

Virtual Simulation Center

Version 0.74.2 Q2 2023



by



Welcome to Acadicus

Acadicus provides an expansive library of simulations, environments, patients, equipment, and templates that can facilitate and customize simulations.



Content creation is determined, guided, and sponsored by our community of users, aligning the community's greatest need and content prioritization.

Example Industries

- Nursing
- EMS
- Pediatrics
- Medical
- Geriatrics
- Multiple Casualty

Example Uses

- Live multi-user simulations
- Recorded instructor demonstrations
- Remote sim via Zoom / screen share
- Practicing communication and critical thinking skills
- Classroom demonstrations

Note: The Acadicus platform and content are updated regularly, so the features and content described here are subject to change.

More Than an App

We understand that there is more to virtual technology than automating simulations with pre-programmed experiences. Our goal is to reduce costs, increase access to simulation, while supporting established standards and best practices based on decades of research and experience, and still allow you the control you want to customize your simulations.

Access

There are different options for accessing Simulations in Acadicus, which is <u>free to download on our website</u>. We provide high fidelity virtual simulation experiences by leveraging the power of a windows PC.



Non-VR Viewer Mode Windows PC



VR Mode
Windows PC



Classroom Projected
Screen share for class viewing



Remote AccessScreen share via Zoom, etc.

Multi User or Solo

Enter a simulation experience in solo mode, or enter with multiple simultaneous participants, joining from any location.

Holographic avatars are minimal by design, enabling the experience to focus on learning objectives, rather than how each student customizes their avatar.



Labs

Like a traditional simulation center, you will access Aadicus by entering individual Labs.

Public

After installing Acadicus, anyone can enter the **Acadicus Commons**, a public multi-user Lab featuring a directory of freely available Featured Simulations to explore.

Private

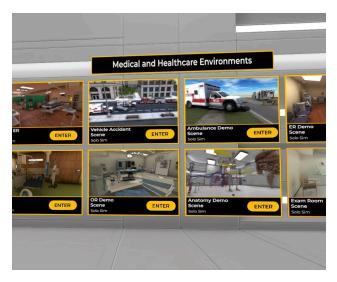
When you're ready to run your own Simulations, subscribe to a private Lab, where you gain access to the entire Shared Content Library and can run private multi-user Simulations.

Community

Become part of a growing community of simulation innovators, building and defining the future of this exciting new frontier!

Simulation Pulse

Stay informed about what's new in the virtual sim world by subscribing to the <u>Simulation Pulse</u> on our website. Gain access to live simulation demonstrations, expert interviews, new content unboxing, virtual sim lab tours, tutorials, and more.





Southwest

Tech

CHAMBERLAIN

Florida NOVA SOUTHEAS UNIVERSITY

Amarillo College

Simulation Manager

Instructors and Sim Techs can control live Simulations using the Simulation Manager dashboard.

Instructors or trained actors can role play patients and other characters (family members, other providers, etc.), manipulating their animations, changing patient states, vital signs, triggering alarms, and a variety of other variables to create lifelike learning experiences.

3D Spatial Recordings

Play and capture 3D recordings of instructor demonstrations and interactive lessons.

Learners can replay these recordings, viewing from any angle, following along and repeating as many times as needed.

DALIETE CONT. JANA, TROM ACTIONS SIMULATION MANAGER ACTIONS VITAIS Shirt CONT. JANA, TROM POR Trigger Trigger



Scene Editing

Acadicus' powerful scene editing tools enable technicians to customize and easily update scenarios.

Save as many configurations in your private Lab as you'd like.

As new content is added to Acadicus, it becomes immediately available to all Lab subscribers as downloadable content packs.



Onboarding

Training

Each private Lab comes with 3 training sessions, providing everything you need to know to run your own Simulations.

Support

The Acadicus team provides robust support through a Knowledge Base, FAQ, Tutorials, Discord channel, an upcoming new Orientation Hub, and the ability to submit tickets to our help desk.



Simple Pricing

Private Labs

The cost of Acadicus is \$20,000 per year, per private Lab. This subscription unlocks access to all features, shared content, multi-user capabilities, all support channels, and anything added to the library during your subscription.

Each Private Lab supports one concurrent active Simulation. Expand your capacity as your program grows with additional Labs.

Acadicus Assist and Custom Content

An optional budget allowance can be added to your Quote for any amount you would like to include. Allowances have ranged from \$1,000 to \$100,000, depending on the organization's goals. These allowance budgets can be applied toward any of our Acadicus Assist services, such as:

- sponsoring custom content
- advanced training sessions
- scene editing services
- assistance running simulations
- patient actors

If you don't use your designated allowance, it can be applied toward future Lab renewals as well.





Featured Content Catalog

Find additional information about this content on our **Shared Library Wiki**.



NEW! Gen2 Patients

Our all-new 'Gen2' (currently in development) will introduce a new class of patients. This enhancement will allow you to multiply the variety of patient simulations you can create through a powerful range of new features and capabilities. Many of the OpenRN cases feature Gen2 patients (<u>learn more here</u>).

The initial Gen2 lineup includes several patients you can configure in an infinite range of states via our Simulation Manager. Most newly created patients will include this standardized feature-set!









Millie

Amy

Micheal

Nao

Limitless Possibilities

Each Gen2 patient can be easily configured using the Simulation Manager to support a wide variety of scenarios.













Below is a sample of Gen2 patient capabilities, subject to change.

Animation Status

- Talking
- Emotion
- **Head Gesture**
 - Shake
 - Shrua
- Arm Gesture
 - Push away
- 0
- **Head Pose**
 - Left
 - 0 Center
 - Right 0
- **Body Position**
 - Fowler's 30
 - Fowler's 45 0 Fowler's 90
 - Fowler's Leaning Forward
 - Sitting (Bed Edge)
 - Sitting (Chair) 0
 - Sitting Leaning Forward (Chair)
 - Supine
 - Lateral Recumbent (Right)
 - 0 Lateral Recumbent (Left)
 - Prone 0
 - Sims' 0
 - Standing 0
 - Fallen

Socket Functionality

- Socket Functionality
- Forehead Thermometer
- Pen Liaht
- Tympanic Thermometer
- Mouth/nose Sockets
- Non-rebreather Mask
- Venturi Mask Nasal Cannula
- **CPAP Mask**
- Surgical Mask
- Mouth Thermometer
- Nebulizer Mouthpiece
- **ETT**
- NG Tube
- Tongue Depressor
- Pen light
- Tracheostomy Collar
- Shock Pad
- ECG Stickers and Electrodes (x10)
- IV (x6)
- BP Cuff (x2)
- PICC Line
- Chest Tube
- Pulse Oximeter (x2)
- Stethoscope (x17)
- Learner Interactions Panel
- Vitals Monitor
- Hospital Bed

Pupils

- Dilation
- Response Rate

General Apparel and Equipment

- Clothina
- Partial Gown
- Blanket
- Hospital Bed

Heart Auscultation

- Normal
- Atrial Fibrillation
- Murmur

Lung Auscultation

- Coarse Crackles
- Fine Crackles
- Wheezing

Digestive and Abdomen

- Tongue
 - Tongue Out Center 0 0
 - Tongue Out Left
 - Tongue Out Right 0
- Vomit
 - Normal 0
 - 0 Bloody
 - Black 0
 - 0 Green
- Mouth
 - Normal 0
 - White Patches 0
 - Ulcers
- Teeth
 - Good Teeth 0
 - No Teeth 0
 - **Decayed Teeth** 0

Respiratory

Cough (Single)

0

- Nonproductive 0
- Productive Clear 0
- Productive Yellow 0
- Productive Green
- Cough (Ongoing)
- - Off 0
 - Occasionally 0
 - Frequently 0
- Breathing
 - 0 Normal
 - Shallow 0
 - Labored 0
 - 0 Stridor
 - Nose
 - Default 0
 - 0 **Bloody Drainage**
 - Clear Discharge 0
 - Yellow/green Discharge

Bowel Auscultation

- Absent
- Hypoactive
- Present
- Hyperactive

Edema

- Absent
- 1+
- 2+
- 3+ 4+

Skin and Subcutaneous Tissue

- Skin Tone
- Perspiration
- Pressure Injury (Sacral)
- Pressure Injury (Heel Left)
- Pressure Injury (Heel Right)
- Leg Swelling (Left)
- Leg Swelling (Right)

Nervous and Musculoskeletal

- Seizure
- Shiver
- Tremor
- Eye
- Face Droop
- Hemiplegia

Strength Test

- Arm Raise (Forward)
- Hand Squeeze
- Leg Raise
- Foot Press

Cognition

- Conscious
- Sleepy Nonresponsive (with pulse)
- Nonresponsive (pulseless, non breathing)

- **Accompanying Assets** PPE Door Card (Contact)
 - PPE Door Card (Droplet)
 - PPE Door Card (Airborne)

 - **Dentures**
 - Hearing Aids
 - Pen Light Nasogastric Tube
 - Tracheostomy Collar
 - **Emesis Bucket**
 - Emesis Bag Wheelchair
 - Sanitization Station (Wall) **Tongue Depressor**

PICC Line

- **Learner Interaction Panel** Blanket
 - Bed Side Rails
 - Bed Height
 - Bed Lock Reposition Patient

Environments

Set the Stage Your Simulations



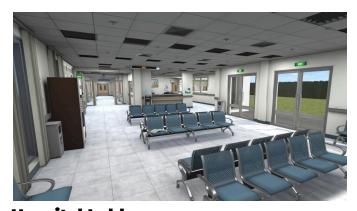
Operating Room



Emergency Room



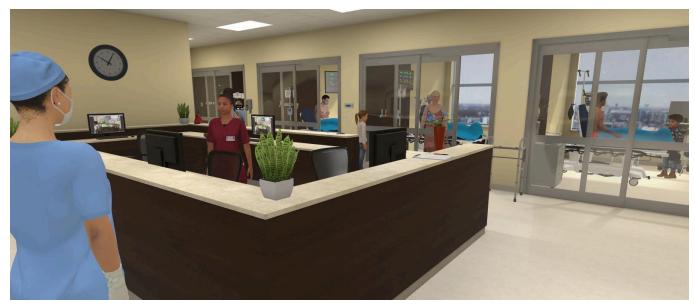
PICU



Hospital Lobby



Clinic



4 Bay Multi-Sim



Exam Rooms



Assisted Living



Neonatal



Long Term Care



Suburban Residential



Suburban Residential Interior



Suburban Residential Interior



Classroom



Simulation Hall



Downtown 1



Downtown 2



Old Farmhouse with Interior



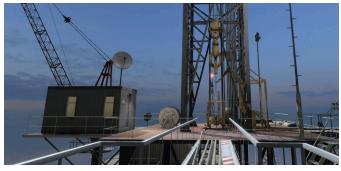
Condo Interior



Office Interior



Industrial Shop



Oil Rig



Forest Lake and Meadow



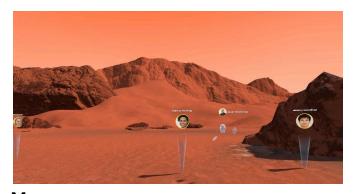
Warehouse



Beach Pavilion



Soccer Stadium



Mars



Space Pavilion

Featured Simulations

As new content is added to Acadicus, it becomes immediately available to all users.



New Content Preview: Birthing Simulator

Scheduled for preliminary release in Q1 2023 - many of the OER OpenRN cases feature this content (<u>learn</u> more here)



Administering Cardiac Medications to a Patient with Dementia

An OpenRN Scenario

Miles Johnson is an 87 year old resident of Shady Acres rehabilitation facility. He has a past medical history of dementia, hypertension, atrial fibrillation, and chronic renal failure.

Students must perform appropriate assessments prior to safely administering cardiac medication while also communicating therapeutically with a patient with dementia.



Addressing Safety Hazards

An OpenRN Scenario

Students must identify and resolve safety hazards in Miles' room while also communicating therapeutically with him.



Caring for a Pediatric Patient Experiencing Pain

An OpenRN Scenario

Ella Peterson is a seven-year-old patient who underwent a tonsillectomy this morning. She tolerated the surgery well but could not swallow fluids during the post-op recovery period, so was admitted for overnight observation until she can swallow fluids and food. Ella has been sleeping since being admitted. Her mother was at Ella's bedside all day, but recently went home to care for Ella's siblings. The student should assess Ella for pain and safely perform interventions to manage her pain while communicating therapeutically.



Administering Nitroglycerin to a Client with Chronic Angina

An OpenRN Scenario

Bjorn McClelland is a resident who was admitted to a Long-Term Care (LTC) setting yesterday. He has a history of chronic stable angina, hypertension, and heart failure. As his morning medications are prepared to be administered, he complains of chest pressure. Students must perform appropriate focused assessments, apply the nursing process, and use clinical judgment to provide safe, effective care.



Caring for a Client with Chronic Heart Failure

An OpenRN Scenario

Hector Fernandez is a 62 year-old Hispanic male recently admitted to a long term care facility due to recent falls. He has a history of chronic heart failure.

Students must assess Hector while communicating therapeutically regarding his concerns. Any new or unexpected findings should be communicated to the provider and cardiac medications administered safely.



Alcohol Withdrawal

An OpenRN Scenario (currently in development)

Students assess a patient withdrawing from alcohol in a Medical Surgical hospital unit and appropriately administer medication based on a CIWA (Clinical Institute Withdrawal Assessment for Alcohol) protocol.



Cirrhosis and GI Bleed



Congestive Heart Failure



PPE



Respiratory Therapy



End of Life



ECG Lead Placement



Foley Catheter Placement



Lumbar Puncture



Dynamic Cardiology

Staged within a residential environment, the Dynamic Cardiology scene template includes 'Miles', a patient configured with a Simulation Manager used by facilitators to manipulate patient vital signs and animations.

Miles' wife Karen is standing in the kitchen. Interactivity includes a defibrillator with pads, BVM, IV, blood pressure cuff and more.







Multiple Casualty

The goal of the virtual MCI content is to provide a demo scenario enabling users to triage severely injured patients following a series of explosions.

This pack also includes firefighters, police officers, an ambient soundboard, an ambulance with scene lights and a siren, an interactive triage board, and more.







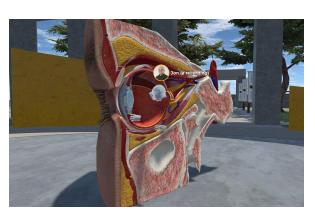




Interactive Skull Visualizer



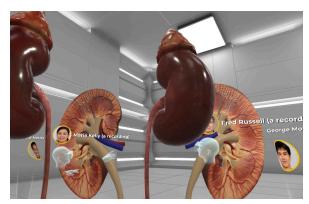
Skeletal Visualizer



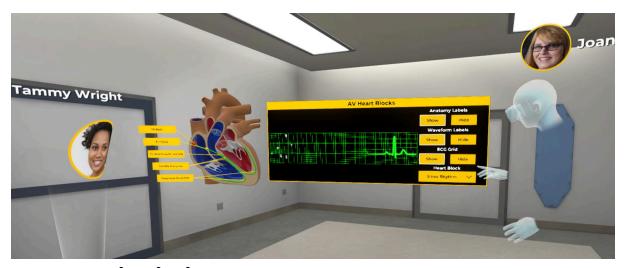
Eye



Muscle Visualizer



Kidneys



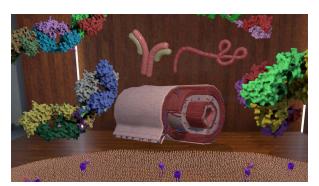
Heart Block Visualization



Interactive Organs



Animated Heart



Molecular



Skin Surface



Dental Anatomy



Brain

Thank You!



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