



## EXECUTIVE SUMMARY

**Pursuant to Broward College Policy 6Hx2-1.14 and Procedure A6Hx2-1.14, Broward College exercised the authority delegated by the Board to issue a standard agreement (purchase order) with INGMAR MEDICAL LTD. to purchase RespiPro® Educational Package for the Respiratory Care program (ITS-2024-179-OA - RESPIRATORY SIMULATION SOLUTION) by utilizing a bid waiver exception (single/source source). Fiscal Impact: Estimated \$75,223.00**

**Presenter(s):** Jamonica Rolle, College Provost and Senior Vice President

**What is the purpose of this contract and why is it needed?** The Respiratory Care program is purchasing from for INGMAR MEDICAL, LTD. for our students. INGMAR MEDICAL, LTD. has created an all-in-one respiratory simulation solution that enables intuitive, interactive, and highly effective training. This package combines the ASL 5000® Breathing Simulator, the RespiSim® Software, the RespiPro® Manikin, and the RespiPro® Mobile Cart. All the components, including a 12” Windows Tablet and 24” Learner Display, are contained on a mobile cart for a compact, highly efficient ventilator management training workstation. With these components, learners are immersed in a true-to-life environment where they practice information gathering and decision making by utilizing the monitored data and waveforms on your real ventilator as well as other relevant assessments including chest rise, lung, heart and bowel sounds, x-rays, ABG values, and vitals. Additionally, training with a respiratory therapist as well as RespiSim® Scenarios are included to help instructors hit the ground running with their simulations.

**What procurement process or bid waiver was used and why?** Bid waiver exception per FIDOE SBE Rule 6A-14.0734(2)(e) and College Procedure A6Hx2-6.34: Services or commodities available only from a single or sole source. The College does not have to compete for services or commodities available only from a sole source. In this case, the value of the exemption is greater than the competitive solicitation threshold (Category Three, F.S. 287.017), so the College electronically posted Intent to Sole Source ITS-2024-179-OA - RESPIRATORY SIMULATION SOLUTION with a description of the commodities or contractual services sought for a period of at least 15 business days.

**Is this a budgeted expenditure from the budget established at the last June Board of Trustees meeting?**  
Yes.

**What fund, cost center and line item(s) were used?** FD100, CC0087, GLC.

**Has Broward College used this vendor before for these products or services?** No.

**Was the product or service acceptable in the past?** Not applicable.

**Was there a return on investment anticipated when entering this contract?** Yes, Respiratory Care students will use this type of equipment out in the field on patients.

**Was that return on investment not met, met, or exceeded and how?** The return on investment is expected to be met by allowing our students to train with the same equipment used by pre-hospital providers in the field, Respiratory Care students are better prepared for real world experience once they are working in the hospital setting.
















APPROVAL PATH: 12256 Ingmar Medical Ltd - RespiPro® Educational Package

 **Workflow**

 Synchronize Routing

 Edit View

 Add Work Item

Stage	Reviewer	Description	Due Date	Status	
1	Nora Powell	Dean Review		✔ Completed	
2	Jamonica Rolle	Vice Provost Review		✔ Completed	
3	Alina Gonzalez	Review		✔ Completed	
4	Raj Mettai	Review		✔ Completed	
5	Jeffrey Nasse	Provost and SVP of Academic Affair		✔ Completed	
6	Natalia Triana-Aristizabal	Contracts Coordinator		✔ Completed	
7	Zaida Riollano	Procurement Approval		✔ Completed	
8	Christine Sims	Budget Departmental Review		✔ Completed	
9	Rabia Azhar	CFO Review		✔ Completed	
10	<b>Legal Services Review Group</b>	Review and Approval for Form and		✔ Completed	
11	<b>Electronic Signature(s)</b>	Signatures obtained via DocuSig 		✔ Completed	
12	Natalia Triana-Aristizabal	Contracts Coordinator		✔ Completed	
13	Board Clerk	Agenda Preparation		⌚ Pending	
14	District Board of Trustees	Meeting	12/10/24 11:00 AM	⌚ Pending	



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## Quotation: RespiPro® Educational Package

With RespiPro®, IngMar Medical has created an all-in-one respiratory simulation solution that enables intuitive, interactive, and highly effective training. This package combines the ASL 5000® Breathing Simulator, the RespiSim® Software, the RespiPro® Manikin, and the RespiPro® Mobile Cart. All the components, including a 12" Windows Tablet and 24" Learner Display, are contained on a mobile cart for a compact, highly efficient ventilator management training workstation.

With these components, learners are immersed in a true-to-life environment where they practice information gathering and decision making by utilizing the monitored data and waveforms on your real ventilator as well as other relevant assessments including chest rise, lung, heart and bowel sounds, x-rays, ABG values, and vitals.

Additionally, training with a respiratory therapist as well as RespiSim® Scenarios are included to help instructors hit the ground running with their simulations.

The Components of the RespiPro® Educational Package (part number 31 30 000) includes:

- The Lungs: ASL 5000® Breathing Simulator
- RespiSim® Software
- RespiSim® Scenarios
- 12" Windows Tablet
- 24" Learners Display
- RespiSim® Manikin
- RespiScope® Advance Auscultation
- RespiPro® Mobile Cart
- Technical Set up call
- Virtual Training
- After-sale Account Management and Support

Full descriptions of each component as well as optional items are contained below.

### **The Lungs: ASL 5000® Breathing Simulator**

A high-fidelity, digitally controlled respiratory simulator that allows you to train for the highest level of patient care, with any ICU ventilator and any mode of ventilation.

- Ventilator-grade spontaneous breathing means the ventilator cannot tell the difference between the breaths produced by the ASL 5000® and those of a real patient.
- Simulate any respiratory patient scenario using the widest range of resistance, compliance and spontaneous breathing parameters of any simulator including disease states and deteriorating/improving patient states.
- Build your own patient or run one of 80+ pre-configured patient models (apnea, chronic bronchitis, emphysema, neonatal obstruction, neonatal chronic lung disease, adult severe asthma, pediatric asthma, and more!)
- Hold PEEP at any clinically relevant level, even > 20 cmH<sub>2</sub>O.
- Seamlessly change any lung parameter during the scenario remotely and see adjustments to the patient condition reflected immediately.
- Advanced patient modeling including inspiratory vs. expiratory resistance, forced exhalation, and two compartment lung models.
- Reproducible Patients ensure consistent instruction and skills assessment.

### **RespiSim® Software**

The NEW RespiSim® Software enhances the use of the ASL 5000® Breathing Simulator as a ventilator management teaching system. Create and control simulations with our brand new intuitive, user-friendly software interface. Features include:

- Home Dashboard for easy and comprehensive control over all aspects of the simulation
- Robust scenario building environment with unlimited patient conditions and unrestricted scenarios
- Rich debriefing environment including recordings of entire sessions with waveforms and event markers.
- Learner Display to show the Patient Monitor application including vitals, lab results, x-rays and ABG values.
- Purchase includes 1 software license, able to connect to the ASL 5000® from two devices.
- Software Updates i.e., minor enhancements, additions, and substitutions to Software, including corrections and bug fixes are provided to licensee at no additional fee, if available

### **RespiSim® Scenarios**

Developed in collaboration with leading educators, RespiSim® Scenarios save instructors time by providing a comprehensive, multi-media package of materials that describes and demonstrates a concept or scenario within the subject of mechanical ventilation. [View RespiSim® Scenarios here.](#)

### **12" Windows Tablet**

Dedicated Control Module that allows instructors to stay in control of the simulation, amplify effects, throw learners a curveball, or get the simulation back on track to ensure that learning goals are met.

### **24" Learner Display**

Provide learners with a true-to-life patient monitor application including assessments during the simulation. Includes a library of EKG and CO2 waveforms, heart rate, blood pressure, respiratory rate, oxygen saturation, end-tidal CO2, chest x-rays, lab results, and heart, lung, stomach, and bowel sounds.

### **Minimum PC System Requirements are as follows:**

- Operating System: Microsoft Windows 10 64-bit
- Memory: 4 GB for RAM Required, 8 GB RAM Recommended
- File System: NTFS or ReFS (other file systems, such as FAT32, are unsupported)
- Disk Space: Minimum of 10 BG
- Processor Speed: Clock speed of 2 GHz or more; 1.4 GHz minimum
- Processor Cores: 2 Cores (Virtual or Physical)
- Processor Type: 64-bit x64-compatible AMD or Intel CPU only
- i5 processor

*\*RespiSim® Software may not work if downloaded onto an IT-managed device. Admin permissions, restrictions, firewall settings can all cause failure. Please speak with your IngMar representative if you have any questions.*

### **RespiPro® Manikin and Interface Box**

Train the full range of airway management and CPR skills with an anatomically correct airway, rib cage, "real feel" skin covering, and realistic unilateral and bilateral chest rise. Replaceable tissue sets allow each learner a life-like and unique experience for training:

- Oral and Nasal Intubation
- Chest tube insertion
- Needle decompression of automated tension pneumothorax
- Needle and surgical cricothyrotomy
- Percutaneous tracheotomy
- Identification of tracheal deviation and jugular vein distention

- Bag-mask ventilation
- Inflatable tongue for simulation of difficult airway & breakaway teeth
- Includes hard sided transport case

*The Interface Box is an accessory that is required for the use of the RespiPro® Manikin. The Interface Box is responsible for driving the manikin's chest rise as well as the inflation and deflation of both the tension pneumothorax pillows and tongue edema.*

### **RespiScope® Advanced Auscultation**

Enables realistic practice and mastery of advanced auscultation skills critical for diagnosis. Lung, heart, stomach, and bowel sounds are provided. The learner must place the dedicated WiFi stethoscope in the correct anatomical location to trigger the sound from a scenario-based playlist.

### **RespiPro® Mobile Cart**

Looks and feels like a real ICU bed including mattress and collapsible bed rails. A highly efficient and organized workstation for all components of the RespiPro® for in-situ simulation training, wherever the learners are located. This enables on-site training or the rehearsal of critical patient ventilation using real patient data right in the treatment unit.

### **Technical Setup Call**

Speak with a Service Technician to ensure your equipment is set up and working properly upon receiving it.

### **Virtual Training**

The virtual trainings are three 2-hour sessions, as described below, with a total of 6 hours of CRCE credit earned through the AARC upon completion of all three sessions. Each session is held remotely via a web conferencing platform and may include up to two other organizations.

1. **Basic Software Use – (2 Hours)**- The RespiSim® Software has been completely redesigned by educators for educators. A Clinical Educator will guide learners through the methodology and navigation of the RespiSim® Software basics, including the building and saving of lung models.
2. **Scenario Building Part 1 – (2 Hours)**-A Clinical Educator will guide learners through the methodology and navigation of the RespiSim® Software Scenario Map and Worksheet sections, loading and running existing scenarios, as well as building your own.

- 3. Scenario Building Part 2 – (2 Hours)-** A Clinical Educator will guide learners through the advanced features of scenario building to finely tune customized scenarios to enhance realism. The debriefing section of the software is also covered to help educators analyze learners' performance.

### **After-Sale Account Management and Support**

As a valued (RespiSim® System/ ASL 5000®) customer, you will be supported by a dedicated Account Specialist. Their mission is to empower you to meet your unique simulation goals. As your main point of contact, they will communicate and coordinate your order confirmation, shipping/ logistics, remote installation and any training/ consulting services. After you're up and running, your Account Specialist will offer scheduled touchbases to revisit your goals and identify any roadblocks or challenges.

## **SUGGESTED OPTIONS (not included in the bundled RespiPro® package)**

### **RespiPro® Consumables Replacement Package**

- Includes overlay neck skin attachments (pack of 5).
- Chest drain insert set.
- Needle decompression inserts (pack of 2).

### **Uninterruptible Power Supply**

Tether-less power for up to an hour! Support transport scenarios with the tether-less mobile cart capability.

### **Upgrade to Customer-Site Training**

Upgrade from included Virtual Training replaced by customer-site training. Upgrade consists of two consecutive days and a total of 9 hours of CRCE credit is earned through the AARC. The RespiSim® Software has been completely redesigned by educators for educators. A Clinical Educator will guide learners through the methodology and navigation of the RespiSim® Software including lung model design, scenario development and execution, debriefing and more...

### **Remote Clinical Consultation**

IngMar Medical provides consultation services customized to your individual needs for respiratory care simulation. Consult with a product specialist so that we can help you accomplish your goals.

### **2-Year Service Plan for RespiPro®**



Once within this period, at a time of customer’s choice, the following services will be performed to the ASL 5000®: inspection of the ASL 5000®, calibration with data, replacement of piston seals and lubrication of moving parts. Does not include cost of shipping.

**1-Year Extended Warranty for RespiPro®**

1-year extension of manufacturer’s warranty. Covers repairs due to manufacturer’s defects or workmanship. Does not cover damages resulting from improper use, negligence, disassembly, unauthorized service, and unauthorized modification. Computer/monitors are excluded from the warranty. All other hardware is covered. Initial purchase only. Does not include calibration. Initial purchase only, up to 8. All newly purchased hardware, excluding computers/monitors, is covered by our standard 1-year manufacturer’s warranty, at no additional cost.

When placing your order, please indicate the interval (12 months, 24 months, other) you would like to have your ASL 5000 re-calibrated. Orders without this information will have the Calibration Certificate and Sticker show a recommended 24-month recalibration date.

IngMar Medical’s guard band to measured values equals 70 percent of a tolerance (standard tolerance minus standard measurement uncertainty) range. Unless requested by the customer or legal entity, outgoing data from the calibration lab will always fall within the set 70 percent guard band of the standard observed value.

For all computers that are not provided by IngMar Medical or are IT managed by your facility, there may be additional steps needed to access RespiSim® software and certain administrative privileges may need to be granted in order to access the RespiSim® software on those computers. We can't guarantee compatibility with IT managed systems.

Item Number	Description	Unit Price (USD)
31 30 000	RespiPro® Educational Package	\$69,995
<b><u>Hardware Options</u></b>		
31 10 865	RespiPro® Manikin Consumables Replacement Package	\$696.00
31 30 061	Uninterruptible Power Supply Option	\$995.00

**Training and Service Options**

1-year Extended Warranty for RespiPro® Package <small>Purchase up to 8 - initial purchase only. Does not include calibration.</small>	\$3,163.00
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<b>Shipping Via IngMar Medical UPS Account</b>	<b>\$374</b>
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**Total Investment: \$75,223**

The shipping included on this quote is an estimate - you may request a more accurate estimate by providing your ship to address. If shipping is not added to your Purchase Order, it will be shipped via IngMar Medical prepay and add and this amount will appear on your order confirmation and invoice. To ship via your own account, provide the account name and number on your Purchase Order. Shipping insurance is included only upon request and availability.

Prices do not include applicable sales tax, customs, or duties and are FOB Pittsburgh.

**Payment Terms:** Net 30

**Warranty:** 1 year from date of delivery and is not transferable.

**Lead Time:** 8-10 weeks from date of order confirmation. Subject to change.

Please let me know if you have questions.

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Please email a Purchase Order to [sales@ingarmed.com](mailto:sales@ingarmed.com) or to your Product Specialist.