



James Rumsey Technical Institute

THE DISCOVERY



The Surgical Technology program at James Rumsey Technical Institute is accredited through the Commission on Accreditation of Allied Health Education Program (CAAHEP). Graduates are qualified to take the national certification exam and, upon passing, earn the title of Certified Surgical Technologist (CST). It is an 11 month program with 30 hours of training per week.

At the onset of the COVID-19 pandemic, the James Rumsey Technical Institute had to find an alternative way to educate and engage learners to provide surgical training. So, they purchased PeriopSim for desktops and tablets to help learners learn at home.

They were also considering PeriopSim VR at that point and were looking into different options to fund the upgrade.

During the initial onboarding process for the desktop and tablet application, the Customer Success Manager at Conquer Experience, Jumana Mascati, arranged an Educator training session and set up a call with Jessica Firl, Surgical Technology Program Director, and Charles (Chuck) McClain, Technical Information Systems Instructor at James Rumsey Technical Institute, to help set up PeriopSim.

Jumana explained the process of upgrading to the PeriopSim VR subscription which, when purchased, also includes the 2D version of the software for desktops and tablets. The pricing is based on a named user basis and would run for the duration of the Surgical Technology program up to a maximum of two years, adding additional value to the program. Chuck requested additional information for PeriopSim VR, including a

quote and stated that he wanted to utilize it and share it with the whole program.

In the meantime, along with sending the quote to Chuck, Jumana arranged for the Travelling PeriopSim VR demo kit to be shipped to James Rumsey Technical Institute to allow learners and surgical technology educators to experience the virtual reality version of the application.

Chuck was extremely interested in purchasing PeriopSim VR after hearing the benefits it could bring to their learners. PeriopSim VR helps learners get familiarized with the instrument names, gain skills such as sharps safety, procedures, and how to pick up each instrument correctly. PeriopSim VR is clinically proven to better prepare clinical learners' and nurses' knowledge in the OR.



Above: Surgical Technology Student trying out PeriopSim VR Kit



Above: Surgical Technology Student trying out PeriopSim VR Kit, Moving hands up and down.

“The software (PeriopSim VR) knows the instrument was handed wrong and when the hands are dropped below the table. That’s really good, I really like that!”

– Jessica Firl, Surgical Technology Program Director, James Rumsey Technical Institute

After receiving and using the Travelling PeriopSim VR demo kit Jessica’s learners were extremely impressed and happy with the outcome of their experiences. Three learners, Brittany, Margarita and Shelby, in particular, commented on their experience with PeriopSim VR. Brittany thought that the more she used the PeriopSim VR, the more familiar she was using the instruments. She felt more confident in picking the instrument up and passing it to the surgeon. Margarita thought that PeriopSim VR helped her feel more comfortable going into the operating room and having to hand the instruments off to surgical nurses and surgeons. Shelby agreed with both the women on how it helped her feel more familiar with the instruments and handing them off. It also felt super realistic, as if she was in a real operating room!



Above: Surgical Technology Student testing the PeriopSim VR kit at James Rumsey Technical Institute 2020.

**“It was not just fun, we got to learn from it too!” –
Surgical Technology Program Learners, James Rumsey
Technical Institute**

Chuck also said to Angela Robert, CEO of Conquer Experience, on a separate call that he was impressed with the customer service that they had received so far.

THE SOLUTION

PeriopSim 



PeriopSim is a surgical training and assessment platform that combines virtual simulations, neuro education and game based learning to save time. When experience is in short supply or too expensive/challenging to attain, simulation training is an ideal option. Pilots have been using simulation for decades and it is a gold standard for certifying and re-certifying competence to fly some of the most complex planes in the world. Healthcare education is catching up.

A National Simulation Study (<https://www.ncsbn.org/685.htm>) was conducted and the study provides substantial evidence that up to 50% simulation can be effectively substituted for traditional clinical experience in all prelicensure core nursing courses

under conditions comparable to those described in the study. It is a study that we use as a foundation in describing how PeriopSim can benefit educators in terms of flexibility in education and timesaving. Additionally, we have been the subject of a number of research studies that you can find more information about here:

<https://www.periopsim.com/research/>

PeriopSim takes live video footage of a one hour long procedure and creates a Virtual Simulation that is 10 minutes long giving a 6x in time savings for that experience. 1 Experience Hour = 10 minutes in simulation with PeriopSim.

Prior to the COVID-19 pandemic, PeriopSim has been used by Educators in Departments of Surgical Services in hospitals across Canada and the US for the last few years. Educators use PeriopSim to improve confidence and competence of perioperative Registered Nurses (RNs) and Surgical Technologists (STs) during their orientation curriculum. PeriopSim can be combined with other learning tools such as AORN's Periop 101, videos, live simulations and preceptor job shadowing. PeriopSim is used to bridge the gap between classroom and the OR.

Surgical Training and Assessment for the Operating Room Team



There are over 35 Virtual Simulation Experiences on the platform and over 15,000 of these experiences have been completed by learners at our customer sites. To build these Experiences, we partnered with our customers at leading healthcare facilities to record the procedures, capture instrumentation and materials. We combine these

assets with evidence-based guidelines from leading sources including AORN and ORNAC. The Educator and Surgeon working with us confirm the quality of the module prior to release. We currently have a large pipeline of modules that are at different stages of development and we provide releases on a regular basis.

When COVID-19 impacted healthcare education more abruptly in mid-March 2020, we had some conversations with leaders in the Surgical Technology area as well as with our customers across the US and Canada in hospitals and we knew we had to act quickly and do something.

PeriopSim was designed to be used on iPad and in Virtual Reality with HPs WMR Reverb Headset or HTC VIVE. This would not work for Surgical Technology Programs that now had to move to 100% online learning. Students did not have access to iPads or Virtual Reality at home. We shifted our entire focus to launching PeriopSim on PC/Mac/Chromebook and Android/Windows Tablet as quickly as possible.

At the same time we had to come up with a low cost pricing package that would be easy to understand and make sense for schools in the short term as well as in the long term. We created our Educational Institution Package with limited pricing for COVID-19 and went live with communications. This allowed for the early leaders to share the information and get the innovative schools onboard and making simulation for procedures accessible within weeks.

We were incredibly impressed by the resilience, grace and energy from both the educators and learners in this new education configuration. The technical aptitude and speed at which they adopted PeriopSim was incredible and it was an honor to see this unfold.

A key aspect of PeriopSim that didn't require any adjustment is the learning data system that does assessments on learners. C or a D means they are learning and focusing on accuracy rather than speed. A and B means that they are focusing on speed and delivery because they are already accurate. Incomplete means that they haven't done more than 3 simulations which is required to get an assessment. The effort it would take to do these detailed assessments is near impossible without technology like PeriopSim.

For more information see here: <https://support.periosim.com/learner-competency-levels>

SCORE 717 Provide a Curved Mosquito Forceps

THE OUTCOME



During the Onboarding and set up call, Jumana explained the procedure on how to use and apply to the program. She set up a registration for Jessica, as an Educator in the program and an automatic email will be sent to the instructor providing a link to set up an account. A username, password and a four digit pin number are the requirements to be filled out, this will be the same account used for the PeriopSim app.

After creating an account, the application can be downloaded through the PeriopSim Help Centre website: www.support.periopsim.com. This page will allow you to download for either Windows PC or Apple devices. There will be a link for you to press to begin the download of PeriopSim. After completely downloading PeriopSim, open the software and login with the designated account.

Jumana then began the educator training session with Jessica. First they discussed the dashboard which allows the educator to view the learner's progress on each module and the grade associated with it. It also shows you the number of seats left, the learners registered for the program, and when the subscription ends. The feature adds value to the dashboard is also extremely important because it highlights that an one hour procedure is completed in 10 minutes on PeriopSim, which means that it is six times faster to learn on PeriopSim. This becomes extremely useful in determining the value in

renewing the subscription for the following year as well as the time and money saved on using PeriopSim.

Jessica currently has 12 learners using PeriopSim. The user management tab will allow you to view and manage the class. This tab also allows the educator to set each student up for PeriopSim through an email. Making sure the invitation button is selected, the learners will receive an email regarding the download procedure for PeriopSim.

The next section shown was the grading system. The learner's competency levels are determined through how familiar the student is with the instrument and how quickly they can hand it to the surgeon in the system. The more familiar and quickly the learner can successfully complete the task, the higher the score. Being able to anticipate the next instrument leads to a higher score.

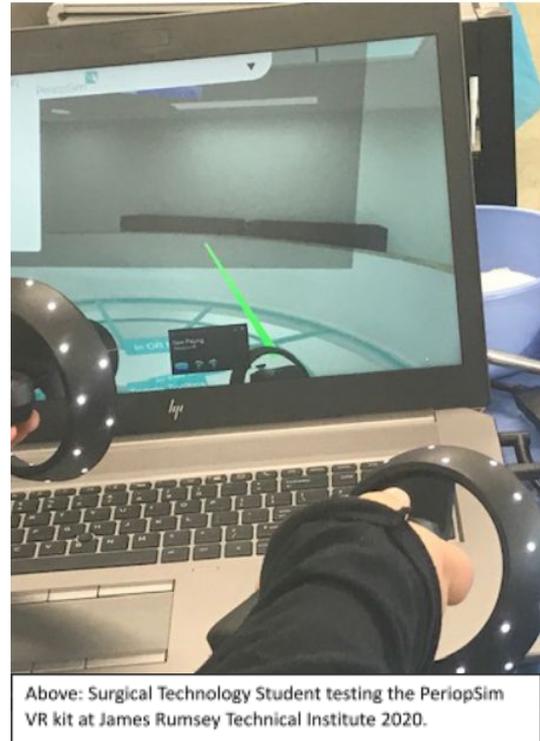
All the learner's grades can also be transferred to an excel sheet for easier accessibility and reference. When asked if the grading will be incorporated into the final grade for the course, Jessica said that the grading will be used as part of the lab grade once they are familiarized with the program. She explained that there is potential in getting the whole program onboard with PeriopSim as it seemed extremely easy to operate. She says, "that PeriopSim provides a platform for learners to learn online and at home, helping them learn new skills and be more familiar with the instruments."

“PeriopSim provides a platform for learners to learn online and at home, helping them learn new skills and be more familiar with the instruments.”- Jessica Firl, Surgical Technology Program Director.

With the Surgical Technology program, learners have to participate a number of hours in the operating room assisting and learning in order to graduate the course. Although the current cohort had been fortunate to have finished their hours prior to COVID-19, Jessica claimed that PeriopSim is definitely going to be a solution to their program. As PeriopSim is six times faster, for every ten minutes of simulation time, the learners would be allocated the equivalent real life time of one hour. With PeriopSim, learners are able to learn more efficiently and effectively.

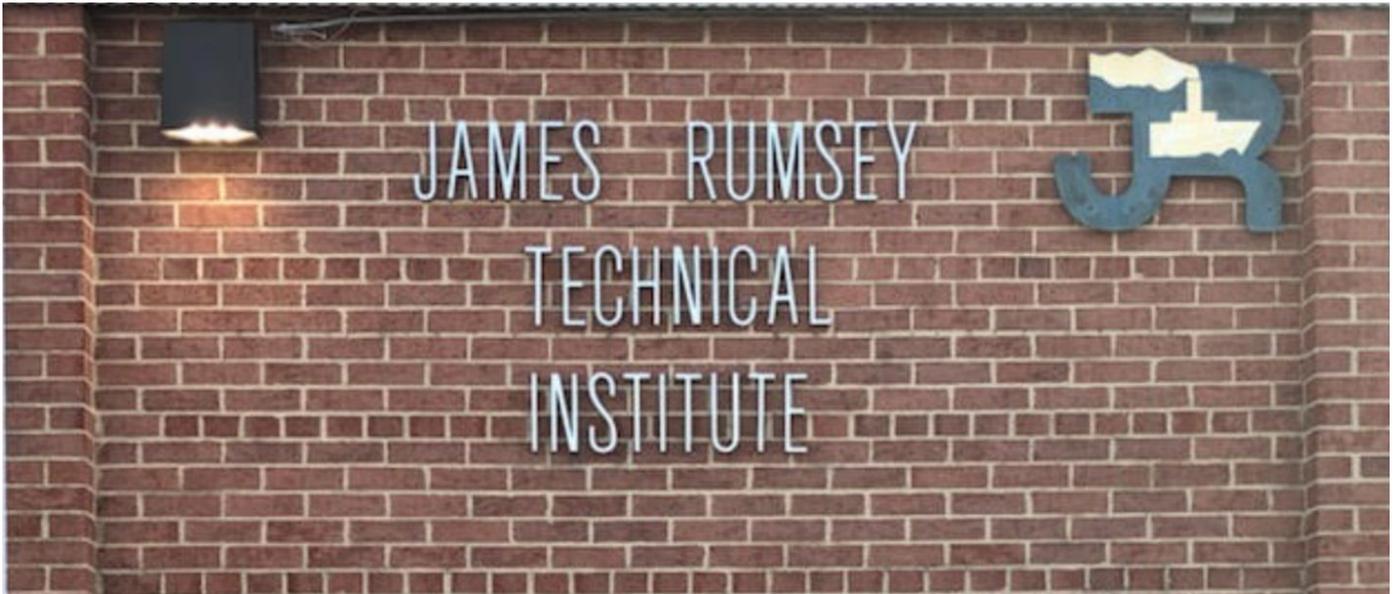
Jumana also talked about the leaderboard feature. The leaderboards allow instructors to see how the student is currently doing and measure their rank amongst their classmates. learners will be able to see where they rank helping to create a friendly competitive atmosphere within the program. Along with the leaderboards, there is also a shared mode feature. The shared mode feature allows instructors and learners to use their individual pin numbers to access the program offline, without wi-fi. Though instructors and learners need to have downloaded the modules prior to accessing it, this may be extremely convenient to those that may not have a stable connection. Additionally, it allows groups of learners to switch and sign in quicker by using their pin number instead of typing in their password.

Jessica was very eager to introduce and start PeriopSim with her learners. Jessica was also provided with a link to the PeriopSim Customer Success Guide, which is a user manual, the first point of support and a good place to find curriculum integration ideas and useful links to PeriopSim support and content. Jumana said that she would check in with James Rumsey Technical Institute Instructors on a quarterly basis to ensure that they are getting the maximum benefit and value from the application.



Above: Surgical Technology Student testing the PeriopSim VR kit at James Rumsey Technical Institute 2020.

The CARES Act Fund Application



**James Rumsey
Technical Institute**

The CARES Act Fund Application

Charles (Chuck) McClain, Technical Information Systems Instructor at James Rumsey Technical Institute, and Jessica Firl, Surgical Program Director at James Rumsey Technical Institute wanted to pursue an upgrade to PeriopSim VR. He contacted Angela Roberts, CEO at Conquer Experience and Jumana Mascati, Customer Success Manager at Conquer Experience to discuss how Angela could help provide a supporting letter to submit alongside the CARES grant application. The three of them met to discuss this over a zoom video call.

Chuck was always completely onboard with the 3D technology, as it is the educational standpoint the school is heading towards. The first time Angela and Chuck spoke, He stated that PeriopSim was the perfect solution for Career and Technical Education (CTE) - Surgical Technology, especially because of COVID-19.

Angela wanted to make sure PeriopSim suited Chuck's educational goals, as well as obtaining additional information for the CARES funding they had received. Angela explained that PeriopSim Surgical Technology Program Educators have been able to purchase PeriopSim using either the Carl Perkins Grant or CARES funding. It is extremely important to update other schools that there is financial support out there that can help them purchase educational products. Conquer Experience wants to be able to provide and update the Surgical Technology Program educators on exploring more accessible funding options. As well as, to help provide them with useful links and also be able to connect them to other educators that have been successful in getting funding approved for their program.

Donna Van Metre, the Principal and Director at James Rumsey Technical Institute, states that James Rumsey Technical Institute (JRTI) participates in assisting postsecondary students to apply for federal PELL grants. As a result of this, JRTI received notification of eligibility to apply for CARES Act funding from the federal government. These funds are for emergency financial aid to institutions and their students who have been financially impacted by COVID-19. Following guidance published by Federal Student Aid, JRTI moved through the required procedure to submit an application for the grant through Grants.gov. Per guidance, at least half of the funds must be allocated directly to students who have faced financial needs as a result of COVID-19. Funds can also be used by the institution for support of physical, safety and instructional changes as a result of COVID-19.

Chuck explains that if their institute does not have enough funding with the CARES Act, the state of West Virginia also has an incentive grant that they are able to use.

The CARES Act enables funding, as long as the school is able to show why the educational product will help and educate learners during COVID-19. This submission would be in the form of a supporting letter. This zoom meeting was arranged so that Angela could understand the application process for the CARES funding from an

information perspective and also be able to provide a short letter that would work really well the first round as opposed to going back and forth too many times.

An important piece of information that can be included in the application process is a reference of other schools successfully using PeriopSim in providing an educational advantage. This information strengthens the application to receive funding from The CARES Act. Currently, PeriopSim is still new to James Rumsey Technical Institute, and the board is still deciding on whether the hours put towards PeriopSim will be put to the completion of the Surgical Technology program certificate.



Above: Surgical Technology Student testing the PeriopSim VR kit at James Rumsey Technical Institute 2020.

One of the biggest concerns Jessica has currently is the cut back on clinical hours. It's extremely tough to provide learners with clinical hours as they need to have the knowledge to pass the certification test in order to be certified. Especially during times like this, learning how to be in the operating room is very difficult. However, PeriopSim is able to provide learners the confidence to enter the operating room and the chance to experience it virtually. And with learners being very adaptive to advanced technology, Chuck believes that PeriopSim can provide a fun opportunity to their learners. One of their learners, Margarita, was able to demonstrate how quickly she caught on and showed how intuitive she was with the technology.

Donna Van Metre, the Principal and Director at James Rumsey Technical Institute said: "After observing the VR kit, I had the opportunity to observe a student utilizing the VR system. I was impressed by the integrity of the product in replicating a field experience. This provides learners with appropriate practice, especially in the event that we would not be able to go to clinical sites."

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- Donna Van Metre, Principal and Director, James Rumsey Technical Institute

Dave Foster, COO and co-founder of Conquer Experience, supported Jessica with the set up for PeriopSim VR. Jessica said it was a pleasure working with Conquer Experience and that the commitment to supporting customers is awesome!

“It has been a pleasure working with you and the company you represent. Your commitment to supporting your customers is awesome!”

- Jessica Firl, Surgical Technology Program Director, James Rumsey Technical Institute

Normally, James Rumsey Technical Institute has a tour with eighth and tenth graders. However with COVID-19 this year, the tour was cancelled. So they were able to bring on a videographer that developed a virtual tour for the learners. Chuck mentioned that he is very interested to see if Conquer Experience is interested in partnering with the school to help bring additional educational benefits to other school programs virtually. He understands that PeriopSim is primarily focused on healthcare programs, including surgical technology programs.

In order to try something creative, Conquer Experience needs to have an approximate budget to understand how much resources they need to create something greater. Fortunately, James Rumsey Technical Institute is qualified for a Rural Grant that is potentially going to fund additional programs Conquer Experience can offer.

Chuck is extremely passionate in creating a program that can provide an educational benefit to the school and their learners on future projects.

THE FACULTY

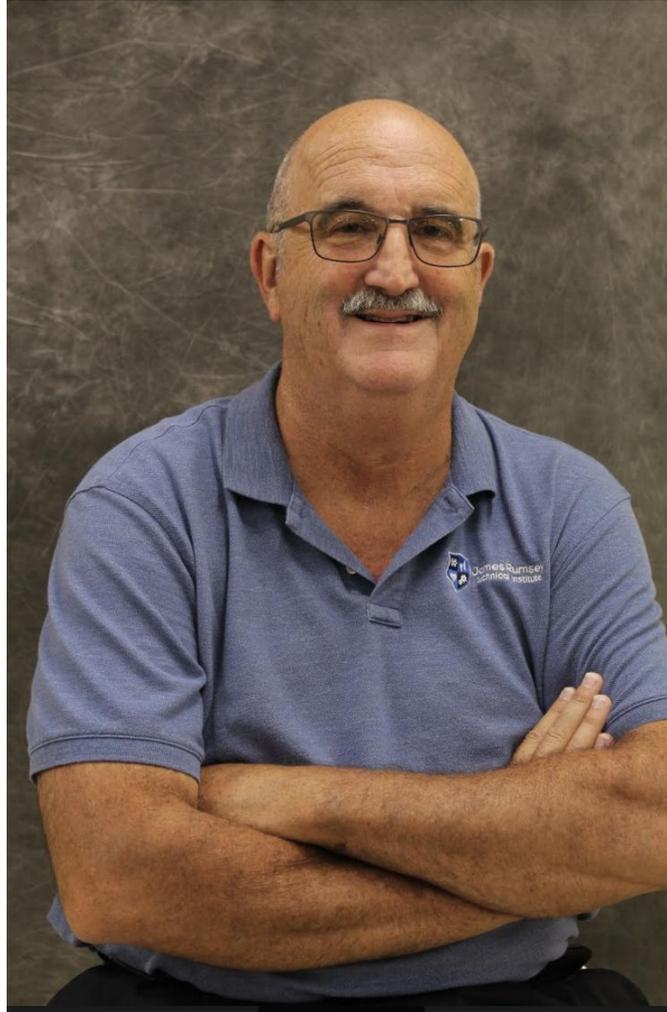


Donna Van Metre

**Principal and Director at
James Rumsey
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Jessica Firl

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Charles (Chuck) McClain

**Technical Information Systems Instructor
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