

**TECHNICAL BROCHURE** 

# WE ARE THE LEARNING GENERATION BODY INTERACT<sup>™</sup>

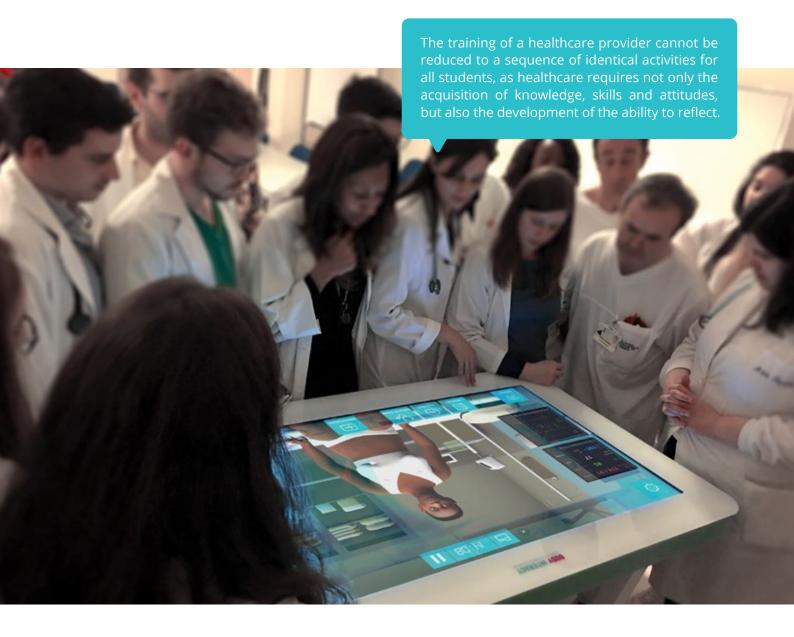
MOVING FROM PASSIVE TO **EXPERIENTIAL LEARNING** 

# THE LEARNING ACCELERATOR FOR MEDICAL AND NURSING EDUCATION

Learner-centered | Interdisciplinary | Gaming-oriented

BODY INTERACT IS AN INTERACTIVE DIGITAL SIMULATOR FOR PROBLEM-SOLVING AND CLINICAL REASONING USING VIRTUAL PATIENTS

Medical and Nursing schools
Offline/Online Continued Medical Education programs



# THE WAVE OF THE FUTURE IN CLINICAL EDUCATION

Body Interact enables an integrative learning process, making connections among concepts and experiences so that information and skills can be applied to novel and complex issues or challenges, through real-life situations, establishing a culture of open communication and collaboration.

# **CRITICAL THINKING**

purposeful, focused, informed and results-oriented thinking in any situation to achieve wise actions

#### **CLINICAL REASONING AND JUDGEMENT...**

reinforces the ability to assess and think in real time, and to reason as the patient situation changes over a period of time

**Dynamic** · Evolving · Unfolding

#### **DECISION-MAKING...**

builds cognitive processes that include definable steps in a desirable sequence in complex situations, developing anticipation and risk management skills

Attainable · Cost-effective · High-quality

#### **COMMUNICATION AND TEAMWORK...**

promotes and reinforces the conscious, learned team behaviors of cooperation, coordination, and sharing Interprofessional communication · Soft skills development

INTEGRATIVE THINKERS, CRITICAL AND ANALYTICAL PROBLEM SOLVERS, AND REFLECTIVE LEARNERS

### A VIBRANT, INTERACTIVE AND REAL-TIME VIRTUAL PATIENT SIMULATOR

Based on 3D virtual interactive patients supported by **realistic physiological algorithms**, Body Interact mimics the visual-spatial and real-time characteristics of the patient's health condition, provides realistic feedback, and is able to compile and assess trainees' performance.

- Interactive lifelike patient-based experience
- Realistic physiological algorithms
- Real-time monitoring and examinations
- Realistic feedback in accordance with established guidelines
- Immediate performance assessment



## AN EXTENSIVE LIBRARY OF EXPERT REVIEWED **CLINICAL SCENARIOS**

Body Interact's validated scenarios challenge the trainee's clinical and critical thinking skills, providing the best possible preparation for providing care without any risk to real patients.

Our expert reviewed scenarios rely on clinical evidence and well-established guidelines. They are designed and regularly updated to address basic, intermediate and advanced clinical skills goals in the Medicine, Nursing and Emergency curricula.







CARDIOLOGY





ALLERGIES **ANESTHESIOLOGY** 

ENDOCRINOLOGY GASTROINTESTINAL











INFECTIOUS

INTERNAL

NEPHROLOGY



NEUROLOGY



ONCOLOGY

**ORTHOPEDIC** 

**PEDIATRICS** 

PREGNANCY

RESPIRATORY

TOXICOLOGY



TRAUMA





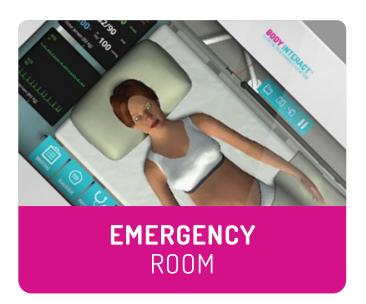
### HIGH QUALITY REVIEW AND VALIDATION

Body Interact works with and obtains validation from leading medical educators and global institutions such as the American College of Cardiology, the American Heart Association/American Stroke Association and the European Society of Cardiology.













# TOTALLY DIGITAL, TOTALLY FLEXIBLE

Body Interact is a flexible and scalable technology that can be uniquely configured for a big tabletop touchscreen or a tablet/computer or via a web browser.



# A SIMULATION LAB IN YOUR HAND TO BE USED EVERY DAY, EVERYWHERE

With the Body Interact Smart Subscription model, take a class wherever and whenever you want; all you need is an Internet connection.

The teacher gets a special license that includes access to tracking and performance management tools and is also able to decide which scenarios are available to students at any given time.

An intuitive interface makes setting up and running Objective Structured Clinical Examinations (OSCEs) easy.

It provides complete case-by-case performance debriefings and visual dashboards that reflect the performance metrics of each student or class.

As an option, each student can be given individual access to the platform and cases selected by the teacher.



All the names of drugs, health problems and treatments are consistent with terminology commonly used in the US and EU markets.

## **SOFTWARE FEATURES**

A realistic experience with a lifelike virtual patient, from diagnosis to treatment:

- Diverse and multicultural virtual patients
- **Visual signs and symptoms** like pain, consciousness, cyanosis, chest movements
- Dynamic dialogues with the patient
- A complete physiological algorithm for drugs, interventions and multiple health conditions
- **Real-time vital parameters** monitoring: blood pressure, heart rate, respiratory rate, SpO2
- **Physical examination:** initial patient assessment with a complete ABCDE approach Airway observation, Breathing, Circulation, Disability, and Exposure and more than 60 physical exam items.
- Lab Tests: arterial blood gas, biochemistry, blood cultures, blood glucose, cardiac markers, coagulation tests, complete blood count, lipid profile, urinalysis, urinary antigens, etc

- Electrophysiology: ECG
- Imaging: angio CT, AP pelvis radiography, abdominal CT scan, abdominal radiography, abdominal ultrasound, carotid echo-doppler, chest CT scan, chest radiography, colonoscopy, coronary angiography, head CT, lateral cervical spine radiography, lower extremity ultrasound, pelvic CT scan, transesophageal echocardiography, transthoracic echocardiography, upper GI endoscopy
- **Decision Aids:** Glasgow coma scale, stroke scale (NIHSS)
- **Interventions:** catheters, defibrillation, chest compressions, oxygen, transfusions, etc
- **Drugs:** a complete set of drugs and fluids to be selected by category, administration mode and doses, such as: analgesics, anti-inflammatories, antiarrhythmics, antibiotics, antiplatelets, antipyretics, bronchodilators, coagulation, diuretics, fibrinolysis, fluids & ions, gastrointestinal, hormones, relaxants & sedatives, vasoactive agents, vasodilators, etc
- **Performance debriefing tools:** action log, performance level in accordance with established guidelines

#### **OUR APPROACH COMBINES**

- Establishing differential diagnosis gestures and attitudes
- Interviewing the patient
- Applying the ABCDE method
- Interpreting complementary diagnostic tests in order to identify a clinical condition
- Knowing how to establish a treatment strategy
- Selecting treatments according to the clinical risk
- Establishing prognostic guidance levels

In this dynamic environment, you can learn not only the facts but also the important, underlying "how's" and "why's" based on the patient's interactions, while tracking their analytics and behaviors through each simulation.

Some cases have a basic or intermediate difficulty level, while others are extremely complex to be changing information load.

#### **MULTI-LANGUAGE**

Contents and audios are available in English, by default. But other languages are also available (e.g. Chinese, Portuguese, Russian, Spanish, etc.).

#### MAKE YOUR OWN SIMULATION CURRICULA

While providing educators with an extensive library of pre-configured clinical scenarios with updated guidelines, it also offers a user-friendly authoring tool to build customized scenarios, thereby helping to expand students' knowledge and enrich their experience.

#### A BUILT-IN LEARNING MANAGEMENT SYSTEM

In order to improve learners' performance by helping them understand it, detailed analysis for an individual or an entire class is provided via a visual dashboard, complete with action metrics and an intuitive interface that makes setting up and running OSCEs easy.





















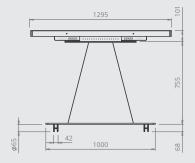
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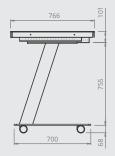
# **HARDWARE OPTIONS**

The table is a multitouch screen for interactive learning and teaching, providing a life-size patient to work on.

## **TECHNICAL SPECIFICATIONS** MULTITOUCH TABLETOP























#### **Display Characteristics**

Diagonal	55"; 138.8cm
Touch technology	Projective capacitive, multitouch (12 compatible touch points HID, only with supported OS), activated by finger
Panel	AMVA3 LED-Back lit, AG80 Coated Glass
Display Area H X W	680.4 x 1209.6 mm; 26.8" x 47.6"
Responsive Time	6.5 ms
Static Contrast	4 000 : 1 typical
Viewing Zone	horizontal / vertical: 178° / 178° right / left: 89° / 89° ; up / down: 89° / 89°
Native Resolution	Full HD 1080p, 1920 x 1080 (2.1 megapixel)
Aspect Ratio	16:9

#### Interfaces / Connectors / Controllers

Digital Input Connector	HDMI
Output Connector	RS 232C
Inputs	USB (for touch connectivity)
Power Supply	AC 100 - 240 V, 50 / 60 Hz

#### **Special Features**

Mobility	4 wheels
Output Connector	RS 232C
Safety	CE, TÜV-Bauart, CU, IPX1 (front), 60950-1 ball drop test
Speakers	2 x 20 W (Stereo)

#### Hardware / OS

Computer

Intel® Core I5-7400, 3.0 GHZ 6MB LGA 1151 (Kabylake)
PH GTX 1050 2G GDDR5 PCI E 3.0; Memory 8GB DDR4
SSDNow 120GB M.2 SATA 6Gbps (Single Side)
PRIME B250M-C - Intel B250, LGA1151, 4DDR4 (Dual channel), microATX
FSP 300W SFX 80PLUS Bronze - FSP300-60GHS 85+

Operating System	Microsoft Windows 10
Operating System	WIICE OSOTE WITHOUTS TO

# BODY INTERACT™ IS TRUSTED BY EDUCATORS WORLDWIDE BECAUSE:

#### IT IS IMMERSIVE

The training of a healthcare provider cannot be reduced to a sequence of identical activities for all students, as healthcare requires not only the acquisition of knowledge, skills and attitudes, but also the development of the ability to reflect.

#### IT IS USER-FRIENDLY

With intuitive features and everything on one platform, all activity is generated in real time and directly adapts to user interaction.

#### IT OFFERS GAME-BASED LEARNING

A dynamic simulation environment offers you active learning-by-doing, which is both fun and memorable, as opposed to passive learning.

#### IT WORKS ON A PLUG-AND-PLAY BASIS

You will no longer need to spend a lot of time and human resources on preparing and running simulation sessions. Body Interact is available 24/7 on your computer or Windows tablet, or on a special classroom display.

#### IT OFFERS A LARGE RANGE OF EXPERT REVIEWED SCENARIOS

It comes with an extensive set of pre-configured expert reviewed scenarios addressing basic, intermediate or advanced clinical skills development for your students.

#### IT HAS TRACKING AND PERFORMANCE MANAGEMENT TOOLS

Body Interact is designed to be easily managed by teachers. You can decide which scenarios are available at any given time. It provides complete case-by-case performance debriefings and visual dashboards that reflect the performance metrics of each student or class.



# A SHARED COMMITMENT TO EXCELLENCE IN HEALTHCARE EDUCATION

Founded in 2008, our company has always been 100% focused on providing innovative digital health solutions. with a great talented team and thanks to those who guided and supported us at the beginning, we have consistently combined science, design and technology to deliver cutting-edge solutions for medical training, patient empowerment and improved care delivery.

Body Interact is used globally. We are headquartered in Coimbra, Portugal. We have an additional office in Austin, Texas, USA, to better serve our customers abroad and to build a network of partners of worldwide reputation.

We have experience with a wide range of complex, large-scale solution deployments and our customer-driven development ensures efficient solutions that make a difference in our users' daily work.

Our company has won the support of the EU Innovate funding programme and has also been awarded prestigious prizes:

- EMF 2012 European Seal of e-Excellence (first prize)
- 2016 Best Product Award (runner-up) at the 6th Annual Serious Games and Virtual Environments Arcade and Showcase, IMSH
- European Union Seal of Excellence Award delivered by the European Commission for project proposal 697403 / Body Interact / SME Instrument (2016 and 2017)
- SME Excellence 2016 / SME Excellence 2017
- Deloitte Technology Fast 500™ 2017 Award
- World Summit Award 2018, national winner in the category "Learning & Education"
- $\bullet$  Born from Knowledge Award 2018 by the National Agency of Innovation/Portugal

Our quality management system is also ISO 9001 certified.







Body Interact™ is a registered trademark of Take The Wind company

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