



Simulation Lab Calendar of Events

<u>Fall – Junior</u>	<u>Simulation Activity</u>
<ul style="list-style-type: none"> • Week 1– Simulation Immersion Experience <ul style="list-style-type: none"> ○ Students work in groups at specific stations <ul style="list-style-type: none"> ▪ Introduced to the basic principles of preparing the anesthetizing site (OR) for patient care ▪ Introduced to the anesthesia workstation <ul style="list-style-type: none"> • Drager Narkomed GS • Drager Fabius Premium • GE Aisys ▪ Utilize task trainers and airway equipment for skills development <ul style="list-style-type: none"> • Airway Larry • Trucorp Airway trainer • Ingmar RespiTrainer ○ Faculty: <ul style="list-style-type: none"> ▪ Cindy Betron, DNP CRNA CHSE ▪ See Sim Lab General Faculty on page 6 	<ul style="list-style-type: none"> • Immersion week <ul style="list-style-type: none"> ○ SOAPTIM ○ Anesthesia workstation checkout procedure ○ Basic airway equipment and airway management principles <ul style="list-style-type: none"> ▪ Mask ventilation ▪ Oral/nasal airway insertion ▪ Introduction to Laryngeal Mask Airway insertion ▪ Introduction to endotracheal intubation ▪ Glidescope intubation ○ Perioperative patient flow



Simulation Lab Calendar of Events

<u>Fall – Junior</u>	<u>Simulation Activity</u>
<ul style="list-style-type: none"> • Weeks 3 through 12 • September through November • Weekly Friday Simulation activities <ul style="list-style-type: none"> ○ Students are oriented to anesthesia simulation with the use of the Gaumard HAL® adult patient simulator with dynamic lung features for mechanical ventilation, the Laerdal SimMan Essential® human patient simulator & the Laerdal ALS Simulator ○ Students attend Tuesday or Friday skills labs ○ Students have access to multiple anesthesia equipment & devices with simulated medications similar to those seen in clinical practice ○ Students have access to both the Drager Narkomed GS & Drager Fabium Premium plus the state of the art GE Aisys anesthesia workstations ○ Small group faculty-directed practice & review sessions are scheduled prior to competency check-outs ○ Students work with: <ul style="list-style-type: none"> ▪ Cindy Betron, DNP CRNA CHSE ▪ CRNA faculty members ▪ Senior students 	<ul style="list-style-type: none"> • Orientation to simulation and lab setting • SOAPTIM review and check-out • Anesthesia workstation review and check -out <ul style="list-style-type: none"> ○ Setup, maintenance, and trouble-shooting the anesthesia workstation including the Drager Narkomed GS, Drager Fabius Premium and GE Aisys • Sedation management <ul style="list-style-type: none"> ○ Practice with setting up infusion pump devices including the CareFusion® syringe pump and infusion channel plus the Medfusion® syringe pump • General induction sequence for LMA and endotracheal intubation including rapid sequence induction (RSI) <ul style="list-style-type: none"> ○ Introduction sessions ○ Faculty supervised small group practice sessions ○ Competency check-out • Patient positioning <ul style="list-style-type: none"> ○ Didactic and simulation • Preoperative evaluation/assessment with standardized patient <ul style="list-style-type: none"> ○ Anesthesia care plan formulation ○ Obtaining anesthesia consent ○ Effective handoff communication • Perfusion block placement • Case Management strategies



Simulation Lab Calendar of Events

Winter – Junior

- Weeks 16 - 27
- January - March
 - Students attend Friday simulation sessions utilizing the Gaumard HAL® adult patient simulator with dynamic lung features for mechanical ventilation, the Laerdal SimMan Essential® human patient simulator, the Gaumard HAL® 5 year old pediatric simulator, and the Laerdal SimNewB® newborn patient simulator
 - Students work in small group faculty-directed case management sessions for frequently encountered respiratory and hemodynamic events
 - Students utilize various spinal and epidural task trainers
 - Spinal and epidural needle/catheter placement kits are utilized similar to those seen in clinical practice
 - Students work in small group faculty-directed case management sessions for obstetrical related complications
 - Faculty:
 - Cindy Betron, DNP CRNA CHSE
 - CRNA faculty members

Simulation Activity

- Management of respiratory and airway complication scenarios
 - Patient assessment and chart review
 - Anesthesia plan of care development
 - Implementation of plan of care
 - Adjust titration of anesthesia care delivery based on patient's presenting/developing issue
 - Participation in group pre-briefing, debriefing, & problem-based learning discussion
- Hemodynamic management related to anesthesia or surgical complications
 - Patient assessment and chart review
 - Anesthesia plan of care development
 - Implementation of plan of care
 - Adjust titration of anesthesia care delivery based on patient's presenting/developing issue
 - Participation in group pre-briefing, debriefing, & problem-based learning discussion
- Spinal/Epidural placement
 - Combined didactic and simulation
 - Individual practice session time
 - Competency check-out
- Management of an obstetrical patient scenario
 - Patient assessment and chart review
 - Anesthesia plan of care development
 - Implementation of plan of care
 - Adjust titration of anesthesia care delivery based on patient's presenting/developing problem
 - Participate in group pre-briefing, debriefing & problem-based learning discussion



Simulation Lab Calendar of Events

- Neonatal resuscitation for meconium aspiration

Spring – Junior

- Weeks 28 - 40
- April - June
 - Students attend Friday simulation sessions
 - Students utilize the Gaumard HAL® adult patient simulator with dynamic lung features for mechanical ventilation, the Laerdal SimMan Essential® human patient simulator the Gaumard HAL® 5 year old pediatric simulator, & the Laerdal ALS Simulator and address patient safety concepts
 - Students utilize the newborn task trainer and the Laerdal SimNewB® newborn patient simulators
 - Students utilize task trainers related to anesthesia subspecialty
 - Airway Larry
 - Trucorp AirSim Bronchi trainer
 - Ingmar RespiTrainer
 - Symbionix Fiberoptic Trainer
 - A-Scope fiberoptic scopes
 - Glidescope
 - GE Venue 40
 - Central & Arterial Line Task trainers
 - Peripheral nerve block trainers
 - Interscalene
 - Femoral
 - Work with:
 - Cindy Betron, DNP CRNA CHSE
 - CRNA faculty for advanced airway techniques
 - CRNA faculty for invasive line placement
 - St Christopher’s Hospital for Children & Children’s Hospital of Philadelphia (CHOP) CRNA faculty

Simulation Activity

- Management of complex anesthesia complications/problems
 - Patient assessment and chart review
 - Anesthesia plan of care development
 - Implementation of plan of care
 - Adjust titration of anesthesia care delivery based on patient’s presenting/developing problem
 - Participation in group debriefing and problem-based learning discussion
- Advanced airway techniques
 - Video laryngoscopy equipment
 - Fiberoptic scope
 - Other advanced airway techniques and equipment
 - Specialty endotracheal tubes
 - Cricothyrotomy needle placement utilizing pig trachea and task trainers
- Central line insertion including Swan-Ganz catheter placement utilizing ultrasound guidance
 - Cardiac room set-up
- Pediatric ‘Boot Camp’
 - Room setup/equipment and fluid management
 - Pediatric anesthesia scenarios
 - Problem-based learning discussion
 - Advanced pediatric simulations
 - Postoperative bleeding tonsil
 - Local anesthesia toxicity post caudal injection
- Peripheral nerve block placement utilizing Stimplex nerve stimulation and ultrasound guidance techniques



Simulation Lab Calendar of Events

- CRNA faculty for peripheral nerve block placement

Senior Year

- September through June
 - Students attend Wednesday Crisis Resource Management (CRM) simulation sessions
- Students utilize the Gaumard HAL® adult patient simulator with dynamic lung features for mechanical ventilation, the Laerdal SimMan Essential® human patient simulator the Gaumard HAL® 5 year old pediatric simulator, & the Laerdal ALS Simulator
 - Advanced patient safety concepts are addressed
 - Faculty:
 - Cindy Betron, DNP CRNA CHSE
 - CRNA faculty for CRM
- Guest speaker
 - John O'Donnell, CRNA, MSN, DrPH,

Simulation Activity

- Crisis Resource Management lecture
- Crisis Resource Management Scenarios
 - Malignant Hyperthermia
 - Laser endotracheal tube fire
 - Neck dissection/trach
 - ASA Difficult Airway algorithm
 - VAE or pneumothorax
 - OB catastrophe
 - AFE or Trauma
 - Post-partum hemorrhage



Simulation Lab Calendar of Events

SIMULATION LAB GENERAL FACULTY

Cynthia Betron, DNP, CRNA, CHSE, CNE, Simulation Lab Director (*Frank J Tornetta School of Anesthesia*)
Stephen Carr, CRNA, MSN (*Wellspan York Hospital*)
Paul Comuso, CRNA, MSN (*Cooper University Hospital*)
Adam D'Alonzo, CRNA MSN (*Abington Hospital - Jefferson Health*)
Lauren Kraft, CRNA, MSN (*St Luke's Hospital – Bethlehem*)
Michael Kost, DNP, CRNA, CHSE (*Frank J Tornetta School of Anesthesia*)
Kristin Markmann, CRNA MSN (*Penn Presbyterian Medical Center*)
Breianna Rompala, CRNA MSN (*University of Pittsburgh Medical Center – Presbyterian Hospital*)
Jeff Rompala, CRNA MSN (*University of Pittsburgh Medical Center – Presbyterian Hospital*)
Elizabeth Stewart, CRNA MSN (*St Luke's Hospital, Allentown, PA*)
Derek Yohn, CRNA MSN (*Pinnacle Health – Harrisburg, PA*)
Jamie Younger, CRNA MSN (*St Luke's Hospital – Bethlehem*)

Crisis Resource Management/TeamSTEPPS

Cynthia Betron, DNP, CRNA, CHSE, CNE, Simulation Lab Director (*Frank J Tornetta School of Anesthesia*)
Michael Kost, DNP, CRNA, (*Frank J Tornetta School of Anesthesia*)
Kristin Markmann, CRNA MSN (*Penn Presbyterian Medical Center*)
Elizabeth Stewart, CRNA MSN (*St Luke's Hospital, Allentown, PA*)
Kelly Stillwell, CRNA MSN (*Penn Presbyterian Medical Center*)

Central Line Insertion

Dan Graves, CRNA MSN (*St Luke's Hospital, Bethlehem, PA*)
Ray Rivera, MSPAS, PA-C (*St Luke's Hospital, Bethlehem, PA*)
Kelly Stillwell, CRNA MSN (*Penn Presbyterian Medical Center*)

Fiberoptic Bronchoscopy Workshop

Brittany Scalley, CRNA MSN (*Penn Presbyterian Medical Center*)



Simulation Lab Calendar of Events

Peripheral Nerve Block Placement Training Sessions

Jeff Petrillo, CRNA MS (*United Anesthesia Services, Abington Memorial Hospital, Lansdale*)
Dr Scott Zalut (*Einstein Healthcare Network*)

Pediatric Faculty Team (Pediatric Boot Camp)

Dawn Bent, DNP CRNA (*Clinical Coordinator, St Christopher's Hospital for Children*)
Robert Grasso, CRNA MSN (*St Christopher's Hospital for Children*)
Don Rank, MSN CRNA (*Chief CRNA, St Christopher's Hospital for Children*)
Rob Simon, CRNA MS (*Children's Hospital of Philadelphia*)

Airway Workshop Team

Michael Hartman, DNP CRNA (*Lehigh Valley Healthcare Network*)
Michael Sweeney, CRNP, CCRN, CFRN, CNRN, CPEN, CEN, PHRN (*Chestnut Hill Hospital*)
Jim Pisaturo, EMT-P (*University of Pennsylvania*)
Dr. Kenneth Butler, DO, FACEP, FAAEM (*Associate Professor University of Maryland*)

Simulation Lab Consultant

John O'Donnell, CRNA, MSN, DrPH (*University of Pittsburgh School of Nursing*)
Professor and Chair, Department of Anesthesia
Director, Nurse Anesthesia Program
Associate Director, The Peter M. Winter Institute for Simulation, Education, and Research (Wiser)