Poster Session Abstracts, Monday August 3 2015

Poster Session Details

The IWSP7 poster session will be held in the 5th floor common room of the Kenneth Myer Building. To get there take the lift in the foyer. The lift location is shown in the back of this program.

Poster numbers occur at the beginning of the titles for each abstract. On the day it should be pretty easy to find the posters you want to see.

Posters will be arranged into 5 categories:

> Epilepsy Mechanisms
> Prediction, Detection & Control
> Seizure Localisation, Imaging, and Networks
> Computational Modelling
> Model-based Estimation

For poster presenters: the maximum poster dimensions allowed are A0 (portrait or landscape). To determine your poster number check the list of poster titles below.

List of Numbered Poster Titles and First Authors

Epilepsy Mechanisms

1. INTERICTAL SPIKES AND EPILEPTIC SEIZURES

Philippa Karoly

2. EPILEPSY IN A DISH: DELIVERING THE PROMISE OF PRECISION MEDICINE

Dulini Mendis

3. FUNCTIONAL RESOLUTION OF LOCAL FIELD POTENTIALS IN THE RAT EPILEPTIC HIPPOCAMPUS

François Laurent

4. NEUROVASCULAR DECOUPLING DURING EPILEPTOGENESIS IN RATS

Rafael Torres

5. GABAA RECEPTOR ACTIVATION TRIGGER ICTAL EVENTS IN IN VITRO/IN VIVO SEIZURE MODELS

Michael Chang

6. TARGETED DRUG THERAPY IN DRAVET SYNDROME

Carol J. Milligan

7. CARBAMAZEPINE AND PHENYTOIN INHIBIT NATIVE SODIUM CURRENTS IN MURINE OSTEOBLASTS – A PROPOSED MECHANISM FOR REDUCED BONE QUALITY IN EPILEPSY

Sandra J. Petty

8. A POSSIBLE MECHANISM FOR THE INVOLVEMENT OF THE PIRIFORM CORTEX IN SEIZURE GENERALISATION

Robertson JJR

9. FUNCTIONAL CORRELATES OF SEVERITY IN GLUT1 DISORDERS

Sasha M. Zaman

10. ISSUE OF PHARMACORESISTANCE: IS SK-CHANNEL OPENER AN EFFECTIVE DRUG TARGET?

Muhammad Liaquuat Raza

11. EVALUATION OF EPILEPTIFORM DISCHARGES AS ELECTROGRAPHIC BIOMARKERS FOR EPILEPTOGENESIS

Hoameng Ung

Prediction, Detection, and Control

12. PREICTAL TIME, POSTICTAL EFFECTS, AND SEIZURE CLUSTERING IN EEG-BASED SEIZURE PREDICTION IN NATURALLY OCCURRING CANINE EPILEPSY

Yogatheesan Varatharajah

13. EARLY SEIZURE TYPE PREDICTION BASED ON A SINGLE INTRACRANIAL EEG CHANNEL - A PROOF OF CONCEPT

Cristian Donos

14. SCALE-FREE PROPERTIES OF INTRACEREBRAL EEG IMPROVE SEIZURE PREDICTION IN MESIAL TEMPORAL LOBE EPILEPSY

Kais Gadhoumi

15. CONTINUOUS SINGLE PULSE ELECTRICAL STIMULATION AS A SEIZURE PREDICTOR

Antonio Valentin

16. INTRINSIC EXCITABILITY MEASURES TRACK ANTI-EPILEPTIC DRUG ACTION AND UNCOVER INCREASING/DECREASING EXCITABILITY OVER THE WAKE/SLEEP CYCLE

Christian Meisel

17. A SUB-SCALP SEIZURE MONITORING IMPLANT FOR EPILEPSY PATIENT MANAGEMENT

Alan Lai

18. DESIGNING PATIENT-SPECIFIC OPTIMAL NEUROSTIMULATION PATTERNS FOR SEIZURES FROM HUMAN SINGLE UNIT HIPPOCAMPAL DATA

Roman A. Sander

19. EVALUATING SUBSPACE ANGLES OF EEG SIGNALS FOR THE DETECTION OF EPILEPTIC SEIZURES

Wanzhi Qiu

20. PERFORMANCE OF SYNCHRONY AND SPECTRAL-BASED FEATURES IN EARLY SEIZURE DETECTION: EXPLORING FEATURE COMBINATIONS AND EFFECT OF LATENCY

Vincent Adam, Joana Soldado-Magraner

21. DETECTION OF EPILEPTIC SEIZURE USING SUPPORT VECTOR MACHINE AND LINEAR DISCRIMINANT CLASSIFIERS

Muhammad Khizar Abbas

22. SEIZURE PREDICTION IN EPILEPSY: LEVEL CROSSING ANALYSIS

V. Senger

23. A WIRELESS SYSTEM FOR MONITORING EPILEPSY IN HYDROCEHALUS PATIENTS

Anand Narayanaswamy

24. PATIENT-AWARE EPILEPTIC SEIZURE PREDICTION IN THE CONTEXT OF M-HEALTH SYSTEMS

Zaher Dawy

25. EARLY DETECTION OF EPILEPTIC SEIZURES

Hilda A. Cerdeira

26. EPILEPTIC SEIZURE PREDICTION: NONLINEAR DYNAMIC FEATURES AND MACHINE LEARNING TECHNIQUES

Arya Rajendran

27. SEIZURE PREDICTION USING POLYNOMIAL SUPPORT VECTOR MACHINE CLASSIFICATION

Zisheng Zhang

28. AUTOMATED DETECTION OF EPILEPTIFORM SIGNATURES IN ELECTROENCEPHALOGRAPHY

Piyush Swami

29. A STUDY OF EEG–EMG FEATURE CORRELATION FOR STARTLE TYPE EPILEPTIC SEIZURES

B.Pushpa

30. EPILEPTIC SEIZURE DETECTION OF MULTICHANNEL EEG

USING RELATIVE POWER FEATURES AND PARTICLE SWARM OPTIMISATION METHOD

D.Najumnissa Jamal

31. EEG SIGNAL COMPRESSION USING COMPRESSIVE SENSING METHOD AND DETECTION OF ALZHEIMER'S DISEASE (AD) BASED ON RELATIVE POWER

Parnasree Chakraborty

32. NON-CONTACT ELDERLY INFRARED BODY TEMPERATURE TELEMONITORING SYSTEM WITH XBEE WIRELESS PROTOCOL

Tonny Heng Yew Ling

Seizure Localisation, Imaging, and Networks

33. EFFECT OF GENERAL ANAESTHESIA ON EPILEPTIFORM DISCHARGES AND BOLD SIGNAL DURING EEG-FMRI IN CHILDREN WITH LENNOX GASTAUT SYNDROME

Catherine Bailey

34. SEIZURE DYNAMICS, NETWORK TOPOLOGY AND THE INFORMATION SPREAD BETWEEN DIFFERENT BRAIN REGIONS

George Petkov

35. PERI-ICTAL CHANGES IN GRAPH THEORY MEASURES OF FUNCTIONAL MRI CONNECTIVITY IN FOCAL EPILEPSY

Jennifer M. Walz

36. VIRTUAL CORTICAL RESECTION OF THE EPILEPTIC NETWORK REVEALS CONTROLLERS OF SEIZURE DYNAMICS

Aankit N. Khambhati

37. NETWORK SEGREGATION PATTERNS HALLMARK SEIZURE-NEIGHBORING STATES IN PATIENTS STUDIED WITH SEEG

Alessandro Principe

38. SEIZURE PROPAGATION IN TUBEROUS SCLEROSIS - INTRACRANIAL EEG ANALYSIS

Lakshminarayanan Kannan

39. TOWARDS TRANSLATING HFOS AS A BIOMARKER OF THE SEIZURE ONSET ZONE

S. Gliske

40. APPLICATIONS OF PRE-ICTAL AND ICTAL FMRI IN CHILDHOOD EPILEPSY

Sarah Barton

Computational Modelling

57. NEW INSIGHTS FOR THE BASAL GANGLIA IN CONTROLLING ABSENCE SEIZURES

Mingming Chen

58. SEIZURE SUPPRESSION IN A COMPUTATIONAL MODEL USING A REINFORCEMENT LEARNING DEEP BRAIN STIMULATION STRATEGY

Vivek Nagaraj

59. MODELLING THE PROPAGATION OF EPILEPTOGENIC DISCHARGES

Sébastien Naze

60. A PYTHON IMPLEMENTATION OF A NEURAL FIELD MODEL ON THE CORTICAL SURFACE

Paula Sanz-Leon

61. OPTOGENETIC STIMULATION AND EPILEPTIFORM ACTIVITY IN A MEAN FIELD MODEL OF THE HUMAN CORTEX

Prashanth Selvaraj

62. DIFFUSION MRI BASED PATIENT-SPECIFIC MODELLING AND CONTROL OF SEIZURES

Peter Neal Taylor

63. POTASSIUM CURRENTS AND GAMMA OSCILLATIONS IN A REALISTIC COMPUTER MODEL OF THE CA3 HIPPOCAMPAL REGION

Ilya Varfolomeev

64. GAMMA OSCILLATION FREQUENCY MODULATES THE EFFICIENCY OF MEMORY ENCODING AND RETRIEVAL IN A COMPUTER MODEL OF THE HIPPOCAMPUS

Ilya Varfolomeev

65. MECHANISMS UNDERLYING DIFFERENT FOCAL SEIZURE ONSET PATTERNS

Yujiang Wang

66. EFFECTS OF THE EXTRACELLULAR POTASSIUM CONCENTRATION AND T-TYPE CALCIUM CHANNEL BLOCKERS ON NEURAL DYNAMICS

Tianlin Ying

Model-based Estimation

67. IDENTIFICATION OF MULTI-SCALE NEURAL MASS MODELS OF FOCAL SEIZURES

Amirhossein Jafarian

68. A MULTIPLE-MODEL BASED ESTIMATION ALGORITHM FOR NEURAL MASS MODELS OF EPILEPSY

Michelle S. Chong

69. THE ROLE OF NETWORKS IN IDIOPATHIC GENERALISED EPILEPSY

Helmut Schmidt

70. FITTING EPILEPTIFORM SPIKE PROPAGATION PATTERNS TO A MODIFICATION OF THE WILSON-COWAN COMPUTATIONAL MODEL OF NEURAL ACTIVITY

Ann C Vanleer

71. MOLECULE TO MECHANISM – MODELLING NMDA-R AUTOANTIBODY ASSOCIATED ABNORMALITIES IN NEURAL DYNAMICS

Rosch RE

72. A TAXONOMY OF SEIZURE DYNAMICS

Jared Scott