

# ECHO**COM**

## **Newsletter July 2019**

Dear valued colleagues,

We have done major advancements with the latest software release EchoCom|Neo 1.2.0 and would like to introduce these to you.

### New features of EchoCom|Neo

#### 1. Case selection

Selection of cases will no longer be by an explorer window, but by a more convenient opening menu that allows filtering cases and with more intuitive case names.

#### 2. Variable window size

The windows within EchoCom are now variable in size.

#### 3. Case informations

We have incorporated case informations into the application. Basically all information that previously was in the PowerPoint files and much more can now conveniently be viewed within the right side of the EchoCom|Neo interface.

This includes color Doppler films, Doppler images, chest X-rays, clinical information, history and physical examination and a tutorial.

Probably most waited for is the inclusion of color Doppler films. One has to be aware that these are pre-recorded films and not 3D data that are interactive like the grey scale data. This is because full-volume color 3D in sufficient quality is still not available. Side-by-side presentation of the simulated 2D views and the pre-recorded color Doppler films nevertheless is a big step forward. The tutorials shall help trainees to get the relevant features of the cases. These are pre-recorded films showing the most relevant views for that case, some with annotations. Also an echocardiography report is added.

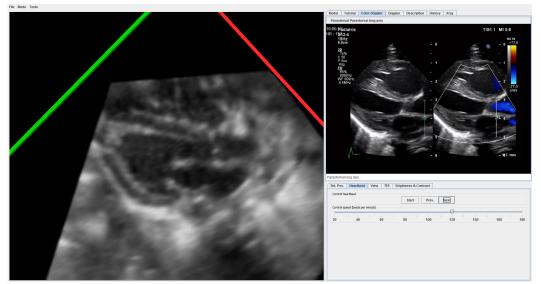
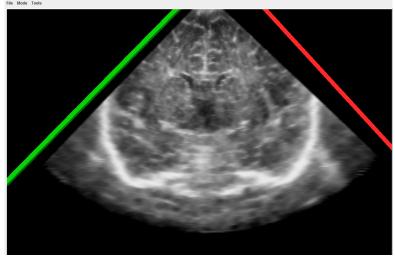


Fig. 1 side-by-side presentation of simulated 2D image and color Doppler images.



#### 2. Simulation of head ultrasound

Fig. 2 Head ultrasound simulation.

We have added simulation of head ultrasound, a feature often asked for by neonatologists. Currently it comes without a virtual 3D model of the skull / brain. This will be added in the future, but in our opinion this is less relevant in head ultrasound compared to echocardiography. The head simulation made it necessary to change the 3D tracker settings. Therefore you have to choose your neonatal manikin model (transmitter in the lower back, external or left side) once in the opening dialogue of EchoCom|Neo. Results of the simulation are best with a transducer in the chest. There is a small time lag of the application with the transducer in the lower back.

The database is not as extensive as the one for the cardiac cases, but we hope it will fill soon. If there is any interest to share cases please tell us. We would give you an instruction how to record cases. You would need to have a 3D scanner to record the ultrasound data.

#### New hardware

#### Computer

EchoCom|Neo is now delivered with a HP notebook. While the computational power and screen quality is the same, the connection for the power adapter is different so that inadvertent plugging-in of the notebook power supply into the SEU (with damage of the latter) is avoided.

#### Activities

The EchoCom team has been active around the world in conferences and courses. This included the 2019 Cardiology Boot Camp at Stanford University, the Imaging and Outcome in Congenital Heart Disease conference at Mount Sinai, New York and the Neonatal Hemodynamic Course in Tel Aviv, Israel to name only a few.

If you have any questions or suggestions, please do not hesitate to contact us.

The ECHOCOM team

Contact: Echocom GmbH Grassistr. 11 04107 Leipzig info@echocom.de www.echocom.de