

20th Annual SBMT

World Congress of Society for Brain Mapping and Therapeutics
Los Angeles, California, USA

Breaking Boundaries of Science, Technology, Medicine, Art, and Healthcare Policy

Program



WBMF Gala "Gathering for Cure" will be held at the Intercontinental Hotel, Downtown LA
February 17th, 2023 For more information visit: www.Worldbrainmapping.org

February 16th-19th, 2023 at the Los Angeles Convention Center, 1201 S. Figueroa St. Los Angeles, CA 90015

Exhibition, Workshops, Didactics, Bio-skills/Cadaver Labs (Brain and Spine) and International Brain Mapping Foundation Gala

Our Audience includes: neurosurgeons, radiologists, neurologists, psychiatrists, rehabilitation medicine physicians, cardiologists, pulmonologists, bio-ethicists, oncologists, radiation oncologists, neuroscientists, engineers, physicists, psychologists, industry leaders, neuro-oncologists, orthopedic/spine surgeons, nanotechnologists, pharmacists, stem cell scientists, computer/data scientists, biochemists, Post-docs, residents and fellows.



Society for Brain Mapping
and Therapeutics



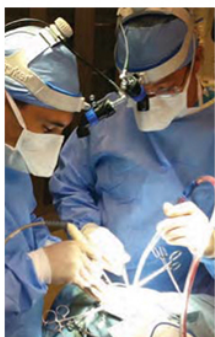
20th Annual SBMT

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Dear Industry Supporter,

The SBMT Board of Directors invites you to the 20th Annual Congress, February 16th-19th, 2023 at the LA Convention Center, Los Angeles, California.

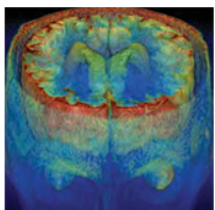


The 2023 World Congresses will be supported by the US Government as well as many prominent US and international Universities and institutions. The program will represent state-of-the-art science and technology in the field of neuroscience, engineering, neurosurgery, psychiatry, psychology, molecular biology, neurology, radiology, and oncology.

This world-class scientific event will bring together physicians, scientists, policymakers, funding agencies, and industry to further advance the applications in brain and spinal cord mapping and image-guided therapies (operative and non-operative). The meeting is designed to facilitate the integration of nanotechnology and cellular therapy with medical devices and imaging.

The theme of the meeting is

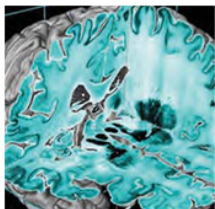
***"Breaking Boundaries of Science,
Technology, Medicine, Art, and Healthcare Policy."***



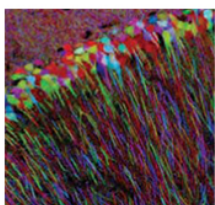
This year SBMT will pay special attention to delivering this audience to the exhibit floor by creating specific initiatives, including oral poster presentations in the exhibit hall, conference breaks, and a wine and cheese reception.

Showcase your innovative products with exhibition space on the trade show floor or by supporting one of our sponsorship programs.

We can also customize a program to present your innovative brand in front of the attendees. This trade show and conference provide you with a significant opportunity to interact with recognized leaders in the field, meet potential investors, find new markets, benefit from the exchange of ideas, and sell your technology.



The SBMT Board of Directors appreciates your support and prompt response. We look forward to partnering with you to ensure an exceptional Congress in Los Angeles, California. Together, we push the boundaries of science and technology.



Vicky Yamamoto, PhD
20th SBMT President (2022-2023)

Babak Kateb, MD
SBMT Chairman and CEO

Kheerty Sunder, MD
Industry Committee Co-Chair

Jason Cormier
19th SBMT President (2021-2022)

Farzad Massoudi, MD
Industry Committee Co-Chair

Namath Hussein, MD
Industry Committee Co-Chair



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TOPICS COVERED BY WORLD LEADERS IN THIS MEETING:

Neurosurgery (e.g. image guided therapy, intraoperative navigation, nanoneurosurgery, stereotactic radiosurgery, minimally invasive therapy, vascular neurosurgery, functional neurosurgery, neurotrauma/military medicine, neurosurgical oncology, surgical simulation, Peripheral nerve disorders...)

Neurology (e.g. EEG, ERP, movement disorders, neurodegenerative diseases (Alzheimer, Parkinson, and Huntington), neuro-oncology, neuromodulation, epilepsy, neuroanesthesia and pain, brain and spinal cord function...)

Psychiatry &

Psychology (e.g. opioid and addiction, anxiety disorder, autism, sleep, medical imaging for psychiatric conditions such as schizophrenia, depression, PTSD...)

Radiology, Neuro-Oncology and Radiation Oncology

(e.g. fMRI, MEG, PET, nuclear medicine, MRSI, MR-PET, DTI, CT-PET, focused ultrasound, MSI/MEG, ultra-high and low field MRI and interventional radiology, neuro-oncology, Gamma-Knife, Cyberknife, radiation physics, ZAP, medical Oncology...)

Neuroscience (e.g. stem cell, molecular neuroscience, image guided mapping of genes, proteomics, genomics, neurophysiology, nanoneuroscience, aging, CBD,...)

Neurovascular surgery (e.g. risk of Spinal Cord Injury and Stroke during Aortic procedures and new protective measures, new dynamic modalities of MRA & MRV in diagnosis of vascular diseases, Neurovascular imaging, Angiogenesis stimulation and stem cells research, new aggressive approach to Stroke management, endovascular treatment of Cerebral aneurysms, Vascular Disease in Patients with Multiple Sclerosis, Chronic Cerebrospinal Venous Insufficiency (CCSVI) in pathophysiology of MS, carotid disease identification & management in Stroke prevention)

Neurotechnology &

Engineering (e.g. artificial intelligence, fractal geometry, super computing, neurophotonics, biomaterial & tissue engineering, human brain machine interface, brain and spinal cord devices, nanomedicine, extraterrestrial/space medicine & clinical practice, software engineering, electrical and material engineering, aeronautic engineering/space medicine and radiation physics/oncology as well as robotics...)

Nano-Bio-Electronics &

Nanoneurosurgery (e.g. integration of stem cell/cellular therapy with nanotechnology, medical devices and imaging...)

Spine &

Nanospine (e.g. regeneration, stem cell, imaging, implants, biologics, materials, hardware and techniques)

Policy and Business Development (e.g. business plan workshops, health care policy issues that affect treatment delivery, usage of certain devices/drugs/imaging technologies, FDA regulations and reimbursements, federal and regional regulation impacting health care delivery and research funding, initiative and congressional legislation...)

Visual Processing (e.g. research on retinal processing and its impact on modulation of autonomic, endocrine and limbic functions, visual influence on movement and behavior (including mental health diagnoses), effect of delayed visual development in autism and other developmental disabilities, visual circuitry disruptions from autonomic dysregulation, concussions and other brain injuries, advancements in optical assessments, sensory integration, virtual/augmented/mixed reality...)



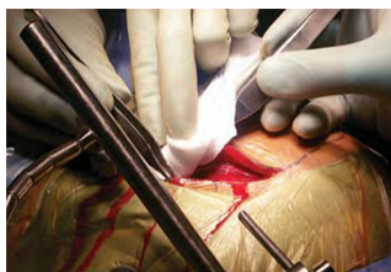


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SBMT MISSION STATEMENT



International Brain Mapping and Intraoperative Surgical Planning Society (IBMISPS) DBA SBMT is a non-profit society organized for the purpose of encouraging basic and clinical scientists as well as engineers who are interested in areas of Brain Mapping and Therapeutics to improve the diagnosis, treatment, and rehabilitation of patients afflicted with neurological disorders. This society promotes public welfare and improves patient care through the translation of new technologies into life-saving diagnostic and therapeutic procedures. The Society is committed to excellence in education and scientific discovery. The Society achieves its mission through multi-disciplinary collaborations with government agencies, patient advocacy groups, educational institutes, and private sector (industries), as well as philanthropic organizations.

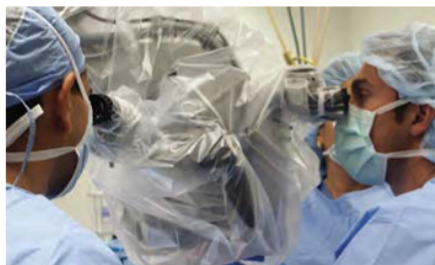
SBMT legal name and Tax ID: IBMISPS: 20-2793206

EDUCATIONAL OBJECTIVES

Upon completion of the scientific congress, participants should be able to:

- Identify and apply new findings in brain mapping (BM) & therapeutics most relevant to their own sub-specialty (i.e., imaging, image-guided therapy, nanotechnology, nanoneurosurgery and stem cell devices).
- Describe the effect of the newly developed methods on medical imaging, medical devices, nanotechnology, nanoneuroscience, stem cell/cellular therapy, quantum supercomputing.
- Discuss and design future research perspectives and developments in BM, neurophotonics, therapeutics, and nano-bio-electronics and assess the possible impact of such research and development on their own clinical and scientific work in the future.
- Describe and assess the latest cutting-edge technological advancements in BM & therapeutics, such as the emerging field of nano-bio-electronics (integration of nanotechnology with stem cell/cellular therapy, medical imaging, AI machine learning and others).
- Explain cross-linking amongst multiple disciplines.
- Recognize advancements in other disciplines and explain how such advancements can help with the formulation of new diagnostic and treatment modalities.
- Discuss and describe governmental agencies, foundations, and industry roles in the research and development of the field.

ANNUAL SBMT WORLD CONGRESS



The annual SBMT World Congress is a multi-disciplinary forum designed to facilitate cross-disciplinary dissemination of technological and medical advances and scientific discovery. Thus the attendees are a mixture of neurosurgeons, radiologists, neurologists, neuro-oncologists, psychiatrists, physiatrists, other physicians, bioethicists, policymakers, government officials, engineers, physicists, graphic designers, neuroscientists, allied healthcare professionals, healthcare executives, students, post-docs, residents, and fellows. SBMT's annual meetings are world-class scientific events designed to have a significant impact on the cross-disciplinary flow of information and scientific advancements.



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A showcase of the vast array of Brain Science, Brain Research, Therapies, and the Treatment of Brain and Spinal Cord Injuries & Diseases.

In recent years, astonishing advances have contributed to amazing discoveries and breakthroughs in the fields of neurology, neuroscience, neurosurgery, radiology, engineering, computer science, nanotechnology, medical imaging, medical devices, and cellular/stem cell therapy. These scientific advances also have contributed to the large gap of knowledge amongst scientists in different disciplines. One of the significant challenges for scientists of the 21st century is how to close the gaps of knowledge among multiple disciplines. We have designed the annual meeting of SBMT to address such challenges by bringing together world-class experts across numerous fields.

REASONS TO PARTICIPATE

Link in with near 100,000+ scientists, engineers, surgeons and physicians on SBMT global network.

Network with attendees in the exhibit hall during breaks and the networking reception.

Present in a World Class Multidisciplinary Biomedical Association.

Meet funding agencies Foundations, Government agencies, and Industry leaders.

Meet Leaders and Pioneers at the conference and in poster sessions held in the exhibit hall.

Market your research and ideas to investors / grant makers.

Commercialize Your Ideas.

Publish in PlosOne NeuroMapping and Therapeutics; SPIE-SBMT Neurophotonics Journal.

Demonstrate Your State of the art technology at one of the top brain and spinal cord conventions in the world.

Access to our scientists, engineers, surgeons, and physicians from multiple disciplines.

Promote your company through multiple networking opportunities, while developing business to business contacts.

Return on Investment and increase your interaction with potential investors

Competitive Advantage Your participation at the conference provides you the opportunity to spend quality time with leaders in the scientific community, helping get your message across more effectively.

Interact with a focused and attentive audience during scientific and educational activities, such as exhibitor-hosted workshops, poster sessions and other meeting activities.

Make the Difference and reinforce your visibility beyond the exhibition area through discussion groups, workshops and hands-on courses.

Attract and influence attendees at every stage of their career, from students, to entry level scientists, to acknowledged leaders in the scientific field.

Enhance Your knowledge and stay updated in industry changes and new developments.

Visit the beautiful city of Los Angeles and behold beautiful sights.

Hands on Training Train with our specialized faculty in the BioSkills Lab.



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BIOSKILLS LAB



The Neuro Vascular BioSkills Lab is designed for neurosurgeons with knowledge and experience in endoscopic surgery, neurotrauma, and/or neurovascular surgery. Short lectures and hands on practical training will be provided to the attendees in the following areas:

- Neurotrauma
- Colloid cyst removal
- Pineal tumor biopsy
- Third ventriculostomy
- Image-guided parenchymal tumor biopsy and hematoma removal
- Skull base tumor
- Aneurysm surgery

The Spine BioSkills Lab is a hands-on practical course on cadaver to perform Lumbar OLIFs and Cervical Total Disc Replacements, while teaching spine surgeons the approach and discussing indications, complications, and necessary tools. Performing the approach on a cadaver to show each step of the operation with guidance from experienced spine surgeons in a portable cadaver lab.





Critical Advances in Alzheimer's Disease

20th Annual World Congress of SBMT

Room 151



20th Annual World Congress of SBMT

Critical Advances in Alzheimer's Disease

All times in Pacific Standard Time (GMT-8)

Organized by SBMT faculty

Drs. Christopher J. Wheeler, J. Wesson Ashford, Carr Smith, Margaret Fahnestock,
James Clifford, Babak Kateb

SBMT Fellows

Drs. Nataliya Bilger, Mojtaba Barzegar, Oreoluwa Ernest



Thursday February 16th, 2023

- 10:00 – 11:30 AM** **ALZ-1/A3: Lifestyles I: Brain Health Assessment**
Cyrus Raji, Session Chair
 Washington, University
J. Wesson Ashford, Session Co-Chair
 Director, War Related Illness & Injury Study Center, VA Palo Alto Health Care System; Clinical Professor (Affiliated), Psychiatry and Behavioral Science, Stanford University
- 10:00- 10:15 AM** **Brain Health Imaging**
Cyrus Raji, Mallinckrodt Institute of Radiology at Washington
- 10:15- 10:30 AM** **Novel Digital Cognitive Testing for Detection of Dementia**
Elena Tsoy, University of California San Francisco, Weill Institute for Neurosciences Department of Neurology, Memory and Aging Center
- 10:30- 10:45 AM** **Overview of Neurotrack's testing and screening tools**
Elli Kaplan, Co-founder and CEO of Neurotrack
- 10:45- 11:00 AM** **CogState**
Paul Maruff, Professor of Psychology, University of California
- 11:00- 11:15 AM** **App Based Assessment and Training of Cognition in Older Adults**
Aaron Seitz, Professor at CSULB College of Health and Human Services (CHHS)
- 11:15- 11:30 AM** **Q&A**
- 1:30 – 3:00 PM** **ALZ-2/A16: Alzheimer's Prevention I: Cognitive Engagement and Screening**
James Clifford, Session Chair
 Professor, Department of Psychology & Behavioral Sciences, College of San Mateo
Curtis Ashford, Session Co-Chair
 CogniFit, Inc., MemTrax, LLC
- 1:30- 1:45 AM** **Measuring Information processing and subjective concerns**
James Clifford, Professor, Department of Psychology & Behavioral Sciences, College of San Mateo
- 1:45- 2:00 AM** **Regulatory Aspects of Computerized Cognitive Assessment**
Ed Johansen, California Orthopedic Research Network, Santa Monica, California
- 2:00- 2:15 AM** **Cognitive Assessment adapting for online testing**
Maxine Krengel, Assistant Professor of Neurology at Boston University School of Medicine
- 2:15- 2:30 AM** **Modeling cognitive processes with shuffled and fixed order multi-trial wordlist memory tests**
Jason Bock, Embic's digital cognitive biomarkers
- 2:30- 2:45 AM** **Developing cognitive assessment systems online- MemTrax**
Curtis Ashford, CogniFit, Inc., MemTrax, LLC
- 2:45- 3:00 AM** **Q&A**
- 3:30 – 5:00 PM** **NOC-3/A31: Neuro-Oncology: Circulating Biomarkers and Liquid Biopsies**
Dharma Singh Khalsa, Session Chair
 President/Medical Director, Alzheimer's Research and Prevention Foundation; Prevention Editor, Journal of Alzheimer's Disease
Chris Walling, Session Co-Chair
 Vice President of Education and Outreach, Alzheimer's Research and Prevention Foundation; Clinical Research Fellow, Traumatic Stress Research Consortium, Indiana University
- 3:30- 3:45 PM** **Evaluation of adding the CANTAB computerized neuropsychological assessment battery in a tertiary center**
Peter Bayley, Director of Research at the War Related Illness & Injury Study Center, VA Palo Alto
- 3:45- 4:00 PM** **Autonomic Features of Alzheimers's Prevention Strategies: Neural Exercises of Social, Emotional & Spiritual Engagement**
Christopher G. Walling, Vice President of Education and Outreach, Alzheimer's Research and Prevention Foundation
- 4:00- 4:30PM** **Meditation & Spiritual Fitness: Overlooked Aspects of Alzheimer's Prevention (Special Featured Speaker)**
Dharma Singh Khalsa, President/Medical Director, Alzheimer's Research and Prevention Foundation; Prevention Editor, Journal of Alzheimer's Disease
- 4:30- 4:45 PM** **Discussion Panel**
Chairs and Co-Chairs, SBMT's Critical Advances in Alzheimer's Disease
- 4:45- 5:00 PM** **Q&A**





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Critical Advances in Alzheimer's Disease

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Friday February 17th, 2023

- 10:00 – 11:30 AM** **ALZ-4/B42: Alzheimer's Disease Mechanisms I: Beyond A β and Tau**
Margaret Fahnestock, Session Chair
 Professor, Department of Psychiatry & Behavioural Neurosciences, McMaster University
- 10:00- 10:15 AM** **MicroRNA dysregulation in the default mode network during the progression of AD**
Scott Counts, Professor, Michigan State University
- 10:15- 10:30 AM** **Increased expression of RIN3 contributes to early cellular pathogenesis in Alzheimer's Disease**
Chengbiao Wu, Professor, University of California, San Diego
- 10:30- 10:45 AM** **A single nucleotide polymorphism in the BDNF gene accelerates reproductive senescence in female rats**
Donna Korol, Professor, Syracuse University
- 10:45- 11:00 AM** **The cholesteryl ester transfer protein (CETP) raises cholesterol levels in the brain**
Lisa Minter, Professor, McGill University
- 11:00- 11:15 AM** **Nitrate stress impairs proNGF retrograde axonal transport in aged basal forebrain cholinergic neurons**
Margaret Fahnestock, Professor, Department of Psychiatry & Behavioural Neurosciences, McMaster University
- 11:15- 11:30 AM** **Q&A**
- 1:30 – 3:00 PM** **ALZ-5/B55: Alzheimer's Disease Mechanisms II: Genetics, Inflammation & Immune Interactions**
Carr Smith, Session Chair
 Toxicology Advisor, Albemarle Corporation
- 1:30- 1:45 PM** **Metabolic changes during microglial aging**
Seokjo Kang, Senior Postdoctoral Fellow, Regenerative Medicine Institute (Dr. Goodridge Lab), Cedars-Sinai Medical Center
- 1:45- 2:00 PM** **Evidence of Bacterial Infection and Inflammation Activation in Alzheimer's Disease Retina**
Bhakta Prasad Gaire, Project scientist, Dr. Koronyo Lab, Cedars-Sinai Medical Center
- 2:00- 2:15 PM** **PET-MR imaging with 20-(18F) fluoroarachidonic in ApoE4-TR mice**
Juno Van Valkenburgh, University of Southern California
- 2:15- 2:30 PM** **Apolipoprotein E4 protects against enteric infection**
Carr Smith, Toxicology Advisor, Albemarle Corporation
- 2:30- 2:45 PM** **Harnessing iPSC-Microglia to Deliver Therapeutic Proteins to the Brain**
Matthew Blurton-Jones, UC Irvine
- 2:45- 3:00 PM** **Q&A**
- 3:30 – 5:00 PM** **ALZ-6/B68: Lifestyles II: Lifestyle Effects on Disease Risks and Comorbidities**
Margaret Fahnestock Session Chair
 Professor, Department of Psychiatry & Behavioural Neurosciences, McMaster University
- 3:30- 3:45 PM** **Submitted Talk -TBD**
Dale Bredesen, Chief Science Officer Apollo Health
- 3:45- 4:00 PM** **Exercise parameters that opens a 'molecular memory window' for cognitive enhancement shine light on key memory mechanisms in the adult, aging, and Alzheimer's Disease brain**
Ashley Keiser, Postdoctoral Fellow, University of California, Irvine
- 4:00- 4:15 PM** **Exercise, traumatic brain injury, and Alzheimer's disease**
Fernando Gomez-Panilla, Professor, University of California, Los Angeles
- 4:15- 4:30 PM** **A 3D bioprinted cell culture system for studying the effects of exercise on the brain**
Margaret Fahnestock, Professor, Department of Psychiatry & Behavioural Neurosciences, McMaster University
- 4:30- 4:45 PM** **Contribution of variable sleep disturbances to cognitive decline in Alzheimer's disease**
Alesha Maree Heath, Postdoctoral Fellow, Stanford University
- 4:45- 5:00 PM** **Q&A**





Critical Advances in Alzheimer's Disease

20th Annual World Congress of SBMT

Room 151



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Critical Advances in Alzheimer's Disease

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Saturday February 18th, 2023

- 10:00 – 11:30 AM** **ALZ-7/C81: Alzheimer Disease Diagnosis I: Non-Imaging Biomarkers**
Christopher J. Wheeler, Session Chair
 Senior Research Scientist, International Brain Mapping Foundation, Chief Science Officer, T-Neuro Pharma, President, StemVax Therapeutics
- 10:00- 10:15 AM** **Regional Brain Volume and Neural Networks That Distinguish Between Potential Super-aging and Cognitive Decline in Midlife**
Auriel Willette, Iowa State University (main), University of Iowa, IAC Tracker Inc., Assistant Professor (ISU), Adjunct Assistant Professor (U. Iowa), and COO
- 10:15- 10:30 AM** **Role of the CNS barriers in neuroimmune mechanisms of disease**
Jorge I. Alvarez, Assistant Professor of Pathobiology, University of Pennsylvania, School of Veterinary Medicine, Department of Pathobiology
- 10:30- 10:45 AM** **The Significance of Met35 Side Chain Oxidation for Amyloid Beta Toxicity**
Ka Chan, University of California, Santa Cruz (Raskatov lab)
- 10:45- 11:00 AM** **Levels of age-related T cells in blood represent a cause-associated biomarker for AD**
Christopher J. Wheeler, Senior Research Scientist, International Brain Mapping Foundation, Chief Science Officer, T-Neuro Pharma, President, StemVax Therapeutics
- 11:00- 11:15 AM** **Quantitative Electroencephalographic Analyses Network Alterations in Older Adults Diagnosed with Alzheimer's/Dementia**
Kristin S. Williams, Critical Advances in Alzheimer's Disease Speaker
- 11:15- 11:30 AM** **Q&A**
- 1:30 – 3:00 PM** **ALZ-8/C94: Alzheimer Disease Diagnosis II: Imaging Biomarkers**
Mojtaba Bargezar, Session Chair
 Co-founder & CEO of iqbm LLC, Fellowship of Society for Brain Mapping Foundation, Director and CEO of SBMT/Iranian chapter
 Research Topic Coordinator of Frontiers in Radiology journal
- 1:30- 1:45 PM** **ShapeGenie: A Novel Shape-Analysis Software That Can Create a 90% Accurate Machine Learning Classifier for Alzheimer's disease Using Three Slices per MRI Stack**
David H. Nguyen, CEO BrainScanology
- 1:45- 2:00 PM** **Challenges in Dementia Research in the Middle East**
Maryam Noroozian, Professor, Tehran University of Medical Sciences
- 2:00- 2:15 PM** **Quantitative Structured Reporting in Dementia**
Mojtaba Bargezar, Co-founder & CEO of iqbm LLC, SBMT Fellow
- 2:15- 2:30 PM** **Quantitative Neuroimaging in Neurodegenerative disorders**
Peter Ngum, Clinical Application Specialist at Combinostics
- 2:30- 2:45 PM** **Transcranial Alternating Pulsed Current Stimulation for Alzheimer's Disease**
Mohammed (Mo) Abouelsoud, CEO and founder at U: The Mind Company
- 2:45- 3:00 PM** **Q&A**
- 3:30 – 5:00 PM** **ALZ-9/C107: Alzheimer Disease Diagnosis III: Biomarkers Beyond Diagnosis**
George Perry, Session Chair
 Professor, Semmes Distinguished University Chair in Neurobiology, University of Texas at San Antonio, Texas
- 3:30- 3:45 PM** **Degenerative disorders of the brain are due to cellular stress**
Williams Rodman Shankle, Founder and Medical Director, Shankle Clinic for Alzheimer's Disease and Related Disorders
- 3:45- 4:00 PM** **Trends in inequalities in the prevalence of dementia in the United States**
Peter Hudomiet, RAND Corporation
- 4:00- 4:15 PM** **Why is a cure for Alzheimer's disease so elusive?**
George Perry, Professor, Semmes Distinguished University Chair in Neurobiology, Univ. Texas at San Antonio, TX
- 4:15- 4:30 PM** **Modeling late-onset Alzheimer's disease in mice (Special Featured Speaker)**
Frank LaFerla, Professor, University of California, Irvine
- 4:30- 4:45 PM** **Naturally-occurring human antibodies associated with AD and normal cognition**
Charles Glabe, University of California, Irvine
- 4:45- 5:00 PM** **Q&A**





Critical Advances in Alzheimer's Disease

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Room 151



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Critical Advances in Alzheimer's Disease

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Sunday February 19th, 2023

10:00 – 11:30 AM

ALZ-10/D120: Alzheimer's Disease Treatment I: Mechanistic & Alternative Targets

Greg Cole Session Co-Chair

Professor of Medicine and Neurology and Associate Director of the UCLA Alzheimer's Center, University of California Los Angeles

Swati More, Session Co-Chair

Center for Drug Design (CDD), University of Minnesota

10:00- 10:15 AM

Neuroinflammation in APOE4 Alzheimer's disease: cause or consequence?

Hussein Yassine, University of Southern California

10:15- 10:30 AM

The Role of Vascular Disease in Dementia

Sally Frautschy, Professor of Neurology and Medicine, University of California Los Angeles and Research Health Scientist, Geriatric Education Research Clinical Center, GLAVA

10:30- 10:45 AM

Restoration of 3-Mercaptopyruvate Sulfurtransferase Activity by Sulfanegen Ameliorates Alzheimer's Disease Pathology

Swati More, Center for Drug Design (CDD), University of Minnesota

10:45- 11:00 AM

Targeting Neuroinflammation to Prevent and Treat Alzheimer's Disease

Greg Cole, Professor of Neurology and Medicine, University of California Los Angeles and Associate Director, Geriatric Education Research Clinical Ctr, GLAVA

11:00- 11:15 AM

Using the Oxytosis/Ferroptosis Pathway to understand and Treat Alzheimer's Disease

Pamela Maher, Salk Institute for Biological Studies, La Jolla, CA

11:15- 11:30 AM

Q&A

1:30 – 3:00 PM

ALZ-11/D133: Lifestyles III: Lifestyle and Genomics in Alzheimer's Treatment

David Socol, Session Chair

Private Practice, Beverly Hills, CA

Sandeep Kapoor, Session Co-Chair

Private Practice, Los Angeles, CA

1:30- 1:45 PM

Application of genomics in clinical psychiatry: Beyond anxiety

Andrius Baskys, Clinical Psychiatrist and Professor of Biomedical Sciences, Western Univ. of Health Sciences

1:45- 2:00 PM

Submitted Talk-TBD

Dale Bredesen, Chief Science Officer Apollo Health

2:00- 2:15 PM

Dentistry's role in Alzheimer's disease

Isaac Comfotes, Private Practice Dentist, Los Angeles, CA

2:15- 2:30 PM

APO-E4 and Beyond: Utilizing Precision Genomics in the Treatment of Cognitive Decline Part 1

David Socol, Private Practice, Beverly Hills, CA

2:30- 2:45 PM

APO-E4 and Beyond: Utilizing Precision Genomics in the treatment of Cognitive Decline Part 2

Sandeep Kapoor, Private Practice, Los Angeles, CA

2:45- 3:00 PM

Q&A

3:30 – 5:00 PM

ALZ-12/D146: What Have We Learned Aand What's Next? Summary & Guided Discussion

J. Wesson Ashford, Session Chair

Professor War Related Illness & Injury Study Center, Palo Alto

Ronit Katz, Session Co-Chair

Associate Director War Related Illness & Injury Study Center, Palo Alto

3:30- 3:45 PM

Panel Discussion

Chairs and Co-Chairs, Critical Advances in Alzheimer's Disease

3:45- 4:00 PM

Panel Discussion

Chairs and Co-Chairs, Critical Advances in Alzheimer's Disease

4:00- 4:15 PM

Panel Discussion

Chairs and Co-Chairs, Critical Advances in Alzheimer's Disease

4:15- 4:30 PM

Panel Discussion

Chairs and Co-Chairs, Critical Advances in Alzheimer's Disease

4:30- 4:45 PM

Panel Discussion

Chairs and Co-Chairs, Critical Advances in Alzheimer's Disease

4:45- 5:00 PM

Q&A





Advances in CerebroVascular Research, Diagnostics and Treatment

20th Annual World Congress of SBMT

Room 153C



20th Annual World Congress of SBMT

Advances in CerebroVascular Research, Diagnostics and Treatment

All times in Pacific Standard Time (GMT-8)

Organized by SBMT faculty

Drs. Abilash Haridas, Giuseppe Umana, Amin Kassam, Akitsugu Kawashima, Robert Hariri
Mohamed Fahmy, Alexander Khalessi, Ashkan Mowla, Santino Ottavio Tomasi

Fellows

Drs. Tejas Venkataram, Atta UI Aleem Bhatti, Fauziyya Muhammad



Thursday February 16th, 2023

10:00 – 11:30 AM

CVS-1/A10: Neurovascular Disorders - I

Abilash Haridas, Session Chair

Cerebrovascular and Skull Base, Neurosurgeon, Board Certified Adult and Pediatric, Neurosurgeon, Tampa, Florida

Ashkan Mowla, Session Co-Chair

Interventional Neuroradiology, Keck School of Medicine, University of Southern California

10:00- 10:15 AM **Role of AI in the management of acute stroke**

Ashkan Mowla, Interventional Neuroradiology, Keck School of Medicine, University of Southern California

10:15- 10:30 AM **New technologies and surgeon training for the clipping of intracranial aneurysms**

Nicola Montemurro, Medical Doctor at Università di Pisa, Italy

10:30- 10:45 AM **Understanding Hemodynamic of Brain Steno-occlusive Disease**

Ali Alaraj, Professor & Section Chief, Endovascular Neurosurgery | Director of Neurosurgical Clinical Operations, UI Health | University of Illinois at Chicago

10:45- 11:00 AM **Stroke, Diagnosis and Neurosurgical Treatment Options**

Abilash Haridas, Cerebrovascular and Skull Base, Neurosurgeon, Board Certified Adult and Pediatric, Neurosurgeon, Tampa, Florida

11:00- 11:15 AM **Stroke, Diagnosis and Neurosurgical Treatment Options**

Anil Nair, Thomas Jefferson University Hospitals, Union, New Jersey

11:15- 11:30 AM **Q&A**

1:30 – 3:00 PM

CVS-2/A23: Neurovascular Disorders – II

Abilash Haridas, Session Chair

Chief of Pediatric Neurosurgery, Cerebrovascular and Skull Base Neurosurgery, St. Joseph's Children's Hospital, Baycare Medical Group, Tampa Florida

Akitsugu Kawashima, Session Co-Chair

Director, Department of Neurosurgery Tokyo Women's Medical University Yachiyo Medical Center

1:30- 1:45 AM **Bypass surgery for infant moyamoya disease**

Akitsugu Kawashima, Neurosurgeon, Complex Spine Surgeon, Loma Linda University Health, CA

1:45- 2:00 AM **Paradigm shift of bypass surgery for intracranial atherosclerosis**

Abilash Haridas, Cerebrovascular and Skull Base, Neurosurgeon, Board Certified Adult and Pediatric, Neurosurgeon, Tampa, Florida

2:00- 2:15 AM **Role of Flow Quantification in Cerebral Steno-occlusive Disease**

Ali Alaraj, Professor & Section Chief, Endovascular Neurosurgery | Director of Neurosurgical Clinical Operations, UI Health | University of Illinois at Chicago

2:15- 2:30 AM **New Technologies and Surgeon Training for the Clipping of Intracranial Aneurysms**

Nicola Montemurro, Medical Doctor at Università di Pisa, Italy

2:30- 2:45 AM **Advances in the Endovascular Treatment of CNS Aneurysm and Vascular Malformations**

Ched Nwagwu, Vascular Neurosurgeon, Providence Mission Hospital Mission Viejo and Saddleback Medical Center

2:45- 3:00 AM **Q&A**

3:30 – 5:00 PM

CVS-3/A36: Neurovascular Disorders – III

Giuseppe Umana, Session Chair

Department of Neurosurgery, Trauma and Gamma Knife Center, Cannizzaro Hospital, Catania, Italy. Founding Member and South Europe Regional Committee at the Holomedicine Association

3:30- 3:45 PM **Computational Fluid Dynamics Analysis for Neurovascular conflict Syndrome: Clinical Study**

Giuseppe Umana, Center for Advanced Spine Care of Southern Arizona and Surgical Institute of Tucson

3:45- 4:00 PM **Immersive Surgical Anatomy of the Retrosigmoid Approach**

Santino Ottavio Tomasi, Delegate Skull Base Fellowship at the Surgical Innovations laboratory for Skull Base and Microneurosurgery at the Weill Cornell Medical College

4:00- 4:15 PM **An Algorithmic Approach to Intrinsic Cavernomas of the Brainstem**

Amin Kassam, Chairman of Neurosciences at NorthShore Neurological Institute at Northwest Community Healthcare, Illinois. Founded CEO of Neeka Enterprises

4:15- 4:30 PM **Minimally invasive BrainPath mediated Parafascicular resection of CEIH after radiation and embolization of brain AVM**

Raghu Sampath, Northwest Kaiser Permanente Physician and Surgeons

4:30- 4:45 PM **Minimally Invasive Surgery for Intracerebral Hemorrhage**

Anil Nair, Thomas Jefferson University Hospitals, Union, New Jersey

4:45- 5:00 PM **Q&A**





Advances in CerebroVascular Research, Diagnostics and Treatment

20th Annual World Congress of SBMT

Room 153C



20th Annual World Congress of SBMT

Advances in CerebroVascular Research, Diagnostics and Treatment

All times in Pacific Standard Time (GMT-8)

Friday February 17th, 2023

10:00 – 11:30 AM

CVS-4/B49: Skull-Based Neuroendoscopy Vs Microsurgery - I

Giuseppe Umana, Session Chair

Department of Neurosurgery, Trauma and Gamma Knife Center, Cannizzaro Hospital, Catania, Italy. Founding Member and South Europe Regional Committee at the Holomedicine Association

Amin Kassam, Session Co-Chair

Chairman of Neurosciences at NorthShore Neurological Institute at Northwest Community Healthcare, Illinois. Founder and CEO of Neeka Enterprise

10:00- 10:15 AM

Craniovertebral Junction Schwannoma Management: Radiosurgery VS. Microsurgery

Giuseppe Umana, CDepartment of Neurosurgery, Trauma and Gamma Knife Center, Cannizzaro Hospital, Catania, Italy.

10:15- 10:30 AM

Perforating Arteries of the Lemniscal Trigone: A Microsurgical Neuroanatomic Description

Santino Ottavio Tomasi, Delegate Skull Base Fellowship at the Surgical Innovations laboratory for Skull Base and Microneurosurgery at the Weill Cornell Medical College

10:30- 10:45 AM

Lessons learned over two Decades and two thousand cases: a corridor approach to the ventral skull base.

Amin Kassam, Chairman of Neurosciences at NorthShore Neurological Institute at Northwest Community Healthcare, Illinois. Founder and CEO of Neeka Enterprises

10:45- 11:00 AM

Reconstruction of the upper posterior circulation via simple subtemporal approach

Akitsugu Kawashima, Director, Department of Neurosurgery Tokyo Women's Medical University Yachiyo Medical Center

11:00- 11:15 AM

Submitted Talk - TBD

Naoufel Ouerchefani, TBD

11:15- 11:30 AM

Q&A

1:30 – 3:00 PM

CVS-5/B62: Skull-Based Neuroendoscopy Vs Microsurgery - II

Abilash Haridas, Session Chair

Cerebrovascular and Skull Base, Neurosurgeon, Board Certified Adult and Pediatric, Neurosurgeon, Tampa, Florida

Mohamed Fahmy, Session Co-Chair

Professor of Neurosurgery, Alexandria University, Egypt

1:30- 1:45 PM

A New Strategic Classification for Surgical Approaches to the Petrous Meningioma Surgery

Mohamed Fahmy, Professor of Neurosurgery, Alexandria University, Egypt

1:45- 2:00 PM

Updates in Skull Base and Cerebrovascular Surgery

Gmaan Alzhrani, Skull Base and Cerebrovascular Surgeon, Riyadh, Saudi Arabia

2:00- 2:15 PM

Microsurgical suction catheter irrigation

Mohamed Fahmy, Professor of Neurosurgery, Alexandria University, Egypt

2:15- 2:30 PM

The Networks: A Paradigm Shift in the Management of all Brain Disorders

Charles Teo, Director, Centre for Minimally Invasive Neurosurgery, Sydney Professor Honoris Causa, Hanoi Medical University, Vietnam

2:30- 2:45 PM

Integral management of Craniopharyngioma

Jose Edgardo Valerio Pascua, Miami Neuroscience Center

2:45- 3:00 PM

Q&A

3:30 – 5:00 PM

CVS-6/B75: Recent Advances in Cerebrovascular Science and Technology

Abilash Haridas, Session Chair

Cerebrovascular and Skull Base, Neurosurgeon, Board Certified Adult and Pediatric, Neurosurgeon, Tampa, Florida

Robert Hariri, Session Co-Chair

Chairman, Founder, and Chief Executive Officer of Celularity, Inc.

3:30- 3:45 PM

Submitted Talk - TBD

TBD, TBD

3:45- 4:00 PM

Submitted Talk - TBD

TBD, TBD

4:00- 4:15 PM

Submitted Talk - TBD

TBD, TBD

4:15- 4:30 PM

Submitted Talk - TBD

TBD, TBD

4:30- 4:45 PM

Submitted Talk - TBD

TBD, TBD

4:45- 5:00 PM

Q&A





20th Annual World Congress of SBMT
Advances in CerebroVascular Research, Diagnostics and Treatment
All times in Pacific Standard Time (GMT-8)

Saturday February 18th, 2023

10:00 – 11:30 AM **BioSkills Lab**

1:30 – 3:00 PM **BioSkills Lab**

3:30 – 5:00 PM **BioSkills Lab**





Advances in CerebroVascular Research, Diagnostics and Treatment

20th Annual World Congress of SBMT

Room 150C



20th Annual World Congress of SBMT

Advances in CerebroVascular Research, Diagnostics and Treatment

All times in Pacific Standard Time (GMT-8)

Sunday February 19th, 2023

10:00 – 11:30 AM

CVS-7 (D127): Microsurgical Neuroanatomy

Abilash Haridas, Session Chair

Cerebrovascular and Skull Base, Neurosurgeon, Board Certified Adult and Pediatric, Neurosurgeon, Tampa, Florida

Santino Ottavio Tomasi, Session Co-Chair

Delegate Skull Base Fellowship at the Surgical Innovations laboratory for Skull Base and Microneurosurgery at the Weill Cornell Medical College Harvard

10:00- 10:15 AM

Risk of intracranial aneurysm growth in patients

Aichi Chien, Professor, Division of Interventional Neuroradiology, UCLA Medical School

10:15- 10:30 AM

Surgical treatment of post herpetic trigeminal neuralgia, intraoperative findings, review of history and presentation

Raghu Sampath, Northwest Kaiser Permanente Physician and Surgeons

10:30- 10:45 AM

Submitted Talk - TBD

Charles Teo, Director, Centre for Minimally Invasive Neurosurgery, Sydney Professor Honoris Causa, Hanoi Medical University, Vietnam

10:45- 11:00 AM

The role of perforating arteries in the microsurgical treatment of cerebrovascular diseases – a neuroanatomical overview

Peter A. Winkler, Univ. Prof. Dr. Dr. h. c. Peter A. Winkler Emeritus Professor and Chairman Neurosurgery Paracelsus Medical University of Salzburg-Austria

11:00- 11:15 AM

Submitted Talk - TBD

Naoufel Ouerchefani, TBD

11:15- 11:30 AM

Q&A

1:30 – 3:00 PM

CVS-8/D140: Brain Aneurysm

Abilash Haridas, Session Chair

Cerebrovascular and Skull Base, Neurosurgeon, Board Certified Adult and Pediatric, Neurosurgeon, Tampa, Florida

1:30- 1:45 PM

Clipping of previously coiled ruptured MCA aneurysm, analysis of cost, future directions

Raghu Sampath, Northwest Kaiser Permanente Physician and Surgeons

1:45- 2:00 PM

Aneurysm post-coiling and Hybrid approach to do surgery in a better scenario

Jose Edgardo Valerio Pascua, Miami Neuroscience Center

2:00- 2:15 PM

Three-Dimensional Plastic Modeling on Bone Frames for Cost-Effective Neuroanatomy Teaching

Jose Antonio Soriano, ABC Medical Center Mexico City, Mexico

2:15- 2:30 PM

Surgical neuroanatomy in and around the third ventricle with regard to optimize preservation of function

- translational research laboratory model

Peter A. Winkler, Univ. Prof. Dr. Dr. h. c. Peter A. Winkler Emeritus Professor and Chairman Neurosurgery Paracelsus Medical University of Salzburg-Austria

2:30- 2:45 PM

Submitted Talk - TBD

TBD, TBD

2:45- 3:00 PM

Q&A

3:30 – 5:00 PM

CVS-9/D153: Subcommittee Meeting





20th Annual World Congress of SBMT
EEG/MEG/Epilepsy and Neuromodulation,
Brain Computer Interface and Neuroengineering
All times in Pacific Standard Time (GMT-8)

Organized by SBMT faculty

Drs. Qifa Zhou, Theodore Berger, Dawn Eliashiv, Mark Liker, Robert Thatcher, Yousef Salimpour,
Lei Li, Leslie Prichep, Hubert Fernandez, Benjamin Walker, Ernesto Soler, Jennifer Treweek, Babak Kateb

SBMT Fellows

Drs. Joe Bolanos, Dina Shainsky, Love Kumar

Interns

Lila Kendall, Armin Nouri



Thursday February 16th, 2023

10:00 – 11:30 AM

MEG-1/A7: Ultrasound Neuromodulation

Qifa Zhou, Session Chair

Professor of Biomedical Engineering and Ophthalmology, USC, CA, USA.

Lei Li, Session Co-Chair

Assistant Professor of Electrical and Computer Engineering, Rice University, CA, USA.

10:00- 10:15 AM

Ultrasound Stimulation on the Retina and VC for Vision Restoration

Chen Gong, Gengxi Lu, Researcher, University of Southern California

10:15- 10:30 AM

Mechanisms of Ultrasonic Neuromodulation in Rodents: Direct and Indirect Brain Activation

Hongsun Guo, Postdoctoral Researcher, California Institute of Technology

10:30- 10:45 AM

Sonothermogenetics for Noninvasive Causal Control of Neurons, Neural Circuits and Behavior

Yaoheng Yang, Researcher, Washington University at STL

10:45- 11:00 AM

Recent Advances in Photoacoustic Brain Imaging and Modulation

Rui Cao, Postdoctoral Scholar, Department of Medical Engineering California Institute of Technology

11:00- 11:15 AM

Ultrafast and Hypersensitive Phase Imaging of Propagating Internodal Current Flows in Myelinated Axons

Yide Zhang, Postdoctoral Scholar, California Institute of Technology

11:15- 11:30 AM

Q&A

1:30 – 3:00 PM

MEG-2/A20: Brain Computer Interface, Neuromodulation

Theodore Berger, Session Chair

Professor of Biomedical Engineering, USC, CA, USA.

1:30- 1:45 PM

Computer Modeling of Degenerated Auditory Nerve Fibers

Hiroaki Mino, Professor, Department of Electrical Engineering at Kanto Gakuin University

1:45- 2:00 PM

Recent fMRI Experiments and Clinical Trials Utilizing Transcranial Low Intensity Focused Ultrasound Pulse (tLIFUP)

Alexander Bystritsky, Professor Emeritus, Ronald Reagan UCLA Medical Center

2:00- 2:15 PM

Deep Learning-Based Stimulus Optimization for Visual Neuroprostheses

Michael Beyeler, Assistant Professor, Department of Computer Science, Bionic Vision Lab at UC Santa Barbara

2:15- 2:30 PM

Multi-scale Photoacoustic Imaging of Brain Functions

Junjie Yao, Assistant professor of Biomedical Engineering

2:30- 2:45 PM

Closed Loop dry electrode EEG recording and tDCS Stimulation

Walid Soussou, President, Wearable Sensing

2:45- 3:00 PM

Q&A

3:30 – 5:00 PM

MEG-3/A33: Epilepsy / Neuromodulation

Dawn Eliashiv, Session Chair

Professor of Biomedical Engineering, USC, CA, USA.

Mark Liker, Session Co-Chair

Professor of Neurosurgery at University of Southern California

3:30- 3:45 PM

Advanced Epilepsy Therapeutics and Implants

Daniel D'Iorenzo, Professor of Neurosurgery, Loma Linda University

3:45- 4:00 PM

Epilepsy Treatment Considerations and Recent Advances

Dawn Eliashiv, Professor of Neurology, University of California, Los Angeles and Co-Director, Seizure Disorder Center

4:00- 4:15 PM

Advancements in Treating Epilepsy

Mona Sazgar, Professor of Neurology, University of California, Irvine

4:15- 4:30 PM

Personalized DBS for Movement and Psychiatric Disorders

Mark Liker, Professor of Neurosurgery, University of Southern California

4:30- 4:45 PM

Pediatric Neuromodulation

Terence Sanger, Professor Electrical Engineering and Computer Science Vice President, Chief Scientific Officer CHOC Vice Chair of Research for Pediatrics School of Medicine

4:45- 5:00 PM

Q&A





20th Annual World Congress of SBMT
EEG/MEG/Epilepsy and Neuromodulation,
Brain Computer Interface and Neuroengineering
All times in Pacific Standard Time (GMT-8)

Friday February 17th, 2023

10:00 – 11:30 AM **MEG-4/B46 New Advancements in Electrical Neuroimaging**
Robert Thatcher, Session Chair
CEO & Director, Applied Neuroscience Research Institute.

10:00- 10:15 AM **Neuro-Navigation of Functional and Effective Connectivity in Epilepsy**
Robert Thatcher, CEO & Director, Applied Neuroscience Research Institute

10:15- 10:30 AM **Electrical Neuroimaging of Epileptic Foci and Affected Networks**
Joel Lubar, President, Southeastern Neurofeedback Institute

10:30- 10:45 AM **Electrical Neuroimaging for Pre vs Post Treatment Evaluation**
Emin Eralt, COO, Applied Neuroscience Research Institute

10:45- 11:00 AM **3-Dimensional EEG Evaluation of Brain Networks**
Anthony Silver, Founder and Executive Director of Gray Matters, LLC

11:00- 11:15 AM **Electrical Neuroimaging and Diffusion Tensor Imaging**
Richard Abbey, Lead Clinician, Abbey Neuropsychology Clinic

11:15- 11:30 AM **Q&A**

1:30 – 3:00 PM **MEG-5/B59 Neuro-Imaging and Sensing**
Lei Li, Session Chair
Assistant Professor of Electrical and Computer Engineering at Rice University

1:30- 1:45 PM **Functional Photoacoustic Imaging of the Brain**
Lidai Wang, Assistant Professor City University of Hong Kong

1:45- 2:00 PM **Bioorthogonal Metabolic Imaging of Lipid Metabolism in Brain During Aging**
Lingyan Shi, Assistant Professor at University of California San Diego

2:00- 2:15 PM **Next Generation Brain-Machine Interfaces for Neurological and Neuropsychiatric Disorders**
Maryam Shanechi, Assistant Professor at University of Southern California

2:15- 2:30 PM **Ultraflexible Electrodes for Glial-scar Free, Chronically Stable, High-Resolution Intracortical Microstimulation**
Lan Luan, Assistant Professor at Rice University

2:30- 2:45 PM **Noninvasive Monitoring of the Brain Physiology Through Synthetic Biomarkers**
Jerzy Szabłowski, Assistant Professor at Rice University

2:45- 3:00 PM **Nanoscale Interface with the Brain Using Light and Advanced Nanomaterials**
Zhenpeng Qin, Assistant Professor at University of Texas at Dallas

3:30 – 5:00 PM **MEG-6/B72 MEG/EEG Clinical Applications**
Robert Thatcher, Session Chair
CEO & Director, Applied Neuroscience Research Institute.

3:30- 3:45 PM **Real-Time Electrical Neuroimaging of the Cerebellum, Red Nucleus and Subthalamus: Future Applications in Parkinsonism and Ataxia**
Robert Thatcher, CEO & Director, Applied Neuroscience Research Institute

3:45- 4:00 PM **Real-Time swLORETA EEG Neurofeedback of Veterans with PTSD**
Anthony Silver, Owner, Gray Matters, LLC

4:00- 4:15 PM **Real-Time swLORETA EEG Neurofeedback of Autistic Spectrum Disorder**
Richard Abbey, Lead Clinician, Abbey Neuropsychology Clinic

4:15- 4:30 PM **Electrical Neuroimaging of in Epilepsy Patients**
Joel Lubar, President, Southeastern Neurofeedback Institute

4:30- 4:45 PM **Real-Time swLORETA EEG Neurofeedback of TBI Patients**
Emin Eralt, COO, Applied Neuroscience Research Institute

4:45- 5:00 PM **Q&A**





20th Annual World Congress of SBMT
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Brain Computer Interface and Neuroengineering
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Saturday February 18th, 2023

- 10:00 – 11:30 AM** **MEG-7/C85 Practical Advances in Electrical Neuroimaging: Hands on Training**
Robert Thatcher, Session Chair
CEO & Director, Applied Neuroscience Research Institute.
- 10:00- 10:30 AM** **Hands on EEG Acquisition, QEEG Clinic Report and EEG Neurofeedback (Special Featured Speaker)**
Robert Thatcher, CEO & Director, Applied Neuroscience Research Institute
Emin Eralp, COO, Applied Neuroscience Research Institute
- 10:30- 10:45 AM** **Electrical Neuroimaging of Epileptic Foci and Network**
Emin Eralp, COO, Applied Neuroscience Research Institute
- 10:45- 11:00 AM** **Real-Time swLORETA EEG Neurofeedback in PTSD**
Anthony Silver, Founder and Executive Director of Gray Matters, LLC
- 11:00- 11:30 AM** **Q&A**
- 1:30 – 3:00 PM** **MEG-8/C98 EEG Clinical Applications**
Leslie S. Prichep, Session Chair
Chief Scientific Officer, BrainScope Company, Inc.
Robert Thatcher, Session Co-Chair
CEO & Director, Applied Neuroscience Research Institute
- 1:30- 1:45 PM** **AI/ML EEG-derived Biomarkers for Triage of Acute Traumatic Brain Injury and Concussion**
Leslie S. Prichep, Chief Scientific Officer, BrainScope Company, Inc.
- 1:45- 2:00 PM** **Use of qEEG in optimization ofTMS**
Robert Isenhardt, Wave Neuroscience
- 2:00- 2:15 PM** **PMS Disorder: A Model of Maladaptive Default Mode Network Response to Stressors**
David Cantor, CEO and Clinical Director Braindx
- 2:15- 2:30 PM** **Electrical Neuroimaging: Linking Symptoms to Dysregulated Networks**
Richard Abbey, Lead Clinician, Abbey Neuropsychology Clinic
- 2:30- 3:00 PM** **Q&A**
- 3:30 – 5:00 PM** **MEG-9/C111 Biomaterials and Tissue Engineering**
Jennifer Treweek, Session Chair
Assistant Professor of Biomedical Engineering at University of Southern California.
- 3:30- 3:45 PM** **Upgrading the Physiological Relevance of Human Brain Organoids**
Giorgia Quadrato, Assistant Professor of Stem Cell Biology and Regenerative Medicine at University of Southern California
- 3:45- 4:00 PM** **Seeing the Sound: An Ultrasound-Mediated Intravascular Light Source for Scanning Optogenetics**
Guosong Hong, Assistant Professor at Stanford University
- 4:00- 4:15 PM** **3D Bioprinting Complex Tissue Models**
Laura De la Vega, Co-founder, Axolotl Bioscience
- 4:15- 4:30 PM** **Brain-on-a-chip platforms for drug discovery, drug screening, and off target toxicity studies**
Vadim Jucaud, Principal Investigator, Terasaki Institute
- 4:30- 4:45 PM** **Brain-on-a-chip Platforms for Drug Discovery, Drug Screening, and Off Target Toxicity Studies**
Jennifer Treweek, Assistant Professor of Biomedical Engineering
- 4:45- 5:00 PM** **Q&A**





20th Annual World Congress of SBMT
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Sunday February 19th, 2023

10:00 – 11:30 AM

MEG-10/D124 Special/Controversial Topics in Neuromodulation

Hubert Fernandez, Session Chair

Director, Center for Neurological Restoration, Neurological Institute, Cleveland Clinic

Benjamin Walter, Session Co-Chair

Neurologist, Center for Neurological Restoration, Cleveland Clinic

10:00- 10:15 AM

Can Neuromodulation Save Gait Disorders and Gait Freezing?

James Liao, Assistant Professor, Center for Neurological Restoration, Cleveland Clinic

10:15- 10:30 AM

The Promise of "Coordinated Reset" and Other Novel DBS Stimulation Paradigms

Ken Baker, Adjunct Assistant Professor at Lerner Research Institute, Cleveland Clinic

10:30- 10:45 AM

Can "Cognitive Sparing DBS" be Achieved?

Darlene Floden, Professor, Center for Neurological Restoration, Cleveland Clinic, Cleveland Ohio

10:45- 11:00 AM

Recent Advances in Neuromodulation Technologies

Yousef Salimpour, Assistant Professor of Neurosurgery, Johns Hopkins

11:00- 11:15 AM

Neuromodulation in Parkinson's Disease

Peter Schmidt, Adjunct Professor of Neurology, NYU Grossman School of Medicine

11:15- 11:30 AM

Q&A

1:30 – 3:00 PM

MEG-11/D137 Software Session for MEG/EEG

Robert Thatcher, Session Chair

CEO & Director, Applied Neuroscience Research Institute.

Ernesto P. Soler, Session Co-Chair

Branch Manager, Applied Neuroscience Research Institute (France)

1:30- 1:45 PM

Real-Time swLORETA Cerebellar EEG Neurofeedback of Parkinson Patients

Robert Thatcher, CEO & Director, Applied Neuroscience Research Institute

1:45- 2:00 PM

Modern Software Tools for MEG/EEG

Ernesto P. Soler, Branch Manager, Applied Neuroscience Research Institute (France)

2:00- 2:15 PM

Electrical Neuroimaging and Seizure Localization

Richard Abbey, Lead Clinician, Abbey Neuropsychology Clinic

2:15- 2:30 PM

Neuronavigation of EEG Functional and Effective Connectivity and Diffusion Tensor Imaging in TBI patients

Ernesto P. Soler, Branch Manager, Applied Neuroscience Research Institute (France)

2:30- 2:45 PM

swLORETA Brain Imaging and Neurofeedback in the Assessment and Treatment of Concussion

Anthony Silver, Founder and Executive Director of Gray Matters, LLC

2:45- 3:00 PM

Q&A

3:30 – 5:00 PM

MEG-12/D150 Subcommittee Meeting





Military Medicine and Veteran Health Track

20th Annual World Congress of SBMT

Room 406B



20th Annual World Congress of SBMT

Military Medicine and Veteran Health Track

All times in Pacific Standard Time (GMT-8)

Organized by SBMT faculty

Drs. Michael Roy, Kenneth Green

SBMT Fellows

Drs. Marjan Assefi, Joe Bolanos, Love Kumar

Interns

Lila Kendall, Armin Nouri



Thursday February 16th, 2023

10:00 – 11:30 AM

MMN-1/A4 : Virtual Reality and Augmented Reality: Best Delivery Mechanisms and Key Obstacles

Pinata Sessoms, Session Chair

Director, CAREN Naval Health Research Center, San Diego, CA

Sarah Kruger, Session Co-Chair

Biomedical Engineer and CAREN Operator, National Intrepid Center of Excellence, Walter Reed National Military Medical Center, Bethesda, MD.

10:00- 10:15 AM

Comparison Of Virtual And Augmented Reality Technology As Rehabilitation Tools- Which Reality Is Right For You?

Vrajeshri Ordek, Biomedical Engineer, Naval Health Research Center, San Diego, CA.

10:15- 10:30 AM

Immersive Technology: Defining a New Reality in Healthcare

Anne Lord Bailey, Director for Clinical Tech Innovation and Immersive Technology Lead VHA Office of Healthcare Innovation and Learning

10:30- 10:45 AM

A Soft Touch - The Challenges and Opportunities of VR and Natural Haptics in Medicine

Bob Crockett, Co-founder, HaptX, Redmond, WA

10:45- 11:00 AM

Virtual Reality Technology, Machine Learning, Biosensing: Converging to Transform Healthcare

Walter Greenleaf, Neuroscientist, Virtual Reality, and Digital Health Expert at Stanford University, Virtual Human Interaction Lab

11:00- 11:15 AM

Prescription Immersive Therapeutics For Chronic Pain Management

Josh Sackman, President and Co-founder, AppliedVR

11:15- 11:30 AM

Q&A

1:30 – 3:00 PM

MMN-2/A17 : Clinical Applications of Virtual Reality and Augmented Reality

Michael Roy, Session Chair

Deputy Director, Center for Neuroscience and Regenerative Medicine and TBI Research Center, Director, Division of Military Internal Medicine and Professor of Medicine, Uniformed Services University, Bethesda, MD

Maheen Mausoo Adamson, Session Co-Chair

Director Research, WRIISC-WOMEN, VA Palo Alto Healthcare System, Clinical Associate Professor Neurosurgery, Stanford School of Medicine, Clinical Research Scientific Director, Rehabilitation Service, VA Palo Alto Health Care System

1:30- 1:45 PM

Randomized Controlled Trial of Motion-Assisted Exposure Therapy for Posttraumatic Stress Disorder after Mild Traumatic Brain Injury, with and without an Eye Movement Task

Michael Roy, Deputy Director, Center for Neuroscience and Regenerative Medicine and TBI Research Center

1:45- 2:00 PM

Beyond Efficacy: Breaking Down Barriers to Care with Virtual Reality!

Ship Rizzo, Director, Institute for Creative Technologies, University of Southern California

2:00- 2:15 PM

The Role of Virtual and Augmented Reality in Pain Management

Jeffrey Gold, Professor of Anesthesiology, Pediatrics and Psychiatry, Keck School of Medicine, University of Southern California

2:15- 2:30 PM

Deep Phenotyping TBI: Treatment Targets Via Neuroimaging, Electrophysiology and Neuromodulation

Maheen Mausoo Adamson, Director Research, WRIISC-WOMEN, VA Palo Alto Healthcare System

2:30- 2:45 PM

Eye movements as indicators of military readiness among Active Duty Service Members with chronic mild TBI

Mark Ettenhoffer, Naval Medical Center San Diego

2:45- 3:00 PM

Q&A

3:30 – 5:00 PM

MMN-3/A30 International Perspectives on Virtual Reality and Augmented Reality

Brenda K Wiederhold, Session Chair

Co-Founder, Virtual Reality Medical Center, San Diego

Eric Vermetten, Session Co-Chair

Professor of Psychiatry, Leiden University Medical Center

3:30- 3:45 PM

A Continuum of Care: Virtual Reality's Value Internationally

Brenda K Wiederhold, Co-Founder, Virtual Reality Medical Center, San Diego

3:45- 4:00 PM

VR, SI: Stress inoculation in Police Officers

Pedro Gamito, Professor, School of Psychology and Life Sciences and Director, HEI-Lab: Digital Human-Environment Interaction Lab

4:00- 4:15 PM

Development and International Expansion of 3MDR Therapy for PTSD

Eric Vermetten, Professor of Psychiatry, Leiden University Medical Center

4:15- 4:30 PM

Adaptation of 3MDR Therapy for PTSD to More Practical and Readily Available Delivery Mechanisms

Suzette Bremault-Phillips, Associate Professor and Director, Heroes in Mind, Advocacy and Research Consortium, University of Alberta, Edmonton, AB

4:30- 4:45 PM

Covid Feel Good: A Multicultural Controlled Trial Assessing The Efficacy of A Free Virtual Therapeutic For Reducing Covid-Related Anxiety and Depression

Giuseppe Riva, Director, UNICATT, University of Milan, Italy

4:45- 5:00 PM

Q&A





20th Annual World Congress of SBMT

Military Medicine and Veteran Health Track

All times in Pacific Standard Time (GMT-8)

Friday February 17th, 2023

10:00 – 11:30 AM

MMN-4/B43 Traumatic Brain Injury

Michael Roy, Session Chair

Deputy Director, Center for Neuroscience and Regenerative Medicine and TBI Research Center, Director, Division of Military Internal Medicine and Professor of Medicine, Uniformed Services University, Bethesda, MD

Kenneth Green, Session Co-Chair

Vice President of Strategic Initiatives for Government and Nonprofit Partnerships, SBMT.

10:00- 10:15 AM

Allostatic Neurotechnology, a Novel Approach for Resetting the Brain to Relieve Post-concussive Symptoms

Paula Bellini, Study Coordinator and Therapist, Center for Neuroscience and Regenerative Medicine and Department of Medicine, Uniformed Services University, Bethesda, MD

10:15- 10:30 AM

Treatment of Acute PTH With a CGRP Receptor mAb in Military Service Members and Civilians With mTBI

Annabel Lee Raboy, Clinical Research Manager, Center for Neuroscience and Regenerative Medicine Clinical Trials Unit, Uniformed Services University, Bethesda, MD

10:30- 10:45 AM

The NCAA Study: An Update on the Longitudinal Study of Military Service Academy Graduates

Paul Pasquina, Chair, Department of Physical Medicine and Rehabilitation, Uniformed Services University, Bethesda, MD

10:45- 11:00 AM

Development and Validation of the EyeBox Eye Tracking Neurodiagnostic Tool For Traumatic Brain Injury

Uzma Samadani, President and CEO, US Neurosurgery Associates, Neurosurgeon, Minneapolis VAMC, Associate Prof. Bioinformatics and Computational Biology, Univ. of Minnesota

11:00- 11:15 AM

Characterizing Blast Exposure to the Brain through the Joint Service Member Occupational Health Assessment Process

Olivia Webster, Deputy Director, Biomedical Engineer, Health Hazard Assessment Division- Army Public Health Center

11:15- 11:30 AM

Q&A

1:30 – 3:00 PM

MMN-5/B56 Subconcussive Blast Exposure in Military Exercises- I

David O. Keyser, Session Chair

Neurophysiologist, Deputy Director Traumatic Injury Research Program, Military and Emergency Medicine/CNRM Uniformed Services University, Bethesda, MD

Suthee Wiri, Session Chair

Senior Scientist, Applied Research Associates

1:30- 1:45 PM

Investigating Training-Associated Blast Pathology: The INVICTA Study

David O. Keyser, Uniformed Services University, Bethesda, MD

1:45- 2:00 PM

Blast Gauge Assessment of Subconcussive Blast Exposure in Military Units

Suthee Wiri, Senior Scientist, Applied Research Associates

2:00- 2:15 PM

Objective Assessment of Brain Function Impairment using a Brain Activity-Based Biomarker

Leslie Prichep, Chief Scientific Officer, BrainScope Company, Inc.

2:15- 2:30 PM

Development and Validation of the Brain Gauge Tactile Discrimination Assessment of Brain Function

Mark Tommerdahl, CEO, Cortical Metrics, LLC

2:30- 2:45 PM

Submitted Talk - TBD

Juan A. Piantino, Associate Professor of Pediatrics, Oregon Health and Science University

2:45- 3:00 PM

Q&A

3:30 – 5:00 PM

MMN-6/B69 Subconcussive Blast Exposure in Military Exercises- II

Michael Roy, Session Chair

Deputy Director, Center for Neuroscience and Regenerative Medicine and TBI Research Center, Director, Division of Military Internal Medicine and Professor of Medicine, Uniformed Services University, Bethesda, MD

Thomas DeGraba, Session Co-Chair

Chief Innovations Officer, National Intrepid Center of Excellence, Walter Reed National Military Medical Center, Bethesda, MD

3:30- 3:45 PM

Blast Exposure in Military Breachers

Walter Carr, Research Psychologist, Center for Military Psychiatry and Neuroscience (CMPN), Blast Induced Neurotrauma Branch Walter Reed Army Institute of Research, Silver Spring, MD

3:45- 4:00 PM

Effect of Combat and Mission Related Repetitive Blast and Blunt Force TBI on Cerebral Autonomic Function and Response to Integrative Medicine Therapies

Thomas DeGraba, Chief Innovations Officer, National Intrepid Center of Excellence

4:00- 4:15 PM

Leveraging Neuroplasticity to Improve Brain Health

Leann Young, Applied Research Associates

4:15- 4:30 PM

Monitoring Blast and Blunt Forces Using a Single Body Worn Device

Adam Bartsch, Chief Science Officer, Prevent Biometrics, Minneapolis, MN

4:30- 4:45 PM

Lifetime Blast Exposure During Military Career Negatively Impacts Recovery from Traumatic Brain Injury

Jason Bailie, Senior Clinical Research Director, Traumatic Brain Injury Center of Excellence (TBI CoE), Research Portfolio Management Division, Research & Engineering Directorate, Defense Health Agency, Intrepid Spirit, Naval Hospital Camp Pendleton

4:45- 5:00 PM

Q&A





Military Medicine and Veteran Health Track

20th Annual World Congress of SBMT

Room 406B



20th Annual World Congress of SBMT

Military Medicine and Veteran Health Track

All times in Pacific Standard Time (GMT-8)

Saturday February 18th, 2023

10:00 – 11:30 AM

MMN-7/C82 Post-Traumatic Stress Disorder, Traumatic Brain Injury and Suicide in the Military

Michael Roy, Session Chair

Deputy Director, Center for Neuroscience and Regenerative Medicine and TBI Research Center, Director, Division of Military Internal Medicine and Professor of Medicine, Uniformed Services University, Bethesda, MD

Kenneth Green, Session Co-Chair

Vice President of Strategic Initiatives for Government and Nonprofit Partnerships, SBMT.

10:00- 10:15 AM

Preliminary Findings from the Reconsolidation of Traumatic Memories to Resolve Posttraumatic Stress Disorder (RECONTROL) Study

Kerri Dunbar, Research Coordinator and Therapist, Center for Neuroscience and Regenerative Medicine, Uniformed Services University, Bethesda, MD

10:15- 10:30 AM

Exploring Neuron- And Astrocyte-Derived Exosomes As Biomarkers of Tbi After A Combat Deployment

Victoria Risbrough, Professor In Residence, Psychiatry, University of California San Diego

10:30- 10:45 AM

Air Force Program to Combat Suicide

Caesar Junker, US Air Force, Colonel Caesar Junker, USAF, Director, Warfighter Health-Human Performance, Joint Artificial Intelligence Center, Department of Defense; Assistant Professor Rehabilitation Medicine, Uniformed Services University, Bethesda, MD

10:45- 11:00 AM

Understanding and Preventing Suicide. What we Know, What We Think We Know, and What We Will Never Know

Kenneth Green, Vice President of Strategic Initiatives for Government and Nonprofit Partnerships, SBMT.

10:45- 11:00 AM

Alpha Guided Neuromodulation in a Military Population

Alexander Ring, Director of Applied Sciences, Wave Neuroscience

10:45- 11:00 AM

Q&A

1:30 – 3:00 PM

MMN-8/C95 Sleep Disorders in Military Service Members and Veterans

J. Kent Werner, Session Chair

Lieutenant Commander, Medical Corps, US Navy; Director of Research, Sleep Disorders Center, WRNMMC, Sleep Neurology, National Intrepid Center of Excellence, WRNMMC, Assistant Professor, Department of Neurology, Uniformed Services University, Bethesda, MD

Molly Malarkey, Session Co-Chair

Project Manager, Center for Neuroscience and Regenerative Medicine, Uniformed Services University, Bethesda, MD

1:30- 1:45 PM

Sleep, TBI and Glymphatic Waste Clearance

J. Kent Werner, Lieutenant Commander, Medical Corps, US Navy; Director of Research, Sleep Disorders Center, WRNMMC, Sleep Neurology, National Intrepid Center of Excellence, WRNMMC, Assistant Professor, Department of Neurology, Uniformed Services University, Bethesda, MD

1:45- 2:00 PM

Harnessing Big Data in Military Sleep Treatment

Vincent F. Capaldi, Associate Professor and Vice Chair, Department of Psychiatry (Research), and Program Director, Combined Internal Medicine / Psychiatry Residency, Uniformed Services University, Bethesda, MD

2:00- 2:15 PM

SHUTi: Preliminary Results of Internet-Guided Cognitive Behavioral Therapy for Insomnia in Service Members with TBI

Molly Malarkey, Project Manager, Center for Neuroscience and Regenerative Medicine, Uniformed Services University, Bethesda, MD

2:15- 2:30 PM

TBD

Cameron Good, Ph.D, Attune Neuroscience

2:30- 2:45 PM

Transcranial Magnetic Stimulation of the Default Mode Network to Improve Sleep: A Preliminary Trial

William D. "Scott" Killgore, Professor of Psychiatry, Psychology, Medical Imaging, & BIO5 Institute, Director, SCAN Lab, Department of Psychiatry, University of Arizona

2:45- 3:00 PM

Q&A

3:30 – 5:00 PM

MMN-9/C108 Biomarkers in Subconcussive Blast Exposure, Traumatic Brain Injuries, and Post-Traumatic Stress Disorder

Mingxiong Huang, Session Chair

Professor & Co-Director of MEG, Departments of Radiology, Electrical and Computer Engineering, University of California San Diego & VA San Diego Healthcare System

Kenneth Green, Session Co-Chair

Vice President of Strategic Initiatives for Government and Nonprofit Partnerships, SBMT.

3:30- 3:45 PM

Emerging Wearable Metabolic and Vascular Sensors To Identify PTSD Patients At Risk For Cardiometabolic Disorders

Tzung Hsiai, Director, UCLA Cardiovascular Engineering & Light-Sheet Imaging; Program Director, Caltech/UCLA Training Program for Cardiovascular Bioengineers; Maud Cady Guthman Endowed Chair in Cardiology

3:45- 4:00 PM

MEG Imaging Markers and Neural Mechanisms for Sensitive Detection of Mild Traumatic Brain Injury

Mingxiong Huang, Professor & Co-Director of MEG, Departments of Radiology, Electrical and Computer Engineering, University of California San Diego & VA San Diego Healthcare System

4:00- 4:15 PM

Defining role of TBI and PTSD in REM Sleep Behavior Disorder and Long-Term Parkinsonism

Jonathan Elliott, Assistant Professor, OHSO and Research Physiologist Portland VA

4:15- 4:30 PM

Machine Learning Enhanced Prediction of Infectious State; A Novel Cervical Neuronal Signal Pre-to-Post Lipopolysaccharide (LPS) Injection

Imanuel Lerman, Professor, Affiliate Electrical and Computer Engineering, VA San Diego Healthcare System, Center for Stress and Mental Health Center for Pain Medicine,

4:30- 4:45 PM

Utility of Blood Biomarkers to Understand Biological Mechanisms and Clinical Symptoms Following Brain Injury

Sara Mithani, Assistant Professor, University of Texas Health Science

4:45- 5:00 PM

Q&A





20th Annual World Congress of SBMT

Military Medicine and Veteran Health Track

All times in Pacific Standard Time (GMT-8)

Sunday February 19th, 2023

10:00 – 11:30 AM

MMN-10/D121 Audiologic and Vestibular Concerns in Military Service Members and Veterans

Doug Brungart, Session Chair

Chief Scientist, National Military Audiology and Speech Center, Walter Reed National Military Medical Center, Bethesda, MD.

Devon Kulinski, Session Co-Chair

Research Audiologist, Walter Reed National Military Medical Center, Lulima Government Solutions

10:00- 10:15 AM

Audiologic Impact of Blast Overpressure from Firing Heavy Weapons, Findings from the INVICTA Study

Devon Kulinski, Research Audiologist, Walter Reed National Military Medical Center, Lulima Government Solutions

10:15- 10:30 AM

Direct And Indirect Measures Of Auditory And Vestibular Performance In Impaired Service Members

Doug Brungart, National Military Audiology and Speech Center, Walter Reed National Military Medical Center, Bethesda, MD.

10:30- 10:45 AM

Toward Continuous, Body-Worn Measurement Of Blast Exposure And Physiological Measures

Chris Smalt, MIT Lincoln Laboratories

10:45- 11:00 AM

Functional Impact of Tinnitus in the Military

LaGuinn Sherlock, Hearing Program Studies Investigator, National Military Audiology and Speech Center, Walter Reed National Military Medical Center, Bethesda, MD.

11:00- 11:15 AM

Auditory Considerations in Blast-Exposed Veterans

Melissa Papesh, National Center for Rehabilitative Auditory Research (NCRAR)

11:15- 11:30 AM

Q&A

1:30 – 3:00 PM

MMN-11/D134 Directed Energy and Environmental Exposures

Matthew Reinhard, Session Chair

Director, War Related Illness and Injury Study Center, Veterans Administration Medical Center, Washington, DC

John Barrett, Session Co-Chair

US Army, Deputy Director, War Related Illness and Injury Study Center, Veterans Administration Medical Center, Washington, DC

1:30- 1:45 PM

Model Based Knowledge Graph of Emerging Threats and Health Problems: A Regulatory Network Model of Neuropsychological Disruption in Havana Syndrome

Gordon Broderick, Director, Center for Clinical Systems Biology at the Rochester General Hospital

1:45- 2:00 PM

Identifying the Source of Havana Syndrome

Eric Heidhausen, Military Medicine and Veteran Health Track Speaker

2:00- 2:15 PM

Holistic Environmental Sensing for Actionable Insights

David Lary, Professor, William B. Hanson Center for Space Science, University of Texas at Dallas, Richardson TX

2:15- 2:30 PM

The Department of Defense Response to Anomalous Health Incidents

Joseph Villacis, Chief, Medical Branch

2:30- 2:45 PM

Towards Standardizing the Evaluation of Complex Military Exposures: Retrospective Exposure Estimation From the Individual Longitudinal Exposure Record (ILER), Veteran- Military Occupational Exposure Assessment Tool (V-MOAT) and Military Records in a High Exposure Military Population

John Barrett, US Army, Deputy Director, War Related Illness and Injury Study Center, Veterans Administration Medical Center, Washington, DC

2:45- 3:00 PM

Q&A

3:30 – 5:00 PM

MEG-12/D150 Ukraine Humanitarian Initiative

Humanitarian Mission Subcommittee

Discussion Panel





Neurotechnology and Neuroradiology

20th Annual World Congress of SBMT

Room 406A



20th Annual World Congress of SBMT

Neurotechnology and Neuroradiology

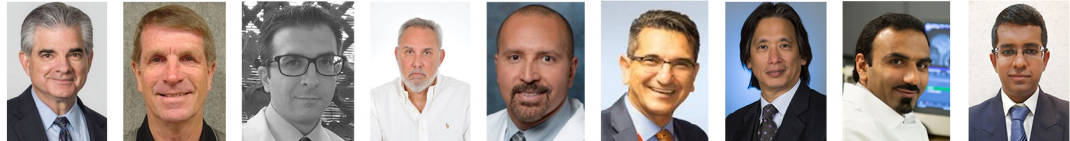
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Organized by SBMT faculty

Drs. Thomas J Williams, Roger Werne, Guiseppe Umana, Vasileios Katsaros, Manny Perez, Babak Kateb, Anthony Chang, Mojtaba Barzegar, Kevin Morris

SBMT Fellows

Drs. Love Kumar, Kevin Morris, Dina Shainsky Intern: Lila Kendall, Armin Nouri



Thursday February 16th, 2023

10:00 – 11:30 AM

NET-1/A8 : Brain Computer interface

Hyun-Chul Kim, Session Chair

Assistant Professor Dept. of Artificial Intelligence, Kyungpook National University

Seung Schick Yoo, Session Co- Chair

Associate Professor of Radiology, Harvard Medical School / Brigham and Women's Hospital, Faculty/ Harvard Mind Brain Behavior, Director/ Neuromodulation and Tissue Engineering Laboratory (NTEL)

10:00- 10:15 AM

fMR-Based Brain Computer Interface for Mindfulness Neurofeedback

Hyun-Chul Kim Assistant Professor, Dept. of Artificial Intelligence, Kyungpook National University

10:15- 10:30 AM

Promoting Brain Solute Clearance by Acoustic Streaming of Transcranial Focused Ultrasound

Seung Schick Yoo, Associate Professor of Radiology, Harvard Medical School

10:30- 10:45 AM

Localized Enhancement of CSF Solute Transport in Response to Neural Activity

Evgenii Kim, Postdoctoral Fellow, Neuromodulation and Tissue Engineering Laboratory, Department of Radiology Brigham and Women's Hospital and Harvard Medical School

10:45- 11:00 AM

Recent Trends of fNIRS-Based Brain Computer Interface

Suh-Yeon Dong, Professor Sookmyung Women's University Department of IT Engineering Human-Computer Interaction Lab

11:00- 11:30 AM

Q&A

1:30 – 3:00 PM

NET-2/A21 Neuroradiology Innovation and Technology

Vasileios Katsaros, Session Chair

Director of the Department of Advanced Imaging Modalities General Anti-Cancer and Oncological Hospital of Athens

Mojtaba Barzegar, Session Chair

IOBIM - CEO & Co-Founder

Babak Kateb, Session Chair

Chief Executive Officer Society For Brain Mapping and Therapeutics

1:30- 1:45 AM

Advances in Neuroradiological Imaging of Brain Tumors

Vasileios Katsaros, Director of the Department of Advanced Imaging Modalities General Anti-Cancer and Oncological Hospital of Athens

1:45- 2:00 AM

Latest update on brain tumor imaging

Soonmee Cha, Professor & Vice Chair of Education; Program Director, Diagnostic Radiology Residency, Associate Program Director, Integrated Interventional Radiology

2:00- 2:15 AM

Radiofrequency ablation of spinal metastatic disease

Jay Acharya, Assistant Professor of Clinical Radiology, Associate Chief of Neuroradiology, Director of Spine Imaging and Intervention, Program Director For Neuroradiology

2:15- 2:30 AM

Application of Artificial Intelligence in Neuroradiology

Pegah Khosravi, Assistant Professor, Department of Biological Sciences New York City College of Technology, CUNY

2:30- 2:45 AM

Submitted Talk - TBD

TBD, TBD

2:45- 3:00 AM

Q&A

3:30 – 5:00 PM

NET-3/A34 Translational Brain Research: Evidence of Synergistic Effects of Multiple Spaceflight-Associated Stressors

Thomas Williams, Session Chair

Senior Consultant, National Aeronautics and Space Administration

3:30- 3:45 PM

Overview of Spaceflight Stressors of Relevance To the Brain

Thomas J. Williams, Alexandra S. Whitmire, & Aaron J. Allcorn, World Brain Mapping, Nasa Johnson Space Center

3:45- 4:00 PM

Analytical Framework For Rodent/Nhp Data Set Utilization To Inform Human CN Risk Estimation.

Ajit Mulavara, Josh Alwood, Sheena Dev, J. Zawaski, Robin Elgart, Alexandra S. Whitmire Nasa Johnson Space Center

4:00- 4:15 PM

Reorganization of Neurotransmitter Networks After Exposure To Spaceflight Stressors: Implications

For Neurocognitive Performance

4:15- 4:30 PM

Raj I. Desai, Harvard Medical School-McLean Hospital

An Approach To Assess Neural Network Signaling in Rodents Under Task Loading Conditions

Richard A. Britten, East Virginia University Medical School

4:30- 4:45 PM

Alterations to the Brain During Spaceflight and Potential Relevance to Crew in Long-Duration Space Exploration

Meaghan Roy-O'Reilly, Stanford University Medical Center

4:45- 5:00 PM

Acute Effects of Low-Dose Space Radiation on Neural Activity

Ashley A Blackwell, East Virginia University Medical School





20th Annual World Congress of SBMT

Neurotechnology and Neuroradiology

All times in Pacific Standard Time (GMT-8)

Friday February 17th, 2023

- 10:00 – 11:30 AM** **NET-4/B47 Mixed Reality and Space Medicine/Translational Research in Space Health**
Giuseppe Umana, Session Chair
 Neurosurgeon, Cannizzaro Emergency Hospital, Sicily
Thomas Williams, Session Chair
 Senior Consultant, National Aeronautics and Space Administration
- 10:00- 10:15 AM** **A View To An Augmented Neurosurgical Reality**
Edward Andrews, Chief Resident, Upmc Department of Neurological Surgery
- 10:15- 10:30 AM** **Informed Consent Mixed Reality Assisted**
Giuseppe Umana, Neurosurgeon Cannizzaro Emergency Hospital, Sicily
- 10:30- 10:45 AM** **Stressors of Isolation and Confinement and How the Metaverse Can Help.**
Jocelyn (Dunn) Rosenberg, Researcher Meta
- 10:45- 11:00 AM** **Walking in My Shoes. How To Use Avatars To Literally Get Inside Your Patient's Head and Body**
Harry Kloor, CEO and CO-Founder, Beyond Imagination
- 11:00- 11:15 AM** **The Space Within: Nasa Funding and Applications of Virtual Reality**
Thomas Williams, Senior Consultant National Aeronautics and Space Administration
- 11:15- 11:30 AM** **Q&A**
- 1:30 – 3:00 PM** **NET-5/B60 Image-Guided Interventions I**
J. Manuel Perez, Session Chair
 Program Director National Cancer Institute
- 1:30- 1:45 PM** **Label-Free Fluorescence Lifetime Imaging For Intraoperative Real-Time Guidance Of Neurological Procedures**
Laura Marcu, Professor of Biomedical Engineering and Neurological Surgery Director, National Center For Interventional Biophotonic Technologies (Ncibt)
- 1:30- 1:45 PM** **Using Ultrasound To Replenish Intracranial Drug-Delivery Devices**
Yevgeny Brudno, Assistant Professor, Joint Department of Biomedical Engineering the University of North Carolina and North Carolina State University
- 2:00- 2:15 PM** **A Physiologic Adaptive Radiation Therapy Pipeline For Glioblastoma By Daily Multiparametric MRI and Machine Learning**
Eric A. Mellon, Associate Professor of Radiation Oncology and Biomedical Engineering, University of Miami, Health System
- 2:15- 2:30 PM** **Pet Imaging of Immunotherapeutic Targets in Gliomas**
Gary Kohanbash, Assistant Professor of Neurological Surgery University of Pittsburgh School of Medicine
- 2:30- 2:45 PM** **Image-Guided Metabolic Imaging to Target Therapies in Glioblastoma**
Jingwen Yao, Assistant Professor, Department of Radiology, Brain Tumor Imaging Laboratory, University of California Los Angeles
- 2:45- 3:00 PM** **Q&A**
- 3:30 – 5:00 PM** **NET-6/B73 Neuroradiology**
Mojtaba Barzegar, Session Chair
 IQBIMI - CEO & Co-Founder
Babak Kateb, Session Chair
 Chief Executive Officer Society For Brain Mapping and Therapeutics
- 3:30- 3:45 PM** **Magnetic Resonance Guided Radiotherapy advantages and challenges**
Mojtaba Barzegar, CEO and Director of SBMT/Iran, CEO and founder of iqbmi
- 3:45- 4:00 PM** **Advanced Imaging in Neuroradiology of Degenerative Disorders/Long COVID**
Vasileios Katsaros, National and Kapodistrian University of Athens, General Anticancer and Oncological Hospital
- 4:00- 4:15 PM** **Crossover Technologies from Peripheral to Neuro-Interventional Radiology**
Nadine Abi-Jaoudeh, Professor of Radiology UCI, Chief of Interventional Radiology Director of Clinical Research
- 4:15- 4:30 PM** **Research Ethics**
Mark Schweitzer, Vice President of Health Affairs For Wayne State University
- 4:30- 5:00 PM** **Q&A**





20th Annual World Congress of SBMT

Neurotechnology and Neuroradiology

All times in Pacific Standard Time (GMT-8)

Saturday February 18th, 2023

10:00 – 11:30 AM

NET-7/C86 Image-Guided Interventions 2

J. Manuel Perez, Session Chair
Program Director National Cancer Institute

10:00- 10:15 AM **Integration of 5-Ala Fluorescence Lifetime Imaging With Stereotactic Surgical Navigation For Quantitative Real-Time Spatial Localization of Tumor During Neurosurgical Procedures**

Orin Bloch, Professor of Neurological Surgery Director of Neurosurgical Oncology University of California – Davis - School of Medicine

10:15- 10:30 AM **Preoperative Image Updating For Guidance During Brain Tumor Resection**

Keith D. Paulsen, Robert A. Pritzker Professor of Biomedical Engineering Scientific Director, Advanced Imaging Center Dartmouth College

10:30- 10:45 AM **Automated Presurgical Language Mapping Via Deep Learning For Multimodal Brain Connectivity**

Archana Venkataraman, John C. Malone Assistant Professor of Electrical and Computer Engineering Johns Hopkins University

10:45- 11:00 AM **Progression of Leukoencephalopathy in Methotrexate-Based Chemotherapy For Pediatric Acute Lymphoblastic Leukemia**

Ravi Bansal, Professor of Research Pediatrics Keck School of Medicine, University of Southern California and Children Hospital of Los Angeles

11:00- 11:15 AM **Recent Advances in Radio-Pathomic Mapping of Glioblastoma**

Peter S. Laviolette, Robert C. Olson Professor of Radiology Director, Radiology Quantitative Imaging Laboratory Medical College of Wisconsin

11:15- 11:30 AM **Q&A**

1:30 – 3:00 PM

NET-8/C99 Nanoneurosurgery and Neurophotonics

Babak Kateb, Session Chair
Chief Executive Officer, Society For Brain Mapping and Therapeutics
Kevin Morris, Session Chair
Research Scientist, Society for Brain Mapping and Therapeutics

1:30- 1:45 PM **Immunotherapy Against Glioblastoma-A Dendritic Cell-Based Approach**

Dwain Irvin, CEO of Novaccess Global Inc.

1:45- 2:00 PM **Application of Artificial Intelligence in Neuroradiology**

Ajeet Kaushik, Assistant Professor of Chemistry, Florida Polytechnic University.

2:00- 2:15 PM **Carbon-Based Nanoplatfoms: Types, and Applications in Neurological Disorders**

Kevin Morris, Research Scientist, Society For Brain Mapping and Therapeutics

2:15- 2:30 PM **Neurophotonics for Therapy**

Nasser Kashou, Image Analysis Lab | Fnlrs Lab, Director

2:30- 2:45 PM **Submitted Talk - TBD**

TBD, TBD

2:45- 3:00 PM **Q&A**

3:30 – 5:00 PM

NET-9/C112 Neuroscience Research At Doe National Labs

Roger Werne, Session Chair
Senior Advisor, Innovation and Partnerships office Lawrence Livermore National Laboratory

3:30- 3:45 PM **Introduction To the Department of Energy National Laboratories**

Roger Werne, Senior Advisor, Innovation and Partnerships Office Lawrence Livermore National Laboratory

3:45- 4:00 PM **Sensorimotor Transformations in Neural and Neuromorphic Systems**

Frances S. Chance, Principal Member of the Technical Staff, Department of Cognitive and Emerging Computing, Sandia National Laboratories

4:00- 4:15 PM **Next-Generation Flexible Neural Interfaces**

Razi Haque, Implantable Microsystems Group Leader, Materials Engineering Division Lawrence Livermore National Laboratory

4:15- 4:30 PM **Computability and Complexity of Neuromorphic Computing**

Prasanna Date, Research Scientist For the Computer Science and Mathematics Division, Oak Ridge National Laboratory

4:30- 4:45 PM **Causal Machine Learning For Drug Repurposing To Impact Als Treatment**

Priyadip Ray, Staff Scientist - Machine Learning Group, Lawrence Livermore National Laboratory

4:45- 5:00 PM **Q&A**





20th Annual World Congress of SBMT

Neurotechnology and Neuroradiology

All times in Pacific Standard Time (GMT-8)

Sunday February 19th, 2023

10:00 – 11:30 AM

NET-10/D125 Neurotech innovation: AI and Telemedicine.

Laura Purdy, Session Chair

Founder and CEO of Laura Purdy America's Favorite Doctor

Anthony Chang, Session Chair

Chief Intelligence and Innovation Officer, Medical Intelligence and Innovation Institute Cardiology, CHOC Specialists

10:00- 10:15 AM

Why Telemedicine is the Wave of the Future

Laura Purdy, Founder and CEO of Laura Purdy America's Favorite Doctor

10:15- 10:30 AM

Artificial Intelligence for Neurosciences: Primer and Update

Anthony C Chang, Chief Intelligence and Innovation Officer, Medical Intelligence and Innovation Institute Cardiology, CHOC Specialists

10:30- 10:45 AM

Brains for Brains: The Role of AI/ML Guided Clinical Decision Support in Neurology

Jeremy Slater, Chief Medical Officer for Stratus

10:45- 11:00 AM

Submitted Talk - TBD

TBD, TBD

11:00- 11:15 AM

Submitted Talk - TBD

TBD, TBD

11:15- 11:30 AM

Q&A

1:30 – 3:00 PM

NET-11/D138 Recent advances and Innovations in Multiple Sclerosis

Flavia Nelson, Session Chair

Professor of Neurology, Chief, CNS Autoimmune Disorders Division, Director, Multiple Sclerosis Center of Excellence, Don Soffer Clinical Research Center
University of Miami, Miller School of Medicine

1:30- 1:45 PM

Advances in stem cell transplant in MS

**Flavia Nelson, Professor of Neurology, Chief, CNS Autoimmune Disorders Division, Director, Multiple Sclerosis Center of Excellence, Don Soffer Clinical Research Center
University of Miami, Miller School of Medicine**

1:45- 2:00 PM

fMRI and cognitive impairment in MS

**Flavia Nelson, Professor of Neurology, Chief, CNS Autoimmune Disorders Division, Director, Multiple Sclerosis Center of Excellence, Don Soffer Clinical Research Center
University of Miami, Miller School of Medicine**

2:00- 2:15 PM

Submitted Talk - TBD

TBD, TBD

2:15- 2:30 PM

Submitted Talk - TBD

TBD, TBD

2:30- 2:45 PM

Submitted Talk - TBD

TBD, TBD

2:45- 3:00 PM

Q&A

3:30 – 5:00 PM

NET-12/D151 SBMT Neurotech innovations : Fellows Talk

Joe Bolanos, Session Chair

Chief Operating Officer SBMT, Society for Brain Mapping and Therapeutics Research Scientist, MD Private Practice Dr. Bolanos Ventura, El Salvador

3:30- 3:45 PM

Submitted Talk - TBD

Love Kumar, SBMT Fellow

3:45- 4:00 PM

Submitted Talk - TBD

Fauziyya Mohammad, SBMT Fellow

4:00- 4:15 PM

Submitted Talk - TBD

Dina Shainsky, SBMT Fellow

4:15- 4:30 PM

Submitted Talk - TBD

Natalia Bilger, SBMT Fellow

4:30- 4:45 PM

Submitted Talk - TBD

Kateryna Patapova, SBMT Fellow

4:45- 5:00 PM

Q&A





20th Annual World Congress of SBMT Neuro-Oncology

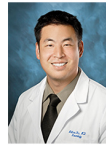
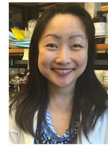
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Organized by SBMT faculty

Drs. Reinhard Schulte, Vicky Yamamoto, Jethro Hu, Chirag Patel, Babak Kateb

SBMT Fellows

Drs. Love Kumar, Aysha Noor



Thursday February 16th, 2023

10:00 – 11:30 AM

NOC-1/A5: Neuro-Oncology: Epidemiology of Brain Tumors

Miguel Robinson, Session Chair

Database Manager, War Related Illness and Injury Study Center, Palo Alto

Carol Kruchko, Session Co-Chair

Founder, President and Chief Mission Officer of the Central Brain Tumor Registry of the United States (CBTRUS)

10:00- 10:15 AM

A Non-Coding Single Nucleotide Polymorphism at 8q24 Drives IDH1-Mutant Glioma Formation

Kristin Drucker, Research Associate, Department of Lab Medicine and Pathology Mayo Clinic

10:15- 10:30 AM

CBTRUS - Resource for US Population-based Data on All Primary Brain Tumors

Carol Kruchko, Founder, President and Chief Mission Officer of the Central Brain Tumor Registry of the United States

10:30- 10:45 AM

Overview of Risk Factors for Adult and Pediatric Brain Tumors

Michael Scheurer, Director, Population Sciences Biorepository, Dan L. Duncan Comprehensive Cancer Center, Baylor College of Medicine

10:45- 11:00 AM

Blood Immune Profiles in Glioma Patients

Annete Molinaro, Professor, Neurological Surgery, University of California San Francisco (UCSF)

11:00- 11:30 AM

Q&A

1:30 – 3:00 PM

NOC-2/A18: Neuro-Oncology: Metabolic Therapy Microbiome

Jethro L. Hu, Session Chair

Neuro-Oncology, Cedars-Sinai Medical Center

Lisa Rogers, Session Co-Chair

Medical Director, Brain Metastasis Program, Department of Neurosurgery, Henry Ford Health

1:30- 1:45 AM

Rationale for Antiangiogenic Therapy in Combination with the Ketogenic Diet to Treat Glioblastoma

Lisa Rogers, Medical Director, Brain Metastasis Program, Department of Neurosurgery, Henry Ford Health

1:45- 2:00 AM

Fasting Fueled Ketogenesis and its Regulation of T-cell Metabolism

Ramandeep Ratan, Gynaecologic Oncology Research Professor, Henry Ford Health

2:00- 2:15 AM

A Phase I Trial of Ketogenic Diet Plus Standard of Care for Newly Diagnosed Glioblastoma

Jethro L. Hu, Neuro-Oncology, Cedars-Sinai Medical Center

2:15- 2:30 AM

Submitted Talk-TBD

TBD, TBD

2:30- 2:45 AM

Submitted Talk - TBD

TBD, TBD

2:45- 3:00 AM

Q&A

3:30 – 5:00 PM

NOC-3/A31: Neuro-Oncology: Circulating Biomarkers and Liquid Biopsies

Stephen Bagley, Session Chair

Assistant Professor of Medicine, Perelman School of Medicine, University of Pennsylvania

Pierluigi Mauri, Session Co-Chair

Director of Research Proteomics and Metabolomics Lab National Council of Research

3:30- 3:45 PM

Integrated Proteomics and Systems Biology for Biomarker and Target Discovery

Pierluigi Mauri, Director of Research, Chief of Proteomics and Metabolomics Laboratory Institute of Technologies for Biomedicine, National Council of Research (ITB-CNR)

3:45- 4:00 PM

Brain Water Homeostasis and Brain Tumors

Antonio Frigeri, Professor, Department of Basic Medical Sciences, Neuroscience and Sensory Organs, Bari University

4:00- 4:15 PM

Untargeted LC-HRMS Based-Plasma Metabolomics Can Reveal New Biomarker in High-Risk Tumors

Andrea Petretto, Department of Translational Research and Laboratory Medicine, Istituto Giannina Gaslini, Genoa, Italy

4:15- 4:30 PM

Liquid Biopsy of Brain Tumors Using Transcranial Low-Intensity Focused Ultrasound

Ying Meng, Division of Neurosurgery, Sunnybrook Health Sciences Centre, University of Toronto

4:30- 4:45 PM

Molecular pattern characterization of recurrent glioblastoma: A new precision-medicine approach

Nicola Montemurro, Medical Doctor at Università di Pisa, Italy

4:45- 5:00 PM

Q&A





20th Annual World Congress of SBMT Neuro-Oncology

All times in Pacific Standard Time (GMT-8)

Friday February 17th, 2023

10:00 – 11:30 AM

NOC-4/B44: Neuro-Oncology: Tumor Treating Fields

Chirag Patel, Session Chair

Assistant Professor of Neuro-Oncology University of Texas MD Anderson Cancer Center

Edwin Chang, Session Co-Chair

Director of Canary Core Preclinical Imaging Facility Department of Radiology Stanford University

10:00- 10:15 AM

TT Fields and its System-Level Effects as Assessed via a Trans-omics Approach

Narasimha Karanam, Department of Radiation Oncology, University of Texas Southwestern Medical School

10:15- 10:30 AM

Computational Modeling of TT Fields and its Effects in Cancer Cells

Kris Carlson, Neurostimulation, Neurosurgery Research, BIDMC/ Harvard Medical School

10:30- 10:45 AM

TT Fields Dually Activate STING and AIM2 Inflammasomes to Induce Adjuvant Immunity in Glioblastoma

David Tran, Lillian S. Wells Department of Neurosurgery, University of Florida College of Medicine

10:45- 11:00 AM

Role of TT Fields in Radiation- and Surgery- Refractory Bony Spine Metastases

Claudio Tatsui, Department of Neurosurgery, University of Texas MD Anderson Cancer Center

11:15- 11:30 AM

Q&A

1:30 – 3:00 PM

NOC-5/B57: Neuro-Oncology: Stem Cell and Molecular Targeting

Vicky Yamamoto, Session Chair

20th President of Society for Brain Mapping and Therapeutics (SBMT) Cancer Scientist, Department Otolaryngology/ Head and Neck Surgery, Keck School of Medicine of Comprehensive Cancer Cleveland Clinic.

Jennifer Yu, Session Co-Chair

Center for Cancer Stem Cell Biology, Radiation Oncology, Leader, Developmental Therapeutics Program, Case USC Center.

1:30- 1:45 PM

Remote and Noninvasive Control of CAR T Cells by Focused Ultrasound for Solid Tumor Therapy

Peter Yingxiao Wang, Chair and Professor, Department of Biomedical Engineering, University of Southern California

1:45- 2:00 PM

Regulation of Wnt Signaling in Glioma Stem Cells

Jennifer Yu, Center for Cancer Stem Cell Biology, Radiation Oncology Cleveland Clinic, Leader, Developmental Therapeutics Program, Case Comprehensive Cancer Center

2:00- 2:15 PM

The Role of Molecular Diagnostics in the Treatment of Patients with Gliomas

Leomar Ballester, Assistant Professor in the Department of Pathology, MD Anderson Cancer Center

2:15- 2:30 PM

The ERKS Axis Cell Fate Regulators as Anti-Proliferation Targets

Qiang Lu, Professor, Department of Stem Cell Biology and Regenerative Medicine, City of Hope

2:45- 3:00 PM

Q&A

3:30 – 5:00 PM

NOC-6/B70: Neuro-Oncology: Clinical Trials Update

Minesh Mehta Session Chair

Deputy Director and Chief of Radiation Oncology, Administrative Services Miami Cancer Institute Member, Memorial Sloan Kettering Cancer

Reinhard Schulte Session Co-Chair

Professor, Division of Biomedical Engineering Sciences Loma Linda University

3:30- 3:45 PM

A Trial to Evaluate Multiple Regimens in Newly Diagnosed and Recurrent Glioblastoma (GBM AGILE)

Elisa Aquilanti, Oncologist, Instructor, Dana Farber Cancer Institute

3:45- 4:00 PM

SurVaxM for Newly Diagnosed Glioblastoma

Manmeet Ahluwalia, Deputy Director, Chief of Medical Oncology and chief scientific officer Miami cancer institute, Florida

4:00- 4:15 PM

An update on NRG trials of hippocampal avoidance

Minesh Mehta, Deputy Director and Chief of Radiation Oncology, Administrative Services Miami Cancer Institute Member, Memorial Sloan Kettering Cancer

4:15- 4:30 PM

Proton Radiotherapy vs Intensity-Modulated Radiotherapy for Newly Diagnosed GBM

Caroline Chung, Vice President, Chief Data Officer & Associate Professor Radiation Oncology & Radiology, MD Anderson Cancer Center

4:30- 4:45 PM

A Non-exhaustive Overview of Important Adult and Pediatric Malignant Glioma trials

Maninder Kaur, Associate Professor, Neurology & Neurosurgery, Loma Linda University

4:45- 5:00 PM

Q&A





20th Annual World Congress of SBMT Neuro-Oncology

All times in Pacific Standard Time (GMT-8)

Saturday February 18th, 2023

- 10:00 – 11:30 AM** **NOC-7/C80: Quantum Medicine and the Future of Wellbeing**
Ian Lee, Session Chair
Neurosurgeon, Henry Ford Health System
Richard Tyc, Session Co-Chair
Co-founder and Vice president, Technology & Advanced Development at Monteris Medical Corporation
- 10:00- 10:15 AM** **Overview of MR Guided Laser Interstitial Thermal Therapy (LITT) : Technology and Clinical Update**
Richard Tyc, Co-Founder and Vice President, Technology & Advanced Development at Monteris Medical Corporation
- 10:15- 10:30 AM** **Overview of Focused US Ablation**
Nir Lipsmani, Director of the Harquail Centre for Neuromodulation and the Focused Ultrasound Centre of Excellence at Sunnybrook Health Sciences Centre.
- 10:30- 10:45 AM** **Radiofrequency Ablation for Painful Metastatic Tumors: Beyond Pain Control**
Nam Tran, Neuro-oncology surgeon at Moffitt Cancer Center, Assistant Professor of Oncology and Neurosurgery at the University of South Florida College of Medicine
- 10:45- 11:00 AM** **Risk of Stroke Due to En Passage Vessels During LITT for Tumors in at Risk Locations**
Ian Lee, Neurosurgeon, Henry Ford Health System
- 11:00- 11:15 AM** **Gamma Tile: Surgically Targeted Radiation Therapy for Brain Tumors**
Michael Garcia, Associate Professor Department of Radiation Oncology Barrow Neurological Institute
- 11:15- 11:30 AM** **Q&A**
- 1:30 – 3:00 PM** **NOC-8/C96: Neuro-Oncology: Precision Medicine**
Jing Wu Session Chair
Lasker Clinical Research Scholar, Investigator, Neuro-Oncology Branch, National Cancer Institute | National Institutes of Health
Chirag Patel, Session Co-Chair
Assistant Professor of Neuro-Oncology University of Texas MD Anderson Cancer Center
Krinio Giannikou, Session Co-Chair
Instructor in Medicine at Harvard Medical School and Brigham and Women's Hospital
- 1:30- 1:45 PM** **Data-driven Approach and AI for GBM Diagnosis and Management**
Caroline Chung, Vice President, Chief Data Officer & Associate Professor Radiation Oncology & Radiology, MD Anderson Cancer Center
- 1:45- 2:00 PM** **Artificial Intelligence to Surpass Radiomics with Multi-Platform Integration for Precision Oncology**
Jia Wu, Assistant Professor, Department of Department of Imaging Physics, Division of Diagnostic Imaging, MD Anderson Cancer Center, Houston.
- 2:00- 2:15 PM** **Artificial Intelligence & Computational Imaging: Opportunities for Precision Medicine in Neuro-Oncology**
Pallavi Tiwari, Associate Professor, Department of Radiology & Biomedical Engineering, UW-Madison
- 2:15- 2:30 PM** **Using Translational AI in Determining Neurocognitive Outcomes and Neural Network Performance.**
Nadia Biassou, Professor, Clinical Neuro-Radiology, George Washington University School of Medicine and the George-town University Medical School
- 2:30- 2:45 PM** **Connectomics, Traditional and Non-Traditional Eloquent Areas: What's Below the Tip of the Iceberg**
Alexis Morell, NeuroOncology Fellow Department of Neurological Surgery Miller School of Medicine
- 2:45- 3:00 PM** **Q&A**
- 3:30 – 5:00 PM** **NOC-9/C109: Neuro-Oncology: New Approaches in Immunotherapy**
John S. Yu, Session Chair
Director, Surgical Neuro-Oncology Vice Chair, Neurosurgical Oncology in the Department of Neurosurgery, Cedars Sinai
- 3:30- 3:45 PM** **Oncolytic Viruses and Immuno-Virotherapy**
Evanthia Galanis, Professor of Medical Oncology, Mayo College of Medicine
- 3:45- 4:00 PM** **Sex Difference in the Glioblastoma Immune Response**
Justin Lathia, Vice Chair and Associate Professor in the Department of Cardiovascular and Metabolic Sciences at the Lerner Research Institute, part of the Cleveland Clinic.
- 4:00- 4:15 PM** **Learning From the Impossible Cases: Is a Durable Immune-Induced Response Possible?**
Christopher Jackson, Assistant Professor of Neurosurgery, Johns Hopkins Hospital
- 4:15- 4:30 PM** **Inhibiting IDO1 in Glioblastoma With 2nd Generation Drugs**
Derek Wainwright, Associate Professor, Department of Onc Inst CC Basic Sciences, Scientific Director of Brain Tumor Research.
- 4:30- 4:45 PM** **Update on Current Dendritic Cell Vaccination Clinical Trials in GBM**
Robert Prins, Professor, Departments of Neurosurgery and Molecular and Medical Pharmacology, David Geffen School of Medicine at UCLA
- 4:45- 5:00 PM** **Q&A**





20th Annual World Congress of SBMT Neuro-Oncology

All times in Pacific Standard Time (GMT-8)

Sunday February 19th, 2023

10:00 – 11:30 AM

NOC-10/D122: Neuro-Oncology: Radiation Technologies

Reinhard Schulte, Session Co-Chair

Professor, Division of Biomedical Engineering Sciences Loma Linda University

Erqi Pollom, Session Co-Chair

Assistant Professor Radiation Oncology, Stanford, Palo Alto

10:00- 10:15 AM

Initial Experience with Zap-X Radiosurgery for Treating Brain Tumors

Michael Garcia, Associate Professor Department of Radiation Oncology at Barrow Neurological Institute

10:15- 10:30 AM

How Does the Updated WHO Classification System of Gliomas Impact Our Recommendations for Radiation Dose and Technology in 2023?

Minesh Mehta, Deputy Director and Chief of Radiation Oncology at Miami Cancer Institute

10:30- 10:45 AM

Clinical Benefits of Multiparametric MRI-Guided Dose Painting Radiotherapy in Glioblastoma

Caterina Brighi, Postdoctoral Research Associate at ACRF Image X Institute, Sydney School of Health Sciences

10:45- 11:00 AM

Translational Studies in Proton FLASH

Jay Dorsey, Associate Professor of Radiation Oncology, Perelman School of Medicine, University of Pennsylvania

11:00- 11:15 AM

Radiosurgery and Fractionated Stereotactic Radiosurgery for High Grade Gliomas

Christos Boskos, Radiation Oncologist / Radiosurgeon, Ethnikis Antistasis, Athens, Greece

11:15- 11:30 AM

Q&A

1:30 – 3:00 PM

NOC-11/D135: Neuro-Oncology: BNCT and Theranostics

Wolfgang Sauerwein, Session Chair

President of German Society for Boron Neutron Capture Therapy

Frankis Almaguel, Session Co-Chair

Director, Nuclear Medicine Loma Linda University

1:30- 1:45 PM

NanoBoron Based Targeted Boron Neutron Capture Therapy for Treatment of Malignant Glioma

Rameshwar Patil, Assistant Professor of Neurosurgery, Loma Linda University

1:45- 2:00 PM

Detection of Incidentalomas on Brain and Body 68Ga-DOTATOC-PET Scans. A Mixed Reality- Assisted paper (A Case Series Study)

Giuseppe E Umana, Department of Neurosurgery, Trauma and gamma-knife Center Cannizzaro Hospital Catania, Italy

2:00- 2:15 PM

Clinical Trial Design for Neutron Capture Therapy

Andrea Wittig, Professor, Radiation Oncology, Friedrich Schiller University Jena, Germany

2:15- 2:30 PM

A Novel Approach of Developing Theranostic DDS for BNCT

Eiji Matsuura, Professor, Neutron Therapy Research Center (NTRC), Okayama University / Collaborative Research Center for Okayama Medical, Innovation Center (OMIC) & Department of Cell Chemistry, Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Science

2:30- 2:45 PM

Submitted Talk-TBD

Frankis Almaguel, Director, Nuclear Medicine Loma Linda University

2:45- 3:00 PM

Q&A

3:30 – 5:00 PM

NOC-12/D148: Neuro-Oncology: Brain Tumors in Veterans

J. Wesson Ashford, Session Chair

Professor War Related Illness & Injury Study Center, Palo Alto

Ronit Katz, Session Co-Chair

Associate Director War Related Illness & Injury Study Center, Palo Alto

3:30- 3:45 PM

The Chemistry of Effluents From Burn Pits

Carr Smith, Toxicology Advisor, Albemarle Corporation

3:45- 4:00 PM

Brain Tumor Mortality Among U.S. Gulf War Veterans (TBC)

Erin K. Dursa, Post Deployment Health Epidemiology Program, Office of Patient Care Services, Veterans Health Administration, Department of Veterans Affairs

4:00- 4:15 PM

Translocation and Bioprocessing of Airborne Nanoparticles in the CNS

Guenther Oberdoerster, Professor Emeritus - Department of Environmental Medicine (SMD), University of Rochester Medical Center School of Medicine and Dentistry

4:15- 4:30 PM

Translocation and Bioprocessing of Airborne Nanoparticles in the CNS

Uschi Graham, Adjunct Professor, University of Kentucky

4:45- 5:00 PM

Q&A





Psychiatry and Addiction Medicine

20th Annual World Congress of SBMT

Room 409A



20th Annual World Congress of SBMT

Psychiatry and Addiction Medicine

All times in Pacific Standard Time (GMT-8)

Organized by SBMT faculty

Drs. Nicole Jafari, Brian Norling, Keerthy Sunder

SBMT Fellows

Drs. Mojtaba Barzegar, Jothisna Bodhanapati, Aysha Noor, Nataliya Bilger

Interns

Lila Kendall, Madeline Jalali



Thursday February 16th, 2023

10:00 – 11:30 AM

PSY-1/A2: Child & Adolescent Psychiatry: Longitudinal Disorders, Persistent Course, Comorbidities and Interventions

Nicole Jafari, Session Chair

Founder/CEO, Cross Cultural Research & Educational Institute, Faculty at California State University, Long Beach

Laleh Mehrad, Session Co-Chair

Founder Joy Self-Awareness Center, Los Angeles

10:00- 10:15 AM

Early Childhood Social Emotional Learning as an Interventional Tool to Prevent Later Psychological Abnormality

Eileen Manoukian, Director at GEM Educare, Early Childhood Educational Institute, Tarzana, California

10:15- 10:30 AM

Postpartum Depression and the Developmental Implications on the Mother/Infant Attachment

Sohila Nankali, Professor, Tabriz University College of Medicine, Tehran, Iran

10:30- 10:45 AM

Awareness Skill Building and Correlation to Improved Mental Health Status in Young Adults

Laleh Mehrad, Founder, Joy Self Awareness Center, California

10:45- 11:00 AM

Juvenile Delinquency- Case Studies of Accountability and Recovery

Monishia Miller, Lecturer, California State University, Fullerton, California

11:00- 11:15 AM

Family and Domestic Violence

Mohammed Forouzes, Partners for Wellness, Professor Emeritus & MPH Graduate Director California State University, Long Beach

11:15- 11:30 AM

Q&A

1:30 – 3:00 PM

PSY-2/A15: Transgenerational Aspect of Trauma Disorders

Keerthy Sunder, Session Chair

Founder, Karma Doctors and Karma TMS

1:30- 1:45 PM

Submitted Talk - TBD

TBD, TBD

1:45- 2:00 PM

Submitted Talk - TBD

TBD, TBD

2:00- 2:15 PM

Submitted Talk - TBD

TBD, TBD

2:15- 2:30 PM

Submitted Talk - TBD

TBD, TBD

2:30- 3:00 PM

Q&A

3:30 – 5:00 PM

PSY-3/A28: Neuropsychiatric Screening & Brain Mapping- Standardization of Diagnostic Screening for a National Approach for Early Diagnosis, Prevention and Treatment

Eric Braverman, Session Chair

Director of PATH Medical

3:30- 3:45 PM

brAln Health Check- A Protocol for Result Oriented Brain Health Culture for the Practice of Medicine

Eric Braverman, Medical director of PATH Medical

3:45- 4:00 PM

Comorbid Psychiatric Screening for Addiction

Johnathan Avery, Affiliation: Director of Addiction Psychiatry, Program Director of Addiction Psychiatry Fellowship, Program Director of Opioid Overdose Prevention Program, Associate Professor of Clinical Psychiatry, Weill Cornell Medicine

4:00- 4:15 PM

A Proposed Brain-, Spine-, and Mental- Health Screening Methodology (NEUROSCREEN) for Healthcare Systems: the SBMT's Position

Robert Thatcher, Director of Brain, Cognition and Behavior Unit at Shiraz University of Medical Sciences, CEO and Director of Applied Neuroscience Research Institute, Senior Research Scientist BMF & SBMT

4:15- 4:30 PM

Predicting Long-Term Cognitive and Neuropathological Consequences of Moderate to Severe Traumatic Brain Injury

Michael Jaffee, Associate professor, Department of Neurology, University of Florida

4:30- 4:45 PM

Panel Discussion

4:45- 5:00 PM

Q&A





20th Annual World Congress of SBMT

Psychiatry and Addiction Medicine

All times in Pacific Standard Time (GMT-8)

Sunday February 19th, 2023

- 10:00 – 11:30 AM** **PSY-10/D119: Circadian Rhythms, Sleep and Neuropsychiatric Implications**
KS Jagannatha Rao, Session Chair
 Director and Distinguished Professor, Institute for Scientific Research and Technology Services, Republic of Panama
Keerthy Sunder, Session Co-Chair
 Founder, Karma Doctors and Karma TMS
- 10:00- 10:15 AM** **Neuropsychiatric Implications of Sleep Related Behavioral Disorders**
KS Jagannatha Rao, Director and Distinguished Professor, Institute for Scientific Research and Technology Services, Republic of Panama
- 10:15- 10:45 AM** **Submitted Talk - TBD**
 TBD, TBD
- 10:30- 10:45 AM** **Stress and Imaging Based Early Diagnostic Biomarkers in Major Psychiatric Disorders**
Pravat Mandal, Scientist, National Brain Research Center (Govt of India), Honorary Professor, Florey Institute of Neuroscience and Mental Health, Melbourne, Australia
- 10:45- 11:00 AM** **Sleep Health: Impacts on Cognitive and Physical Performance**
Joanna Fong, Sleep Neurologist at UPMC
- 11:00- 11:30 AM** **Effective Nutraceutical & Botanicals for Insomnia (Special Featured Speaker)**
Todd Born, Medical Director, Born Integrative Medicine Specialists, PLLC., Gig Harbor, Washington
- 1:30 – 3:00 PM** **PSY-11/D132: Mental Health in a New Normal**
Christoph Glaser, Session Chair
 CEO, TLEX Institute
Ajay Tejasvi, Session Co-Chair
 International Director, The Art of Living Foundation
- 1:30- 1:45 PM** **Panel Discussion**
Emma Seppälä, Faculty Director of the Yale School of Management's Women's Leadership, Program Science Director, Stanford Center for Compassion and Altruism
- 1:45- 2:00 PM** **Panel Discussion**
Dara G. Ghahremani, Research Faculty, Department of Psychiatry & Biobehavioral Sciences, UCLA Semel Institute for Neuroscience and Human Behavior
- 2:00- 2:15 PM** **Panel Discussion**
Fahri Saatcioglu, Professor of Molecular and Cellular Biology, Department of Biosciences, University of Oslo, Norway
- 2:15- 2:30 PM** **Panel Discussion**
Julia Tang, Stanford University, Wellness Education
- 2:30- 2:45 PM** **Panel Discussion**
Session Speakers, SBMT Psychiatry and Addiction Medicine Speakers
- 2:45- 3:00 PM** **Q&A**
- 3:30 – 5:00 PM** **PSY-12/D145: Covid-19 Brain: Neuropsychiatric Implications & Interventions**
David Baron, Session Chair
 Professor, Western University of Health Sciences, Emeritus Professor, University of Southern California
Keerthy Sunder, Session Chair
 CEO, Karma Doctors & Karma TMS Inc, President- The Sunder Foundation, assistant Clinical Professor, University of California Riverside
- 3:30- 3:45 PM** **Acute and Chronic Neurological Effects of COVID Infections**
Ashraf Elsayegh, Pulmonologist, Critical Care Specialist, Cedars Sinai Medical Center, Los Angeles, California
- 3:45- 4:00 PM** **Neuro Cognitive Behavior and Long COVID Symptoms**
David Baron, Professor, Western University of Health Sciences, Emeritus Professor University of Southern California
- 4:00- 4:15 PM** **COVID-19 and Correlation to Family Systems Cognitive & Emotional Equilibration**
Nicole Jafari, Founder/CEO Cross Cultural Research & Educational Institute, Faculty at California State University Long Beach & California State University Fullerton
- 4:15- 4:45 PM** **Discussion Panel**
- 4:45- 5:00 PM** **Q&A**





20th Annual World Congress of SBMT

Psychiatry and Addiction Medicine

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Saturday February 18th, 2023

10:00 – 11:30 AM

PSY-7/C80: Quantum Medicine and the Future of Wellbeing

Brian Norling, Session Chair

CEO MEMS Precision Technology Inc.

Deepak Chopra, Session Co-Chair

Founder, Chopra Global Clinical Professor of Family Medicine, UCSD

10:00- 10:15 AM

Consciousness and the Brain: Implications for the Future of Human Evolution and Reality

Deepak Chopra, Founder, Chopra Global, Clinical Professor of Family Medicine, UCSD

10:15- 10:30 AM

What Can Quantum Physics Offer to Psychiatry

Jack Tuszyński, Allard Chair and Professor in Experimental Oncology, Department of Oncology University of Alberta's Cross Cancer Institute and Professor, Department of Physics, Canada

10:30- 10:45 AM

The Endocrinology and Metabolism of the Stress Response

Brian Fertig, Endocrinology, Diabetes & Metabolism Specialist Hackensack Meridian Health JFK Medical Center and Robert Wood Johnson University Hospital, New Jersey

10:45- 11:00 AM

Reflecting on the Nature of Consciousness and its Potential Impact on Wellbeing

Jonathan Schooler, Psychologist and Distinguished Professor of Psychological and Brain Sciences at the University of California, Santa Barbara

11:00- 11:15 AM

Discussion Panel

11:15- 11:30 AM

Q&A

1:30 – 3:00 PM

PSY-8/C93: TMS in Neuropsychiatric Disorders- Novel Protocols & Applications

Keerthy Sunder Session Chair

Founder, Karma Doctors and Karma TMS, President- The Sunder Foundation, Assistant Clinical Professor, University of California Riverside

Nesrin Dilbaz, Session Co-Chair

Director, NP Istanbul Brain Hospital Professor of Psychiatry, Üsküdar University, Istanbul, Turkey

1:30- 1:45 PM

Deep TMS in Treating ADHD and Addiction

Nesrin Dilbaz, Director of NP Istanbul Brain Hospital, Professor of Psychiatry, Üsküdar University, Istanbul, Turkey

1:45- 2:00 PM

Bilateral TMS Protocols in Treating Depression Comorbid with Anxiety

Keerthy Sunder, Founder, Karma Doctors and Karma TMS, President- The Sunder Foundation, Assistant Clinical Professor, University of California Riverside

2:00- 2:15 PM

Neuromodulation Applications for Anxiety Disorders

Onur Noyan, Associate Professor of Psychiatry, NPISTANBUL Brain Hospital, Advisory Board Member of Addiction Research and Treatment Center Affiliated with Üsküdar University, Istanbul, Turkey

2:15- 2:30 PM

The Role of DTI Guided TMS in the Management of Symptoms of Mild Traumatic Brain Injury

Aaron Filler, Medical Director, Institute for Nerve Medicine, Santa Monica, California

2:30- 2:45 PM

Discussion Panel

2:45- 3:00 PM

Q&A

3:30 – 5:00 PM

PSY-9/C106: Neuromodulation Applications & Neurotechnology

Nevzat Tarhan, Session Chair

Founding President of Üsküdar University, Psychiatrist

3:30- 3:45 PM

Theta Burst Stimulation as a Neuromodulation Tool

Nevzat Tarhan, Turkish Medical Scientist, Psychiatrist and Neuropsychology Expert, Founding Rector of Üsküdar University, Istanbul, Turkey

3:45- 4:00 PM

A Predictive Variable for Neuromodulation: EEG

Sermin Kesebir, Professor of Psychiatry, Üsküdar University, Istanbul, Turkey

4:00- 4:15 PM

EEG and MRI Biomarkers in Neuropsychiatry

Barış Metin, Associate Professor of Neurology, Üsküdar University, Istanbul, Turkey

4:15- 4:30 PM

Neuromodulation Applications for Anxiety Disorders

Onur Noyan, Associate Professor of Psychiatry, NPISTANBUL Brain Hospital, Advisory Board Member of Addiction Research and Treatment Center Affiliated with Üsküdar University, Istanbul, Turkey

4:30- 4:45 PM

CNN Based Neuromodulation Treatment Response Prediction

Turker Erguzel, Associate Professor of Software Engineering, Üsküdar University, Istanbul, Turkey

4:45- 5:00 PM

Q&A





20th Annual World Congress of SBMT

Psychiatry and Addiction Medicine

All times in Pacific Standard Time (GMT-8)

Sunday February 19th, 2023

10:00 – 11:30 AM

PSY-10/D119: Circadian Rhythms, Sleep and Neuropsychiatric Implications

KS Jagannatha Rao, Session Chair

Director and Distinguished Professor, Institute for Scientific Research and Technology Services, Republic of Panama

Keerthy Sunder, Session Co-Chair

Founder, Karma Doctors and Karma TMS

10:00- 10:15 AM

Neuropsychiatric Implications of Sleep Related Behavioral Disorders

KS Jagannatha Rao, Director and Distinguished Professor, Institute for Scientific Research and Technology Services, Republic of Panama

10:15- 10:45 AM

Functional Foods and Sleep Health (Special Featured Speaker)

Michelle Thompson-Olson, Integrative and Lifestyle Family Medicine Physician, Associate Medical Professor for LECOM & PCOM, Faculty for University of Pittsburgh Medical School, Vice Chair of Family Medicine for University of Pittsburgh Medical Center Horizon

10:45- 11:00 AM

Sleep Health: Impacts on Cognitive and Physical Performance

Joanna Fong, Sleep Neurologist at UPMC

11:00- 11:15 AM

Effective Nutraceutical & Botanicals for Insomnia (Special Featured Speaker)

Todd Born, Medical Director, Born Integrative Medicine Specialists, PLLC, Gig Harbor, Washington

1:30 – 3:00 PM

PSY-11/D132: Mental Health in a New Normal

Christoph Glaser, Session Chair

CEO, TLEX Institute

Ajay Tejasvi, Session Co-Chair

International Director, The Art of Living Foundation

1:30- 1:45 PM

Panel Discussion

Emma Seppälä, Faculty Director of the Yale School of Management's Women's Leadership Program Science Director, Stanford Center for Compassion and Altruism

1:45- 2:00 PM

Panel Discussion

Dara G. Ghahremani, Research Faculty, Department of Psychiatry & Biobehavioral Sciences, UCLA Semel Institute for Neuroscience and Human Behavior

2:00- 2:15 PM

Panel Discussion

Fahri Saatcioglu, Professor of Molecular and Cellular Biology, Department of Biosciences, University of Oslo, Norway

2:15- 2:30 PM

Panel Discussion

Julia Tang, Stanford University, Wellness Education

2:30- 2:45 PM

Panel Discussion

Session Speakers, SBMT Psychiatry and Addiction Medicine Speakers

2:45- 3:00 PM

Q&A

3:30 – 5:00 PM

PSY-12/D145: Covid-19 Brain: Neuropsychiatric Implications & Interventions

David Baron, Session Chair

Professor, Western University of Health Sciences, Emeritus Professor, University of Southern California

Keerthy Sunder, Session Chair

CEO, Karma Doctors & Karma TMS Inc, President- The Sunder Foundation, assistant Clinical Professor, University of California Riverside

3:30- 3:45 PM

Acute and Chronic Neurological Effects of COVID Infections

Ashraf Elsayegh, Pulmonologist, Critical Care Specialist, Cedars Sinai Medical Center, Los Angeles, California

3:45- 4:00 PM

Neuro Cognitive Behavior and Long COVID Symptoms

David Baron, Professor, Western University of Health Sciences, Emeritus Professor University of Southern California

4:00- 4:15 PM

COVID-19 and Correlation to Family Systems Cognitive & Emotional Equilibration

Nicole Jafari, Founder/CEO Cross Cultural Research & Educational Institute, Faculty at California State University Long Beach & California State University Fullerton

4:15- 4:45 PM

Discussion Panel

4:45- 5:00 PM

Q&A





Advances in Spine Research, Diagnostics and Treatment

20th Annual World Congress of SBMT

Room 150C



20th Annual World Congress of SBMT

Advances in Spine Research, Diagnostics and Treatment

All times in Pacific Standard Time (GMT-8)

Organized by SBMT faculty

Drs. Kai-Uwe Lewandrowski, Namath Hussain, Jason Cormier, Farzad Massoudi, Ann Choe
Giusseppe Umana, Mike Chen, Cristina Sadowsky, Jose A. Soriano, Jose Valerio-Pascua, Tobias Mattei

SBMT Fellows

Drs. Fauziyya Muhammad, Oleksandra Kashyryna



Thursday February 16th, 2023

10:00 – 11:30 AM

SPN-1/A1: Spine Research; Imaging, Stem Cell, and Regenerative Medicine

Ann Choe, Session Chair

Assistant Professor of Radiology and Radiological Science, Johns Hopkins School of Medicine, Baltimore

Cristina Sadowsky, Session Co-Chair

Clinical Director International Center for Spinal Cord Injury, Kennedy Krieger Institute, Associate Professor Physical Medicine and Rehabilitation, John Hopkins School of Medicine, Baltimore

10:00- 10:15 AM

Advanced MR Imaging: Cortical plasticity in Individuals with SCI

Ann Choe, Johns Hopkins School of Medicine, Baltimore

10:15- 10:30 AM

Muscle Mass Matters; the Importance of Muscle Mass in the Context of Neurologic Deficit

Cristina Sadowsky, John Hopkins School of Medicine, Baltimore

10:30- 10:45 AM

ABCs of Acute Rehab in Complex Neurosurgical Patients

Philippines Cabahug, Kennedy Krieger Institute Baltimore

10:45- 11:00 AM

Pain after Acute SCI

Travis Edmiston, Johns Hopkins School of Medicine, Baltimore

11:00- 11:15 AM

Does SCIWORA (Spinal Cord Injury without Radiographic Abnormality) Really Exist?

How Quantum Non-Locality Has Shown Us the Light

Kevin Rolfe, Acute care director for the Southern California Spinal Cord Injury Model System through Rancho Research Institute (RRI) at Rancho Los Amigos Nat.Rehab. Ctr.

11:15- 11:30 AM

Q&A

1:30 – 3:00 PM

SPN-2/A14: Surgical Treatment of Degenerative Spine Diseases and Deformities

Farzad Massoudi, Session Chair

Neurosurgeon, Providence Medical Foundation, Laguna, CA, Founder and Chief Executive Officer at NeuroTrack, Inc. Founder Massoudi Foundation

Mike Chen, Session Co-Chair

Associate Professor, Section Head of the Malignant Brain Tumor Program, Director of Neuro-oncology Surgical Fellowship Program, City of Hope Hospital

1:30- 1:45 AM

Surgical and Non-surgical Therapies for Cervical Radiculopathy

Namath Hussain, Neurosurgeon, Complex Spine Surgeon, Loma Linda University Health, CA

1:45- 2:00 AM

Comparative Study of Curative Effect of Spinal Endoscopic Surgery and Anterior Cervical Decompression for Cervical Spondylotic Myelopathy

Kai-Uwe Lewandrowski, Center for Advanced Spine Care of Southern Arizona and Surgical Institute of Tucson

2:00- 2:15 AM

Tumor Resection and Instrumentation Techniques for Partial Sacrectomies

Mike Chen, Director of Neuro-oncology Surgical Fellowship Program, City of Hope Hospital, Duarte, CA

2:15- 2:30 AM

Surgical Treatments of the Degenerative Disease of the Lumbar Spine

Farzad Massoudi, Assistant Clinical Professor of Neurosurgery at UCLA, President of Orange County Neurosurgical Associates in Laguna Hills

2:30- 2:45 AM

Clinical Review of Surgical treatment Options for Cervical Degenerative Disc

Jason Cormier, Motorsports Safety Group, Founder and CEO, Neurosurgeon, Acadiana Neurosurgery, Lafayette, Louisiana

2:45- 3:00 AM

Q&A

3:30 – 5:00 PM

SPN-3/A27: Minimally Invasive Spinal Surgery Techniques

Kai-Uwe Lewandrowski, Session Chair

Associate Professor of Orthopaedic Surgery, Department of Orthopaedics, Fundación Universitaria Sanitas, Bogotá, D.C., Colombia

Namath Hussain, Session Co-Chair

Neurosurgeon, Complex Spine Surgeon, Medical Device Innovator, Clinical Investigational Device Developer, Loma Linda University Health

3:30- 3:45 PM

The Learning Curve & Credentialing Problem with Modern Minimally Invasive Spinal Surgery Techniques

Kai-Uwe Lewandrowski, Center for Advanced Spine Care of Southern Arizona and Surgical Institute of Tucson

3:45- 4:00 PM

Pain Relief and Functional Improvements after Spinal Ozone and Prp Injections for Symptomatic Lumbar

Herniated Disc

Luis Miguel Duchén Rodríguez, Bolivian Spine Association, Public University of El Alto and Center for Neurological Diseases, La Paz, Bolivia

4:00- 4:15 PM

Spinal Endoscopy

Namath Hussain, Neurosurgeon, Complex Spine Surgeon, Loma Linda University Health

4:15- 4:30 PM

Pain Relief and Functional Improvements after Spinal Ozone and Prp Injections for Symptomatic Lumbar Herniated Disc

Vincent Hagel, Helios Klinik, Lindau, Germany

4:30- 4:45 PM

Minimally Invasive Management of Spinal Infections

Israel Romero, ABC Medical Center, Neurological Center, Mexico

4:45- 5:00 PM

Q&A





Advances in Spine Research, Diagnostics and Treatment

20th Annual World Congress of SBMT

Room 150C



20th Annual World Congress of SBMT

Advances in Spine Research, Diagnostics and Treatment

All times in Pacific Standard Time (GMT-8)

Friday February 17th, 2023

- 10:00 – 11:30 AM** **SPN-4/B40: Atlantoaxial Dislocation and Craniovertebral Anomalies**
Kai-Uwe Lewandrowski, Session Chair
 Associate Professor of Orthopaedic Surgery, Department of Orthopaedics, Fundación Universitaria Sanitas, Bogotá, D.C., Colombia
Jason Cormier, Session Co-Chair
 Motorsports Safety Group, Founder and CEO, Neurosurgeon, Acadiana Neurosurgery, Lafayette, Louisiana
- 10:00- 10:15 AM** **68gadotac-PET incidentalomas**
Giuseppe Umana, Department of Neurosurgery, Cannizzaro Hospital, Trauma Center, Gamma Knife Center, 95125 Catania, Italy.
- 10:15- 10:30 AM** **Submitted Talk - TBD**
 TBD, TBD
- 10:30- 10:45 AM** **New Technologies and Telemedicine in Spine Surgery**
Nicola Montemurro, Medical Doctor at Università di Pisa, Italy
- 10:45- 11:00 AM** **Advanced Percutaneous Interventions in the Spine and Brain Using Low Dose Image Guidance**
Paulo Villablanca, Professor of Neuroradiology and neurosurgery, UCLA
- 11:00- 11:15 AM** **Recent Advances in Spine**
Jose Antonio Soriano, ABC Medical Center
- 11:15- 11:30 AM** **Q&A**
- 1:30 – 3:00 PM** **SPN-5 (B53): Spinal Biologics and Instrumentations**
Mike Chen, Session Chair
 Associate Professor, Section Head of the Malignant Brain Tumor Program, Director of Neuro-oncology Surgical Fellowship Program, City of Hope Hospital
Farzad Massoudi, Session Co- Chair
 Neurosurgeon, Providence Medical Foundation, Laguna, CA, Founder and Chief Executive Officer at NeuroTrack, Inc, Founder Massoudi Foundation
- 1:30- 1:45 PM** **Instrumentation Failure Rate with Use of Sublaminar Bands**
Mike Chen, Director of Neuro-oncology Surgical Fellowship Program, City of Hope Hospital
- 1:45- 2:00 PM** **Advances in surgical treatments of degenerative spine disorders**
Farzad Massoudi, Assistant Clinical Professor of Neurosurgery at UCLA, President of Orange County Neurosurgical Associates in Laguna Hills
- 2:00- 2:15 PM** **Advances in the surgical treatments of spine neoplasms**
Jason Liauw, Medical Director, Memorial Care Neuroscience Institute, Director of Neurosurgery, Mission Hospital-Laguna Beach
- 2:15- 2:30 PM** **Updates in Spine surgery**
Jose Edgardo Valerio Pascua, Neurosurgeon, Palmetto General Hospital, CEO Biscayne Plaza Surgical Center.
- 2:30- 2:45 PM** **Submitted Talk - TBD**
 TBD, TBD
- 2:45- 3:00 PM** **Q&A**
- 3:30 – 5:00 PM** **SPN-6/B66: Spinal Oncology**
Namath Hussain, Session Chair
 Neurosurgeon, Complex Spine Surgeon, Medical Device Innovator, Clinical Investigational Device Developer, Loma Linda University Health
Giuseppe Umana, Session Co-Chair
 Department of Neurosurgery, Cannizzaro Hospital, Trauma Center, Gamma Knife Center, Italy
- 3:30- 3:45 PM** **Head injury prevention in American Samoa**
Rahul Jandial, Associate Professor, Division of Neurosurgery, Department of Surgery, City of Hope
- 3:45- 4:00 PM** **Tumor Resection and Instrumentation Techniques for Partial Sacrectomies**
Mike Chen, Affiliation: Director of Neuro-oncology Surgical Fellowship Program, City of Hope Hospital
- 4:00- 4:15 PM** **Role of Neuromodulation in the treatment of chronic pain**
Brian Hwang, Orange County Neurosurgical Associates, Laguna Hills
- 4:15- 4:30 PM** **Neurosurgery is leading the way for treatment of pelvic disease**
How, When, and Why?
Jose Edgardo Valerio Pascua, Neurosurgeon, Palmetto General Hospital, CEO Biscayne Plaza Surgical Center.
- 4:30- 4:45 PM** **Tubology in spine: current state.**
Jose Antonio Soriano, ABC Medical Center Mexico City, Mexico
- 4:45- 5:00 PM** **Q&A**





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Saturday February 18th, 2023

10:00 – 11:30 AM **BioSkills Lab**

1:30 – 3:00 PM **BioSkills Lab**

3:30 – 5:00 PM **BioSkills Lab**





Advances in Spine Research, Diagnostics and Treatment

20th Annual World Congress of SBMT

Room 150C



20th Annual World Congress of SBMT

Advances in Spine Research, Diagnostics and Treatment

All times in Pacific Standard Time (GMT-8)

Sunday February 19th, 2023

- 10:00 – 11:30 AM** **SPN-7/C118: Complex Spine Surgery and Complications**
Kai-Uwe Lewandrowski, Session Chair
 Associate Professor of Orthopaedic Surgery, Department of Orthopaedics, Fundación Universitaria Sanitas, Bogotá, D.C., Colombia
Jason Cormier, Session Co-Chair
 Motorsports Safety Group, Founder and CEO, Neurosurgeon, Acadiana Neurosurgery, Lafayette, Louisiana
- 10:00- 10:15 AM** **Surgeon Reported Learning Curve Issues & Practice Patterns Related To Full Endoscopic Anterior and Posterior Cervical Foraminotomy**
Vincent Hagel, Helios Klinik, Lindau, Germany
- 10:15- 10:30 AM** **Spine Surgery updates**
Jason Cormier, Motorsports Safety Group, Founder and CEO, Neurosurgeon, Acadiana Neurosurgery, Lafayette, Louisiana
- 10:30- 10:45 AM** **Initial Complications in My Learning Path.**
Alejandro Sharid, Cerna by Fija (Medical Centre of Excellence), Hidalgo, Mexico
- 10:45- 11:00 AM** **The Role of Water-Based Spinal Endoscopy (Uni and Biportal) in Cervical Degenerative Pathologies.**
Javier Quillo-Olvera, The Brain and Spine Care, Minimally Invasive Spine Surgery Group, Anahuac University, School of Medicine, Hospital H+, Querétaro, Mexico.
- 11:00- 11:15 AM** **Influence of Cervical Arthroplasty on the Range of Motion of the Cervical Spine**
Ivan Domazet, Consultant Neurosurgeon at University Hospital Center Zagreb and St. Catherine Specialty Hospital
- 11:15- 11:30 AM** **Q&A**
- 1:30 – 3:00 PM** **SPN-8/D131: Future Therapeutics of Spinal Column and Cord Injuries**
Jason Cormier, Session Chair
 Motorsports Safety Group, Founder and CEO, Neurosurgeon, Acadiana Neurosurgery, Lafayette, Louisiana
Namath Hussain, Session Co-Chair
 Neurosurgeon, Complex Spine Surgeon, Medical Device Innovator, Clinical Investigational Device Developer, Loma Linda University Health
- 1:30- 1:45 PM** **MIS surgery, the future of the spine surgery**
Xifeng Zhang, Third PLGA Hospital, Beijing, China
- 1:45- 2:00 PM** **Are Randomized Clinical Trials Even Possible in Surgery**
Ivo Abraham, Professor of Pharmacy, Medicine, and Clinical Translational Sciences, University of Arizona
- 2:00- 2:15 PM** **Nanotechnologies in Spinal Cord Injury**
Marjan Assefi, SBMT Fellow
- 2:15- 2:30 PM** **Expansion of Surgical Indications for Endoscopic Spine Care of Fractures, Tumors, Infections & Degenerative Disease**
Xifeng Zhang, Third PLGA Hospital, Beijing, China
- 2:30- 2:45 PM** **Informed Consent Mixed Reality Assisted**
Giuseppe Umana, Neurosurgeon and Neuroscientist, City of Hope Hospital
- 2:45- 3:00 PM** **Q&A**
- 3:30 – 5:00 PM** **SPN-9/D144: Subcommittee Meeting**





20th Annual World Congress of SBMT

Visual Processing

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Organized by SBMT faculty

Deborah Zelinsky, O.D., Delia DeBuc, Ph.D., Amy Pruszenki, O.D.,
Vahid Mohammadzadeh M.D.,

SBMT Fellows

Drs. Nataliya Bilger, Oreoluwa Ernest, **SBMT Intern:** Kashyap Patel



Thursday February 16th, 2023

10:00 – 11:30 AM

VPS-1/A6 : Traditional vs. Novel Diagnostic Modalities for Visual Processing

Delia Cabrera Debuc, Session Chair
Bascom Palmer Eye Institute, Miami, FL

10:00- 10:15 AM **Importance of Accuracy Of Subjective Testing In Order to Get To Next-Generation Methods For Further Diagnosis.**
Alex Helfand, Ascension Medical Group Wisconsin, Milwaukee, WI

10:15- 10:30 AM **Precision Medicine: Genetics And The Future Of Eye Care**
Rachelle Lin, Ketchum University, Fullerton, CA

10:30- 10:45 AM **I Can See A Digital Eye Chart, But Not You So If You Were Digitized, Then I Could Perceive You**
Gary Asano, Ocutech, Manhattan Beach, CA

10:45- 11:00 AM **Retinal Influence On Lymphatic Flow (Special Featured Speaker)**
Christina Hankins, P.T. Lymphwell, Round Rock, TX & Allyson McKenney, Brain Injury Survivor, Austin, TX

11:00- 11:15 AM **Retinal Influence on Epigenetics from Neurotransmitter Changes**
Deborah Zelinsky, Founder of Mind-Eye Institute, Northbrook, IL

11:15- 11:30 AM **Q&A**

1:30 – 3:00 PM

VPS-2/A19 : Assessments of Visual Processing

Delia Cabrera Debuc, Session Chair
Bascom Palmer Eye Institute, Miami, FL

1:30- 1:45 AM **Eye Imaging and Neurological Disease: The Importance of Patient Experience and Data Accessibility**
Matthew Ellis, Neuroptica, Hoffman Estates, Illinois

1:45- 2:00 AM **Visual Evoked Potential: How it Provides a View of Visual Function**
Carl Garbus, Amplify Eyecare, Valencia, CA

2:00- 2:15 AM **Advancements in Camera Equipped Methods for Ocular Assessments**
Kurtis Sluss, BrightLamp, Indianapolis, IN

2:15- 2:30 AM **Pupillometry Measurements**
Rachel Cabaay, Bascom Palmer Eye Institute, Miami, FL

2:30- 2:45 AM **Pupillometry Application**
Rachel Cabaay, Bascom Palmer Eye Institute, Miami, FL

2:45- 3:00 AM **Q&A**

3:30 – 5:00 PM

VPS-3/A32 : Analysis of Visual Processing

Delia Cabrera Debuc, Session Chair
Bascom Palmer Eye Institute, Miami, FL

3:30- 3:45 PM **Ocular Pain Study Using the Kernel Flow**
Delia Cabrera Debuc, Bascom Palmer Eye Institute, Miami, FL

3:45- 4:00 PM **Filtering Effects of Changes in Color Frequency**
Delia Cabrera Debuc, Bascom Palmer Eye Institute, Miami, FL

4:00- 4:15 PM **Eye Biomarkers of Neurodegenerative Diseases**
Sasha Semaan, Bascom Palmer Eye Institute, Miami, FL

4:15- 4:30 PM **The Iris as a 4th Photoreceptor**
Peter Guhl, CVT Neuro-Optometric Rehabilitation, Yorktown, VA

4:30- 4:45 PM **Retinoscopy Assesses the Balance between Vascular & Neurological Activity at a Cellular Level**
Amy Pruszenski, Visual Victory Training, Portsmouth, NH, USA

4:45- 5:00 PM **Q&A**





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Friday February 17th, 2023

10:00 – 11:30 AM VPS-4/B45 : The Influence of Visual Processing on Movement and Behavior
Vahid Mohammadzadeh, Session Chair
Jules Stein Eye Institute, UCLA, Los Angeles, CA, USA

10:00- 10:15 AM "Staring At Beauty": The Impact Of Visual Beauty-Seeking On Mental Health
Seyed Arash Taqavi, Adjunct professor, Department of MBA, California Miramar University, CA

10:15- 10:30 AM The Brain/Body Disconnect And How Gross Motor Improves Visual Tracking
Heidi Bonaroti, Touchstone Rehabilitation, Phoenix, AZ

10:30- 10:45 AM The Importance Of Visual Tracking For Functional Independence
Heidi Bonaroti, Touchstone Rehabilitation, Phoenix, AZ

10:45- 11:00 AM How The Autistic Spectrum Affects Mental Health
Peyman Raoofi, Therapy Zone, Los Angeles, CA

11:00- 11:15 AM Prevalence Of Strabismus In Patients With Autistic Spectrum Disorder
Nataliya Bilger, Penn State Hershey Medical Center, Hershey, PA

11:15- 11:30 AM Q&A

1:30 – 3:00 PM VPS-5/B58 : Brain Disorders and Developmental Disabilities
Vahid Mohammadzadeh, Session Chair
Jules Stein Eye Institute, UCLA, Los Angeles, CA, USA

1:30- 1:45 PM A Solution For Special Needs Families With Brain And Developmental Disabilities
Kiera Rain, California Brainwaves, San Francisco, CA

1:45- 2:00 PM Non-Invasive Neuroimaging Of Brain Development
Leighton Hinkley, University of California, San Francisco, CA

2:00- 2:15 PM Open Science Solutions For Neurodevelopmental Disorders
Morgan Hough, NeuroTechX, San Francisco, CA

2:15- 2:30 PM Child-Mind Research
Morgan Hough, NeuroTechX, San Francisco, CA

2:45- 3:00 PM NeuroSync: Eye Tracking to Diagnose Attention Disorders
Jamshid Ghajar, Clinical Professor of Neurosurgery, Stanford University, CA

2:45- 3:00 PM Q&A

3:30 – 5:00 PM VPS-6/B71 : Case Studies in the Complex Healing of a Traumatic Brain Injury.
Vahid Mohammadzadeh, Session Chair
Jules Stein Eye Institute, UCLA, Los Angeles, CA, USA

3:30- 4:00 PM Case Studies in the Complex Healing of a Traumatic Brain Injury. Case 1
Leighton Reynolds, Private Practice –Neuropsychologist, with emphasis on Brain Injuries in Athletes

4:00- 4:30 PM Case Studies in the Complex Healing of a Traumatic Brain Injury. Case 2
Leighton Reynolds, Private Practice –Neuropsychologist, with emphasis on Brain Injuries in Athletes

4:30- 5:00 PM Case Studies in the Complex Healing of a Traumatic Brain Injury. Case 3
Jonathan Hall, Daniel and Davis Optometry, Carlsbad, CA

4:15- 4:30 PM Case Studies in the Complex Healing of a Traumatic Brain Injury. Case 4
Wynn Tran, Heal My Eyes Optometry, Corte Madera, CA

4:30- 4:45 PM New Treatment Techniques for Traumatic Brain Injury
DeAnn Fitzgerald, Fitzgerald and Associates, Cedar Rapids, IA

4:45- 5:00 PM Q&A





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Saturday February 18th, 2023

10:00 – 11:30 AM

VPS-7/C84 : Functional Circuitry for Motor Outputs

Amy Pruszenski, Session Chair
Visual Victory Training, Portsmouth, NH, USA

10:00- 10:15 AM

Methods For Eye Movement Assessment

Derek Tong, Center for Vision Development, Pasadena, CA

10:15- 10:30 AM

The Cerebellar Contributions to Visual Processing

Douglas Major, Optometric Care Associates, Paso Robles, CA

10:30- 10:45 AM

Clinically Applying New Neurologic Research With Advanced Eye Movement Techniques

Douglas Major, Optometric Care Associates, Paso Robles, CA

10:45- 11:00 AM

The 100ms Brain Assessment: Interpreting Characteristics of Saccades

Matthew Antonucci, D.C., Co-founder of "Plasticity Centers", Orlando, FL

11:00- 11:15 AM

The Importance of Saccadic Eye Movements

Matthew Antonucci, D.C., Co-founder of "Plasticity Centers", Orlando, FL

11:15- 11:30 AM

Q&A

1:30 – 3:00 PM

VPS-8/C97 : Effects of Structural Changes on Visual Processing

Amy Pruszenski, Session Chair
Visual Victory Training, Portsmouth, NH, USA

1:30- 1:45 PM

Practical Assessment Tools For Visual Dysfunction Analysis PART 1

William Boro, D.C. Founder, Chiropractic Center of Annapolis, Maryland

1:45- 2:00 PM

Practical Assessment Tools for Visual Dysfunction Analysis PART 2

William Boro, D.C. Founder, Chiropractic Center of Annapolis, Maryland

2:00- 2:15 PM

The Importance Of Visual Fixation During Functional Movement Activities To Develop Body Strength And Endurance

Marianna Newsam, OTR, Owner of MNO Therapy, Los Angeles, CA

2:15- 2:30 PM

Alteration of Auditory Signaling to Affect Visual Processing

Lillian Chen-Byerley, O.T.R. Owner, "Sense Able Kids", Northfield, IL

2:30- 2:45 PM

How visual processing can influences posture and weight bearing

Deborah Zelinsky, Founder of Mind-Eye Institute, Northbrook, IL

2:45- 3:00 PM

Q&A

3:30 – 5:00 PM

VPS-9/C110 : NeuroMovement®

Amy Pruszenski, Session Chair
Visual Victory Training, Portsmouth, NH, USA

3:30- 3:45 PM

NeuroMovement® Tools For Visual Improvement Through Intentional And Reliable Activation Of Neuroplasticity

Neil Sharp, Director of Anat Baniel Method®/NeuroMovement®

3:45- 4:00 PM

NeuroMovement® Tools For Whole-Body Improvement Through Neuroplasticity

Neil Sharp, Director of Anat Baniel Method®/NeuroMovement®

4:00- 4:15 PM

Utilizing The Complex, Dynamic Relationships In The Brain Between Eyes, Vision, And The Whole Body For "Quantum" Shifts In Functioning.

Anat Baniel, Founder of the Anat Baniel Method®/NeuroMovement®

4:15- 4:30 PM

VIDEO: Utilizing The Complex, Dynamic Relationships In The Brain Between Eyes, Vision, And The Whole Body For "Quantum" Shifts In Functioning.

Anat Baniel, Founder of the Anat Baniel Method®/NeuroMovement®

4:30- 4:45 PM

New Universe Of Possibilities When A Physical Therapist Shifts From A "Parts" To A Whole Person Approach – A Case Study.

Michelle Vine, Practitioner of Anat Baniel Method®/NeuroMovement®

4:45- 5:00 PM

Q&A





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Visual Processing

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Sunday February 19th, 2023

- 10:00 – 11:30 AM** **VPS-10/D123 : New Treatment Techniques DXXX:**
Deborah Zelinsky, Session Chair
Founder of Mind-Eye Institute, Northbrook, IL
- 10:00- 10:15 AM** **Neuro-Optimism and the Law of Sensory Constancy**
Danny Gottlieb, Eminence Family Eyecare, Alpharetta, GA
- 10:15- 10:30 AM** **NeuroPrism™ Treatment of Acquired Strabismus, Concussion & Spatial Neglect**
Ron Wachman, NeuroPrism™ Eminence Family Eyecare, Alpharetta, GA
- 10:30- 10:45 AM** **The Autism Prism™ - Prism Therapy For Averted Gaze**
David Cantor, Mind and Motion Developmental Center, Atlanta, GA
- 10:45- 11:00 AM** **The Concussion Riddle and Breathing Brain: Improving Rehabilitation Using Nasal Release Technique.**
Cynthia Stein, Founder, Conquer Concussion, Annapolis, MD
- 11:00- 11:15 AM** **Video: Concussion Management Using Nasal Release Technique**
Cynthia Stein, Founder, Conquer Concussion, Annapolis, MD
- 11:15- 11:30 AM** **Q&A**
- 1:30 – 3:00 PM** **VPS-11/D136 : Virtual and Augmented Reality Innovations**
Deborah Zelinsky, Session Chair
Founder of Mind-Eye Institute, Northbrook, IL
- 1:30- 1:45 PM** **Video Games in the Future of Brain Health Product 1**
Sam Dreyer, LevelEx, Chicago, IL
- 1:45- 2:00 PM** **Video Games in the Future of Brain Health Product 2**
Sam Dreyer, LevelEx, Chicago, IL
- 2:00- 2:15 PM** **Virtual Reality and Visual Processing**
Vahid Mohammadzadeh, Jules Stein Eye Institute, UCLA, Los Angeles, CA
- 2:15- 2:30 PM** **The Role of Artificial Intelligence in Virtual Reality**
Vahid Mohammadzadeh, Jules Stein Eye Institute, UCLA, Los Angeles, CA
- 2:45- 3:00 PM** **The Pivotal Role of Retinal Processing in Artificial Intelligence**
Clark Elliott, DePaul University, Chicago, IL
- 2:45- 3:00 PM** **Q&A**
- 3:30 – 5:00 PM** **VPS-12/D149 : Brainstorming**
Discussion Panel
Deborah Zelinsky, Founder of Mind-Eye Institute, Northbrook, IL

Subcommittee Meeting





20th Annual SBMT

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Los Angeles, California, USA

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