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(BHI 2012)

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Programme by Chronology (BHI 2012 Pre-conference Workshop)

2 Jan 2012, Monday (Cheng Yu Tong Building, The Chinese University of Hong Kong)		
09:00 - 09:15	Registration	LT4
09:15 - 09:30	Opening Speech & Overview of Workshop	LT4
09:30 - 10:30	Ultrasound Imaging: The Essence <i>Dr. Alfred Yu, The University of Hong Kong</i>	LT4
10:30 - 11:00	Tea Break	
11:00 - 12:00	Intravascular Ultrasound Imaging: A View from Inside <i>Dr. William Hau, The University of Hong Kong</i>	LT4
12:00 - 14:00	Lunch	
14:00 - 15:00	Photoacoustic Imaging <i>Dr. Liang Song, SIAT-Institute of Biomedical & Health Engineering</i>	LT4
15:00 - 15:30	Tea Break	
15:30 - 16:30	MRI: Physical Principles and its Cardiovascular Applications <i>Dr. Y. C. Chung, SIAT-Institute of Biomedical & Health Engineering</i>	LT4

3 Jan 2012, Tuesday (Cheng Yu Tong Building, The Chinese University of Hong Kong)		
08:30 - 09:30	Wearable Systems for P-Health <i>Dr. Carmen Poon, The Chinese University of Hong Kong</i>	LT4
09:30 - 10:30	Cell-based BioMEMS <i>Dr. Douglas Yung, The Chinese University of Hong Kong</i>	LT4
10:30 - 11:00	Tea Break	
11:00 - 12:00	Optofluidic Devices <i>Dr. Yan Chen, SIAT-Institute of Biomedical & Health Engineering</i>	LT4
12:00 - 14:00	Lunch	
14:00 - 15:00	Tips on Presentation Design and Delivery <i>Dr. Matthias Reumann, IEEE-EMBS GOLD Rep., Australia</i>	LT4
15:00 - 15:30	Tea Break	
15:30 - 16:30	Tips on Presentation Design and Delivery (Cont'd) <i>Dr. Matthias Reumann, IEEE-EMBS GOLD Rep., Australia</i>	LT4
16:30 - 17:30	EMBS Chapter Development <i>Dr. Matthias Reumann and IEEE-EMBS Hong Kong Chapter</i>	LT4
17:30 - 19:00	Reception	LT4

4 Jan 2012, Wednesday
(Cheng Yu Tong Building, The Chinese University of Hong Kong)

08:30 - 09:30	Multi-scale Modelling <i>Dr. Matthias Reumann, IBM Research</i>	LT4
09:30 - 10:30	Translational Biomedical & Health Informatics for Personalized Healthcare: Biomarker Pipeline & Molecular Tissue Imaging Informatics Tool TissueWiki <i>Prof. May Wang, Georgia Institute of Technology</i>	LT4
10:30 - 11:00	Tea Break	
11:00 - 12:00	Information for Informatics: Cardiac Biophysical Monitoring <i>Prof. Michael R. Neuman, Michigan Technological University</i>	LT4
12:00 - 14:00	Lunch	
14:00 - 15:00	Technical Writing <i>Dr. M. Reumann, IBM Research</i> <i>Prof. M. R. Neuman, Michigan Technological University,</i> <i>Prof. Bruce Wheeler, University of Florida</i>	LT4
15:00 - 15:30	Tea Break	
15:30 - 16:30	Technical Writing (Cont'd) <i>Dr. M. Reumann, IBM Research</i> <i>Prof. M. R. Neuman, Michigan Technological University,</i> <i>Prof. Bruce Wheeler, University of Florida</i>	LT4
16:30 - 18:30	R10 Chapter Chairs' Meeting <i>Chair: Gudrun Zahlmann, EMBS V.P. Member & Student Activities</i>	LT7

5 Jan 2012, Thursday
(Cheng Yu Tong Building, The Chinese University of Hong Kong)

09:00 - 10:00	Eradicating Heart Attacks with Screening for Early Detection & Treatment of Asymptomatic Atherosclerosis: The SHAPE Initiative <i>Dr. Morteza Naghavi, Chairman of SHAPE</i>	LT8
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Programme by Chronology (BHI 2012)**5 Jan 2012, Thursday**

(5/F, Shenzhen Convention and Exhibition Center)

12:00-14:00	Registration and Poster Hang-up	Central Hall
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14:30-14:40	Opening Ceremony of BHI 2012	Bougainvillea Hall
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14:40-15:15	Keynote Speech1	Bougainvillea Hall
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Development of Medical Devices: China's Perspectives

Director General Xian-En Zhang

Basic Research Department, Ministry of Science & Technology, China

(Co-moderators: Y. T. Zhang, The Chinese Univ. of Hong Kong & Chinese Academy of Sciences, China
Paolo Bonato, Harvard-MIT Division of Health Sciences and Technology, USA)

15:15-15:25	Group Photo Taking	
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5.0.1	Tea Break and Poster Session	Time: 15:25 - 16:05, 5 Jan 2012, Central Hall
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#	Time	PIN	Title & Authors	
1	15:25	20077	Robustly Separating Sound Components in Human Body based on 2-ch ICA and EM Algorithm with Dirichlet Distribution <i>K. Hashiodani, S. Takada, Y. Fukumizu, H. Yamauchi, Y. Kurumi and T. Tani</i>	56
2	15:25	20363	Body Movement in Children with ADHD Calculated 60 <i>Shima OKADA, Naruhisro SHIOZAWA and Masaaki MAKIKAWA</i>	
3	15:25	20391	Seizure Detection by Means of Hidden Markov Model and Discrete Wavelet Transform of Electroencephalograph Signals 62 <i>Mohd Hafidz Abdullah, Jafri Malin Abdullah and Mohd Zaid Abdullah</i>	
4	15:25	20238	EEG Feature Extraction using Parametric and Non-Parametric Models 66 <i>F. Shiman, S.H. Safavi, F.M. Vaneghi, M. Oladazimi, M.J. Safari, and F. Ibrahim</i>	
5	15:25	20395	Sleep Stages Classification Using Wavelet Transform & Neural Network 71 <i>Vijaylaxmi Jain, V Mytri, Virendar Shete and Bahubali Shiragapur</i>	
6	15:25	20283	Scatter Correction in Cone-beam CT Based on Deconvolution 75 <i>Lin Wang, Lin Shi and Defeng Wang</i>	
7	15:25	20274	Golay Excitation for Dual-Frequency Tissue Harmonic Imaging 79 <i>Tai-yu Shi and Che-chou Shen</i>	
8	15:25	20094	Development of e-health network for in-home pregnancy surveillance based on artificial intelligence 82 <i>Alexander Kazantsev, Julia Ponomareva, Pavel Kazantsev, Rafael Digilov, and Ping Huang</i>	
9	15:25	20328	Algorithm for calibration of the electromagnetic tracking system 85 <i>Tomasz Bien and Georg Rose</i>	
10	15:25	20016	Developing a Wireless DICOM for Osirix 89 <i>Samir Abdul-Jauwad and Mansour AlJaroudi</i>	
11	15:25	20231	ECG Acquisition Circuit Design Based on C8051F330 93 <i>Wu Baochun, Li Min, Yang Yaning and Zhang Weiwei</i>	
12	15:25	20253	Enhancing Low-dose CT Images in the EHR Based on HTML5 97 <i>Liwei Hao, Dongyan Jia, Guo Dan, Qianjing Feng and Siping Chen</i>	
13	15:25	20287	Developing a Hospital Information System Ecosystem for Creating new Clinical Collaboration Methodologies 101 <i>Wolfgang Schramm, Harald Koestinger, Klaus Bayhammer, Michael Fiedler and Thomas Grechenig</i>	
14	15:25	20258	An Emotional Analysis Method Based on Heart Rate Variability 104 <i>Chendi Wang and Feng Wang</i>	

15	15:25	20308	Efficacy of Biophysiological Measurements at FTFPs for Facial Expression Classification: A Validation 108 <i>Ihsan Oz and Masood Khan</i>
16	15:25	20011	Wireless Accelerator Based Body Posture Stability Detection and Application for Meditation Practitioners 112 <i>Kang-Ming Chang, Sih-Huei Chen and Hsin-Yi Lee</i>
17	15:25	20017	A Mobile Health System Design For Home And Community Use 116 <i>Qing Pan, Pan Yang, Rui Zhang, Chengyu Lin, Shijin Gong and Gangmin Ning</i>
18	15:25	20147	Health Effects of Playing Online Game: Vocational and Technical Students in Thailand 120 <i>Sumalee Chanchalor, Sineenart Konsue and Orawan Chanchalor</i>
19	15:25	20158	Development of Simple Camera-based System for Lower Limb Alignment Evaluation during Cycling 123 <i>H. S. Oh, J. S. Choi, D. W. Kang, H. S. Kim and J. W. Seo</i>
20	15:25	20197	Multi-platform Telemedicine System for Patient Health Monitoring 127 <i>Kovac Miroslav, Lehocki Fedor, Valky Gabriel</i>
21	15:25	20352	Modern approach in multiple patients ECG monitoring 131 <i>Gabriel Valky and Fedor Lehkoci</i>
22	15:25	20314	Analysis of the Effect of Horseback Riding Exercise Equipment on the Human Body 135 <i>Seung Rok Kang, Gu Young Jeong, Dong An Moon, Song Sik Choi and Jung Ja Kim</i>
23	15:25	20335	Real-time data streaming for functionally improved eHealth solutions 140 <i>Enar Reilent, Alar Kuusik and Madis Puju</i>
24	15:25	20393	Design of Bio-Signal Based Physical Activity Monitoring System 144 <i>GyeongWoo Gang, Chul Hong Min and Tae Seon Kim</i>
25	15:25	20340	Design and Modeling of a New Biomimetic Earthworm Robot for Endoscopy Actuated by SMA Wires 148 <i>M. M. Kheirikhah, A. Khodayari, and S. M. Nikpey</i>
26	15:25	20279	A unimodal person authentication system based on signing sound 152 <i>Dorri Khazaei, Keivan Maghooli, Fardin Afdideh and Hilda Azimi</i>
27	15:25	20009	Risk Analysis of Thalassemia Using Knowledge Representation Model: Diagnostic Bayesian Networks 155 <i>Patcharaporn Paokanta and Napat Harnpornchai</i>
28	15:25	20354	Electrical Properties of Mycobacterium Tuberculosis 159 <i>Raja Umi Kalsom Raja Mohd Radzi, Wahidah Mansor and Juliana Johari</i>
29	15:25	20306	Recognition of Staphylococcus Aureus by New Carborane Derivative 163 <i>Xiayi Lv, Shuihong Li, Wei Liu, Hong Yan and Xuemei Wang</i>
30	15:25	20227	Ischemia Detection via Dynamic Time Warping and Fuzzy Rules 166 <i>Hossein Rabbani</i>
31	15:25	20228	Detection of QRS Complex in Electrocardiogram Signal Based on a Combination of Hilbert Transform, Wavelet Transform and Adaptive Thresholding 170 <i>Hossein Rabani</i>
32	15:25	20082	Primary Side Control Based Inductively Coupled Powering Scheme for Biomedical Implants 174 <i>Manzil Zaheer, Jaspreet Singh Suri and Harshal Nemade</i>

16:05 - 16:30 Keynote Speech 2

Bougainvillea Hall

Grand Challenge in Neural Engineering: Can We Forward Engineer a Living Brain?

Prof. Bruce Wheeler, IEEE Fellow, AIMBE Fellow
 Professor & Interim Chair, Biomedical Engineering Department, University of Florida, USA
 Editor in Chief, IEEE Trans. on Biomedical Engineering
 President Elect, IEEE Engineering in Medicine and Biology Society

(Moderator: Bin He, University of Minnesota, USA)

16:30 - 16:55	Keynote Speech 3	Bougainvillea Hall
<p>Eradicating Heart Attacks with Screening for Early Detection and Treatment of Asymptomatic Atherosclerosis: The SHAPE Initiative Dr. Morteza Naghavi, President and Chief Executive Officer, Fairway Medical Technologies, USA Chairman, Society for Heart Attack Prevention and Eradication (SHAPE)</p> <p><i>(Co-moderators: Rutai Hui, Cardiovascular Institute & Fuwai Hospital, China C. M. Yu, The Chinese University of Hong Kong & Prince of Wales Hospital, China)</i></p>		

16:55 - 17:20	Keynote Speech 4	Bougainvillea Hall
<p>Cardiovascular Magnetic Resonance Imaging: from Morphology to Function Prof. Guang-Zhong Yang, REng Fellow, IEEE Fellow, AIMBE Fellow, IET Fellow Director and Co-founder of the Hamlyn Centre for Robotic Surgery Deputy Chairman of the Institute of Global Health Innovation (IGHI) Chairman of the Centre for Pervasive Sensing Imperial College London, UK</p> <p><i>(Moderator: Xiaochuan Pan, The University of Chicago, USA)</i></p>		

17:20 - 18:10	Special Forum	Bougainvillea Hall
<p>Special Forum on Challenges of Health Informatics Chair: Paolo Bonato, Harvard Medical School and Harvard-MIT HST, USA Co-chair: Shuming Nie, Emory University, Georgia Institute of Technology, USA</p> <p>Panelists (in alphabetical order): Atam P. Dhawan, New Jersey Institute of Technology, USA Ratko Magjarević, University of Zagreb, Croatia Morteza Naghavi, Fairway Medical Technologies, USA Toshiyo Tamura, Chiba University, Japan Bruce Wheeler, University of Florida, USA Peiheng Wu, University of Nanjing & Chinese Academy of Sciences, China Guang-Zhong Yang, Imperial College, UK Xian-En Zhang, Ministry of Science & Technology, China</p>		

6 Jan 2012, Friday
 (5/F, Shenzhen Convention and Exhibition Center)

6.1	Time: 08:00 - 08:55, 6 Jan 2012, Rose Hall 3 Invited Talks on Neuroinformatics Chair: Bin He, University of Minnesota, USA
Time	Title & Speakers
08:00-08:10	Introduction to Neuroinformatics <i>Prof. Bin He, University of Minnesota, USA</i>
08:10-08:30	Somatosensory BMIs <i>Prof. Jose C. Principe, University of Florida, Gainesville, USA</i>
08:30-08:50	DEP-Well: a new technique for electrophysiology <i>Prof. Robert J. Butera, Georgia Institute of Technology, USA</i>

6.2.1 Oral Session , Time: 09:00 - 10:30, 6 Jan 2012, Rose Hall 1 Fall, Activity and Posture Monitoring Chair: Paolo Bonato , Harvard Medical School and Harvard-MIT HST, USA Co-chair: Ye Li, SIAT-Institute of Biomedical and Health Engineering, China			
#	Time	PIN	Title & Authors
1	09:00	20296	Fall Detection using Doppler Radar and Classifier Fusion 180 <i>Liang Liu, Mihail Popescu, Marilyn Rantz and Marjorie Skubic</i>
2	09:12	20319	Fall Detection by Built-In Tri-Accelerometer of Smartphone 184 <i>Yi He, Ye Li and Shu-Di Bao</i>
3	09:24	20365	A wearable system for long-term monitoring of knee kinematics 188 <i>Luca Della Toffola, Shyamal Patel, Muzaffer Ozsecen, Ravi Ramachandran and Paolo Bonato</i>
4	09:36	20022	Online FOG Identification in Parkinson's disease with a time-frequency combined Algorithm 192 <i>Y. Zhao, K. Tonn, K.Niazmand, U. M. Fietzek, L.T. D'Angelo, A. Ceballos-Baumann, T.C. Lueth</i>
5	09:48	20173	Toward Real-Time Accurate Fall/Fall Recovery Detection System by Incorporating Activity Information 196 <i>Natthapon Pannurat, Pitchakan Theekakul, Surapa Thiemjarus and Ekawit Nantajeewarawat</i>
6	10:00	20185	Wearable posture recognition systems: factors affecting performance 200 <i>Ramona Rednic, Elena Gaura, James Brusey and John Kemp</i>
7	10:12	20207	Automated Abnormal Behavior Detection for Ubiquitous Healthcare Application in Daytime and Nighttime 204 <i>Young-Sook Lee and Wan-Young Chung</i>

6.2.2 Oral Session, Time: 09:00 - 10:30, 6 Jan 2012, Rose Hall 2 Brain Computer Interfaces Chair: Jose C. Principe, University of Florida, USA Co-chair: Guanglin Li, SIAT-Institute of Biomedical and Health Engineering, China			
#	Time	PIN	Title & Authors
1	09:00	20143	A Digitally Trimmable Low-Noise Low-Power Analog Front-End for EEG Signal Acquisition 208 <i>Hong Liu, Kea-Tiong Tang and Jo-Yu Wu</i>
2	09:12	20008	Multi-channel Near-Infrared Spectroscopy (NIRS) System for Noninvasive Monitoring of Brain Activity 212 <i>Nima Hemmati, Seyed Kamaledin Setarehdan and Seyed Hossein Ahmadi Noubari</i>
3	09:24	20342	A Novel EMD-Based Common Spatial Pattern for Motor Imagery Brain-Computer Interface 216 <i>He Wei, Wei Pengfei, Wang Liping and Zou Yuexian</i>
4	09:36	20278	High-speed SSVEP-based BCI: study of various frequency pairs and inter-sources distances 220 <i>Seyed Navid Resalat, Valiollah Saba, Fardin Afdideh and Ali Heidarnejad</i> Submitted by: Fardin Afdideh, Sharif University of Technology
5	09:48	20203	Emotion Primitives Estimation from EEG Signals Using Hilbert Huang Transform 224 <i>Sinem UZUN, Serdar YILDIRIM and Esen YILDIRIM</i>
6	10:00	20330	The Dual Mode Micro Electrode Arrays and Integrated Detection System for Neuroelectrical and Neurochemical Detection 228 <i>lin Song, sen Lin, xiu Liu and xia Wang</i>

6.2.3 Oral Session, Time: 09:00 - 10:30, 6 Jan 2012, Rose Hall 3 Cardiovascular Health Informatics: Imaging and Modeling Chair: Bin He, University of Minnesota, USA Co-chair: Nizamettin Aydin, Yildiz Technical University, Turkey			
#	Time	PIN	Title & Authors
1	09:00	20331	Automated Segmentation of Blood Vessels for Detection of Proliferative Diabetic Retinopathy 232 <i>M. Usman Akram, Ibaa Jamal, Anam Tariq and Junaid Imtiaz</i>
2	09:12	20204	Research on Model-Based 2D Strain Algorithm for Non-Invasive Carotid Plaque Characterization 236 <i>Wei Tan, Gang Cheng, Jing Ye and Xiaodong Han</i>

3	09:24	20280	A Hybrid Method to Segment Common Carotid Arteries from 3D Ultrasound Images 241 <i>Xin Yang, Wanji He, Jiaoying Jin, Mingxu Zhang and Ming Yuchi</i>
4	09:36	20379	A Quantitative Study of the Effect of Blood Viscosity and Bulk Modulus of Plaque Compositions on the Vulnerability of an Atherosclerotic Plaque Using a 3D Fluid-Structure Interaction Model 245 <i>Lina Pu, Ping Yang, Xinyu Zhang and Yuanting Zhang</i>
5	09:48	20230	Novel technique for Visualizing Heart Motion Without Using Ultrasonic Cardiography 249 <i>Fumio Nogata, Yasunari Yokota, Yoko Kawamura, Hiroyuki Morita and Yoshiyuki Uno</i>
6	10:00	20146	Signal Integrity Evaluation for Fetal Magnetocardiography 253 <i>Shulin Zhang, Ming Liu, Jia Zeng, Yongliang Wang and Xiangyan Kong</i>
7	10:12	20198	Multiscale Modelling of Notch-Mediated Lateral Induction 257 <i>Tariq Abdulla, Jean-Marc Schleich and Ron Summers</i>

6.0.1 Poster Session, Time: 10:30 - 11:10, 6 Jan 2012, Central Hall

#	Time	PIN	Title & Authors
1	10:30	20042	Design of a wireless skin moisture detection system using a capacitive sensor 261 <i>Qun Wei, Chong Wen Zhu, Ki Wong Seong, Jyung Hyun Lee, Hyo Chan Jeon and Jin Ho Cho</i>
2	10:30	20101	Centralized Heart Rate Monitoring Telemetry System Using ZigBee Wireless Sensor Network 265 <i>Nor Saradatul Akmar Zulkifli, Fauzan Khairi Che Harun and Nur Syazana Azahar</i>
3	10:30	20098	Design a wireless capacitive sensor detection system with power line communication for liquid volume of intravenous drip measurement 269 <i>D. J. KIM, Q. Wei, J. H. Lee, K. W. Seong, D. W. Kim, M. N. Kim and J. H. Cho</i>
4	10:30	20169	LEXCOMM: a Low Energy, Secure and Flexible Communication Protocol for a Heterogenous Body Sensor Network 273 <i>Bishal Lamichhane, Steven Mudda, Francesco Regazzoni and Alessandro Puiatti</i>
5	10:30	20240	Localization in Wireless Sensor Network by using Mobile Stations 277 <i>Ramin Ahmadi, Ahad Jahangiry, Shahram Babaie, Maryam Kordlar and Saeed Rasouli Heikalabad</i>
6	10:30	20338	A CMOS Analog Front End Design in Multi-Lead ECG System for Ubiquitous Healthcare 281 <i>Hsienche Hung, Daming Wei and Wenxi Chen</i>
7	10:30	20349	Estimating the Influence of Chronotype and Social Zeitgebers on Circadian Rhythms using an Accelerometer-based Sensor Network 285 <i>Che-Wei Lin, Jeffrey Gamble, Ya-Ting Yang and Jeen-Shing Wang</i>
8	10:30	20334	Monitoring of Premonitory Septic Shock in Heart-Rate Variability 289 <i>Yasunari Yokota, Yoko Kawamura, Naoki Matsumaru and Kunihiro Shirai</i>
9	10:30	20343	An Adaptive Glucose Prediction Method Using Auto-Regressive (AR) Model and Kalman Filter 293 <i>Youqing Wang and Xiangwei Wu</i>
10	10:30	20160	Measurement of Directivity for the Design of an Implantable Microphone Implanted under an Artificial Skin Model 297 <i>Eui Sung Jung, Dong Ho Shin, Ki Woong Seong, Jyung Hyung Lee, Jang Woo Lee, Hui Sup Cho, Myoung Nam Kim, and Jin Ho Cho</i>
11	10:30	20058	An Empirical Study on the Relations between EEG Alpha-Beta Entropy & EQ- IQ Test Scores 301 <i>Sarah Vakili, Nima Tehranchian, Maryam Tajziehchi, Iman Mohammad Rezazadeh and Xiangyu Wang</i>
12	10:30	20260	EOG based Eye Movement Measure of Visual Fatigue caused by 2D and 3D displays 305 <i>Jae-Hwan Yu, Byoung-Hoon Lee and Deok-Hwan Kim</i>
13	10:30	20290	Frequency Content Analysis of Brainwave C3 and P3 for Dyslexia related Writing Disorder 309 <i>C.W.N.F. Che Wan Fadzal, L. Y Khuan and Wahidah Mansor</i>
14	10:30	20091	Identifying Activated Brain Regions from fMRI Data Based on Blind Non-negative Component Separation Technique 313 <i>Bao Feng, Zhu Liang Yu, Zhenghui Gu and Yuanqing Li</i> Submitted by: Zhu Liang Yu, South China University of Technology
15	10:30	20317	Functional localization of the cortical motor area in the brain based on wavelet analysis of slow cortical potential 317 <i>Tao Jiang, Xiaoming Wu and Shifu Zhang</i>
16	10:30	20086	Determining protrusion cephalometric readings from panoramic radiographic images 321 <i>Sara Ahmed, Tamer Nassef, Neveen Ghali, Gerald Schaefer and Aboul Ella Hassanien</i>

17	10:30	20110	The Improved Matching Method to Cell Extract using Ellipse Template 325 <i>Minghui Hunagfu, Shinsuke Konaka, Masatake Akutagawa and Takahiro Emoto</i>
18	10:30	20152	Automatic segmentation of brain tumors in magnetic resonance images 329 <i>Neda Behzadfar and Hamid Soltanian-Zadeh</i>
19	10:30	20206	Automatic Liver Segmentation in CT images based on Support Vector Machine 333 <i>Jie Lu, Defeng Wang, Lin Shi and Pheng Ann Heng</i>
20	10:30	20259	A New Global Optimization Strategy for Medical Image Elastic Registration 337 <i>Xingang Liu, Qinglao Yang, Hou Qing and Na Long</i>
21	10:30	20265	Determining Features for Discriminating PTB and Normal Lungs Using Phase Congruency Model 341 <i>Omar Rijal, Hossein Ebrahimian and Norliza Noor</i>
22	10:30	20276	Vessel Extraction in Retinal Images using Multilevel Line Detection 345 <i>Suthit Rattathanapad, Pradit Mittrapiyanuruk, Pakorn Kaewtrakulpong, Bunyarit Uyyanonvara and Chanjira Sinthanathin</i>
23	10:30	20284	Radiographs Enhancement Based on Unsharp Masking and Gray-level Grouping 350 <i>Lin Wang, Defeng Wang, Lin Shi and Winnie CW Chu</i>
24	10:30	20292	3D/4D Cardiac Ultrasound Image Registration from Low Cost 2D Ultrasound Instrument 354 <i>Tigang Jiang, Lixue Yin</i>
25	10:30	20313	On Convolution Model for Ultrasound Echo Signal Processing 357 <i>Ming Chen and Cishen Zhang</i>
26	10:30	20359	The Graph Cuts Technique, Breast Density and Abnormality Detection 361 <i>N. Saidin, H. A. M. Sakim, U. K. Ngah and I. L. Shuaib</i>
27	10:30	20170	Perfusion study on Modic Changes of Spine based on DCE-MRI 365 <i>Heather Ma, Haiyan Lv, Alvin Li, James Griffith and Yixiang Wang</i>
28	10:30	20126	Reflex Activities of the Urinary Bladder in Intact and Spinally Transected Rats with Bladder Filling and Sacral Neuromodulation 368 <i>XY Zhao, P Shi, YH Sun, and N Lan</i>
29	10:30	20167	A Framework for Applying An Intelligent Agent to Monitoring, Interpreting and Reporting Risk of Online Computer Games Addiction in Children and Early Adolescent in Thailand 372 <i>Kongkarn Vachirapanang and Sukree Sinthupinyo</i>
30	10:30	20235	Comparitive analysis of Machine learning techniques for classification of Arbovirus 376 <i>Shameem Fathima and Nisar HUndewale</i>
31	10:30	20046	Tumor-Induced Effects on PO2 Distribution in a Normal Tissue 380 <i>Mao Li, Yan Li and Peng (Paul) Wen</i>
32	10:30	20134	Influence of the Auditory Canal Number of Segments and Radius Variation on the Outer Ear Frequency Response 384 <i>Tshegofatso Thejane, Fuluthelo Vincent Nelwamondo, Jacoba Elizabeth Smit and Tshilidzi Marwala</i>

6.3.1 Oral Session, Time: 11:10 - 12:40, 6 Jan 2012, Rose Hall 1
Body Sensor/Area Networks: Theories and Applications
 Chair: Penders Julien, Imec, Netherlands
 Co-chair: Lei Wang, SIAT-Institute of Biomedical and Health Engineering, China

#	Time	PIN	Title & Authors
1	11:10	20021	Study on Transfer Function of Intra-Body Communication Based on Quasi-static Electric Field Modeling 388 <i>Xi Mei Chen, Sio Huang Pun, Yue Ming Gao, Peng Un Mak, Mang I Vai and Min Du</i>
2	11:22	20076	Rectangular Template-Based Coherent IR-UWB Correlator Receivers for Wireless Body Sensor Networks (WBSNs) 392 <i>Mohamad Abou El-Nasr and Heba Shaban</i>
3	11:34	20104	A Cross-Layer Optimization Design for Implanted BAN Communication System 396 <i>Zhao Xu and Ye Li</i>
4	11:46	20208	Robust Heart Rhythm Calculation and Respiration Rate Estimation in Ambulatory ECG Monitoring 400 <i>Torfinn Berset, Iñaki Romero, Alex Young and Julien Penders</i>
5	11:58	20236	Categorization of Patients' Health Status in COPD Disease using a Wearable Platform and Random Forests Methodology 404 <i>Christos Bellas, Athanassios Papadopoulos, Roberto Rosso and Dimitrios Fotiadis</i>

6	12:10	20090	SickleREMOTE: A Two-Way Text Messaging System for Pediatric Sickle Cell Disease Patients 408 <i>Chihwen Cheng, Clark Brown, Tamara New, Todd H. Stokes, Carlton Dampier and May D. Wang</i>
7	12:22	20108	Assessment of Upper Body Muscle Activity during Salat and Stretching Exercise: A Pilot Study 412 <i>Fatimah Ibrahim and Siti Ahmad</i>

6.3.2 Oral Session, Time: 11:10 - 12:40, 6 Jan 2012, Rose Hall 2
Neuroinformatics
Chair: Robert Butera, Georgia Institute of Technology, USA
Co-chair: Liping Wang, SIAT-Institute of Biomedical and Health Engineering, China

#	Time	PIN	Title & Authors
1	11:10	20271	Anti-Logarithmic Quantization for Data Reduction in Multi-Channel Intra-Cortical Neural Recording Implants 416 <i>Alireza Akhavan, Mohsen Judy and Amir M. Sodagar</i>
2	11:22	20184	Difference of Perceptual Response between Auditory Stimuli and Recalling Them 420 <i>Makoto Shigeta, Takahiro Emoto, Masatake Akutagawa, Fumio Shichijo and Yohsuke Kinouchi</i>
3	11:34	20088	Temporal Activities during P3 Components on the Working Memory-related Brain Regions: n-back ERP Study 424 <i>Yoshiaki Nakao, Atsushi Kodabashi, Masaru Yarita, Toshiro Fujimoto and Toshiyo Tamura</i>
4	11:46	20123	A neuronal network model with STDP for tinnitus and its management by sound therapy 428 <i>Hirofumi Nagashino, Yohsuke Kinouchi, Ali Danesh and Abhijit Pandya</i>
5	11:58	20390	A Novel Method to Estimate Baroreflex Sensitivity Based on Pulse Transit Time 432 <i>Qing Liu, Carmen, C.Y. Poon and Yuan-ting Zhang</i>
6	12:10	20045	Characteristic of autonomic nerve activation during aerobic interval training in comparison with aerobic endurance training in cardiac rehabilitation 435 <i>Satoru Hanada, Masaki Sekine, Toshiyo Tamura, Tomokazu Shinchi and Toshiro Fujimoto</i>

6.3.3 Oral Session, Time: 11:10 - 12:40, 6 Jan 2012, Rose Hall 3
Image Segmentation and Registration
Chair: Jim Ji, Texas A&M University, USA
Co-chair: Lin Shi, The Chinese University of Hong Kong, China

#	Time	PIN	Title & Authors
1	11:10	20323	Hierarchical Modelling for Unsupervised Tumour Segmentation in PET 439 <i>Ziming Zeng, Tony Shepherd and Reyer Zwiggelaar</i>
2	11:22	20402	Application of Intuitionistic Fuzzy Histon Segmentation for the Automated Detection of Optic Disc in Digital Fundus Images 444 <i>Muthu Rama Krishnan M, U Rajendra Acharya, Chua Kuang Chua, Lim Choo Min and E Y K Ng</i>
3	11:34	20179	Evaluating the Effects of Image Filters in CT Liver CAD System 448 <i>Abdalla Mostafa, Hesham Hefny, Neven Ghali, Aboul Ella Hassanien and Gerald Schaefer</i>
4	11:46	20057	Enhancement of Nailfold Capillaroscopy Images 452 <i>Niraj Doshi, Gerald Schaefer and Arcangelo Merla</i>
5	12:58	20176	Hybrid Deformable Registration Method Joint Using TPS and B-spline in CT image 456 <i>Yixiao Zhu, Qingsong Zhu and Lili Wang</i>
6	12:10	20264	Mouse Brain Histology Reconstruction based on Piecewise Registration and Correction 460 <i>Xi Qiu, Lin Shi and Defeng Wang</i>
7	12:22	20307	Simple Augmented Reality System for 3D Ultrasonic Image by See-through HMD and Single Camera and Marker Combination 464 <i>Shun'ichi Tano, Keisuke Suzuki, Kenji Miki, Natsuko Watanabe, Mitsuru Iwata, Tomohiro Hashiyama, Junko Ichino, Ken Nakayama</i>

6.4 Time: 13:40 - 14:05, 6 Jan 2012, Rose Hall 3
Biomedical Optical Imaging Technologies for Clinical and Personalized Healthcare Application
Chair: Shuming Nie, Georgia Institute of Technology, USA
Co-chair: Qiushi Ren, Peking University, China

Time	Title and Speaker
13:40-14:05	Biomedical Optical Imaging Technologies for Clinical and Personalized Healthcare Applications <i>Prof. Atam P. Dhawan, New Jersey Institute of Technology, USA</i>

6.5.1 Oral Session, Time: 14:05 - 15:35, 6 Jan 2012, Rose Hall 1 Wearable Sensors and Systems Chair: Amol Wagholikar, Australian e-Health Research Centre, CSIRO, Australia Co-chair: Wei Chen, Eindhoven University of Technology, The Netherlands			
#	Time	PIN	Title & Authors
1	14:05	20224	From Wearable to Aware: Intrinsically Electrotiles for Human Strain/Stress Sensing 468 <i>Hui Zhang and Xiaoming Tao</i>
2	14:17	20369	Performance assessment of active electrode applied in wearable physiological monitoring system 472 <i>Chang-Ming Yang, Tsair Kao, Tzu-Lin Yang and Chih-Chung Wu</i>
3	14:29	20171	Predicting Uncompensable Heat Stress with Embedded, Wearable Sensors 475 <i>John Kemp, Elena Gaura and James Brusey</i>
4	14:41	20043	Bio-inspired Wearable Computing Architecture and Physiological Signal Processing for On-road Stress Monitoring 479 <i>Sailesh Conjeti, Rajiv Ranjan Singh and Rahul Banerjee</i>
5	14:53	20285	Relationship between Fatigue and Foot Pressure while Walking 483 <i>Shuhei Terada, Dai Hanawa and Kimio Oguchi</i>
6	15:05	20293	Real-Time Performance of Textile Electrodes in Electromyogram Pattern-Recognition Based Prosthesis Control 487 <i>Dandan Tao, Haoshi Zhang and Guanglin Li</i>

6.5.2 Time: 14:05 - 15:35, 6 Jan 2012, Rose Hall 2 Round Table Discussion on Cardiovascular Health Informatics: Myocardial Infraction and Stroke Screening and Intervention amongst Nations (MISSIoN) Chair: Yuan-Ting Zhang, The Chinese University of Hong Kong & Chinese Academy of Sciences, China	
Time	Title & Speakers
14:05-14:15	Introduction to MISSIoN <i>Yuan-Ting Zhang, The Chinese University of Hong Kong & Chinese Academy of Sciences, China</i>
14:15-14:35	Quantitative Assessment of the Extent and Severity of Vascular Disease <i>Milan Sonka, Iowa Institute for Biomedical Imaging, USA</i>
14:35-14:55	Invited Talk by Prof. Ru-Tai Hui, Fuwai Hospital and Cardiovascular Institute, China
14:55-15:15	Invited Talk by Prof. Chek-Man Yu, The Chinese University of Hong Kong, China

6.5.3 Oral Session, Time: 14:05 - 15:20, 6 Jan 2012, Rose Hall 3 Image Classification Chair: Samuel Cheng, University of Oklahoma, USA Co-chair: George Zouridakis, University of Houston, USA			
#	Time	PIN	Title & Authors
1	14:05	20085	Naifold Capillaroscopy Pattern Recognition using Texture Analysis 491 <i>Niraj Doshi, Gerald Schaefer and Arcangelo Merla</i>
2	14:17	20075	Combining Multiresolution Local Binary Pattern Texture Analysis and Variable Selection Strategy Applied to Computer-Aided Detection of Breast Masses on Mammograms 495 <i>Jae Young Choi, Dae Hoe Kim and Yong Man Ro</i>
3	14:29	20113	Malignant Nodule Detection on Lung CT Scan Images with Kernel RX-algorithm 499 <i>Aminmohammad Roozgard, Samuel Cheng, and Hong Liu</i>
4	14:41	20254	Detection of Blue-Whitish Veil in Melanoma using Color Descriptors 503 <i>Tarun Wadhawan, Rui Hu and George Zouridakis</i>
5	14:53	20172	Breast Thermogram Analysis using a Cost-Sensitive Multiple Classifier System 507 <i>Bartosz Krawczyk, Gerald Schaefer and Michal Wozniak</i>
6	15:05	20102	Voxel-Based Treatment Prediction of Glioblastoma Multiform Tumor Using Diffusion Tensor Imaging 511 <i>Hadi Sabahi, Hamid Soltanian-Zadeh, Lisa Scarpace and Tom Mikkelsen</i>

7	15:17	20305	An Approach Based on Strain-compounding Technique and Ultrasound Nakagami Imaging for Detecting Breast Microcalcifications 515 <i>Yin-Yin Liao, Chia-Hui Li, and Chih-Kuang Yeh</i>
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6.6
 Time: 15:35 - 16:20, 6 Jan 2012, Rose Hall 3
 Invited Talks on Personalized Healthcare
 Chair: May Wang, Georgia Institute of Technology, USA
 Co-chair: Ye Li, SIAT – Institute of Biomedical and Health Engineering, China

Time	Title and Speaker
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15:35-15:55	What can imaging contribute to drug development? <i>Prof. Gudrun Zahlmann, Hoffmann-La Roche Ltd, Switzerland</i>
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15:55-16:15	Personalized System for Remote Health Monitoring and Care <i>Ratko Magjarević, University of Zagreb, Croatia</i>
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6.0.2 Poster Session, Time: 16:20 - 17:00, 6 Jan 2012, Central Hall

#	Time	PIN	Title & Authors
1	16:20	20341	Automated Abnormality Detection of Craniomaxillofacial based on Statistical Deformable Models 519 <i>Shaoyin Wang, Jun Feng, Xinlong Tong, Hui Liu and Xiaowei He</i>
2	16:20	20093	Increased Heart Rate Reduced Crossbridge Formation in Beating Rat Whole Heart 523 <i>Yamato Tamura, Takehiro Miyasaka and Juichiro Shimizu</i>
3	16:20	20128	Development of Analyzer for non-invasive detection of Helicobacter Pylori with CO2 collecting card 526 <i>Hao Yu, Quan Su and Jiandong Tang</i>
4	16:20	20394	A Gait Cadence Measurement Method Based on Match Filter and Turns Detection for Human Locomotion Monitoring 530 <i>Yunfeng Wu, Suxian Cai, Meng Lu, Zhangting Zhong and Jia He</i>
5	16:20	20132	Examination of Appropriate Stimuli to Attention Inducement 534 <i>Yuko TSUMAGARI, Atsushi KODABASHI, Yuji HIGASHI, Toshiro FUJIMOTO and Toshiyo TAMURA</i>
6	16:20	20145	The Design of Temporal Bone Implantable Microphone for Masticatory Movement Noise Reduction 538 <i>Seong-Tak Woo, Eui-Sung Jung, Ki-woong Seong, Jyung-Hyun Lee and Myoung-Nam Kim</i>
7	16:20	20151	Membrane Design of Vibration Transducer to Drive Round Window to Increase Vibration Displacement 541 <i>Jang Woo Lee, Hyung Gyu Lim, Eui Sung Jung, Ki Woong Seong and Jyung Hyun Lee</i>
8	16:20	20155	Effective Stimulation Parameters Affecting the Stimulating Threshold for Epi-Retinal Prostheses 544 <i>Yu Huang and Xiaohong Sui</i>
9	16:20	20157	Necessity of Human Middle Ear Characteristics at Design of Piezoelectric Type Round Window Vibrator 548 <i>Hyung Gyu Lim, Ki Woong Seong, Eui Sung Jung, Jyung Hyun Lee, Jae Hoon Park, Hee Joon Park, Chulho Won, and Jin Ho Cho</i>
10	16:20	20261	A Constraint of Accelerometer-based Range of Motion Estimation 551 <i>Surapa Thiemjarus, Pongwat Poomchoompol, Ithipan Methasate and Thanaruk Theeramunkong</i>
11	16:20	20329	Influence of Origins and Insertions of Muscles on Artificial Hip Joint Dislocation 555 <i>Kazuo Kiguchi, Kaori Tamura, Yoshiaki Hayashi, Masaru Ueno and Tsuneyuki Kobayashi</i>
12	16:20	20332	Unobtrusive ambulatory estimation of knee joint angles during walking using gyroscope and accelerometer data – a preliminary evaluation study 559 <i>Mareike Schulze, Tsung-Han Liu, Jiang Xie, Wu Zhang, Klaus-Hendrik Wolf, Tilman Calliess, Henning Windhagen, and Michael Marschollek</i>
13	16:20	20350	Gait analysis of Sit-to-Walk Motion by using Portable Acceleration Monitor Device for Fall Prevention 563 <i>Naruhiro Shiozawa, Shin Arai, Shima Okada and Masaaki Makikawa</i>
14	16:20	20370	Development of Wearable Measurement System for Abdominal Palpation 565 <i>Takashi Kato, Leow Chi Cheng, Jun Ito and Koji Ikuta</i>
15	16:20	20310	Visual Synchronization Analysis of Simple Color Stimuli 569 <i>Huiran Zhang, Jiang Xie, Michael Marschollek, Mareike Schulze and Wu Zhang</i>

16	16:20	20018	Prediction of Breast Cancer in Mammogram image using Support Vector Machine and Fuzzy C-means 573 <i>Gul Shaira Banu Jahangeer, Amjath Fareeth and Nisar Hundawale</i>
17	16:20	20282	Spectral Domain Optical Coherence Tomography for Imaging Human Skin in vivo 577 <i>Zhenhe Ma, Qiaoyun Wang, Mengchao Li and Zhonghai He</i>
18	16:20	20119	A Novel Approach to Remote Access Picture Archiving and Communication System on Mobile Devices over Wireless Networks 581 <i>Longjun He, Xing Ming, Wenxiang Ding and Qian Liu</i>
19	16:20	20196	PSST... Privacy, Safety, Security, and Trust in Health Information Websites 584 <i>Hamman Samuel and Osmar Zaiane</i>
20	16:20	20316	MID-based Electronic Data Collection and Adaptive Drug Delivery Model for Improving Quality of PCA Services 588 <i>Chih-Yen Chiang, I-Ting Kuo, Mei-Yung Tsou, Kuang-Yi Chang and Steen J. Hsu</i>
21	16:20	20137	Verification of Open Platform Board and Bluetooth Dongle for Wireless controlling Binaural Hearing aids 593 <i>Dong-Wook Kim, Hyung Gyu Lim, Ki-Woong Seong, Jung-Hyun Lee, Hee-Joon Park, Byung-Seop Song, Myoung-Nam Kim and Jin-Ho Cho</i>
22	16:20	20286	Learning DICOM by solving real clinical problems 596 <i>Rita Noumeir and Jean-Francois Pambrun</i> Submitted by: Jean-Francois Pambrun, University of Quebec
23	16:20	20013	Importance of Improving Scoring Methods in Predicting Protein Free-energy Changes 600 <i>Sen Liu</i>
24	16:20	20020	Post-training Corticosterone Opposingly Modulates Fear Conditioning of High and Low Anxiety Rats 604 <i>Xianli An and Xigeng Zheng</i>
25	16:20	20156	Behaviour analysis of micro-organisms to observe invisible substance effects : towards the more sensitive biological effect detectors 608 <i>Ahmet Orun, Fatih Kurugollu and Huseyin Seker</i>
26	16:20	20181	The Sound of Proteins 612 <i>Lorenzo Picinali, Charalambos Chrysostomou and Huseyin Seker</i>
27	16:20	20368	Statistical Bias and Variance of Gene Selection and Cross Validation Methods: A Case Study on Hypertension Prediction 616 <i>Zeliha Gormez, Olcay Kursun, Ahmet Serbas, Nizamettin Aydin and Huseyin Seker</i>
28	16:20	20040	Preparation of Cross-linked Biodegradable Copolymers based Polycarbonian of 3- arm PL(D)LA with Brominated Pluronic and Stereocomplex Mediated Gelation Behavior 620 <i>Jeong A Nam, Yeon Jeong Oh, Abdullah-Al- Nahain and Euisang Yoo</i>
29	16:20	20178	Point-of-Care Early HIV Diagnosis System On the CMOS & Microfluidic Hybrid Platform 624 <i>Bowei Zhang, Zhenyu Li, Qiuchen Yuan, Chia-pin Chang and Mona Zaghoul</i>
30	16:20	20318	Patient Identification using High-Confidence Wavelet based Iris Pattern Recognition 628 <i>Sailesh Conjeti and Dhiraj Puroshottam Jetwani</i>
31	16:20	20213	A Pilot Study on Simulation of Ultrasound from MRI Using Ray-based Model 632 <i>Wenjian Qin, Tiexiang Wen, Zheng Zhen, Zhicheng LI and Jia Gu</i>

6.7.1

Time: 17:00 - 18:30, 6 Jan 2012, Rose Hall 1
Cardiovascular Health Informatics: Advances in Blood Pressure and Blood Flow Velocity Measurement
 Chair: Jinho Cho , Kyungpook National University, Korea
 Co-chair: Masatake Akutagawa , The University of Tokushima, Japan

#	Time	PIN	Title & Authors
1	17:00	20268	Estimation of Central Blood Pressure using Peripheral Upper Extremity Arterial Blood Pressure: a Comparative Study 636 <i>Hongxia Ding, Ping Yang and Yuan-Ting Zhang</i>
2	17:12	20105	Arterial Pressure Pulse Palpation with the Haptic Lens 640 <i>Mahsan Rofouei, Pooya Monajemi, Mike Sinclair and Majid Sarrafzadeh</i>
3	17:24	20389	Investigation of Temporal Relationship between Cardiovascular Variables for Cuffless Blood Pressure Estimation 644 <i>Yali Zheng, Carmen C.Y. Poon and Yuan-Ting Zhang</i>

4	17:36	20135	Remote Blood Pressure Monitoring using a Pulse Diagnostic System in TCM and Android-Based Tablet PC 647 <i>K.Y. Shin, T.K. Kim, J.S. Song and S.O. Jin</i>
5	17:48	20139	Study on Blood Flow Velocity Patterns at Carotid Using One-dimensional Computer Simulation of Human Arteries 651 <i>Motoshi Masuda, Masatake Akutagawa, Takahiro Emoto, Tomoki Kitawaki and Kazuyoshi Kitaoka</i>
6	18:00	20187	Evaluating the Atherosclerosis based on the Blood Flow Velocity Waveform of Common Carotid Artery 655 <i>Kouki Aoyama, Takahiro Emoto, Masatake Akutagawa, Motoshi Masuda and Syota Minato</i>

6.7.2 Time: 17:00 - 18:30, 6 Jan 2012, Rose Hall 2
Special Workshop on "Meet the IEEE-EMBS Editors"
Chair: Andrew Laine, Columbia University, USA

Editors (in alphabetical order)

- 1 **Metin Akay**, Editor-in-Chief, Biomedical Engineering Book Series
- 2 **Robert Butera**, Deputy Editor-in-Chief, IEEE Trans. on Biomedical Circuits and Systems (2007-2010)
- 3 **Atam P. Dhawan**, Editor-in-Chief, IEEE Trans. on Biomedical Engineering Letters
- 4 **Michael P. Hughes**, Editor-in-Chief, IEEE Trans. on NanoBioscience
- 5 **José C. Príncipe**, Editor-in-Chief, IEEE Reviews on Biomedical Engineering
- 6 **Michael R. Neuman**, Editor-in-Chief, IEEE Pulse
- 7 **Milan Sonka**, Editor-in-Chief, IEEE Trans. on Medical Imaging
- 8 **Bruce Wheeler**, Editor-in-Chief, IEEE Trans. on Biomedical Engineering
- 9 **Yuan-Ting Zhang**, Editor-in-Chief, IEEE Trans. on Information Technology in Biomedicine

6.7.3 Oral Session, Time: 17:00 - 18:30, 6 Jan 2012, Rose Hall 3
Towards Real-time Imaging, Image Processing and Transmission
Chair: Constantinos Pattichis, University of Cyprus, Cyprus
Co-chair: Xin Liu, SIAT-Institute of Biomedical and Health Engineering, China

#	Time	PIN	Title & Authors
1	17:00	20007	Evaluation and Simulation of eight-element phased-array surface coil in 3.0T MRI 659 <i>Longchen Wang, Gaojie Zhu, Jie Wang and Bin Li</i>
2	17:12	20375	Parametric perfusion imaging using contrast enhanced ultrasound with bolus administration of contrast agents 663 <i>Xiaolin Gu, Yujin Zong, Hui Zhong and Mingxi Wan</i>
3	17:24	20229	Mobile Ultrasound with DICOM and Cloud Connectivity 667 <i>Chia-Chi Teng, Carter Green, Rob Johnson, Paul Jones and Craig Treasure</i>
4	17:36	20367	Fast Pulse Design for Parallel Transmission in MRI Using Under- Determined Systems 671 <i>Shuo Feng and Jim Ji</i>
5	17:48	20129	An Advanced WCE Video Summary Using Relation Matrix Rank 675 <i>Jia Sen HUO, Yue Xian ZOU, Lei LI</i>
6	18:00	20210	Abdominal Aortic Aneurysm Medical Video Transmission 679 <i>Andreas Panayides, Zinonas Antoniou, Vassilis Barberis, Marios Pattichis, Constantinos Pattichis and Efthymoulos Kyriacou</i>
7	18:12	20071	Three-dimensional Ultrasound Guided Percutaneous Renal Puncture A Phantom Study 683 <i>Ken Chen, Zhicheng Li, Ling Li and Jia Gu</i>

7 Jan 2012, Saturday

(5/F, Shenzhen Convention and Exhibition Center)

7.1 Time: 08:00 - 08:55, 7 Jan 2012, Rose Hall 3
 Invited Talk and Special Forum on Medical Imaging Informatics
 Chair: Zhi-Pei Liang, University of Illinois at Urbana-Champaign, USA

Retrieval of Information in Medical Image Databases
 Dr. Christian Roux, Télécom Bretagne – Inserm, France

Panelists (in alphabetical order):

Dr. David Dagang Feng, University of Sydney, Australia
 Dr. Zhi-Pei Liang, University of Illinois at Urbana-Champaign, USA
 Dr. Xiao-Chuan Pan, The University of Chicago, USA

7.2.1 Time: 09:00 - 10:30, 7 Jan 2012, Rose Hall 1
 Special Session on "Health Informatics in Eye Care"
 Chair: Qiushi Ren, Peking University, China

Time	Title and Speaker
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09:00-09:15	Progress of C-Sight Visual Prosthesis Based on Penetrating Optic Nerve Electrical Stimulation: Current Research and Future Challenge <i>Prof. Qiushi Ren, Department of Biomedical Engineering, Peking University, China</i>
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09:15-09:30	Y-Like Retinal Ganglion Cells Innervate the Dorsal Raphe Nucleus in the Mongolian Gerbil (<i>Meriones unguiculatus</i>) <i>Prof. Kwok-Fai So, The University of Hong Kong, China</i>
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09:30-09:45	Treatment of Age-Related Macular Degeneration –Past, Present and Future <i>Prof. Xiaodong Sun, Shanghai First People's Hospital, China</i>
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09:45-10:00	Development of 3D Flexible Microelectrode Arrays for Artificial Retinal Implants <i>Prof. Qinghui Jin, State Key Lab of Transducer Technology, Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences, China</i>
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10:00-10:15	Independent Component Analysis Can Remove Cortical Artifacts Elicited by Electrical Optic Nerve Stimulation <i>Prof. Yao Chen, School of biomedical engineering, Shanghai Jiao Tong University, China</i>
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10:15-10:30	Where come and go? - Evolutionary dynamics of initiation mechanisms of protein synthesis for microbial genomes <i>Prof. Huaiqiu Zhu, Department of Biomedical Engineering, College of Engineering, and Centre for Theoretical Biology, Peking University, China</i>
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7.2.2 Oral Session, Time: 09:00 - 10:30, 7 Jan 2012, Rose Hall 2
 Clinical Decision Support Systems
 Chair: Wolfgang Schramm, Vienna University of Technology
 Co-chair: Chien-Hung Chang, Chang Gung University, Taiwan

#	Time	PIN	Title & Authors
1	09:00	20353	Trends and Opportunities for Integrated Real Time Neonatal Clinical Decision Support 687 <i>Nadja Bressan, Andrew James and Carolyn McGregor</i>
2	09:12	20124	Automated ASPECTS Scoring System as a Clinical Support System for Acute Stroke Care 691 <i>Yao Shieh and Chien-Hung Chang</i>
3	09:24	20125	A Treatment Decision Support System for patients receiving Ventricular Assist Device (VAD) therapy 695 <i>Evangelos Karvounis, Kostas Stefanou, Themis Exarchos, Alexandros Tzallas and Dimitrios Fotiadis</i>
4	09:36	20216	A Hybrid Case-Based System in Clinical Diagnosis and Treatment 699 <i>Mobyen Uddin Ahmed, Shahina Begum and Peter Funk</i>
5	09:48	20199	Patient Specific Seizure Prediction Algorithm Using Hilbert-Huang Transform 705 <i>Firat DUMAN, Nilufer OZDEMIR and Esen YILDIRIM</i>
6	10:00	20194	Findability in Health Information Websites 709 <i>Hamman Samuel, Osmar Zaiane and Jane Robertson Zaiane</i>
7	10:12	20089	Questionable Relationship Triples in the UMLS 713 <i>Huanying Gu, Gai Elhanan, Michael Halper and Zhe He</i>

7.2.3

Oral Session, Time: 09:00 - 10:30, 7 Jan 2012, Rose Hall 3
 Image Formation and Information Extraction
 Chair: Atam P. Dhawan, New Jersey Institute of Technology, USA
 Co-chair: Hairong Zheng, SIAT-Institute of Biomedical and Health Engineering

#	Time	PIN	Title & Authors
1	09:00	20234	Compressed Sensing Photoacoustic Tomography in Vivo in Time and Frequency Domains 717 <i>Jing Meng, Dong Liang and Liang Song</i>
2	09:12	20295	Novel Compressive Sensing MRI Methods with Combined Sparsifying Transforms 721 <i>Ying Dong and Jim Ji</i>
3	09:24	20186	Image Processing for Pathological Visualization in Multitemporal Convoluted TIRI 725 <i>Daniel T.J. Arthur and Masood M. Khan</i>
4	09:36	20025	Blood Oxygen Saturation Estimation in Transilluminated Images of Skin Lesions 729 <i>Brian DAlessandro and Atam Dhawan</i>
5	09:48	20267	Numerical Analysis of Interaction between Microbubble and Elastic Microvessel in Low Frequency Ultrasound Field Using Fluid Solid Interaction Method 733 <i>Yuanyuan Shen, Tianfu Wang, Xianfen Diao and Siping Chen</i>
6	10:00	20163	A New Approach to Detecting Ulcer and Bleeding in Wireless Capsule Endoscopy Images 737 <i>Xiaoying Liu, Jun Xiong, Jia Gu, Yaoqin Xie and Wenjian Qin</i>
7	10:12	20218	Human Tissue Diagnostics For Physiological Information Using Hyperspectral Image Model 741 <i>Rajendra Gad, Narayan Vetrekar, Ingrid Nazareth, Jivan Parab and Gourish Naik</i>

7.0.1

Poster Session, Time: 10:30 - 11:10, 7 Jan 2012, Central Hall

#	Time	PIN	Title & Authors
1	10:30	20361	Development of Novel Wearable Sensors for Mobile Health 745 <i>Kevin Hung, C.C. Lee, W.M. Chan, Sheung-On Choy and Paul Kwok</i>
2	10:30	20103	A Non-linear contact FE Model to Evaluate Pressure Ulcer on Buttock-thigh under Sitting 748 <i>Peng Shang and Xueling Bai</i>
3	10:30	20263	The Experiment Study on Infrared Radiation Spectrum of Human body 752 <i>W.L. Yu, Zhen Wang and Lei Jin</i>
4	10:30	20337	Computational Modeling of Full-length Prochemerin From Human 755 <i>Qingsheng Huang, Tianxia Xiao and Jian V. Zhang</i>
5	10:30	20300	Experimental Characterization of human body communication 759 <i>Zedong Nie, tengfei leng, wencheng wang, feng guan and Lei Wang</i>
6	10:30	20309	Pre-impact & Impact Detection of Falls Using Wireless Body Sensor Network 763 <i>Ding Liang, Guoru Zhao, Yanwei Guo and Lei Wang</i>
7	10:30	20079	Optimal Time-Frequency Distribution of Arterial Blood Pressure for Assessing Cerebral Autoregulation 767 <i>Ren Xu and Jia Liu</i>
8	10:30	20382	Spectral and Coherence Analysis of the Variabilities of Heart Rate, Stroke Volume, and Systolic Blood Pressure in Exercise Stress Tests 771 <i>Ze Zhao, Wanhua Lin, Ping Yang and Yuanting Zhang</i>
9	10:30	20387	Robust heart beat detection from photoplethysmography interlaced with motion artifact based on Empirical Mode Decomposition 775 <i>Xuxue Sun, Ping Yang, Yulin Li, Zhifan Gao and Yuan-Ting Zhang</i>
10	10:30	20388	Automatic Estimation of Respiratory Rate from Pulse Transit Time in Normal Subjects at Rest 779 <i>Dan Wu, Ping Yang, Guan-Zheng Liu and Yuan-Ting Zhang</i>
11	10:30	20362	A Comparison of Binary Number Generators for Wireless Body Sensor Networks Security 782 <i>Guanghe Zhang, Yongxiang Zhang and Yuanting Zhang</i>
12	10:30	20321	PPG and ECG Feature Comparison for Healthy People and Hypertensive Patients 785 <i>Xiaoqin Luo, Fen Miao and Ye Li</i>

13	10:30	20324	Comparison of Electromyography and Mechanomyogram in Control of Prosthetic System in Multiple Limb Positions 788 <i>Geng Yanjuan, Chen Liang and Li Guanglin</i>
14	10:30	20116	Healthcare Delivery with IP-Based Sensor Networks 792 <i>Fei Xue, Ye Li, Shu-Di Bao, Chuan Yin and Cun-Zhang Cao</i>
15	10:30	20164	A Low-Power and Cost-Effective AES Chip Design for Healthcare Devices 795 <i>Yun-Ping Liang and Ye Li</i>
16	10:30	20127	Doppler Radar Based Non-Contact Multi-Person Respiration Signals Separation 799 <i>Yannian Chen, He Tan, Boping Hu and Ye Li</i>
17	10:30	20396	An Integral Sampler for Analog-to-Information Converter 803 <i>zigang dong and yuanting zhang</i>
18	10:30	20073	A novel on-chip soft-started DC-DC buck converter for biomedical applications 806 <i>Ai-Ping Yao, Hai-Xi Li, Jin-yong Zhang and Lei Wang</i>
19	10:30	20189	Experimental Result on Wireless Power Management Microsystem for Endoscopic Capsule Robot 810 <i>Dingkun Peng, Jinyong Zhang and Lei Wang</i>
20	10:30	20377	A fully-integrated R-MOSFET-C filter for biomedical applications 814 <i>Yan Li and Yuanting Zhang</i>
21	10:30	20092	PET-Guided Liver Segmentation for Low-Contrast CT via Regularized Chan-Vese Model 816 <i>Changyang Li, Xiuying Wang, Jinhu Chen, Yong Yin and Dagan Feng</i>
22	10:30	20233	Lung Tumor Segmentation and Separation from PET Volumes Based on Tumor-Customized Downhill 820 <i>Xiuying Wang, Hui Cui, Cherry Ballangan and Dagan Feng</i>
23	10:30	20111	Deformable Registration with Excessive Deformation Correction for Lung Lesions 824 <i>Xiuying Wang, Chaojie Zheng, Jinhu Chen, Yong Yin and Dagan Feng</i>
24	10:30	20239	Design of Hilbert Transformation Module in Katsevich Algorithm of Helical CT 828 <i>Yu Fei, Jing Zuo and Wu Yating</i>
25	10:30	20038	Symmetry Recurrence in protein sequence and structure with Pearson's correlation coefficients 832 <i>Xiaojuan Shen</i>
26	10:30	20106	The Biomechanics Analysis of Anatomical Morphology of Skeleton 836 <i>Xueling Bai and Peng Shang</i>
27	10:30	20275	The Treatment Effects of HET0016 on demyelinating Mice induced by Cuprizone 840 <i>Wang Huina, Jin Lei, Yu Wei, Chen Li and Ouyang Xiaoming</i>
28	10:30	20273	Diagnosis Algorithm of Sleep Apnea Syndrom 843 <i>Jing Zhou, Li-yi Jiang, Su-juan Liu and Xiao-ming Wu</i>
29	10:30	20177	Wireless Black Box Using MEMS Accelerometer and GPS Tracking for Accidental Monitoring of Vehicles 847 <i>Natthapol Watthanawisuth, Tanom Lomas and Adisorn Tuantranont</i>

7.3.1 Time: 11:10 - 12:40, 7 Jan 2012, Rose Hall 1
Special Session on "Medical Imaging and Analysis"
Chair: Wufan Chen, Southern Medical University, China

#	Time	PIN	Title & Authors
1	11:10	20399	PET Image Reconstruction Based On Particle Filter Framework 851 <i>Fengchao Yu, Huafeng Liu and Pengcheng Shi</i>
2	11:25	20398	Inverse Design of an Organ-oriented RF Coil for the Open Vertical-Field MR-guided Focused Ultrasound Surgery 854 <i>Xuegang Xin, Jijun Han, Yanqiu Feng, Qianjin Feng and Wufan Chen</i>
3	11:40	20397	Algorithm-Based Low-Dose Computed Tomography Image Reconstruction 856 <i>J. Ma, J. Huang, H. Zhang, Q. Feng, Z. Liang, H. Lu, and W. Chen</i>
4	11:55	20400	Region-specific Bag-of-Visual-Words Representations for Retrieving Brain Tumors in Contrast-enhanced MRI 858 <i>Wei Yang, Meiyuan Huang, Mei Yu, Zhentai Lu, Qianjin Feng, Wufan Chen</i>

7.3.2 Oral Session, Time: 11:10 - 12:40, 7 Jan 2012, Rose Hall 2 Advances in Cardiopulmonary Research Chair: Steffen Leonhardt, RWTH Aachen University, Germany Co-chair: Chih-Chung Wu, 3H Technology Corp.			
#	Time	PIN	Title & Authors
1	11:10	20028	The 'music' within thoracic cavity using Wavelet filtering 860 <i>Anake Pomprapa, David Schwaiberger, Burkhard Lachmann and Steffen Leonhardt</i>
2	11:22	20133	Heart sounds measurement using PVDF film sensor and their comparison with RR intervals of ECG signals 864 <i>Won Kyu Lee, Gih Sung Chung and Hyun Jae Baek</i>
3	11:34	20059	Comparison of Pulse Rate Variability Indices Estimated from Pressure Signal and Photoplethysmogram 867 <i>Xin Zhu, Wenxi Chen, Kei-ichiro Kitamura, and Tetsu Nemoto</i>
4	11:46	20221	Mechanism of Pressure Induced Baseline Shift in Bioelectric Signals Measurement Using Wearable Electrodes 871 <i>Pengjun Xu, Xiaoming Tao, Hao Liu and Shanyuan Wang</i>
5	11:58	20372	A Textile-based Capacitive Breath-sensing System 875 <i>Chang-Ming Yang, Tsair Kao, Narisa N. Y. Chu, Chih-Chung Wu and Tzu-Lin Yang</i>
6	12:10	20201	Nose Detection on Far infrared Image for Non-contact Measurement of Breathing 878 <i>Dai Hanawa, Toshiki Morimoto, Shuhei Terada, Tomoki Sakai, Shota Shimazaki, Katsuhiko Igarashi, Kimio Oguchi</i>
7	12:22	20159	Development of a Simulator for Patient-Ventilator Interaction in Non-Invasive Mask Ventilation 882 <i>Enas Abdulhay and Osama A. Tamimi</i>

7.3.3 Oral Session, Time: 11:10 - 12:40, 7 Jan 2012, Rose Hall 3 Assisted Living Technology and Smart Homes Chair: Wahidah Mansor, Universiti Teknologi Mara, Malaysia Co-chair: Haiying Wang, University of Ulster, UK			
#	Time	PIN	Title & Authors
1	11:10	20142	Using Dynamic Time Warping for Sleep and Wake Discrimination 886 <i>Xi Long, Pedro Fonseca, Jerome Fossier, Reinder Haakma and Ronald Aarts</i>
2	11:22	20360	Fusion of Image and Signal Processing for the Detection of Obstructive Sleep Apnea 890 <i>Elnaz Geder and Gari D. Clifford</i>
3	11:34	20051	Automatic Sleep Monitoring System for Home Healthcare 894 <i>Linlin Jiang, Zunyi Tang, Zhaoqin Liu, Wenxi Chen and Kei-ichiro Kitamura</i>
4	11:46	20114	Estimation of Sleep Onset Latency based on the Correlation between Blood Pressure and Heart Beat Interval 898 <i>Da Woon Jung, Gih Sung Chung and Su Hwan Hwang</i>
5	11:58	20339	Sleep Stage Classification of Sleep Apnea Patients Using Decision-Tree-Based Support Vector Machines Based on ECG Parameters 902 <i>Jeen-Shing Wang, Guan-Rong Shih and Wei-Chun Chiang</i>
6	12:10	20162	Detection of Asphyxia from Infant Cry Using Support Vector Machine and Multilayer Perceptron Integrated with Orthogonal Least Square 906 <i>Rohilah Sahak, Wahidah Mansor, Lee YootKuan, Azlee Zabidi and Ahmad Ihsan Mohd Yassin</i>
7	12:22	20149	Knowledge Discovery from Activity Monitoring to Support Independent Living of People with Early Dementia 910 <i>Hoda Nikamalfard, Huiru Zheng, Haiying Wang, Paul Jeffers and Maurice Mulvenna</i>

7.4 Time: 13:40 - 14:05, 7 Jan 2012, Rose Hall 3 Invited Talk on "International Collaborations" Chair: Metin Akay, University of Houston, USA	
Time	Title and Speaker
13:40-14:05	International Collaborations <i>Dr. Semahat S. Demir, National Science Foundation</i>

7.5.1 Time: 14:05 - 15:35, 7 Jan 2012, Rose Hall 1
Mini Symposium on "Cardiovascular Health Informatics"
 Chair: Da Xing, MOE Key Laboratory of Laser Life Science & Institute of Laser Life Science, South China Normal University
 Co-chair: Fan Jiang, Key Laboratory of Cardiovascular Remodeling and Function Research, Shandong University, Jinan, China

Time	Title and Speaker
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14:05-14:20	Noninvasive Ultrasound Elastography and Contrast-Enhanced Parametric Imaging of Carotid Plaque <i>Prof. Mingxi Wan, Department of Biomedical Engineering, Xi'an Jiaotong University, China</i>
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14:20-14:35	Shear stress and atherosclerotic plaque stability <i>Prof. Fan Jiang, Key Laboratory of Cardiovascular Remodeling and Function Research, Shandong University, China</i>
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14:35-14:50	New Progress of Photoacoustic Imaging for Biomedical Applications <i>Prof. Da Xing, MOE Key Laboratory of Laser Life Science & Institute of Laser Life Science, South China Normal University, China</i>
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14:50-15:05	Cadiovascular MRI and Interventions <i>Prof. Bensheng Qiu, Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, China</i>
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15:05-15:20	Sensitive Detection of microRNA with Isothermal Amplification and Single Quantum Dot-Based Nanosensor <i>Dr. Chunyang Zhang, Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, China</i>
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7.5.2 Oral Session, Time: 14:05 - 15:35, 7 Jan 2012, Rose Hall 2
eHealth Systems: Interactivity and Interoperability
 Chair: Joseph Finkelstein, Johns Hopkins University, USA
 Co-chair: Liliana Ferreira, Fraunhofer Portugal Research Center AICOS, Portugal

#	Time	PIN	Title & Authors
1	14:05	20039	Quantitative Evaluation of the Recovery Stages from Hemiplegia Using a Game Controller 914 <i>Hiroyuki Hoshino and Michio Miyakawa</i>
2	14:17	20358	Using Gaming Platforms for Telemedicine Applications: A Cross-Platform Comparison 918 <i>Eunme Cha, Jeffrey Wood and Joseph Finkelstein</i>
3	14:29	20048	Development of Gesture Recognition-Based Serious Games 922 <i>Guan-Feng He, Jin-Woong Park, Sun-Kyung Kang and Sung-Tae Jung</i>
4	14:41	20087	An Interactive Assessment System for Children with Chronic Pain 926 <i>James Mc Cann, Haiying Wang, Huiru Zheng and Christopher Eccleston</i>
5	14:53	20357	Towards an Interoperable Health-Assistive Environment: the eHealthCom Platform 930 <i>Liliana Ferreira and Pedro Ambrosio</i>
6	15:05	20209	A Novel Framework for Event Stream Processing of Clinical Practise Guidelines 933 <i>Rishikesan Kamaleswaran, Carolyn McGregor and Andrew James</i>
7	15:17	20107	A Framework for Practice-Centred Awareness and Decision Support in Pervasive E-Health 937 <i>Obinna Anya, Hissam Tawfik, Atulya Nagar and Khalid Lootah</i>

7.5.3 Oral Session, Time: 14:05 - 15:35, 7 Jan 2012, Rose Hall 3
Special Session on Recent Advances and Challenges in Data Mining in Bio-Medicine
 Chair: Huseyin Seker, De Montfort University, UK
 Co-chair: Graham Ball, Nottingham Trent University, UK

#	Time	PIN	Title & Authors
1	14:05	20138	Global pairwise sequence alignment using Hidden Markov Models applied through different scoring schemes 941 <i>Mustafa Duran and Ihsan Bucak</i>
2	14:17	20356	Embolc Doppler Ultrasound Signal Detection Using Modified Dual Tree Complex Wavelet Transform 945 <i>Gorkem SERBES and Nizamettin AYDIN</i>
3	14:29	20355	Modeling Estrogen Receptor Pathways In Breast Cancer Using An Artificial Neural Networks Based Inference Approach 948 <i>Gopal Dhondalay, Christophe Lemetre and Graham Ball</i>
4	14:41	20225	Imbalanced Data Classifier By Using Ensemble Fuzzy C-Means Clustering 952 <i>Yucel Kocycigit and Huseyin Seker</i>

5	14:53	20012	The Effects of Time-Delay on Feedback Control of Depth of Anesthesia 956 <i>Shahab Abdulla and Peng Wen</i>
6	15:05	20161	Discovering Sequential Patterns in a UK General Practice Database 960 <i>Jenna Reys, Jonathan M. Garibaldi, Uwe Aickelin, Daniele Soria, Jack E. Gibson, Richard B. Hubbard</i>
7	15:17	20047	MS-Labeler: Bioinformatics support for quality assessment on high resolution mass spectrometry sample 964 <i>Dong Tong, Clare Coveney and Graham Ball</i>

7.6.2
Time: 15:35 - 16:20, 7 Jan 2012, Rose Hall 2
Special S.T.H.M. Forum on "Deployment of Telemedicine and Mobile Health"
Chair: Tsair Kao, Hungkuang University, Taiwan
Co-chair: Mang I Vai, University of Macau, Macau

Wearable Textile Sensor for Mobile Health
Chang-Ming Yang, MD
CEO, Ming Young Biomedical Corp., Taiwan

The Perspectives of Evolution for Telemedicine - The Experience of Implementation in Taiwan
Te-Pei Tang, MD
Director, Telecare Service Development Project Management Office,
Department of Health, Taiwan

Other Panelists (in alphabetical order):
Dr. Ye Li, SIAT – Institute of Biomedical and Health Engineering, Shenzhen, China
Dr. Carmen C.Y. Poon, The Chinese University of Hong Kong, Hong Kong SAR
Dr. Mang I Vai, University of Macau, Macau SAR

7.6.3
Time: 15:35 - 16:20, 7 Jan 2012, Rose Hall 3
Invited Talks on Technologies for Early Detection of Diseases
Chair: Robert Butera, Georgia Institute of Technology, USA
Co-chair: Yan Chen, SIAT – Institute of Biomedical and Health Engineering, China

Time	Title and Speaker
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15:35-15:55	DEP-Well: a new technique for electrophysiology <i>Prof. Michael Pycraft Hughes, University of Surrey, UK</i>
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15:55-16:15	Investigating the Effect of Nicotine on the Expression of Neuroprotective Genes <i>Prof. Metin Akay, Department of Biomedical Engineering, University of Houston, USA</i>
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7.7.1
Oral Session, Time: 17:00 - 18:30, 7 Jan 2012, Rose Hall 1
Clinical Information Systems
Chair: Fedor Lehocki, Slovak University of Technology in Bratislava, Slovak
Co-chair: Mario Magliulo, Italian National Council of Research, Italy

#	Time	PIN	Title & Authors
1	17:00	20141	Does e-Health technology design affect m-Health informatics acceptance? A case study 968 <i>Abdul Hakim Mohamed, Hissam Tawfik, Lin Norton and Dhiya Aljumeily</i>
2	17:12	20374	Novel technique Radio Frequency Identification (RFID) based to manage patient flow in a Radiotherapy Department 972 <i>Mario Magliulo, Laura Cella and Roberto Pacelli</i>
3	17:24	20148	Parent's Perspective of children with autism in North - Eastern Region of Thailand about requirements and factors involved caring children 976 <i>Kanisorn Jeekortok and Sumalee Chanchalor</i>
4	17:36	20154	The Study of Knowledge and Behaviors in Learning about Thai Herbs through Online Media 980 <i>Bunthida Chunngam and Sumalee Chanchalor</i>

7.7.2 Oral Session, Time: 17:00 - 18:30, 7 Jan 2012, Rose Hall 2 Personalized Healthcare Technology Chair: Matthias Reumann, IBM Research Co-chair: Liang Song, SIAT-Institute of Biomedical and Health Engineering, China				
#	Time	PIN	Title & Authors	
1	17:00	20315	New Soft Subspace Method to Gene Expression Data Clustering <i>Natthakan Iam-On and Tossapon Boongoen</i>	984
2	17:12	20386	Computer controlled Dynamic Wedge Collimator for Cancer Treatment Machine <i>Mayur Yelpale, Sanjay Pethe, Mandar Vidwans, Paresh Jadhav and M Jadhav</i>	988
3	17:24	20252	3D Computational Modeling of Epiretinal Prosthesis Stimulation of the Ganglion Cell <i>Shabnam Novin, Hamid Abrishami Moghaddam, Amir Masoud Sodagar and Amin Mahnam</i>	992
4	17:36	20373	An Intelligent Approach for Generation of Muscular Electrotherapy Stimulation Waveforms <i>Faisal Mahmood, Arslan Zia and Mehak Fatima</i>	997

7.7.3 Oral Session, Time: 17:00 - 18:30, 7 Jan 2012, Rose Hall 3 Point-of-care Technology and Rehabilitation Chair: Chunyang Zhang, SIAT-Institute of Biomedical and Health Engineering, China Co-chair: Sungkyu Seo, Korea University, Korea				
#	Time	PIN	Title & Authors	
1	17:00	20371	Wearable Patch for the Electrical, Durometry and Optical Skin Measurements in Tuberculin Skin Test <i>Wai Chun Chan, Lin Kai Li and Pun To Yung</i>	1001
2	17:12	20336	Design of DNA Biosensors and Amperometric Microchips Featuring Copper Electrodes <i>Motasem Ghanim and Mohd Zaid Abdullah</i>	1005
3	17:24	20262	Shadow Image Based High-throughput Continuous Cell Monitoring for Point-Of-Care and Telemedicine Applications <i>Geonsoo Jin, Inhwa Yoo, Ki Baek Yeo, Seung Pil Park, Unhwan Ha, Ji-Woon Yang, Seungoh Han, Se-Hwan Paek, and Sungkyu Seo</i>	1009
4	17:36	20100	A Tongue-Activated Emergency Beacon for Immobile Patients <i>Sean Sandy and Masood Mehmood Khan</i>	1012
5	17:48	20136	Estimation of Lower Limb Muscle Forces During Human Sit-to-stand Process With a Rehabilitation Training System <i>Enguo Cao, Yoshio Inoue, Tao Liu and Kyoko Shibata</i>	1016
6	18:00	20068	Validation of a Virtual Arm Model for Movement Control and Rehabilitation <i>Xin He, Yu-Fan Du and Ning Lan</i>	1020