



Laerdal

helping save lives



Deliver highly realistic neonatology training

SIMCharacters Paul

Every year, 15 million babies are born preterm. That equates to 1 in 10 babies that require high-quality care in a uniquely complex and time-sensitive process. Improve their outcomes with deeply immersive training driven by a representative, premature baby simulator combining lifelike anatomy with state-of-the-art technology.

SIMCharacters Paul is a true-to-life, representative 27-week premature baby simulator developed by a team of medical and design experts. Paul combines anatomically correct 3D-printed airways based on real-life preterm MRI scans, physiological and pathological breathing patterns, realistic internal structures, and lifelike facial and skin features.

SIMCharacters Paul

Paul

- Preterm gestational week 27+3
 - Weight: 1.1 kg
 - Length: 35 cm
 - Head circumference: 26 cm
 - Highly realistic external anatomy
 - Real hair
 - Realistic to the touch
- Skin color changes to simulate cyanosis (blue) and hyperoxia (red)
- Realistic spontaneous breathing and respiratory pathologies
- Completely wireless operation
- 3 hours of mobile battery use
- Recharged via inductive charging pad
- Battery indicator under the skin

Airway

- Highly realistic upper airway
- Oral and nasal intubation
- Ideal for training endotracheal intubation, LISA (MIST) and INSURE

Normal Respiration

- Physiological lung with realistic values under machine assisted ventilation
- Spontaneous breathing with respiratory rate variable between 0 and 100bpm

Pathological Breathing

- Infinitely variable lung compliance
- Inverted breathing
- Subcostal retractions
- Pathological respiration noises (grunting)
- Pneumothorax

Circulation

- Noiseless palpable pulse on all four extremities and on the umbilical cord
- Chest compressions
- Insertion of peripheral catheters in all four extremities (exchangeable)
- Insertion of umbilical venous catheter (exchangeable umbilical cord)
- New and optimized connector for umbilical cord

Sensors

- Sensor for head position
- Detection of the tube in the trachea or esophagus
- Detection of the tube depth
- Automatic collapse of the left lung if tube is inserted too deeply into the right main bronchus
- Effectiveness of chest compressions
- Sensor for pulse palpation
- Detection of umbilical cord transection
- Detection of the umbilical venous catheter and the insertion depth

Audible Effects

- Crying
- Amniotic fluid
- Grunting

Stethoscope

- Optimized position-dependent auscultation of respiratory, heart and stomach sounds via bluetooth stethoscope

Trainer Laptop

- Inputs via touchscreen, or keyboard and mouse
- Surface Laptop Studio with foldable screen for in-situ training
- Manikin operated via Wi-Fi
- 3D animation of the manikin on the graphical user interface
- Real-time display of all physiological and pathological processes and therapeutic interventions (e.g. mask ventilation and intubation)
- Automatic transfer of events and manikin status to the debriefing interface
- Ability to add annotations via the debriefing interface

Present Functions

- User configuration and fine-tuning of limits for head position, optimal tidal volume, chest movement and strength of palpable pulses

Feedback Monitor

- Direct feedback for your trainees during orientation phase on head position, PEEP, PIP tidal volumes, ventilation rate, depth and position of endotracheal tube, and efficiency of chest compressions

Preconfigured Patient Monitors

- Easily switch between monitor types via the trainer monitor
- Dräger, Philips, Nellcor, and GE
- User-defined configuration and use corresponding to the interface of the original monitor
- Touch-screen function
- Various monitor sizes
- Pre and post ductal saturation
- Endtidal CO₂ curve
- Motion artifacts in all curves

Programmable Scenarios

- Preprogrammed symptoms (RDS, BPD, NEC, Bowel Distension, Apnea)
- Intuitive programming of scenarios via quick save function
- Easy access to factory settings and scenario progressions

Transport

- Highly mobile system, designed especially for in-situ training

Operation

Laerdal Medical and SIMCharacters' partnership marks a milestone in advancing healthcare simulation and a shared commitment to revolutionizing medical training. Starting in 2024, Laerdal will serve as the sole global distributor for SIMCharacters' products to better serve the healthcare community by delivering impactful simulation solutions.



Educational Services

SIMCharacters Paul includes a two-hour remote introduction and product setup. An educator will guide staff through operations and general care and maintenance.

Technical Services

Extend your SIMCharacters standard warranty for all parts and labor. A two-year and five-year program is available that includes general refurbishments, checks, maintenance work, and repairs.

Ordering Information

PHE02 SIMCharacters Paul

Includes: Paul Preterm Simulator, Bluetooth Stethoscope, Virtual Orientation, SIMCharacters Paul Software License, and 1-year manufacturer's warranty.

PHE02.BDL.01 SIMCharacters Paul Localisation Kit (US)

PHE02.BDL.03 SIMCharacters Paul Localisation Kit (UK)

PHE02.BDL.33 SIMCharacters Paul Localisation Kit (EU)

PHE02.BDL.15 SIMCharacters Paul Localisation Kit (AU)

Includes: Power plugs, foam inserts, and router for SIMCharacters Paul

Computer Options

ACC.GEN.TLP.33 SIMCharacters Trainer Laptop

ACC.GEN.TLP.10 SIMCharacters Trainer Laptop (DE)

ACC.GEN.PMT SIMCharacters Patient Monitor

Warranty and Maintenance Programs

Paul offers a two-year and five-year program. Both include an extended warranty and one or two general refurbishments of the simulator during the contractual term. The refurbishment consists of a complete check of all functions and the refurbishment and preventative exchange of parts subject to wear and tear. If necessary, a replacement will be provided for the period that your system is being refurbished or repaired by SIMCharacters.

For more information, visit [Laerdal.com](https://www.laerdal.com)

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