LATEST NEWS

- Webinar "How can safety pharmacology benefit from human heart disease modelling and simulations?"
  There is still time to register for this upcoming SPS webinar on Thursday, 5th of December. It will give a comprehensive overview about how computer modelling and simulations can contribute to safety pharmacology
- The white paper about Validation Principles for Proarrhythmia Risk Prediction Models is now available online
  The manuscript, published in Clinical Pharmacology and Therapeutics, presents principles for validating proarrhythmia risk prediction models for regulatory use, based on the example of the CiPA paradigm, and it constitutes the results of a combined effort across regulators, industry and academia.
- Recent ICH E14-S7B IWG meeting in Singapore
  The ICH E14-S7B IWG (Implementation Working Group) met face to face during the last ICH meeting in Singapore (16-20th Nov), to continue working on the Questions & Answers. Read the Press Release HERE.
- Applying the 3Rs in drug development: Improving delivery of innovative treatments to patients
  The NC3Rs has a long-standing collaboration with the pharmaceutical industry, providing companies with an opportunity to share data and experience in a non-competitive environment with the aim of advancing the 3Rs. To mark 15 years of this collaboration, the NC3Rs hosted a workshop last June, bringing together scientists working in academia, industry, government and regulatory bodies from across the UK, Europe and the USA. A workshop report is now available HERE.
- JPTM Special Issue on Safety Pharmacology – Deadline 14th of February
  This focused issue centers on "Methods in Safety Pharmacology", and it will be devoted to manuscripts that describe reviews/methods of fundamental importance to Safety Pharmacology.
- PIC (Personalised In-silico Cardiology) **Webinar Repository** up and running
  If you want to learn more about in-silico cardiac modelling, biomedical signals and imaging, or medical devices and therapies, this repository includes a selection of lectures from the EU PIC consortium.
- Our Human Cardiac **Model Repository** has been updated!
  Thanks to your feedback, we updated our repository. Please keep sending relevant information about new human computer models, as soon as they are available.

UPCOMING EVENTS

- Biennial UC Davis Cardiovascular Symposium
  Davis (CA, US), 21-23 February 2020
- Gordon Research Conference in Drug Safety
  "Advances in Machine Learning, Models and Clinical Considerations for Drug Safety"
  Easton (MA,US), 14-19 June 2020
- 26th Congress of the European Society of Biomechanics
  Milan (IT), 12-15 July 2020
- VPH2020 Conference
  Paris (FR), 26-28 August 2020
- Computing in Cardiology 2020
  Rimini (IT), 13-16 September 2020
- Safety Pharmacology Society 2020 Annual Meeting
  Montreal (CA), 13-16 September 2020

RECENT PUBLICATIONS

-
- Hypocalcemia-Induced Slowing of Human Sinus Node Pacemaking. Loewe A, Lutz Y, Nairn D, Fabbri A, Nagy N, Toth N, Ye X, Fuertinger DH, Genovesi S, Kotanko P, Raimann JG, Severi S. Biophys J. 2019. doi: 10.1016/j.bpj.2019.07.037.
- High Thyrotropin Is Critical for Cardiac Electrical Remodeling and Arrhythmia Vulnerability in Hypothyroidism. Fernandez-Ruocco J, Gallego M, Rodriguez-de-Yurre A, Zayas-Arrabal J, Echeazarra L, Alquiza A, Fernández-López V, Rodriguez-Robledo JM, Brito O, Schleier Y, Sepulveda M, Oshiyama NF, Vila-Petroff M, Bassani RA, Medei EH, Casis O. Thyroid 2019. doi: 10.1089/thy.2018.0709.
- Four Ways to Fit an Ion Channel Model. Clerx M, Beattie KA, Gavaghan DJ, Mirams GR. Biophys J. 2019. doi: 10.1016/j.bpj.2019.08.001.

- Arrhythmia mechanisms and spontaneous calcium release: Bi-directional coupling between re-entrant and focal excitation. Colman MA. PLoS Comput. Biol. 2019. doi: 10.1371/journal.pcbi.1007260
- MRI-Based Computational Torso/Biventricular Multiscale Models to Investigate the Impact of Anatomical Variability on the ECG QRS Complex. Mincholé A, Zacur E, Ariga R, Grau V, Rodriguez B. Front Physiol. 2019. doi: 10.3389/fphys.2019.01103.
- A 'comb' algorithm for accurate detection of calcium transients and action potentials in regularly activating cardiac preparations. Tomek J. BioRxiv 2019. doi: 10.1101/757294.
- All-optical electrophysiology refines populations of in silico human iPS-CMs for drug evaluation. Paci M, Passini E, Klimas A, Severi S, Hyttinen J, Rodriguez B, Entcheva E. BioRxiv 2019. doi: 10.1101/799478.
- Electromechanics of the Normal Human Heart In Situ. Andrews C, Cupps BP, Pasque MK, Rudy Y. Circ Arrhythm Electrophysiol. 2019. doi: 10.1161/CIRCEP.119.007484.
- Electrophysiological and Contractile Effects of Disopyramide in Patients With Obstructive Hypertrophic Cardiomyopathy. Coppini R et al. J Am Coll Cardiol Basic Trans Science. 2019. doi: 10.1016/j.jacbts.2019.06.004.
- High arrhythmic risk in antero-septal acute myocardial ischemia is explained by increased transmural reentry occurrence. Martinez-Navarro H, Mincholé A, Bueno-Orovio A, Rodriguez B. Sci Rep. 2019. doi: 10.1038/s41598-019-53221-2.
- General Principles for the Validation of Proarrhythmia Risk Prediction Models: An Extension of the CiPA In Silico Strategy. Li Z et al. Clin Pharmacol Ther. 2019. doi: 10.1002/cpt.1647.