Notes for Educators

A Newsletter for the ARDMS Educator Community





FALL 2019

A New Era in Sonographic Technology: Virtual Beam-Forming

By: Frederick Kremkau, PhD

There are *two* fundamentally different operating principles present in the sonographic systems commercially available currently. Therefore, a new approach to teaching and testing sonographic principles is necessary. For over 50 years, one principle has been operating. Now there are two, providing dramatically different results. Students must be prepared to encounter both when they graduate.

The fundamental pulse-echo principle that has been in use in *conventional sonography* for decades states that a pulse of ultrasound is sent into the anatomy to be imaged and the returning echo stream is displayed as a visible scan line. This is repeated about 100 to 250 times to form one frame of the anatomic image. In conventional sonography there is a one-to-one correspondence between the emitted pulse and the returning echo stream that appears as a scan line on the display (ignoring the detail that, in some cases, multiple scan lines can be presented from one emitted pulse, typically two or four). The best detail resolution occurs in the focal region of the focused, transmitted beam. A laserthin beam would produce excellent detail resolution everywhere in the image. Unfortunately, the high frequencies necessary to produce such a beam would not allow the penetration necessary for human anatomic imaging. Conversely, a broad, unfocused beam would produce a useless image with unacceptable detail resolution throughout.

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it! Do you have a patient that you'll never forget? What was your defining moment? Would you choose sonography again... and again... and AGAIN!? Join the conversation by submitting your own video that builds on one of the original episodes.

Submit Today!

Enter for a chance to have your 2020 renewal fee waived!

The ARDMS is looking to increase our collection of sonography images to be used for a variety of promotional and educational purposes. Submit your images of:

- Adult Echo (AE)
- Pediatric Echo (PE)
- Fetal Echo (FE)
- OB/GYN
- Vascular Technology (VT)
- Breast (BR)

Click For Full Contest Rules



Certification Corner

Are You Submitting a New Prerequisite 2 Application Form?

See Below for Important Tips!

- All students added to a Prerequisite 2 Form must have a MY ARDMS account.
- Students not appearing in Prerequisite 2 Application Form list of Eligible Students simply means they did not identify the school's program when registering for a MY ARDMS account. In this situation, the Program Director will need to manually add these students; to do so, instead of clicking 'Select Students', you will need to select 'Add Student'. You will need to enter their names exactly the way they are listed in their MY ARDMS accounts along with their ARDMS ID number.

Special note to Program Directors Sending in Bulk Payments for students

- Ensure students apply individually on-line for their examinations prior to sending in payment. There are legal
 questions that they must respond to themselves.
- Students would select the "Pay by Mail" option when prompted for payment method on their on-line application and then provide their Program Director with their Application Summary only. Do not include application documents.

Click For More Tips



Looking for a Job in Ultrasound?

Here are two featured open positions:

Ultrasound Technologist (Tacoma, WA) Vascular Ultrasound Tech (Richmond, VA)

To view more, visit **UltrasoundJOBS by ARDMS** and search sonography-specific positions in your area. **Create an account**, upload your resume, browse the Career Learning Center and build custom job alerts to fit your needs.

Hiring? Post a Job!

UltrasoundJOBS by ARDMS will help you find the right professional by delivering enhanced features including a Feature Jobs option and Ultrasound SmartBrief Add-on. **Create an account today!**

Volunteer with ARDMS/APCA!

At Inteleos, we depend on our over 600 volunteers to help create the global standards of excellence in healthcare and patient safety by:

- Developing Exams
- Communicating about ARDMS
- Guiding Students

Click here for information on volunteering with ARDMS or **click here** for information on volunteering as a physician with APCA.





Sign-up for the complimentary e-newsletter bringing you the most important and timely news stories about the sonography industry to over 40,000 subscribers. **Ultrasound SmartBrief** is brought to you exclusively by the ARDMS.

SDMS Student Luncheon

On Saturday, September 28, ARDMS hosted "Making Connections with ARDMS" – our annual luncheon at the 2019 SDMS conference. Students and Registrants were invited to enjoy a delicious Tex-Mex style buffet with our staff. Guests learned how ARDMS can be a career partner to sonographers and how to stay involved with ARDMS through volunteer opportunities. Door prizes were awarded, with one lucky student receiving half off an examination fee and one Registrant receiving a waiver of the 2020 annual renewal fee. The lunch concluded with a networking activity to encourage continued connections.

Learn more about getting involved, volunteering and other opportunities with ARDMS by **clicking here**. Make sure to join us next year in New Orleans!



INTELEOS STAFF UPDATE



Inteleos staff decorated pumpkins using only office supplies for our Fall 2019 Community Engagement Team event

WINNERS







Cutest Most Creative Scariest





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