

Participant's booklet

Scientific Advisory Board



September 25 and 26, 2023 at
Hôpital de la Pitié-Salpêtrière



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Program

September 25, 2023 - Meeting room 7th floor E3M Building

8:30-9:00 am: welcome coffee

9:00-10:15 am: ICAN Overview and evaluation - Stéphane Hatem

The strategy of the IHU ICAN to fight cardiometabolic diseases

- Deciphering the dialogues between organs Liver-heart crosstalk environmental factors meet genomic factors : From rare monogenic cardiometabolic diseases to polymorphisms and personalized medicine
- Translation to patients: new biomarkers for precision medicine
- The challenge of generating research grade health data

Discussion with SAB members

10:15-10:30 am: Coffee break

10:30-12:30 am: Scientific Overview Part I: research hypothesis, major projects and key strengths

1. Liver-heart crosstalk

- **Liver, the metabolic hub for cardiometabolic diseases**
Vlad Ratziu
- **New mediators released by diseased liver**
Pascal Ferré
- **Necroptosis and MLD**
Jérémy Gautheron

2. Adipose tissue as central interface of cardiometabolic diseases

- **Adipose tissue and heart : EAT and AF**
Stéphane Hatem
- **Lipodystrophy from patient cohort to adipose tissue biology**
Corinne Vigouroux

3. Microbiota and cardiometabolic diseases

- **Metabolic dysbiosis associated with obesity and CMD and interventional strategies: FMT to improve T2D control**
Judith Aron-Wisniewsky

Discussion with SAB members

12:30-2:00 pm: Lunch buffet with ICAN community

2:00-3:00 pm: Scientific Overview Part II: research hypothesis, major projects and key strengths (1/2)

1. From rare mutations to risk factors of cardiometabolic diseases

- **Twin technology and the prediction of CV risk**
Antonio Gallo
- **From rare familial forms of cardiomyopathy to common heart failure**
Philippe Charron
- **Imprinting disease**
Irène Netchine

Discussion with SAB members

3:00-3:45 pm: Strategic challenge 1 – Accelerating research transfer to patient care

- **New care pathways**
Raluca Pais
- **Making the best out of patient cohorts (structuring a cohort strategy as a tool for research and partnerships)**
Stéphane Commans

Discussion with SAB members

3:45-4:00 pm: Coffee break

4:00-4:45 pm: Scientific Overview Part III: emerging talents, young investigators

- **The biology of fatty atria**
Nadine Suffee
- **Metabolic biomarker and heart transplantation**
Khaoula Bouazizi-Verdier

Discussion with SAB members

4:45-6:15 pm: SAB members lectures

7:00-10:00 pm: Cocktail diner – Historic Salpêtrière Hospital Chapel (XVII Century)

September 26, 2023 - Challenge facing ICAN - IHU ICAN meeting room

8:30-9:00 am: welcome coffee

9:00-10:30 am: Strategic challenge 2 – Briding gap between basic and clinical research and accelerating research transfer to patient care

- **Maestria Demonstrator : AI tools for research**
Maharajah Ponnaiah
- **What can we expect form the reprogramming of lps to study cardiometabolic disease**
Eric Villard
- **Tools to promote emerging Scientific approaches**
Stéphane Hatem

Discussion with SAB members

10:30-10:45 am: coffee break

10:45-12:00 am: Scientific Overview Part II: research hypothesis, major projects and key strengths (2/2)

2. Translation to patient: new imaging biomarkers of cardiometabolic diseases

- **Cardio metabolic and liver imaging in the general population**
Alban Redheuil
- **Technical developments in Cardiovascular MRI**
Nadjia Kachenoura
- **The new frontiers of the echocardiography**
Laurie Soulat Dufour

Discussion with SAB members

12:00-1:00 pm: lunch buffet

1:00-3:00 pm: Debriefing with SAB in presence of ICAN Executive committee & Concluding remarks by Stéphane Hatem



Speakers



Judith Aron-Winewsky

Nutrition department , Pitié-Salpêtrière Hospital, Sorbonne université France

Judith Aron-Wisnewsy (MD-PHD) is a professor of nutrition at Sorbonne Université and Pitié-Salpêtrière Hospital (Paris) comprising a French center of excellence for medical and surgical care of obesity. Her field of expertise is the care and follow-up of patients with severe obesity and in particular with metabolic comorbidities including type-2 diabetes. She has written the national French recommendation for the management of obesity recently published on HAS website.

She is involved in National and European (FP7 and H2020) clinical investigation research programs involving patients with cardiometabolic diseases, some of whom require bariatric surgery. In particular, she currently works on searching for predictors of diabetes remission after bariatric surgery, including the potential role of gut microbiota. She investigates the relationships between environmental factors (including diet), modification of tissue pathophysiology in particular adipose tissue and liver, microbiota and obesity-related comorbidities in patients with overweight or obesity.

She has published more than 100 papers published in English in high impact factor journals available on pubmed and more than 50 dissemination paper in french.



Khaoula Bouazizi-Verdier

PhD, Research Engineer at INSERM – Operational manager of IHU ICAN

She obtained a Ph.D from the University of Paris Saclay in 2015. Khaoula Bouazizi-Verdier is a research engineer at INSERM and the operational manager of the imaging platform at IHU ICAN. Her research focuses on tissue characterization of the myocardium using a non-irradiating and non-invasive technique, which is magnetic resonance imaging (MRI). She is particularly interested in optimizing MRI acquisition techniques to address clinical needs in terms of cardiovascular diseases. Her projects are centered on the tissue characterization of the left atrium to understand mechanisms of atrial fibrillation, for example. MRI provides robust acquisition techniques through parametric mapping of T1 and T2, which inform them about tissue composition in terms of fibrosis and fat. She also uses this technique to assess myocardial viability of a graft before heart transplantation, in relation to omics analyses. She also works on studying cardiac deformation in mouse hearts to validate the acquisition protocol and analysis algorithms in small-sized mouse hearts with very high heart rates, in conjunction with histology.

Speakers



Philippe Charron

Team leader of INSERM/Sorbonne University 1166 unit dedicated to Genomics of cardiac diseases

Philippe Charron is Professor of medicine, Team leader of INSERM/Sorbonne University 1166 unit dedicated to Genomics of cardiac diseases and a board member of ICAN IHU. As a cardiogeneticist, he is also Head of the National referral center for cardiac hereditary diseases (labelled through the Rares diseases Health Ministry Plan, France), and president of the scientific committee of the French association of patients “League against cardiomyopathy”. He is also a board member of the ERN Guard-Heart (European reference network for rare heart diseases), former Chairman of the European EORP registry on cardiomyopathies (>3200 patients included), former president of the ESC working group on myocardial and pericardial diseases.

He has coordinated or participated in various international research networks (ERA-CVD, UE-Horizon, FP7, Leducq transatlantic network for excellence), in various clinical trials and is a member of several scientific boards in the field of hereditary or rare heart diseases.



Stéphane Commans

Head of Innovation and Research Valorisation Division

Stéphane Commans is a dedicated and accomplished academic and industrial with a strong background in enzymology, drug discovery, and scientific management, His objective is to seek challenging opportunities where he can leverage his expertise and innovation to contribute to cutting-edge research projects.

He arrived at IHU ICAN in 2012 and became Portfolio Manager for Alliances and Scientific Projects. From 2017 to 2022, he was the Director of Scientific Operations.

Since 2022 to Present, he is Head of Valorization and Research and leading efforts to transform research findings into tangible products and innovations.

Notable projects :

- Successfully obtained the PSPC Calypso project grant (2018).
- Secured funding for the European project MAESTRIA (2020).
- Secured funding for the SESAME program (Atlas Cœur/Aorte) and initiated the ICONIC project (2022).

Speakers



Pascal Ferré

Member of the team : "Metabolic diseases, diabetes and co-morbidities", Cordeliers Research Center, IHU ICAN and Emeritus professor, Sorbonne University medical faculty

Former director of the Inserm-Sorbonne University Cordeliers Research Center, Pascal Ferré is an author of 300 research articles and reviews.

His interests lie in the regulation of energy metabolism in physiological and pathophysiological situations such as type 2 diabetes and obesity with a particular emphasis on hepatic lipid metabolism. Among other things, he has deciphered with his colleagues the mechanisms by which insulin and endoplasmic reticulum stress induces the expression of lipid synthesis genes.

More recently, they have addressed the role of hepatic sphingolipids (ceramides, dihydroceramides) in diabetic and NAFLD patients, thanks to a close collaboration with clinicians of the IHU ICAN. They are now extending their studies on sphingolipids on cardiovascular pathologies in collaboration with UMR-S 1166.



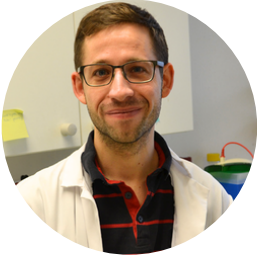
Antonio Gallo

Head of the Lipid clinic and cardiovascular prevention unit and associate professor at Sorbonne University

After completing his training in Internal Medicine at Sapienza University of Rome, Antonio Gallo obtained a PhD in Physiology, Physiopathology and Therapeutics at Sorbonne University and. His clinical activity focuses on the diagnostic and therapeutic management of genetic dyslipidaemias and primary cardiovascular risk prevention. His research interests include lipid metabolism, severe forms of genetic dyslipidaemias, residual risk in primary and secondary prevention, and imaging in atherosclerosis. His current projects focus on non-invasive coronary imaging and residual risk in familial hypercholesterolemia as well as severe forms of hypertriglyceridemia.

He is involved in several randomized placebo-controlled trials on novel lipid-lowering treatments. He has authored or co-authored more than 60 peer-reviewed publications. He is a member of EAS (member of the Young Fellows of EAS 2019-2022), French Atherosclerosis Society NSFA (member of the scientific committee on the French registry of Familial Hypercholesterolemia), French Society of Cardiology (Member of the working group on heart and Metabolism)

Speakers



Jérémie Gautheron

PhD in Molecular Biology and INSERM Research Associate

Jérémie Gautheron obtained his PhD in Molecular and Cellular Biology in 2011 under the supervision of Dr. Gilles Courtois. After spending several years in Germany as a post-doc with renowned scientists such as Prof. Tom Luedde, he returned to France in 2017 thanks to the support of the FRM. He settled at the Centre de Recherche Saint-Antoine in Paris, in the unit headed by Prof. Bruno Fève, and more specifically within the team of Prof. Chantal Housset. They gave him the freedom and support he needed to set up his own group. He was thus awarded the "Émergence de la Ville de Paris" program in 2018, a research grant from the Société Francophone du Diabète the following year, as well as funding from the ICAN University Hospital Institute, which enabled him to establish his group. In 2019, he was recruited to INSERM as a research fellow.

On September 1, 2023, he took over the management of Team 11 of UMRS 938, entitled Biliary and Fatty Liver Diseases. Chantal Housset is now an emeritus member of the team.



Stéphane Hatem

Chief Executive of IHU ICAN, cardiologist with a doctorate in science, and Professor of Cardiovascular Physiology at Sorbonne University

His career as a medical researcher has been entirely devoted to understanding the pathophysiology of cardiac arrhythmias, the most common of which is atrial fibrillation, a major cause of stroke and heart failure. His work contributed to the identification of the atrial cardiomyopathy that forms the basis of arrhythmia. In particular, it demonstrated the role played by cardiac fatty tissue in the formation of this cardiomyopathy, and the relationship between metabolic diseases and fibrillation. This research continues today with the development of new diagnostic tools and therapeutic targets for earlier, personalized treatment of at-risk patients, and is carried out within the framework of international consortia, the European FP7 and H2020 networks, and the Leducq Transatlantic Network. In 2004, Prof. Stéphane Hatem set up a joint Inserm research unit at Sorbonne University devoted entirely to research into cardiovascular and metabolic diseases, focusing on atherothrombosis, the genomics and pathophysiology of heart disease, lipid metabolism and the biology of atherosclerosis. Since 2018, he has been Managing Director of IHU ICAN, a translational research institute dedicated to cardiometabolic diseases that enables interdisciplinary approaches based on patient cohorts and data generated by the latest developments in medical imaging, Omics and artificial intelligence.

Speakers



Nadja Kachenoura

INSERM research Director

Nadja Kachenoura, had her PhD in biomedical imaging in 2007 and a post-doc fellowship at University of Chicago (2007-2009). During this training period she developed a multimodality profile as she has been working and publishing on cardiac echo, CT and MRI. Once back to France, she got the prestigious AXA research grant and then her Inserm research associate (CR1) position in 2011. In 2014, she founded the cardiovascular imaging (LIB-ICV) team at Sorbonne Université/INSERM/CNRS Laboratory of Biomedical Imaging and became a team leader of a multidisciplinary group (researchers with a clinical or engineering background). She received 12 awards in international conferences, personally or on behalf of her supervised students. She received more than 25 invited talks in cardiovascular radiology/biomedical image processing international meetings as well as chairing responsibilities, and programs committee member. She has over 150 publications that have been cited over 2000 times (WOS h-index=24). She recently co-authored a book chapter on aortic MRI with the MESA MRI investigators and is recently invited to edit a special issue on advances in multimodality aortic imaging for the Journal of Clinical Medicine.



Irène Netchine

Professor of Physiology at Sorbonne Université, Trousseau Children's Hospital, Paris, France

Trained in paediatric endocrinology, Irène Netchine obtained her PhD in human genetics. She was the ESPE-Research Unit coordinator, vice-Chair for a COST European Network for Human Congenital Imprinting Disorders and is the pediatric co-chair for Growth and Rare Obesity Syndromes for ENDO-ERN. She is coordinating a department of Paediatric Endocrinology, a molecular diagnosis laboratory (concerning growth retardation and excessive growth), a national center for rare growth and endocrine disorders and is leading an INSERM-Sorbonne Université research team. Her initial research concerned the genetics of growth hormone deficiency and the molecular pathology of anterior pituitary development.

Her current research interests are the implication of the IGF system in intra-uterin growth retardation and imprinting anomalies leading to foetal growth disorders and their consequences. She has developed a multidisciplinary clinic for patients with Silver Russell and Beckwith Wiedemann Syndromes and has been the chair of the first Silver-Russell international consensus.

Speakers



Raluca Pais

MD PhD in Hepatogastroenterology Department and Institute of Cardiometabolisme and Nutrition, Pitié Salpetriere Hospital

Dr Raluca Pais is MD PhD in Hepatogastroenterology Department and Institute of Cardiometabolisme and Nutrition, Pitié Salpetriere Hospital, Paris, France. She first completed her medical training at University of Medicine and Pharmacy "Iuliu Hatieganu" Cluj Napoca, Romania. She earned her doctoral degree at the University Pierre et Marie Curie, Paris VI for her work on the natural history and progression of non-alcoholic fatty liver disease, liver and cardiovascular related comorbidities related to MASLD.

She's responsible for MASLD clinical care pathways at Pitié Salpetriere Hospital. She is deeply involved in clinical research in MASLD and is part of several European Consortia in MASLD.



Maharajah Ponnaiah

Head of the ICAN Intelligence and Omics (I/O) Data Science Platform

Holding a PhD in Molecular Genetics from Italy, he embarked on a remarkable 9-year research tenure at CNRGRH, INRAE, and Sorbonne University, specializing in Bioinformatics. In 2018, he joined IHU ICAN as a Data Scientist, closely collaborating with the ICAN Omics team, expanding his expertise in Multi-Modal Integration, Clinical Research, and Artificial Intelligence.

He participates in several National and European Projects, including MAESTRIA, where he leads the AI multimodal integration. He aims to steer his team towards AI Personalized Medicine navigating the dynamic landscape of data-driven healthcare and scientific innovation.

Speakers



Vlad Ratziu

MD, PhD, Professor of Hepatology at Sorbonne University and Pitié-Salpêtrière Hospital

His main research interests are in the field of NAFLD; the mechanisms, risk factors, and progression of liver fibrosis in viral and metabolic diseases; and the treatment of viral hepatitis and hepatocellular carcinoma.

He has participated in early, mid, and late-stage trials of NASH and has published more than 260 articles in prominent journals. Prof. Ratziu coordinated the Fatty Liver Inhibition of Progression (FLIP) consortium, which sought to study both the mechanisms of liver disease progression in NAFLD and potential interventions, drawing on the largest cohort of NAFLD patients in Europe. He is co-editor for the Journal of Hepatology.



Alban Redheuil

Cardioradiologist, Head of Cardiovascular and Thoracic Imaging ICT Hôpital Pitié-Salpêtrière, APHP.SU, Medical Head of the Imaging Research Center of the Foundation for Innovation in Cardiometabolism and Nutrition (IHU ICAN)

Alban Redheuil, MD PhD Board certified Cardiologist and Radiologist. Head of non invasive Cardiovascular Imaging (CT and MRI) at Pitié Salpêtrière Hospital, Cardiovascular Imaging Department, Institute of Cardiology, Paris. Professor of Medicine at Sorbonne University School of Medicine, Paris.

Head of Institute of Cardiometabolism and Nutrition ICAN Imaging Core Lab and MRI research platform, Paris. Member of the Laboratory of Biomedical Imaging LIB Inserm/CNRS/Sorbonne University research team focused on basic and applied research of morphological, functional and molecular cardiovascular imaging methods.

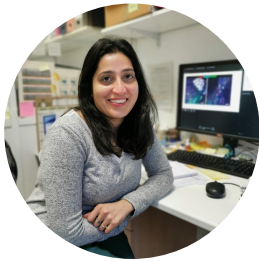
Research interests include: cardiovascular MRI and computed tomography, population/cohort imaging and clinical research, biomedical image processing, imaging biomarkers.

Speakers



Laurie Soulat Dufour

MD-PhD, Cardiology Department Saint Antoine Hospital



Nadine Suffee

PhD, Researcher Scientist, Team 3 - Cellular and molecular plasticity in cardiovascular diseases
ICAN-INSERM UMRS_1166

Dr. Nadine Suffee has obtained her PhD in 2012 in Sorbonne Paris-Nord. She has deciphered the role of the chemokine CCL5 in angiogenesis.

Then, she was interested in stem cell tools (hiPS) in a bio-engineering lab's as post-doctoral position. She took advantages of her expertise to integrate the research unit 1166-IHU-ICAN in 2014 under S. Hatem's supervision, in which she has deciphered cellular and molecular mechanisms involved in epicardial remodeling and in the regulation of epicardial progenitor cells fate.

Her research led her to interest to immune response in cardiovascular diseases with Z. Mallat, with who she acquired a strong expertise on the inflammatory response. In 2021 she's returned to unit-1166 and in 2023 she's recruited at Inserm (CRCN) to continue her research on the impact of obesity and inflammation on the crosstalk with epicardium in the ACM development.

Speakers



Corinne Vigouroux

Endocrinologist, professor of cell biology at Sorbonne University

Corinne Vigouroux (MD, PhD) is an endocrinologist, professor of cell biology at Sorbonne University. She focuses for many years in translational studies in genetics, pathophysiology, cellular modeling and patient care in the field of lipodystrophy and insulin resistance syndromes. She coordinates the National Reference network for Rare Diseases of Insulin Sensitivity and Insulin Secretion (PRISIS), aiming to develop, improve and update diagnostic tools, care protocols, and pathophysiological research in these diseases.

In the “Lipodystrophies, metabolic and hormonal adaptations, and aging” team led by Bruno Feve at the Saint-Antoine Research Center (Inserm U938, Paris), her research group combines molecular and cellular studies of lipodystrophy syndromes with epidemiology, deep phenotyping and innovative therapeutic management of patients.



Eric Villard

PhD, TEAM 1 of UMR 1166 - Genomics and pathophysiology of cardiovascular diseases: from monogenic to multifactorial diseases

Eric Villard is a geneticist and molecular biologist interested in cardiomyopathy genomics approaches to reach pathophysiological mechanism of these devastating diseases. Eric Villard’s team identified many genes responsible for dilated cardiomyopathies in familial and sporadic forms through pioneer GWAS study in the field revealing proteostasis as a major candidate pathway regulating heart failure in humans.

His actual interest is focused on the validation of this exciting hypothesis using CrisprCas9 genome editing, iPS derived Cardiomyocytes from patients and derived 3D-Engineered Heart Tissue (EHT), genetically modified mice models and AAV based therapeutic approach. He is scientific director of ICAN BioCell iPS facility.

SAB Members



André Carpentier

MD FRCPC CSPQ FCAHS, Endocrinologist and Professor
Canada Research Chair in Molecular Imaging of Diabetes
Department of Medicine Faculty of Medicine and Health
Sciences - Centre de recherche du CHUS Université de
Sherbrooke

Dr. Carpentier is the Canada Research Chair in Molecular Imaging of Diabetes and professor and endocrinologist-lipidologist in the Departments of Medicine, Faculty of Medicine and Health Sciences at the Université de Sherbrooke. He is the Scientific Director of the Centre de recherche du CHUS since December 2020. He was the director of the Province of Quebec Research Network on Cardiometabolic Health, Diabetes and Obesity (CMDO Network - <https://www.rrcmdo.ca/en/>) from 2012-2021 and is the new scientific co-lead of Diabetes Action Canada (<https://diabetesaction.ca/>). His research interests include: 1) the role of postprandial fatty acid metabolism in the development of type 2 diabetes and cardiovascular diseases; 2) the investigation of brown adipose tissue metabolism in humans; and 3) the anti-diabetic mechanisms of bariatric surgery.

Since 2007, Dr. Carpentier received >\$7.9M in operating funds and >\$29M in infrastructure and network funds as PI, and >\$24.5M as co-PI, >\$1M of which was attributed directly to his lab. Dr. Carpentier has published more than 180 peer-reviewed manuscript publications cited over 18,500 times (H index 57). He has trained 30 undergraduate, 19 graduate and 15 postdoctoral students, some of whom are currently pursuing their own successful independent research careers. He is the recipient for multiple awards, including the 2011 Diabetes Young Investigator Award of the Canadian Society of Endocrinology and Metabolism, the CDA/CIHR Young Investigator Award in 2012 and the Canadian Lipoprotein Conference Physician-Scientist Award in 2014.

He has been elected Fellow of the Canadian Academy of Health Sciences (FCAHS, 2015).

SAB Members



Arnold Von Eckardstein

Professor of Clinical Biochemistry, Laboratory Medicine and Pathology, University Centre for Laboratory Medicine and Pathology (UZL), Switzerland

Arnold Von Eckardstein studied medicine in Giessen and Kiel and then specialized in laboratory medicine and clinical chemistry in Frankfurt and Münster (Germany). Since 2001, he is professor at the medical faculty of the University of Zurich and the director of the Institute of Clinical Chemistry of the University Hospital of Zurich (Switzerland; <http://www.en.ikc.usz.ch/Pages/default.aspx>). His main research interests include risk factors and biomarkers of cardiovascular and metabolic diseases as well as structure, function, and metabolism of high density lipoproteins (HDL) and sphingolipids. He has published more than 450 original and review papers in international peer reviewed scientific journals (Scopus h-index: 91).

Currently, Arnold von Eckardstein is the Editor-in-Chief of *Atherosclerosis* as well as the member of the Editorial Boards of *Arteriosclerosis, Thrombosis and Vascular Biology*; *BBA Molecular and Cell Biology of Lipids*; *Cardiovascular Research*, and *European Heart Journal*.

Previously, he served as the Chairman of the European Lipoprotein Club, the Swiss and German Atherosclerosis Societies, and the Swiss Society of Clinical Chemistry as well as the Secretary of the European Atherosclerosis Society.

SAB Members



Michaël Roden (absent)

**Professor of Endocrinology and Metabolic Diseases,
University Hospital of Düsseldorf, Germany**

Michael Roden (born February 11, 1961) is Professor and Chairman of Internal Medicine, Endocrinology and Metabolic Disorders at Heinrich Heine University Düsseldorf, Director of the Division of Endocrinology and Diabetology at the University Hospital of Düsseldorf and Spokesman for the Executive Board and Scientific Director of the German Diabetes Center, the Leibniz Center for Diabetes Research at the Heinrich Heine University Düsseldorf (Legal body: Deutsche Diabetes-Forschungsgesellschaft eV).

Michael Roden's research focusses on energy metabolism in humans under physiological conditions and with metabolic disorders such as metabolic syndrome, diabetes mellitus and non-alcoholic fatty liver disease. He has made major contributions to our understanding of the cellular mechanisms of fatty acid and amino acid-induced insulin resistance in humans. Additionally, he examined the function of mitochondria in muscle and liver tissue.

With his research group, he is contributing to the development of novel non-invasive methods for real-time analysis of tissue-specific metabolism. His studies demonstrated that alterations of mitochondrial function can decisively influence the development and progress of diabetes and non-alcoholic fatty liver disease. His recent research contributes to a novel differentiation of diabetes subtypes with various risks for their sequelae and promotes the way to precision medicine for people with diabetes.

Roden is the author of more than 700 "peer-reviewed" publications, co-author of (inter)national guidelines and the editor of the book "Clinical Diabetes Research: Methods and Techniques".

SAB Members



Karin Sipido

Chair of the SAB, Professor of Medicine and Head of Experimental Cardiology, University of Louvain, Belgium

Karin Sipido, MD, PhD, is Professor and Head of Experimental Cardiology at the Department of Cardiovascular Sciences, KU Leuven. Her research field is rhythm disturbances and heart failure, identifying cellular and molecular mechanisms, in a translational perspective. Her expertise is in cellular electrophysiology and calcium imaging of isolated cells and tissues, using living cardiac myocytes and fibroblasts, isolated from animal models and human hearts.

Molecular studies of gene expression and regulation underpin the functional studies. Her research is in close collaboration with imaging specialists and clinical electrophysiology. She is an elected member of the Academia Europaea, and elected Fellow of the European Society of Cardiology, of the American Heart Association and of the International Society for Heart Research. She has held several editorial positions..

She takes an active interest in research policy, serving in various positions at KU Leuven, at European and international level. She was member of the board of the European Society of Cardiology, and led the Council for Basic Cardiovascular Sciences. She was a founding member and President of the Biomedical Alliance in Europe.

From 2015-2020 she chaired the European Commission's Scientific Panel for Health (SPH), a science-led expert group based on the provisions of Horizon 2020. She is a member of the Scientific Advisory Board of ORE, the European Commission's Open Research Platform.

SAB Members



Rozemarijn Vliegenthart (absent)

Radiologist and Professor of Cardiothoracic Imaging,
University Medical Center Groningen, Netherlands

Rozemarijn Vliegenthart (MD, PhD, EBCR, FNASCI, FICIS) is Radiologist and Professor of Cardiothoracic Imaging at the University Medical Center Groningen (UMCG), The Netherlands. Her clinical and research interests focus on early detection of cardiothoracic diseases, in particular imaging of cardiovascular disease, lung cancer and COPD.

She has an interest in AI, and is involved in the UMCG DataScience Center in Health (DASH) as expert in cohort data. Vliegenthart has obtained a number of grants in cardiothoracic imaging as applicant or co-investigator. She is PI of ImaLife, CONCRETE, NELSON-POP and B3Care. Vliegenthart is (co-)author of 305 papers (H index 50), and is Deputy Editor of Radiology.

She has held invited lectures at numerous international conferences including RSNA, SCCT and ECR. Vliegenthart is the current President of ESCR.