TechnicalProgram

SUNDAY, 10 NOVEMBER 2013

14:00-18:30	Registration
18:30-18:45	Opening – *Imperial room* Welcome by the conference chairs Prof. K. S. Nikita and Prof. D. I. Fotiadis
18:45-19:00	Welcome by the Rector of Technical University of Crete Prof. V. Digalakis *Imperial room*
19:00-19:30	Plenary Lecture: **Prof. Robert W. Williams,** *University of Tennessee Health ScienceCenter, Memphis, USA* **"Systems Genetics: Experimental and Computational Challenges"** ***Chair:*** *Prof. Dimitrios I. Fotiadis*
19:30-20:00	Plenary lecture: **Mr. Anastasius Gavras,** *Member of the editorial board of the Eurescom, Germany* **"Emerging trends for decentralized e-health services in smart cities"** ***Chair:*** *Prof. Dimitrios I. Fotiadis*
20:00-20:30	Presentation of achievement award to Prof. N. Bourbakis and Prof. Y. T. Zhang *Imperial room*
20:30-22:30	Welcome cocktail- *Bar "Galini", Minoa Palace Resort & Spa* 

MONDAY, 11 NOVEMBER 2013

Imperial room 08:00-08:30	Invited lecture: **"An Overview of M-Health Medical Video Communication Systems"** **Prof. Constantinos S. Pattichis,** *University of Cyprus, Cyprus* ***Chair:*** *Prof. Michalis Zervakis*

Session M.1.1 - Imperial 1 room: 08:30-10:00

Special Session #2 - Porting Bio and Health Informatics to the Cloud

Chair: *Christoph Thuemmler*

M.1.1.1 - A Profile-based Trust Management Scheme for Ubiquitous Healthcare Environment

Georgia Athanasiou, Georgios Mantas, Maria-Anna Fengou, Dimitrios Lymberopoulos

M.1.1.2 - Creating dynamic and customized fetal growth curves using cloud computing

Mario Bochicchio, Antonella Longo, Lucia Vaira, Antonio Malvasi, Andrea Tinelli

M.1.1.3 - CloudStudy: A Cloud-Based System for Supporting Multi-Centre Studies

Amalia Tsafara, Christos Tryfonopoulos, Spiros Skiadopoulos

M.1.1.4 - An architecture for designing Future Internet (FI) applications in sensitive domains: Expressing the Software to data paradigm by utilizing hybrid cloud technology

Stelios Sotiriadis, Euripides Petrakis, Stefan Covaci, Paolo Zampognaro, Eleni Georga, Christoph Thuemmler

Session M.1.2 – Imperial 2 room: 08:30-10:00

NeuorEngineering, Neuromuscular Systems and Rehabilitation Engineering

Chair: *Athanasios Bibas*

M.1.2.1 - Controlling Variability of Air-Pulses to Determine the Thresholds of Laryngeal-Pharyngeal Reflexes by a Novel Device

Luis F Giraldo, Mauricio Agudelo, Mario Arbulu, Felipe Ortiz, Javier Burguete, Secundino Fernandez

M.1.2.2 - Quering Functional Brain Connectomics to Discover Consistent Subgraph Patterns

Nantia Iakovidou, Stavros Dimitriadis, Nikos Laskaris, Kostas Tsichlas

M.1.2.3 - Design and Simulation of Wheel-chaired Elliptical Stepping Exercise for Stroke Rehabilitation

Saiful Zaimy Yahaya, Zakaria Hussain, Rozan Boudville

M.1.2.4 - A system for optically controlling neural circuits with very high spatial and temporal resolution

Chethan Pandarinath, Eric Carlson, Sheila Nirenberg

M.1.2.5 - Towards an Overall 3-D Vector Field Reconstruction via Discretization and a Linear Equations System

Chrysa Papadaniil, Leontios Hadjileontiadis

Session M.1.3- Imperial 3 room: 08:30-10:00

Workshop – ISMSR-13

Healthcare Monitoring Technologies and Methods

Chair: *Nikolaos Bourbakis*

M.1.3.1 -TeleCare of Mental Disorders by Applying Semantic Web Technology

Chryssa Thermolia, Ekaterini Bei, Euripides Petrakis

M.1.3.2 - Microstate analysis of the EEG using Local Global graphs

Kostas Michalopoulos, Nikolaos Bourbakis

M.1.3.3 - A Low-Cost Embedded Real-Time 3D Stereo Matching System for Surveillance Applications

Georgia Rematska, Kyprianos Papadimitriou, Apostolos Dollas

M.1.3.4 - The MobiFall Dataset: An Initial Evaluation of Fall Detection Algorithms Using Smartphones

George Vavoulas, Matthew Pediaditis, Emmanouil Spanakis, Manolis Tsiknakis

M.1.3.5 - A wearable Ultrasound multi-transducer array system for Abdominal Organs Monitoring

Michael Tsakallakis, Nikolaos Bourbakis

M.1.3.6 - A Single Chip Solution for Pulse Transmit Time Measurement

Sasa Knezevic, Radovan Stojanovic

Imperial Lobby 10:00-10:30	Coffee Break	

Session M.2.1 – Imperial 1 room: 10:30-12:00

Computer Assisted Intervention Systems

Chair: *Christos Schizas*

M.2.1.1 - Electronic Health Record: Facilitating the Coding Process

Harris Soteriades, Kleanthis Neokleous, George Tsouloupas, Antonis Jossif, Schizas Christos

M.2.1.2 - Towards Efficient and Secure in-Home Wearable Insomnia Monitoring and Diagnosis System

Sana Tmar-Ben Hamida, Elyes Ben Hamida, Beena Ahmed, Adnan Abu-Dayya

M.2.1.3 - Guided Physical Exercise of Cardiac Patients during Rehabilitation: Adherence and Changes in Physiological Variables

Hilkka Runtti, Dimitris Filos, Mark van Gils, Ioanna Chouvarda, Anita Honka, Juha Pärkkä

M.2.1.4 - Ef-Zin: A hybrid framework for ubiquitous management of comorbidity and multimorbidity in chronic diseases.

Foteini Andriopoulou, Konstantinos Birkos, Dimitrios Lymberopoulos

M.2.1.5 - Detection of occlusal caries based on digital image processing

Georgia Koutsouri, Elias Berdouses, Evanthia Tripoliti, Constantine Oulis, Dimitrios Fotiadis

M.2.1.6 - On the Use of Smartphones for Detecting Obstructive Sleep Apnea

Mamoun Al-Mardini, Fadi Aloul, Assim Sagahyroon, Luai Al-Husseini

Session M.2.2 – Imperial 2 room: 10:30-12:00

Special Session #3 - Computational BioEngineering

Chair: *Nenad Filipovic*

M.2.2.1 - Multivariate Discriminant Analysis of Multiparametric Brain MRI to Differentiate High Grade and Low Grade Gliomas - A Computer-Aided Diagnosis Development Study

Füsun Çıtak Er, Zeynep Firat, Ilhami Kovanlikaya, Ugur Ture, Esin Ozturk Isik

M.2.2.2 - Blind Recovery of Cardiac and Respiratory Sounds Using Non-negative Matrix Factorization & Time-Frequency Masking

Ghafoor Shah, Constantinos Papadias

M.2.2.3 - Graph-theoretic analysis of scalp EEG brain networks in epilepsy - the influence of montage and volume conduction

Manolis Christodoulakis, Avgis Hadjipapas, Eleftherios Papathanasiou, Maria Anastasiadou, Savvas Papacostas, Georgios Mitsis

M.2.2.4 - Experimental and Numerical Investigation of Electromagnetic Field at Different Cancer Cell Lines

Nenad Filipovic, Tijana Djukic, Milos Radovic, Danijela Cvetkovic, Snezana Markovic, Branislav Jeremic

M.2.2.5 - Application of Data Mining Algorithms for Mammogram Classification

Milos Radovic, Marina Djokovic, Aleksandar Peulic

M.2.2.6 - Estimation of Blood Pressure Levels from Reflective Photoplethysmograph using Smart Phones

Aishwarya Visvanathan, Aniruddha Sinha, Arpan Pal

Session M.2.3 – Imperial 3 room: 10:30-12:00

Workshop-ISMSR-13

Computational Oncology: From mathematical models to clinical practice

Chair: *Michalis Zervakis*

M.2.3.1 - Towards in-vivo Validation of Computational (in silico) Models of Tumor Growth

V. Sakkalis

M.2.3.2 - Computational Development Models in the Micro-Environment of Cancer

M. Papadogiorgaki

M.2.3.3 - Improving Personalized Therapy Assessment in Cancer Patients based on MRI Image Analysis

K. Marias

M.2.3.4 - Stochastic Approaches for Personalized Modeling of Cancer

G. Mitsis

M.2.3.5 - On the use of Computational Models in Clinical Practice

P. Koliou

Open Discussion

Imperial room **12:00-12:30**	Invited lecture: **"Challenges and Opportunities in Cardiovascular Health Informatics"** **Prof. Yuan-Ting Zhang,** *Chinese University of Hong Kong, China* ***Chair:*** *Prof. Konstantina S. Nikita*

"Elia" restaurant **12:30-13:30**	Buffet Lunch 

Session M.3.1 – Imperial 1 room: 13:30 -15:30

Bio-Ontology and Data Mining

Chair: *Dimitrios Lymberopoulos*

M.3.1.1 -OnTheFly 2.0: A service to automatically annotate files and extract biological information.

Evangelos Pafilis, Georgios A. Pavlopoulos, Venkata P. Satagopam, Nikolas Papanikolaou, Heiko Horn, Christos Arvanitidis, Lars Juhl Jensen, Reinhard Schneider, Ioannis Iliopoulos

M.3.1.2 - Enhanced Probabilistic Latent Semantic Analysis with Weighting Schemes to Predict Genomic Annotations

Pietro Pinoli, Davide Chicco, Marco Masseroli

M.3.1.3 - Modified Free Energy Model to improve RNA secondary structure prediction with pseudoknots

Kwok-Kit Tong, Kwan-Yau Cheung, Kin-Hong Lee, Kwong-Sak Leung

M.3.1.4 - Classification of RNAs with Pseudoknots using k-mer Occurrences Count as Attributes

Kwan-Yau Cheung, Kwok-Kit Tong, Kin-Hong Lee, Kwong-Sak Leung

M.3.1.5 - Integrative Warehousing of Biomolecular Information to Support Complex Multi-Topic Queries for Biomedical Knowledge Discovery

Arif Canakoglu, Marco Masseroli, Stefano Ceri, Luca Tettamanti, Giorgio Ghisalberti, Alessandro Campi

Session M.3.2 – Imperial 2 room: 13:30 -15:30

Special Session #3 - Computational BioEngineering

Chair: *Nenad Filipovic*

M.3.2.1 - SIFEM Project: Semantic Infostructure interlinking an open source Finite Element tool and libraries with a model repository for the multi-scale Modelling of the inner-ear

Christos Bellos, Athanasios Bibas, Dimitrios Kikidis, Steve Elliott, Stefan Stenfelt, Ratnesh Sahay, Konstantina Nikita, Dimitrios Koutsouris, Dimitrios Fotiadis

M.3.2.2 - SIFEM Project: Finite Element Modeling of the Cochlea

Velibor Isailovic, Milica Obradovic, Dalibor Nikolic, Igor Saveljic, Nenad Filipovic

M.3.2.3 - Modeling of Abdominal Aorta Aneurism Rupture by using Experimental Bubble Inflation Test

Igor Koncar, Dalibor Nikolic, Suzana Pantovic, Mirko Rosic, Nikola Mijailovic, Nikola Ilic, Marko Dragas, Zivan Maksimovic, Lazar Davidovic, Nenad Filipovic

M.3.2.4 - Multi-process Dynamic Modeling of Tumor-specific Evolution

Achilleas Achilleos, Charalambos Loizidis, Marios Hadjiandreou, Triantafyllos Stylianopoulos, Georgios D. Mitsis

M.3.2.5 - Towards a Semantic Representation for Multi-Scale Finite Element Biosimulation Experiments

Andre Freitas, Margaret Jones, Kartik Asooja, Christos Bellos, Steve Elliott, Stefan Stenfelt, Panagiotis Hasapis, Christos Georgousopoulos, Torsten Marquardt, Stefan Decker, Ratnesh Sahay

M.3.2.6 - Modeling Atherosclerotic Plaque Growth: A Case Report Based on a 3D Geometry of Left Coronary Arterial Tree from Computed Tomography

Antonis I. Sakellarios, Panagiotis Siogkas, Lambros Athanasiou, Themis Exarchos, Michail Papafaklis, Christos Bourantas, Katerina Naka, Lampros Michalis, Nenad Filipovic, Oberdan Parodi, Dimitrios Fotiadis

Session M.3.3 – Imperial 3 room: 13:30 -15:30

Biomedical Signal Processing

Chair: *Nizamedin Aydin*

M.3.3.1 - A new approach to adaptive noise cancellation in synthetic auditory evoked potentials

Nurettin Acir, Engin Cemal Mengus

M.3.3.2 - Denoising Simulated EEG Signals: A Comparative Study of EMD, Wavelet Transform and Kalman Filter

Christos Salis, Anastasios Malissovas, Paschalis Bizopoulos, Alexandros Tzallas, Panagiotis Angelidis, Dimitrios Tsalikakis

M.3.3.3 - TRS-TMS: an EEGLAB plugin for the reconstruction of onsets in EEG-TMS datasets

Sara Petrichella, Luca Vollero, Florinda Ferreri, Giulio Iannello

M.3.3.4 - Unsupervised Approach for Measurement of Cognitive Load using EEG Signals

Diptesh Das, Debatri Chatterjee, Aniruddha Sinha

M.3.3.5 - EEG Epileptic Seizure Detection using k-Means Clustering and Marginal Spectrum based on Ensemble Empirical Mode Decomposition

Paschalis Bizopoulos, Dimitrios Tsalikakis, Alexandros Tzallas, Dimitrios Koutsouris, Dimitrios Fotiadis

M.3.3.6 - Synchronization coupling investigation using ICA cluster analysis in resting MEG signals in Reading Difficulties

Marios Antonakakis, Giorgos Giannakakis, Manolis Tsiknakis, Sifis Micheloyannis, Michalis Zervakis

Session M.4.1 – Imperial 1 room: 15:00-16:30

Bio-Imaging

Chair: *Dimitris Maroulis*

M.4.1.1 - EEG Identification of a localized 1-D neuronal excitation

George Dassios, Konstantia Satrazemi

M.4.1.2 - Analysis of errors and bounds in Electroencephalography

George Dassios, Michael Doschoris, Fotini Kariotou, Vasiliki Christina Panagiotopoulou

M.4.1.3 - The Influence of Surface Deformations on EEG Recordings

George Dassios, Michael Doschoris, George Fragoyannis

M.4.1.4 - 2D-GE Spot Detection Combining Multidirectional Texture and Spatial Intensity Cues

Eleni Zacharia, Eirini Kostopoulou, Dimitris Maroulis, Nicholas P. Anagnou, Kalliopi I. Pappa

M.4.1.5 - Local focus-tolerant image descriptors for classification of biological particles

Nefeli Vassiliki Politi-Stergiou, Ilias Theodorakopoulos, George Economou

M.4.1.6 - Improving Image Quality in Dual Energy CT by Edge-Enhancing Diffusion Denoising

Andreas Petropoulos, Georgios Vlachopoulos, Spyros Skiadopoulos, Anna Karahaliou, Lena Costaridou

Session M.4.2 – Imperial 2 room: 15:00-16:30

Special Session #5 - Advanced Concepts in Endoscopic Imaging and Engineering

Co-Chairs: *Dimitris K. Iakovidis, Anastasios Koulaouzidis*

M.4.2.1 - Towards a Multimodal Wireless Video Capsule for the Early Detection of Cancerous Polyps

Olivier Romain, Aymeric Histace, Juan Silva, Jad Ayoub, Bertrand Granado

M.4.2.2 - Capsule Endoscope Localization based on Visual Features

Dimitris Iakovidis, Evaggelos Spyrou, Dimitris Diamantis, Ilias Tsiompanidis

M.4.2.3 - Efficient Homography-Based Video Visualization for Wireless Capsule Endoscopy

Dimitris Iakovidis, Evaggelos Spyrou, Dimitris Diamantis

M.4.2.4 - Operation of Ingestible Antennas along the Gastrointestinal Tract: Detuning and Performance

Konstantinos Psathas, Anastasis Keliris, Asimina Kiourti, Konstantina Nikita

M.4.2.5 - A Comparison of Color Correction Algorithms for Endoscopic Cameras

Ioannis Constantinou, Marios Neofytou, Vasilis Tanos, Marios Pattichis, Christodoulos Christodoulou, Constantinos Pattichis

Session M.4.3 – Imperial 3 room: 15:00-16:30

Engineering Models in Bio-Medicine

Chair: *Carmelina Ruggiero*

M.4.3.1 - The Effects of Synthetic Azurocidin Peptide Analogue on Staphylococcus Aureus Bacterium

Jie Hu, Pantea Peidaee, Eltaher Elshagmani, Taghrid Istivan, Elena Pirogova

M.4.3.2 - Identification the Shape of Biconcave Red Blood Cells Using Histogram of Oriented Gradients and Covariance Features

George Apostolopoulos, Stefanos Tsinopoulos, Evaggelos Dermatas

M.4.3.3 - Feasibility Study on Serviced-based Method of Data Acquisition for Human Signal Molecule Profiling Database

Xinyan Zhao, Tao Dong

M.4.3.4 - 3D Printing: Basic concepts Mathematics and Technologies

Athanasios Anastasiou, Charalampos Tsirmpas, Alexandros Rompas, Kostas Giokas, Dimitris Koutsouris

M.4.3.5 - Polyelectrolyte Multilayer Coatings for Implant Osseointegration

Massimo Giulianelli, Roberta Ferretti, Laura Pastorino, Carmelina Ruggiero

Imperial Lobby **16:30-17:00**	Coffee Break 

Imperial room **17:00-19:00**	**Satellite event** **Panel discussion on knowledge-intensive entrepreneurship**

Session M.5.1 – Imperial 1 room: 19:00-20:30

Drug Discovery

Chair: *Dimitrios Koutsouris*

M.5.1.1 - An Isometry-Invariant Spectral Approach for Protein-Protein Docking

Dela De Youngster, Eric Paquet, Herna Lydia Viktor, Emil Petriu

M.5.1.2 - Drug Screening with Elastic-Net Multiple Kernel Learning

Kitsuchart Pasupa, Zakria Hussain, John Shawe-Taylor, Peter Willett

M.5.1.3 - A Fast Point Pattern Matching Algorithm for Robust Spatially Addressable Bead Encoding

Abhik Datta, Adams Wai-Kin Kong, Soumita Ghosh, Dieter Trau

M.5.1.4 - Implementation of Reversible Multiplier Circuit Using Deoxyribonucleic Acid

Ankur Sarker, Mohd. Istiaq Sharif, Tanvir Ahmed, Md. Atiqur Rahman, S. M. Mahbubur Rashid, Hafiz Md. Hasan Babu

Session M.5.2 – Imperial 2 room: 19:00-20:30

Algorithms, Modeling and Simulation of Bio-Sets

Chair: *Dimitrios Fotiadis*

M.5.2.1 - Biologically Inspired Near Extinct System Reconstruction

Athanasios Bibas, George Spanoudakis, Christos Bellos, Dimitrios Fotiadis, Dimitrios Koutsouris

M.5.2.2 - A Discrete Optimization Approach for SVD Best Truncation Choice based on ROC Curves

Davide Chicco, Marco Masseroli

M.5.2.3 - Studying the correlation between the extracellular environment geometry and the diffusion processes

Pantelis Ampatzoglou, Maria Hadjinicolaou

M.5.2.4 - Identification and correction of substitution errors in Moleculo long reads

Jared Price, Judson Ward, Joshua Udall, Quinn Snell, Mark Clement

M.5.2.5 - Short-term vs. Long-term Analysis of Diabetes Data: Application of Machine Learning and Data Mining Techniques

Eleni Georga, Vasilios Protopappas, Stavroula Mougiakakou, Dimitrios Fotiadis

Session M.5.3– Imperial 3 room: 19:00-20:30

Bio-Imaging

Chair: *George Spyrou*

M.5.3.1 - Segmentation of Enhanced Depth Imaging Optical Coherence Tomography Images Using Wavelet Based Graph Cut Algorithm

Hajar Danesh, Raheleh Kafieh, Hossein Rabbani

M.5.3.2 - A Level Set Based Method for Lung Segmentation in CT Images

Shiva Azimi, Hossein Rabbani

M.5.3.3 - The Use of Real-Time MRI Techniques for Imaging an Extended Field of View in Magnetic Resonance Angiography

Stephen Riederer, Casey Johnson, Paul Weavers

M.5.3.4 - Modeling of Solitary Pulmonary Nodules in PET/CT images using Monte Carlo Methods

George Tzanoukos, Anastasios Gaitanis Alexandros Georgakopoulos, Achilleas Chatziioannou, Sofia Chatziioannou, George Spyrou

M.5.3.5 - Comparison of EIT Reconstruction Techniques Applied to IMPETOM

Eduardo Santos, Franco Simini

M.5.3.6 - Evaluation of Modified Median Root Prior on a myocardium study, using realistic PET/MR data

Konstantinos Karaoglanis, Anastasios Gaitanis, Charalampos Tsoumpas

"Elia" restaurant 21:00-23:00	Barbeque	

TUESDAY, 12 NOVEMBER 2013

Imperial room **08:00-08:30**	Invited lecture: **"Implantable Microsystems for the Management of Trauma"** **Prof. Anthony Guiseppi–Elie**, *Clemson University, USA* ***Chair:*** *Prof. Dimitrios Lymberopoulos*

Session T.1.1 – Imperial 1 room: 08:30-10:00

Special Session #1 - Risk Analysis and Prediction in Cardiovascular Applications

Co-Chairs: *Renata Guarneri, Claudio Silvestro*

T.1.1.1 - The RT3S Project – An Introduction

Gabriele Dubini, Maria Renata Guarneri, Gordon Clapworthy, Nassos Katsaounis, Patricia Lawford, Euripides Petrakis, Michel Rochette, Claudio Silvestro, Debora Testi

T.1.1.2 - Real Time Prediction of the Fatigue Behavior of Peripheral Stents

Francesco Migliavacca, Michel Rochette, Florent Petiot, Christelle Biochon, Elena Dordoni, Gabriele Dubini, Giancarlo Pennati, Lorenza Petrini

T.1.1.3 - Reconstruction method of a stented coronary bifurcation model for fluid dynamic numerical analyses from optical coherence tomography images

Claudio Chiastra, Eros Montin, Francesco Burzotta, Luca Mainardi, Francesco Migliavacca

T.1.1.4 - AimaSimul: a software tool to plan stent positioning in peripheral arteries and evaluate the associated fatigue fracture risk

Debora Testi, Nigel J. B. McFarlane, Hui Wei, Youbing Zhao, Gordon J. Clapworthy, Desmond M. Ryan, Patricia Lawford

T.1.1.5 - Crafting Vascular Medicine Training Scenarios: The RT3S Authoring Tool

Evanthia Tripoliti, Ioannis Pappas, Euripides Petrakis, Josep Maria Sans

T.1.1.6 - Application of Decisional Models to the Health-Economic Assessment of New Interactive Clinical Software

Claudio Silvestro, Jonathan Michaels, Spiridoula Dimou, Evanthia Tripoliti, Euripides Petrakis

Session T.1.2 – Imperial 2 room: 08:30-10:00

Gene Expression Analysis & Bioinformatics Engineering

Chair: *Michalis Zervakis*

T.1.2.1 - A Generic Framework for the Elicitation of Stable and Reliable Gene Expression Signatures

Nick Chlis, Stelios Sfakianakis, Ekaterini Bei, Michalis Zervakis

T.1.2.2 -QLZCClust: Quaternary Lempel-Ziv Complexity based Clustering of the RNA-seq Read Block Segments

Ashis Kumer Biswas, Jean X. Gao

T.1.2.3 - Reconstructing Phylogenetic Network with ReTF algorithm (Rearranging Transcriptional Factor)

Shamita Malik, Dolly Sharma

T.1.2.4 - Inference of a robust diagnostic signature in the case of Melanoma: Gene Selection by Information Gain and Gene Ontology Tree Exploration

Ioannis Valavanis, Konstantinos Moutselos, Ilias Maglogiannis, Aristotelis Chatziioannou

T.1.2.5 - Feature Identification and Reduction for Improved Generalization Accuracy in Secondary-Structure Prediction

Seeley Matt, Mark Clement, Quinn Snell

Session T.1.3 – Imperial 3 room: 08:30-10:00

Sequence Search and Alignment & Systems Biology

Chair: *Aristotelis Chatziioannou*

T.1.3.1 - Some Results on Topological Colored Motifs in Metabolic Networks

Elói Araújo, Marco Aurélio Stefanes

T.1.3.2 - Prediction of Enzymatic Activity of Proteins Based on Structural and Functional Domains

Theodoros Koutsandreas, Eleftherios Pilalis, Aristotelis Chatziioannou

T.1.3.3 - Fast search of locally repetitive elements based on auto-correlation property in genome

Kyung-Seop Shin, Byung-Chang Chung, Woo-Chan Kim, Dong-Ho Cho

T.1.3.4 - A Comparison of Community Identication Algorithms for Regulatory Network Motifs

Douglas Oliveira, Marco Carvalho

T.1.3.5 - A Synthetic Biology Approach to the Realization of Embedded Feedback Controllers for Chemical Reaction Networks

Carlo Cosentino, Mariaconcetta Bilotta, Alessio Merola, Francesco Amato

Session T.1.4 – Imperial room: 08:30-10:00

Biomedical Image Processing, Analysis and Visualization

Chair: *Ilias Maglogiannis*

T.1.4.1 - Segmentation and Recognition of Multi-Food Meal Images for Carbohydrate Counting

Marios Anthimopoulos, Joachim Dehais, Peter Diem, Stavroula Mougiakakou

T.1.4.2 - Human Segmentation and Pose Recognition in Fish-eye Video for Assistive Environments

Kostas Delibasis, Theodosios Goudas, Vassilios Plagianakos, Ilias Maglogiannis

T.1.4.3 - HEp-2 Cells Classification Using Locally Aggregated Features Mapped in the Dissimilarity Space

Dimitrios Kastaniotis, Ilias Theodorakopoulos, George Economou, Spiros Fotopoulos

T.1.4.4 - A Scheme for X-ray Medical Image Denoising using Sparse Representations

Evmorfia Adamidi, Evangelos Vlachos, Aris Dermitzakis, Kostas Berberidis, Nicolas Pallikarakis

T.1.4.5 - A Comparison of Ultrasound Intima Media Thickness Measurements of the Left and Right Common Carotid Artery

Christos Loizou, Constantinos Pattichis, Niki Georghiou, Maura Griffin, Andrew Nicolaides

T.1.4.6 - Image registration of follow-up examinations in digital dermoscopy

Christos Nikolaos E. Anagnostopoulos, Dimitrios Vergados, Panagiotis Mintzias

Imperial Lobby 10:00-10:30	Coffee Break – *Imperial Lobby* 

Imperial room 10:30-11:00	Invited lecture: "Advances (Innovations) in Neurotechnology" **Prof. Metin Akay,** *University of Houston, USA* ***Chair:*** *Prof. Dimitrios Koutsouris*

Session T.2.1 – Imperial 1 room: 11:00-12:30

Special Session #4 - The Digital Patient concept: Vision and Early Demonstrations

Co-Chairs: *Feng Dong, Manolis Tsiknakis*

T.2.1.1- "Digital Patients and their impact on Healthcare"
Roderick Tooher

T.2.1.2 - Exploitation of patient avatars towards stratified medicine through the development of in silico clinical trials approaches

Marios Spanakis, Efrosini Papadaki, Apostolos Karantanas, Thomas G. Maris, Dimitris Kafetzopoulos, Vaggelis Sakkalis, Konstantinos Marias

T.2.1.3 - Designing a digital patient avatar in the context of the MyHealthAvatar project initiative

Evaggelia Maniadi, Haridimos Kondylakis, Emmanouil G. Spanakis, Marios Spanakis, Manolis Tsiknakis, Kostas Marias, Feng Dong

T.2.1.4 - A Virtual Individual's Model Based on Facial Expression Analysis: a Non-Intrusive Approach for Wellbeing Monitoring and Self-Management

Franco Chiarugi, Eirini Christinaki, Sara Colantonio, Giuseppe Coppini, Paolo Marraccini, Matthew Pediaditis, Ovidio Salvetti, Manolis Tsiknakis

T.2.1.5 - A Scalable Data Repository for Recording Self-Managed Longitudinal Health Data of Digital Patients

Xia Zhao, Youbing Zhao, Nikolaos Ersotelos, Dina Fan, Enjie Liu, Gordon Clapworthy, Feng Dong

T.2.1.6 - A Cross-platform Approach for Treatment of Amblyopia

Hui Wei, Youbing Zhao, George Saleh, Feng Dong, Gordon Clapworthy, Xujiong Ye

Session T.2.2 – Imperial 2 room: 11:00-12:30

Identification and Classification of Genes

Chair: *Michalis Zervakis*

T.2.2.1 - Candidate Biomarkers for Response to Tamoxifen in Breast Cancer metastatic patients

Claudia Cava, Gloria Bertoli, Italo Zoppis, Giancarlo Mauri, Maria Carla Gilardi, Isabella Castiglioni

T.2.2.2 - Automated Selection of Differentially Methylated Regions in Microarray Data

Pavlos Antoniou, Spiros Michalakopoulos, Elisavet Papageorgiou, Philippos Patsalis, Carolina Sismani

T.2.2.3 - Towards an Integrated Framework for Clinico-Biological Data Management and Analysis: the Case of Chronic Lymphocytic Leukemia

Evangelia Minga, Athanasios Gkoufas, Anna Vardi, Evangelia Stalika, Anastasia Hadzidimitriou, Kostas Stamatopoulos, Nicos Maglaveras, Ioanna Chouvarda

T.2.2.4 - Identifying Gender Independent Biomarkers Responsible for Human Muscle Aging Using Microarray Data

Emmanouil Sifakis, Ioannis Valavanis, Olga Papadodima, Aristotelis Chatziioannou

T.2.2.5 - Hierarchical Multi-Label Gene Function Prediction using Adaptive Mutation in Crowding Niching

Mina Moradi Kordmahalleh, Abdollah Homaifar, Dukka KC

Session T.2.3 – Imperial 3 room: 11:00-12:30

Biological Systems and Models

Chair: *Konstantina Nikita*

T.2.3.1 - A Model-Based Retrospective Analysis of the Fixed-Ratio Oscillometric Blood Pressure Measurement

Rein Raamat, Kersti Jagomagi, Jaak Talts, Jana Kivastik

T.2.3.2 - Accelerated MR Physics Simulations on multi-GPU systems

Christos Xanthis, Ioannis Venetis, Anthony Aletras

T.2.3.3- A Lumped Parameter Model for the Analysis of the Motion of the Muscles of the Lower Limbs under Whole-Body Vibration

Francesco Amato, Paolo Bifulco, Mario Cesarelli, Domenico Colacino, Carlo Cosentino, Antonio Fratini, Alessio Merola, Maria Romano

T.2.3.4 - A Mathematical Model for Secondary Structure in Proteins

Alexey Nikolaev, Saad Mneimneh

T.2.3.5 - Support vector-based fuzzy system for the prediction of mouse class I MHC peptide binding affinity

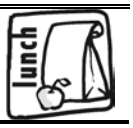
Volkan Uslan, Huseyin Seker

T.2.3.6 - A bioinformatics approach for investigating the determinants of Drosha processing

Nestoras Karathanasis, Ioannis Tsamardinos, Panayiota Poirazi

Imperial room **11:00-12:30**	**Satellite event** **Short seminar "From the lab to the market"**

Imperial room **12:30-13:00**	Invited lecture: **"Brain on a Chip: From Patterns to Circuits with Information Transfer"** **Prof. Bruce Wheeler,** *University of Florida, Gainesville, USA, IEEE EMBS President* ***Chair:*** *Prof. Konstantina S. Nikita*

"Elia" restaurant **13:00-14:00**	Buffet Lunch 

Session T.3.1 – Imperial 1 room: 14:00-15:30

Biomedical Image Processing, Analysis and Visualization

Chair: *Huseyin Seker*

T.3.1.1 - Gradient cumulative filtering to detect MRI thermometry artifacts

Juha Kortelainen, Juha Koikkalainen, Julius Koskela, Gösta Ehnholm

T.3.1.2 - Resting state and task related fMRI in small cell lung cancer patients

Konstantinos Bromis, Irene Karanasiou, George Matsopoulos, Errikos Ventouras, Nikolaos Uzunoglu, Georgios Mitsis, Eustratios Karavasilis, Matilda Papathanasiou, Nikolaos Kelekis, Vasileios Kouloulias

T.3.1.3 - Variations on breast density and subtlety of the findings require different computational intelligence pipelines for the diagnosis of clustered microcalcifications

Ioannis Andreadis, George Spyrou, Panos Ligomenides, Konstantina Nikita

T.3.1.4 - Generation of clustered microcalcifications' atlases for benign and malignant cases

Ioannis Andreadis, George Spyrou, Panos Ligomenides, Konstantina Nikita

T.3.1.5 - Performance Evaluation of Clustering Algorithms on Microcalcifications as Mammography Findings

Emmanouil Ikonomakis, George Spyrou, Panos Ligomenides, Michael Vrahatis

T.3.1.6 - Investigation of AM-FM Methods for Mammographic Breast Density Classification

Styliani Petroudi, Ioannis Constantinou, Chryso Tziakouri, Marios Pattichis, Constantinos Pattichis

Session T.3.2 – Imperial 2 room: 14:00-15:30

Functional Genomics, Proteomics

Co-Chairs: *Costas Papaloukas, Dimitrios Vergados*

T.3.2.1 - Impacts of the Different Spline Orders on the B-spline Association Estimator

Zeyneb Kurt, Nizamedin Aydin, Gökmen Altay

T.3.2.2 - Identification of signaling pathways related to drug efficacy in hepatocellular carcinoma via integration of phosphoproteomic, genomic and clinical data

Ioannis N Melas, Douglas A Lauffenburger, Leonidas G Alexopoulos

T.3.2.3 - Novel Biomarkers Discovery for HBV and HCV Monitoring Through Protein Interaction Networks Analysis

Thomas Simos, Costas Papaloukas, George Thyphronitis, Urania Georgopoulou

T.3.2.4 - Toll-like Receptor Structural Determinants: Variability Analysis by Digital Signal Processing Methods

Norbert Maggi, Patrizio Arrigo, Carmelina Ruggiero

T.3.2.5 - HRelief: A new algorithm relief hybrid for biological motifs selection

Faouzi Mhamdi, Hanen Mhamdi

Session T.3.3 – Imperial 3 room: 14:00-15:30

Data Visualization

Chair: *George Spyrou*

T.3.3.1 - Implementing Patient Recruitment on EURECA Semantic Integration Platform through a Groovy Query Engine

Brecht Claerhout, Kristof De Schepper, David Perez-Rey, Raul Alonso-Calvo, Jasper van Leeuwen, Anca Bucur

T.3.3.2 - A user interface design for a patient oriented digital patient

Nikolaos Ersotelos, Xia Zhao, Youbing Zhao, Enjie Liu, Gordon Clapworthy, Feng Dong

T.3.3.3 - Weighted Committee-Based Structure Learning for Microarray Data

Hasna Njah, Salma Jamoussi

T.3.3.4 -WebGL-based Interactive Rendering of Whole Body Anatomy for Web-oriented Visualisation of Avatar-centered Digital Health Data

Youbing Zhao, Xia Zhao, Nikolaos Ersotelos, Feng Dong, Enjie Liu, Gordon Clapworthy

Session T.3.4 – Imperial room: 14:00-15:30

Biomedical Data Engineering

Chair: *Panagiotis Bamidis*

T.3.4.1 - Clinical Decision Support Framework for Validation of Multiscale Models and Personalization of Treatment in Oncology

Anca Bucur, Jasper van Leeuwen, Traian Cristian Cirstea, Norbert Graf

T.3.4.2 - Molecular Clustering via Knowledge Mining from Biomedical Scientific Corpora

Panagiotis Hasapis, Dimitrios Ntalaperas, Christos Kannas, Aristos Aristodimou, Dimitrios Alexandrou, Thanassis Bouras, Athos Antoniades, Christos Georgousopoulos, Constantinos Pattichis, Andreas Constantinou

T.3.4.3 - Decision Tree Induction to Prediction of Prognosis in Severe Traumatic Brain Injury of Brazilian Patients from Florianopolis City

Merisandra Garcia, Ruano Pereira, Evandro Martins, Fernando Azevedo

T.3.4.4 -TeleRehabilitation: a novel service oriented platform to support Tele-Supervised rehabilitation programs for ICU patients

Nikolas Stylianides, Andreas Papadopoulos, Ioannis Constantinou, Loizos Loizou, Marios Dikaiakos, Theodoros Kyprianou

T.3.4.5 - In silico study of mechanical stresses at the cellular level during tissue development

Anne Jeannin-Girardon, Pascal Ballet, Vincent Rodin

T.3.4.6 - "Meleti" Speech and Language Development Support System

Efthyvoulos Kyriacou, Marina Charalambous, Charalambos Theodorou, Christos Iliophotou, George Hadjichristofi, Maria Ioannou

15:30-19:00	Excursion – Old city of Chania	

20:00-22:30	Congress Dinner – "Nikolas" tavern	

WEDNESDAY, 13 NOVEMBER 2013

Imperial room **08:30-09:00**	Invited lecture: **"Somatosensory Brain Machine Interfaces"** **Prof. Jose C. Principe,** *University of Florida, Gainesville, USA* ***Chair:*** *Prof. Aristotelis Chataziioannou*

Session W.1.1 – Imperial 1 room: 09:00-10:30

Gene Expression Analysis & Bioinformatics Engineering

Co-Chairs: *Aristotelis Chatziioannou, Dimitrios Vergados*

W.1.1.1 - Ensemble learning and hierarchical data representation for microarray classification

by Mattia Bosio, Pau Bellot, Philippe Salembier, Albert Oliveras-Vergés

W.1.1.2 - Stability of feature selection algorithms for classification in high-throughput genomics datasets

Panagiotis Moulos, Ioannis Kanaris, Gianluca Bontempi

W.1.1.3 - Frequent Weighted Itemset Mining from Gene Expression Data

Elena Baralis, Luca Cagliero, Tania Cerquitelli, Silvia Chiusano, Paolo Garza

W.1.1.4 - A Kernel SVM Algorithm to Detect Mislabeled Microarrays in Human Cancer Samples

Manuel Martín-Merino

W.1.1.5 - Similarity and Dissimilarity of Whole Genomes using Intuitionistic Fuzzy Logic

Subhram Das, D. K. Bhattacharya

Session W.1.2 – Imperial 2 room: 09:00-10:30

Cardiovascular and Respiratory Systems Engineering

Chair: *Francesco Migliavacca*

W.1.2.1 -Multiscale motion analysis of the carotid artery wall from B-mode ultrasound: investigating the optimal wavelet parameterization

Nikolaos Tsiaparas, Aimilia Gastounioti, Spyretta Golemati, Konstantina Nikita

W.1.2.2 - Modeling stent deployment in realistic arterial segment geometries: the effect of the plaque composition

Georgia Karanasiou, Antonis Sakellarios, Evanthia Tripoliti, Euripides Petrakis, Michalis Zervakis, Francesco Migliavacca, Gabriele Dubini, Elena Dordoni, Lambros Michalis, Dimitrios Fotiadis

W.1.2.3 - Identification of scalp blood flow in NIRS data based on Granger causality

Masako Sugai, Masaharu Adachi

W.1.2.4 - Low-power Hardware Implementation of Noise Tolerant Heart Rate Extractor for a Wearable Monitoring System

Shintaro Izumi, Masanao Nakano, Ken Yamashita, Takahide Fujii, Hiroshi Kawaguchi, Masahiko Yoshimoto

W.1.2.5 - Computational Study of Particle Deposition in Patient Specific Geometries

Marika Pilou, Anastasios Skiadopoulos, Evangelos Makris, Panagiotis Neofytou, Christos Housiadas

Session W.1.3 – Imperial 3 room: 09:00-10:30

Biomedical Signal Processing

Chair: *Konstantina Nikita*

W.1.3.1 - An Information Theoretic Approach to Classify Cognitive States Using fMRI

Itir Onal, Mete Ozay, Orhan Firat, Ilke Oztekin, Fatos T. Yarman Vural

W.1.3.2 - Resting State fMRI Analysis using a Spatial Regression Mixture Model

Vangelis P. Oikonomou, Konstantinos Blekas, Loukas Astrakas

W.1.3.3 - Developing a Simulator for Multispectral Optoacoustic Tomography

Efthymios Maneas, Stratis Tzoumas, Vasilis Ntziachristos, George Spyrou

W.1.3.4 -Spatio-Spectral Analysis of ECoG Signals during Voice Activity

Vasileios Kanas, Iosif Mporas, Heather Benz, Kyriakos Sgarbas, Nathan Crone, Anastasios Bezerianos

W.1.3.5 - LBP-Based Ear Recognition

Nazmeen Bibi Boodoo-Jahangeer, Sunilduth Baichoo

Imperial Lobby 10:30-11:00	Coffee Break 

Imperial room 11:00-11:30	Invited lecture: **"Wellness, Disease and Public Health Informatics: Multidimensional Global Threats with Local Impact"** **Prof. Luis Kun**, Center for Hemispheric Defense Studies at the National Defense University, USA ***Chair:*** *Prof. Manolis Tsiknakis*

Session W.2.1 – Imperial 1 room: 11:30-13:00

Gene Expression Analysis & Bioinformatics Engineering

Chair: *Georgios Potamias*

W.2.1.1 - Integrative Transcriptomic Analysis of Two Cell Lines elucidates the Architecture of Endoplasmic Reticulum Stress Signaling in Glioblastoma

Aristotelis Chatziioannou, Olga Papadodima, Nicolas Dejeans, Eric Chevet

W.2.1.2 - Enhancing the Performance of a Microarray Gridding Algorithm via GPU Computing Techniques

Stamos Katsigiannis, Eleni Zacharia, Dimitris Maroulis

W.2.1.3 -Bonferroni correction hides significant motif combinations

Aika Terada, Jun Sese

W.2.1.4 - Experimental Model Construction and Validation of the ErbB Signaling Pathway

Kalliopi Kalantzaki, Leyteris Koumakis, Ekaterini Bei, Michalis Zervakis, Georgios Potamias, Dimitrios Kafetzopoulos

W.2.1.5 - Prioritized Functional Analysis of Biological Experiments Using Resampling and Noise Control Methodologies

Eleftherios Pilalis, Aristotelis Chatziioannou

Session W.2.2 – Imperial 2 room: 11:30-13:00

Intelligent Therapeutic & Diagnostic Systems

Chair: *Anca Bucur, Costas Balas*

W.2.2.1 - Rectangular Patch Antenna on Split-ring Resonators Substrate for THz Brain Imaging: Modeling and Testing

Maria Koutsoupidou, Irene Karanasiou, Nikolaos Uzunoglu

W.2.2.2 - Towards Generalized Nuclear Segmentation in Histological Images

Abhishek Vahadane, Amit Sethi

W.2.2.3 - A New Modality for Quantitative Evaluation of Parkinson's Disease: In-Air Movement

Peter Drotar, Jiri Mekyska, Irena Rektorova, Lucia Masarova, Zdenek Smekal, Marcos Zanuy

W.2.2.4 - Food Volume Computation for Self Dietary Assessment Applications

Joachim Dehais, Sergey Shevchik, Peter Diem, Stavroula Mougiakakou

W.2.2.5 - A Hybrid Genetic Algorithm for the Selection of the Critical Features for Cardiovascular Complications Prognosis in Type 2 Diabetic Patients

Kalliopi Dalakleidi, Konstantia Zarkogianni, Vassilios Karamanos

Session W.2.3 – Imperial 3 room: 11:30-13:00

Clinical Engineering

Chair: *Maria Tereza Arredondo*

W.2.3.1 - Guidelines for the economic analysis of a telematic platform for Parkinson's disease monitoring

Jorge Cancela, Maria T Arredondo, Olivia Hurtado

W.2.3.2 - Preliminary Study on Optical Feature Detection for Head Tracking in Radiation Therapy

Tobias Wissel, Patrick Stüber, Benjamin Wagner, Ralf Bruder, Achim Schweikard, Floris Ernst

W.2.3.3 - Method for measuring the heart rate through fingertip using a low-end video camera and its application in self care

Lucian Pestritu, Alexandra Todiruta, Maria Goga, Nicolae Goga

W.2.3.4 - A CUDA based digital X-ray image stitching algorithm

Jiaxiang Huang, Xu Xu

W.2.3.5 - An Asthma Management Framework for the RespDoc Clinical Decision Support System Based on the Combination of the Official Clinical Guidelines

Aikaterini Rigopoulou, Dimitrios Lymberopoulos

W.2.3.6 - Smart Cards in Healthcare Information Systems: Benefits and Limitations

Anastasis Keliris, Vassileios Kolias, Konstantina Nikita

Session W.2.4 – Imperial: 11:30-13:00

Biomedical Signal Processing

Chair: *Ilias Maglogiannis*

W.2.4.1 - Influence on Skin Temperature and Blood Flow of Thermal and Massage Stimuli

Hirotaka Inoue, Hiroshi Hagiwara

W.2.4.2 - Efficient C Level Hardware Design for Floating Point Biomedical DSP Applications

Christoforos Economakos, Harry Sidiropoulos, George Economakos

W.2.4.3 - Classification of Atrio-Ventricular Reentrant Tachycardia using Intracardiac Signals

Wajeeha Nafees, Bushra Riaz, Nauman Razzaq, Wardah Iftikhar, Tahir Zaidi

W.2.4.4 - Estimation of ECG Parameters using Photoplethysmography

Rohan Banerjee, Aniruddha Sinha, Arpan Pal, Anurag Kumar

W.2.4.5 - Performance Analysis of Multi-frequency SSVEP-BCI Using Clear and Frosted Colour LED Stimuli

Surej Mouli, Ramaswamy Palaniappan, Ian P Sillitoe, John Q Gan

W.2.4.6 - Does Music affect HRV impulse? -A time domain study

Anilesh Dey, Sayan Mukherjee, Sanjay Kumar Palit, D. K. Bhattacharya, D.N. Tibarewala

Imperial Lobby 13:00-13:30	Light Lunch	

Session W.3.1 – Imperial 1 room: 13:30-15:00

Engineering Models in Bio-Medicine

Chair: *Dimitrios Lymberopoulos*

W.3.1.1 - An in-silico Model for Solid Tumor Growth based on the Concept of Glycolysis

Michail Kounelakis, Maria Papadogiorgaki, Michail Zervakis

W.3.1.2 - Personalized Glucose-Insulin Metabolism Model based on Self-Organizing Maps for Patients with Type 1 Diabetes Mellitus

Konstantia Zarkogianni, Eleni Litsa, Konstantina Nikita

W.3.1.3 - Unsupervised Clustering of Patient-Centric Models to Cluster-Centric Models for Ubiquitous Healthcare Environment

Maria-Anna Fengou, Iosif Mporas, Dimitrios Lymberopoulos

W.3.1.4 - Biomedical Magnetic Induction Tomography Using Two-Arm Archimedean Spiral Coil: A Feasibility Study

Ziyi Zhang, Peiguo Liu, Dongming Zhou, Hengdong Lei

Session W.3.2 – Imperial 2 room: 13:30-15:00

NeuorEngineering, Neuromuscular Systems and Rehabilitation Engineering

Co-Chairs: *Wei Chen, Panagiotis Bamidis*

W.3.2.1 - A new Multiple ANFIS model for classification of hemiplegic gait

Ahmet Yardimci

W.3.2.2 - Ultra-fast Epileptic Seizure Detection Using EMD based on Multichannel Electroencephalogram

Wei Chen, Yan-Yu Lam, Chia-Ping Shen, Hsian-Ya Sung, Jeng-Wei Lin, Ming-Jang Chiu, Feipei Lai

W.3.2.3 - Handgrip estimation based on total variation denoising filtering for control applications

Julio Reategui, Gonzalo Cucho, Paul Rodrigues, Rocio Callupe, Ericka Madrid

W.3.2.4 - Speech Perception: Single Trial Analysis of the N1/P2 Complex of Unimodal and Audiovisual Evoked Responses

George Zouridakis, Martijn Baart, Jeroen Stekelenburg, Jean Vroomen

W.3.2.5 - Model free predictive control of human heart rate and blood pressure

Amirehsan Sarabadani Tafreshi, Stefania Bernasconi, Verena Klamroth-Marganska, Silvio Nussbaumer, Robert Riener

W.3.2.6 - Enabling e-services based on affective exergaming, social media and the semantic web: a multitude of projects serving the citizen-centric vision for ICT in support of pHealth

Panagiotis Bamidis

Session W.3.3 – Imperial 3 room: 13:30-15:00

Biomedical Data Engineering

Chair: *Huseyin Seker*

W.3.3.1 -SNOMED CT Normal Form and HL7 RIM binding to normalize clinical data from cancer trials

Antonio Rico-Diez, Santiago Aso-Lete, David Perez-Del-Rey, Raul Alonso-Calvo, Anca Bucur, Brecht Claerhout, Victor Maojo

W.3.3.2 - Recommending medical documents by user profile

Kleanthi Lakiotaki, Angelos Hliaoutakis, Serafim Koutsos, Euripides Petrakis

W.3.3.3 - Med-Tree: A User Knowledge Graph Framework for Medical Applications

Maunendra Sankar Desarkar, Sandip Bhaumik, Sailesh Kumar Sathish, Satnam Singh, Rangavittal Narayanan

W.3.3.4 - Querying Phenotype-Genotype Associations across Multiple Knowledge Bases using Semantic Web Technologies

Oya Deniz Beyan, Aftab Iqbal, Yasar Khan, Athos Antoniades, John Keane, Panagiotis Hasapis, Christos Georgousopoulos, Myrto Ioannidi, Stefan Decker, Ratnesh Sahay

W.3.3.5 - A RF Sensor for in vivo Measurements of the Dielectric Properties of Anisotropic Tissue

Liang Zhang, Dongming Zhou, Peiguo Liu, Xiuzhen Dong

W.3.3.6 - Automated prediction procedure for Charcot-Marie-Tooth disease

Athanasios Alexiou, Maria Psiha, Georgia Theocharopoulou, Panayiotis Vlamos

Imperial room 15:00-15:30	Closing remarks – Student Paper Competition Awards