

Dear Colleagues,

We are happy to share with you the third issue of our bimonthly newsletter, featuring news from the ISE, the ISE Young Community and their members, upcoming events, recent literature about electrocardiography and an interview with one of our special guests about the history and future of ECG.



We hope you enjoy this issue. Also, we would most welcome your contributions and suggestions for future issues.

The ISE Communication Team

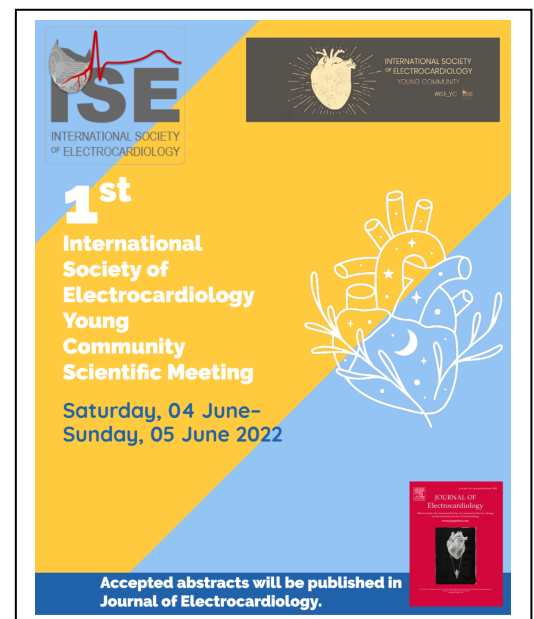
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News from ISE

- **The Date of First International Meeting of ISE Young Community Has Been Announced: 4th and 5th of June 2022.**

The ISE young committee will hold its first scientific meeting on the 4th and 5th of June. The event will be fully online and registration is free of charge. Four of the submitted abstracts will be selected to be presented at the “Best Abstract” oral session. Other accepted abstracts will be presented as posters during the conference. Finally, and most importantly, accepted abstracts will be published in the Journal of Electrocardiology. Stay tuned for the scientific programme!

- Abstracts can be sent via this link: <https://bit.ly/3pbBsGR>.



- **Upcoming Meeting on ECG in Inherited Arrhythmia Disorders: Part II**

The second part of the ECG inherited Arrhythmia Disorders webinar meeting will be held in April. We are looking forward to see the second part of the meeting, which the first part was followed with interest in December. Save the Date!

- **Recent Webinar on 12-Lead ECGs of Permanent Pacemakers and Implantable Cardioverter-Defibrillators**

The most recent ISE meeting was held on 24 February with as topic the evaluation of the 12-lead ECG in pacemaker/ICD implanted patients. At the meeting, Prof Henry Huang, Prof Oswaldo Gutiérrez and Prof Gurbet Ozge Mert talked about case examples with interesting ECGs. Don't worry if you missed it, you can watch it via this link:

<https://www.youtube.com/watch?v=epteUi-efzl>

Recent Publications

1. **Title:** Detection of Atrial Fibrillation by Implantable Loop Recorders Following Cryptogenic Stroke: A Retrospective Study of Predictive Factors and Outcomes

Authors: Samaan S, Kohli U, Nazeer B, Stoute H, Zhao W, Szpunar SM, Azzo Z, Hassan S.

Contributor: Dr Levent Pay (Turkey)

Full text link: <https://doi.org/10.1016/j.jelectrocard.2022.01.007>

Summary

Samaan *et al.* aimed to investigate the risk factors and outcomes associated with AF detection with implantable loop recorders (ILRs) in the cryptogenic stroke patient population. In the study, 172 patients diagnosed with cryptogenic stroke and implanted ILR were evaluated retrospectively. In conclusion, age, gender, stroke pattern and presence of AF symptoms were found to be independent predictors of AF detection by ILR in patients with cryptogenic stroke. Most patients with confirmed AF were started on anticoagulation to prevent secondary stroke, resulting in low recurrence rates.

2. **Title:** Non-Invasive Localization of Premature Ventricular Focus: A Prospective Multicenter Study

Authors: Chrispin J, Mazur A, Winterfield J, Nazeri A, Valderrabano M, Tandri H.

Contributor: Dr Levent Pay (Turkey)

Full text link: <https://doi.org/10.1016/j.jelectrocard.2022.02.007>

Summary

Chrispin *et al.* investigated the accuracy of ViewInto Ventricular Onset (VIVO) software in identifying anatomical origins for premature ventricular contraction. The VIVO device applies a mathematical algorithm from surface signals to noninvasively determine the source of the arrhythmia, via the exact positions of the 12-lead ECG electrodes. 51 consecutive patients admitted for PVC ablation were included in this study. The positions predicted by VIVO were compared with the successfully ablated sites. In conclusion, the current study showed that VIVO is a new system that can be used to guide ablation procedures with high accuracy.

3. **Title:** Terminal T-Wave Inversion Predicts Reperfusion Tachyarrhythmias in STEMI

Authors: Sedova KA, Demidova MM, Azarov JE, Hejda J, Carlson J, Bernikova OG, Arteyeva N, Erlinge D, Platonov PG.

Contributor: Dr Levent Pay (Turkey)

Full text link: <https://doi.org/10.1016/j.jelectrocard.2021.12.008>

Summary

Sedova *et al.* reviewed whether terminal T-wave inversion (TTWI) on the admission ECG could serve as a predictor of ventricular fibrillation during reperfusion (rVF) in anterior STEMI patients undergoing primary PCI. TTWI has not been previously tested as a predictor of rVF in clinical settings. The study included 181 consecutive patients with acute anterior wall infarction admitted for primary PCI. While the prevalence of TTWI was 62% in the rVF group, it was 23% in the No-rVF group. In conclusion, in this study, terminal T-wave inversion in anterior leads before PCI was shown to independently predict rVF in patients with anterior MI.

Interview with Professor Antoni Bayés de Luna

On behalf of the International Society of Electrocardiology Young Community (ISE-YC) it is our honor to have the opportunity to interview Professor Antoni Bayés de Luna from the Autonomous University of Barcelona.

Besides publishing over 190 publications in the field of cardiology over the course of his career, Dr Bayés de Luna reported the increased risk for atrial fibrillation amongst patients with advanced interatrial block. The association was subsequently coined Bayés syndrome by Prof. Adrian Baranchuk. Dr Bayés de Luna has also contributed greatly to the education and promotion

in the field of electrocardiology, including writing the textbook Clinical Electrocardiology, founding the Catalan Society of Cardiology, and being the former president of the Spanish Society of Cardiology, World Heart Federation and International Society of Cardiovascular Pharmacotherapy.

Question: Dr Bayés de Luna, may you please tell us about your motivation underlying your active contribution in the education and promotion of electrocardiology?

Dr Bayés de Luna: My aim as a teacher has always been to help people understand difficult problems. In my traineeship in the early 60's I had some difficulties understanding a few aspects of electrocardiology and I was looking for solutions. I realized that, in spite of excellent research performed in the field of ECG, especially in North and South America (USA, NIC Ignacio Chávez from Mexico and Rosenbaum and Elizari from Argentina), there was lacking a comprehensive textbook that would explain the origin of the ECG curves based on the correlation dipole, vector, loop and projection of the loop in positive or negative hemifield of different leads. Therefore, as I was understanding ECG myself, I thought it would be a good idea to put all this knowledge in the form of a short book containing the answers to all the questions I had in my beginnings.

Question: What was your most memorable memory during your career?

Dr Bayés de Luna: I am fortunate to have lived through many memorable times in my career. I remember with emotion the first patient in whom we implanted a pacemaker in Spain in 1963, or the first one in whom we implanted an ICD in the early 80's. It was also a very emotional day when our cardiac surgeon, Dr. Caralps, performed the first heart transplant of Spain in our institution. From a scientific point of view, I would like to mention 3 publications: i) The association of advanced interatrial block with atrial arrhythmias (Eur Heart J 1988; 9: 1112-1118), the origin of Bayés Syndrome; ii) The demonstration for the first time that colchicines may prevent recurrences of pericarditis (Circulation 1990; 82: 117-1120); and iii) The confirmation that in patients post-MI the R wave in V1 was due to lateral and not posterior MI (Eur Heart J 2015; 36: 959-964).

Another highlight of my career was the set-up of our Experimental Institute of Cardiology in St. Pau Hospital directed by Prof. Lina Badimon.

I also remember with great fondness when, during my term as President of the World Heart Federation (1997-1999,) we 1) organized the World Heart Day; 2) published the White Book of World Cardiology; 3) performed a memorandum of understanding how to fight against heart diseases in developing countries; 4) incorporated mainland China to the Society while retaining Nationalist China working together through their differences; and 5) converted the old International Society and Federation of Cardiology (ISFC) to the successful World Heart Federation.

At a more personal level, I enjoy returning with my wife María Clara, the mother of our 5 children to Vic, a medieval city inland Catalonia, where we have the family house for almost 2 centuries and where I used to visit patients until very recently. I am the fourth generation of doctors, and three of my children and one grand-child are also doctors, and one grandchild is on the way.

Question: Could you tell us about an excellent ECG paper that you have read in the past year?

Dr Bayés de Luna: In the past few years I have very much enjoyed reading the papers related to our current topic of research: The advanced Interatrial block and Bayés Syndrome. I have particularly enjoyed the publications on this topic from the ARIC and Danish cohorts confirming in a global population cohort what we have demonstrated in different clinical settings starting with the paper of O’Neal in the Am J Cardiol (2016; 117: 1755-1759).

Question: What do you think about the future of electrocardiology and ISE? What are some upcoming opportunities and challenges?

Dr Bayés de Luna: The future of electrocardiology is bright and its importance will be even more relevant in the XXI Century, especially if we achieve real automation of the ECG curve. My great wish would be that all physicians have the knowledge to understand the ECG curves and, thanks to that, have greater information about ischemic heart disease, sudden death, Brugada syndrome, AV block, advanced interatrial block and ... many others.

Question: ISE-YC has been actively recruiting young talents who are interested in the field of electrocardiology over the recent years. What advice would you like to give to these young researchers/ clinicians?

Dr Bayés de Luna: I encourage ISE to pursue stimulating teaching and research in electrocardiology. There are many aspects that yet remain to be explained from a diagnostic and prognostic point of view, as well as many other aspects that still have to be discovered... Therefore, young talents you have in the field of electrocardiology a great future in front of you... Embrace the opportunity.

Question: Thank you for your time and expertise!

The source of this interview is “<https://electrocardiology.org/member-highlights.html>”.