The European Society of Cardiology Working Group on Development, Anatomy and Pathology held its annual meeting in Marseille from the 22nd to the 24th October 2018. The meeting was held in the magnificent "Palais du Pharo" overlooking the Mediterranean sea and the port of Marseille. There were 120 attendees from 12 European countries as well as the USA and Australia. The meeting bridged molecular studies of early heart development with cardiac pathology and kicked-off with a hands-on session at La Timone Hospital focused on congenitally malformed hearts with atrioventricular septal defects. This gave attendees a chance to directly observe human hearts and discuss the etiology of these defects with experts. The talks at the "Palais du Pharo" began on the Monday afternoon and were divided into 9 sessions covering the following broad areas of cardiovascular development: Valve development, anatomy and pathology; Cardiomyopathies; Cardiac progenitors; Transcriptional regulation of heart morphogenesis; Conduction system; Genetics and epigenetics of congenital heart defects; Endocardium and flow; Coronary Vessels; Regeneration. Each session opened with a seminar from an invited speaker, including an introduction to the state-of-the-art, followed by 4-5 talks selected by the organizing committee from over 80 submitted abstracts. In addition to talks on human pathology and genetics, presentations were given on mouse, reptile, frog, fish and fly heart development. 50 abstracts were presented in two lively poster sessions at lunch on Tuesday and Wednesday. At the end of the afternoon on Tuesday the keynote seminar given by Prof. Cedric Blanpain from the "Université Libre de Bruxelles" addressed the role of Mesp1 in early cardiac progenitor cells, a fascinating account of the earliest events of heart development. This was followed by the general assembly of the working group. Overall the scientific quality of the presentations was outstanding and at the end of the meeting prizes were awarded for the best abstract-selected talks and posters. Prizewinners were awarded a copy of the recently published ESC Textbook on Cardiovascular Development (Oxford University Press, 2018). The meeting concluded on Wednesday afternoon with an interactive session in French in which families of congenital heart defect patients could exchange with cardiologists and pathologists, organized in collaboration with a national patients' association. A major strength of the ESC working group meeting is the presence of both basic scientists and clinicians and delegates took the opportunity for productive exchange in both directions. Indeed, throughout the conference there was extensive scientific discussion that continued through the breaks and into the evenings.