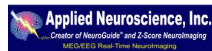


2020 Resolutions

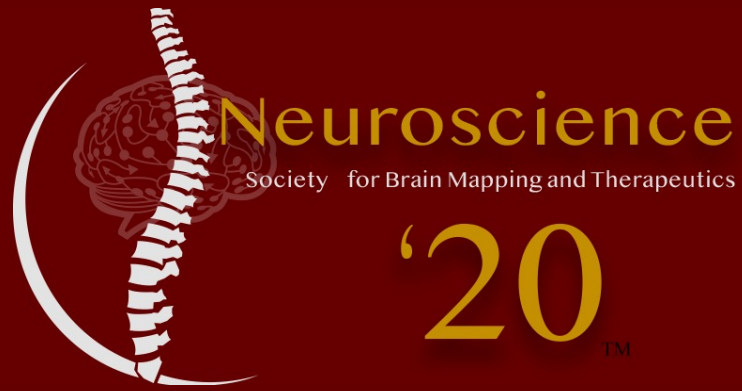


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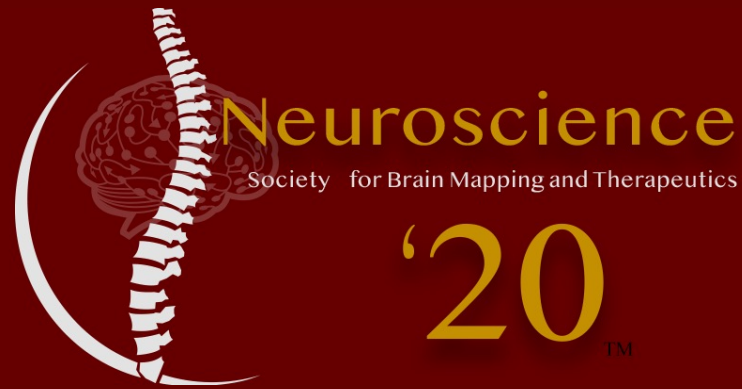




Neuromodulation

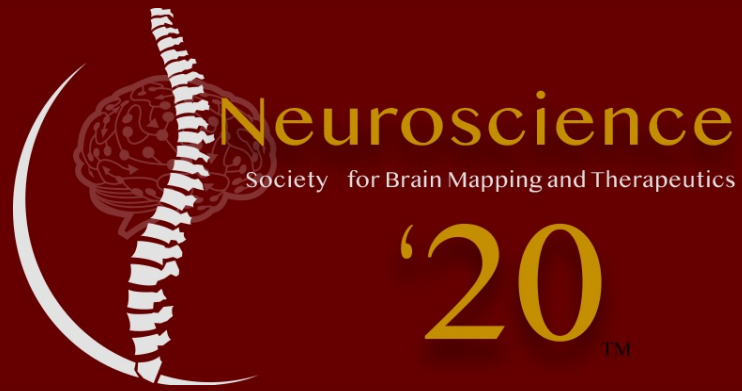


Neuro- modulation



- *Medicare should expand approved CPT codes for ASC*
- *CMS should limit hospital regulation to a few key indicators and limit JCAHO mandate*
- *Congress should provide legal protection for physicians who choose to negotiate with insurance companies or third parties*





Ophthalmology Optometry

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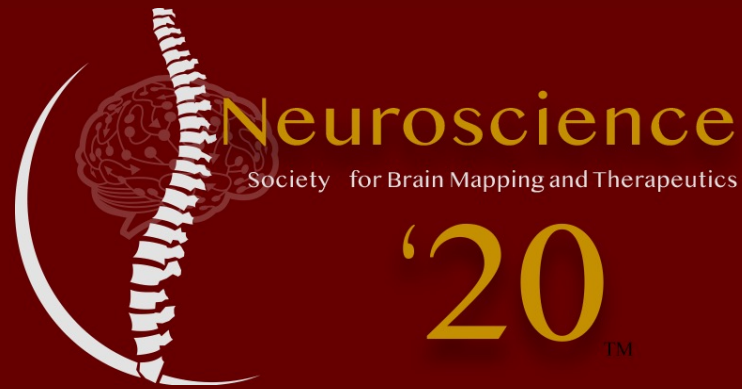
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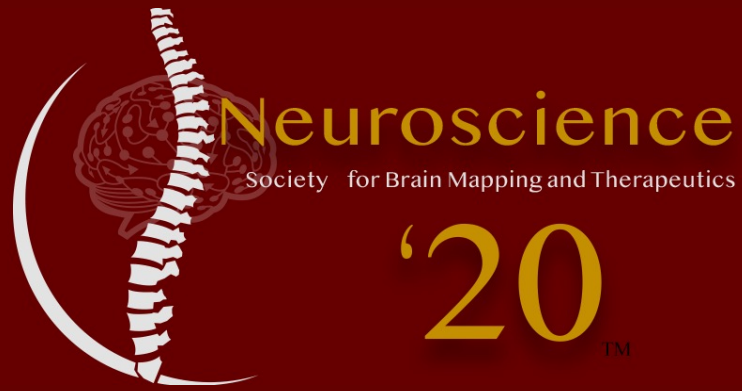
Ophthalmology Optometry



Neuro-Ophthalmology and Neuro-Optometry

- Augment current eye examinations to include the linkages of sensory systems (e.g., eye-ear connection) and peripheral retinal assessment of moving targets.
- Realize that assessment of eye-ear connection is of importance ... developed throughout life and their disruption during neurological diseases.
- Educating healthcare providers and the population at large on the use of individualized prescription eye glasses to stimulate brain function, and neuromodulation through brain stimulation.
- Modify current occupational therapists CPT-codes (97112, 97530, 97533, 97750) to be accepted by optometrists and ophthalmologists.
- Include assessment of retinal vessels as a promising tool for diagnosing neurological disorders.





Opiates

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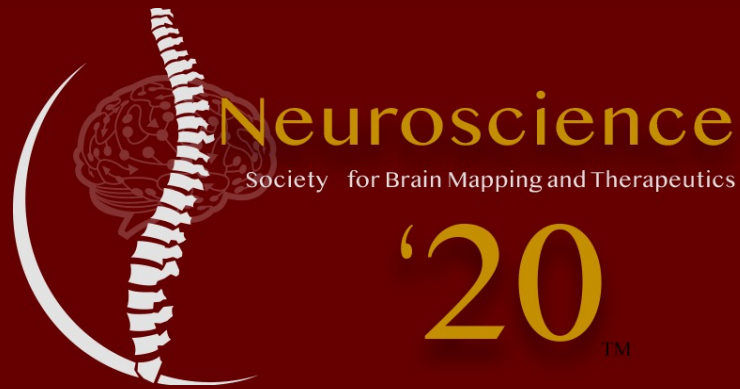


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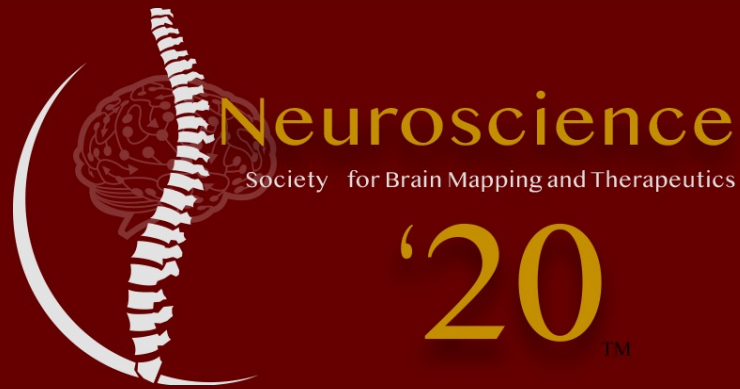


Opiates

Pain Management as the only Therapeutic Resource During COVID-19

- Creation of guidelines where indications for spine surgery are discussed and carefully categorized as elective, urgent, or emergent in consideration of the risks and benefits of proceeding versus delaying surgery in the setting of the COVID-19 pandemic. (legislation)
- Legislative laws should be created against the prohibition of elective surgeries, considering the progression of spinal disorders with the delay of appropriate treatment.
- Require prior authorization for methadone prescription for Medicare (public healthcare) related prescriptions.
- Promote the use of pharmaco-genetic testing, for patients on opiates longer than three months.



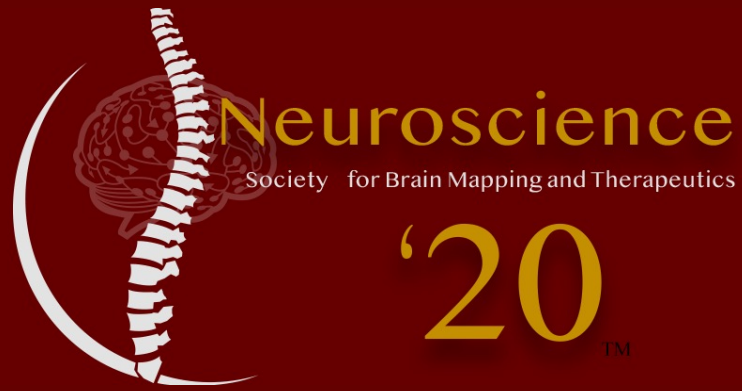


Opiates

Increase in the use of Opiates During COVID-19

- Need for raising awareness on the proper use of opiates with the assistance of national education campaigns to curb the national opioid epidemic.
- Adopt rules and guidance for the duration of the national crisis to address added flexibility for elective surgical procedures, while supporting the removal of prior authorization and other administrative barriers for medications used to treat opioid use disorders.
- Support the use of biofeedback of nucleus accumbens and other brain networks to reduce addictive substance cravings.
- Explore relationships between the retina and nucleus accumbens.

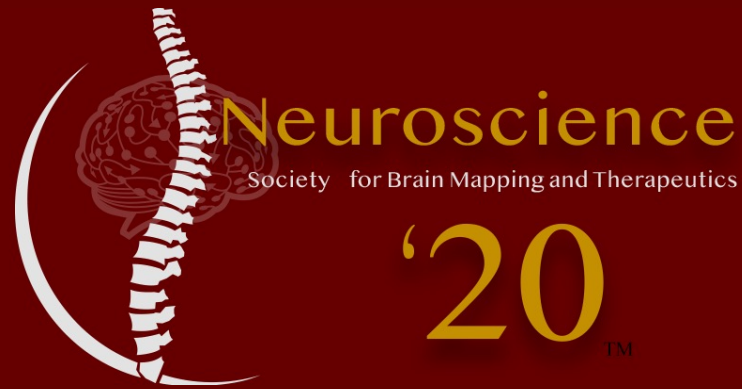




Mental Health



Mental Health



The Mental Health Pandemic and its De-stigmatization

- Increase Public education and the provision of accurate science-based information regarding prevention, treatment, and rehabilitation.
- Create health equity for diagnosis and treatment by removing socioeconomic, gender, age, and racial disparities.
- Destigmatize mental illness, further improve early screening, and encourage individuals to seek diagnostic care.
- Use of quantitative EEG, MEG, and other neuro-imaging methods to evaluate brain networks related to mental health disorders such as anxiety, attention problems, memory problems , etc. (For Example: CPT Codes 96151, 96152, 96153)

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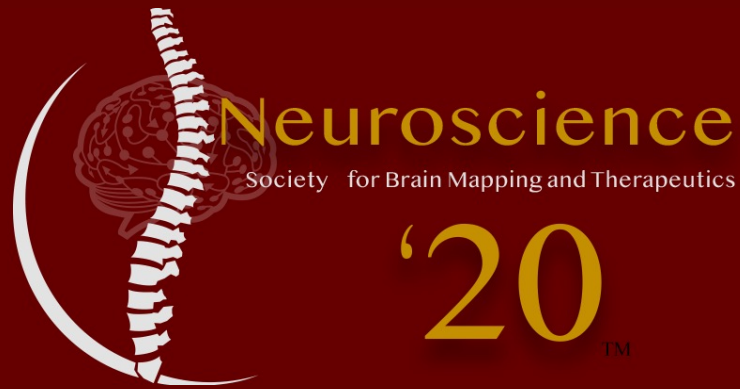


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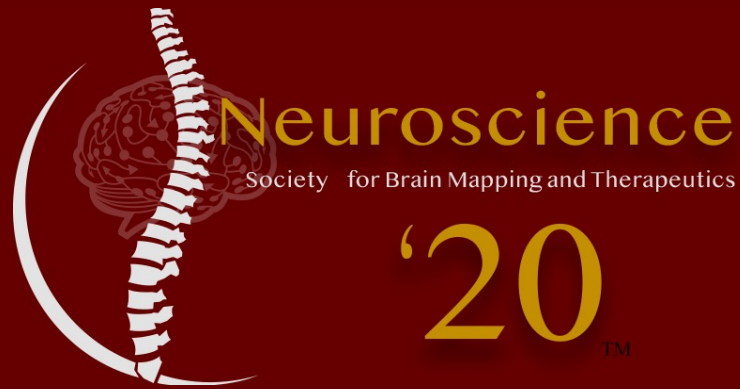


Mental Health

The Mental Health Pandemic and its De-stigmatization

- Neurofeedback and neuromodulation of the depression, anxiety and other related networks, to improve mental health.
- Promoting psychiatric education and mental health education in the high school/college setting.
- Using artificial intelligence, Virtual Reality (VR) and data mining to explore the relationship between mental health and lifestyle.





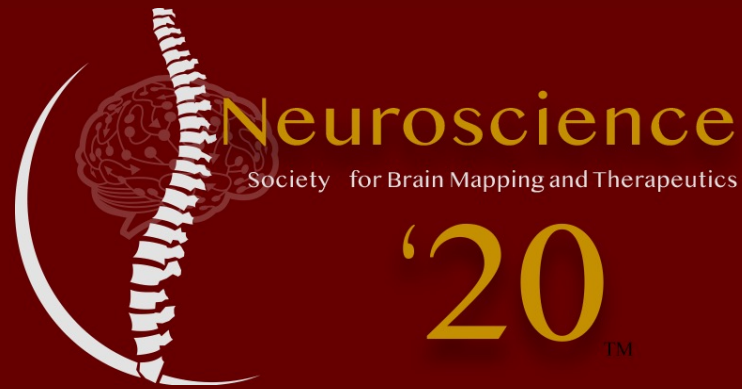
Mental Health

The Mental Health Pandemic and its De-stigmatization

- Develop a national network of clinical mental health counselors accessible to those in need, supported by dedicated federal and state resources to allow access for the financially challenged and disenfranchised.
- Formulation and implementation of upstream, early, HIPAA compliant and data security.
- Post COVID-19 pandemic, has increased unhappiness feelings which increase risk for mental disorders like depression, increasing addiction cases.



Mental Health

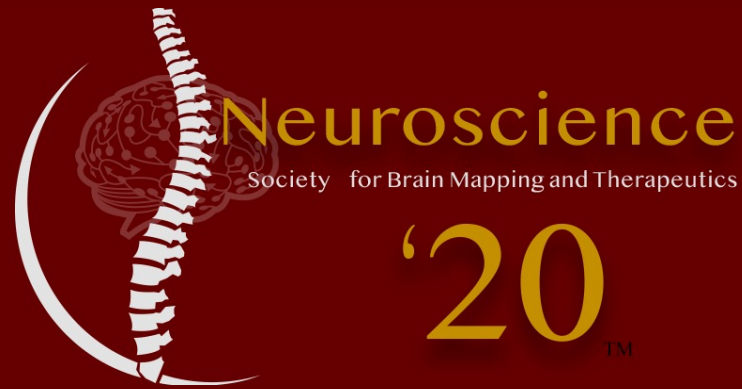


The Mental Health Pandemic and its De-stigmatization

- Bring awareness in demographic-related effects of pandemics.
- Promotion of the use of smart phone technology to link post COVID-19 individuals to a clinician for long term mental health support.
- Enhance non-pharmaceutical approaches to increase brain health. For example Yoga, meditation and counseling.
- Proper recognition in the form of modern mental health diagnostic codes, based on diagnostic tools and criteria, leading to destigmatization and specific treatment protocols for non-organic disorders. Including the involvement of multidisciplinary care.



Mental Health



The Mental Health Pandemic and its De-stigmatization

- Suicide prevention on a global scale:
 - Combat unemployment and increase public spending to promote/facilitate job search activities.
 - School based interventions to mitigate the effects of suicide.
 - Responsible use of social media. Avoidance of the sensationalization and normalization of suicide in social media. Take photos, videos, or locations (particularly of celebrities) out of the equation. Reduce access/exposure to negative social media by young minds.
 - Restrict lethal agents. Control access to medications, and safely lock up firearms.
 - Communication, collaboration, coordination on time (C3T) [Yamamoto, Bolanos 2020, JAD] between multi-disciplinary teams.
 - Promote the use of smart-phone technology for self assessment of suicidal ideation to link individuals to clinicians.

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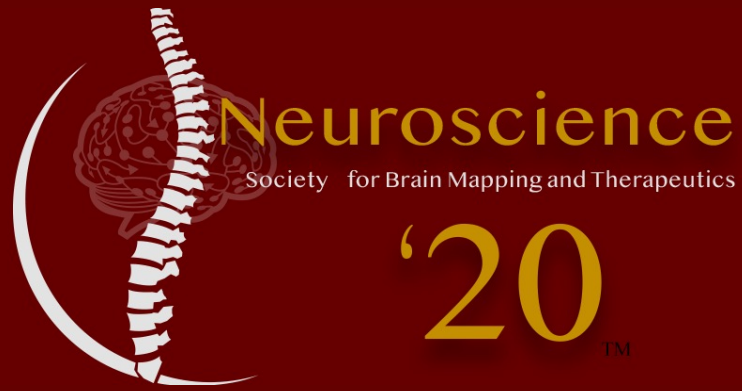


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Innovation

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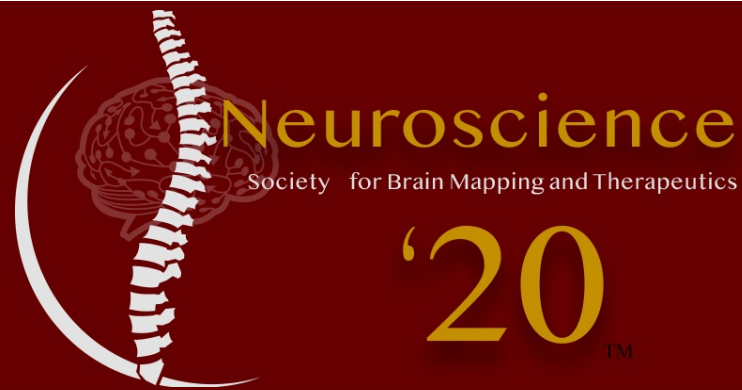
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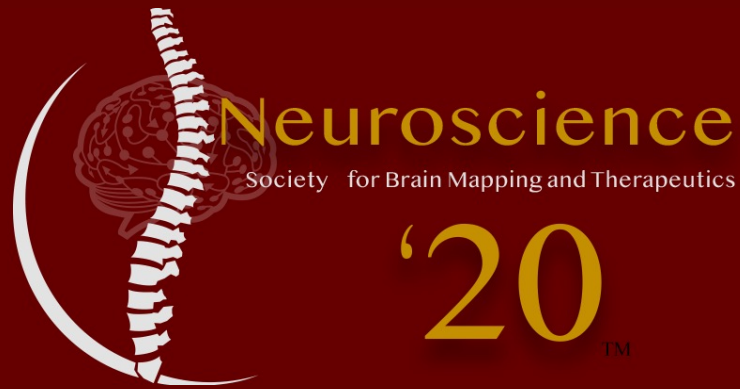
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Innovation



- Promote advanced technologies, international partnerships and interactions with health agencies.
- Promote initiatives for large-scale bioproduction at lower costs.
- Building bridges between currently existing Bio-tech parks and initiatives across the G20 in order to rapidly identify and spin off life saving therapeutics and diagnostics for neurological diseases and COVID-19 and future pandemics.
- Link CA-proposition 14 (Stem cell); 5.5 billion dollars funding to current US and international brain initiatives to Neuroscience 20.
- Linking opportunity zones and promise zones with the Brain technology innovation park initiative.
- Industrialization of neuro technology by encouraging more investments through public-private partnerships across the G20 countries.
- Utilizing emerging technologies for advancing and implementing new diagnostics and therapeutics.





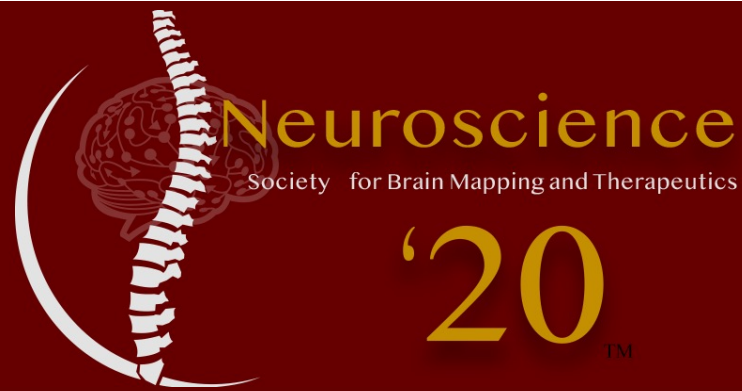
Innovation

Advancing our Global Coalition of Brain (CNS, PNS, ANS, Retina), Spine, and Mental Health Initiatives

- Cross-collaboration amongst different groups, disciplines, and methodology to develop initiatives toward sharing and combining resources, creating standardized international guidelines for research, standards, ethics and neuroscience policy, as well as an international Institutional Review Board.
- Encouraging and facilitating collaborative approaches to global clinical trials through building bridges.
- Integrating multi- modality neuro imaging for screening, early detection and better mental health diagnostics and treatment.



Innovation

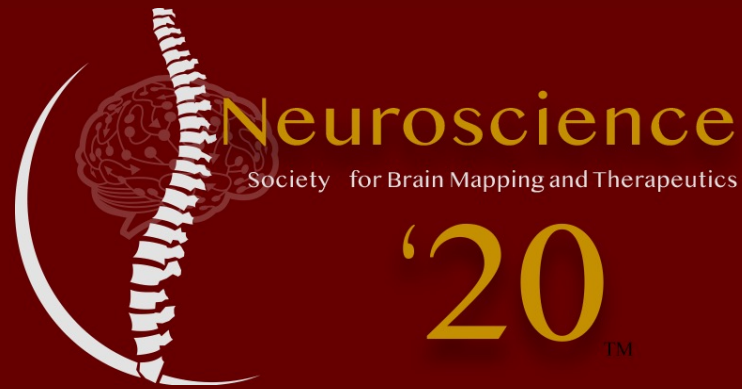


Precision Medicine-informed planning toward pharmacological, and peripherally, non-pharmacological approaches via neurotech deployment.

- Advancing evidence-based Neuro-functional Rehabilitation Therapies (NFRx).
- Promoting alternative mental health approaches including psycho-education, mindfulness-based cognitive training (MBCT), mental-health literacy trainings, meditation, yoga and reconcentrative training and practices to help mental resilience and cognitive fitness at personal and societal levels.
- Helping noninvasive brain stimulation technologies like Trans-cranial Doppler, (TD), tdcS, TMS.
- **Promoting innovative multidisciplinary technological solutions:**
 - usage of VR and AR for pain relief, Phobia, affective, adaptive training etc.
 - Nanotechnology for drug delivery, Biosensors for detection, etc.



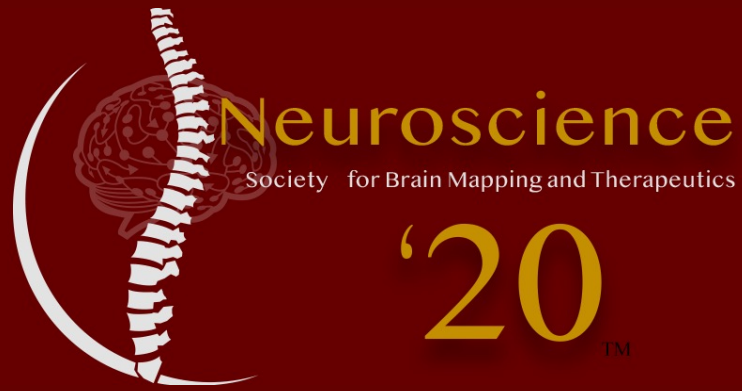
Innovation



Global innovation in neurotechnology for spinning off diagnostic and therapeutic technologies and processes while creating quality jobs locally.

- Repurpose and reposition existing therapeutics in terms of intellectual property and patents.
 - For example, agricultural patents repurposed for biotechnology to combat the opioid crisis.
- Accelerate Theragnostics for neurological disorders through public-private partnerships (PPP) and impact investments.
- Collaboration across diverse Tech Parks to fast-track neuro-technologies, which could be used for prevention, diagnostics, and therapeutics of neuropsychiatric disorders. For instance, collaboration between Brain Technology and Innovation Park (BTIP) and Paris Biotech Park, which is a self-sustainable model.





Spine

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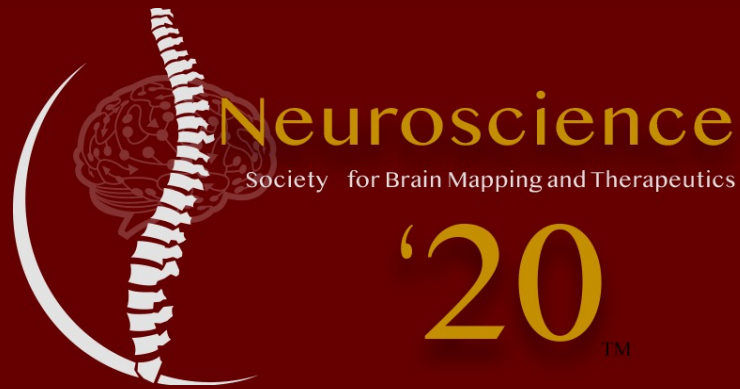


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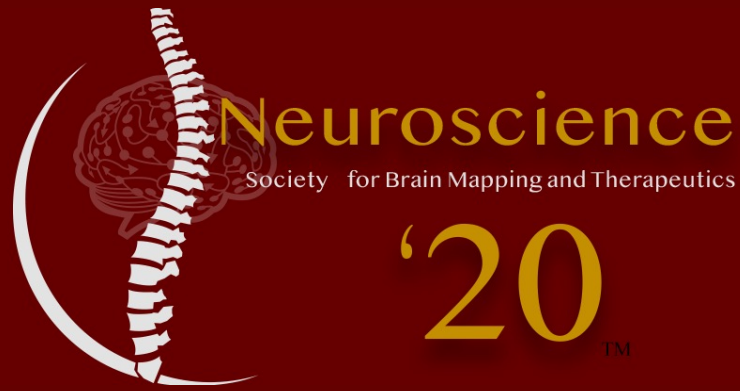


Spine

Cost of Spine Disorders

- Investment in educational resources to elucidate the importance of spine care and resource utilization.
- Education on spine hygiene and prevention of spinal injuries in the workplace.
- Raise awareness about scoliosis and encourage early detection programs.
- Education about nutrition and exercise, to prevent spinal disorders.
- Promote appropriate pain management, neurofeedback and biofeedback/ Brain-Spine pain management approach.



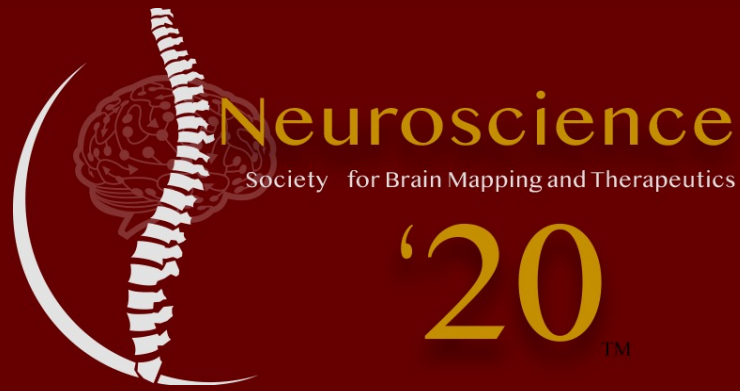


Spine

Lack of Access to Spinal Health and Wellness

- Creating programs that aim to reduce spinal disorders through different funds and training programs at different levels, from patients to health care providers.
- Educate patients on the prevention and management of spinal disorders, develop rehabilitation programs for spinal disorders, while providing ongoing and long-term follow-up and coordination of providers.
- Training for healthcare providers to diagnose, refer when appropriate, properly use and interpret medical imaging, perform spinal manipulation, and other manual therapies.



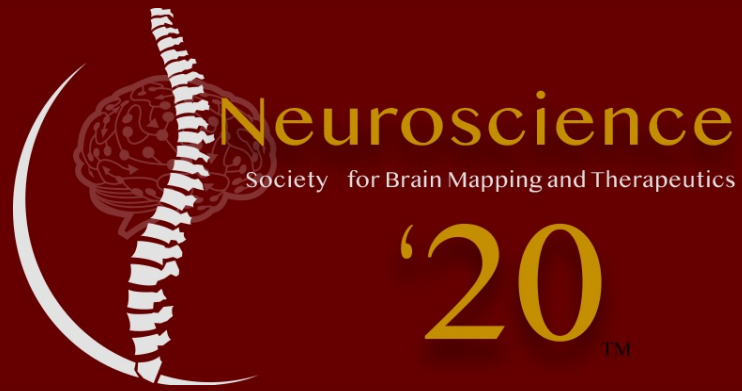


Spine

Lack of Access to Spine surgery:

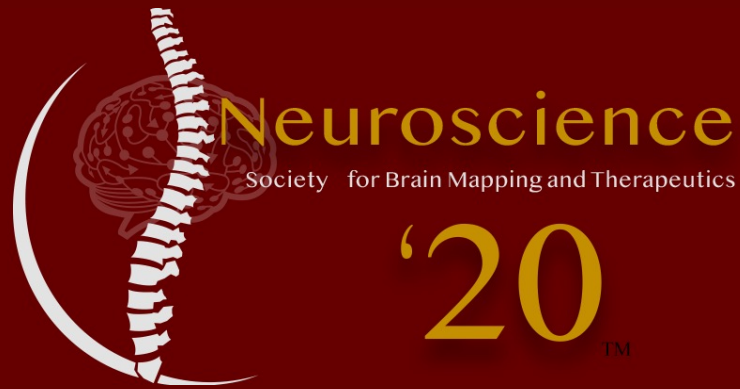
- Create economic and legislative laws to increase access for the assessment and treatment of spinal disorders via spinal surgery.
- There is an urgent need to increase the number of specialists and surgical subspecialists within reasonable proximity for patients.
- Raise awareness amongst physicians and the public about TB infections in the spine and growing concerns about MDR and XDR pathogens.
- Promote Annual Spinal screening.





Stem Cell





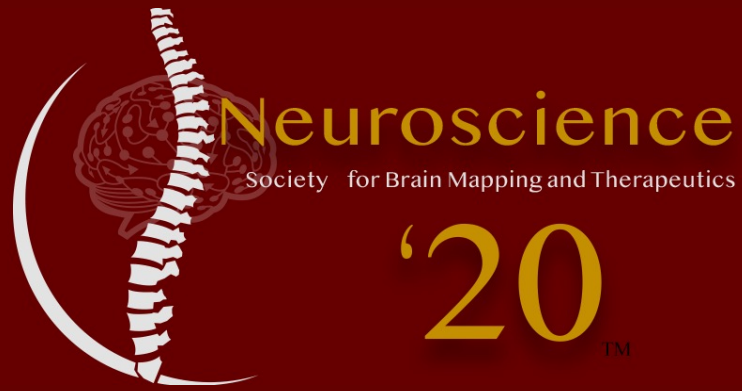
Stem Cell

Stem Cell Therapy Funding for Research

- California Proposition-14 has taken a global leadership position on this platform with \$5.5 billion in funding for stem-cell research and \$1.5 billion for neurotechnology research. Need to launch similar government-backed funds in G20 member nations for research into novel treatments (e.g., nanomedicine) to address myriad brain and spine diseases.
- Funding for translational research and spinoffs.
- Connecting opportunity zones and promise zones to neuro tech parks which facilitate translation, integration and application of stem cell therapy, globally and locally.
- Stream line FDA approval for Stem cell processing facilities and funding.
- Review the legal and regulatory international harmonization framework for clinical trials.

[https://ballotpedia.org/California_Proposition_14,_Stem_Cell_Research_Institute_Bond_Initiative_\(2020\)](https://ballotpedia.org/California_Proposition_14,_Stem_Cell_Research_Institute_Bond_Initiative_(2020))





Neuro- Oncology

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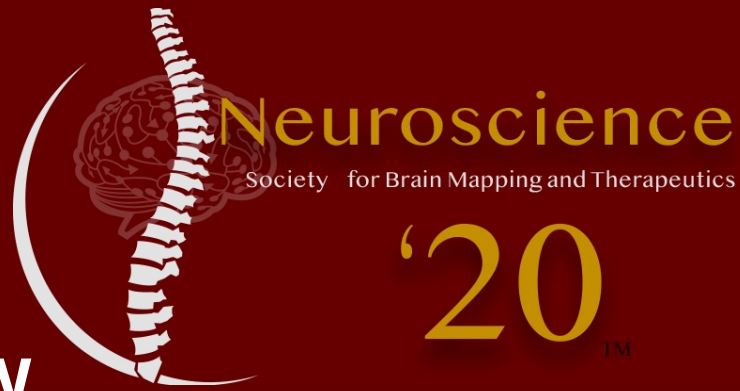


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Neuro-Oncology

Genomic Data Commons

Aggregating data and bio-analytics on genomic sequences and analyses of tumors, as well as clinical data on enrollment and treatment, focusing on tumor control, treatment toxicity, quality of life, and overall survival.

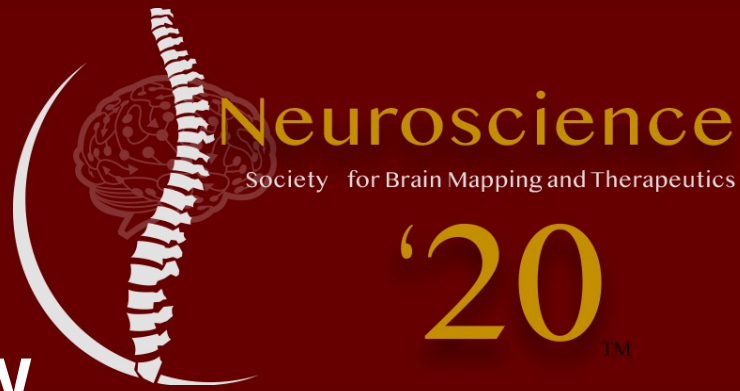
Evidence-Based Medicine

Redefining evidence-based medicine according to precision oncology and next generation sequencing.

Precision Medicine

Improving patient access to precision medicine, including customized treatment plans and testing coordinated interdisciplinary case management.





Neuro-Oncology

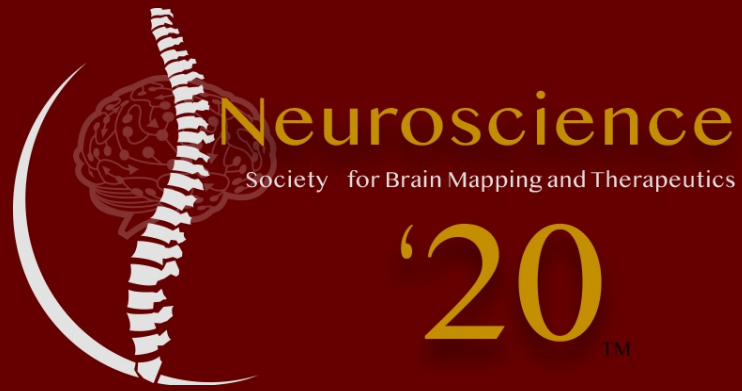
Telemedicine Protocols

Enhancing telemedicine protocols for global virtual brain tumor patient care during the Covid19 pandemic and future pandemics.

Global Expansion of the Cancer Moonshot Initiative

Expanding cancer moonshot initiatives focusing on reducing cancer drug prices and cost of cancer technology and providing a global insurance mandate for coverage of patients with cancer when the therapy of choice is selected by the patient and is part of a data-generating clinical trial.





Neuro-Imaging

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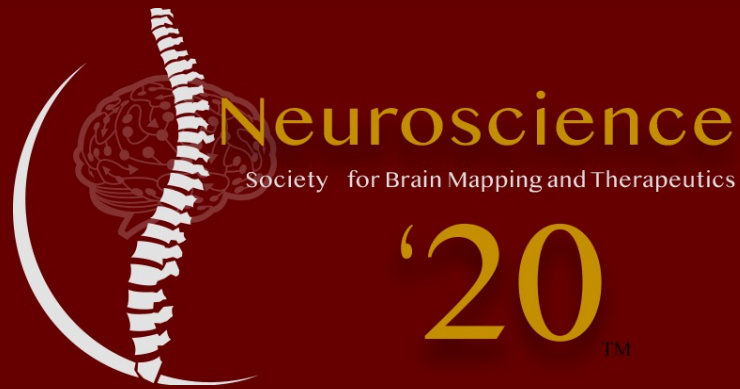
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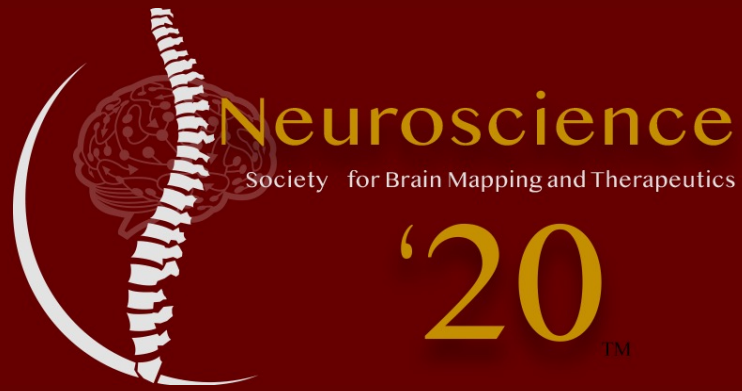
Neuro-Imaging



Significance of Annual Brain, Spine and Mental Health Screening for Body/Mind Wellness

- Use of multi-modality neuroimaging; CT scan, MRI (including fMRI and tractography), MEG and Electro Encephalogram (EEG), functional near-infrared spectroscopy (fNIRS), and qEEG, including ambulatory EEG and combined (ambulatory) EEG-fNIRS, as a standard assessment technique for treating neurological disorders, thereby mitigating these disorders' economic burden, subsequently bringing change to the socio-economic status and public health policies.
- Screen for cognitive, whole genome, autoimmune, fitness, sleep and nutritional status.
- Screening for early detection of brain dysregulation related to anxiety, depression, stress, addiction and other neuropsychiatric disorders.





COVID-19

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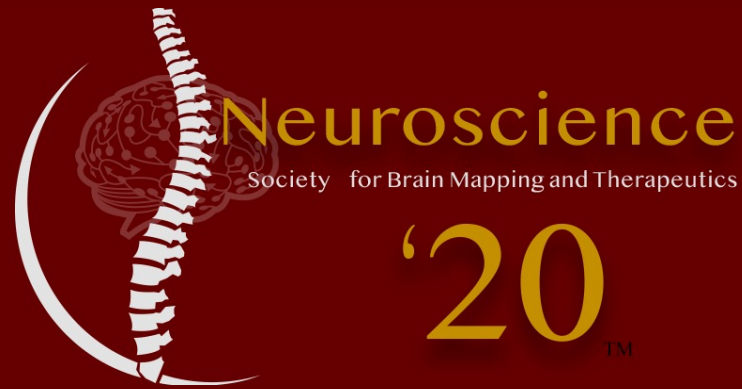
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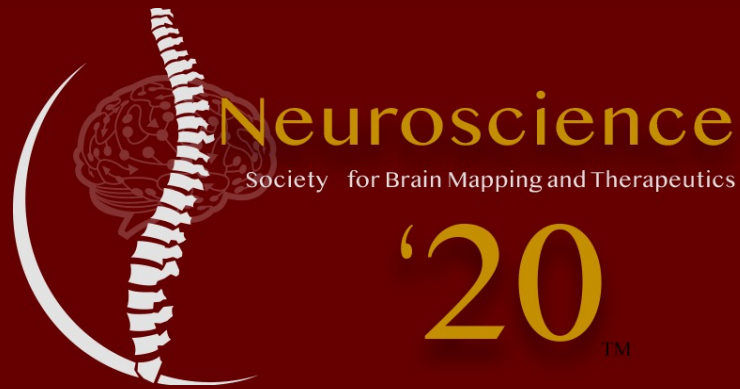
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COVID-19



- Improve public support networks, including “emergency pandemic funds” to be able to mitigate the economic impact of an emergency event.
- Encourage safe online education and activities to help the student population adapt to online learning environments in times of pandemics, continue research on the efficacy of online education.
- Surveillance of psychological conditions following the viral pandemic, to prevent a mental health pandemic.
- Encourage the continuation of occupational therapy in the institutionalized population during pandemics. Improve pre-existing support systems for patients with Alzheimer disease and related dementias.
- Promote the usage of digital solutions, such as tele-medicine, tele-psychiatry and mental health digital platforms and mobile device applications for patients.

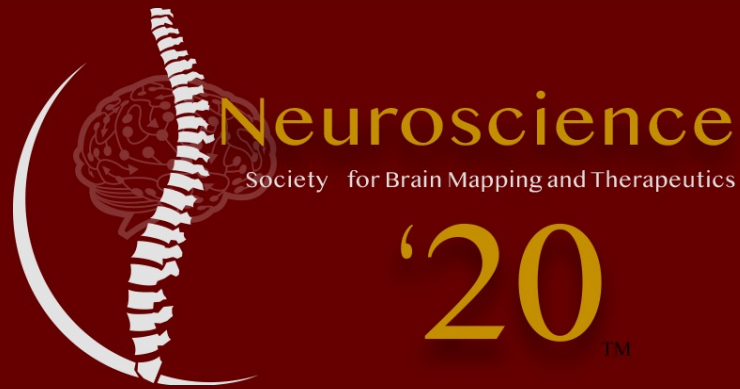




COVID-19

- Develop a national network of clinical mental health counselors accessible to those in need, supported by dedicated federal and state resources to allow access for the financially challenged and disenfranchised.
- This committee recommends the importance of preparedness for pandemic of mental illness. For example suicide, depression, anxiety, psychotic attacks, PTSD, complicated bereavement.
- Loneliness problem increases risk for suicidality.
- The committee recommends educational training (interactive) for the general population and university faculty and students, especially undergraduates.



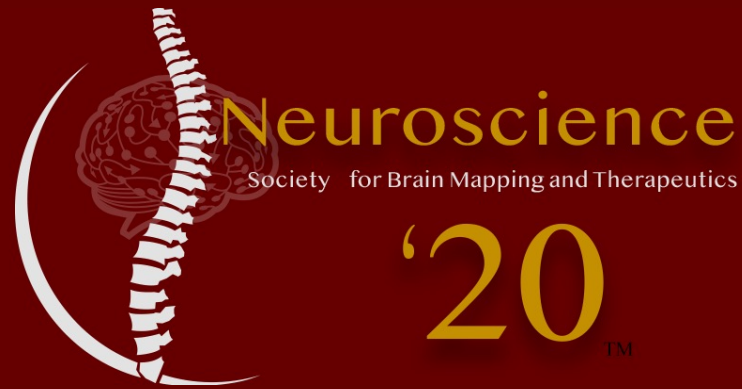


COVID-19

- Implementing help lines for domestic abuse survivors, initiating a surveillance program of known domestic abuse offenders in times of pandemics and implementing nationwide programs that would facilitate seeking help. For example, the MASK 19 program in Europe.
- Set a separate emergency economic system to support unemployed domestic abuse victims.
- Establish micro and small-scale healthcare support systems by creating a straightforward path for public and private entrepreneurs, to supplement continued care by decreasing bureaucracy.



COVID-19



- COVID-19 prevention, diagnosis and treatment:
 - Identifying and predicting patterns to prevent complications.
 - Encourage widespread testing.
 - Collaboration, coordination and cooperation on time (C3T) in the care unit and between specialized consultations to offer prompt and accurate therapeutics.
 - Science-based social preventative measures (Facemasks, increase of personal hygiene, physical distancing).
- Promote a nationwide, unified, comprehensive guideline for prevention, diagnosis and therapeutics.



Signatures

