

3-D printed heart showcased at world's largest cardiovascular imaging congress

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New 3D printed heart technology will be showcased at EuroEcho-Imaging 2014, the official annual meeting of the European Association of Cardiovascular Imaging (EACVI), a registered branch of the European Society of Cardiology (ESC). Held in cooperation with the Austrian Working Group of Echocardiography, the congress takes place during 3-6 December in Vienna, Austria, at the Reed Messe Wien GmbH congress centre.

EuroEcho-Imaging is the leading congress for clinicians and scientists to present and discuss the latest research and clinical findings on [echocardiography](#) and other cardiovascular imaging techniques. Journalists can expect to hear the most up to date findings in the field over 4 days of scientific sessions. The scientific programme is available here [insert link]

New frontiers in cardiovascular imaging will be explored through presentations on three-dimensional imaging, which is a main theme of the congress. Experts will reveal the latest developments in the technology that uses imaging data to print a 3D model of the heart, providing journalists with first hand access to experts with experience of this cutting edge technique.

Professor Patrizio Lancellotti, EACVI President, said: "The heart is a 3D structure that we traditionally analysed using 2D imaging including echocardiography, cardiac [magnetic resonance imaging](#) (CMR) or [cardiac computed tomography](#) (CT). But with the advent of 3D imaging,

now we can clearly evaluate the structure of the heart in different planes."

He added: "An amazing advance in this field is the ability to print a 3D model of the heart. This will help clinicians doing surgical and percutaneous interventions on the mitral or aortic valve to choose the perfect size of device and plan the procedure according to the patient's anatomy. Also new is the ability to create a 3D computational model of the heart which will assist with interventions but also improve our understanding of the heart's physiology. With this novel technology we will gain insights into the interactions between the valves and the ventricles, the valves and the aorta, and the valves and the left atrium."

Imaging in acute cardiac care is the second theme, with hot topics in the programme including stress imaging to rule out myocardial ischaemia. Prof Lancellotti said: "Imaging, especially echocardiography, has become the primary method for diagnosing patients with unstable cardiovascular disease in the acute setting."

Cardiac oncology is a growing field and is the subject of a dedicated session. Novel findings on how to detect and prevent the effects of cancer drugs on the heart will be presented, along with current recommendations for monitoring cardiotoxicity after radiotherapy and chemotherapy.^{1,2}

Prof Lancellotti said: "More cancer patients are surviving cancer and living longer but then developing cardiac disease. Imaging plays a major role in the diagnosis and follow up of these patients. The ESC/EACVI's Cardiac Oncology Toxicity Registry was launched in September to collect data on practices for identifying and treating cardiotoxicity of breast cancer drugs and progress will be reported at EuroEcho-Imaging."³

Groundbreaking research will be released in the abstracts, with more than 1 320 submitted this year. Oral abstracts will be presented in the newly designed Agora area, providing the chance for interaction with experts and the opportunity for journalists to find out what's hot in a particular field of research.

The Roelandt Young Investigator Awards will be launched to honour the late Jos Roelandt, who was founding editor of the society's journal in 1999.4 Joint sessions will be held with several sister societies from across the globe, highlighting the international scope of the congress. More than 3 300 healthcare professionals are set to attend from over 90 countries.

Professor Gilbert Habib, Chairperson of the Scientific Programme Committee and President-Elect of the EACVI, concluded: "EuroEcho-Imaging is the place to be this December. Journalists will have access to pioneering research in [cardiovascular imaging](#) presented by an international network of renowned experts."

Provided by European Society of Cardiology

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