

THE SCOOP

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Message from the CEO

by Debra Leeves, CEO

What an interesting and challenging year it has been for all of us this year, as we moved out of travel restrictions due to Covid and caught up on so many of the projects that could only be done face to face. Our commercial teams managed to attend two international conferences, ESTRO and ASTRO, and we were also able to host VERT user events in Germany and the US. We tried to find a large international conference in Asia, but the larger events still seemed to be on hold, so instead we are attending and showcasing VERT products at slightly smaller events across Asia in the coming months.

As part of our three-year strategy to deliver more flexible VERT solutions for our customers, we are developing new platforms such as the recently launched cloud delivery of VERT software (VERT on Demand), which enables students, lecturers, and clinicians to access the latest VERT software whenever they want on a subscription basis. We feel that this new format will help students to learn and consolidate their knowledge at their own pace away from the classroom. The Product Specialists at Vertual have worked with radiotherapy course providers across the world to ensure that the workbooks and assessment questions meet your and your students' learning needs.

Looking forward to next year, we are developing software solutions to support patient care in radiotherapy as well as planning to add new features to the core VERT software for all current users. Have a wonderful end of year celebration with your family and friends and a happy New Year in 2023.

German user meeting

by Tammy Vivian, Product Specialist

On 11th November 2022 we gathered for a German VERT Customer user meeting. This was hosted in Kiel by Jonas Schaper and organized in collaboration with CH Consult our German Distributor. The event was a great way to catch up with other sites and learn different ways to use the VERT software. Thank you to all who presented. Attendances from neighboring sites were greatly appreciated and we hope you all enjoyed the meal on behalf of Vertual.

Make sure you keep an eye out for our next UK/EU User meeting – details to be announced in the new year!

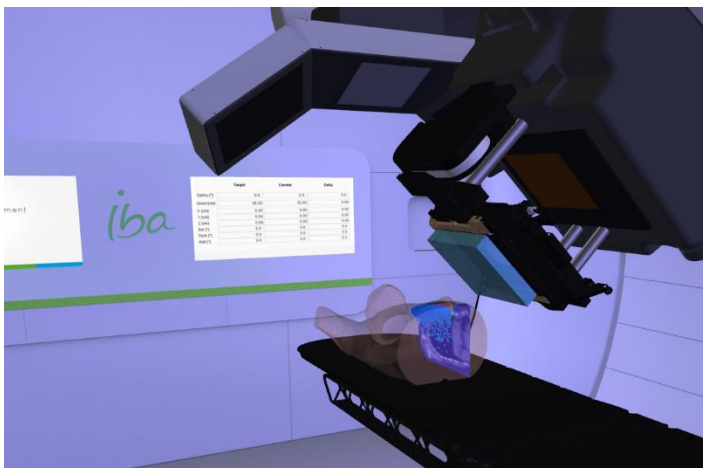


Proton therapy workshop at PARTICLE

by Sofie Isebaert, Particle Therapy Interuniversity Center Leuven

On October 8, 2022 the Particle Therapy Interuniversity Center Leuven – PARTICLE, located at the Health Sciences campus Gasthuisberg of UZ Leuven in Belgium, organized a workshop on proton therapy for participants of the EU INTERREG V project "EP/PT - Cross-border PT Team". This is a European project aiming to train a cross-border team of radiation oncology professionals from Germany, Luxembourg and Belgium to increase awareness and knowledge of proton therapy and to establish appropriate patient access to proton therapy. In addition, a group of last-year bachelor students in medical imaging technology joined the workshop.

The program consisted of a mix of lectures, a guided tour of PARTICLE and the department of radiation oncology as well as several interactive, hands-on sessions. By way of linking theory and practice, Claire Hardie from Vertual, provided the audience with an overview of the uses of the VERT system. This virtual environment for radiation therapy treatment rooms which includes proton therapy replicates the treatment room and allows for learning in a safe non-pressured environment. Thanks to the 3D simulation of the treatment room as well as the treatment itself the radiation oncology professionals as well as the students already had a first impression on how the Proteus@ONE system, that is installed at PARTICLE, looked like and how treatment plans are being delivered. As such this VERT demo was a nice compliment to the real-life experience.



VERT as a recruitment and engagement tool

By Marissa Mangrum, University of Oklahoma Health Sciences Center

At the University of Oklahoma Health Sciences Center, we use the VERT system across the curriculum for our junior and senior radiation therapy students. We have found VERT to be an invaluable tool to demonstrate the concepts of radiation therapy as well as develop critical thinking skills.

Although many have spoken on the importance of VERT with students, we have found VERT to be extremely useful as a recruitment and community engagement tool. In our college we hold multiple recruitment activities with students of all ages. The VERT system always takes center stage when explaining what radiation therapy is to those who have never been exposed to the field.

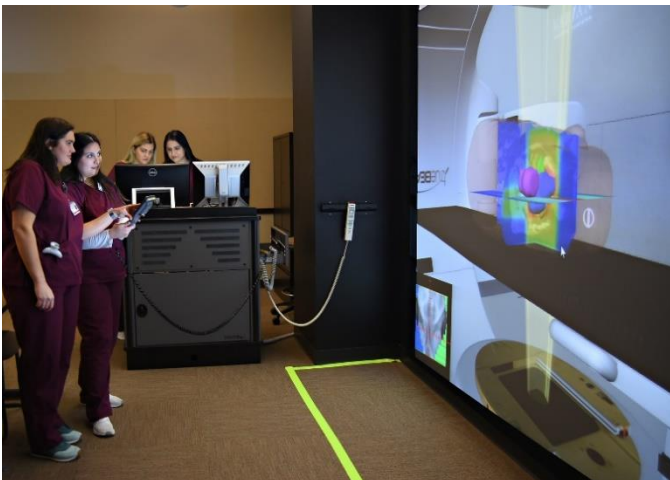
One of our greatest opportunities for student recruitment in the University of Oklahoma Radiation Therapy program is at our college wide open house. At our open house we invite all ages to come and see the programs we offer. At the open house VERT allows our program faculty to not only talk to students that are already planning to enter our program but to spark interest in those who have never thought about the career path. Often, we see attendees that came to the open house interested in one of our other programs within the college but the opportunity to display the technology our program offers with the VERT system while speaking to them about the profession has really made an impact. We often see family members that also attend open house with the prospective student and VERT allows us the opportunity to explain what the student will be doing within the profession. During the open house, we often have the VERT screen left on with one of the full body clothed patients. As we discuss the process of treatment with those interested, we progressively move into the DICOM patients and discuss the role of the radiation therapist.

Within our program we also have a high school early admission track. Within this track if they meet qualifications while in high school, they will receive a conditional admission. The admission is conditional on successful completion of two years of college

prerequisites before entering the radiation program. This program is very dependent on recruitment activities. Within our college we offer high school and middle school exploration programs. In these programs students interested in science are rotated through the labs of the college. This is a great opportunity for us as a program to catch the interest of the students. VERT allows us to offer a hands-on experience while explaining the field of radiation therapy. Since VERT is unlike any other simulator within our college it creates a memorable experience for those students and hopefully, we see them as applicants in the future.

We not only use our full VERT system for these activities, but we also use VERT on a laptop which allows us to bring the technology to events off campus. Each year we attend an event called the Women in Science Conference at our local science museum. The event is a hands-on conference designed for girls in grades 6-12 to become excited about science, technology, engineering, and math (STEM). The event promotes the experience of having immersive activities and interactive sessions. The VERT laptop allows us to promote the field of radiation therapy with an interactive activity. This last year over 1600 students and teachers attended. Having VERT on a laptop was a critical tool in bringing the field of radiation therapy and our program to the community. Some of the comments we have received from these younger students are “my mom had breast cancer and now I understand her treatment” and “this is what I want to do when I grow up”.

VERT is an invaluable tool to our program not only for educational purposes but for the future of our program and the field of radiation therapy. Exposure of the radiation therapy field to the community and possible applicants has been much more effective with the use of VERT.



US user meeting

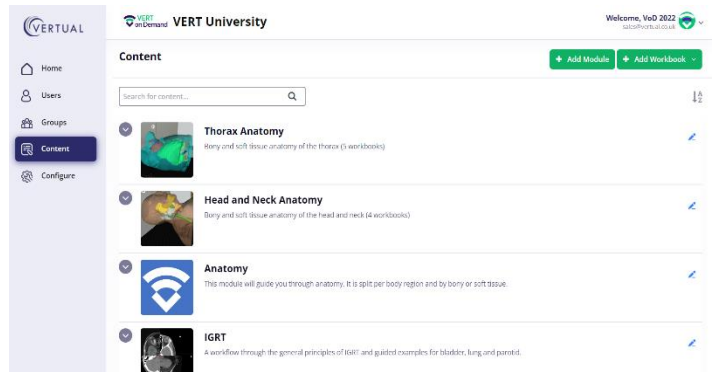
by Daniel Owen, Product Specialist

The 2022 US annual Vertual user meeting in San Antonio was a great success. It was lovely to see so many of our customers come together and discuss the different ways they use their VERT systems to help teach and train the next generation of Radiation Therapists.

We kicked things off with a warm welcome from CEO (Debra Leeves), a brief overview of Vertual in the United States and an introduction of the host for the evening, product specialist and territory manager for the Americas (Daniel Owen).

Our first guest speaker of the evening, Jessica Smith from Texas State University. Jessica presented “Utilizing VERT to Ensure Continuity of Clinical Education through the COVID Pandemic”. It was amazing to see how Jessica and the team at Texas State University used their VERT system to adapt to working remotely, whilst still providing the best teaching. Our next guest speaker was Lauren Fantham from St Georges University London. Lauren gave us a fascinating history of St Georges and just how important they have been in the progression of global health. Lauren then went on to show us how they have brilliantly integrated VERT into their programmes at every level.

This was followed by presentations about our latest products and VERT updates. Jan Antons, Business Development Manager and Tamsyn Vivian, Product Specialist and Territory Manager for the UK and Europe presented “An introduction to Vert on Demand”. Jan gave us a brilliant insight to the advantages and benefits of VERT on Demand, followed by Tamsyn giving us an excellent live demonstration of the software.



Chief Technical Officer, James Ward excellently presented the new features of VERT 6 and how they can benefit your teaching and engage students. The new features include more DICOM plans, a 4DCT patient, plan comparison on DVH, desktop shortcuts and many more!



Our final presentation of the evening was VERT physics and product platform advances by our Chief Science Officer, Professor Andy Beavis. Andy explained the newest features that have been included in our latest physics module, including TG51. He also went on to speak about Vertual's direction and our latest products. The presentations were followed by closing statements from Debra. We then had a chance to discuss ideas for the future over some food and drinks!

ASTRO and ASRT

by Daniel Owen, Product Specialist

Both ASTRO and ASRT are fantastic ways to connect with our current customers and also meet new people who want to join the VERT community. In addition the Vertual team was so excited to attend the conferences after years of missing out due to COVID-19. We arrived a few days before the conference opened to set up our booth, and get everything ready. Finally after a few days of setting up the conference opened its doors. It was amazing to see so many people interested in VERT. We aimed to show off our full range of products from our installed systems to our latest cloud based systems. It was also a great opportunity to showcase our new product "Patient Flex" aimed at improving patient education.

We were so thrilled to connect with people and customers that we have not seen in a very long time and new people who were extremely excited to see what VERT can do and how many different products are available to meet their needs. We met people from all over US and made some brilliant new connections to try and get VERT to help as many people as possible.

Everyone on the team brilliantly demonstrated the advantages of every VERT product were able to engage and grow the VERT community. San Antonio brought an amazing experience through the culture and friendliness of the people!



Founder's Blog – From classroom to living room and beyond

by Professor Andy Beavis and James Ward,
Vertual

As 2022 draws to a close it seems right to reflect on Vertual's 15th year and on those 15 years. As we have commented in various presentations in the past; it has been a fun trip! Whilst teaching at Sheffield-Hallam University in Sheffield as a guest Physicist lecturer, I always struggled at the point of lectures when I really needed to take the class in to the bunker and SHOW them something. Discussing this with Roger and James, during our work up on (IMRT) Optimisation Algorithms, sparked many 'well we could' and 'what if we used VR' conversations. We started to ponder on 'well, what if we brought the Linac into the classroom'. When we were having those 'corridor' / 'what if' discussions many moons ago, wondering if our ideas to provide novel training for radiotherapy would be of interest, we really had no idea that VERT would take off to become what it is today. As an educator, I just wanted better ways to show and illustrate what I was teaching. As a proponent of new technology, I was frustrated by the slow uptake of IMRT and IGRT at the turn of the century, in the UK.

We are grateful for the fact that some in the NHS leadership were captured by our vision. Prof Sir Mike Richards, The UK Cancer Csar, was looking for ways to improve training for Radiotherapy whilst I was looking to help the UK catch up on IMRT. Sometime in 2007 he asked to come and visit us in Hull. Following a conversation with him, we were confident that we might get funding for two VERT systems; the three of us ended up having to figure

out how to provide and install some 45 across England within the following 12 months. Colleagues in the College of Radiographers were enthusiastic supporters of VERT from the beginning and helped us make a difference to the way their students were trained.



The future brings some exciting developments for Vertual with new products and our embracing new platforms such as 'cloud' delivery and software as a service. We look forward to working with customers and learning how students and trainees will use the remote access to VERT. Having successfully brought the Linac into the classroom, we are now taking it to the students' living rooms at any time of the day. We believe that by doing so, students will benefit from self-directed and self-paced consolidation of the didactic learning provided in the classroom. Virtual Presenter has been expanded to provide a more comprehensive e-learning platform and can now be used to set up knowledge/competency assessments. The facility now exists to launch the VERT session with a specific Linac, patient, scenario and set of instructions and assessment questions. We look forward to learning how this can be incorporated into course assessments as well as giving students more access to the VERT environment.

As ever, we Founders are grateful for the feedback we receive and the wonderful collegiate nature of the International VERT family. We appreciate your continued enthusiasm and look forward to catching up with as many of you as possible at the upcoming user meetings.



Available in 2023. Watch the space for more news and webinars. If you are an existing customer and would like a quote, get in touch now: sales@vertual.co.uk