

# FEATURES THAT ARE AVAILABLE WITH “STAN” and “Lil Joe”

## I Airway:

- Esophageal intubation results in gastric distension and the absence of: breath sounds, lung excursion, and carbon dioxide output.
- Right or left mainstem intubation results in: unilateral breath sounds and lung excursion.

## II Breathing

- Stan and Lil Joe physically consumes oxygen, and produces carbon dioxide
  - (also uptake or excretion of nitrous oxide, sevoflurane, isoflurane, enflurane, and halothane.)
  - Appropriate and dose dependent response to inhaled anesthetics
- Respiratory responses to sympathetic and parasympathic activities are modeled.
- ‘Stan’ breathes with self regulated rate and tidal volume to maintain a target carbon dioxide partial pressure typically 40 mm Hg
- Pulse oximetry monitoring---responds in kind to nasal cannula, simple O2 mask, NRB mask and other adjuncts
- End tidal CO2 monitoring via capnography is possible.
- Airway resistance, lung compliance and chest wall compliance are modeled with independent control of the left and right lung. Changes in airway resistance in these areas show appropriate wave form on a capnograph.
- Three modes of ventilation, (spontaneous, assisted, and mechanical) can be superimposed on one another---for example ‘fighting the ventilator
- Ventilator compatible---and capable of triggering a ventilator in SIMV and Assist modes, (ventilator weaning can be realistically rehearsed)
- Built in continuous monitoring for: tidal volume and ABG—ph, PO2, & PCO2 (PO2 & PCO2 are measured at venous, arterial and alveolar locations.)

### III Circulation

- Invasive hemodynamic monitoring with the following capability:
  - Mannequin has right internal jugular PA catheter that can be:
    - Advanced with appropriate waveforms
    - Wedged (by inflation)
    - Used for thermodilution cardiac output.
  - Arterial blood pressure
  - Left ventricular pressure
  - Central venous pressure
  - Right arterial pressure
  - Right ventricular pressure
  - Pulmonary artery pressure

### IV Neuro:

- Eyes constrict and dilate to light and can be independently controlled.
- Blink rate can be controlled.
- In addition, left and right pupil size can be independently varied as needed.
- Eyes will close automatically when cerebral perfusion fails
- Right arm will accommodate a peripheral nerve stimulator. Appropriate thumb response to type of test and level of medication still present

### V Other Features

- Logs: the software supports event, physiological and drug logs allowing for review of all aspects both during and post training.
- Temperature: both body and blood temperature are monitored.
- Weight: Patient can be weight adjusted to represent different body masses.
- [\[To see a list of all of the various parameters that are adjustable click here. \]](#)