



Virtual reality simulator wins first AOTrauma Innovation in Education award

01. November 2018

The award will be bestowed for the first time at the Davos Courses in December 2018



A five-person project team from Germany will be awarded AOTrauma's first-ever Innovation in Education award at the Davos Courses 2018 in Davos, Switzerland. The team's innovative "Virtual-reality-simulator for teaching radiation hazards prevention" was praised by the jury as an highly innovative and effective tool.

Enhancing the AOTrauma Education Experience

In a call earlier this summer, AOTrauma brought the idea of fostering innovation in education to life and announced the first call for applications for the new AOTrauma award for Innovation in Education.

Seeking innovative approaches to educational content, education delivery and curriculum design, AOTrauma sought nominees advancing one of the following aspirations:

- Teaching **effectiveness**
- Educational **impact**
- Stimulate learners' **motivation**
- **Engage** learners in the learning process
- **Interaction**

AOTrauma received twelve well-qualified and eligible nominees out of 19 submissions from eight countries in total.

The jury made its decision in September. Jury members were:

- Wa'el Taha, chairperson AOTrauma Education Commission (AOTEC)
- Vajara Phiphobmongkol, member AOTEC
- Mike Sirkin, member AOTEC
- Michael Baumgaertner, member of AO Education Institute (AOEI) Advisory Board
- Samir Mehta, chairperson AOTrauma Community Development Commission (AOTCDC)

The winner

With its "Virtual-reality-simulator for teaching radiation hazards prevention" project, a team composed of Klaus Dresing, Michael Teistler, Matthias Suencksen, Markus Wagner, and Oliver Bott (DE) persuaded the jury.

The team's novel simulation-based application, combining gamification and virtual reality technology, provides a user-friendly, enjoyable and motivating training tool with a high educational value for intraoperative C-arm imaging. It helps to operate C-arms adequately and hence to avoid unnecessary radiation exposure and intraoperative delays.

The jury recognized the contribution of this highly innovative and effective training tool to the field of computer-based healthcare professional training.

Dresing will be invited as faculty to the Davos Courses 2018 and will receive the award certificate during a ceremony. The simulator will be integrated into the AOTrauma Course— Basic Principles of Fracture Management in Davos.



With virtual reality glasses and handheld 3D controllers learners can practice intraoperative X-ray imaging in a life-like and engaging way



Example views of the virtual operating room with C-arm, including simulated X-ray images and corresponding scattered radiation

The runner-up

Tim Coughlin (GB), with his "Online course for undergraduates" was runner-up for the award.

Honorable mentions

Honorable mentions were awarded to Ingmar Buffo (MX) for his efforts to make Basic Principles courses in Mexico more affordable, as well as the Intraoperative Imaging Working Group with Jochen Franke, Stephan Grechenig, Paul Grützner, Michael Kraus and Sven Vetter (DE) for their development of an Intraoperative Imaging Curriculum.

While neither the runner-up nor the honorable mentions will receive a prize, their projects are great achievements, and both the jury and the AOTrauma International Board were very impressed by these ambitious projects.

Learn more

AOTrauma will feature the winner, runner-up and honorable mention projects more detailed in separate stories on the [AOTrauma Website](#). Stay tuned.