

Deep South Biosafety



Worker Training Program

**IT TAKES A VILLAGE:
BENEFITS OF CROSS-
SECTOR PLANNING AND
TRAINING FOR AN ID
RESPONSE**

Lisa McCormick, DrPH

Matt Fifolt, PhD

UAB School of Public Health

EBOLA

HIV

SARS

HBV

MERS

MALARIA

UAB THE UNIVERSITY OF
ALABAMA AT BIRMINGHAM

Knowledge that will change your world

PRESENTATION OBJECTIVES:

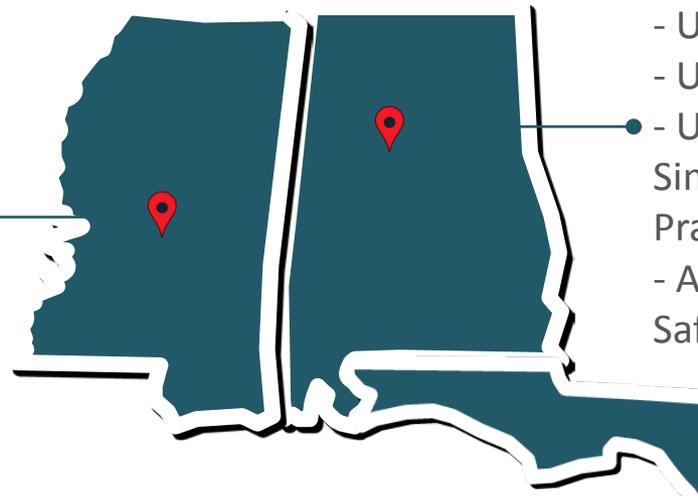
- Describe the rationale and multi-sector approach used in developing the Deep South Biosafety WTP's Advisory Board
- Identify the benefits of simulation and interprofessional education in cross-sector planning and training
- Discuss the Interprofessional Education Collaborative's (IPEC) Core Competencies for Interprofessional Collaborative Practice
- Review how both simulation and interprofessional education link to adult learning theory

The Deep South Biosafety Worker Training Program (WTP)

ABOUT:

One of eight institutions funded in 2016 by the **National Institute of Environmental Health Sciences (NIEHS)** to provide infectious disease safety training for a range of high risk occupations.

Mississippi
University of Mississippi
Medical Center



Alabama

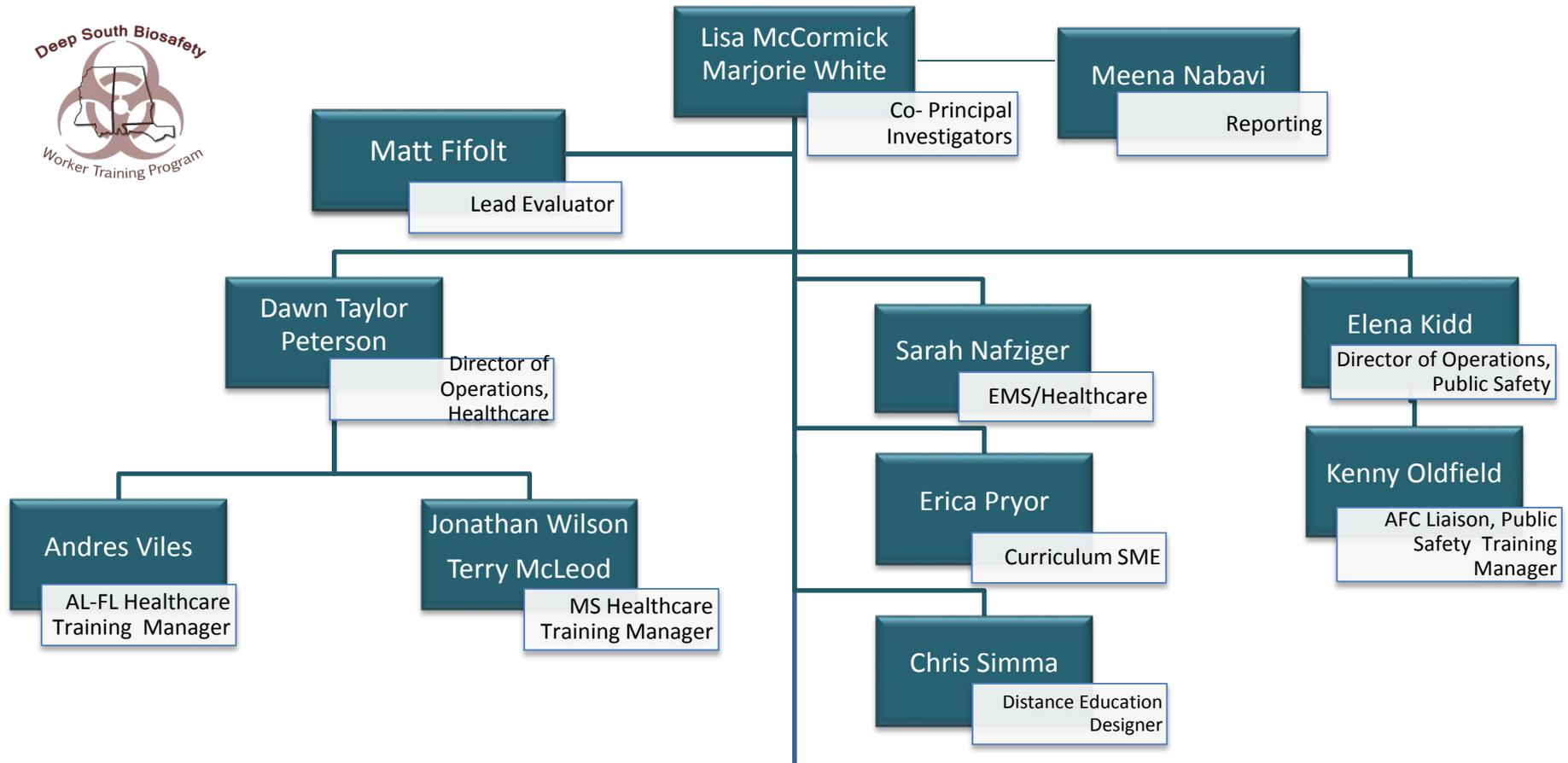
- UAB School of Medicine
- UAB School of Public Health
- UAB Office of Interprofessional Simulation for Innovative Clinical Practice
- Alabama Fire College Workplace Safety Training Program

WHAT WE DO:

- **Four (4) levels of trainings** (awareness, operations, train-the-trainer, and refresher/simulation)
 - Chain of infection and routes of exposure
 - Infection control measures
 - Exposure risk assessment and categorization
 - Relevant government standards, regulations and guidelines
 - Hand-on training using PPE
 - Review of infectious disease resources
- Develop a cadre of workers equipped with the skills and knowledge needed to protect themselves in an ID response.



Structure and Advisory Board Members



Advisory Board

- Alabama Department of Public Health
 - Center for Emergency Preparedness
 - Emergency Medical Services
- Jefferson Co Department of Health/Jefferson Co Healthcare Coalition
- Mississippi State Department of Health
 - Office of Preparedness and Emergency Response
 - Emergency Medical Services

- UAB Health System
- UAB School of Medicine – Infectious Disease
- Mississippi Hospital Association
- UMMC Health System
- Alabama Fire College
- Mississippi State Fire Academy
- USNORTHCOM
- Center for Domestic Preparedness

Role of Advisory Board

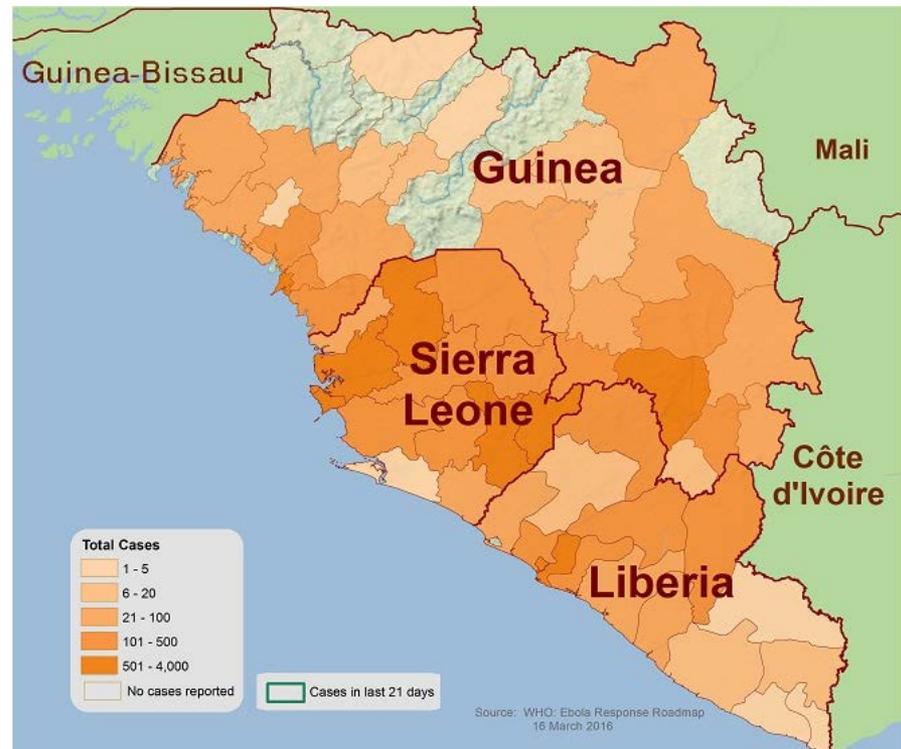
- Provide direct feedback to the Co-PIs/PD, Investigators and staff on identifying current needs
- Establish and modify training plans
- Assist in planning outreach to target populations
- Assess and maintain program curriculum
- Ensure quality control and improvement of the program

Advisory Board Makeup

- How did we decide who to include on the advisory board?
- What disciplines?

Ebola Virus Disease Outbreak 2014

- In 2014 West Africa experienced the largest outbreak of Ebola in history
 - 28,600+ cases
 - 11,325+ deaths



Ebola Virus Disease in the U.S.

September 30, 2014

CDC confirmed the first-travel associated case of Ebola diagnosed in the U.S. (passed on Oct. 8, 2014)

October 23, 2014

A medical aid worker who volunteered in Guinea was hospitalized in NYC with Ebola

July - September, 2014

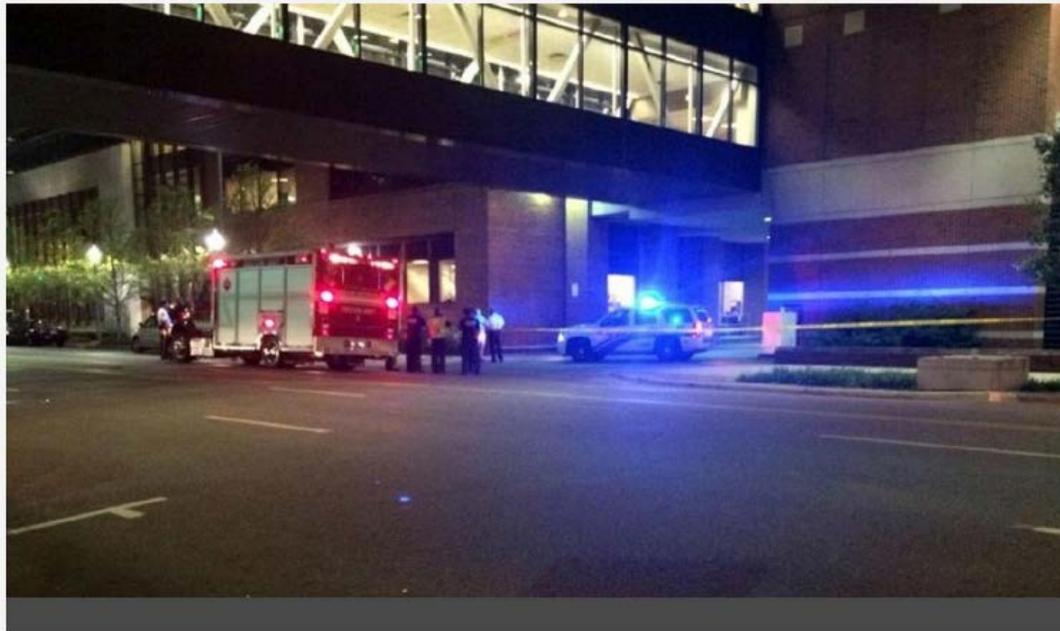
4 Americans who contracted Ebola in West Africa transported back to US for treatment

October 10 & 15, 2014

Two healthcare workers who cared for index patient tested positive for Ebola

Patient taken to UAB Hospital with Ebola-like symptoms; 8 others being monitored

BY | TUESDAY, AUGUST 4TH 2015



VIEW PHOTO GALLERY

3 photos

ADVERTISEMENT

TRENDING



Myster spread at school



Traffic: County of \$3 m



Camel being h pickup Alabarr



Calhou accuere torture

Who were the key players in the response?

- Fire Department
 - Engine
 - EMS Unit
 - Battalion Chief
- Hospital Personnel
- Health Department (Local and State)
 - Public Health Lab

Deep South Biosafety WTP

Advisory Board

- Alabama Department of Public Health
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What did we learn from event?

01 No matter how much you prepare, mistakes will be made

02 Communicate early and with the same message

144

UPDATE: No Ebola found in Birmingham patient, family members, firefighters

5.6k
shares

Multiple Birmingham firefighters are being quarantined tonight after treating a patient with Ebola-like symptoms that was transported to UAB Hospital. (Tamika Moore/tmoore@al.com)

Lessons Learned (cont.)

03 Trust is key – Cross-sector planning and training is imperative

- Long working relations between first receivers & first responders, but not necessarily with other responders.
- Already had drilled patient transfer piece (respectful of knowledge and authority of ED and State EMS Medical Director)

Need for Interprofessional Education and Simulation



What is simulation?

“Simulation is a technique – not a technology– to replace or amplify real experiences with guided experiences that evoke or replicate substantial aspects of the real world in a fully interactive manner.”

Qual. Saf. Health Care, 2004
David Gaba. *Qual. Saf.*

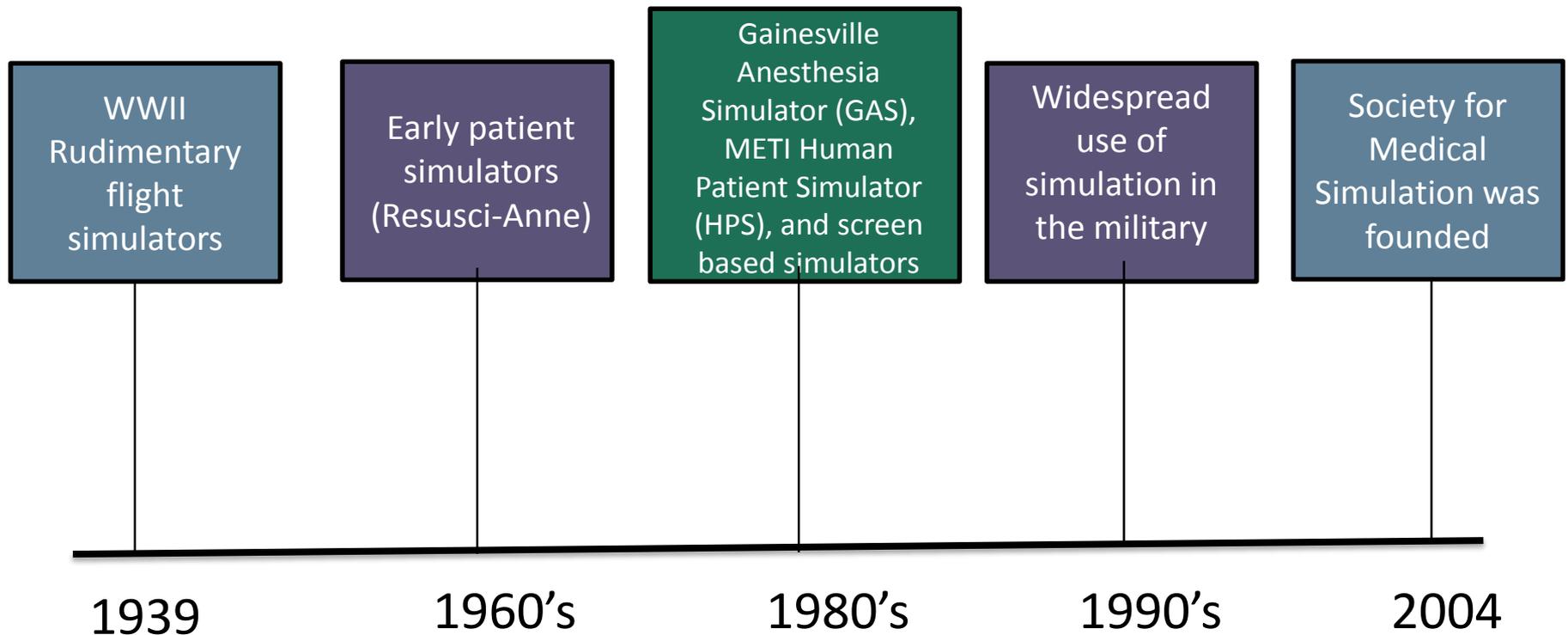


What is simulation?





Brief History of Healthcare Simulation



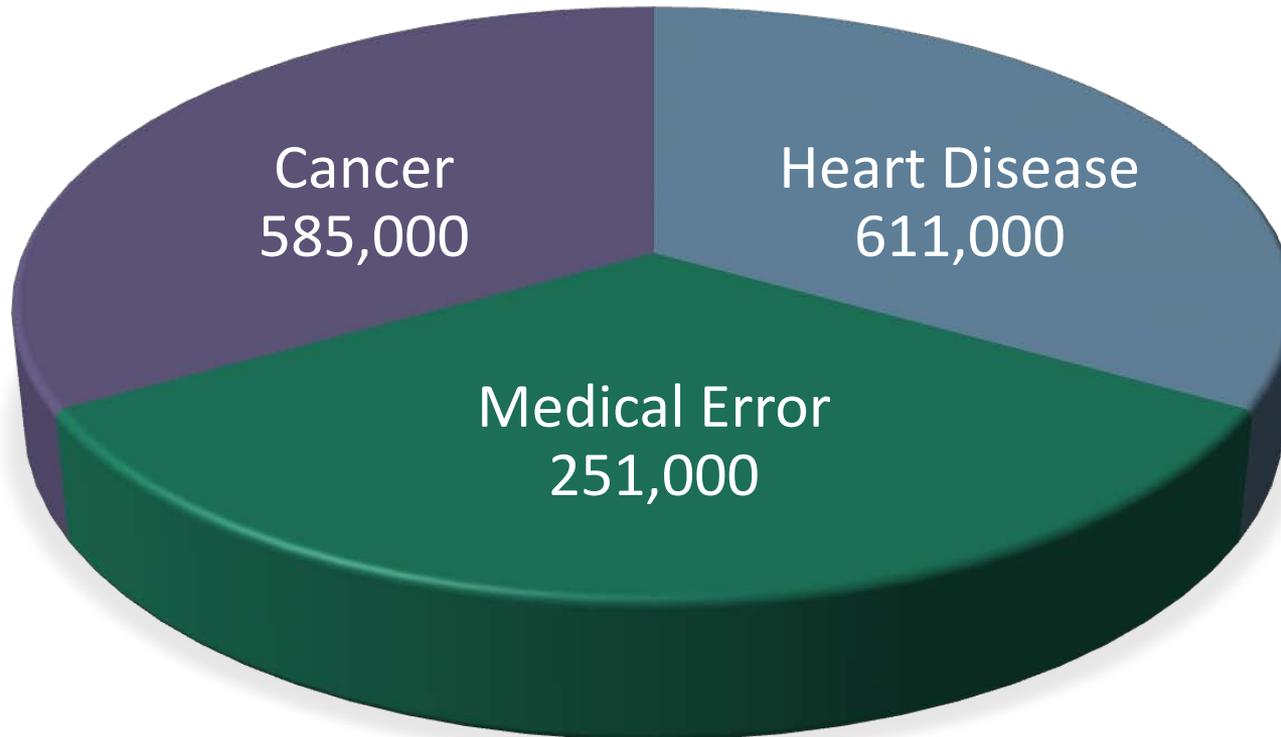
Why simulate?

- ❖ Puts patient and learner safety first
- ❖ Optimizes learning conditions
- ❖ Provides valuable feedback
- ❖ Integrates multiple skills

(Agency for Healthcare Research and Quality, AHRQ Issue Brief: Health Care Simulation To Advance Safety: Responding to Ebola and Other Threats, February 2015.)



IMPLICATIONS FOR PATIENT SAFETY



Simulation: Tool for Patient & Worker Safety

- Practice without risk
- Capture clinical and procedural variation
- Set in a controlled environment

“The use of simulation wherever feasible conveys a critical educational and ethical message to all: patients are to be protected whenever possible and they are not commodities to be used as conveniences of training. – Patients are safe AND it’s a safe learning environment (learners can make mistakes)”

- Amitai Ziv - Director, Israel
Center for Medical Simulation

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InterProfessional Education (IPE)

Defining Our Terms

“Interprofessional education occurs when students/workers from two or more professions learn about, from and with each other to enable effective collaboration and improve outcomes”

InterProfessional Education Collaborative (IPEC)

IPEC Core Competencies for Interprofessional Collaborative Practice



Core competencies for interprofessional collaborative practice. (2016).
Washington, D.C. Interprofessional Education Collaborative.

Interprofessional Education Collaborative

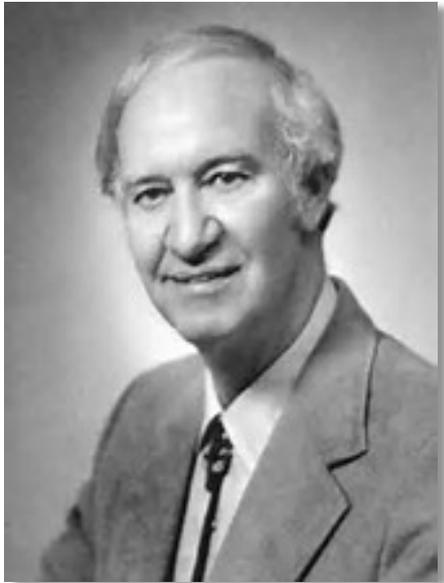
IPEC Core Competency: Role Clarity and Responsibility

“Use the knowledge of one’s own role and those of other professions to appropriately assess and address the healthcare needs of the patients and populations served.”

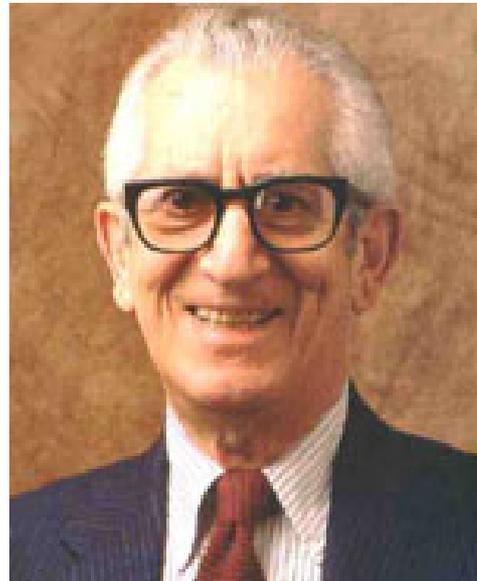
IPEC, 2016



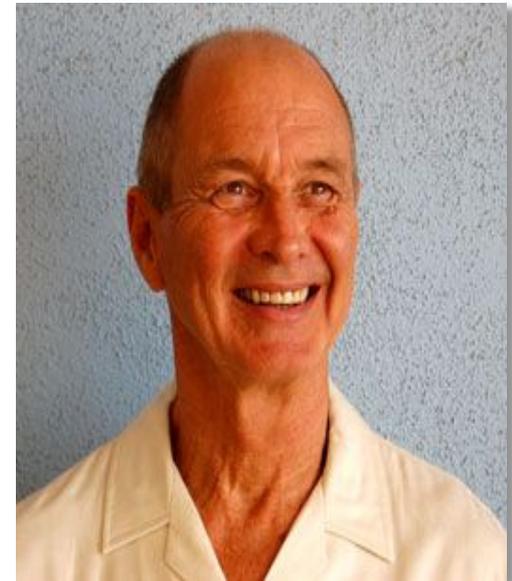
Simulation is supported by adult learning theory



Malcolm
Knowles
1913 –1997

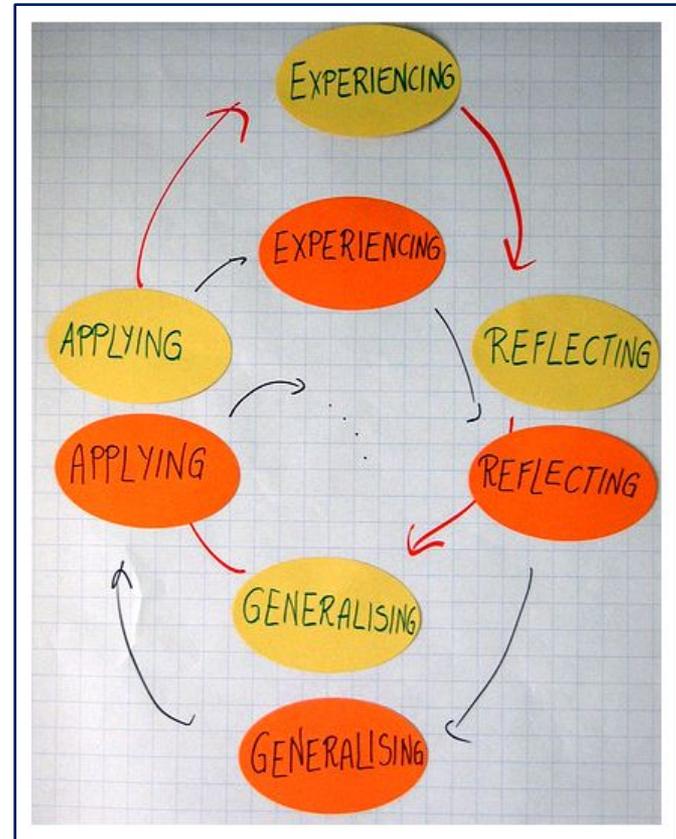
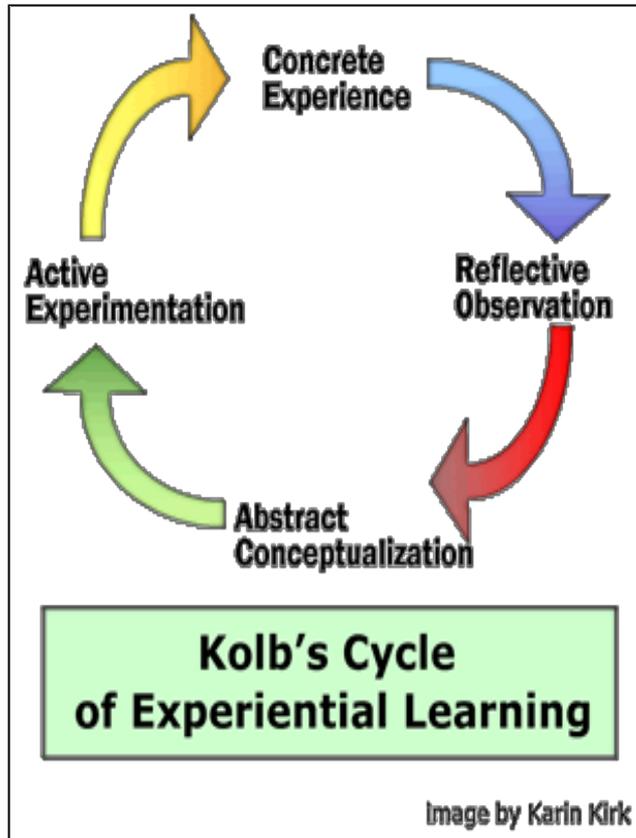


Benjamin
Bloom
1913 –1999



David Kolb
1939 -

Kolb's Experiential Learning



ACKNOWLEDGEMENTS:

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Co-Authors: Marjorie Lee White, MD, MA, MPPM, *Principal Investigator*; Dawn Taylor Peterson, PhD, *Instructional Design Specialist*; Andres Viles, MSN, RN, *Lead Healthcare Instructor*; Elena Kidd, MPH, *Program Manager*



ADDITIONAL INFORMATION

Additional information about our consortium and the trainings offered can be found on our website:

<https://www.soph.uab.edu/dsb>.