## Introduction

Welcome to the 44<sup>th</sup> Computing in Cardiology conference. This is the third time, after Lyon 2005 and Nice 2015, that the Computing in Cardiology community has met in France, a country with a long tradition of engineering applied to cardiology. The Board of Directors was very happy when Guy Carrault and colleagues from the University of Rennes volunteered to host this year's meeting. The research group in Rennes has large experience from collaborative projects involving academia, industry, and clinicians. They have prepared an excellent meeting and social program, and the record number of abstracts submitted demonstrates the increasing interest and huge impact of engineering in cardiology.

To ensure that the conference remains at the frontier of research, the following three special sessions are included in the program:

- Electrocardiographic Imaging: Challenges in Evaluation and Validation
- 2) Understanding the basic mechanisms of atrial fibrillation using novel computational approaches
- 3) Clinical Guidelines in the practice eHealth: Where do we stand?

The program also includes several clinical talks whose aim is to better connect clinical and engineering aspects of research. The titles are:

- Noninvasive Electrocardiographic Imaging: Touching Ground in Clinical Cardiology to be delivered by Paul Volders
- Cardiac Computing and Prevention of Sudden Cardiac Death in Athletes by Frederic Schnell
- Prediction of Response to Cardiac Resynchronization Therapy: the Value of Cardiac Work When Compared to Other Dyssynchrony Parameters by Erwan Donal
- Targeted Cardio-respiratory Rhythms Monitoring Used as Decision Support System in Neonatology, by Patrick Plady
- Noninvasive Electrocardiographic Imaging for Individuals at Risk for Idiopathic Ventricular Fibrillation, by Paul Volders; and
- Apneas, Chronic Intermittent Hypoxia and Heart Rate Rhythm: Physiology and Exploration by Trang Nguyen Phuc Thu.

The Mortara Fellowships represent an extraordinary means for "reducing the distance" for young researchers with limited means so that they can present their work at CinC. The Rosanna Degani YIA Competition aims at promoting high standards in research quality by highlighting the best research projects conducted by young investigators. The PhysioNet-CinC Challenge represents a major effort to direct research towards clinically relevant topics, in which annotated data is provided to the research community. All these initiatives, being features of today's CinC, benefit from feedback from the scientific community. Therefore, I encourage you to provide the Board of Directors with feedback on these initiatives as well as any other aspects. It is the Board's commitment to do its best for guiding the progress of our CinC organization in the coming years.

At the end of this meeting, Peter Macfarlane, Leif Sörnmo, George Moody, Victor Mor-Avi, Paul Kligfield, and Alan Murray leave the Board. I would like to thank them for nine or more years of hard work serving Computing in Cardiology. – Peter, first as a member, then as president, and most recently as past president, has guided the transformation of CinC for about a decade. Leif, as secretary, has established a well-organized repository of all the board debates, decisions, and documentation related to CinC. Victor, as Treasurer of CinC, has skillfully managed the finances with the introduction of the endowment fund which has allowed CinC to move closer to the objective of financing our awards from the interest of that fund. Paul, as our clinical expert, has driven the initiatives to close the gap between engineering and cardiology, while also contributing substantially to the financial vision of CinC. Finally, two non-elected Directors who will not be returning to the Board, George who organized the very successful Physionet Challenge for a decade, and Alan, editor of the Proceedings for almost three

decades, guaranteeing that the format of the proceedings has met the highest standards. The CinC Proceedings are today recognized as top quality in the scientific community. To all of these individuals, we offer our sincere thanks. Please remember that Board work is voluntary, at times with high workloads, making this service to CinC particularly worthy of acknowledgment.

This year also marks my final year as President of the Board. The last three-year term has at times been challenging, consolidating changes introduced just before my term started. New initiatives have been taken, including the Clinical Translational Award, in collaboration with the ESC e-cardiology working group, the special sessions and the clinical talks. All these initiatives reduce the gap between engineering and clinical applications. On the logistic side, we have introduced the *Confernece4me* app to allow participants up-to-the minute information on the conference. In addition, we have advanced the proceedings to a fully digital publication which utilizes our own DOI for reference. An organization like CinC never reaches a steady state, but rather is always characterized by large dynamics. Because of this, the new Board will have to adjust to new scientific challenges and new organizational strategies. All these things cannot occur without the huge commitment of the Board members, for which I would like to thank each and every one of them. They have been a great support to me over the past three years, and I offer my successor, whoever that may be, every good wish for the continued success of CinC.

Again, it is time to remind any of you who might be considering hosting a CinC conference to contact the Secretary of the Board. Advanced planning is strongly encouraged, so please step forward. We would like to stress that all potential hosts are welcome, and we particularly encourage those from regions/countries that have not yet hosted a conference.

Finally, I hope you will have a scientifically stimulating meeting that will enable you to continue your work, raising new ideas and projects, and inspiring you to submit an abstract for presentation at next year's meeting in Maastricht, the Netherlands from 23 -26 September 2018. Let me take this opportunity to thank Guy Carrault and the Rennes Local Organizing Committee for the work they have done in preparing Computing in Cardiology 2017. I am sure it will be a great success.

Best wishes,

Pablo Laguna President, Computing in Cardiology