



# Shapiro Institute

BETH ISRAEL DEACONESS MEDICAL CENTER  
HARVARD MEDICAL SCHOOL

**Simulation & Skills Center**

**Standard Operating Procedures**

**Carl J. Shapiro Simulation and Skills Center**  
**Department of Academic Affairs**  
**Shapiro Center SC-OG20**

Standard Operating Procedures

**Table of Contents**

Introduction

**Section 1 – General Information**

Beth Israel Deaconess Medical Center Mission Statement

Code of Conduct

Abbreviations

Department Shared Drive

Organizational Chart

SASC Advisory Board

Floor Plan

Decision Making

Required Disclaimers

Video Recording in the SASC

Conducting Research in the SASC

Brand Usage Policy

Contact Information

Hours of Operation

Overtime

**Section 2 – Scheduling**

Calendar

Rolling Schedule

Outreach for Scheduled Courses

Approval for New Courses

Class Prioritization

Class Cancellations

Prioritization of Resources

Outside Learners and Rental Fees

Outside Learners Cancellation Policy

### **Section 3 - Equipment**

Simulation Maintenance and Repair  
Acquisition of Equipment  
Equipment Loans/In Situ Use  
Inventory

### **Section 4 – SASC Operations**

Weekly Huddle  
Monthly Staff Meeting  
Start Up Process  
Shut Down Process  
Class Attendance  
Embedded Person  
Session Evaluations  
Audio Visual Systems  
Visitor Parking  
Guest Wireless Access  
Printer Access

CENTER FOR EDUCATION



Shapiro Institute

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HARVARD MEDICAL SCHOOL

**Simulation & Skills Center**

## **Introduction**

The Carl J. Shapiro Simulation and Skills Center (SASC) is a unit within the Shapiro Institute for Education and Research at Beth Israel Deaconess Medical Center and Harvard Medical School. The SASC is responsible for incorporating simulation-based education and professional development for medical students, residents, and practicing medical professionals.

### **1. General Information**

#### **Beth Israel Deaconess Medical Center Mission Statement**

*To Provide Extraordinary Care, Where the Patient Comes First, Supported by World Class Education and Research.*

The mission of the Beth Israel Deaconess Medical Center is to serve our patients compassionately and effectively, and to create a healthy future for them and their families. Our mission is supported by our commitment to personalized, excellent care for our patients; a workforce committed to individual accountability, mutual respect and collaboration; and a commitment to maintaining our financial health.

The mission statement of the Carl J. Shapiro Simulation and Skills Center is to train and educate all clinically active healthcare providers, students, and allied health care staff by using the latest and most sophisticated education methods and technology available. In doing so we will advance the field of simulation education and research while supporting both individualized learning methods and promoting interdisciplinary teaching and team training. Thus, we enable all learners to acquire and enhance their skills and knowledge in support of independent lifelong growth

#### **Code of Conduct**

The SASC utilizes the ethical standards set forth by Beth Israel Deaconess Medical Center to guide professional conduct. The Code of Conduct can be found on the BIDMC website by using the following link: <https://www.bidmc.org/-/media/files/beth-israel-org/compliance/codeofconduct19.pdf>

## **Abbreviations**

**BIDMC** – Beth Israel Deaconess Medical Center

**CME** – Continuing Medical Education

**HMFP** – Harvard Medical Faculty Physicians

**HMS** – Harvard Medical School

**SASC** – Skills and Simulation Center

## **Department Shared Drive**

The SASC has a shared drive for electronic files. The shared drive can be accessed by connecting to

**smb://resfile.bidmc.harvard.edu/research/Institute**

**ADMIN**

**Simulation Center**

Electronic files that may need to be accessed by others in the department, should be stored in the appropriate folder in the shared drive.

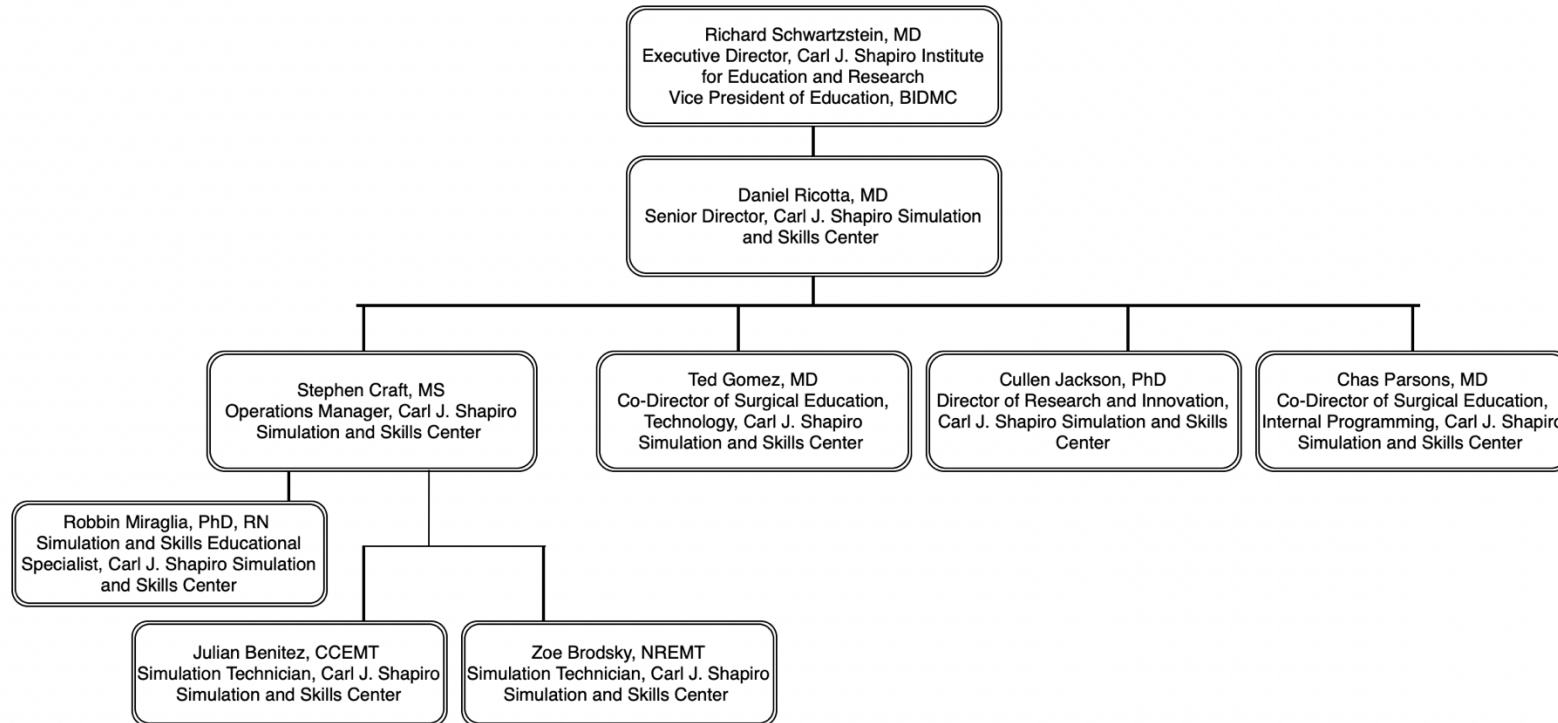
Shapiro Institute

BETH ISRAEL DEACONESS MEDICAL CENTER  
HARVARD MEDICAL SCHOOL

Simulation & Skills Center

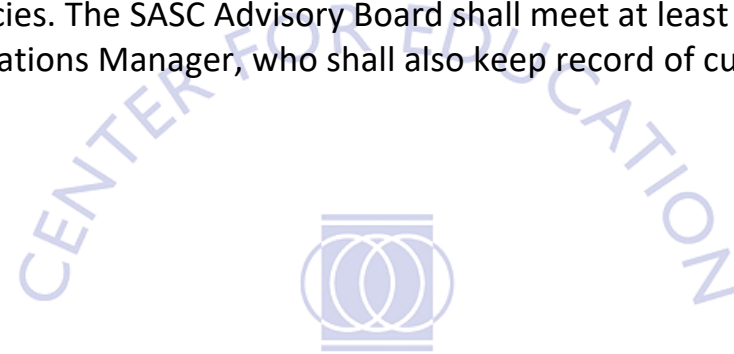
# Organizational Chart

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## **SASC Advisory Board**

The SASC Advisory Board exists to provide expertise and guidance for the SASC staff, and assures accountability and governance to BIDMC policies. The SASC Advisory Board shall meet at least once per year. The meeting shall be organized by the SASC Operations Manager, who shall also keep record of current advisory board members.



# Shapiro Institute

BETH ISRAEL DEACONESS MEDICAL CENTER  
HARVARD MEDICAL SCHOOL

## Simulation & Skills Center

## Floor Plan

# Background – SASC Floorplan

- Mock ICU
- Mock Operating Room
- 2 Debriefing Rooms
- Large Lecture Hall
- Multipurpose Room
- Video / VR Surgical Training





## **Decision Making**

Day-to-day decisions are made within the SASC along the authority lines described in the organizational chart. The team defers to each other when guidance or assistance is needed based on each person's expertise. The team shall meet on a regular basis to assure all employees are working towards the same goals and priorities



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HARVARD MEDICAL SCHOOL

## Simulation & Skills Center

## **Required disclaimers**

The simulation and skills center staff reserves the right to cancel any event or course at any time. The reason for this policy is due to the needs of the BIDMC during emergency room or staffing issues, weather related issues, or any other multitude of issues that can arise that impact BIDMC. Furthermore, a course that is not considered to meet the highest educational quality or standards, or does not further the education or knowledge of the participants shall be cancelled. As much notice as possible of a cancellation or the possibility of cancellation will be given to the course instructors and their cohorts.

## **Conducting Research in the SASC**

A priority of the SASC is conducting research that aligns with the missions of BIDMC and the Shapiro Institute. Any activity exploratory in nature, or involves the collecting or sharing data (including patient specific data), must be reviewed by the IRB and have an IRB designation prior to the initiation of the activity. Requests to conduct research and questions about this process shall be submitted to Robbin Miraglia at [rmiragli@bidmc.harvard.edu](mailto:rmiragli@bidmc.harvard.edu).

## **Video Recording in the SASC**

Many activities at the Simulation and Skills Center (SASC) are video-recorded and/or photographed for academic and research purposes. The videos are securely stored in our SimCapture cloud storage account. The SASC protects the confidentiality of its employees, instructors, and learners. Instructors and learners will sign in to the SASC using a QR code which is linked to a survey. On this survey instructors and learners have the option to consent to videos of their simulation session being included in the data repository, or requesting their video not be included in the data repository. Any use of the video outside of the learning purpose is strictly prohibited.

## **Brand Usage Policy**

The name Carl J. Shapiro Simulation and Skills Center shall be acknowledged in all course materials, videos, audio recordings, electronic recordings and publications to which the Carl J Shapiro Simulation and Skills Center was a part of developing. This includes even minimal participation by the center. Permission to use the Carl J Shapiro Simulation and Skills Center name shall be presented to the director of the Simulation and Skills center. This should be done during the presentation of

the course materials to the simulation curriculum committee so that all of the stakeholders involved the Center can review and provide feedback, if necessary. This is to ensure the highest quality medical education offerings carry and acknowledge the name of the Carl J. Shapiro Simulation and Skills Center. Please see ADM-52A, Marketing, Logo Usage, Website policies.

## Contact Information

- Mailing Address: Carl J. Shapiro Simulation & Skills Center Ground Floor #SCG20 330 Brookline Avenue Boston, MA 02215.
- Phone: 617-667-5117
- Email: [SASC-Scheduling@BIDMC.Harvard.edu](mailto:SASC-Scheduling@BIDMC.Harvard.edu)

## Hours of Operation

The hours of operation for the Carl J. Shapiro Simulation and skills Center are **business weekdays 7:00 AM-5:00 PM.**

The simulation center may be closed at times during normal business hours due to operational commitments, weather related issues, and at the discretion of the director of the SASC. The simulation center may be operational at any time a staff member is present which may include times that are outside of normal business hours. The simulation and skills center front skills arcade are open 24/7 to any physician with a BIDMC badge seeking to use the pc work station or any of the FLS or minimally invasive surgery task practice stations. The front skills arcade may be closed to general usage by SASC staff during FLS/FES/Fuse testing times to ensure privacy and proper environment for any participant during and exam. Any request for the usage of the simulation and skills center during normal business hours and during non-business hours must be made via email addressed to [SASC-Scheduling@bidmc.harvard.edu](mailto:SASC-Scheduling@bidmc.harvard.edu).

## Overtime

Requests to use the SASC outside of normal business hours may result in an additional fee or be subject to additional restrictions for space and equipment. BIDMC employees working overtime will follow the procedures established by BIDMC for accounting of additional time worked.

## 2. Scheduling Courses

### Calendar

All scheduled classes shall be added to the SimCapture calendar found at <https://bidmc.simcapture.com/calendar>.

This calendar should be referenced by both SASC staff, and instructors. All classes, meetings, and simulation related events should be recorded on this calendar. Request for access to this calendar should be submitted via email to [SASC-Scheduling@bidmc.harvard.edu](mailto:SASC-Scheduling@bidmc.harvard.edu).

### Rolling Scheduling

In 2023 the SASC transitioned to rolling scheduling. Instructors can request and reserve space in the SASC for their classes by emailing [SASC-Scheduling@bidmc.harvard.edu](mailto:SASC-Scheduling@bidmc.harvard.edu).

The SASC Operations Manager shall send out requests for scheduling to all class points of contact at least twice per year to serve as a reminder for each department to reserve time and space in the SASC.

SASC staff will do the best to honor all SASC reservations, but must reserve the right to reschedule classes if absolutely necessary.

### Outreach for Scheduled Courses

The goal of reaching out to departments/instructors before their class takes place is to improve efficiency of the simulation center, reduce downtime, and assure SASC staff are aligned with instructors as to what learning objectives are, and what the curriculum will look like.

Outreach for scheduled courses should occur at least one week before a class takes place, but not more than a month in advance. This communication shall be via email, and [SASC-Scheduling@bidmc.harvard.edu](mailto:SASC-Scheduling@bidmc.harvard.edu) shall be copied on the email. A sample of an outreach email can be found below.

Good morning!

I'm writing to confirm your class (class name) **on (date) from (time)**. In your response, please provide the approximate number of learners and instructors.

We have the following spaces reserved for this class: **List spaces reserved**

If there is a research component for this class, or you are interested in adding a research or data component to this class, please include that in your response to this email.

If you have not already done so, please provide SASC staff with any class materials, an agenda outlining time spent on simulations, and equipment needed at least one week prior to the course. This can be done by emailing [SASC-Scheduling@BIDMC.Harvard.edu](mailto:SASC-Scheduling@BIDMC.Harvard.edu).

If you have previously shared course documents, either as an attachment or through a link, please be sure that you have provided access from the original document in outlook or teams.

If you have questions about the standardized scenario template, please reach out to Robbin Miraglia, [rmiragli@bidmc.harvard.edu](mailto:rmiragli@bidmc.harvard.edu)

We look forward to seeing you soon!

The SASC Team

## Approval Process for New Courses

New users or current users requesting new simulation courses in the SASC are required to meet with the SASC staff to get their course and exercises approved. The meeting shall be used to determine several factors, including but not limited to:

- Does the course align with BIDMC and SASC mission?
- What resources are needed to run the simulation activity? (Equipment, staffing, space, funding)
- Is simulation needed to accomplish the learning objectives of the course?

Once it's determined that a class is appropriate for use of the SASC, the simulation center staff shall determine the classes priority level, and what openings we have to fit the class in. After this, the instructor shall work with SASC staff to determine a date and time to schedule the class.

Once a proposed simulation course has been approved by the simulation committee the following set up materials will be required:

- A course outline and exercise descriptions using the SASC exercise templates.
- A simulation box with required disposables unless they are too large or numerous. A picture of the materials will be placed in the box along with a list of the required materials provided by the course directors. A list of equipment provided by the simulation center should also be placed in the box.
- Pictures of each station fully set up.

## **Class Prioritization**

Prioritization of classes and events that occur in the SASC are based on the level of educational importance as determined by the stakeholders involved in the governance of the SASC. Scheduling conflicts will also be handled by the stakeholders of the SASC present based upon the above criteria. All reasonable efforts will be made to prevent such conflicts or to mitigate the effects of any conflicts. If any of the above cannot be resolved by the staff present at the time the issue's/conflicts will be advanced to the following in the following order until resolved; operations manager, co-director, director, and then the VP of the Medical Education.

## **Class Cancellations**

The SASC requests at least 48 hours' notice for cancelling classes or events. In the event a class is cancelled, SASC staff may reach out to other departments to schedule classes or events for that timeslot. Once a requester submits a cancellation request, they should not assume they could re-book the same timeslot if needed.

## **Prioritization of Resources (Scheduling Disputes)**

The SASC makes every effort to accommodate all scheduling requests. Due to limited staffing and equipment resources, there may be times when classes are unable to be scheduled, or need to be rescheduled to meet the overall needs of BIDMC.

Once a class is on the schedule, their timeslot must be adhered to. On the day of a class, SASC staff has the authority to enforce the calendar's schedule, and if needed, reschedule or cancel a class that does not adhere to the original schedule. For example, if a class that is scheduled for 8:00-10:00 shows up at 9:00

and is under the impression their timeslot is 9:00-11:00, SASC staff has the authority to reschedule or cancel their class due to lack of staffing or equipment resources.

## Outside Learners and Rental Fees

The Simulation and Skills Center (SASC) is available as a venue for courses involving outside learners. If there is at least one learner from outside of BIDMC in a class, the class shall be subject to a facility fee. Upon scheduling a class with outside learners, the SASC Operations Manager shall request billing information from the person who requested the class. If the person who requested the class is unable to provide billing information 14 days before the class is scheduled, the class may be cancelled. Upon completion of the class, a bill will be sent to the address provided by the person who requested the class.

We also have a number of simulators that are available for rental. Below is contact information and a listing of our current rental fees and services that we offer. These rental services are separate and in addition to regularly run BIDMC courses.

To make arrangements please contact the Simulation and Skills Center at:  
Email: [SASC-Scheduling@BIDMC.HARVARD.EDU](mailto:SASC-Scheduling@BIDMC.HARVARD.EDU)  
Phone: 617-667-5117

	<b>BIDMC Learners<sup>1</sup></b>	<b>Outside Learners</b>
Skills Access	Waived	\$100
Videotaped Session	Waived	\$250
Facility Fee*	Waived	\$ 3,000

*\*HMS learners shall be considered BIDMC learners and not charged a facility fee*

Events scheduled outside of the normal hours of operation (M-F 7:00-5:00) will incur an additional \$150 per hour per staff member.

**Skills Access:** Access to the simulation center for a day, plus consumables

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<sup>1</sup> Courses that require specialized equipment, rentals, or special supplies may incur a fee. Courses that are grant funded or sponsored may incur a fee.

**Simulation Session:** Use of either the ICU or OR simulation space, and the debrief room for simulations

**Videotaped Session:** Use of the debrief room and video/audio capture

**Lecture Hall:** Use of the large lecture room and equipment

**Equipment Rentals:** The SASC can provide a simulator and tissues to BIDMC learners, but outside learners must purchase their own tissues from the simulation center. The available simulators and their prices are listed below:

Equipment	BIDMC Learners	Outside Learners (per day)
Blue Phantom Central Venous Access Head and Torso	Waived	\$100
Blue Phantom Nerve Block Simulator	Waived	\$100
Simulab Central Line Man	Waived	\$100
Simulab Femoral Line Man	Waived	\$100
Life/form Cricothyroidotomy Simulator	Waived	\$100
Laerdal Airway Management Trainer	Waived	\$100
Arterial Arm Simulator	Waived	\$50
Veinous Arm Simulator	Waived	\$50
Kyoto Kagaku Lumbar Puncture Simulator	Waived	\$100

## Simulation & Skills Center

### Outside Learners Cancellation Policy

A deposit of \$1,000 is required one month before a class takes place. The balance will be invoiced after the delivery of the class. Upon requesting a class, a name and address shall be provided to send the invoice. Class dates and times, and name and address of the class requester shall be provided to a Shapiro Institute Financial Analyst, who will send the invoice.

Classes that include outside learners can be cancelled up to 14 days in advance with no penalty.



If a class with outside learners is cancelled between 7-14 days in advance, there will be a \$1,000 facility fee.

If a class with outside learners is cancelled less than 7 days in advance, there will be a \$1,500 facility fee.

## Tours

Tour requests should be submitted to [SASC-scheduling@bidmc.harvard.edu](mailto:SASC-scheduling@bidmc.harvard.edu). SASC staff will accommodate tours if time, and class schedule allows. Tours outside of the hours of 7:00-5:00 generally will not be given, but exceptions may be made.

## 3. Equipment



### Simulation Equipment Maintenance and Repair

Maintenance and Repair, remote or on site, shall be scheduled during times when there are no classes scheduled. This will minimize the chance of this maintenance negatively impacting classes. After maintenance and repair is completed, the impacted simulation systems should be tested to assure they are fully operational. Any maintenance or repair shall be logged in the *Tasks* section of Microsoft Teams.

### Acquisition of Equipment

When supplies arrive as the SASC, simulation educators ensure they are labeled “not for patient use” if applicable. Items should also be added to inventory upon arrival. SASC staff is responsible for assuring all supplies are available for each course, and should confirm this approximately three weeks prior to a course. If supplies need to be purchased, the SASC staff will facilitate this.

When ordering larger equipment or services, quotes from vendors should be solicited. When it is confirmed that there is both a need and budget for equipment or services SASC staff will submit a purchase order for equipment or services. A BIDMC Center for Education financial analyst should be consulted if there are any questions related to this process, currently this person is Diana Wang.

If equipment or services are from a new vendor, there is required paperwork to be completed in order to execute a purchase order.

## Equipment Loan/In Situ Use

Faculty, instructors, and training partners may request to check out specific equipment, simulators, and supplies. Equipment can be loaned out at the discretion of SASC staff. All requests for equipment use should be sent to [SASC-Scheduling@bidmc.harvard.edu](mailto:SASC-Scheduling@bidmc.harvard.edu). Requests can also be made directly to SASC staff members in person or via e-mail.

The following equipment is available for use:

- Blue Phantom Central Venous Access Head and Torso
- Blue Phantom Nerve Block Simulator
- Simulab Central Line Trainer
- Simulab Femoral Line Trainer
- Life/form Cricothyroidotomy Simulator
- Laerdal Airway Management Trainer
- Arterial Arm Simulator
- Veinous Arm Simulator
- VATA IV trainers
- Kyoto Kagaku Lumbar Puncture Simulator

## Inventory

Inventory shall be performed by a Simulator Technician on an ongoing basis, and be available in the shared drive. Requests to order new equipment shall be submitted to the Operations Manager.

Inventory of Kits and Consumables shall be recorded on the **Kits & Consumables** excel sheet in Microsoft Teams. The goal of this sheet is to track spending, costs, par level, number currently on hand, and expected future use of this equipment. It's important to designate equipment that is reusable in this document. When classes use consumables Simulation Technicians should keep record on this sheet. If we are blow our par level on any supplies, the Simulation Technicians should notify the Operations Manager of the SASC so replacements can be ordered.

## **4. SASC Operations**

### **Weekly Huddle**

The SASC Operations Manager shall facilitate a weekly huddle no later than Tuesday of each week. All full time SASC staff shall attend if available. The SASC Operations Manager will send out an agenda prior to this meeting. During this meeting the following topics should be addressed:

- Upcoming Schedule, typically covering until the following Friday
- Needs of supplies or consumables
- Any upcoming events
- Needs, questions, or concerns of staff

### **Monthly Staff Meeting**

The SASC Operations Manager shall facilitate a monthly staff meeting on the first Friday of each month. All full time SASC staff, directors, and co-directors should attend if available. The SASC Operations Manager will send out an agenda prior to this meeting. During this meeting the following topics should be addressed:

- Each person shall update the rest of the staff on their work the past month
- Any upcoming events
- Expansion of SASC offerings
- Assuring the SASC is on track to accomplish short-, medium-, and long-term goals

### **Start Up Process**

The SASC Simulation Technicians shall be responsible for daily setup of simulation spaces. Educators are responsible for arriving prior to their course to ensure the setup and available supplies are correct. The SASC staff will start mannequins, laptops, and equipment. If educators are experienced starting mannequins and operating simulation classes, they are permitted to do so.

### **Shut Down Process**

It is the Simulator Technician's responsibility to inform SASC staff when a course is complete. After this has happened, SASC staff member will prepare the room for

the next simulation exercise. If another exercise is not planned, a SASC staff member will shut down equipment.

## **Class Attendance**

Class attendance is by learners scanning a QR code located at the entry of the Videoconference Room. It is the responsibility of SASC staff to have the QR code displayed in the entrance to the Videoconference Room. Learners should be made aware by instructors that scanning the attendance QR code is required. SASC staff should periodically check the attendance spreadsheet to assure it's accurately being recorded.

The class sign-in includes a video recording consent. If a learner or instructor wishes the video from the class is not included in our data repository, they can decline consent when signing in to the class using the QR code.

## **Embedded Person**

Classes that require an embedded person in a simulation exercise are common in the SASC. When a class requires an embedded person, SASC staff shall agree upon who will play the embedded person role at least one week in advance. This information shall be added to SimCapture in the *Public Notes* section. The embedded person is responsible for familiarizing themselves with the exercise and the instructor's expectations of the embedded person.

## **Session Evaluations**

There are three separate evaluations conducted by the SASC. All surveys can be found in the SASC's Microsoft 365 account. The surveys are the following:

1. **Yearly Instructor Surveys**
2. **Class-specific Learner Surveys**
3. **Class-specific Instructor/SASC Staff Surveys**

### **Yearly Instructor Surveys**

Yearly Instructor Surveys shall be sent via email to instructors who have taught classes in the SASC during the last calendar year. Records shall be kept in the shared drive of the Staff Microsoft 365 account, and added to the institute shared drive.

### **Class-specific Learner Surveys**

Class-specific Learner Surveys shall be automatically sent out when a learner signs in using the attendance QR code. Records shall be kept in the shared drive of the SASC Microsoft 365 account, and added to the institute shared drive.

### **Class-specific Instructor/SASC Staff Evaluations**

In an effort for instructors and SASC to exchange feedback, SASC staff shall send evaluations to instructors to complete. These evaluations are sent out at the discretion of SASC staff, or at the request of instructors. The goal of these evaluations is for SASC staff to collaborate with instructors on how to improve classes that occur in the SASC. Both positive and constructive feedback are encouraged by both parties.

### **Audio Visual Systems**

Audio visual systems shall be checked daily during the start-up process. Any audio-visual issues shall be documented, and be resolved by the SASC staff. For issues that cannot be resolved by SASC staff, AV technical vendors are listed below. The SASC Operations manager shall schedule all audio-visual repair work.

Mike Langolis: MLangloi@BIDMC.Harvard.edu

Jeff Gerow: Gerow.Jeff@Gmail.com

### **Visitor Parking**

The SASC does not supply parking passes. When there are visitors coming to the SASC, direct them to park in the Shapiro Garage and access the Simulation Center via the Binney Street entrance to BIDMC's East Campus.

### **Guest Computer and Internet Access**

Guests should use the wireless network **bidmcguest** to access the internet on their own devices. Guests who have a BIDMC login are welcome to use the computer workstations in the Skills Arcade.

## Printing

The workstations SASC users have access to in the Skills Arcade are connected to the printer in the Skills Arcade. Users are welcome to use this printer for documents 50 pages or less. **This printer does not print in color.** SASC staff can approve and print color documents upon request.



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## Simulation & Skills Center