



3rd World Congress on Genetics, Geriatrics and Neurodegenerative Diseases Research

25 -28 October 2018, Toronto, Canada

<http://www.genedis.eu/>

CONFERENCE PROGRAM

THURSDAY AFTERNOON October 25, 2018

Venue	Hilton DoubleTree Meeting Room
18:00-21:00	Presentation of Research Center on Computational Biomarkers (RCCBm)
18:00-19:00	Panayiotis Vlamos , Professor and Head of the Department of Informatics, Ionian University Title: Scope of the RCCBm
19:00-20:00	Ioannis Tarnanas , Senior Researcher at the University of Bern, Switzerland, Gerontechnology and Rehabilitation group at the ARTORG Center for Biomedical Engineering Research Title: The meaning and the potential use of Computational Biomarkers
20:00-21:00	Kotsireas Ilias , Professor in Physics & Computer Science, Wilfrid Laurier University-Waterloo, Ontario, Canada Title: High Performance Computing for Computational Biomarkers
Discussion	

FRIDAY MORNING October 26, 2018

Workshop on Mathematical Modeling Methodologies in Computational Neurodegeneration	
Venue	Fields Institute
09:00-11:00	PART I - Neurodegenerative disease mathematical modelling
09:00-09:30	Panayiotis Vlamos , Professor and Head of the Department of Informatics, Ionian University Title: Mathematical Modeling in Computational Neurodegeneration
09:30-10:00	Astero Provata , Research Director, Institute of Nanoscience & Nanotechnology, NCSR Demokritos, Vice-Chairman of the Complex Systems and Applications (COSA) Network Title: Chimera states in the dynamics of neuron networks
10:00-10:30	Maria Hadjinicolaou , Professor of Applied Mathematics, School of Science and Technology, Hellenic Open University Title: Mathematical aid for understanding cardiovascular diseases related to aging
10:30-11:00	Questions-Discussion
11:00-11:30	Coffee Break
11:30-13:00	PART II - Applied information processing and visualization
11:30-12:00	Themis Exarchos , Assistant Professor, Department of Informatics, Ionian University, Greece Title: Decision support systems in neurodegenerative diseases diagnosis, treatment and management
12:00-12:30	Greg Anderson , Dean Office of Applied Research & Graduate Studies at Justice Institute of British Columbia Title: Neural basis of movement education
12:30-13:00	Questions-Discussion
13:00-14:00	Lunch Break

14:00-15:30	PART III -Digital health and mixed realities
14:00-14:30	Ioannis Tarnanas , Senior Researcher at the University of Bern, Switzerland, Gerontechnology and Rehabilitation group at the ARTORG Center for Biomedical Engineering Research Title: Predicting progression from normal cognition to mild cognitive impairment for individuals at 5 years
14:30-15:00	Michael Harney , MS Bioinformatics, Sr. Data Architect, Health Catalyst, Salt Lake City, Utah Title: The Effects of Quantum Entanglement on Chromatin and Gene Expression
15:00-15:30	Questions-Discussion
15:30-16:00	Coffee Break
16:00-17:00	PART IV -Data Mining, Metaheuristics, High-performance Computing
16:00-16:30	Phivos Mylonas , Associate Professor, Department of Informatics, Ionian University Title: The convergence of data analytics techniques in medical applications
16:30-17:00	Ilias Kotsireas , Professor in Physics & Computer Science, Wilfrid Laurier University- Waterloo, Ontario, Canada Title: Data Mining Techniques in Neurodegeneration
17:00	Closing

FRIDAY AFTERNOON October 26, 2018

Venue	Lennox Hall, Theatre
18:00-22:30	Official Opening
17:00-18:30	Registration
18:30-19:00	Welcome addresses
19:15-20:00	<p style="text-align: center;">Key Note address</p> <p style="text-align: center;">Chair: Panayiotis Vlamos</p> <p>Paxinos George Professor, AO DSc FASSA FAA, NHMRC Australia Fellow, Neuroscience Research Australia, Barker St and Hospital Rd, Randwick, Sydney Title: <i>Brain & Mind: Who is the puppet and who the puppeteer?</i></p>
20:15-21:00	<p style="text-align: center;">Key Note address</p> <p style="text-align: center;">Chair: Ilias Kotsireas</p> <p>Lyketsos Constantine, MD, MHS, Elizabeth Plank Althouse Professor, Director, Memory and Alzheimer's Treatment Center, Chair, Bayview Department of Psychiatry and Behavioral Sciences, Johns Hopkins Medicine Title: <i>"Treatment development for Alzheimer's disease: How are we doing?"</i></p>
21:00	Welcome Cocktail

SATURDAY October 27, 2018

Venue	Lennox Hall, Theatre
10:15-13:00	Neuroscience and Modern Technology
10:15-11:00	<p align="center">Key Note address</p> <p align="center">Chair: Ioannis Tarnanas</p> <p>Styliani Geronikolou, PostDoc Researcher at Biomedical Research Foundation of the Academy of Athens. First Dep. Pediatric, Un. Athens Med School Agia Sophia Hospital, Un. Res Inst.for Malignant Dis in childhood</p> <p>Title: <i>Mobile Phone Use Effect on Autonomic Nervous and Cardiac Systems</i></p>
11:15-12:00	<p align="center">Key Note address</p> <p align="center">Chair: Ioannis Tarnanas</p> <p>Vasiliki Machairaki, M.Sc., Ph.D., Assistant Professor of Neurology, Johns Hopkins School of Medicine</p> <p>Title: <i>Human pluripotent stem cells as in vitro models of neurodegenerative diseases</i></p>
12:15-13:00	<p align="center">Key Note address</p> <p align="center">Chair: Ioannis Tarnanas</p> <p>Spyridon Doukakis, Educator Mathematics, Computer Science, ICT, Neuroeducation, Distance Learning, Teacher Education and Training Villanova University</p> <p>Title: <i>Exploring Brain Activity in Visual and Textual Programming using Neuroeducation Approaches</i></p>
13:00-14:00	Lunch Break

SATURDAY October 27, 2018

Venue	Lennox Hall, Theatre
14:00-15:30	Neuropsychology and Aging
14:00-14:30	<p align="center">Key Note address</p> <p align="center">Chair: Themis Exarchos</p> <p>Eva Kehayia, PhD Associate Professor School of Physical and Occupational Therapy McGill University</p> <p>Title: <i>What psycholinguistics, neurolinguistics and the real environment can tell us about language, communication and mobility in aging</i></p>
14:30-15:00	<p align="center">Key Note address</p> <p align="center">Chair: Themis Exarchos</p> <p>Christos Plakiotis Unit Head, Aged Persons Mental Health Service, Monash Health, Adjunct Senior Lecturer, Department of Psychiatry, Monash University</p> <p>Title: <i>What does the literature tell us about the welfare of psychiatrists in training?</i></p>
15:00-15:30	<p align="center">Key Note address</p> <p align="center">Chair: Themis Exarchos</p> <p>Panagiotis Roussos, Associate Professor of Psychiatry and Genetics and Genomic Sciences at the Icahn School of Medicine at Mount Sinai</p> <p>Title: <i>Big Data Analysis and Genetic Liability to Neuropsychiatric Disease</i></p>
15:30-16:00	Coffee Break

SATURDAY October 27, 2018

Venue	Lennox Hall, Theatre
16:15-19:00	Neurodevelopment and Neurodegeneration
16:15-17:00	<p align="center">Key Note address</p> <p align="center">Chair: Phivos Mylonas</p> <p>Christos Yapijakis, Assistant Professor of Neurogenetics 1st Department of Pediatrics, School of Medicine National & Kapodistrian University of Athens, Greece Title: <i>Regulatory role of microRNAs in brain development and function</i></p>
17:15-18:00	<p align="center">Key Note address</p> <p align="center">Chair: Phivos Mylonas</p> <p>Benjamin Wolozin, MD, PhD, Professor, School of Medicine, Boston University Title: <i>Membrane-less organelles and RNA binding proteins: The biological underpinnings of neurodegeneration</i></p>
18:15-19:00	<p align="center">Key Note address</p> <p align="center">Chair: Phivos Mylonas</p> <p>Dimitrios Kapogiannis, Clinical Investigator, Laboratory of Neurosciences, National Institute on Aging; Associate Professor, Department of Neurology, Johns Hopkins University Title: <i>Exosome biomarkers revolutionize preclinical diagnosis of neurodegenerative diseases and assessment of treatment responses in clinical trials</i></p>
19:00	Gala Dinner

SUNDAY October 28, 2018

Venue	ROYAL ONTARIO MUSEUM (ROM)
09:15 – 11:00	Animal Models of Brain Structure and Function
09:15-10:00	<p align="center">Key Note address</p> <p align="center">Chair: Astero Provata</p> <p>Taraviras Stavros Prof. Department of Physiology at the Medical School, University of Patras, Director Stem Cell Laboratory</p> <p>Title: <i>Getting insights into human hydrocephalus from mouse model</i></p>
10:15-11:00	<p align="center">Key Note address</p> <p align="center">Chair: Astero Provata</p> <p>Clifford Kentros, Professor, NTNU, Kavli Institute for Systems Neuroscience, Kentros Research Group, Norway</p> <p>Title: <i>Molecular genetic dissection of the neural circuitry of memory</i></p>
11:00-12:00	Coffee Break
12:15 – 14:00	Recent Advances in Neurodegeneration
12:15-13:00	<p align="center">Key Note address</p> <p align="center">Chair: Ilias Kotsireas</p> <p>Nektarios Tavernarakis, Chairman of the Board of Directors, Foundation for Research and Technology, Research Director, Inst. of Molecular Biology and Biotechnology, Prof. of Molecular Systems Biology, Medical School, Univ.of Crete</p> <p>Title: <i>Regulation and roles of autophagy in the brain</i></p>
13:15-14:00	<p align="center">Key Note address</p> <p align="center">Chair: Ilias Kotsireas</p> <p>Nikolaos Robakis, Professor of Psychiatry, Neuroscience and experimental therapeutics, First A.P. Slaner family Professor for Alzheimer disease research. Icahn School of Medicine at Mount Sinai</p> <p>Title: <i>What do recent clinical trials teach us about the etiology of Alzheimer's neurodegeneration</i></p>
14:00-15:00	Lunch Break

SUNDAY October 28, 2018

15:15 – 17:00	Social Interaction of Neurodegenerative Patients
15:15-16:00	<p style="text-align: center;">Key Note address</p> <p style="text-align: center;">Chair: Panayiotis Vlamos</p> <p>Joseph DeSouza, Associate Professor Systems Neuroscience, York University, Toronto</p> <p>Title: <i>Learning choreography in expert ballet dancers and people with Parkinson's disease</i></p>
16:15-17:00	<p style="text-align: center;">Key Note address</p> <p style="text-align: center;">Chair: Panayiotis Vlamos</p> <p>Kristine Newman, Associate Professor at Ryerson University in the Faculty of Community Services, Daphne Cockwell School of Nursing in Toronto, Ontario, Canada</p> <p>Title: <i>Engaging social interest and creating awareness for the behavioral and psychological symptoms of dementia</i></p>
17:00	Closing