

## COUNCIL ON PEDIATRIC AND CONGENITAL HEART DISEASE COMMUNICATION

2021 Refocus - The Revolution of Imaging in Pediatric and Congenital Heart Disease



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As COVID-19 continues to affect our world, the 32<sup>nd</sup> ASE Scientific Sessions will once again be in a virtual format, and we will miss seeing each other in person in Boston as originally planned. Despite the consequences of the pandemic, the work of our community has only grown and come closer together in collaborative learning. Innovations in communication, resource utilization, and processes optimizing patient care delivery and protecting our first line personnel became paramount and allowed all of us to reevaluate our practices.

We would be remiss in not recognizing the immeasurable contributions of the Icons who passed away in 2020. Dr. Paul Weinberg, who was always part of our sessions teaching, mentoring and simplifying nomenclature; and Dr. William Norwood, whose surgical innovation inspired and formed the basis of a multitude of scientific research and most importantly revolutionized congenital cardiothoracic surgery and patient survival.

We are humbled and excited to bring to you a Pediatric and Congenital Heart Disease (PCHD) Track as part of a superb educational program. Our track will highlight something new, something old, and a glimpse into the future in imaging and its impact on improving patient care. The format will be a combination of live panel discussions, prerecorded talks, abstracts, case discussions, debate, and a nomenclature conundrum.

This year has impacted us as healthcare workers and as individuals in a way that has made us all come together as a community. The ASE Council on Pediatric and Congenital Heart Disease joined with the Society of Pediatric Echocardiography and the Fetal Heart Society to develop guidelines for imaging at the onset of the pandemic and also published the ASE Statement on Adapting Pediatric, Fetal, and Congenital Heart Disease Echocardiography Services to the Evolving COVID-19 Pandemic.<sup>1-3</sup> ASE stepped forward to lead as social determinants of health, telecardiology, education, and inclusion became both medical and national priorities. It is indeed a time when we are so excited to see how the collaboration across institutions, countries, and continents has enriched and expedited our knowledge. A session highlighting the experience our Society has gained from dealing with the challenges of COVID-19 will be our opening session. This joint session with the European Association of Cardiovascular Imaging (EACVI) will highlight the challenges faced by our frontline colleagues - our sonographers, as well as the challenges in identifying and following children as knowledge about cardiac involvement with SARS-COV-2 evolved, and the additional direct impact the lockdown had on our trainees, imaging quality standards, and patients.

Seven additional sessions cover the breadth and depth of our field, and should not be missed. The fetal symposium will highlight standards and challenges using a case-based approach. Cases will cover arrhythmias, complex decision making following the fetal diagnosis of CHD, and need for advanced imaging to help determine outcomes. Sessions focusing on surgical interventions for atrioventricular valves in AV Canal Defects, Ebstein's anomaly, and small left-sided structures will showcase discussions between surgeons and imagers to share imaging pearls that help guide surgical planning, risk stratification, management, short and long term assessment, and outcomes.

The ASE Scientific Sessions have always been a platform to highlight the importance of other imaging modalities that complement echocardiography and allow us to provide the best care for our patients.

There will be a session focusing on how

emerging technology applications in

creating registries, artificial intelligence, ma-

chine learning, and computer modelling

propose to have an impact on how we

manage and evaluate our patients. A ses-

sion on the challenges of a systemic left

ventricle both in a single and biventricular

circulation will showcase multimodality

imaging, and surgical and lymphatic inter-

ventions. Never to be overlooked, a ses-

sion on the right ventricle will focus on

clinical imaging tools and challenges in ac-

curate assessment of structure, and in-

cludes what will surely be an exciting

debate on how best to assess right ventricle

function. This session will be book-ended

by an excellent invigorating session on daily conundrums and challenges of varia-

tions in nomenclature!

This year multimodality imaging has been incorporated into multiple sessions including Single Ventricle, the Fetal Symposium, and in general for anatomical delineation and management.

For the first time, the PCHD Track will showcase a session designed by the Neonatal Hemodynamics TnECHO Specialty Interest Group that will present the nuances of imaging the transitional circulation, evaluation of the patent ductus, and the role of cardiovascular assessment in cases of hypoxic ischemic encephalopathy.

Now, more than ever, we need to recognize the importance of equity, inclusion and diversity. We hope you will enjoy a PCHD Track in which gender, region, institution, and continent are represented as equally as possible within the time we had allotted - a total of eight sessions over 8.5 hours. We look forward to connecting virtually June 18-21<sup>st</sup>, and can't wait to "see" you all this year, staying safe and staying strong.

## REFERENCES

- 1. Barker PCA, Lewin MB, Donofrio MT, Altman CA, Ensing GJ, Arya B, et al. Specific considerations for pediatric, fetal, and congenital heart disease patients and echocardiography service providers during the 2019 novel coronavirus outbreak: Council on Pediatric and Congenital Heart Disease supplement to the statement of the American Society of Echocardiography. J Am Soc Echocardiogr 2020;33:658-65.
- 2. Hung J, Abraham TP, Cohen MS, Main ML, Mitchell C, Rigolin VH, et al. ASE statement on the reintroduction of echocardiographic services during the COVID-19 pandemic. J Am Soc Echocardiogr 2020;33:1034-9.

3. Altman CA, Donofrio MT, Arya B, Wasserman M, Ensing GJ, Cohen MS, et al. ASE statement on adapting pediatric, fetal and congenital heart disease echocardiography services to the evolving COVID-19 pandemic. J Am Soc Echocardiogr 2021;34:553-61.

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