

Take your simulation training to the next level with

# iSIM

## Improving Simulation Instructional Methods

### Program Description:

This 3-day internationally renowned program, created in collaborative effort between WISER at the University of Pittsburgh and the Gordon Center for Research in Medical Education at the University of Miami, is designed as an introduction to fundamental skills and abilities for delivering simulation-based healthcare education through a variety of techniques and technologies. The program emphasizes hands-on activities and active participation to maximize simulation-based instruction skill acquisition. Class group sizes are kept small to allow for maximum participation.

### Upcoming Course Dates:

- 2010 - June 23, 24 & 25 (Miami, FL - GCRME)
- 2010 - August 4, 5 & 6 (Pittsburgh, PA - WISER)
- 2010 - October 20, 21, 22 (Miami, FL- GCRME)
- 2010 - November 29, 30 & December 1 (Pittsburgh, PA - WISER)
- 2011 - February 16,17 & 18 (Honolulu, HI- SimTiki)

Registration for SimTiki Course is available at [www.simtiki.org](http://www.simtiki.org)

Course Fee - \$1795 per person, group discounts available

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REGISTRATION AND INFORMATION:  
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**WISER**  
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## COURSE AGENDA and OBJECTIVES

### DAY 1 OVERVIEW AND MANIKIN-BASED INSTRUCTION AND ASSESSMENT

#### 8:00 Welcome, Introductions and Expectations

- Determine benchmarks to be achieved in this program
- Assign small group assignments for course

#### 8:20 Overview of Simulation Center Operations, Facilities

- Observe and discuss the role of a simulation center in medical education
- Review and discuss methods of simulation, simulation technologies and simulation environments
- Review important simulation definitions and terminology
- Review and discuss common environments of a simulation center

#### 9:00 Practical Exercise in Healthcare Simulation

- Participate in a simulation session and debriefing
- Identify the elements necessary to conduct a healthcare simulation activity

#### 9:30 Key Components for Successful Simulation

- Identify outcomes of a successful simulation session
- Review simulation exercise feedback to identify improvement targets

#### 10:00 Design and Development Tools for Scenario Construction

- Review basic design and development elements for constructing a simulation activity
- Review guidelines for developing defined measurable objectives

10:20 Break

#### 10:35 Scenario Design 1.1 – Objectives and Modeling

- Develop an outline for simulation-based teaching activity for a small group of learners using a computer-driven simulator, standardized patient or hybrid patient simulator
- Develop 3 to 5 measurable learning objectives for the simulation activity
- Use a design template to script the physiology of the simulated patient for the objectives of the simulation activity, including successful and unsuccessful outcome points

#### 11:15 Scenario Environments, Fidelity and Equipment Selection

- Review simulation environment requirements for small group simulation activities
- Discuss simulation environment design questions as they relate to required fidelity
- Determine appropriate environmental, fidelity and equipment for the small group learning environment

#### 11:35 Scenario Design 1.2 – Environments, Equipment, People and Props

- Use a design template to outline the environmental elements of the small-group simulation activity
- Determine the simulation elements required to achieve the appropriate level of simulation fidelity
- List and describe required equipment for the small-group simulation activity

12:15 Lunch

#### 1:00 Teaching with Simulation

- Discuss the use of simulation methods for delivering classroom instruction
- Review examples of simulation-based instruction and discuss their key components
- Review simulation-based instructional methods for large-group instructor led, small-group instructor led, small-group independent, and individual independent learning activities

#### 1:30 Scenario Design 1.3 – Assessment and Debriefing

- Develop a global rating scale for the simulation activity based on the defined objectives
- Develop standardized debriefing points for the activity objectives

2:20 Break

#### 2:30 Scenario Design 1.4 – Implementation and Evaluation

- Setup and conduct the simulation activity for a small group of learners using a full-body, computer-driven manikin
- Participate in a simulation session debriefing

- Review simulation exercise feedback to identify improvement targets

#### **4:30 Discussion, Wrap-up, and Team Assignment**

- Review and summarize effective strategies for conducting simulation activities in small groups
- Use scenario performance feedback to develop a performance improvement plan for the small-group simulation activity

5:00 Learner Evaluations – Day 1

### **DAY 2 TASK TRAINERS, STANDARDIZED PATIENTS AND HYBRID SIMULATION**

8:00 Welcome and Sign-in

#### **8:15 Reflections on Day 1 Simulation Projects**

- Discuss the performance improvement implementation plan for each of the Day 1 scenarios

#### **8:45 Key Case Presentation – Standardized Patient Simulation**

- Participate in a simulation session and debriefing
- Identify the elements necessary to conduct a healthcare simulation activity using a standardized patient

#### **9:15 Design and Development of Non-computer Based Simulations**

- Review basic design and development elements for constructing a non-computer driven simulation activity
- Review and discuss the use of standardized patients in healthcare simulations
- Define the “hybrid” simulator concept, and review examples

#### **9:35 Scenario Design 2.1 – Objectives and Modeling – Task Training and Standardized Patients**

- Develop an outline that incorporates assessment into a simulation activity for a small group of learners using non-computer-driven simulator, standardized patient or hybrid patient simulator
- Develop 3 to 5 measurable learning objectives for the simulation activity
- Use a design template to script the dynamic changes of the simulated patient for the objectives of the simulation activity, including successful and unsuccessful outcome points

10:25 Break

#### **10:40 Scenario Environments, Fidelity and Equipment Selection for Non-computer Driven Simulations**

- Review simulation environment requirements for task training and standardized patient simulation activities
- Discuss simulation environment design questions as they relate to required fidelity of task-trainers and standardized patients
- Determine appropriate environmental, fidelity and equipment for the task training and standardized patient, learning environment

#### **11:00 Scenario Design 2.2 – Environments, Equipment, People and Props for Non-computer Driven Simulations**

- Use a design template to outline the environmental elements of the non-computer driven simulation activity
- Determine the simulation elements required to achieve the appropriate level of simulation fidelity for a non-computer driven simulation activity
- List and describe required equipment for the non-computer driven simulation activity

11:45 Lunch

#### **12:30 Assessment, Debriefing and Testing**

- Discuss the use of procedural checklists for measuring individual and small-group activities
- Review examples of procedural checklists and discuss their key components
- Review debriefing methods for small group simulation activities
- Discuss fundamental strategies for debriefing learners

#### **1:00 Scenario Design 2.3 – Assessment and Debriefing**

- Develop a procedural checklist for an individual learner or a small group of learners for the simulation activity based on the defined objectives
- Develop standardized debriefing points for the activity objectives

1:50 Break

#### **2:05 Scenario Design 2.4 – Implementation and Evaluation**

- Set-up and conduct the simulation activity for an individual or small group of learners using a non-computer driven simulator, standardized patient or combination
- Participate in a simulation session and debriefing

- Review simulation exercise feedback to identify improvement targets

#### **4:30 Discussion, Wrap-up, and Team Assignment**

- Review and summarize effective strategies for conducting simulation activities using non-computer driven simulator or standardized patients
- Use scenario performance feedback to develop a performance improvement plan for the simulation activity

5:00 Learner Evaluations – Day 2

### **DAY 3 TEAM BASED SIMULATION**

8:00 Welcome and Sign-in

#### **8:15 Reflections on Day 2 Simulation Projects**

- Discuss the performance improvement implementation plan for each of the Day 2 scenarios

#### **8:45 Key Case Presentation – Team-Based Simulation**

- Participate in a team-based simulation session and debriefing
- Identify the elements necessary to conduct a team training healthcare simulation activity

#### **9:15 Design and Development of Team Training Simulations**

- Review basic design and development elements for constructing a team training simulation activity
- Review and discuss the use of simulation technologies in team training healthcare simulations
- Compare and contrast the differences between clinical and team training simulations and review examples

#### **9:35 Scenario Design 3.1 – Objectives and Modeling**

- Develop an outline for a team training simulation activity for a small group of learners using a computer-driven simulator, standardized patient or hybrid patient simulator
- Develop 3 to 5 measurable learning objectives for the simulation activity
- Use a design template to script the actions of the simulated patient for the objectives of the simulation activity, including successful and unsuccessful outcome points

10:25 Break

#### **10:40 Scenario Environments, Fidelity and Equipment Selection**

- Review simulation environment requirements for team training activities
- Discuss simulation environment design questions as they relate to required fidelity for team training
- Determine appropriate environmental, fidelity and equipment for the team training, learning environment

#### **11:00 Scenario Design 3.2 – Environments, Equipment, People and Props**

- Use a design template to outline the environmental elements of team training simulation activity
- Determine the simulation elements required to achieve the appropriate level of simulation fidelity for team training
- List and describe required equipment and personnel for team training simulation

11:45 Lunch

#### **12:30 Assessment, Debriefing and Testing**

- Discuss the use of global rating scales and checklists for measuring team performance
- Review examples of team-based global rating scales and checklists, and discuss their key components
- Review debriefing methods for team training simulation activities
- Discuss fundamental strategies for debriefing healthcare teams

#### **1:00 Scenario Design 3.3 – Assessment and Debriefing**

- Develop a team oriented global rating scale and checklist for the simulation activity based on the defined objectives
- Develop standardized debriefing points for the activity objectives

1:50 Break

#### **2:05 Scenario Design 3.4 – Implementation and Evaluation – Team Training**

- Set-up and conduct the simulation activity for a healthcare team using a computer-driven simulator, standardized patient or hybrid patient simulator
- Participate in a simulation session and debriefing
- Review simulation exercise feedback to identify improvement targets

**4:30 Discussion, Wrap-up, Next Steps**

- Review and summarize effective strategies for conducting simulation activities for healthcare teams
- Use scenario performance feedback to develop a performance improvement plan for the simulation activity
- Develop a professional development plan in healthcare simulation instruction

5:00 Learner Evaluations – Day 3