

DIGITAL HEALTH INDUSTRY FORUM

Pre-meeting information

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ESC Digital Health Committee - Nucleus Members

Biographies

Martin Cowie

Not available

Allan Bohm

February, 2015 - Presence

• National Institute of Cardiovascular Disease in Bratislava, Department of acute cardiology

April, 2013 – April, 2015

• Comenius University, Lecturer

April, 2013 – January, 2015

• Beginning of the cardiology training (expected date of finishing is December, 2018)

• Thomayer hospital in Prague and University hospital in Bratislava, department of internal medicine and ICU Work experience

October, 2018

• European ACCA certificate in acute cardiology

September, 2018 – Presence

• Nucleus member of the advocacy committee - European society of cardiology

February, 2018 – Presence

• Nucleus member of the committee for digital health - European society of cardiology

August, 2017 – Presence

• Principal investigator of a national multicenter study AFISBIO (Atrial Fibrillation in relationship to Sleep quality and plasma Biomarkers) organized by Academy n.g.o.

March, 2017 – Presence

• Nucleus member of the Cardiologists of tomorrow - European society of cardiology

September, 2016 - Presence

• Leader of the young cardiologists working group in Slovakia (The Forum of Young Cardiologists) July, 2016 – Presence

• Co-founder of Webimed – web portal for young cardiologists focused on e – learning via broadcasting live webinars and providing webcasts

September, 2015 – Presence

• Founder of Academy n.g.o. – Organization of clinical trials, IT solutions for clinical research,

machine learning, e – learning

June, 2015 – July, 2015

• Certificate of attendance at the International Research Interdisciplinary School (IRIS) in Brazil

January, 2013 – Presence

• Invited oral presentations and chairing at multiple national and international cardiology congresses (including the annual ESC congress, World Cardiology Congress etc.)

January, 2013 – June, 2017

• Administration board president of Rafael n.g.o. - Strategic manager of a health facility June – August, 2010 and 2012

• Practical placement at University hospital of Navarra in Spain – Department of Cardiology Scientific achievements

February, 2017

• Awarded for the best presentation from the "difficult clinical cases" session at the Anti-thrombotic therapy update 2017 in Nice

July, 2016

• First prize at the international cardiology congress "Cardio Update" in Budapest for the best scientific poster presentation

October, 2015

• Awarded for outstanding scientific work at Eurothrombosis congress in Italy for a presentation of a case study "Thrombus wedged in patent foramen ovale"

June, 2015

• First prize at the International electrocardiology congress in Brazil for the best scientific study "Oxidative stress biomarkers in prediction of atrial fibrillation burden"

December, 2013 – Presence

• Winner of several research grants (Slovak cardiology society research grant; Ministry of Education, Science, Research and Sport of the Slovak Republic research grant etc.)

Selected scientific papers

• Böhm A, Tothova L, Urban L, Slezak P, Musil P, Hlivak P, Hatala R

Advanced glycation endproducts as a new predictor of long term outcome after catheter ablation of atrial fibrillation. Eur Heart J. 2017; 38:570571

• Böhm A, Hricak V, Tomasovic B, Bena M, Michalek P, Postulka J.

Transcatheter Mitral Valve Prosthesis Dysfunction-Early Valve Degeneration or Thrombosis?

Circ J. 2018; Feb 3

• Böhm A, Michalek P, Slezak P, Stevlik J, Jackuliak P, Stevove M, Uher T

Risk vs. benefit of anticoagulation therapy in elderly patients with atrial fibrillation and documented ground-level falls. Eur Heart J. 2015; 36:340-341

• Böhm A, Tothova L, Urban L, Slezak P, Bacharova L, Musil P, Hatala R.

The relation between oxidative stress biomarkers and atrial fibrillation after pulmonary veins isolation. J Electrocardiol. 2016; 49(3):423-8

• Peterkova A, Michalconok G, Böhm A. Overview and comparison of machine learning methods to build classification model for prediction of categorical outcome based on medical data. In Prokopova Z. Cybernetics Approaches in Intelligent Systems. Proceedings of the Computational Methods in System and Software 2017, Springer Verlag, 2018, p. 216-224.

Enrico Caiani

Enrico G. Caiani (MS 1996, PhD 2000) is Associate professor at the Electronics, Information and Bioengineering Dpt., Politecnico di Milano, Italy, where he teaches the classes of "E-health: methods and applications" and "Biomedical Image Processing Laboratory". Author of 6 book chapters and >90 papers in ISI journals (IF>250, H-index=23, total citations>1700), 130 conference proceeding papers and >100 abstracts presented in international conferences, he was involved in several Italian, EU, ESA, and other international research projects.

In the last years, he participated in the program committee of several eHealth conferences, also as invited speaker on eHealth related talks. In particular, he served as Core Faculty and Scientific Program organizer of the last two editions (Berlin 2017, Moscow 2018) of the "eHealth and eCardiology" congress.

He is member of the Editorial Board of several clinical and bioengineering journals: the International Journal of Biomedical and Clinical Engineering, European Heart Journal-Cardiovascular Imaging, Sensors, and the Journal of Clinical Medicine – Cardiology section.

Since 2017, he is member of the Innovation advisory board of CompBioMed Centre of Excellence, London, UK, and affiliated member of the Istituto di Elettronica e Ingegneria dell'Informazione e Telecomunicazioni (IEIIT), Consiglio Nazionale delle Ricerche (CNR), Turin, Italy, and since 2018 he is member of the PhD board in Data analysis and decision science at Politecnico di Milano, where is currently supervising 2 PhD students.

His main research interests include e-health solutions in the field of cardiology and persuasive design technology, cardiac image processing and space physiology.

In the European Society of Cardiology, currently he is serving as Past-Chair of the e-Cardiology Working Group, member of the Advocacy and Public Policy Committee and EU eHealth (DG-CONNECT) stakeholder group ESC representative (2016- today), member of the Regulatory Affairs Committee on Medical Devices and Vice Chair of the Digital Cardiology Board Committee (2018-today).

Nico Bruining

Nico Bruining started his career in 1985 at the Thoraxcenter (department of Cardiology, Erasmus MC, Rotterdam, The Netherlands) in the cathlab with some of the pioneers within interventional Cardiology as Professor's P.W. Serruys and de P.J. de Feyter. In 1993 he joined the department of experimental and clinical information processing (KEI) at the Thoraxcenter, of which he is currently the head, as a scientist with as primary focus Cardiovascular imaging. He was involved in the early developments of three-dimensional (3D) echocardiography, culminating in 1998 with the defense of his PhD thesis - "Quantitative 3D Echocardiography of the Heart and the Coronary Vessels" under the promotorship of Prof. J.R.T.C Roelandt. Since then he was mostly involved in many clinical studies evaluating new therapies within interventional cardiology using novel technologies. Nico's current field of interest is bringing together clinical and technical innovations for Cardiology in which computer technology plays a major role often referred to as eHealth (eCardiology or Digital Health). This includes developing in-house and/or with industry expanding already existing, or new platforms to acquire all sorts of cardiovascular related data. This includes general data registration, patient monitoring, imaging and seamless integration of further computer-assisted analyses methods, such as modelling and quantification. The focus areas for the near future are big data and patient empowerment.

Internationally is Nico since the end of the '90s active within the European Society of Cardiology (ESC) of which he became a fellow in 2006. At first within the working group (WG) of Computers in Cardiology, currently named e-Cardiology, of which he was the chair from 2008-2010. Nico is currently nucleus member of the Digital Health committee, advisory nucleus member related to interventional cardiology of the e-Cardiology WG and is a member of the ESC e-Communications advisory board. In addition, Nico represents the ESC within the cardiovascular section of the DICOM medical imaging standardization committee. Other scientific tasks are e-

Cardiology editor of EuroIntervention, the interventional journal of the European Heart Journal (EHJ) family and is an international editorial board member of the mother journal (EHJ). Besides these ones he is also editorial board member of Ultrasound in Medicine and Biology and is editor-in-chief of the cardiology edition of the Journal of Medical Internet Research (JMIR). He holds memberships of the EACVI, the imaging association of the ESC, and the EAPCI, the interventional cardiology association.

Prof Panos E. Vardas, MD, PhD

President of the European Society of Cardiology (2012-2014)

Visiting Professor, Imperial College, UK

Chief Strategy Officer of ESC/ European Heart Agency, Brussels

Consultant of Zurich University Hospital

Chairman of Heart Sector, Hygeia Hospitals Group

Professor Vardas had been the Head of the Cardiology Department at Heraklion University Hospital, Crete, Greece from 1990 until June 2016.

Currently, Professor Vardas holds the position of Chairman of Heart Sector of the Hygeia Hospitals Group, Athens, Greece. His career started at the University of Athens, where he obtained his Medical Degree and his MD Thesis. Consequently, he was specialized in Internal Medicine and Cardiology at the Department of Clinical Therapeutics, University of Athens.

In 1985 he started working at the Westminster Hospital in London, Cardiology Department (director: Prof. Richard Sutton), where he stayed until 1989, focusing on Clinical Electrophysiology and Cardiac Rhythm Management Devices. In 1993 he obtained his PhD in Clinical Electrophysiology from the Charing Cross & Westminster Medical School. In Greece, Prof. Vardas held major academic positions, such as Dean of the Medical Faculty of the University of Crete (2003-2007) and President of the Hellenic Cardiological Society (1999-2001).

Furthermore, he has been founder and editor of the Hellenic Journal of Cardiology (English version) since 2002 and President of the Hellenic Cardiovascular Research Society since 2007.

In Europe, Prof. Vardas was elected to significant scientific positions. He was President of the European Society of Cardiology (2012-2014) and President of the European Heart Rhythm Association (2009-2011). He also served as

Chairman of the Review Committee for the 2010 and 2012 Guidelines on AF, and Chairman of the European Working Group of Pacing and Electrophysiology (2002-2003).

Prof. Vardas was awarded the Gold Medal of the ESC in 2014 and also the Silver medal of the International League of Humanists in 2008. He has been further honored as Invited Professor in several Universities and Honorary Member of a significant number of National Cardiac Societies.

Prof. Vardas has participated as an author in 587 publications included in the MedLine as well as in a considerable number of chapters of well-known medical books, the *Text Book of the ESC* being one of them. He has been a fervent contributor to the activities of the European Society of Cardiology for twenty years.

Apart from the wide range of Cardiovascular Medicine, Prof. Vardas' main interests today lie in Health Economics, Health Technology Assessment, and Business Administration.

Keynote Speakers

Biographies

Dr Andrew Mitchell

Dr Andrew Mitchell is Consultant Cardiologist at Jersey General Hospital and Honorary Consultant Cardiologist at Oxford University Hospitals. He is an an experienced cardiologist and a Digital Health ambassador, providing advice and coordinating research for novel digital health technology companies. Andrew has published over 150 papers, articles, chapters and abstracts on aspects of clinical research and has edited a series of books that have become the leading guides to emergency and practical cardiology in Europe. He is invited to publish internationally and present at global congress and is on the board of Nature's Digital Medicine journal.

Guy Boersma

Not available

Industry Partners

Biographies

AliveCor, LTD.

Glyn Barnes Not available

Amgen

David Dellamonica *Not available*

Periklis Giovas *Not available*

Stefan Schopf Not available

Bayer

George Psaroudakis

Not available

Pamela Cohen

Carreer Profile: Experienced healthcare professional with proven success in business and academic environments. Demonstrated skills in strategic plan development, stakeholder engagement, digital asset management, cross-functional project team management, operational solutions, customer service, and communications. Bilingual fluency in English and German.

Publication:

Cohen PE (*Editor-in-Chief*), (5 Publication Years: **2012**, **2010**, **2008**, **2006**, **2004**), Research Report: Max Delbrück Center for Molecular Medicine. MDC Publications, Berlin-Buch, Germany.

Cohen PE (2001), "Tuberous Sclerosis Complex." In: Blachford SL (ed.) The Gale Encyclopedia of Genetic Disorders, Gale Group, Farmington Hills, MI.

Cohen PE and Wolpert CW (1998), "Family Participation in Genetic Research Studies" In: Haines JL and Pericak-Vance MA (eds.) Approaches to Gene Mapping Studies in Complex Human Disease, John Wiley and Sons, Inc., New York, NY.

Cohen PE and Wolpert CW (1998), Manual for Genetic Counselors in a Research Setting. National Society of Genetic Counselors, Inc., Wallingford, PA.

Cohen PE, Nippert I, Wolff G, Wertz DC (1997), Genetic Counseling Practices In Germany: An East and West German Comparison. *Journal of Genetic Counseling* v 6 (1) 61-80.

Cohen PE (1996), "The New Reproductive Technologies – A Plain Language Translation," Lower Mainland Community Based Services Society, British Columbia, Canada.

Invited Presentations:

"Science in America: A Perspective" (September 2008), United States Embassy Speaker Program, Deutsch-Amerikanisches Institut Saarbrücken e.V., Saarbrücken, Germany.

"Alternative Careers in Genetic Counseling" (April 2001), University of California, Berkeley, CA

"All Bang, No Buck: Current Status of Reimbursement for Genetic Counseling Services" (March 2001), American College of Medical Genetics Annual Meeting, Miami, FL.

"Newborn Screening: New Frontiers, New Roles" (October 1999) Janus Series, National Society of Genetic Counselors' Annual Education Conference, Oakland, California.

"Unique Issues in Human Genetic Research Studies" (May 1999) Dialogue on Genetics for Asians and Pacific Islanders Conference, Seattle, Washington.

"The Brave New World of Genetic Medicine" (April 1998) City College of San Francisco, San Francisco, California. "Tuberous Sclerosis Complex" (October 1996) National Society of Genetic Counselors' Annual Education Conference, San Francisco, California.

"Impact of Genetic Research on families: Practical Considerations for Researchers" (April 1996) Genetic Analysis Methods for Medical Researchers, Babson College, Boston, Massachusetts.

"Facilitating Research: The Role of the Genetic Counselor" (January 1996) Harvard Medical School, Massachusetts General Hospital, Charlestown, Massachusetts.

Biotronik

Robert Wustenberg

Not available

Boston Scientific

Massimo Croce Not available

Cardiomatics

Rafał Samborski

Rafał Samborski is CEO and co-founder of Cardiomatics (AI tool for cardiac data analysis). His field of interest are digital health and data analysis. Rafał is author and coauthor of peer-reviewed research articles in the field of digital signal processing. He has a PhD and MSc in Electronics from the AGH University of Science and Technology in Krakow.

Christian Vincent, FEops Director of therapy development

Christian has a long track record of success in the cardiovascular device industry. His healthcare industry experience spans three decades, with a strong focus on cardiovascular medical devices. He has held multiple roles within the structural heart space with different key market players and has led structural heart clinical trials. Developing educational programs as EMEA VP of education and head of therapy development EMEA, Christian brings substantial expertise to FEops vision of becoming a game-changer in the way transcatheter structural heart procedures are planned.

Nico Uwents, FEops Director of business development

Nico has worked in the cardiovascular medical device space for more than two decades. Prior to FEops, he worked at St Jude Medical/Abbott as the EMEA marketing director responsible for the Cardiac Rhythm Management portfolio. Nico has also fulfilled different strategic and commercial roles with Boston Scientific, Guidant and Servier.

FibriCheck

Lars Grieten Not available

GE Healthcare

Christina De Mur

GM – Cardiology IT GE HCD (part of Imaging Care Areas)

Chicago, Illinois (but working from Boston, MA)

Christina joined GE Healthcare Digital as the GM for Cardiology IT in May 2017. In that role, she is responsible for managing and leading strategy, product development, commercialization activities for the Cardiology IT business, and administrative IT including enterprise imaging, workflow, solutions. Christina brings more than 25 years of clinical experience and med-tech product development. She began her career working as a Clinical Engineer for 10 years at two of Boston's teaching hospitals, Brigham and Women's and New England Medical Center. She then joined Draeger Medical, where she spent 15 years in Patient Monitoring Systems. At Draeger Medical, Christina held various roles including more than five years as the Vice President of R&D. She is active in the Boston med-tech community including the Medical Development Group and the University of Massachusetts Amherst Institute for Applied Life Sciences.

Christina holds a B.S. in Biomedical Engineering from Boston University and a M.S. in Management from Lesley University.

Daniela Knecht

Not available

Medopad

Keith Tsui

Keith is a medical doctor, trained in the University of Hong Kong. He also holds an MPhil in Bioscience Enterprise from Cambridge University and has experience in management consulting for the NHS. He is now focused on bringing digital health innovations to the hands of patients and doctors.

MSD

Claudia Rockel

Not available

Novartis Pharma

Maximiliano Di Domenico

Maximiliano is 1 part clinician, 1 part entrepreneur, 1 part family man and 2 parts adventurer/sport addict. He has been using his skill sets to help people with health conditions live better lives for more than 20 years and has walked on many interesting paths. Trained as an MD and Internal Medicine Specialist he cared for patients with diverse conditions with a special emphasis in critical and emergency room care. For the last 7 years and after joining the pharmaceutical industry he has dedicated his efforts in the area of diabetes and cardiovascular disease, collaborating with clinicians, investigators and scientific associations in advancing medical education and appropriate use of commercialized innovative treatments. Recently he joined Novartis' cardio-renal-metabolism disease area as a global medical director, where he is involved in projects across the drug development spectrum and leads the medical team's efforts in the digital space. As Max believes in the transformative power of technology driven innovation and Artificial Intelligence in the healthcare ecosystem he is pursuing an executive degree in Artificial Intelligence. He also tries to play the guitar in his spare time.

Pfizer

John Gordon Not available

Virginia Hayward

Global Congress Lead, Pfizer

Experienced global lead with a demonstrated history (21 years) in the Pharmaceutical industry. Skilled in congress, brand marketing engagements, human centred design innovation, and global strategic planning and implementation

Sophie Nisse-Durgeat Not available

Siemens Healthcare

Joachim Buck, PhD

Joachim Buck completed his undergraduate studies in geophysics at the University of Karlsruhe (TH).

He holds a PhD in computer tomography from Fraunhofer Institute for Nondestructive Testing in Saarbrücken.

Since 1996 he has held various positions in marketing, from product management to market intelligence, in the field of medical imaging.

Extensive knowledge of clinical processes in radiology and beyond, in the area of image processing, Healthcare IT, Digital Health, as well as vast experience in the decision processes of customers and networking with healthcare representatives (e.g. business development, sales, ...) complete his professional profile.

Currently he is responsible for Market & Strategic Intelligence in the business line Digital Services at Siemens Healthineers in Erlangen. His responsibilities include: strategic market assessment, customer satisfaction measurement, and deep-dive vendor analysis.

Dr. Friedrich Fuchs, FESC

Specialist for Internal Medicine and Cardiology Senior Medical Officer Siemens Healthineers AG Strategy