

図 23 手術室のシミュレーションルーム



図 **24** 妊婦・新生児のシミュレーション ルーム

## 医学教育コース

コースは全91コース、開講されている。コース名を表4に示す(表 2)。 このコースはそれぞれ診療科目別、学生別、看護別、生涯教育という4つの分類に分かれている。また学生の中でも2・3・4学年に分かれているなど、細かい分類がある。またこの地域はヘリコプターによる救急搬送が盛んに行われておりAir Medical Crew Trainingも開講されていることも特徴の一つである。

## 表 2 WISER でのシミュレーションコース詳細

## no. Course

- 1 Air Medical Crew Training
- 2 2nd Year Medical Student Anesthesiology Basic Monitoring
- 2nd Year Medical Student Clinical Procedures Course: Adult Basic Airway
  Management
- 4 3rd Year Medical Student Anesthesia EKG Recognition
- 5 3rd Year Medical Student Critical Care Medicine
- 6 3rd Year Medical Student Day 1: Airway Management During Intravenous Induction of General Endotracheal Anesthesia
- 3rd Year Medical Student Day 2: Intravenous Induction of General Endotracheal Anesthesia
- 8 3rd Year Medical Student Day 3: Anesthesia for Emergency Exploratory Laparotomy
- 9 3rd Year Medical Student Day 4: Perioperative Crises
- 10 4th Year Medical Student Anesthesiology Advanced Airway Management

- 11 4th Year Medical Student Anesthesiology TURP
- 12 4th Year Medical Student Anesthesiology for Neurosurgery
- 13 4th Year Medical Student Anesthesiology for Obstetrics
- 14 4th Year Medical Student Critical Care Medicine
- 15 4th Year Medical Student Emergency Medicine Clerkship
- 16 Advanced Cardiac Life Support (CME)
- 17 Advanced Crisis Leadership for Critical Care Medicine Fellows
- 18 Airway Management for Pediatric Clinicians
- Anesthesia Crisis Leadership Training Resident & Student Registered Nurse
  Anesthetists
- 20 Anesthesia Faculty Difficult Airway Management Fiberoptic Bronchoscopy
- 21 Anesthesia Residents Fiberoptic Bronchoscopy
- 22 CA-1 Introduction to Anesthesiology Simulation
- 23 Central Venous Cannulation Training
- Creating and Implementing a Simulation Learning System and Custom SimMan Programming and Advanced Techniques
- 25 Crisis Team Training Mckeesport
- 26 Crisis Team Training Oakland
- Critical Care Medicine Fellows Difficult Airway Management Fiberoptic
  Bronchoscopy
- 28 Critical Care Medicine Fellows Orientation
- 29 Design, development and operation of medical simulation centers
- Difficult Airway Management Anesthesiology Certified Registered Nurse
  Anesthetists
- 31 Difficult Airway Management Anesthesiology Faculty
- 32 Difficult Airway Management Anesthesiology Residents
- 33 Difficult Airway Management Anesthesiology Residents Northwest
- 34 Difficult Airway Management Critical Care Medicine Fellows
- 35 Difficult Airway Management Emergency Medicine Faculty
- 36 Difficult Airway Management Emergency Medicine Residents
- 37 Difficult Airway Management Training Program CME
- 38 Difficult Airway Management for Pre-Hospital Care Providers
- 39 Emergency Medicine 1114: Medication Administration
- 40 Fiberoptic Bronchoscopy Critical Care Medicine Fellows
- 41 Fiberoptic Bronchoscopy Training Program CME
- 42 Inhalation Anthrax
- 43 Introduction to Pediatric Critical Care Medicine
- 44 MISC Training Anesthesiology
- 45 MISC Training Critical Care Medicine

- 46 MISC Training Emergency Medicine
- 47 MISC Training Medical Students
- 48 MISC Training Pediatric
- 49 MISC Training Respiratory Therapy
- 50 MISC Training SDY Hillman
- 51 MISC Training School of Nursing
- 52 MISC Training WISER
- 53 Medical Simulation Course Director Training
- 54 Medical Simulation Course Facilitator Training
- 55 Mock Code
- 56 Moderate Sedation for Non-Anesthesia Care Givers Adult
- 57 Moderate Sedation for Non-Anesthesia Care Givers Pediatrics
- 58 NUR 0051: Introduction to Nursing Practice
- 59 NUR 1050: Nursing Care of Mothers, Newborns, and Families
- 60 NUR 1052 Nursing Care of Children and Families
- NUR 1120 Advanced Nursing Management of the Adult with Acute/Complex Health 61
- Problems
- 62 NUR 1121 Nursing Advanced Clinical Problem Solving
- NUR 1233 Advanced Clinical Problem Solving/Transition into Professional
  - Nursing Practice
- 64 NUR 1710 Nursing Advanced Cardio-Pulmonary
- 65 NURSAN SRNA Physical Assessment
- 66 NURSAN 2740 SRNA Double Lumen Tube / Jet Ventilation
- 67 NURSAN 2740 SRNA Introduction to Anesthesia Crisis Resource Management
- 68 NURSAN 2740 SRNA Invasive Monitoring/Central Line Placement
- 69 NURSAN 2750: Course Content Integration and Simulation
- 70 NURSAN 2750: Difficult Airway Workshop
- 71 NURSAN 2750: Trauma Rounds
- 72 NURSAN 2760 Anesthesia Crisis Leadership Training Nursing Third Year
- 73 Nursing Fast Track Back
- 74 Organized Structured Clinical Exam: Ambulatory Internal Medicine Clerkship
- 75 Organized Structured Clinical Exam: Clinical Competency Assessment
- 76 Organized Structured Clinical Exam: Clinical Skills Assessment
- Organized Structured Clinical Exam: Clinical Skills Assessment: Physical Diagnosis II
- 78 Organized Structured Clinical Exam: Combined Ambulatory Medical Clerkship
- 79 Pediatric Advanced Life Support Simulation Research
- 80 Pediatric Resident Organized Structured Clinical Exam
- 81 Pharm 5221: Introduction to Critical Care

- 82 RaPiD-T: WMD Training for First Responders
- 83 Research Difficult Airway Management Accuracy
- 84 Research Difficult Airway Management Reproducibility of Scores
- 85 Research Difficult Airway Management Retention
- 86 Respiratory Therapy Mini-BAL
- 87 Second Look Weekend Course for Medical Student Applicants
- 88 Simulation Training
- 89 Surgical Advanced Crisis Leadership Training
- 90 Thoracic Anesthesia Simulation for Residents
- 91 Validation of the optimal single-provider facemask ventilation

## コース実施風景

この写真が実際にこの施設を使用しているところ見学したものである。この日は中心静脈路確保のコースであった。たいていがインストラクター1人に対して受講生は2・3名で構成されている。WISERのコースの特徴の1つとして挙げられるのが、インストラクターはどの部屋からでもPCに自分のIDを入力すればそのコースのテキストをウェブ上で閲覧することができるため、実際の手技に入る前の導入・手技説明から穿刺する静脈または頸部の解剖、さらには穿刺方法の動画を参考資料にコースを進めることができる。

これにより最も効果的な Watch Then Practice を実行することができる。この日は受講生が 2 つのグループに分かれて、中心静脈路確保を学んでいたが、1 つのブースでは実際に人形に穿刺する手技を学ぶブース、もう一つのブースはエコーを使用し穿刺する静脈を見つけ、エコー下で穿刺する手技を学ぶブースに分かれて行っていた。





図 25 中心静脈路確保のトレーニング風景 図 25 使用するシミュレーションマネキン