Ultrafest: Ultrasound Symposium Sweeps Medical Students Across California

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The use of bedside ultrasound as a diagnostic and procedural guidance tool is rapidly spreading across multiple medical fields. The University of California at Irvine is a driving force helping to lead the country in integrating ultrasound into medical education. On May 20th, 2012 UC Irvine School of Medicine opened its doors to expose its educational paradigm to medical students across the state at the first Ultrafest, a free bedside ultrasound symposium for medical students. The primary goal was for students to leave the symposium with a foundation of practical skills they would be able to take with them to clinic, where they then may be able to continue expanding upon their knowledge and skills. We worked to maximize hands on experience and learning by providing instructional videos prior to Ultrafest created by UC Irvine Ultrasound Director Dr. Chris Fox. This allowed students to solely focus on the experience of innovative simulators, phantoms, and live models with quality instructors in small groups for guidance during the symposium. Furthermore, the symposium was tailored to each student by allowing them to choose which workshops they wanted to attend with hopes of most effectively building skills and meeting the peak interests of each individual.

Over 200 students from schools throughout California attended Ultrafest. Twenty physicians from a variety of specialties from the University of California Irvine, Loma Linda University, and the University of California San Francisco served as workshop leaders. An additional 24 well trained UC Irvine students served as small group instructors, maintaining an instructor to student ratio of less than 5:1. Workshops offered included cardiology, anesthesia, pulmonary, male genitourinary, female pelvis, question and answer image review, pediatrics, obstetrics, musculoskeletal, trauma simulation, hepatobiliary and vascular. Workshops featured 32 live models including multiple live pelvic models, pregnant models, male genitourinary models, as well as models with musculoskeletal and hepatobiliary pathology. Cutting edge simulation technology was featured at the cardiology and trauma simulation stations. Phantoms were provided for practicing procedural skills including central line placement and thoracentesis in addition to viewing pathology in the transvaginal, FAST, and pleural effusion phantom models.

Data taken from the event echoed the enthusiasm of the student attendees. Ninety-six percent of students reported less than 5 hours of prior hands on ultrasound exposure. However, 78% of students reported moderate to much improvement and 20% endorsed mild improvement in their skills after Ultrafest. Ninety-three percent of responders reported they would like much more ultrasound integrated into their curriculum and felt they would frequently use ultrasound in their future career.

The large student attendance and overwhelmingly positive response from students demonstrates the enthusiasm among medical students and allied health professionals for more ultrasound training in their curriculum. Most of the students who attended had less than 5 hours of hands on exposure to ultrasound prior to Ultrafest. Dramatically positive trends displayed by the subjective data support the value in holding bedside ultrasound symposiums for students, with the majority of students feeling at least moderately more confident in their ultrasound skills after the symposium. There seems to be a high level of interest amongst medical students to integrate much more ultrasound into their medical education. Bedside ultrasound symposiums like Ultrafest may be a way to effectively teach students bedside ultrasound skills while generating further enthusiasm in integrating ultrasound into medical education across a large spectrum of medical schools.