

## Breathing

- Simulated spontaneous breathing
- Observable chest rise
- Variable respiratory rates
- Multiple upper airway sounds synchronized with breathing
- Detect mechanical ventilations (including no ventilations)
- Bag Valve Mask capable
- Normal and abnormal breath sounds
- Oxygen saturation and waveform (Optional Patient Monitor)
- Breathing complications
  - Left and right lungs can be either closed or opened to allow ventilations
    - Bilateral chest movement with spontaneous breathing
    - Unilateral chest rise with right mainstem intubation
    - Unilateral and bilateral breath sounds
  - Left and right lungs can be either closed or opened to allow ventilations

## Airway

The SimJunior airway is anatomically modeled as far as the trachea.

- Realistic airway with landmarks
- Oral and nasal intubation
- LMA or ET insertion
- Tongue oedema

NG tube

- Cricoid cartilage
- Head tilt and jaw thrust (no sensor)

## Cardiac

- Defibrillation and cardioversion
- Pacing
- Extensive ECG library
- Multiple heart sounds synchronized with ECG
- ECG rhythm monitoring (3 leads)
- 12 lead ECG display (Optional Patient Monitor)

## Chest Compressions

- Compliant with 2015 AHA and ERC Guidelines
- CPR compressions generate palpable carotid pulses, blood pressure waveform, and ECG artifacts
- Detection and logging of a series of compressions in the data log

## Vascular Access

- IV access (right arm and hand)
- Intraosseous access (right tibia)

## Circulation

- Blood pressure measured manually by auscultation of Korotkoff sounds
- Bilateral carotid and unilateral brachial and radial (left side) pulses synchronized with ECG

- Pulse strength variable with BP
- Pulse palpation is detected and logged

## Sounds

- Heart
- Lung
- Bowel
- Patient voice
  - Pre-recorded sounds
  - Wireless microphone

## Other Features

- Interchangeable pupils
  - Normal, Dilated, and Constricted
- Convulsions

## Session Viewer (PC operation)

- Web-camera recording
- Review event log together with synchronized recording of the patient monitor and in-room video

## Patient Monitor (Optional)

- Highly configurable
- Simulates several parameters including:
  - Heart rate, ECG, SPO2, NIBP, ETCO2

- 12 lead ECG display

#### Educational Services

- Introduction to SimJunior
- Scenario Programming
- Customized Educational Services

#### Technical Services

- Professional Installation
- Preventive Maintenance
- Extended Warranty

#### Additional Accessories

- Paediatric Trauma Modules