

Activity Report

ESC COUNCIL ON BASIC CARDIOVASCULAR SCIENCE
FISCAL YEAR 2022 (APRIL 2021 – MARCH 2022)

Chairperson's Introduction



Prof. Christian Weber, FESC

*Chairperson of the Council on
Basic Cardiovascular Science
2020-2022*

Dear colleagues, dear friends of basic cardiovascular science,

Now that the Covid-19 pandemic has finally become controlled and despite facing new geopolitical and viral challenge, our Council has also resumed and revived its full scope of activities. The philosopher Sloterdijk once described the society of the future in his “Spherology” as a foam: The bubbles (as individuals) are co-isolated, each living for itself, and yet they are connected at their borders, thus sharing what makes them different.

Along these lines, the Frontiers in CardioVascular Biomedicine (FCVB) Congress as our prime physical meeting and outlet, originally planned for April 2020 in Budapest could not take place, and was then converted to a virtual Basic Science spring program in 2021, and we are very delighted and pleased to report that we have just experienced a highly successful and lively physical FCVB 2022 Congress April 28-May 1 in the beautiful City of Budapest.

After introducing direct membership in 2020, our Council has now accrued over 500 members as of March 2022, bringing together basic science organisations in Europe, ESC Working Groups, and the Scientists of Tomorrow, a group of young and highly proactive researchers.

The Basic Science sessions in the ESC Congress 2021 - a digital experience - played an important part in the overall programme, and the Council made many well attended contributions, including the organisation of a Basic Science Poster Reception. The ESC Congress 2022 in Barcelona will take place in physical attendance and we very much look forward re-engaging in personal exchange and many fruitful interactions.

Of note, we will continue our highly successful collaboration with Cardiovascular Research to present a joint CVR-ESC CBCS webinar series entitled ‘Cardiovascular Research Discoveries’, which was established in 2021 and continues to regularly draw over 500 attendees owing to a programme with outstanding speakers.

So please take care and carpe diem, enjoying work and life as much as you can!

Christian Weber

Highlights from 2021-2022

➔ Membership has grown to over 500 members in March 2022

➔ Collaborated on the joint CVR-ESC CBCS *Cardiovascular Research Discovers* webinar with CVR

➔ Over €43,000 invested in grants and awards.

➔ Organised the **Basic Science Spring Programme**, helping to staying connected with its members.

➔ Organised the Basic Science Poster Reception during ESC Congress 2021 – *The digital experience*.

Council on Basic Cardiovascular Science Nucleus 2020-2022



Christian Weber
Chairperson



Johann Wojta
Chairperson-Elect



Johannes Waltenberger
Past Chairperson



Paul Evans
Secretary



Imo Hoefler
Treasurer

Council on Basic Cardiovascular Science Board 2020-2022

The **Board** of the Council is composed of representatives from the **ESC Working Groups and from non-ESC sister organisations concerned with basic science.**

- Gemma Vilahur Working Group on Thrombosis
- Rosalinda Madonna Working Group on Cellular Biology of the Heart
- Carlo Gabrielle Tocchetti Working Group on Myocardial Function
- Teresa Padro Working Group on Coronary Pathophysiology and Microcirculation
- Yehuda Adler Working Group on Myocardial and Pericardial Diseases
- Bill Chaudhry Working Group on Development, Anatomy and Pathology
- Elisabetta Cerbai Working Group on Cardiovascular Pharmacotherapy
- Matthijs Cluitmans Working Group E-Cardiology
- Carol Ann Remme Working Group on Cardiac Cellular Electrophysiology
- Magnus Back Working Group on Atherosclerosis and Vascular Biology
- Massimiliano Gnechchi Working Group Cardiovascular Regenerative and Reparative Medicine

- Henning Morawietz European Society for Microcirculation
- Judith Sluimer European Vascular Biology Organisation
- Sean Davidson International Society of Heart Research - European Section
- Marisol Alfonso European Council for Cardiovascular Research
- Alberico Catapano European Atherosclerosis Society
- Cristina Basso Association for European Cardiovascular Pathology

- Carlo Gabrielle Tocchetti Ex-officio: HFA liaison Heart Failure Association
- Tomasz Guzik Ex-officio: Editor in Chief of Cardiovascular Research
- Sveva Bollini Ex-officio: SoT representative 2021 Scientists of Tomorrow (SoT)
- Gemma Chiva Blanch Ex-officio : SoT representative 2022 Scientists of Tomorrow (SoT)

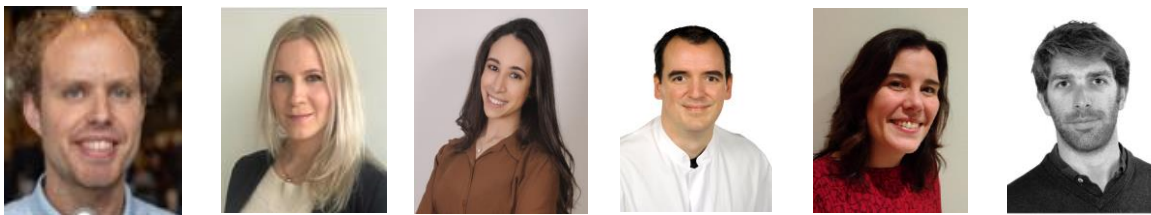
Membership

After introducing direct membership in 2020, the Council has over 500 members as of March 2022. The Council also brings together basic science organisations in Europe and ESC Working Groups.

The Scientists of Tomorrow (SoT) is a group of young, proactive, basic and clinical researchers, who work closely with the Council on Basic Cardiovascular Science. This community reached 1800 followers by March 2022 via the LinkedIn platform where basic scientists from all around the world are able to discuss major issues and discoveries.

Scientists of Tomorrow Nucleus

The Scientists of Tomorrow nominate two new Nucleus members each winter. Since January 2022 the Nucleus is composed of:



Left to right

Rui Adao, Monika Gladka, Soumaya Ben-Aicha, Emiel van der Vost, Gemma Chiva Blanc, Julien Barc

Congresses

ESC Congress 2021 – a digital experience

The Council organised its annual [Basic Science Poster Reception](#) in an online format. The event included award-giving from the Council and from the Cardiovascular Research Journal, as well as the presentation of fourteen posters including some interactive Q&A time with the audience.

Research

During 2021-2022, the Council awarded:

- Five [First Contact Initiative Grants](#) to allow young scientists to establish contact with hosting institutions with the aim of obtaining a fellowship or research affiliate position.
- One [Basic Research Fellowship](#) to enable a researcher to spend one year in a European research laboratory.
- Two [Outstanding Achievement Awards](#) to recognise investigators of exceptional merit.

The winners of the Outstanding achievement award 2021 are:



Assistant Professor Giovanni G Camici
Center for Molecular Cardiology, University of Zurich, Switzerland



Professor Paul Evans
Department of Infection, Immunity & Cardiovascular Disease, Medical School, University of Sheffield, United Kingdom

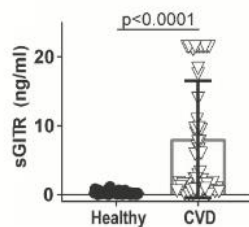
Education

Basic Science Spring Programme

The Council organised a series of educational and member-focused events in April 2021

- **Virtual Coffee Break** – an informal networking event aimed at engaging and creating bonds between the members of the Council.
- **Online speed Mentoring**, allowing 4 mentees to have a one-to-one discussion with an experienced cardiovascular professional during a 20-30 minute session
- **Webinar:** [Recent advances in immune pathways in atherosclerosis](#)
Faculty: Professor Claudia Monaco, Professor Esther Lutgens
Professor Paul Evans, Professor Johann Wojta
- **Symposium:** [Does atherosclerosis have a sex and gender? Perspectives from basic science to clinical practice](#). A collaboration with the ESC Working Group on Atherosclerosis & Vascular Biology

sGfTR plasma levels correlate with cardiovascular disease



Summit cohort. J. Nilsson, I Goncalves



Webinars

In 2021-2022, the Council continued its collaboration with Cardiovascular Research to develop a series of joint CVR-ESC CBCS webinars entitled 'Cardiovascular Research Discoveries'.



- [Determinants of cognitive impairment in cardiovascular disease](#)

9 February 2022

Speakers - Dr. Costantino Iadecola and Prof. Daniela Carnevale

- [Cardiovascular Remodelling](#)

1 December 2021

Speakers - Prof. Eva van Rooij and Dr. Sebastian Cremer

- [Immune checkpoints in cardiovascular disease](#)

3 November 2021

Speakers - Prof. Esther Lutgens and Dr. Holger Winkels

- [New targets in atrial fibrillation](#)

6 October 2021

Speakers - Drs. Stanley Nattel (Montreal Heart Institute) and Svetlana Reilly

- [Cellular cross-talk in cardiovascular disease](#)

16 July 2021

Speakers - Prof. Stefanie Dimmeler and Dr. Donato Santovito

- [Current approaches to cardiac repair and regeneration](#)

14 April 2021

Speakers - Prof. Thomas Eschenhagen and Dr. Ronald Vagnozzi

Scientific Papers

The Council has contributed to the following scientific document during 2021-2022:

[Progress in cardiac research: from rebooting cardiac regeneration to a complete cell atlas of the heart](#)

Cardiovascular Research

Cardiovascular Research (CVR) is the ESC's international journal for basic and translational research, (IF 10.787).

The Cardiovascular Research editorial team and the Scientists of Tomorrow continue to collaborate to produce [Cardiovascular Research Onlife](#), an online platform linking Cardiovascular Research with the wider scientific community.



In 2021-2022, published interviews & articles included:

- [Scientists on the Spot: Tracing the potential in electrophysiology](#)
- [Scientists on the Spot: Cardiovascular ageing and stroke](#)
- [Scientists on the Spot: A matter of blood flow](#)
- [Scientists on the Spot: A fraction of wisdom on heart failure](#)
- [Scientists on the Spot: Re-defining atherosclerosis through biobanks](#)
- [Scientists on the Spot: Re-awakening the heart's regenerative capacity](#)
- [Scientist on the Spot: Exploring the cause and cure for pulmonary arterial hypertension](#)
- [Scientists on the Spot: Repairing and restoring the heart](#)
- [Old, but gold? Not the case for the immune system when promoting systemic ageing](#)
- [Sex matters? Sex matters!](#)