

NEWSLETTER

In silico human-based methodologies for evaluation of drug safety and efficacy

New Twitter account!

Please follow us on twitter:

@insilicocardiotox



Kick off of the project

The project “In silico human-based methodologies for evaluation of drug safety and efficacy” officially started on September the 1st, 2016. The main goal of this initiative is to accelerate the use of *in silico* methodologies for the evaluation of drug safety and efficacy in academic, industrial, regulatory and clinical settings. We are pushing together to improve the efficiency of drug testing through the use of human-based computer models, refined and evaluated using experimental and clinical recordings. Through this project we will work towards the refinement, reduction and replacement of animals in the drug development process, and the development of a more reliable and accurate process for drug testing. The team is formed by a partnership across industry, academia, hospitals and regulatory agencies from 11 countries.

News and Events

New website

The new website of the project has been launched:

www.cs.ox.ac.uk/insilicocardiotox.

The main objective of the website is to highlight key scientific developments to accelerate the uptake of in silico methodologies for drug safety and efficacy assessment. This will include links to new models of human cardiac electrophysiology, contractility and metabolism, knowledge, evaluation studies as well as new critical experimental or clinical data.



In Silico Human drug safety and efficacy



Cardiotoxicity (adverse outcomes of the heart) is a common side effect of many drugs, and the main reason for which a drug is withdrawn from the market. In addition to the high cost of releasing a new drug, the preclinical stage involves a large number of animals (more than 500,000 per year), raising



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Special issue on Safety Pharmacology.



Frontiers is preparing a special issue on "Safety Pharmacology, Risk Assessment QT Interval Prolongation and Beyond at Frontiers". The deadline for manuscripts is the 1st of July, 2017. Please visit the website for more information.

<http://journal.frontiersin.org/researchtopic/5662/safety-pharmacology-risk-assessment-qt-interval-prolongation-and-beyond>

The editors for this special topic are; Eleonora Grandi and Stefano Morotti, (The University of California, Davis, USA) Esther Pueyo, (University of Zaragoza, Spain) and Blanca Rodriguez (University of Oxford, UK).

In Silico Drug Safety and Efficacy Symposium in Oxford.

An exciting opportunity to discuss the latest developments on in-silico assessment of drug cardiac safety and efficacy with key players across academia, industry, hospitals and regulatory agencies. The In Silico Drug Safety and Efficacy Symposium in Oxford symposium will take place on September 21-22, 2017 in Oxford, just before the Safety Pharmacology Society meeting in Berlin and Computing in Cardiology in Rennes. Speakers will present the latest scientific advancements, and joint intersectorial efforts to accelerate the adoption of in silico methodologies for the evaluation of drug safety and efficacy. The Symposium will be supported by the NC3Rs-funded consortium and the Quantitative Systems Pharmacology network.

For more information, please check: www.cs.ox.ac.uk/insilicocardiotox.

Safety Pharmacology Society meeting

The meeting of the Safety Pharmacology Society will be held this year in Berlin, Germany, 24th -27th of September, 2017.

Safety Pharmacology Society is a non-profit organization that promotes knowledge, development, application, and training in Safety Pharmacology—a distinct scientific discipline that integrates the best practices of pharmacology, physiology and toxicology. The objective of Safety Pharmacology studies is to further the discovery, development and safe use of biologically active chemical entities by the identification, monitoring and characterization of potentially undesirable pharmacodynamic activities in nonclinical studies. The Safety

Pharmacology Society also supports the human safety of drugs and biologicals by fostering scientific research, education, and dissemination of scientific information through meetings and other scientific interactions.

This meeting is a great opportunity for networking with a dynamic forum of industry, CRO's, academics and regulators and for being updated on the latest cutting-edge research. There are award opportunities to bring together students and junior investigators with seasoned scientists, while sharing their research. Please check all the information here: <https://www.safetypharmacology.org/index.asp>



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Quantitative Systems Pharmacology, 1st Problem Workshop

The Quantitative Systems Pharmacology Network is organising a 1st problem workshop at the University of Warwick, UK, 18th-22nd September 2017.

Participants will spend 5 days tackling QSP problems brought by industrial and academic clinical pharmacologists, life, biological and biomedical scientists focused around QSP.

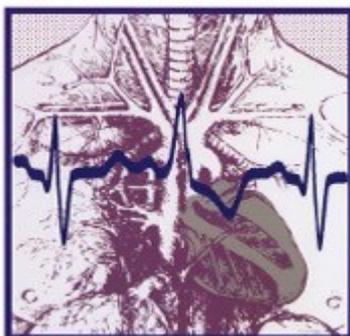
The first day will consist of problem presentations by clinical pharmacologists, biological, biomedical and clinical scientists. Following this participants will spend time brain storming and working on each respective problem. Presentations on progress made throughout the week are made on the Friday of the meeting.

UK

Quantitative
Systems
Pharmacology
NETWORK

If you are interest please visit: <http://www.qsp-uk.net/>

Computing in Cardiology



Computing in Cardiology will be held this year in Rennes, France 24-27 September, 2017. Computing in Cardiology (formerly Computers in Cardiology) is an international scientific conference that has been held annually since 1974. CinC provides a forum for scientists and professionals from the fields of medicine, physics, engineering and computer science to discuss their current research in topics pertaining to computing in clinical cardiology and cardiovascular physiology. The deadline for submission of abstracts is the 15th of April.

You can find all the information here: <https://www.cinc2017.org/>

TransQST Project

The TransQST £14m European research project has been officially launched. The object of the project is to understand adverse drug reactions and improving the approach of systems modelling for drug safety.

Funded by the Innovative Medicines Initiative 2 (IMI2) Joint Undertaking, this five-year project "Translational Quantitative Systems Toxicology (TransQST)" aims at developing novel computational approaches using the best available data from the public and private domains to address drug safety challenges. The research will be focused on the **cardiovascular**, the liver, the kidney and the gastrointestinal systems.



TransQST is a partnership between ten academic institutions, including some of the participants on the "In Silico Human drug safety and efficacy" project. The project will be coordinated by the University of Liverpool, and the pharmaceutical company AbbVie is the Project Leader. For more information visit: <http://transqst.org/>