Università della Svizzera italiana



Cardio e-TeC

Advanced short course in Electronic Technologies and Communication in Cardiology at USI

Programme

Lugano: 23-27 November 2009







Accredited by the European Board for Accreditation in Cardiology (EBAC) for 27 hours of External CME credits.



Meeting endorsed by EHRA, a Registered Branch of the ESC.

Programme boards

Programme chairs

Prof. Dr. Tiziano Moccetti

Prof. Dr. Maria Giovanna Sami

Prof. Dr. Peter Schulz

Steering board

Prof. Dr. Piero Martinoli Lic. Phil. Albino Zgraggen Dr. Mauro Martinoni

Scientific committee

Prof. Dr. Tiziano Moccetti

Prof. Dr. Maria Giovanna Sami

Dr. Giovanni Pedrazzini

Prof. Dr. Peter Schulz

Prof. Dr. Angelo Auricchio

Dr. Heidrun Flaadt Cervini

Ec. E. Umberto Bondi

Managing director

Dr. Heidrun Flaadt Cervini

Moderation and project tuition

Prof. Dr. Miroslaw Malek



Cardio e-TeC is accredited by:

The Schweizerische Gesellschaft für Kardiologie (SGK) for 27 hours 1A

The European Board for Accreditation in Cardiology (EBAC) for 27 hours of External CME credits.

Each participant should claim only those hours of credit that have actually been spent in the educational activity. EBAC works according to the quality standards of the European Accreditation Council for Continuing Medical Education (EACCME), which is an institution of the European Union of Medical Specialists (UEMS)."

Welcome!

Universities are major players in today's knowledge society, by creating know-how, transferring it to industry and society, and fostering innovation. Our fast changing environment and its challenges ask for a stronger university commitment to improving and broadening the skills and the personal qualities required in the professional life.

The treatment of cardiovascular diseases has changed dramatically over the past decades: patients live longer and enjoy a better quality of life. The introduction of new therapies, using medication and devices, has contributed much to this success.

The cardiology sector is characterized by advanced product innovation. But a relatively small percentage of device ideas are conceived in academic medical centres. Normally, inventors (physicians or engineers) conceive a device solution to an unmet clinical challenge, initiate the patent process and build preliminary device prototypes. Subsequently, in the further stages of development, a team of engineers is engaged, who, working closely with medical advisors, carries the concept through the "design-build-test-redesign" cycle of testing.

In this context the objective is to foster the biomedical engineering process for new electronic technologies in cardiology. To achieve it, we need to update the specific knowledge on the advanced use of implantable and non-implantable (but wearable) medical equipment used for diagnosis, monitoring, and eventually therapy prescription. The update is necessarily directed to all health professionals, scientists, industry managers, and hospital administrators.

This is the basic idea behind the decision to set up an advanced course on Electronic Technologies and Communication in Cardiology, **Cardio e-TeC**, at the Università della Svizzera italiana (USI). The program is conceived in close partnership with Cardiocentro Ticino. Its strength relies on a combination of resources, drawing equally from USI's expertise in Embedded Systems Design and Health Communication and from the medical competence and experience of Cardiocentro Ticino.

Prof. Dr. Piero Martinoli Università della Svizzera italiana

Prof. Dr. med Tiziano Moccetti Cardiocentro Ticino

Monday, November 23, 2009

8:00	Registration, Università della Svizzera italiana, via Giuseppe Buffi 13, CH-6904 Lugano
8:00 - 8:45	A first coffee together
8:45	Welcome Prof. Dr. Piero Martinoli, President USI and Prof. Dr. Tiziano Moccetti, Head Cardiocentro, Ticino Executive Center USI, red lecture room
9:00	Possible Functions of Implantable, Wearable, Portable and Ambient Embedded Systems in Cardiology Prof. Dr. Maria Giovanna Sami, USI, ALaRI Executive Center, USI, red lecture room
10:30	Break Executive Center USI, Office House Lounge
11:00	Sensing: Basic Concepts in Metrology Prof. Dr. Maria Giovanna Sami, USI, ALaRI Executive Center, USI, red lecture room
12:30	CardioLunch with Industry Experts: From Programmer based Device and Patient Management to the Electronic Medical Record Mr Charles d'Heureuse, meddatsystem, Switzerland Aula 351, USI
13:30	Valve Repair using Catheters Dr. Giovanni Pedrazzini, Cardiocentro, Ticino Executive Center, USI, red lecture room
15:00	Break Executive Center USI, Office House Lounge
15:30	Enhance Patients Compliance Prof. Dr. Peter Schulz, USI, ICH Executive Center, USI, red lecture room
17:00	Break Executive Center USI, Office House Lounge
17:30	CardioProject: Participants' Projects Prof. Dr. Miroslaw Malek, Humboldt University, Berlin, Germany Executive Center, USI, break-out rooms

Tuesday, November 24, 2009

9:00	What to Do with Collected Data Dr. Alberto Ferrante, USI, ALARI Executive Center USI, red lecture room
10:30	Break Executive Center USI, Office House Lounge
11:00	Model-Based Approaches for Actuation and Control in Cardiology Prof. Dr. Silvano Balemi, SUPSI, DTI Executive Center USI, red lecture room
12:30	CardioLunch with Industry Experts: Securing Reimbursement for Innovative Medical Devices: a Case Study on Telemonitoring for Cardiac Rhythm Management Mr Markus Siebert, St. Jude Medical Aula 351, USI
13:30	Telemedicine Prof. Dr. Tiziano Moccetti, Cardiocentro, Ticino Executive Center USI, red lecture room
15:00	Break Executive Center USI, Office House Lounge
15:30	Tailoring Health Communication Prof. Dr. L. Suzanne Suggs, USI, ICH Executive Center USI, red lecture room
17:00	Break Executive Center USI, Office House Lounge
17:30	CardioProject: Participants' Projects Prof. Dr. Miroslaw Malek, Humboldt University, Berlin, Germany Executive Center, USI, break-out rooms
19:00	Sponsors' Exhibition

Wednesday, November 25, 2009

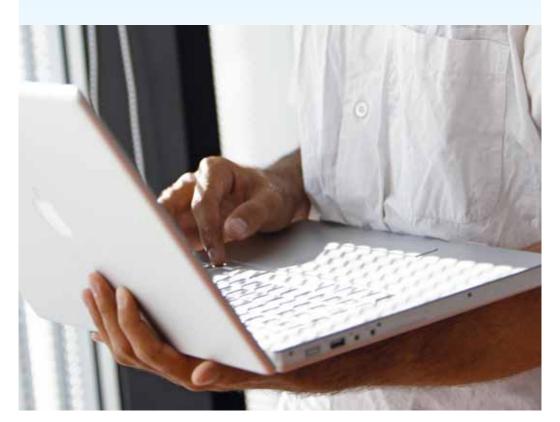
9:00	Overview of Cardio-Specific Devices PD Dr. med Stefanos Demertzis, Cardiocentro, Ticino and Inselspital, Bern Executive Center USI. red lecture room
10:30	Break Executive Center USI, Office House Lounge
11:00	Wearable and Ambient Solutions for Medical Application Dr. Bert Arnrich, ETH Zuerich Executive Center USI, red lecture room
12:30	CardioLunch with Industry Experts: After a decade of Home Monitoring Development: What Comes Next? Dr. Hans-Juergen Wildau, Vice President Health Services, Biotronik Aula 351, USI, red lecture room
13:30	Heart Failure Prof. Dr. Angelo Auricchio, Cardiocentro, Ticino Executive Center USI, red lecture room
15:00	Break Executive Center USI, Office House Lounge
15:30	Benefit and Possible Risks of e-Health Tools Dr. Sara Rubinelli, USI, ICH Executive Center USI, red lecture room
17:00	Break Executive Center USI, Office House Lounge
17:30	CardioProject: Participants' Projects, Prof. Dr. Miroslaw Malek, Humboldt University, Berlin, Germany Executive Center USI, break-out rooms
20:30	CardioTalk and Conference Dinner Special Lecture: The Power of Prediction Prof. Dr. Miroslaw Malek, Humboldt University, Berlin, Germany Hotel Lugano Dante, Piazza Cioccaro 5, 6900 Lugano

Thursday, November 26, 2009

9:00	Regulatory Framework for Medical Devices (CE Conformity) Dr. Siavoche Mohadjer, QS Zuerich AG Executive Center USI, red lecture room
10:30	Break Executive Center USI, Office House Lounge
11:00	Artificial Intelligence Prof. Dr. Juergen Schmidhuber, USI, Faculty of Informatics Executive Center USI, red lecture room
12:30	CardioLunch and Finalization of the CardioProjects Prof. Dr. Miroslaw Malek, Humboldt University, Berlin, Germany Aula 351, USI
13:30	Data Protection Dr. Alberto Ferrante, USI, ALaRI Executive Center USI, red lecture room
15:00	Break Executive Center USI, Office House Lounge
15:30	Intellectual Property Rights PD Dr. Peter Felder, Managing Partner Schmauder & Partner AG Executive Center USI, red lecture room
17:00	Break Executive Center USI, Office House Lounge
17:30	Presentation of the CardioProjects Prof. Dr. Miroslaw Malek, Humboldt University, Berlin Executive Center USI, red lecture room

Friday, November 27, 2009

9:00	Idea, Invention, Innovation: From Science to Market Prof. Dr. Hendrik Tevaearai, Inselspital, Berne Executive Center US, red lecture room
10:30	Break Executive Center USI, Office House Lounge
11:00	Medical Innovation and Ethics Prof. Dr. Alexandre Mauron, University of Geneva, Medical School Executive Center USI, red lecture room
12:30	Feedback and Closing Remarks Prof. Dr. Miroslaw Malek, Humboldt-University, Berlin Executive Center USI, red lecture room



Bert Arnrich is a senior researcher at the Wearable Computing Laboratory of ETH Zurich, Switzerland. With a diploma (MSc) in natural science informatics of the University of Bielefeld, Germany (2001) and a PhD in engineering sciences (2006), Dr Arnrich is currently engaged in personal health systems in the framework of national and European research projects. While conducting his doctoral studies, his research focused on medical data-mining, machine learning and statistical modelling in close cooperation with a heart institute. He developed a data mart system designed to identify patterns of heart disease, patients' response to treatment and real-time risk stratification. Since 2006 his research on pervasive computing technologies has shifted to the pursuit of a pervasive, user-centred and preventive healthcare model.

Angelo Auricchio is director of the Heart Failure Program and Clinical Electrophysiology Unit at Fondazione Cardiocentro Ticino, Lugano, Switzerland and Professor of Cardiology at University Hospital in Magdeburg, Germany. Dr. Auricchio graduated in 1985 at Medical School in Naples (Italy), in 1994 he received a PhD in Cardiovascular Physiology at University of Rome Tor Vergata (Italy). In 1991, he has been awarded with the Young Investigator Award of the North American Society of Pacing and Clinical Electrophysiology, and in 2005 he received the Fritz Acker Award of the Germany Society of Cardiology for his research activities in the field of cardiac resynchronization therapy. From 2005 to 2007 he served as Chairman of the Scientific Initiative Committee of the European Heart Rhythm Association (EHRA) and from 2007 to 2009 as Chairman of the Scientific Documents Committee of EHRA. He is currently the EHRA President-Elect (Presidency Turn 2011-2013). He is a member of the Training and Research Grant Committee of the European Society of Cardiology (ESC), and Member of the Clinical Practice Guidelines of ESC. He has served as co-chair of a joint Heart Rhythm Society (HRS) and EHRA initiative on Expert Consensus Statement on Cardiac Device Monitoring: Description of Techniques, Indications, Personnel, Responsibilities and Frequency. He has served as a member of the Task Force for European Society of Cardiology (ESC) Guidelines for Cardiac Pacing and Cardiac Resynchronization Therapy, and as Chair of the EHRA Cardiac Rhythm Management Product Performance Task Force. He is the co-editor of Cardiac Resynchronization Therapy (Blackwell, 2006, 1st Edition and 2008 2nd Edition), Pacing to Support the Failing Heart (AHA serie, Blackwell 2009), and Cardiac Imaging for Diagnosis and Treatment of Electrical Disorder (Springer Verlag, in press). He is the author of over 50 review articles and book chapters, almost 120 original scientific papers. He serves among others on the editorial board of Journal of the American College of Cardiology, European Journal of Heart Failure, Journal of Cardiovascular Electrophysiology, Journal of Interventional Electrophysiology, and EP Europace.

Silvano Balemi is Professor of Mechatronic systems at the University of Applied Sciences of Southern Switzerland (SUPSI). His research interests include control of high precision mechatronic systems, rapid control prototyping, and control of discrete event systems with emphasis on the automatic synthesis and implementation of systems starting from given behavioural specifications. After working for a software engineering company and an industrial firm developing and manufacturing uninterruptible power supply systems, he returned to academia as a research coordinator in technology at SUPSI. At present, he sits on the executive board of the Department of Innovative Technologies, and is research coordinator in technology and director of the Institute of systems and applied electronics. He has been in charge of more than 50 projects conducted jointly with industrial firms, especially in the field of precision systems for various application fields, including the biomedical sector.

Stefanos Demertzis is associate professor (*Privatdozent*) at the Universities of Bern (Switzerland) and Saarland (Germany). He is Senior Staff Cardiac Surgeon at Cardiocentro Ticino Lugano and at Inselspital Bern. His special clinical interests are minimally invasive coronary surgery and reconstruction of the aortic root, while his research focuses on computer-based and in-vitro flow and physiological simulations, as well as on the development of medical devices. Born in Athens (Greece) in 1963, he graduated from medical school in Kiel (Germany) in 1987. His training in general surgery as well as in thoracic & cardiovascular surgery was accomplished at the Hannover Medical School (Hannover, Germany). Between 1992 and 1999 his main clinical and research focus was heart and lung transplant as well as the multimodal surgical treatment of end-stage cardiac and pulmonary diseases. For his PhD-thesis he was awarded the Köhler Prize of the German Society of Thoracic and Cardiovascular Surgery (2000).

Charles d'Heureuse joined the IT-world in1988. He held several management and CIO positions in varying industries. His engagements in high-tech companies cover enterprises like Compaq/HP, EMC or Bluewin/Swisscom where he was co-responsible for the introduction of TV-services on the Internet. Since 2006, d'Heureuse has been supporting young companies as executive consultant and business angel. In early 2007 he was nominated CEO of meddatsystem ag, bringing the company and its products to the Swiss market.

Peter Felder is registered as a European Patent Attorney and interacts with the Swiss and the European Patent Office. He is the managing partner of Schmauder & Partner AG, Patent- und Markenanwälte VSP, a private IP consultancy firm located in Zurich, Switzerland. His principal activities comprise developing and implementing client-specific patent strategies and consultancy concerning technology transfer. His technical expertise primarily covers chemistry, materials technology and analytics, but also medicine, pharmaceutics and medical device technology. Originally a physical chemist with a PhD from ETH Zurich, he spent twelve years in research, first at the Lawrence Berkeley Laboratory of the University of California and then at the University of Zurich, where he was appointed lecturer. He currently lectures on the protection of intellectual property in physics, chemistry, biology, and medicine.

Alberto Ferrante obtained an MSc (Laurea) in Computer Engineering from Politecnico di Milano in 2002; subsequently, in 2006 he was awarded a PhD in Computer Science at the University of Milan, Italy. He also successfully completed the one-year Master of Engineering in Embedded System Design programme at the ALaRI Institute of the University of Lugano, Switzerland. In 2006, he was appointed to a post-doctoral position at the ALaRI Institute. His main research activities include hardware–software architectures for security processors, self-adaptive systems, and security for adaptive pervasive devices.

Miroslaw Malek holds the Chair of Computer Architecture and Communication at the Department of Computer Science, Humboldt University, Berlin. His research interests focus on dependable, embedded and distributed systems including failure prediction, dependable architectures and service availability. He has authored and co-authored over 200 publications, including six books; has supervised 25 PhD dissertations (eight of his students are now professors) and initiated, organized and co-organized numerous workshops and conferences. He serves on the editorial board of several journals and acts as a consultant to government and companies on technical and strategic issues in information technology. Malek received his PhD in Computer Science from the Technical University of Wroclaw in Poland; he spent 17 years as professor at the University of Texas at Austin and was also, among others, visiting professor at Stanford, Università di Roma-La Sapienza, Keio University, New York University, the Chinese University of Hong Kong, and guest researcher at Bell Laboratories and IBM T.J. Watson Research Center.

Alex Mauron studied biology at the University of Lausanne, where in 1978 he received his doctorate in molecular biology. He completed his post-doctoral studies at Stanford University, USA, and at the Institute for Biochemistry at the University of Geneva. Since 1987 Alex Mauron has worked in bioethics, first as a scientific advisor at the *Fondation Louis-Jeantet de Médecine* in Geneva and from 1995 as an associate professor for bioethics at the Faculty of Medicine, University of Geneva (full professor since 2001). In addition to his research and teaching in bioethics, Alex Mauron has been presenting bioethical and policy issues in the public media on a regular basis. He has been a member of the Swiss Science and Technology Council since 2004. Alex Mauron was born on 26 July 1951 in Pasadena, California. He has dual Swiss and French nationality.

Tiziano Moccetti is medical director and medical superintendent of Cardiology at Cardiocentro Ticino, Lugano, Switzerland. He is Professor at the University of Zurich, Faculty of Medicine; a part-time Professor at the University of Insubria (Varese, Italy), Medicine and Cardiology Faculty, and a member of the scientific board of the Master in Cardiac Imaging at La Sapienza University, Rome, Italy. Prof. Moccetti graduated in 1963 at the University of Zurich, where in 1975 he was awarded the venia legendi, for internal medicine and cardiology, and where in 2008 he became professor emeritus. He was medical superintendent of Internal Medicine and Cardiology at the Regional Hospital Lugano (1972-1999), medical director and medical superintendent at the same hospital (1999-2001), Chairman of the Medical Directors of the Cantonal Hospital Authority (1994-1997). Prof. Moccetti was also Chairman of the Board of Medical Superintendents of the Society for Internal Medicine of Switzerland (1976-1993), a member of the Research Board of the National Council of the Swiss Academy of Medical Sciences (1983-2000), Chief-Editor of Tribuna Medica (1975-2000), member of Editorial Board of the Kardiovaskuläre Medizin Journal (since 2007). He was an elected member of Parliament of Canton Ticino (1983-1991 and 1995-2003), spokesman for the New Health Law of Canton Ticino (1987), a member of the parliamentary Committee for Health affairs of Canton Ticino (1983-2003), chairman of the parliamentary Committee for Health affairs (1990-1991), and chairman of the Commission of social health education of Canton Ticino. He is a member of the Swiss Society of Internal Medicine, the Swiss Society of Cardiology, the European Society of Cardiology, the International Society of Endovascular Specia list, the American Heart Association, the American Stroke Association, and EHRA (European Heart Rhythm Association). He is the author and co-author of over 300 review articles in scientific papers. In cooperation with all major Institutes worldwide, Prof. Moccetti is developing scientific research projects in cardiovascular diseases and stem cell therapies.

Siavoche Mohadjer graduated from the University of Lyon I (France) as a PhD in Biomedical Engineering in 1991. In 1993, he also completed an MBA at University of Lyon III. The subject of his PhD study was a device used for the diagnosis of joint impairment as well as in sport medicine. He worked for more than three years in the Cardiological Hospital of Lyon, in a clinical investigation unit for the validation of innovative technologies applied to the diagnosis of cardiovascular system diseases. He subsequently built up industrial experience working for the leader in radiofrequency ablation. His professional experience in regulatory affairs and quality assurance started in 1995, with the most important French company for industrial inspection and certification. Since then he has worked for several European Notified Bodies (third party organizations in charge of the assessment of medical devices before they reach the market). As a qualified lead auditor for CE and ISO audits, providing consultancy and training worldwide, he has audited more than 350 companies internationally. He holds authorizations recognized by several European competent authorities (health ministries) as well as Canada and Japan. He is currently working as an auditor for Quality Service in Basel.

Giovanni Pedrazzini is the deputy head physician and chief interventional cardio logist at the Fondazione Cardiocentro Ticino, Lugano, Switzerland. Dr Pedrazzini graduated in 1985 at the University of Lausanne, Switzerland. He has worked in the cardiology department at the Tiefenauspital and Inselspital in Bern and as head assistant of invasive cardiology at the University Hospital of Zurich. He is professor at the University of Insubria (Italy) and at the University of L'Aquila (Italy). Dr Pedrazzini is a member of the Swiss Society of Internal Medicine, the Swiss Society of Cardiology, the European Board of Cardiology (UEMS), the Swiss Working Group for Heart Failure, and the Medical Association of Canton Ticino. He also sits on the steering committee of AMIS plus (the national registry for acute myocardial infarction in Switzerland) and the steering committee of BAS-KET-PROVE Investigators. He is vice-president of the Swiss working Group for PTCA and Thrombolysis and former editor in chief of Tribuna Medica Ticinese. He has been director of the MTE international interventional meeting on coronary high risk intervention and organizer of the winter meeting of the Swiss Society of Interventional Cardiology.

Sara Rubinelli holds a PhD from the University of Leeds (UK) in the areas of rhetoric and argumentation theory. Since 2006 she has worked as scientific coordinator of the Institute of Communication and Health of the University of Lugano (CH), where she collaborates on national and international research projects that explore humanistic approaches to the field of health communica-

tion. She currently lectures on health communication, strategic communication in health, argumentation theory and persuasion research at the Faculty of Communication Sciences of the University of Lugano, at the Institut des Sciences de l'Information de la Communication of the University of Neuchâtel, Switzerland, as well as at the Faculty of Computer Engineering, Politecnico di Milano, Como Campus-I.

Mariagiovanna Sami graduated in Electronic Engineering from Politecnico di Milano, where she later became a lecturer. She obtained her libera docenza in Switching theory and Digital computers from the Italian Ministry for Education and University. In 1980 she became full professor (SSD ING-INF 05). From 1987 to 1990 she was Chairperson of the Department of EECS of Politecnico di Milano. She is at present the academic Director of the ALaRI Institute at the University of Lugano (Switzerland), an inter-university initiative devoted to research and education in Embedded Systems Design involving, besides Politecnico di Milano, such institutions as the EPFL, ETHZ, the Technical University of Aachen, research centres such as CSEM and IMEC (Belgium). Her research activities have always focused on problems relating to complex digital systems; in particular her contributions have been in the areas of design methodologies for embedded systems characterized by high performances, fault-tolerance and low power consumption. She is the author or co-author of over two hundred scientific papers published in international journals and conference proceedings, of several book chapters as well as of two books published by MIT Press and by Kluwer International, respectively. She has been on the Board of Editors of IEEE Transactions on Computers, IEEE Design and Test, IEEE Micro, of the Journal of Electronic Testing (Theory and Applications), and on the Advisory Board of IEEE Computer Magazine. She has been Editor-in-Chief of the Journal of Systems Architecture. She has been general chairperson or program chairperson of a number of international workshops and conferences (in particular, of IEEE and Euromicro conferences). She has been involved – as local coordinator or in some cases as general coordinator - in a large number of research projects, in particular of European projects (starting with the CVT projects for Microelectronics launched by the EU in 1982). Focusing in particular on the ALaRI-USI activities, she was general coordinator for EU project ANTITESYS, in which ALaRI was granted academic responsibility. She was local coordinator for the EU-sponsored MEDEA+ project "LOMOSA", dealing with NoC architectures, which was funded in Switzerland by KTI; she was co-coordinator (together with Prof. Paolo lenne of EPFL) of a SNSF project dealing with DPA-resistant solutions for secure systems.

Jürgen Schmidhuber is co-director of the Swiss Institute for Artificial Intelligence IDSIA (since 1995), head of the Cognitive Robotics Lab at TU Munich (since 2004), a professor at SUPSI (since 2003), and professor of Artificial Intelligence at the University of Lugano, Switzerland (since April 2009). He obtained his doctoral degree in computer science from TUM in 1991 and his *Habilitation* degree in 1993, after a postdoctoral stay at the University of Colorado at Boulder, USA. He helped to transform IDSIA into one of the world's top ten Al labs. He is a member of the European Academy of Sciences and Arts, and has published some 200 peer-reviewed scientific papers on topics ranging from machine learning, mathematically optimal universal Al and artificial recurrent neural networks to adaptive robotics, complexity theory, digital physics, and the fine arts.

Peter J. Schulz is professor of Communication theories and Health communication at the Faculty of Communication Sciences and director of the Institute of Communication and Health, University of Lugano (http://www.ich.com.unisi.ch/). His main research interests are in the field of doctor-patient communication, in particular in knowledge transfer, as well as in risk communication. He currently holds several project grants funded by the Swiss National Science Foundation and project grants from other funding bodies (including King's Fund, UK, Cancer-Backup, and Health Promotion Switzerland) in the area of health communication. Further research interests are in the area of theories of communication sciences. He is the author of five books, editor of three books and of more than 50 journal articles. He serves on the editorial and advisory boards of several journals. In addition, he is a committee member of a number of research institutions, including the council of the Swiss National Science Foundation. Since 2004 he has been guest professor at the Virginia Polytechnic Institute and State University, USA.

Markus Siebert, Director Reimbursement and Health Economics, EMEAC, is responsible for supporting St Jude Medical's reimbursement-related activities in a number of European countries. With the main challenge coming from the introduction of DRG-based funding systems in several countries he focuses on specific claims for the coverage of SJM products, but is also engaged at national trade association level in shaping the emerging DRG systems to be innovation-friendly. Markus Siebert manages St Jude's activities in the field of health economics in order to support reimbursement and marketing activities. He has built considerable experience in health economics, particularly in cardiac rhythm management, neuro-modulation and cardiac surgery; and his attention is currently directed to reimbursement and health economics of remote care technologies. In this capacity he chairs the Eucomed CRM Telemonitoring Group, where five companies active in cardiac rhythm management have joined forces in supporting the imple-

mentation of telemonitoring solutions. Prior to joining St Jude Medical, he was responsible for economic affairs at the European umbrella association for medical technology, Eucomed.

Suzanne Suggs' principal research focuses on the use of communication technologies, new media, and messaging strategies (tailoring and targeting) to improve health status, health outcomes, and facilitate behavior and social change. Prior to joining the faculty at the University of Lugano in August 2007, she was Assistant Professor in the Graduate Program in Health Communication, Department of Marketing Communication at Emerson College and Adjunct Assistant Clinical Professor in the Department of Public Health and Family Medicine at Tufts University School of Medicine in Boston, Massachusetts. She has held positions as research assistant and project Coordinator at the Oregon Center for Applied Science (Eugene, Oregon) and as Associate Director of Research at HealthMedia (Ann Arbor, Michigan). She earned her PhD in Health Studies from Texas Woman's University and a post-doctoral fellowship in the Department of Clinical Epidemio logy and Biostatistics, Evidence-Based Practice Centre, at McMaster University in Ontario Canada. She is the President of Health X Change, a health and wellness consulting company based in the U.S. and Canada. She also serves as Director for the Massachusetts Social Marketing Association (MASMA) and is on the Editorial Review Board for the Journal of Health Communication

Hendrik T. Tevaearai is Professor at the Clinic for Cardiovascular Surgery at the University Hospital, Bern, Switzerland (http://herzundgefaesse.insel.ch). He is heading a R&D Unit which consists of five groups (Clinical research, Reperfusion injury, Biomechanical Engineering, Tissue engineering, Gene Therapy). Hendrik is author of more than 130 scientific papers, owns five patents and serves on the editorial board and/or as reviewer of several journals. Hendrik has also obtained an eMBA from the University of St Gallen, Switzerland. He is founder and CEO of a Spin-off company (http://www.swisscardiotech.com).

Hans-Jürgen Wildau has been working since 2000 as vice president of Health Services for BIOTRONIK GmbH & Co. KG. He studied Electronic Engineering and graduated in the field of Solid-state electronics (Dr.-Ing.) at the Technical University Berlin. Afterwards, he worked in the field of Marketing and Product management (medical industry) and as strategic consultant for Roland Berger & Partner, specia lising in Medical technology and Microelectronics. Hans-Juergen Wildau is a member of the Association of German Engineers (*Verein Deutscher Ingenieure, VDI*), the German Society of Cardiology (*Deutsche Gesellschaft fuer Kardiologie, DGK*) and, since 2005, of the Advisory Board Chair of the German Ministry of Education and Sciences project 'Preventive Micromedicine with 24/7-Monitoring'.

Conference Dinner

All participants of Cardio e-TeC are cordially welcome to join the Conference Dinner.

It will be held on Wednesday 25 November 2009, 8:30 pm, at Hotel Lugano Dante.

Hotel Lugano Dante ****

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Notes

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