



GENEDIS 24

GENOMICS
NEUROSCIENCE
& DATA INNOVATION

ATH 17-20
OCT 2024

6th “Genomics, Neuroscience, Therapeutics & Data Innovation Summit”

UNDER THE PATRONAGE OF: H.E. the President of the Hellenic Republic Ms. Katerina Sakellariopoulou.



GENEDIS²⁴

GENOMICS
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CONFERENCE PROGRAM

Thursday Afternoon October 17, 2024

18:00-21:00

Hellenic Initiative Against Alzheimer's Disease (HIAAD) Private Event

Friday Morning October 18, 2024

VENUE	Pharos, Stavros Niarchos Foundation Cultural Center
09:00-09:45	Registration
09:45-10:00	Welcome addresses
10:00-10:30	<p>Welcome Panel</p> <p>Paul Schulz, MD, Professor, Director, Neurocognitive Disorders Center, McGovern Medical School, University of Texas Health Science Center at Houston (UTHealth), USA</p> <p>Thrasylvoulos Karydis, Co-Founder & Chief Technical officer, Deepcure Inc</p> <p>Panagiotis Vlamos, PhD, Professor, Bioinformatics and Human Electrophysiology Laboratory, Department of Informatics, Ionian University, Greece</p>

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Friday Morning October 18, 2024

10:30-12:30	Panel Discussion
	Session Title: "Use of Anti-Amyloid Monoclonal Antibodies to Treat Alzheimer's Disease – Controversies and Practicalities"
	Chairs: Constantine Lyketsos, Nikolaos Scarmeas
10:30-10:45	Nikolaos Scarmeas, MD, MS, Associate Professor, Neurology, Columbia University, USA & Professor, Neurology, University of Athens, Greece Title: "Overview of efficacy and safety."
10:45-11:00	Paul Rosenberg, MD, Professor, Department of Psychiatry & Behavioral Sciences, School of Medicine, Johns Hopkins University, USA Title: "The challenge of Amyloid Related Imaging Abnormalities (ARIASs)."
11:00-11:15	Haroon Burhanullah, MD, Assistant Professor, Department of Psychiatry & Behavioral Sciences, School of Medicine, Johns Hopkins University, USA Title: "Deployment of monoclonals in clinical care: the Johns Hopkins experience."
11:15-11:30	Chara Kani, MSc, PhD, Head of Medicines Division, E.O.P.Y.Y., Greece Title: "Approval and funding of monoclonals for use in Greece."
11:30-12:30	Open Q&A Constantine Lyketsos, MD, MHS, Elizabeth Plank Althouse Professor, Johns Hopkins University & Chair, Department of Psychiatry and Behavioral Sciences, Johns Hopkins Bayview, USA
12:30-13:30	Lunch Break



CONFERENCE PROGRAM

Friday Afternoon October 18, 2024

13:30-14:50	Keynote addresses
	Session Title: "The impact of stress in the brain."
	Chair: Panagiotis Vlamos
13:30-13:50	<p>Nikolaos Daskalakis, MD, PhD, Associate Professor, Department of Psychiatry, Harvard Medical School, USA</p> <p>Title: "Systems Biology Dissection of Trauma-Related Risk and Disease Processes Across Brain Regions, Omic Layers, Cell-types and Blood."</p>
13:50-14:10	<p>Paige Seegan, PhD, Assistant Professor, Department of Psychiatry & Behavioral Sciences & Director of Behavior Medicine Services for the Division of Pediatric Nephrology & Pediatric Dialysis Program, Johns Hopkins University, USA</p> <p>Title: "Digital Mental Health Applications for Anxiety and Depression: Current Evidence, Limitations, and Future Directions."</p>
14:10-14:30	<p>Nuno Sousa, MD, PhD, Professor & President, School of Medicine, University of Minho, Portugal</p> <p>Title: "The neuromatrix of stress."</p>
14:30-14:50	<p>John Sotiropoulos, PhD, Researcher C, Group leader, Institute of Biosciences & Applications, NCSR Demokritos, Greece</p> <p>Title: "Chronic Stress and Exosomes in precipitation and diagnosis of Alzheimer's Disease."</p>
14:50-15:10	Networking - Break



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Friday Evening October 18, 2024

15:10-17:30	Keynote addresses
	Session Title: "Disease Mechanisms and Neural Dynamics."
	Chair: John Sotiropoulos
15:10-15:30	<p>Josephine Egan, MD, Chief, Diabetes Section, Laboratory of Clinical Investigation, IRP/NIA/NIH & Clinical Director, IRP/NIA/NIH, USA</p> <p>Title: "The Origins of Intracerebral Insulin."</p>
15:30-15:50	<p>Bez Wolozin, MD, PhD, Professor, Department of Anatomy and Neurobiology, Chobanian and Avedisian School of Medicine, Boston University, USA</p> <p>Title: "The Cellular Phase of Alzheimer's disease: Intersection of the RNA metabolic stress response with tau in neurodegeneration."</p>
15:50-16:10	<p>Vasiliki Machairaki, PhD, Assistant Professor, Department of Genetic Medicine, Johns Hopkins, USA</p> <p>Title: "iPSC-based disease modeling & drug discovery in Alzheimer's Disease."</p>
16:10-16:30	<p>Arno Villringer, MD, Professor, Director, Department of Neurology, Max Planck Institute for Human Cognitive and Brain Sciences (MPI CBS), Leipzig, Germany</p> <p>Title: "Why cardiovascular diseases are neurological and vice versa."</p>
16:30-16:50	<p>Kyung-Min Noh, PhD, Group Leader, Genome Biology Unit, European Molecular Biology Laboratory (EMBL), Heidelberg, Germany</p> <p>Title: "Deciphering Disease Mechanisms: CRISPRi and Single-Cell Multiomics Analysis of Chromatin Regulators."</p>
16:50-17:10	<p>Clifford Kentros, PhD, Professor, Kavli Institute of Systems Neuroscience, Norwegian University of Science and Technology (NTNU), Norway</p> <p>Title: "Celltype-specific dissection of the Neural Circuitry of Memory."</p>
17:10-17:30	<p>Christos Yapijakis, MS, DMD, PhD, Associate Professor, 1st Department of Pediatrics, School of Medicine, National Kapodistrian University of Athens, "Aghia Sophia" Children's Hospital, Greece</p> <p>Title: "Genetics and Epigenetics of Oral Cancer."</p>
17:30-18:00	Networking - Break



CONFERENCE PROGRAM

Friday Evening October 18, 2024

18:00-18:20	Keynote addresses
	Session Title: "Nanotechnology"
	Chair: Panagiotis Vlamos
18:00-18:20	<p>Costas Demetzos, PhD, Professor, Pharmaceutical Nanotechnology, Director, Laboratory of Pharmaceutical Technology, Department of Pharmacy, University of Athens, Greece</p> <p>Title: "Complexity at nanoscale. New challenges in therapeutics."</p>
18:20-19:20	Book launch
	<p>Title: "Nanotechnology in Therapeutics. Basics and Trends., Wiley, 2024"</p> <p>Author: Prof. Costas Demetzos</p>
	Chair: Themis Exarchos
18:20-18:30	<p>Dennis Douroumis, PhD, Professor, Pharmaceutical Technology and Process Engineering & Director of Centre for Research Innovation (CRI), Faculty of Engineering and Science, University of Greenwich, UK</p> <p>Title: "Recent advancements in nanomedicine challenges and oppotunities."</p>
18:30-18:40	<p>Themis Exarchos, PhD, Associate Professor, Department of Informatics, Ionian University, Greece</p> <p>Title: "Artificial intelligence, bioinformatics and nanopharmaceuticals."</p>
18:40-18:50	<p>Nikolaos Naziris, MSc, PhD, Pharmacist, Department of Pharmacy, University of Athens, Greece</p> <p>Title: "New health technologies in industry and clinical practice."</p>
18:50-19:00	<p>Maria Chountoulesi, MSc, PhD, Pharmacist, UNI-PHARMA S.A., Greece</p> <p>Title: "Nanotechnological platforms intended for the delivery of biomolecules."</p>
19:00-19:10	Closing - Efstathios P. Efstathopoulos , PhD, Professor, Medical Physics, Vice-Rector for Administrative Affairs and Student Welfare, National and Kapodistrian University of Athens, Greece
19:10-19:20	Open Q&A - Costas Demetzos , PhD, Professor, Pharmaceutical Nanotechnology, Director, Laboratory of Pharmaceutical Technology, Department of Pharmacy, University of Athens, Greece



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Saturday Morning October 19, 2024

09:00-11:00	Keynote addresses
	Session Title: "Advances in the field of neurodegenerative diseases."
	Chair: Constantine Lyketsos
09:00-09:20	<p>Katerina Akassoglou, PhD, Professor, Department of Neurology, University of California, San Francisco, Senior Investigator, Gladstone Institute of Neurological Disease Director, Center for Neurovascular Brain Immunology, Gladstone Institutes, UCSF, USA</p> <p>Title: "Blood drivers of neurodegeneration: Translating basic discoveries to the clinic."</p>
09:20-09:40	<p>Panteleimon Giannakopoulos, MD, Medical Direction, University of Geneva Hospitals and Faculty of Medicine, University of Geneva, Switzerland</p> <p>Title: "Alzheimer's disease: the era of biomarkers."</p>
09:40-10:00	<p>George Paxinos, PhD, NHMRC Senior Principal Research Fellow, Neuroscience Research Australia and Scientia Professor, The University of New South Wales, Australia</p> <p>Title: "Mind and Brain – The Puppet and the Puppeteer".</p>
10:00-10:20	<p>Vasilis Ntziachristos, PhD, Professor, Chair of Biological Imaging (CBI) - Technical University Munich, Germany & Director, Institute of Biological and Medical Imaging (IBMI) - Helmholtz, Munich, Germany</p> <p>Title: "Optoacoustics for advancing biomedical observation."</p>
10:20-10:40	<p>Christos Plakiotis, MD, Unit Head, Aged Persons Mental Health Service, Monash Health & Adjunct Senior Lecturer, Department of Psychiatry, Monash University, Australia</p> <p>Title: "Establishing a Novel Psychogeriatric Nursing Home (PGNH) InReach Service: A Multidisciplinary Team Approach to Mental Health Treatment in Residential Aged Care."</p>
10:40-11:00	<p>Maria Chountoulesi, MSc, PhD, Pharmacist, UNI-PHARMA S.A., Greece</p> <p>Title: "Collaborative research strategy between pharmaceutical industry & academia."</p>
11:00-11:20	Networking - Break



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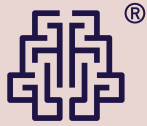
Saturday Afternoon October 19, 2024

11:20-13:00	Keynote addresses
	Session Title: "Bioinformatics in a clinical setting."
	Chair: Samuel Danso
11:20-11:40	<p>Roy Adams, PhD, Assistant Professor, Department of Psychiatry & Behavioral Science, Johns Hopkins School of Medicine, USA</p> <p>Title: "Evaluating and comparing electronic health records-based dementia risk models for memory clinic and primary care settings."</p>
11:40-12:00	<p>Samuel Danso, PhD, Senior Lecturer, School of Computer Science, University of Sunderland, UK & Fellow, Centre for Dementia Prevention & Centre for Clinical Brain Sciences, University of Edinburgh, UK</p> <p>Title: "Explainable Deep Learning Models for Early Detection of Alzheimer's Disease based on ATN Framework."</p>
12:00-12:20	<p>Nikolaos Hatzakis, PhD, Professor, Department of Chemistry & NanoScience Center, University of Copenhagen, & Director of Novo Nordisk foundation center for Optimized oligo escape and control of disease, & Director of Novo Nordisk foundation center for 4D cellular dynamics, Novo Nordisk Foundation Center for Protein Research, Denmark</p> <p>Title: "Decoding Protein Aggregation in Live Cells: Single Molecule recordings, 4D cell imaging and Machine Learning analysis."</p>
12:20-12:40	<p>Michael Harney, CEO, Terrahertz Ventures, USA</p> <p>Title: "The Determination of Physiological Variables Using a Local Analysis of Gravitational Resonances."</p>
12:40-13:00	<p>Maria Hadjinicolaou, PhD, Professor, Director of the Applied Maths Laboratory, School of Science and Technology, Hellenic Open University, Greece</p> <p>Title: "Towards Precise Modelling of Diffusion Across the Blood-Brain Barrier."</p>
13:00-14:00	Lunch Break



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14:00-15:40	Keynote addresses
	Session Title I: "Therapeutic approaches & disease intervention."
	Chair: Paul Rosenberg
14:00-14:20	<p>Dimitrios Kapogiannis, MD, Clinical Investigator, Human Neuroscience Section/Laboratory of Clinical Investigation, NIA/NIH, USA</p> <p>Title: "Metabolic interventions for brain aging and Alzheimer's disease: results of clinical studies for 5-2 intermittent fasting and an oral ketone ester."</p>
14:20-14:40	<p>Paul Schulz, MD, Professor, Director, Neurocognitive Disorders Center, McGovern Medical School, University of Texas Health Science Center at Houston (UTHealth), USA</p> <p>Title: "Routine viral and bacterial vaccinations appear to reduce the risk for developing Alzheimer's."</p>
14:40-15:00	<p>Taisuke Tomita, PhD, Professor, Laboratory of Neuropathology and Neuroscience, The University of Tokyo, Japan</p> <p>Title: "Targeting neuroinflammation in drug discovery strategy for Alzheimer disease."</p>
15:00-15:20	<p>Javier Ortiz, PhD, Assistant Professor, Neurocognitive Disorders Center, McGovern Medical School, University of Texas Health Science Center at Houston (UTHealth), USA</p> <p>Title: "Investigating Novel Disease Modifying Therapies for Early Alzheimer's Disease."</p>
15:20-15:40	<p>Thrasyvoulos Karydis, Co-Founder, CTO, DeepCure Inc</p> <p>Title: "Unlocking Novel Chemical Space for Inflammation Therapeutics with AI and Automation."</p>
15:40-16:00	Networking - Break



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Saturday Afternoon October 19, 2024

16:00-17:20	Keynote addresses
	Session Title II: "Therapeutic approaches & disease intervention."
	Chair: Stavros Taraviras
16:00-16:20	<p>Georgios Skretas, PhD, Director, Institute for Bio-innovation, Biomedical Sciences Research Center "Alexander Fleming", Greece & Associated Researcher, Institute of Chemical Biology, National Hellenic Research Foundation, Greece</p> <p>Title: "Engineered microbes as a platform for discovering molecular rescuers of neurotoxic protein misfolding and aggregation."</p>
16:20-16:40	<p>Christina Dalla, PhD, Professor, Pharmacology, 2nd Dep. of Obstetrics-Gynecology, Aretaieio Hospital, Medical School, National & Kapodistrian University of Athens, Greece</p> <p>Title: "The role of sex and gender in neuropsychiatric research: neuroestrogens as novel pharmacological targets."</p>
16:40-17:00	<p>Dimitrios Vlachakis, PhD, Associate Professor, Department of Biotechnology, Agricultural University of Athens, Greece</p> <p>Title: "From irrational to rational to inspirational structure-based drug design."</p>
17:00-17:20	<p>Stavros Taraviras, PhD, Professor, Department of Physiology, Medical School, University of Patras, & Director Stem Cell Laboratory, Greece</p> <p>Title: "Towards a gene therapy approach for human hydrocephalus."</p>
17:20-17:45	Networking - Break



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Saturday Afternoon October 19, 2024

17:45-19:15	Workshop
	Title: "Interdisciplinary Approaches for the Diagnosis and Treatment of Neurodegenerative Diseases. The Role of Nanotechnology and Complexity."
	Chair: Vasiliki Machairaki
17:45-18:00	Ioannis Tsihchlis, MSc, Pharmacist, Department of Pharmacy, University of Athens, Greece Title: "Hybrid lipid-polymer nanoparticles for gene delivery to mitochondria."
18:00-18:15	Maria Tsakiri, MSc, Pharmacist, Department of Pharmacy, University of Athens, Greece Title: "Genistein-loaded exosome-inspired nanoparticles: development and in vitro evaluation on human iPSCs-derived neurons."
18:15-18:30	Nikolaos Naziris, MSc, PhD, Pharmacist, Department of Pharmacy, University of Athens, Greece Title: "Classic and New Technologies for Studying the Biophysics of Complex Nanosystems."
18:30-18:45	Stavros Stavrinides, PhD, Professor, Physics Department, Democritus University of Thrace, Greece Title: "Emerging complexity in nanoscale."
18:45-19:00	Michael Hantias, PhD, Associate Professor, Physics Department, Democritus University of Thrace, Greece Title: "Critical Phenomena and Neurodegenerative Diseases."
19:00-19:15	Open Q&A - Discussion
19:15-19:30	Closing, Panagiotis Vlamos



CONFERENCE PROGRAM

Sunday October 20, 2024

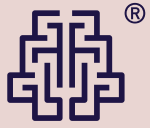
Sessions on demand

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