



DZHK
Deutsches Zentrum für
Herz-Kreislauf-Forschung

UNIVERSITÄTSMEDIZIN
GÖTTINGEN **UMG**

The 10th CARDIOVASCULAR BIOENGINEERING SYMPOSIUM 2026 CVBE

**June 18th - June 20th 2026
Göttingen, Germany**

DRAFT - PROGRAM

Thursday, June 18, 2026

10:00 AM

Registration & Coffee

12:00 – 12:30 AM

Opening Remarks



Wolfram-Hubertus Zimmermann, MD

Chair, Institute of Pharmacology and Toxicology
University Medical Center Göttingen
Göttingen, Germany



Jianyi (Jay) Zhang, MD, PhD

Chair, Department of Biomedical Engineering
T. Michael and Gillian Goodrich Endowed Chair of Engineering Leadership
Professor of Medicine, of Engineering
School of Medicine, School of Engineering
UAB | The University of Alabama at Birmingham
USA



Rabea Hinkel, DVM, PhD

Speaker, DZHK Partner Site Lower Saxony
Head, Laboratory Animal Science and Pathology
German Primate Center (DPZ)
Göttingen, Germany



Constanze Schmidt, MD

Director, Clinic for Cardiology and Pneumology
University Medical Center Göttingen
Germany



Ke Chang, PhD

Chair, AHA CVBE Council
Alan L. Kaganov Professor of Biomedical Engineering
Columbia University
New York, USA

12:30 – 14:40

Session I – The Foundation : Developmental Biology

MODERATORS: Alessandra Moretti, Malte Tiburcy

12:30 – 12:50



Protein Aggregation in the Heart

Thomas Braun, MD, PhD

Director, Max-Planck-Institute of Heart and Lung Research, Bad Nauheim,
Department of Cardiac Development and Remodeling
Full Professor, Univ. of Gießen, Medical Faculty, Dept. of Internal Medicine

12:50– 13:10



Core mechanisms that regulate cardiac regeneration across vertebrate species

Paul Riley, PhD

BHF Professor of Regenerative Medicine
Chair of Development and Cell Biology
Institute of Developmental & Regenerative Medicine

13:10 – 13:30 AM



Cell Competition in Heart Development - A story of winners and losers

Miguel Torres, PhD

Professor, Cardiovascular Development Program,
Centro Nacional de Investigaciones Cardiovasculares (CNIC)
Madrid, Spain

14:00 – 14:20

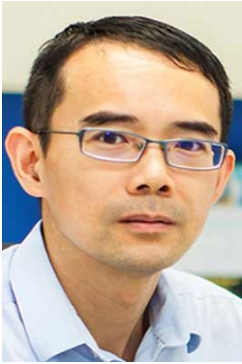


Regulation of Cardiac Maturation

Nicole Dubois, PhD

Associate Professor Cell, Developmental and Regenerative Biology
Department of Cell, Developmental and Regenerative Biology,
Icahn School of Medicine at Mount Sinai
New York, USA

14:20 – 14:40



Maturing ventricular cardiomyocytes in vitro and in vivo

Lei Ye, PhD

Associate Professor, Department of Biomedical Engineering
School of Engineering | Heersink School of Medicine
UAB | The University of Alabama at Birmingham
USA

14:40 – 15:00 PM

Coffee Break

15:00 – 16:40 PM

Session II – Bioengineered Heart Modelling

MODERATORS: Miguel Torres, Nicole Dubois

15:00 – 15:20



Heart – Skeletal Muscle Cross-Talk

Malte Tiburcy, MD

Group Leader

Institute of Pharmacology and Toxicology

University Medical Center Göttingen

Göttingen, Germany

15:20 – 15:40



Modelling Repair by Cell Supplementation in Cardiac Organoids

Alessandra Moretti, PhD

Professor, Regenerative Medicine of Cardiovascular Diseases

TU München

Germany

15:40 – 16:00



Modelling Cardiac Hypertrophy in Cardiac Organoids

Sakthivel Sadayappan, PhD, MBA

Professor and Department Head, Cellular and Molecular Medicine

Associate Director, Sarver Heart Center

Czarina M. & Humberto S. Lopez Endowed Chair

16:00 – 16:20



ESCAPE Bioengineering

Christopher Chen, MD, PhD

Founding Director, Biological Design Center

William F. Warren Distinguished Professor of Boston University

The Wyss Institute for Biologically Inspired Engineering at Harvard University
Boston, USA

16:20 – 16:30



Behind the Scene at Nature Medicine

Michael Basson, PhD

Senior Editor

Nature Medicine

16:30 – 19:00

Poster Viewing (Posters will be at display on June 18th to June 20th)

19:00

BBQ at German Primate Center

Friday, June 19, 2026

NOBEL-LAUREAT LECTURE

Moderator: Wolfram Zimmermann

9:00 – 9:40 AM



Breaking Optical Barriers

Stefan Hell, PhD

Director, Department NanoBiophotonics

Max Planck Institute for Multidisciplinary Sciences

Göttingen, Germany

9:40 – 10:00 AM

Coffee Break

10:00 – 11:40 AM

Session III – Modelling and Simulations

MODERATORS: Ke Chang, Milica Radisic

10:00 – 10:20 AM



Modelling Cardiac Repair

David Nordsletten, DPhil

Professor, Biomedical Engineering and Cardiac Surgery

University of Michigan

Ann Arbor, USA

10:20 – 10:40 AM



Virtual Drug Screens

Jeff Saucerman, PhD

Professor, Biomedical Engineering

Department of Biomedical Engineering, University of Virginia

Charlottesville, VA, USA

10:40 – 11:00 AM



Physics-Informed Neural Networks to Predict Outcome of Cardiac Interventions
Eberhard Bodenschatz, PhD
Director, Max Planck Institute for Dynamics and Self-Organization (MPIDS),
Göttingen

11:00 – 11:20 AM



Modelling of Electrical Heterogeneity in Cardiac Remuscularization
Blanca Rodriguez, PhD
Professor in Computational Medicine
Department of Computer Science, British Heart Foundation Centre of Research
Excellence, University of Oxford, Oxford, UK

11:20 – 11:40 AM



Cardiac Atlas Project
Andrew McCulloch, PhD
Distinguished Professor of Bioengineering and Medicine
Shu Chien Chancellor's Endowed Chair in Engineering and Medicine
Director, Institute for Engineering in Medicine
University of California San Diego
La Jolla, USA

11:40 – 13:00 PM

Lunch Break

13:00 – 14:40 PM

Session IV – Gene/Nucleotide Therapies

MODERATORS: Ricardo Sanz, Yajing Wang

13:00 – 13:20 PM



LNP delivered gene therapies for heart repair

Mauro Giacca, MD, PhD

Professor, School of Cardiovascular Medicine
King's College London

13:20 – 13:40 PM



miR-therapeutics in heart failure

Thomas Thum, MD, PhD

Director, Institute of Molecular and
Translational Therapeutic Strategies
Medizinische Hochschule Hannover (MHH)
Hannover, Germany

13:40 – 14:00 PM



PKP2 restauration in arrhythmic cardiomyopathy

Eva van Rooij, PhD

Professor, Molecular Cardiology at the University Medical Center Utrecht
And Hubrecht Institute
Utrecht, the Netherlands

14:00 – 14:20 PM



Non-coding RNA in the regulation of smooth muscle proliferation

Andy Baker, MD, PhD

Professor, Centre for Cardiovascular Science, The Queen's Medical Research
Institute, University of Edinburgh, EH16 4TJ Edinburgh, UK; CARIM School for
Cardiovascular Sciences, Department of Pathology, Maastricht University Medical
Center (MUMC), 6229HX Maastricht, the Netherlands

14:20 – 14:40 PM



Switching on cardiomyocyte renewal by YAP activation

James Martin, MD, PhD

Vice Chairman/Professor Molecular Physiology and Biophysics and Vivian L. Smith
Chair in Regenerative Medicine, Baylor College of Medicine, Houston, USA
Cardiomyocyte Renewal Laboratory, Texas Heart Institute, Houston, USA

14:40 – 15:00

Lunch Break

15:00 – 16:20 PM

Session V – Heart Repair in Clinical Trials

MODERATORS: Massimiliano Gnecci, Rabea Hinkel

15:00 – 15:20 PM



Clinical Observations from ESCORT to SECRET-HF

Philippe Menasché, MD, PhD

Professor Philippe Menasché

Service as Department of Cardiovascular Surgery

Hôpital Européen Georges Pompidou

15:20 – 15:40 PM



HEAL-CHF: Clinical Trial

Eugene J Wang, MD, PhD

Founder & CEO, Help Therapeutics Co., Ltd.

15:40 – 16:00 PM



LAPiS: Clinical Trial

Keiichi Fukuda, MD, PhD

Professor, Department of Regenerative Medicine and Advanced Cardiac
Therapeutics, Graduate School of Medicine, Keio University

16:00 – 16:20 PM



BioVAT-HF: Clinical Trial

Wolfram-Hubertus Zimmermann, MD

Chair, Institute of Pharmacology and Toxicology

University Medical Center Göttingen

Göttingen, Germany

16:20 – 16:40 PM



Evolution of Stem Cell Clinical Trials

Ricardo Sanz Ruiz, MD, PhD

University Hospital Gregorio Maranon, Madrid (Spain)



16:40 – 16:50 PM

Behind the Scene at Science

Joana Osório, PhD

Senior Editor

Science

16:50 – 18:00 PM Poster Viewing (Posters will be at display on June 18th - 20th)

Session VI - Early Career Researcher Presentations – selected from submitted abstracts

Moderators:



Chloe Wilson, MD
Senior Editor
Lancet



Michael Basson, PhD
Senior Editor
Nature Medicine



Joana Osório, PhD
Senior Editor
Science

Rapid Fire Presentation *(5 min presentation + 2 min discussion)*

18:00 - 18:07 **TBD**

18:07 - 18:14 **TBD**

18:14 - 18:21 **TBD**

18:21 - 18:28 **TBD**

18:28 - 18:35 **TBD**

18:35 - 18:42 **TBD**

18:42 - 19:00 **Panel Discussion:** Michael Basson, Patrick Ching-Ho Hsieh, Joana Osório, Ricardo Sanz, Chloe Wilson, Jay Zhang, Wolfram Zimmermann

19:00 - **Conference Dinner**

Saturday, June 20, 2026

NOBEL-LAUREAT LECTURE

Moderator: Constanze Schmidt

9:00 – 9:40 AM



Discovery and Targeting of Ion Currents

Erwin Neher, PhD

Director, Department Membrane Biophysics

Max Planck Institute for Multidisciplinary Sciences

Göttingen, Germany

9:40 – 10:00 PM

Coffee Break

10:00 – 11:40 PM

Session VII – Nanopharmacology

MODERATORS: Patrick Ching-Ho Hsieh, Pilar Alcaide

10:00 – 10:20



Nanoparticle Delivery of Cardiac Therapeutics

Ke Chang, PhD

Chair, AHA CVBE Council

Alan L. Kaganov Professor of Biomedical Engineering

Columbia University

New York, USA

10:20 – 10:40



Stem cell-derived small extracellular vesicles in heart repair

Xinyang Hu, MD, PhD

Professor, Cardiovascular Key Laboratory of Zhejiang Province and Department of

Cardiology, Second Affiliated Hospital, College of Medicine, Zhejiang University,

Hangzhou 310009, PR China

10:40 – 11:00



Atrial tattoos lines: a new method to terminate atrial fibrillation

Constanze Schmidt, MD

Director, Clinic for Cardiology and Pneumology, University Medical Center
Göttingen

11:00 – 11:20



Mesenchymal Stem Cell derived Extracellular Vesicles for Heart Repair

Massimiliano Gnecci, MD, PhD

Director of the Research and Clinical Laboratories of the Department of Cardiology
in Pavia

11:20 – 11:40



Delivery of CRISPR/Cas by Extracellular Vesicles

Joost Sluiter, PhD

Professor, Circulatory Health Laboratory, Regenerative Medicine Center, University
Medical Center Utrecht, University Utrecht, Utrecht, The Netherlands

11:40 – 13:00 PM

Lunch Break

13:00 – 15:20 PM

Session VII – Proliferation in the Heart

MODERATORS: Thomas Braun, Eva van Rooij

13:00 – 13:20



Protein Signature in proliferative cardiomyocytes

Jianyi (Jay) Zhang, MD, PhD

Chair, Department of Biomedical Engineering

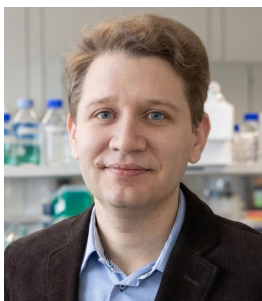
T. Michael and Gillian Goodrich Endowed Chair of Engineering Leadership

Professor of Medicine, of Engineering

School of Medicine, School of Engineering

UAB | The University of Alabama at Birmingham, USA

13:20 – 13:40



Latent Cardiomyocyte Regeneration Potential in Human Heart Disease

Olaf Bergmann, MD, PhD

Group Leader, Institute of Pharmacology and Toxicology, University Medical Center Göttingen

13:40 – 14:00



Inducing Cytokinesis in Cardiomyocytes

Hesham Sadek, MD, PhD

Division of Cardiology, University of Arizona College of Medicine, Tucson, AZ, USA;
Centro Nacional de Investigaciones Cardiovasculares (CNIC), Madrid, Spain;
University of Arizona Sarver Heart Center, Tucson, AZ, USA

14:00 – 14:20



The immunopeptidome landscape of the heart in health and injury

Eldad Tzahor, PhD

Professor, Faculty of Biology, Department of Molecular Cell Biology
Faculty of Biology, The Helen and Martin Kimmel Institute for Stem Cell Research,
Weizmann Institute, Israel

14:20 – 14:40



Nanoparticle Delivery to Modulate Heart Repair

Patrick Ching-Ho Hsieh, MD, PhD

Professor, Institute of Biomedical Sciences and
Institute of Medical Genomics and Proteomics and Institute of Clinical Medicine,
National Taiwan University College of Medicine, Taipei, Taiwan

14:40 – 15:00 PM

Coffee Break

15:00 – 17:00 PM

Session VII – Intercellular/organ Cross-Talk

MODERATORS: Pilar Alcaide, Eldad Tzahor

15:00 – 15:20



Mechanisms driving microvascular inflammation

Rabea Hinkel, DVM, PhD

Head, Laboratory Animal Science and Pathology
German Primate Center (DPZ)
Göttingen, Germany

15:20 – 15:40



Nanoparticle-Directed Delivery of Programming Factors

Johnny Kim, PhD

Director, Cardiovascular Therapeutics
TRON gGmbH, The Center for Cardiovascular Immunology and Regeneration,
Mainz, Germany

15:40 – 16:00



Crosstalk between Heart and Immune System

Pilar Alcaide, MD, PhD

Professor and Vice Chair, Microbiology and Immunology
Miller School of Medicine
University of Miami, USA

16:00 – 16:20 PM



Adipocyte-derived small extracellular vesicles promote cardiomyocyte apoptosis

Yajing Wang, PhD

Professor
Director of Basic and Translational Research
Department of Biomedical Engineering
University of Alabama at Birmingham, USA

16:20 – 16:30



Behind the Scene at Lancet

Chloe Wilson, MD

Senior Editor
Lancet

Concluding Remarks



Jay Zhang, MD, PhD

Chair, Department of Biomedical Engineering
T. Michael and Gillian Goodrich Endowed Chair of Engineering Leadership
Professor of Medicine, of Engineering
School of Medicine, School of Engineering
UAB | The University of Alabama at Birmingham



Wolfram-Hubertus Zimmermann, MD

Chair, Institute of Pharmacology and Toxicology
University Medical Center Göttingen
Göttingen, Germany

CVBE 2027

Welcome to Taipei, Taiwan



Patrick Ching-Ho Hsieh, MD, PhD

Professor, Institute of Biomedical Sciences and
Institute of Medical Genomics and Proteomics and Institute of Clinical Medicine,
National Taiwan University College of Medicine, Taipei, Taiwan

CVBE 2026

REGISTRATION

QR

<https://www.xxxxx.de/cvbe2026/>

June 18th – June 20th, 2026

While there is no fee for academic participant, registration is necessary.

Please complete the form before April 1, 2026. Thank you.

Location and direction

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