

FELLOWS-IN-TRAINING & EARLY CAREER PAGE

# The European Society of Cardiology's Cardiologists of Tomorrow



## The Evolving “Heart Team” Opens International Borders

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Cardiology is a fast-moving medical specialty with increasing demands for training, education, research, and cooperation at national and international levels. Training in cardiology is increasingly challenging. On the one hand, there is the need for further subspecialization in cardiology. On the other hand, the modern cardiologist needs to be involved—in collaboration with other care providers—in the global care of the patient, which requires a broader comprehension of cardiovascular medicine and not just of cardiology (1).

Over the last few years, we have witnessed significant changes in cardiology practice. Patients are older, have more complex cardiovascular disease, and have a greater number of comorbidities. At the same time, knowledge of several cardiovascular disease states has significantly advanced, with new diagnostic and therapeutic technologies (e.g., percutaneous heart valves, cardiac resynchronization, 3-dimensional imaging, cardiac magnetic resonance imaging, and fusion imaging) as part of our everyday clinical practice. Consequently, general and subspecialty cardiologists, cardiac surgeons, anesthesiologists, internists, general practitioners, nurses, paramedics, and other health care providers need to work more closely to build patient-centric multidisciplinary “heart teams” (2).

The understanding and implementation of this novel clinical environment require new tools to improve our cardiovascular education. A strong focus

should be placed on continuing medical education and, more importantly, on new methods to provide undergraduate and post-graduate education. Several stakeholders will need to work in closer cooperation, building the new “heart teams of medical education” that should include networks between scientific societies, universities, training institutions, mentors, and fellows.

### THE EUROPEAN SOCIETY OF CARDIOLOGY CARDIOLOGISTS OF TOMORROW NETWORK

The European Society of Cardiology (ESC) Cardiologists of Tomorrow (CoT) initiative was launched in 2010 and is dedicated to providing a network for cardiology professionals and trainees who are <36 years of age (3). The main objectives are to foster cooperation between cardiologists across Europe and worldwide, to promote excellence of education in cardiology, to increase research and international exchange opportunities, and to develop scientific, organizational, and political activities of special interest to young cardiologists. We believe that by helping young cardiologists keep scientifically and clinically up to date, while at the same time being integrated in a strong peer support network, it is possible to improve patient care and reduce the burden of cardiovascular disease.

Although still in its infancy, the CoT is already a global initiative. A network of 29 national young cardiologist associations has been created (Figure 1), representing >5,000 members. Also, to accomplish the particular educational needs of those training in cardiology subspecialties, specific groups have been created in the fields of cardiovascular imaging (EACVI [European Association of

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**FIGURE 1** Young Cardiologist Groups Building the European Society of Cardiology Cardiologists of Tomorrow Network



The countries in **blue** have national young cardiologist associations that are part of the Cardiologists of Tomorrow network.

Cardiovascular Imaging] Club 35), electrophysiology (Young Electrophysiologists), intervention (EAPCI [European Association of Percutaneous Cardiovascular Interventions] Young Community), acute cardiac care (Young AACCA [Acute Cardiovascular Care Association]), heart failure (Heart Failure Specialists of Tomorrow), and basic science (Scientists of Tomorrow).

Several projects have been developed over the last several years. One of the main CoT responsibilities is the organization of the “Cardiologists of Tomorrow track” during the ESC Congress, which consists of a series of scientific sessions covering topics of special interest to young cardiologists. These include treatment of difficult clinical cases, tips and tricks for interpretation and statistical analysis of clinical trials, practical “how-to” sessions, discussion of the most promising devices/technologies for the future of cardiology, and the application of digital medicine in clinical practice.

Moreover, every year, the CoT organizes a worldwide call for the submission of challenging case reports to be presented during ESC Congress. Last year, clinical cases from 53 different countries across 5 continents were submitted. Cases with the best grades are discussed in a highly interactive session to stimulate cardiology learning from everyday clinical practice and real case scenarios. Another objective of these sessions is to promote interaction between

generations by inviting renowned senior cardiologists to teach younger ones.

Building a successful career in cardiology is not an easy path. To inspire young people to develop successful careers in cardiology, we built the CardioStars project, a series of television interviews with world-famous cardiologists. Drs. Eugene Braunwald, Valentin Fuster, Peter Libby, Patrick Serruys, Alain Cribier, and others have told their own personal and professional stories, described their achievements and frustrations, and given advice to young people in videos that are hosted on YouTube. For example, we remember Dr. Fuster’s advice on “giving back something to the society” in our careers.

Another objective of the CoT is to improve education in cardiology worldwide. We have participated in discussions leading to the new ESC Core Curriculum for General Cardiology, which defines the knowledge, skills, behaviors, and attitudes that should be part of training in cardiology (1). The support and active involvement of young cardiologists will be important for the implementation of the ESC eLearning platform, a new online tool that aims to set the standard for high-quality cardiology training in Europe and worldwide. This web-based tool will improve cardiovascular training in general cardiology and the subspecialties. Finally, the development and promotion of other new educational web-based learning opportunities will become increasingly important, such as

webinars on general cardiology (4) and the clinical case portal.

### A NEW CONCEPT OF A HEART TEAM TO BUILD THE CARDIOLOGY YOUTH FOR THE FUTURE

The CoT initiative is now a place for cooperation among cardiology training centers, general and subspecialty cardiologists, European and non-European countries, as well as young and senior cardiologists. It is a new “Heart Team” that aims to improve education in cardiology. We expect that by increasing international cooperation, facilitating the exchange

of knowledge and clinical experiences, and delivering new methods of training, it will be possible to improve patient outcomes and reduce the burden of cardiovascular disease.

Finally, as once stated by Franklin D. Roosevelt, “We cannot always build the future for our youth, but we can build our youth for the future” (5). Both young and senior cardiologists are welcome to join the CoT and actively contribute to this quest.

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## RESPONSE: Cardiologists of Tomorrow and the Future of Cardiology

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The future of any institution is built upon its roots and on how much it can attract the best of the best to infuse their knowledge, vision, and energy to consolidate and strengthen what previous generations have been building over the years. Scientific societies are no exception to this rule, and it is our responsibility—as the current leaders—to provide the right tools and platforms for the next generations to thrive and to build the future. I am very proud to have been part of the group of colleagues who launched the initiative called “Cardiologists of Tomorrow” in 2010 under Dr. Roberto Ferrari’s presidency, Dr. Steen Dalby Kristensen’s vice-presidency for national societies, and myself as chair of the European Society of Cardiology (ESC) Congress at that time. It started as a small group of young enthusiastic cardiologists-in-training who immediately took the initiative to organize a set of activities, mostly around the annual Congress. From a small group, it spread to a wide network, which is outlined by Dr. Fontes-Carvalho

and colleagues. The experience has spread virally, and it now involves a large number of young physicians. I believe this is 1 of the secrets why the ESC has been so successful over the last few years. The inclusion of “young blood” into the organization has made it possible to have a new approach in many ways, besides the fact that it has allowed the involvement of these colleagues in the activities of the society, contributing their enthusiasm to create new programs and activities. It is also one way to revitalize the society and allow it to respond to the needs of the younger generations, following what has been implemented in modern education rules of engagement of students in universities, where they participate in the design of their own programs.

Scientific societies, as much as societal structures, must be able to read and interpret the signs of time and develop strategies that can embrace new and evolving needs. It is the leadership’s ability to read these signs

and react accordingly that will distinguish success from failure.

The ESC Cardiologists of Tomorrow initiative represents an excellent example of how appropriate and timely decisions, engaging the right performers, can be a recipe

for success. This is particularly relevant in a challenging world where it is not always easy to challenge the status quo; but, with the help of our younger, determined colleagues, I am sure we will build a bright future for cardiovascular medicine for the good of our communities.