

WORKSHOP: “Cardiac Development and Biomechanical Modeling”

Sunday June 1st, 2025, Time 13.00 – 15.00

13.00 – 13.30 *The Critical Role of Cardiac Development and Biomechanical Modeling in Advancing our Understanding of Congenital Heart Defects: An Overview & Speaker Profiles*

Talât Mesud Yelbuz, M.D., Ph.D., Professor of Pediatric Cardiology, King Abdulaziz Cardiac Center, Riyadh, Kingdom of Saudi Arabia

13.30 – 13.50 *A focus on the looped design of vertebrate hearts*

Jörg Männer, M.D., Ph.D., Professor of Anatomy and Cardiac Embryology, Institute of Anatomy and Cell Biology, UMG, Georg-August-University Goettingen, Germany

+ 5 min Q/A

13.55 – 14.15 *Impact of hemodynamics on cardiac development*

Sandra Rugonyi, Ph.D., Professor of Biomedical Engineering, School of Medicine, Oregon Health & Science University, Portland, OR, USA

+ 5 min Q/A

14.20 – 14.40 *Left Atrial Ligation–Release Model for HLHS: Visualizing Hemodynamic and Biological Reversibility in Early Heart Development*

Kerem Pekkan, Ph.D., Professor of Mechanical Engineering Department, Biofluids and Cardiovascular Mechanics Laboratory, Koc University, Istanbul, Türkiye

+5 min Q/A

14.45 – 15.00 *Group Discussion*