

Marc Nyssen Treasurer IFMBE International Federation for Medical and Biological Engineering Professor Medical Informatics - Medische Informatica Faculteit Geneeskunde en Farmacie Vrije Universiteit Brussel, BELGIUM

Diploma of Civil Engineer Electro techniques (Electronics) V.U.B. in July 1975. Diploma of Civil Engineer in Computer Science V.U.B. in Juli 1978 (Great Distinction). Doctor in Applied Sciences in June 1983, after defending a thesis: "New architectures for opto-electronic signal processing" (Maxima Cum Laude). Nominations. Nominated van 1 January 1976 - 30 September 1977, Department of "Electronics, TW" (Prof. O. Steenhaut), as academic assistant. Nominated van 1 October 1977 tot 1 January 1982 Unit "Medical Informatics, GF-VUB" (Prof. R. Bourgain), as academic assistant. Nominated from November 1st 1979 to September 30th 1984 Unit of "Medical Informatics, GF-VUB" (Prof. R. Bourgain), as academic assistant, OZR and "Concerted Research Actions". Nominated October 1st 1984 "First Assistant" (Medical Informatics, GF-VUB), then Associated Professor, tenure track and Professor (since January 1st 2002). Chairman of the "Bureau for development cooperation" BOW of VUB from May 2003 to January 2005, currently: member Member bureau VLIR-UOS since August 2004, Chairman VLIR-UOS 2005 – 2009. Member of the Commission "Computer management" and of the Board of Directors of the "Data-center VUB-ULB". Since January 1st 2006 to March 2008 Chairman of the Board of Directors of the "Data-center VUB-ULB". Affiliated with the International Union for Physical and Engineering Sciences in Medicine. Member of the "Vlaamse Toezichtcommissie" 2010 – 2014 (as engineer) Since September 1st 2014 chairman of the "Vakgroep Geneeskunde Wetenschappen" (Public Health) at VUB, Faculty of Medicine and Pharmacy. Member of the commission "Implants" of the RIZIV/INAMI (Federal Social Security agency) (2013 -)

Teaches courses on Computer Science/ Medical Informatics at the Medical and Pharmaceutical Faculty of the Vrije Universiteit Brussel, to undergraduate and to master programs.



Co-coordinator of the inter-university Master "biomedical engineering" Faculties Engineering and Medical Sciences UGent and VUB. Member of the commission for new approaches in education, VUB. Promoter of research and education projects related to internet applications in Medicine, Medical Internet applications and the internet technology.

E-HEALTH: NOTABLE DEVELOPMENTS, - WHO: THE TEMPLE OF PUBLIC HEALTH,

Keynote: Octubre 28 de 2016 HORA: 2:00 - 3:00 p.m
Auditorio Carlos Gómez Albarracín
Universidad Autónoma de Bucaramanga, Colombia

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Luis Kun, Ph.D. Editor in Chief - Journal of Health & Technology - Springer - IUPESM - WHO, IFMBE Chairman Global Citizen Safety and Security WG.

Ex- Professor of National Security Affairs, CHDS / National Defense University
Fellow AIMBE, Lifetime Fellow
IEEE Editor in Chief - Journal of Health & Technology - Springer - IUPESM – WHO. IFMBE Chairman Global Citizen Safety and Security WG, Member Developing Countries WG
IEEE Society on Social Implications of Technology (SSIT) - Board of Governors
IEEE Life Science Technical Committee Member
IEEE - SSIT - Distinguished Lecturer (DL) <http://ieeessit.org/programs/distinguished-lecturers/>
IEEE - Computer Society - Distinguished Visitor Program (DVP) <http://www.computer.org/portal/web/chapters/Kun>
IEEE - Computer Society Ad hoc Public Policy Committee, Member - Healthcare Transformation Ad hoc Committee, Chair
IEEE EMBS, Editorial Board - <http://tnb.embs.org/editorial-board/steering-committee/> Transactions on Nano Bioscience, Steering Committee



A WELLNESS-CENTRIC HEALTHCARE SYSTEM INTEROPERABLE WITH PUBLIC HEALTH: THE MULTIDIMENSIONAL GLOBAL THREATS, INTERDEPENDENCES OF THE CRITICAL INFRASTRUCTURES, AND GEO MEDICINE

Keynote: Octubre 26 de 2016 HORA: 11:00 -12:00 m
Auditorio Carlos Gómez Albarracín
Universidad Autónoma de Bucaramanga, Colombia

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CLAIB 2016 PLENARIAS

**LA PARTICIPACIÓN MAGISTRAL
DE EUROPA, ASIA, ESTADOS UNIDOS.**

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Professor James Goh: President, International Federation Of Medical And Biological Engineering (ifmbe)

PhD (1982), University of Strathclyde, Glasgow, UK; B.Sc (Hons) (1982), University of Strathclyde, Glasgow, UK; CEng (1993), The Engineering Council, UK

Appointment Status: Professor and Head, Department of Biomedical Engineering, NUS; Research Professor, Orthopedic Surgery, NUS; Multidisciplinary Programs: Program Leader, Tissue Engineering Program, Life Sciences Institute, NUS; Committees/Councils: Member, Biomedical Standards Committee, Spring Singapore

Professional Societies: President, Biomedical Engineering Society (Singapore); President, International Federation of Medical and Biological Engineering. Council Member, World Council of Biomechanics. Secretary General, Asia-Pacific Association for Biomechanics. Treasurer, Executive Council, World Association for Chinese Biomedical Engineers. Secretary, TERMIS Asian Pacific chapter

Conferences: Chairman, Organizing Committee, TERMIS-AP 2011, August 3 to 5, 2011, Singapore.

Chairman, Organizing Committee, 6th World Congress of Biomechanics, August 1 -6, 2010, Singapore. Member, International Advisory Board, 2nd World Congress on Tissue Engineering and Regenerative Medicine, Aug 31- Sept 3, 2009, Daejeon, Korea. Chairman, Organizing Committee, 13th International Conference on Biomedical Engineering, Dec 3 - 6, 2008, Singapore.



EMERGING TRENDS IN MUSCULOSKELETAL BIOMECHANICS IN RELATION TO TISSUE REPAIR AND REGENERATION.

Keynote: Octubre 27 de 2016 - HORA: 1:30 p.m a 2:30 p.m
Auditorio Carlos Gómez Albarracín Universidad Autónoma de Bucaramanga, Colombia

01

Ratko Magjarević. Past President IFMBE Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia

Ratko Magjarević received his Ph.D. in Electrical Engineering in 1994 from the University of Zagreb, Faculty of Electrical Engineering. After his appointment in industry at the Institute of Electrical Engineering "Koncar," he joined the Electronic Measurement and Biomedical Engineering Group at the University of Zagreb, Faculty of Electrical Engineering and Computing. He is full professor teaching several courses in Electronic Instrumentation and Biomedical Engineering at undergraduate, graduate and at postgraduate studies. As visiting professor he was teaching in Stuttgart, Trieste, Ljubljana, Madrid and Bogota.

His scientific and professional interest is in fields of electronic and biomedical instrumentation, in particular in bioelectric potential analysis and in cardiac pacing, computer modelling of biological systems, in research of new methods for drug delivery based on electroporation and recently in research in biomedical and health informatics, in particular in research of personalized intelligent health systems and body area networks.

R. Magjarevic is elected the President of International Federation for Medical and Biological Engineering (IFMBE) for the term of office 2012-15. In the latest years, he visited Latin America several times giving support to promotion of biomedical and clinical engineering generally, and also to LA affiliates to IFMBE. He is also the Editor in Chief of the IFMBE Proceedings series. For his activities in BME, he received a Charter from Colombian Senate and in 2013, he was awarded honorary title Senator of the University of Ljubljana.



IMPROVING PREVENTION AND TREATMENT OF DIABETES

Keynote: Octubre 28 de 2016 HORA: 8:00 - 9:00 a.m
Auditorio Carlos Gómez Albarracín
Universidad Autónoma de Bucaramanga, Colombia

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Andrew Laine President IEEE/EMBS Professor of Biomedical Engineering, Chair Department of Biomedical Engineering, Columbia University, New York USA.

Professor of Radiology (Physics), Department of Radiology; Director, Heffner Biomedical Imaging Laboratory Columbia University, New York, NY USA. Research Areas: Mathematical analysis and quantification of medical images, signal and image processing, computer-aided diagnosis. Andrew F. Laine received his D.Sc. degree from Washington University (St. Louis) School of Engineering and Applied Science in Computer Science, in 1989 and BS degree from Cornell University (Ithaca, NY). He was a Professor in the Department of Computer and Information Sciences and Engineering at the University of Florida (Gainesville, FL) from 1990-1997. He joined the Department of Biomedical Engineering in 1997 and served as Vice Chair of the Department of Biomedical Engineering at Columbia University since 2003 - 2011. He is currently Chair of the Department of Biomedical Engineering and Director of the Heffner Biomedical Imaging at Columbia University and the Percy K. and Vida L. W. Hudson Professor of Biomedical Engineering and Professor of Radiology (Physics). He was the founding chair of the SPIE conference on "Mathematical Imaging: Wavelet Application in Signal and Image Processing", and served as co-chair during the years 1993-2003. Dr. Laine has served as Chair of Technical Committee (TC-BIIP) on Biomedical Imaging and Image Processing for EMBS 2004-2009, and has been a member of the TC of IEEE Signal Processing Society, TC-BISP (Biomedical Imaging and Signal Processing) 2003-present. Professor Laine served on the IEEE ISBI (International Symposium on Biomedical Imaging) steering committee, 2006-2009 and 2009 - 2012. He was the Program Chair for the IEEE EMBS annual conference in 2006 held in New York City and served as Program Co-Chair for IEEE ISBI in 2008 (Paris, France). He served as Area Editor for IEEE Reviews in BME in Biomedical Imaging since 2007-2013. He was Program Chair for the EMBS annual conference for 2011 (Boston, MA). Professor Laine Chaired the Steering committee for IEEE ISBI, 2011-2013, and Chairs the Council of Societies for AIMBE (American Institute for Medical and Biological Engineers).



EMERGING TRENDS IN THE SIGNAL AND IMAGE PROCESSING AND COMPUTER-AIDED DIAGNOSIS.

Keynote: Octubre 26 de 2016 HORA: 10:00 - 11:00 a.m
Auditorio Carlos Gómez Albarracín
Universidad Autónoma de Bucaramanga, Colombia

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Shankar Krishnan, Ph.D. Elected President International Federation for Medical and Biological Engineering - IFMBE. Professor & Chair. Department of Biomedical Engineering. Wentworth Institute of Technology, Boston, USA.

Dr. Shankar Krishnan is the founding chair of the Biomedical Engineering program and an endowed chair Professor at Wentworth Institute in Boston since 2008. He received his Ph.D. degree from the University of Rhode Island with research work done at Rhode Island Hospital. Previously, he was an assistant director at Massachusetts General Hospital (a teaching affiliate of Harvard Medical School) in Boston. He has also held faculty appointments in Illinois, Miami and Singapore. At NTU in Singapore, he was the founding director of the BME Research Center and the founding head of the Bioengineering division. He was the Principal Investigator for several Biomedical Engineering projects with funds over USD 15 million. He also worked in R&D in Miami and in hospital design and operations management at Bechtel for healthcare megaprojects. He has served in the National Medical Research Council in Singapore. His research interests are biomedical signals and image processing, telemedicine, medical robotics and BME education. He has been developing novel models in BME curriculum design, labs, interdisciplinary project-



based learning, co-ops, internships and undergraduate research. He has over two hundred publications in conference proceedings, book chapters, and journal papers. He keeps active memberships in AAMI, ASME, BMES, IEEE, BMES, IFMBE, and ASME. He has served the administrative counsel of IFBME for the past ten years, and he was the Secretary General of IFBME.

A GLIMPSE AT EMERGING INNOVATIVE CARDIO-TECH SOLUTIONS.

Keynote: Octubre 27 de 2016 HORA: 8:00 - 9:00 a.m
Auditorio Carlos Gómez Albarracín
Universidad Autónoma de Bucaramanga, Colombia

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Kang-Ping Lin, Ph.D. Secretary General IFMBE Distinguished Professor, Chung-Yuan Christian University Kang-Ping Lin obtained his Ph.D. degree in 1994 at the University of California, Los Angeles (UCLA) in Biomedical Physics. He is Distinguished Professor of Electrical Engineering at Chung-Yuan Christian University, Taiwan. He served as Director of Medical Device Technology Division of the Biomedical Engineering Center in Industrial Technology Research Institute in Taiwan (2000~2004). He was the president of Taiwanese Society of Biomedical Engineering (2007~2010) and the Editor-in-Chief of the Journal of Medical & Biological Engineering (1999~2007). He is now the Director of Technology Translation Center for Medical Device in his university (2011~now), and the Board member of Taiwanese Society of Molecular Imaging (2009~2015). He has several roles in IFMBE including the Chair of Publication Committee and Publicity Committee, the Co-Chair of Asia Pacific Working Group Committee, and the Editor of IFMBE Newsletter from 2009 to now. His research interests include handheld medical devices, physiological signal processing, and medical image processing. His current research topics include capillary blood velocity measurement, microcirculation images, and hemodynamic data analysis. In the field of medical devices, he has also focused on integration of industry, academia and medicine oriented towards being home care, small, simple and low-energy consumption.

He has participated in IFMBE meetings, Committees, Working Groups and the IFMBE NEWS for five+ years. He represented IFMBE at the 2012 WHO annual meeting, attended the IFMBE strategic planning meeting for reforming the organization, and hosted the 9th APCBME conference. He is co-chair of Asia Pacific Working Group (APWG) that fosters exchanges among young BME scholars in Asia-Pacific countries. APWG and he initiated the student medical-device design competition at the 9th APCBME. By participating in IFMBE activities, including MEDICON, CLAIB, APCBME and IUPESM-WC, He has established good connections to our BME colleagues worldwide. He proposes expanding AP's experiences to Latin America, Africa and Europe to reinforce BME education and cooperation among young scholars. He also proposes creating films/animations for our website illustrating modern BME technologies.



" HEART, HEART RATE, & HEART RATE VARIABILITY WITH RESPIRATORY SINUS ARRHYTHMIA

Keynote: Octubre 28 de 2016 HORA: 6:00 - 7:00 pm
Auditorio Carlos Gómez Albarracín
Universidad Autónoma de Bucaramanga, Colombia

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