

# **TOIN International Symposium on Biomedical Engineering Past Speakers / 2006-2019**

## **1st TOIN International Symposium on Biomedical Engineering (2006)**

Dr. Peter S. McFetridge

School of Chemical, Biological and Materials Engineering, University of Oklahoma, U.S.A.

- Functional Materials for Tissue Engineering Applications -

Dr. Xiongzhen Mu

Department of Plastic and Reconstructive Surgery, Shanghai Ninth Hospital

Shanghai Jiaotong University, China

- 3D Bone Biomaterial and Rapid Prototyping in Cranio-Maxillo-Facial Surgery -

Dr. Claude F. Meares

Department of Chemistry, University of California, U.S.A.

- New Bioconjugates for Molecular Imaging and Therapy -

Dr. Abraham J. Domb

Department of Medicinal Chemistry and Natural Products, The Hebrew University of Jerusalem,

Republic of Turkey

- Biodegradable Polymers for Cancer Therapy -

Dr. Masamitsu Haruna

Graduate School of Medicine, Osaka University, Japan

- Recent Development of Optical Coherence Tomography -

## **2nd TOIN International Symposium on Biomedical Engineering (2007)**

Dr. Peter S. McFetridge

School of Chemical, Biological and Materials Engineering, University of Oklahoma, U.S.A.

- Cellular Function and Proliferation in Composite Materials for Tissue Regeneration -

Dr. Xiongzhen Mu

Department of Plastic and Reconstructive Surgery, Shanghai Ninth Hospital / Jiaotong University, China

- The Clinic Application of Digi-medicine in Plastic Surgery -

Dr. Charles A. Taylor

Department of Bioengineering, Mechanical Engineering and Surgery, Stanford University, U.S.A.

- Image-based modeling of blood flow in arteries: applications in disease research, device design and surgical planning -

Dr. Toshihiro Akaike

School and Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology, Japan

- New Frontier of Biomedical Materials in Regenerative Medicine and Targetted Therapy -

Dr. Takayuki Ishida

Department of Clinical Radiology, Faculty of Health Sciences, Hiroshima International University, Japan

- Future in Radiological Technology: Computer-Aided Diagnosis on Chest Images -

### **3rd TOIN International Symposium on Biomedical Engineering (2008)**

Dr. Leonard A. Herzenberg  
Professor, Department of Genetics, Stanford University, U.S.A.  
- AIDS, Cancer, Stem Cells: Breaking the Barrier -

Dr. Leonore A. Herzenberg  
Professor, Department of Genetics, Stanford University, U.S.A.  
- Harnessing the Computer for Biomedical Research -

Dr. Aftab Seth  
Professor of Global Security Research Institute, Keio University / Former Ambassador of India, Japan  
- India's Advanced Technical Education and the Economic Growth -

Dr. Shigehisa Hirose  
Professor, Department of Biological Sciences, Tokyo Institute of Technology, Japan  
- Zebrafish early cardiac connexin, Cx36.7/Ecx, regulates myofibril orientation and heart morphogenesis by establishing Nkx2.5 expression -

Dr. Peter S. McFetridge  
School of Chemical, Biological and Materials Engineering, University of Oklahoma, U.S.A.  
- Progress Towards Developing Functional Tissue Engineering Small Diameter Blood Vessels -

Dr. Tetsuji Okuno  
Clinic Director, Clinica E.T., Japan  
- Zebrafish early cardiac connexin, Cx36.7/Ecx, regulates myofibril orientation and heart morphogenesis by establishing Nkx2.5 expression -

### **4th TOIN International Symposium on Biomedical Engineering (2009)**

Dr. Peter S. McFetridge  
Associate Professor, School of Chemical, Biological and Materials Engineering, University of Oklahoma, U.S.A.  
- Progress Towards Developing Functional Tissue Engineering Small Diameter Blood Vessels -

Dr. Julia Li Zhong  
Professor, College of Bioengineering, Chongqing University, China  
- A Role for Bach 1 and HO-2 in Suppression of Basal and UVA-induced HO-1 Expression in Human Keratinocytes -

Dr. Naomi Kitamura  
Professor, Graduate School of Bioscience and Biotechnology/Biological Sciences, Tokyo Institute of Technology, Japan  
- Intracellular Signaling in Antiproliferative Effect of HGF on Hepatocellular Carcinoma Cells -

Dr. Henry J. Snaith  
RCUK Fellow in Photovoltaics, Department of Physics-Condensed Matter Physics,  
University of Oxford, U.K.  
- New Nanomaterials for Solid-State Dye-Sensitized Solar Cells -

## **5th TOIN International Symposium on Biomedical Engineering (2010)**

Dr. Peter S. McFetridge

Assistant Professor, Department of Biomedical Engineering, University of Florida, U.S.A.

- Soft Tissue Regeneration: Progress Towards Functional Vascular Grafts -

Dr. Maria Nowakowska

Professor, Physical Chemistry, Nanotechnology of Polymers and biomaterials Research Group, Jagiellonian University, Poland

- Polymeric and Hybrid Functional Materials for Biomedical Applications -

Dr. Yuejun Zhang

Professor, School of Chemical Engineering, Nanjing University of Science and Technology, U.S.A.

- Mechanism and Application Researches of Polyquaternary Ammonium Salt PDMDAAC as Bactericide and Algicide -

Dr. Hitoshi Miyazaki

Professor, Graduate School of Life and Environmental Sciences, University of Tsukuba, Japan

- Prevention of Oxidative Stress-induced Diseases Using Olive Leaf Compounds -

## **6th TOIN International Symposium on Biomedical Engineering (2011)**

Dr. Peter S. McFetridge

Assistant Professor, Department of Biomedical Engineering, University of Florida, U.S.A.

- Soft tissue regeneration: from the wound environment to functional tissues -

Dr. Elsie Effah Kaufmann

Head/Senior Lecturer, Department of Biomedical Engineering, Faculty of Engineering Sciences, University of Ghana, Ghana

- Biomedical Engineering at University of Ghana: Opportunities for Collaboration -

Dr. K. Kirk Shung

Professor, Department of Biomedical Engineering, University of Southern California, Director, NIH Resource on Medical Ultrasonic Transducer Technology, U.S.A.

Nanjing University of Science and Technology, China

- High Frequency Ultrasound -

Dr. Yutaka Tamaura

Professor, Research Center for Carbon Recycling and Energy, Tokyo Institute of Technology, Japan

- Solar Thermal Fuel Production by Light and Dark Reactions

## **7th TOIN International Symposium on Biomedical Engineering (2012)**

Dr. Peter S. McFetridge

Associate Professor, Department of Biomedical Engineering, University of Florida, U.S.A.

- Soft Tissue Regeneration: From the Wound Environment to Functional Tissues -

Dr. Toshihiro Akaike

Professor, Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology, Japan

- Design of Cell-recognizable Nano-biomaterials for ES/iPS Cell Proliferation and Differentiation – Cadherin-based "Cell-Cooking Plate" – -

Dr. El Akrem Hayouni

Associate Professor, Laboratory of Bioactive Compounds, Center of Biotechnology at Borj-Cedria Ecopark, Tunisia

- Tunisian Natural Bioresources in Pharmaceutical and Biomedical Uses: New Opportunities -

Dr. Qifa F. Zhou

Professor, Department of Biomedical Engineering, University of Southern California, U.S.A.

- Integrated High Frequency Ultrasound/OCT system for IVUS Imaging Application -

## **8th TOIN International Symposium on Biomedical Engineering (2013)**

Dr. Peter S. McFetridge

Associate Professor, Department of Biomedical Engineering, University of Florida, U.S.A.

- Human Birthing Tissues: Biomaterial Applications in Wound Healing -

Dr. Agung Pranoto

Professor, Faculty of Medicine, University of Airlangga, Indonesia

- Osteoporosis in Indonesia: Epidemiology and Research Activity -

Dr. Nobuhiro Nakamura

Associate Professor, Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology, Japan

- Control of Mitochondrial Morphology by Ubiquitination and Deubiquitination -

Dr. Kenichi Mitsui

Specially-appointed Research Associate, Department of Molecular Biology and Medicine, University of Southern California, U.S.A.

- Functional Reconstitution of Olfactory Receptor Complex on Baculovirus -

## **9th TOIN International Symposium on Biomedical Engineering (2014)**

Dr. Peter S. McFetridge

Associate Professor, Department of Biomedical Engineering, University of Florida, U.S.A.

- In Viro and in Vivo Vascularization: The Formation of Capillaries and Functional Capillary Beds Using Human Placental Lysate -

Dr. Zoltan Krasznai

Associate Professor, Department of Biophysics and Cell Biology, Faculty of Medicine, University of Debrecen Medical and Health Science Center, Poland

- New Trends in Molecular Imaging: Multimodal Bioluminescence and Isotope Imaging Techniques in Cancer Research -

Dr. Loreto Feril, Jr.

Senior assistant Professor, Department of Anatomy, Fukuoka University School of Medicine, Japan

- Bioeffects of Ultrasound: Mechanisms Involved and Their Potential Therapeutic Applications -

Dr. Toshihiro Akaike

Director, Biomaterials Center for Regenerative Medical Engineering, Foundation for Advancement of International Science, Japan

Professor Emeritus, Tokyo Institute of Technology, Japan

- Cadherin-Matrix Engineering in Cell-Recognizable Biomaterials -

## **10th TOIN International Symposium on Biomedical Engineering (2015)**

Dr. Peter S. McFetridge

Associate Professor, Department of Biomedical Engineering, University of Florida, U.S.A.

- Revascularization – capillaries to large vessels: current research, clinical applications and Viro and in future directions -

Dr. Ian Liao

Professor, Department of Applied Chemistry and Department of Biological Science and Technology, National Chiao Tung University, Taiwan

- Shedding Light on Cardiovascular Research Using Zebrafish as A Model Organism -

Dr. Sjeff Verbeek

Associate Professor, Department of Human Genetics, Leiden University Medical Center, The Netherlands

- Genome Engineering Today: The sky is the limit? -

Dr. Alfred Yu

Associate Professor, Department of Electrical and Computer Engineering, University of Waterloo, Canada

- Towards Beside Visualization of Complex Flow Dynamics Using High Frame Rate Ultrasound -

## **11th TOIN International Symposium on Biomedical Engineering (2016)**

Dr. Peter A. Lewin

Richard B. Beard Distinguished University Professor, Electrical and Computer Engineering and Biomedical Engineering

Director, Biomedical Ultrasound Research and Education Center

Drexel University, U.S.A.

- Quality of Life Enhancement: Low Frequency (20 kHz), Low Intensity (100 mW/cm<sup>2</sup>) Ultrasound Treatment of Chronic Wounds -

Dr. Seyedeh Moosavi Nejad

Senior Researcher, Department of Anatomy, School of Medicine, Fukuoka University, Japan

- Current Trends in Reversible Cell Membrane Manipulation -

Dr. Khalid M. Lodhi

Associate Professor, Forensic Biology

Director, Forensic Science Program, Department of Biological Sciences

Fayetteville State University, U.S.A.

- Role of Biomedical Engineering in the Advancement of Forensic DNA Typing-Past, Present, and Future Directions -

Dr. Akira Kato

Associate Professor, Center for Biological Resources and Informatics, Tokyo Institute of Technology, Japan

- Diversity of Magnesium Transporters Involved in Magnesium Homeostasis -

## **12th TOIN International Symposium on Biomedical Engineering (2017)**

Dr. Christopher Druzgalski

Professor, Department of Electrical Engineering, California State University, Long Beach, U.S.A.

- Bioengineering Human senses -Developments and Trends -

Dr. Xin Zhu

Senior Associate Professor, Biomedical Information Technology Lab, The University of Aizu, Japan

- Computer Simulation of Heart : from Cell to Beside -

Dr. Piotr Kielczynski

Professor, Institute of Fundamental Technological Research, Polish Academy of Sciences, Poland

- Love Surface Wave Biosensors -

Dr. Moo Joon Kim

Professor, Department of Physics, Graduate School, Pukyong National University, Korea

- Aqueous Ultrasonic Dispersion with Acoustic Streaming -

## **13th TOIN International Symposium on Biomedical Engineering (2018)**

Dr. James Goh

Professor and Head, Department of Biomedical Engineering, Faculty of Engineering, National University of Singapore, Singapore

- Engineering Innovations for Future Healthcare -

Dr. Luc Gailhouste, Ph.D.

Division of Cellular and Molecular Medicine, National Cancer Center Research Institute, Japan

- Potential of MicroRNAs and Epigenetic Agents for Cancer Cells Reconditioning -

Dr. Syed Ghufran Hashmi

Post Doctoral Researcher, School of Science and Technology, Aalto University, Finland

- Modern Technology Based Health Care Solutions for The Rural Areas of Developing Countries -

Dr. Wenxi Chen

Professor, Biomedical Information Technology Laboratory, The University of Aizu, Japan

- From Gold Mining to Data Mining - Big Data Analytics and Lifelong Healthcare -

## **14th TOIN International Symposium on Biomedical Engineering (2019)**

Dr. Fu-Jen Kao

Distinguished Professor, Institute of Biophotonics, National Yang-Ming University, Taiwan

- Stimulated Emission Microscopy with Subharmonic Modulation -

Dr. Claudio I. Zanelli

CEO and President, Onda Corporation, U.S.A.

- Strategies in the Development of Metrology for Medical Ultrasound -

Dr. Yan Pei

Associate Professor, Computer Science Division, The University of Aizu, Japan

- Machine Learning and Computational Intelligence for Medical Image Processing -

Dr. Damdindorj Boldbaatar

Chair, Department of Physiology, Dean, Graduate School of Medicine, Mongolian National University of Medical Sciences, Mongolia

- Ghrelin Interacts with GLP-1 Action on Glucose-induced Insulin Secretion in islet b-cells -