

The new electronic ESC Textbook of Cardiovascular Medicine

ESC CardioMed

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Education – the mission of the ESC

The education of trainees, postgraduate and established cardiologists alike has always been a critical component of the mission of the European Society of Cardiology (ESC). Besides the most successful congresses of the main Society as well as its Associations, the growing ESC journal family and also the ESC Textbook of Cardiovascular Medicine have been important products of this successful strategy.

The ESC Textbook of Cardiovascular Medicine

The first edition of the ESC Textbook of Cardiovascular Medicine was published in print in 2009 by Blackwell, with John Camm, Thomas F. Lüscher and Patrick Serruys as editors. Following the success of the first edition, the second edition appeared in 2011, this time published by Oxford University Press. Although available from the outset in a basic digital format, after the launch of the second edition the editors of the textbook felt that in today's modern world a more dynamic electronic version of a cardiology textbook with a sophisticated search system, many illustrations and movies should be developed.

ESC CardioMed

Thus, in 2016 the ESC Board of the European Society of Cardiology decided to launch a third edition of the textbook, this time in a completely different format (fig. 1).

The editors, now also including Gerald Maurer (fig. 2), decided to enlarge the scope of the textbook to include many of the so far uncovered topics within the growing field of cardiovascular medicine, such as embryology, catheter-based structural interventions, psychological factors, ethnicity, interpretation of trials and personalised medicine, to name but a few.

As such, the concept of a huge, primarily electronic textbook was born with four main editors, 63 section coordinators and more than 1000 chapter authors. As one can imagine, such a large project took more time than anticipated to develop, but the editors are now ready to proudly announce the publication of ESC CardioMed. Access to this huge electronic database is available as a membership benefit for all Professional Members and Fellows of the European Society of Cardiology. For oth-

The screenshot displays the Oxford Medicine Online interface for the ESC CardioMed (3rd edition). At the top, there are navigation links for 'About', 'Subscriber Services', 'Contact Us', 'Take a Tour', 'FAQs', and 'Help', along with a 'Personal Profile: Sign in or Create' option. A search bar is prominently featured. Below the search bar, there are tabs for 'Specialty', 'Career Stage', and 'Series'. The main content area features a large image of a heart, the title 'ESC CardioMed (3 ed.)', and the editors' names. An abstract describes the initiative as a ground-breaking effort to transform reference publishing in cardiovascular medicine. Bibliographic information includes the publisher (Oxford University Press), ISBN (9780199794906), and DOI (10.1093/med/9780199794906.001.0001). A table of contents is visible on the right side of the page.

Figure 1: ESC CardioMed online.



Figure 2: ESC CardioMed editors (from left to right): Thomas F. Lüscher, John A. Camm, Gerald Maurer, Patrick W. Serruys

ers wishing to access the publication, annual subscriptions are available for individuals and institutions alike through the publisher. In spring 2018 about a third of the ESC CardioMed content became available online and now, on the occasion of the Annual Congress of the European Society of Cardiology in Munich in August 2018, the majority of the chapters, with a very few exceptions, will be accessible online. The database has a sophisticated search system allowing rapid identification of the relevant parts of the book. Each of

the chapters is illustrated, most with full colour figures and informative tables or videos of the most important clinical features. The imaging sections in particular contain numerous videos of different cardiac conditions. A novel aspect of the electronic ESC Textbook of Cardiovascular Medicine is first of all its name. It will be introduced under the name of ESC CardioMed to communicate its modern nature as a primarily comprehensive electronic database. Furthermore, and most importantly, it will be continually updated, three

times a year after each of the large cardiology congresses such as the Annual Congress of the European Society of Cardiology, the Scientific Sessions of the American Heart Association and the Annual Congress of the American College of Cardiology. Updates will primarily involve new trials affecting clinical practice or new imaging or interventional techniques highly relevant for the management of patients, as well as new insights into causes and mechanisms of cardiovascular disease of clinical interest. This will avoid the problem that

Table 1: CardioMed table of contents.

Part 1: Introduction to the cardiovascular system		
Section 1 Cardiovascular history and physical examination	Nicholas Boon	
Section 2 Developmental biology of the heart	Miguel Torres	
Section 3 Functional anatomy of the heart	Yen Ho	
Section 4 Cardiovascular physiology	Guido Grassi	
Section 5 Cardiovascular pharmacology	Faiez Zannad	
Section 6 Anticoagulation	Raffaele DeCaterina	
Section 7 Epidemiology and global burden	Sumeet Chugh	
Part 2: Investigations		
Section 8 Electrocardiogram	Antonio Bayes de Luna	
Section 9 Chest radiography	Christian Herold	
Section 10 Cardiac ultrasound	Frank Flachskampf	
Section 11 Cardiovascular magnetic resonance	Dudley Pennell	
Section 12 Cardiovascular computed tomography	Stephan Achenbach	
Section 13 Nuclear cardiology and positron emission tomography	Philipp Kaufman	
Section 14 Invasive imaging – haemodynamics	Carlo di Mario	
Section 15 Selection of imaging techniques	Jeroen Bax	
Part 3: Heart diseases		
Section 16 Genetics of CV diseases	Heribert Schunkert	
Section 17 Congenital heart disease (GUCh)	John E. Deanfield	
Section 18 Prevention in cardiovascular disease and rehabilitation	Massimo Piepoli	
Section 19 Diabetes mellitus metabolic syndrome	Lars Ryden	
Section 20 Heart and the brain	Hans-Christoph Diener	
Section 21 Cardiovascular problems in chronic kidney disease	Christoph Wanner	
Section 22 Erectile dysfunction	Charalambos Vlachopoulos	
Section 23 Lung disease	Martin Cowie	
Section 24 Gastrointestinal disease	Gerhard Rogler	
Section 25 Rheumatoid arthritis and the heart	Thomas F. Lüscher	
Section 26 Rheumatic heart disease	Ferande Peters	
Section 27 Cardio-oncology	John Groarke	
Section 28 HIV	Nombulelo Magula	
Section 29 Acute coronary syndromes	Stefan James	
Section 30 Takotsubo syndrome	Christian Templin	
Section 31 Chronic ischaemic heart disease	William Wjins	
Section 32 Myocardial disease	Perry Elliott	
Section 33 Pericardial disease	Yehuda Adler	
Section 34 Tumours of the heart	Gaetano Thiene	
Section 35 Valvular heart disease	Helmut Baumgartner	
Section 36 Infective endocarditis	Gilbert Habib	
Section 37 Heart failure	John McMurray, Thomas Lüscher	
Section 38 Bradycardia	Giuseppe Boriani	
Section 39 Syncope	Michele Brignole	
Section 40 Supraventricular tachycardias	Carina Blomström-Lundqvist	
Section 41 Atrial fibrillation	John A. Camm	
Section 42 Ventricular tachycardia	Brian Olshansky	
Section 43 Sudden cardiac death	Gerhard Hindricks	
Part 4: Vascular disease		
Section 44 Systemic hypertension	Bryan Williams	
Section 45 Pulmonary hypertension	Marc Humbert	
Section 46 Diseases of the aorta	Raimund Erbel	
Section 47 Trauma to the cardiovascular system	Christoph Nienaber	
Section 48 Non-cardiac surgery	Steen Kristensen	
Section 49 Peripheral arterial diseases	Victor Aboyans	
Section 50 Venous thromboembolism	Stavros Konstantinides	
Section 51 Venous disease	Sebastien Schellong	
Part 5: Specific populations – gender and race		
Section 52 Cardiovascular disease in women	Noel Bairey Merz	
Section 53 Pregnancy and heart disease	Vera Regitz-Zagrosek	
Section 54 Ethnicity	Gregory Lip	
Part 6 Other aspects		
Section 55 Sports and heart disease	Antonio Pelliccia	
Section 56 Elderly	Franz H. Messerli and Tomasz Grodzicki	
Section 57 Precision medicine	Paulus Kirchhof	
Section 58 Decision-making and the heart team	Patrick W. Serruys	
Section 59 Psychological factors and heart disease	Susanne Pedersen	
Section 60 Interpretation of clinical trials	John Cleland	
Section 61 Environment	Thomas Münzel	
Section 62 Occupational and regulatory aspects	Demos Katritsis	
Section 63 Economics and cost-effectiveness	Lorenzo Mantovani	
Part 7: Appendices		
Appendix 1 Cardiovascular disease risk estimation		
Appendix 2 Patient reported outcome measures		

most textbooks encounter, i.e., that they are outdated by the time they appear.

The content

The content of the textbook is divided into 63 sections that cover major aspects of cardiovascular disease (table 1).

Interaction with ESC Guidelines

A further major new aspect of ESC CardioMed is its alignment with the ESC guidelines. Many leaders in the field, as well as the users of the ESC guidelines, have felt for some time that the documents were too long and diffi-

cult to read and it was hard to find the main message. Therefore, the editors of ESC CardioMed came together with the ESC guidelines Committee and its chairman Stephan Windecker and decided to gradually bring the two products together. To that end it is envisaged that the ESC CardioMed will provide the background knowledge such as mechanisms of disease, epidemiology and describe the trials in more detail, while the ESC guidelines will focus primarily on the recommendations. Examples of this synergy are the direct links between ESC CardioMed and the most recent ESC Guidelines on Valvular Heart Disease and on Peripheral Arterial Disease published in the *European Heart Journal*. This concept will

make the ESC guidelines more readable and digestible and still provide the full information through the links with ESC CardioMed. This process will take some time to be completed but is currently ongoing as new ESC Guidelines are being developed.

A print version will be published early in 2019 (fig. 3).

The editors and the leaders of the European Society of Cardiology involved in this project do hope that ESC CardioMed will be frequently used by our cardiologists around the world and will turn out to be essential in their daily practice.

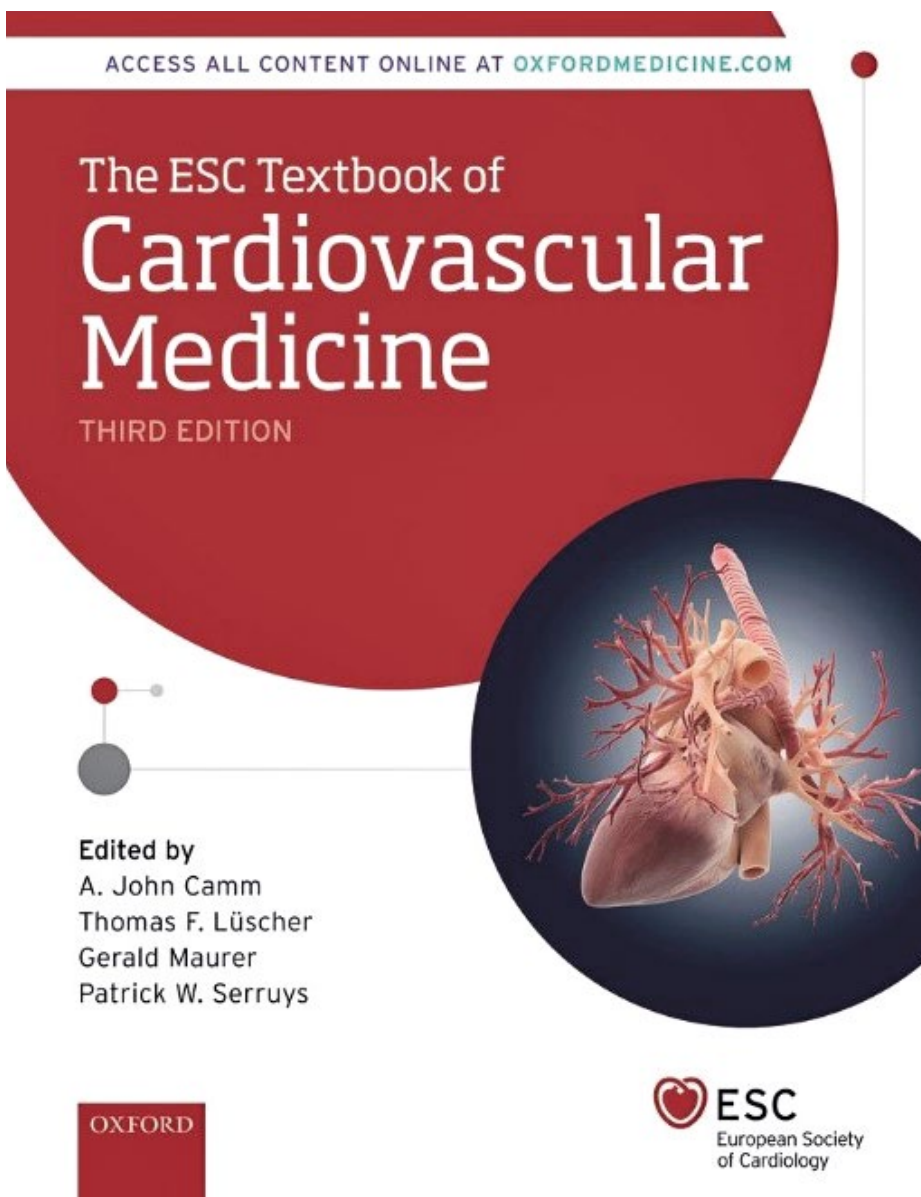


Figure 3: Print version of the ESC Textbook of Cardiovascular Medicine, Oxford University Press, 2019.