PREFACE.

On behalf of the Working Group on Cellular and Molecular Biology of the Italian Society of Cardiology, we are glad to present this special issue devoted to Channelopathies, the genetically transmitted ion channel diseases.

The relevance of Channelopathies has rapidly become impressive. Together with heart muscle disorders, they represent the leading cause of sudden cardiac death (SCD) in young and apparently healthy individuals. The fact that they manifest themselves in the absence of macroscopic modifications of the cardiac anatomy and function which could modify arrhythmic risk makes them excellent models for understanding the genetic basis of SCD. They have been forcing the knowledge of clinical and molecular genetics in clinical practice, as shown by the publication in 2011 of two international consensus documents focused on the indications for genetic testing in the clinical evaluation patients at risk of SCD, with special reference to the Inherited Cardiac Arrhythmias Syndromes, i.e. the Channelopathies.

Molecular biology is no longer a research tool but it has become an integrant part of the clinical management of the patients at risk for SCD and it can no longer be ignored or kept separate from clinical practice. It has definitely entered the diagnostic, prognostic and therapeutic processes of cardiovascular diseases.

The Italian Society of Cardiology and our Working Group are proud to produce this special issue with the objective to provide the reader with adequate information for a better understanding of how to deal with patients affected by channelopathies and of when it is appropriate to ask for a molecular screening.

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- *the members of the nucleus of the Working Group on Cellular & Molecular Biology of the Italian Society of Cardiology and the coordinator of the Working Groups, Prof. Giuseppe Germanò;*
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A special thanks to Ms. Paola Granata, Managing Editor, for her enthusiastic and professional effort.

Dr. Crotti would like to dedicate this issue, her first achievement as an Editor to Prof. Peter Schwartz, her teacher and mentor.