Virtual Worlds (VWs). *Magic in Teaching*. California Institute for Nursing and Health Care (CINHC), Burlingame, CA, Nov.2-3, 2009

- 115. Heinrichs WL, Youngblood P, Dev P. Healthcare Providers Like Online Virtual Medical Environments (VMEs). The Changing Landscape: Innovations in Simulation. CESEI, Univ. British Columbia, Canada. Jan 26,2010
- 116. Heinrichs WL, Youngblood P, Dev P. Do Virtual Worlds WORK in Healthcare Training? The Case of CPR Training in High School Student Teams. VirtualEdge 2010: Summit on virtual events, marketing, and communities. SantA Clara, CA, Feb. 22-23, 2010
- 117. Heinrichs WL, Dev P, Youngblood P, Kusumoto L, Hendrick A. Emergency Patient Care Is Improved by Training in Virtual Worlds (VWs). *Magic in Teaching*. California Institute for Nursing and Health Care (CINHC), Los Angeles, CA, March 10-11, 2010
- 118. Heinrichs WL and Dev P. *CliniSpace*, An Online Virtual Learning environment for Training in Medicine. 2011 GameTech Users Conference, Federal Consortium of Virtual Worlds, *Team Orlando*, March 22-25, 2011, Orlando, FL.
- 119. Heinrichs, WL. BattleCare, teaching ATLS on the iPad. June 4, 2012, at SimFEST2012, at the Northern Alberta Institute of Technology, Edmonton, Alberta.

# Workshops for Simulation Technologies:

- 1. Integrating Simulators into the Medical Curriculum, with Carla Pugh, SUMMIT. West Coast Section of the Am. College of Medicine, Monterey, CA, June, 2002;
- 2. Whither Surgical Education and Training? A Gynaecology Workshop, Univ. of New South Wales, Perth, Australia. Sept. 2002;
- 3. Integrating Simulation Technologies into the Medical School Curriculum, with Jenn Stringer, AAMC (American Association of Medical Colleges), San Francisco, CA, Nov. 2002;
- 4. Envisioning the Future of SMILE (Stanford Medical Immersive Learning Environments), with Parvati Dev, SUMMIT, Charles Taylor, Surgery and E.E, Dave Gaba, PAVAH, Stanford, CA, May, 2003;
- 5. Assessment and Learning Technologies in Ob/Gyn, and VR Learning and Assessment Technologies in Ob/Gyn, WLH presentations, with AE Brill, and M. Munro. CREOG Workshop, San Diego, CA June 2003;
- 6. Simulators in Immersive Learning Environments in SMILE, International Speakers, with Parvati Dev, SUMMIT, Stanford, CA, Jan 2004;
- 7. Simulators in Surgical Training. An American College of Surgery Sub-committee Workshop, Chicago, IL., Feb 27, 2004;

- 8. The Role of Simulation in Residency Training and Continuing Medical Education, Richard M. Satava, MD, Harry Hasson, MD, and Wm. LeRoy Heinrichs, MD, PhD, PG Course #8; SLS 13<sup>th</sup> Annual Meeting, NYC, Sept 29, 2004;
- 9. Luncheon Roundtable; Simulation-based Learning, AAGL, San Francisco, Nov. 12,2004
- 10.Simulation-based Learning: Games and Medicine. TATRC West / SUMMIT Workshop, Medicine Meets Virtual Reality, Westin Hotel, Long Beach, CA; Jan. 25, 2005
- 11. Simulation-based Learning: Games and Medicine. TATRC West / SUMMIT Workshop, Slice of Life, Portland, OR June 24, 2005
- 12. Simulation-based Learning: Games and Medicine. TATRC West / SUMMIT Workshop, Gaming for Behavioral Change and Performance, San Diego, CA, Dec. 4-5, 2005
- 13. Simulation-based Learning: Games and Medicine. TATRC West / SUMMIT Workshop, Gaming for Behavioral Change and Performance, Medicine Meets Virtual Reality, Long Beach, CA, Jan. 24-25, 2006
- 14. Immersive and Simulation-based Learning Technologies, Invited Lecture at the *OR for the Future*, An ACI-sponsored Seminar, San Francisco, CA, January 19, 2006; Los Angeles, CA, May 19,2006:
- 15.Co-Director of TATRC West / SUMMIT Workshop, Designing Case-based Learning for Virtual Worlds. Presentation: Serious Story Development for Modeling Virtual Patients, August 25-26,2006, Stanford. CA
- 16.Co-Director of TATRC West / SUMMIT Workshop: Rapid Prototyping of Surgical Simulators with Open Source Simulation Software. Presentation: Benchmark Performance Metrics; the SLS Proficiency Study, Stanford University August 28-30, 2006
- 17.Co-Director of Master Class #8: How to Assess Competency in Laparoscopic Surgery. Presentation: Benchmark Performance Metrics; the SLS Proficiency Study, and Conducted the Hands-on Session with seven simulator systems, 15th Annual Meeting of the Society of Laparoendoscopic Surgeons, Boston, MA, September 6-9, 2006
- 18.Co-Director of Workshop #2: Where are we going with remote access surgery, robots, simulators, 3D and cameras with third-eye vision? 35<sup>th</sup> Annual Meeting of AAGL, Las Vegas, NV Nov.6, 2006
- 19. Director of Simulation Laboratory: Laparoscopic Suturing. 16th Annual Meeting of the Society of Laparoendoscopic Surgeons, San Francisco, CA September 5, 2007
- 20.Exec. Med. Dir., Innovation in Learning, Inc. Media-X Summer Institute Workshop, <a href="http://mediax.stanford.edu/WSI/index.html">http://mediax.stanford.edu/WSI/index.html</a> Workshop: July 20, 2010 "Teaching My Avatar New Tricks: Experiential Learning and Biomeasurement In Virtual Online Environments"

21. SimFEST2012, Workshop at Northern Alberta Technical Institute (NAIT), Edmonton, Alberta, CA June 4, 2012; CliniSpace, & CliniSpace Nursing

#### Online Presentations

- 1. Second Life: Inaugural Lecture of the International Virtual Association of Surgeons (IVAS), hosted by Imperial College, London. Topic; Developing Virtual Patient Scenarios. September, 2007
- 2. OLIVE: The 2<sup>nd</sup> International Conference on Virtual Worlds, hosted by SGI Coventry University, UK. Topic; Training High School Students for Bystander CPR, jointly with Ron Edwards, CEO/Ambient Performance, Ltd (London); Sept. 2008
- 3. OLIVE: The Annual Meeting of the National Association of Medical Simulation (NAMS), Manchester, UK, jointly with Ron Edwards, CEO/Ambient Performance, Ltd (London); April 2009
- 4. People-on-the-Go Webinar, Medical Training Using CliniSpace, a 'next-gen' Virtual Learning Environment; March 4, 2011.
- 5. Second Life--Nonprofit Commons Meeting April 1, Winners\* of Federal Virtual World Challenge + Machinima for Nonprofits;
  - \* CliniSpace was named as 1stPlace and the Grand Prize Winner of the Federal Consortium Virtual Worlds Challenge.
    Assessment was on Application of AI, at the 2011 GameTech Users Conference, Orlando, FL.: April 1, 2011
  - \* BattleCare was named as the 1stPlace and Grand Prize Winner of the Federal Consortium Virtual Worlds Challenge.
    Assessment was on Content Application, at the 2012 GameTech Users Conference, Orlando, FL.: April 12, 2012