Lecture summaries VECCUS and EVECC congress 2022
1-4 June 2022, Ghent, Belgium

Thoracic ultrasound: "Technique matters"
Stream: VECCUS

Descriptor: Several refinements and numerous sonographic techniques have recently been published in small animals to improve the accuracy of thoracic focused assessment with sonography for trauma (TFAST) to detect pleural space pathology, and assess the lung for parenchymal disease. The goal of this lecture will be to review the evolution of pleural space and lung pathology, describe the different techniques currently used, discuss evidence- based medicine regarding the accuracy of the different techniques, and review tips and tricks on how techniques can be modified based on the suspected pathology and patient positioning.

Intended learning outcomes:

- Appraise the utility of the thoracic point-of-care ultrasound techniques
- Describe how techniques are modified based on patient positioning and the pathology suspected
- Perform thoracic ultrasound to answer clinically driven questions

Pneumothorax: "Rule in or rule out"
Stream: VECCUS

Descriptor: Pneumothorax is arguably the toughest point of care ultrasound application when it comes to the pleural space and lung. However, there are several key concepts that make the diagnosis easier when they are properly understood; Does detection of the glide sign always rule out pneumothorax? Is a glide sign always visible when the lung contacts the chest wall? Are the detection of B lines 100% specific to rule out a pneumothorax? Is the lung point the same as a lung pulse? What the heck are abnormal curtain signs!?!? Better yet, what is a curtain sign and how does it help us diagnose pneumothorax? Why does Kris insist that playing “Peak a Boo” with his kids or that “playing an accordion” helps him diagnose pneumothorax?!!?? Trust me, you don’t want to hear Kris try to play the accordion, but you do want know why it helps him diagnose pneumothorax.

POCUS Technical skills: "Vascular Access, catheter checks and regional blocks"
Stream: VECCUS

Can't feel the vessel? – ultrasound can help! Ever struggle with placing a percutaneous IV catheter or collecting blood (venous or arterial) when you can't feel the vessel? Should you even be trying to place a catheter in a particular vessel or is that catheter you placed posing a risk for thromboembolism? Ever wonder if you are at the correct location to perform nerve blocks? Stop wondering and increase your confidence by using point of care ultrasound! This lecture will focus on ultrasound guided techniques to place catheters and collect blood samples, perform nerve blocks, and assess IV catheters.

The aim of this lecture are: to describe in and out of plane techniques to place IV catheters and collect arterial and/or venous blood samples, to describe the use of ultrasound to perform common locoregional nerve blocks and to discuss the application of point of care ultrasound to assess IV catheter insertion sites.

POCUS around CPR
Stream: Advanced

Descriptor: what can ultrasound tell us? Arguably the faster any causes contributing to an arrest can be identified and reversed, the better the chances of successful CPR. However, the ability to assess patients in the CPR setting is limited to physical exam findings and simple point of care diagnostics. With the rapidly growing availability of mobile and hand held ultrasound units, the use of POCUS during and right after the CPR setting is also rapidly expanding. It can help identify contributing causes of an arrest, and evidence suggests it can determine the presence of cardiac activity and detect arrhythmias without interrupting or having to stop CPR efforts! This lecture will cover the basic application of POCUS in the arrest setting, and, technology permitting (and provided the stars align correctly) will include live cases scanned in real time to demonstrate some of the applications.

Advanced Pleural and Lung Ultrasound lab
Stream: Lab

Descriptor: The session is aimed at those clinicians already using point of care ultrasound (POCUS) in the clinical setting and understand the basics of echography. Live dogs, cadaver models and interactive powerpoint case examples will be used to demonstrate how to use POCUS to answer clinically driven questions in emergency and critically ill animals.

Intended learning outcomes:

- Demonstrate how to use sonographic borders to locate sensitive sites for pathology
- Perform POCUS to answer clinically driven questions
- Formulate a plan based on history, physical examination and POCUS