

JOINT EVENT ON
INTERNATIONAL CONFERENCE ON
**ADDICTION MEDICINE,
MENTAL HEALTH AND
PSYCHIATRY**
&
INTERNATIONAL CONFERENCE ON
**NEUROLOGY AND
NEUROSCIENCE**



23-25
MARCH, 2026

SINGAPORE

Village Hotel Changi
1 Netheravon Rd, Singapore 508502



Book of Abstracts



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Welcome Message



Aaron Olson

Distinguished colleagues and guests, welcome to the International Conference on Addiction Medicine, Mental Health, and Psychiatry 2026, here in Singapore and online worldwide. At a time of rising substance use disorders and complex co-occurring psychiatric conditions, this gathering reflects our shared commitment to advancing integrated, evidence-based, and compassionate care across disciplines and cultures.

Over the coming days, you will engage in dynamic keynote presentations, skills-based workshops, panel discussions, and research symposia led by international experts. Topics span advances in addiction pharmacotherapy, trauma-informed and culturally responsive care, co-occurring disorders, emerging psychiatric treatments, prevention strategies, and integrated systems of care. Whether you are a clinician, researcher, educator, or policymaker, these sessions are designed to foster collaboration, practical skill development, and meaningful dialogue that translates science into real-world impact.

In my presentation, I will explore emotional regression within family systems and its role in addiction and psychiatric treatment. Under stress, individuals and families often revert to earlier developmental coping patterns, intensifying reactivity and rigid roles. By recognizing regression as a predictable stress response rather than a moral failure, we can intervene more effectively to support emotional regulation, differentiation, and healthier relational functioning. Recovery then becomes more than symptom reduction; it becomes emotional growth within the family system.

Welcome Message



**Bob Robert
Ladouceur, Ph.D.,**

Dear Colleagues and Friends,

With great pleasure, we welcome you to join us for the International Conference on Addiction Medicine, Mental Health, and Psychiatry (ICAMP 2026). The conference will take place from 23 to 25 March 2026, in Singapore and Online.

The International Conference will feature keynote presentations, scientific sessions, workshops, and networking opportunities. Attendees will explore topics such as substance use disorders, behavioral addictions, mental health therapies, neuroscience of addiction, and emerging treatment modalities. The event aims to foster collaboration and innovation in addressing global challenges in psychiatry and addiction medicine. The conference will focus on discussing the current findings and networking opportunities for the advancement of addiction.

My keynote address will focus on the notion and definition of “Responsibility” in the field of addiction. In addition, the challenging question of who is responsible for the development and maintenance of addictive disorders will be clearly addressed and discussed.

Hope to seeing you in Singapore in March 2026.

Welcome Message



*Dr. Mohamed Hadi
Eltonsi*

Distinguished colleagues, honored guests, and dear participants,

On behalf of the Organizing Committee of ICAMP 2026 – International Conference on Addiction Medicine, Mental Health and Psychiatry, it is my privilege to welcome you all—whether in person in Singapore or joining us online from around the world.

This year's theme, "Breakthroughs in Addiction & Psychiatry," could not be more timely. As researchers, clinicians, psychotherapists, and healers, the work we do touches the most vulnerable threads of human life. The global burden of addiction, comorbid psychiatric conditions, trauma, and psychosomatic disorders demands not only cutting-edge science, but also integrative approaches that heal at the root level of consciousness.

I bring to this conference both my scientific and healing experience, especially through my pioneering method of Instant Remote Leadership Mindset Development—a discovery rooted in psychotherapeutic dialogue followed by nonverbal subconscious realignment, energy transfer and telepathic integration during sleeping hours. In my view, mental health care, addiction treatment, and personal transformation are inseparable from restoring alignment between conscious and unconscious mind, and empowering individuals with inner coherence and psychological resilience.

Therefore, I encourage all participants to engage deeply—not only in sharing empirical studies, pharmacological advances, and neurological research, but also in exploring holistic, transformative modalities. May this conference become a platform not only for scientific exchange, but for the integration of heart, mind, and spirit in healing.

Over the next three days, I invite you to:

Participate boldly in keynote sessions, workshops, and panel dialogues.

Open your minds to interdisciplinary collaboration—combining neuroscience, psychotherapy, energy work, digital tools, and remote modalities.

Consider how discoveries like Instant Remote Leadership Mindset Development can complement addiction therapy, mental health care, relapse prevention, and integrated wellness strategies.

Network generously with peers across continents and disciplines, forging partnerships that can carry new ideas beyond this event.

Share your challenges and breakthroughs, so that the next frontier in psychiatry and addiction care is richer, more humane, and more deeply healing.

As a committee member, and as someone passionate about bridging medical science and conscious transformation, I look forward to collaborating with many of you—during sessions, in corridors, and in ongoing projects after the conference.

May ICAMP 2026 be a watershed moment: where innovation meets compassion, where addiction medicine becomes more than management, and where each of us leaves a stronger vision for mental health, human dignity, and societal maturity.

Thank you for your presence, your courage, and your dedication. Let us together co-create a conference—and a future—of healing, insight, and profound advancement.

Welcome Message



*Jaime Sebastian F.
Galan Jimenez*

Dear Colleagues and Friends,

With great pleasure, I'm happy to welcome you to join us, virtually, for the International Conference on Addiction Medicine, Mental Health and Psychiatry. The conference will take place from March 23-25, 2026, in Singapore and online.

This conference will bring together leading psychiatrists, psychologists, addiction specialists, researchers, healthcare professionals, and industry experts from around the world to discuss the latest advancements in mental health, addiction and psychiatric research. Key highlights include keynote presentations, scientific sessions, workshops, and networking opportunities, covering topics such as attachment, substance abuse, mental health therapies, neuroscience of addiction, and emerging treatment modalities. ICAMP 2026 is a vital event for professionals dedicated to improving mental health and addiction care, fostering collaboration and innovation in addressing global challenges in psychiatry and addiction medicine.

Cast the future with groundbreaking strides in Addiction Medicine, Mental Health and Psychiatry!

Welcome Message



Joris C. Verster, PhD

Dear Colleagues and Friends,

With great pleasure, I'm happy to welcome you to join us, either in-person or virtually, for the International Conference on Addiction Medicine, Mental Health and Psychiatry (ICAMP 2026). The conference will take place from 23 to 25 March 2026, in Singapore.

The International Conference on Addiction Medicine, Mental Health and Psychiatry, Singapore 2026 will provide stage to researchers and other healthcare professionals interested in addiction research and the interplay of addiction and substance use with mental and physical health. The program welcomes both fundamental and applied research in addiction, alcohol and drug use, as well as recent advances in addiction treatment and psychological interventions. The conference will feature both oral and poster presentations to talk about existing research and upcoming research plans.

We cordially invite and encourage potential authors and co-authors to contribute by submitting their latest research findings in all areas of addiction research. With the presence of outstanding international experts, this conference promises a productive exchange of innovative ideas that can lead to new discoveries and applications. Authors are invited to submit their abstracts for the conference.

Welcome Message



*Prof. Meera
Vaswani*

The Neuro care 2026 is a global platform dedicated to bringing together neurologists, neuroscientists, researchers, and clinicians, to discuss research breakthroughs in the field. This event features cutting-edge keynote sessions, interactive discussions, and scientific presentations, covering a wide range of topics.

It also serves as a networking hub for professionals, fostering collaborations and knowledge exchange. Younger Attendees are encouraged to present their research findings, offering them a global platform for recognition. It gives them an opportunity to gain insights into innovative research and engage in discussions.

Welcome Message



Robb Russell, DC

Dear Participants,

Welcome to beautiful Singapore with its vibrant, multicultural heritage and world-renowned food scene. Neurocare 2026 offers a forum for neuroscientists and clinical specialists to share ideas, research and become a part of a collaborative, international gathering.

Young and emerging researchers will have opportunities to gain insight into relevant research by listening to and interacting with seasoned researchers and clinical specialists. The format will help those in early career development pave a path for a career in research.

Welcome Message



*Thomas J. Webster,
Ph.D.*

Dear Colleagues and Friends,

Welcome to Neuro-care 2026! Without a doubt, recent advances in science have revolutionized neurological care. But, how did this occur? Was your research part of these advancements? Have we innovated and commercialized enough? Are companies paying attention to your wonderful research? Are Universities doing enough to help you? What about federal funding agencies? And, most importantly, are you in the right environment to innovate and commercialize your research?

In my own experience, above all else, it takes a supportive environment. Find the right community. I left the very negative, ultra-competitive Northeastern University in Boston over 4 years ago - I have never seen such negative people in my 25 year education and research career! Stifling my advances every chance they got. I found a truly supportive environment by forming my own companies and, yes, finding supportive people who value me and my contributions at another University. Only then after surrounding myself with supportive people was I able to start numerous companies and commercialize my research which is now improving the mobility and health of over 30,000 patients...and counting!

I encourage everyone to find that right environment. The right conferences can also make the difference. Make that move. Neuro-care 2026 is such a conference where you will meet the right people and be inspired!

It will change your life once you make the commitment to surround yourself with positive people. I know, because I lived it.

I look forward to seeing everyone to further share my story!

Welcome Message



Weina Liu

Dear Esteemed Participants,

On behalf of the organizing committee, it is my privilege to extend a warm welcome to the International Conference on Neurology and Neuroscience (Neuro Care-2026), taking place from March 23 to 25, 2026, in Singapore and Online. This premier global platform is dedicated to uniting researchers, clinicians, and innovators to advance neurological care through cutting-edge science and collaborative dialogue.

This year's conference will spotlight transformative advancements in neurotherapeutics, AI-driven technologies, and novel treatment methodologies. Whether joining in person or virtually, attendees will engage with pioneering research, interactive workshops, and insights from global experts shaping the future of neurological health. We are particularly excited to facilitate discussions on disease modification strategies and cross-disciplinary innovations that promise to redefine patient outcomes worldwide.

Your participation—whether through presenting groundbreaking work, sharing clinical experiences, or contributing to dynamic debates—will be instrumental in driving this mission forward. Together, we can accelerate progress from bench to bedside and beyond.

We eagerly anticipate your valuable contributions to this transformative gathering.

Our Keynote Team



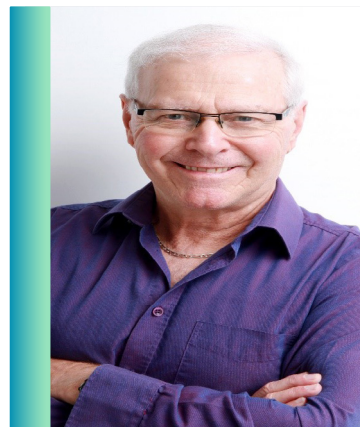
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Joris C. Verster

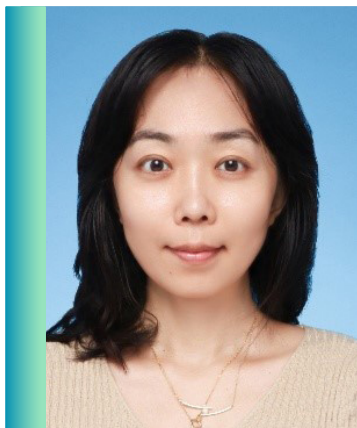
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ABOUT

Mathews International LLC

Founded in 2015, Mathews International LLC has rapidly established itself as a prominent publisher in the scientific community. With a strong focus on open access, Mathews International provides a platform for disseminating cutting-edge research across various scientific disciplines. The company has published numerous high-quality journals, fostering advancements in science and ensuring that knowledge is freely accessible to researchers, professionals, and the public alike.

Driven by a commitment to excellence, Mathews International prides itself on maintaining rigorous peer-review standards and collaborating with a diverse network of authors, reviewers, and editors from across the globe. Its open-access model not only promotes transparency and inclusivity but also accelerates the dissemination of vital scientific information. This approach has earned the company a reputation for publishing trustworthy, high-impact research that contributes to solving global challenges in fields such as medicine, environmental science, and technology.

As part of its ongoing commitment to advancing science and fostering collaboration, Mathews International LLC is now expanding into organizing conferences. These events aim to bring together experts, innovators, and thought leaders from around the world to share insights, exchange ideas, and explore the latest developments in their respective fields. The conferences will feature a diverse range of topics, from emerging technologies to groundbreaking healthcare innovations, fostering interdisciplinary dialogues that inspire new perspectives and solutions.

With years of experience in publishing, Mathews International's foray into conferences promises to deliver high-quality, impactful events that align with its mission of advancing scientific discovery and promoting global collaboration.

ABOUT

CPD Accreditation

Overview

Continuing Professional Development (CPD) represents a commitment to lifelong learning and the ongoing enhancement of professional knowledge and skills. This program provides participants with an opportunity to gain formal recognition for their dedication to professional growth through the award of CPD credits. These credits acknowledge active participation in educational sessions, workshops, and interactive discussions that contribute to advancing expertise and practical competence.

CPD Credit Allocation

Participants are eligible to earn 1 CPD credit for each hour of active attendance, with the opportunity to accumulate up to 15 CPD credits throughout the duration of the program. Attendance is tracked to ensure accurate credit allocation, and participants who complete the required hours will receive an official certificate verifying their earned CPD credits.

Value of CPD Credits:

- Encourages continuous learning and skill enhancement
- Contributes to career advancement and professional recognition
- Promotes knowledge sharing and collaboration in oncology research
- Supports compliance with professional development requirements



Journal Collaboration

Strategic Journal Partnerships for ICAMP-2026 & Neuro Care-2026

ICAMP-2026 and Neuro Care-2026 are honored to collaborate with internationally recognized scholarly journals published by Mathews Open Access to enhance the visibility, credibility, and dissemination of research presented at the conferences.

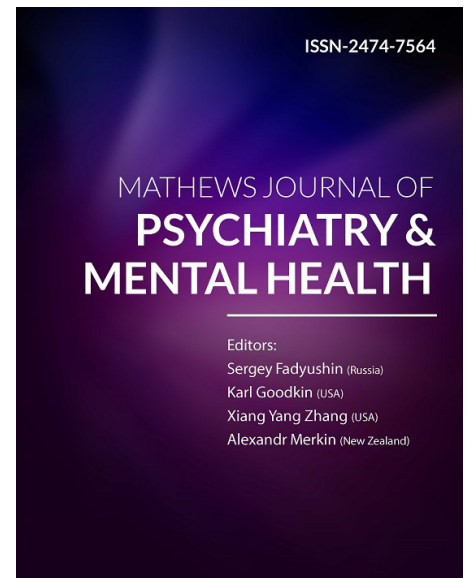
Partner Journals

Mathews Journal of Psychiatry & Mental Health (MJPMH; ISSN: 2474-7564): A reputed international journal focusing on mental health and psychiatry research, publishing studies related to intellectual disorders, anxiety, depression, dementia, clinical psychology, neurodegenerative diseases, psychotherapy, psychological disorders, bipolar disorders, sleep disorders, and psychiatric care.

Mathews Journal of Neurology (MJN; ISSN: 2572-6536): An international journal dedicated to publishing research in diverse areas of neurology, including neurobiology, neuroanatomy, neurophysiology, neuronal development, neurosurgery, pediatric neurology, neurological disorders, brain disorders, traumatic brain injury, neuroinflammation, neuropathies, neurocognition, and related fields.

Conference Proceedings with DOI:

- The conference proceedings book will be assigned a DOI, making all presented abstracts and findings globally accessible and citable.
- This guarantees that your research is recognized and easily referenced by the scientific community.



Journal Collaboration

Opportunity for Full-Length Publications:

- Participants can submit full-length manuscripts to the journals for peer-reviewed publication.
- Article processing charges are fully waived, ensuring a seamless path to publication.
- Manuscripts undergo rigorous review by the journal's editorial team, ensuring high-quality scientific standards.

Journal Visibility & Indexing

The partner journals are indexed in major scholarly databases, including CrossRef, Google Scholar, WorldCat, J-Gate, DRJI, ISI, Genamics JournalSeek, Scilit, and CiteFactor, ensuring global visibility, discoverability, and credibility of published research.

Participant Benefits

- Global visibility and recognition for your research
- Opportunity for peer-reviewed publication in internationally recognized journals
- No publication fees for conference participants
- Contribution to advancing research and innovation in psychiatry, mental health, and neurology
- Enhanced dissemination of scientific knowledge to the global academic and healthcare communities

This collaboration reflects the commitment of ICAMP-2026 and Neuro Care-2026 to fostering scientific excellence, promoting knowledge exchange, and providing researchers with credible platforms to disseminate their work to the global psychiatry, mental health, and neurology communities.



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BOOK OF ABSTRACTS

Keynote Sessions

MAR 23-25

JOINT EVENT ON

INTERNATIONAL CONFERENCE ON

**ADDICTION MEDICINE,
MENTAL HEALTH
AND PSYCHIATRY**

&

INTERNATIONAL CONFERENCE ON

**NEUROLOGY AND
NEUROSCIENCE**

**Aaron Olson**

Cirque Lodge, Orem, UT, USA

Walking backwards: Utilizing emotional regression as a therapeutic entry point in the treatment of substance use disorders, anger, and grief

Emotional regression, the temporary return to earlier stages of development in the midst of overwhelming emotion, represents a strong treatment point of entry in Substance Use Disorder (SUD), anger, and bereavement treatment. This professional presentation explains how access to regressed states of emotion allows clinicians to access unresolved developmental pain, which underlies maladaptive coping behaviors. Citing John Lee, Harry Easel, Freud, and contemporary family systems theory, I present a synthesizing model that focuses on emotional regression as both a diagnostic understanding and an intervention process.

Substance dependency, chronic anger, and unprocessed bereavement frequently occur as responses to early relational trauma and unprocessed emotional hurt. While clients are being stirred into regressive states, they let their guard down, and unfulfilled childhood needs, attachment trauma, and family patterns that tend to perpetuate pain reveal themselves. Therapeutic regression enables clinicians to bypass intellectual defenses, enabling direct access to the "younger self" where foundational wounds reside. Synthesizing genograms and family identity mapping, therapists are able to place in the foreground intergenerational patterns and systemic patterns of dysfunction, such as emotional cutoff, locked roles, and hidden rules that suppress emotional expression and healing.

The presentation offers evidence-informed approaches to inducing and working through regression safely, emphasizing trauma-informed care and Acceptance and Commitment Therapy (ACT)-compatible values. Experiential techniques like guided imagery, somatic awareness, and narrative repair will be demonstrated as means of helping clients process developmental hurt without re-traumatization. Participants will see how regression work can be integrated with behavioral coping with cravings, anger management, and recovery from complicated grief, placing emotional regression in its rightful role as an introduction to long-term change rather than an end in itself.

Case vignettes illustrate regression-focused interventions as a way to make breakthroughs in SUD treatment through improved emotional regulation, greater psychological flexibility, and greater self-compassion. Theory and practice are synthesized in this session, which equips clinicians with skill sets to identify regressive patterns, build stronger therapeutic alliances, and create recovery paths.

This presentation will challenge therapists to reconsider emotional regression as a therapeutic setback rather than an opportunity for profound change. By working at the moment of disruption of their emotional development, therapists can foster integration, resilience, and profound healing for substance use, anger, and loss disorders.

Biography

Aaron has been with Cirque Lodge since 2009 and has more than 30 years of experience working in the behavioral health field. This includes time working in the juvenile justice system, inpatient psychiatry, and community mental health. Aaron has specialized in substance use issues and has worked at the residential, outpatient, and intensive outpatient levels of care. Aaron utilizes an eclectic approach to treatment with a strong foundation in Acceptance and Commitment (ACT) therapy, family systems theory, and contextual therapy. Aaron has a significant interest in understanding the impact of transgenerational trauma on families, compassion fatigue and burnout in clinicians, and emotional regression. Aaron has lectured around the United States on these topics. As the program director at Cirque Lodge's prestigious Lodge program, Aaron oversees the overall clinical experience of residents while maintaining a clinical caseload and supervising the clinical staff. Aaron is a member of the faculty at the University of Utah, College of Social Work, teaching in the Substance Abuse Counseling Program.



Prof. Habil. Dr. Bernd Blobel, FACMI, FACHI, FHL7, FEFMI, FIAHSI

University of Regensburg, Medical Faculty, Regensburg, Germany

Charles University Prague, First Medical Faculty, Prague, Czech Republic

Faculty European Campus Rottal-Inn, Deggendorf Institute of Technology, Deggendorf, Germany

University of Genoa, DIBRIS, Genoa, Italy

Enabling knowledge-driven communication and cooperation in intelligent and ethical transformed health and social care ecosystems

Health and social care systems around the world undergo a transformation towards personalized, preventive, predictive, participative precision medicine (5PM), considering the individual health status, conditions, genetic and genomic dispositions in personal, social, occupational, environmental and behavioral context. For enabling communication and cooperation between actors from different domains using different methodologies, languages and ontologies based on different education, experiences, etc., we have to advance design and management of the resulting complex and highly dynamic ecosystem from data to knowledge level. The aforementioned transformation is strongly supported by technologies such as micro- and nanotechnologies, advanced computing, artificial intelligence, edge computing, etc. Beside their opportunities, those advanced technologies also bear risks to be managed. The behavior of intelligent and autonomous systems must be considered from a humanistic, moral and ethical perspective. The challenge is the consistent, correct and formalized representation of the transformed health ecosystem from the perspectives of all domains involved including the legal and ethical ones, representing and managing them based on related ontologies. The resulting domain perspectives of the real-world ecosystem must be interrelated using the ISO/IEC 21838 Top Level Ontologies standard. Thereafter, the outcome can be transformed into implementable solutions. The different viewpoints are represented using viewpoint-specific ICT ontologies. The necessary model and framework has been developed by the author and meanwhile standardized as ISO 23903 Interoperability and Integration Reference Architecture. The formal representation of any ecosystem and its development process including examples of practical deployment of the approach are presented in detail. This includes correct systems and standards integration and interoperability solutions.

Biography

Dr. Bernd Blobel studied Mathematics, Technical Cybernetics and Electronics, Bio-Cybernetics, Physics, Medicine and Informatics at the University of Magdeburg and other universities in the former GDR. Bernd Blobel received his PhD in Physics with a neurophysiological study. Furthermore, Bernd Blobel performed the Habilitation (qualification as university professor) in Medicine and Informatics. Bernd Blobel was Head of the Institute for Biometrics and Medical Informatics at the University of Magdeburg, and thereafter Head of the Health Telematics Project Group at the Fraunhofer IIS in Erlangen.

Thereafter, Bernd Blobel acted until his retirement as Head of the German National Health Competence Center at the University of Regensburg as well as Head of the globally unique International Interdisciplinary PhD and Post Doc College. Bernd Blobel was and is still leadingly involved in many countries health digitalization as well as electronic health record strategy. Bernd Blobel published more than 600 papers, published/edited many books and supervised a big number of PhD students from all around the world. Bernd Blobel was German Representative to many SDOs such as HL7, ISO, CEN, OMG, IEEE, ASTM, SNOMED, etc., also chairing the national mirror groups. Furthermore, Bernd Blobel still engaged in international higher education. Bernd Blobel is Fellow of several international academies. His extended publication list is available at <https://epub.uni-regensburg.de/view/people/Blobel=3ABernd=3A=3A.html>.

**F. Galán Jiménez, Jaime Sebastián**

Autonomous University of San Luis Potosí, San Luis Potosí, México

Addictions, family communication and attachment

The aim of the conference is to present the findings of the communicational phenomena of disqualification and disconfirmation, as well as the attachment patterns perceived during childhood in comparison with the population that self-reports as having addiction problems and those that do not.

Method: We worked with a population of more than 400 people who applied the scale of disqualification and disconfirmation (Galán, 2023) and the scale of secure attachment patterns during childhood (Palau and Galán, 2023).

Results: Significant differences were found in both items in the population that reported harmful substance use. It is concluded that family communication and attachment bonds are associated with addictive behavior.

Biography

Dr. Jaime Sebastián is PhD in psychology, Msc. In psychology, Msc. In systemic psychotherapy. Jaime Sebastián was head of the research and postgraduate division, actually Dean of psychology faculty in the University of San Luis Potosí. Jaime Sebastián has 19 years as psychotherapist and has written more than 30 papers, four books and 10 books chapters.



Dr. Hadi Eltonsi

Cairo University Medical College. MB.BCH, Egypt

Instant remote leadership mindset development

Statement of the problem: Clients receiving psychotherapy require several sessions even if with drugs and use of will power over time.

Purpose of the treatment: Achieving from distance immediate non medicinal effortless painless healing and without complications

For leadership personality development, relief of neurotic disease, psychosomatic symptoms and diseases, treating emotional obesity and smoking.

Method: After joint analysis with Client and definition of psychological and physical goals of treatment, the healer as a trained behavioral, cognitive and logo psychotherapist arrives with client to a new corrected understanding of the case, roots of conflicts in childhood, and hoals taking around 3 hours by video call application then with reiki technique during his/ her sleeping hours wherever he/she is performs nonverbal interpersonal hypnosis with transfer of energy and telepathy to client till deep sleep when he implants the required personality , ideas, emotions, motives and attitudes into the unconscious mind embodying the required state.

The unconscious and conscious mind will have same agreed upon analysis and targets for immediate results in that session of 3 hours in addition to less than 2 hours during sleep

Results: The healer got patent in Egypt 2016 for his discovery of The Immediate Healing for Personality Development and for mentioned purposes. Up till now treating more than 1200 cases aging between 12 and 80 years with relief of 96% of cases either totally or mostly.

Conclusion: Immediate non medicinal revolutionary life transforming healing from distance for a wide spectrum of cases achieving higher grades of maturity, insight, harmony and efficiency saving client time, effort, interests and complications. Also used to mature community leaders to be a motivating trouble shooter model efficient leaders with team spirit.

Biography

Dr. Hadi Eltonsi a medical graduate trained in group psychotherapy, hypnosis, silva mind control, NLP, Reiki Master, Panic Healing, Life Couch, Mantra Yuga meditation among others courses for psychic powers, family constellation thru his medical study and practice then as a diplomat and Ambassador. Hadi Eltonsi performed many TV, Radio interviews and seminars apart of two short American films about his work or inspired by his skills which were shown in international film festivals, the second got an award in Venice 2017 and got patent and published twice for immediate healing for personality development (in situ) and instant leadership mindset formation from distance.

**Joris C. Verster, PhD**

Utrecht University, Utrecht Institute for Pharmaceutical Sciences, Division of Pharmacology, 3584CG, Utrecht, The Netherlands

Swinburne University of Technology, Centre for Mental Health and Brain Sciences, Melbourne, VIC 3122, Australia

Cognitive Neurophysiology, Department of Child and Adolescent Psychiatry, Faculty of Medicine, TU Dresden, Dresden, D-01307, Germany

Alcohol hangovers and the risk of developing immune-related diseases

Background: Contrary to popular belief, there is a positive relationship between the frequency of experiencing alcohol hangover and their severity. This reverse tolerance implies that hangovers become worse when they are experienced more often. Research on the pathology of the alcohol hangover revealed that the inflammatory response after alcohol consumption, i.e. elevated levels of immune biomarkers such as cytokines and C-Reactive Protein (CRP), is an important factor that elicits the alcohol hangover. It is hypothesized that frequently experiencing hangovers could lead to chronic systemic inflammation. The latter is a significant health concern, as chronic systemic inflammation is associated with an increased susceptibility to developing chronic immune-related non-communicable diseases such as diabetes and cardiovascular disease.

Methods: Results from a study among N=108 young Dutch adults are discussed that further investigated the association of hangover frequency and severity with immune fitness, i.e. the body's capacity to respond to health challenges (such as infections) by activating an appropriate immune response. Possible confounding factors, including age, sex, weekly alcohol consumption, sleep quality, physical activity, daily diet, stress, and mental resilience were assessed and taken into account, as well as salivary immune biomarkers.

Results: The study revealed that both hangover frequency and hangover severity correlated significantly and negatively with immune fitness. The results were supported by salivary immune biomarker outcomes. A highly significant positive correlation was found between hangover frequency and hangover severity, suggesting that hangovers become worse when experienced more frequently.

Conclusion: The findings confirm that experiencing more frequent and more severe hangovers is associated with poorer immune fitness, thereby potentially increasing the risk of developing immune-related diseases.

Biography

Dr. Joris C Verster (1970) investigates the role of immune fitness in health and disease at Utrecht University, the Netherlands, and is appointed as adjunct professor at Swinburne University (Australia) and the TU Dresden (Germany). Dr. Verster founded the Alcohol Hangover Research Group and published extensively on immune fitness, and the effects of alcohol and hangovers.



Professor Meera Vaswani

All India Institute of Medical Sciences, New Delhi, India, Now in USA.

Neurobiology of addiction

Addiction was historically viewed as a disease of “weak personality” and was not systematically addressed by the scientific and medical communities until the latter half of the 20th century. They are now commonly accepted as diseases of the brain caused by the impact of the drug on the brain (direct effects and neuroadaptations) modified by environmental factors.

Drug addiction can be considered a chronic brain disease that affects neurotransmission between neuronal circuits controlling behavior, emotion and cognition; characterized by excessive drug use, unsuccessful attempts in controlling drug intake leading to increase in anxiety and emotional pain. Thus, addiction results from repeated long-term exposure to drugs, leading to changes in central nervous system, especially in the midbrain dopamine system, resulting in an addictive state with complex behaviors such as dependence, tolerance, sensitization, and craving. However, addiction leading to loss of volitional control (opiates, nicotine and illicit use of psychostimulants), if left untreated, can cause major medical, social, and economic problems.

Drug addiction represents a dramatic dysregulation of motivational circuits caused by a combination of exaggerated incentive salience and habit formation, reward deficits and stress. Three phenomena characterize addiction: binge/intoxication, withdrawal/negative affect and craving (preoccupation/anticipation). Impulsivity and positive reinforcement often dominate the first stages, driving the motivation for drug seeking, and compulsivity and negative reinforcement dominate the terminal stages of the addiction cycle.

Binge/intoxication: Addictive substances and rewarding behaviors, increases the release of dopamine from mesolimbic projections to the nucleus accumbens. Thus, dopamine signals a pleasurable experience and is critical for the reinforcing effects which releases dopamine in the mesolimbic area, the corpus striatum, and the frontal cortex thereby promoting self-administration

Withdrawal/negative affect: The increase in negative emotional states in the withdrawal stage involve decrease in the dopamine function. These neuronal changes lead to dysphoric and stress-like responses. Repeated drug intake during withdrawal, results in a vicious cycle.

Craving (preoccupation/anticipation): The craving and deficits in executive function in the so-called preoccupation/anticipation stage involve the dysregulation of key afferent projections from the prefrontal cortex to the basal ganglia and extended amygdala. Impaired dopamine and glutamate

signaling in the prefrontal regions weakens the ability to resist strong urges to stop taking the drug. Thus, despite the potentially catastrophic consequences, it develops compulsive behavior and the associated inability to voluntarily reduce drug- taking behavior.

Molecular genetic studies have identified transduction and transcription factors that might mediate initial vulnerability, maintenance, and relapse associated with addiction.

Summary:

- Addiction-relevant behaviors in animal studies model have led to an understanding of addiction neurobiology and identification of several genes mediating variation in drug preference and response.
- The neurobiological pathways that modulate reward, stress resiliency and behavior inhibition are among those having underlying addiction liability.
- Variation in the neurobiology of addiction is genetically influenced by correlation of addiction liability with heritability.
- The individualization of treatment and prevention is likely to be advanced by the discovery of genetic predictors of the neurobiological pathways that underlie addiction

Biography

Dr. Meera Vasami is a Tenured Professor and Director of the WHO Collaborative National Drug Dependence Treatment Center at All India Institute of Medical Sciences. She holds a PhD from University of Delhi and completed postdoctoral training at AIIMS. Dr. Vasami received prestigious awards from the National Institute on Drug Abuse, chaired Addiction sessions at American Psychiatric Association meetings (2002–2012), and was awarded a UN Fellowship at the University of Glasgow. She is an elected Fellow of the Royal Society of Chemistry and Member of the National Academy of Medical Sciences. She has been invited to publish chapters on addiction for "Elsevier Publications"; in "International Series of Addiction" Praeger Publications, USA"; in "Advances in Psychology "Nova Science Publishers', Inc. USA". in "Genomics and Health in the Developing World" Oxford Publishers"; in "Substance Use Disorder, Indian Publishers".

**Mingming Zhou**

University of Macau, Macau SAR, China

Social media addiction and well-being in rural children: From a self-determination theory perspective

The popularity of social media amongst children and adolescents has exponentially increased and is firmly embedded within youth culture worldwide. Despite differences in young people's social media adoption and use across countries, the prevalence of social media is universal. Existing studies on social media addiction mainly focus on adolescents, with a limited understanding of social media use at different developmental stages. More and more children and teens are and crowd out other age-appropriate activities, such as socializing, sports, and school work. This is even worse in rural areas with left-behind children.

As of June 2022, rural internet users in China numbered 293 million, accounting for 27.9% of all Internet users. Teens were found to spend excessive amounts of time on social media and psychologists and addiction experts are reporting seeing more teenagers whose behavior looks alarmingly like addiction, beginning with intermittent to recreational use, then progressing into daily use, and then into consequential use or even life-threatening use. Children's impaired self-awareness, dysfunctional relationships with their parents, and imbalanced social environment have contributed to the growing risk of social media addiction.

Children in rural areas typically face a unique constellation of psychosocial challenges, such as less social support, impaired emotional adjustment, and a lack of adequate psychological education and support. They tend to experience repeated parental migration, who are at higher risk of maladaptive psychological development. In this talk, I would like to present a recent project examining short-form video addiction in primary school children in Chinese rural areas and how that would be related to their well-being as indicated by school engagement and social isolation. As a macro theory of human motivation, the Self-Determination Theory (SDT) purports to explain the motivational causes of wellness and thriving. It identifies three basic psychological needs, namely, autonomy, competence, and relatedness, and asserts that all human beings have evolved such a set of basic psychological needs, which are essential for optimal development and wellbeing. Rural students' basic psychological needs are often unmet due to parental absence, reduced social support, and fragmented caregiving, leading to inadequate emotional adjustment, such as higher depression, loneliness, lower self-esteem, and social isolation. This relationship pattern also reveals significant differences across gender. The findings will be discussed both in a national and international context.

Biography

Dr. Mingming Zhou is a Professor in Faculty of Education at University of Macau. Mingming Zhou is highly research active and has published about 100 journal articles mostly in the area of positive psychology, achievement motivation and emotion regulation. Her current research projects include developing new measures for emotion regulation during collaboration, role of digital technology in intercultural competence, social media addiction among different student groups, and others. Mingming Zhou has been listed among the world's top 2% most-cited scientists in the 2023, 2024 rankings published by Stanford University.



Robb Russell, D.C

SCU Health, United States

Neurological effects of spinal manipulation: What do we know?

Introduction: Spinal Manipulation (SM) is a key therapeutic procedure of chiropractic healthcare and a component of osteopathy, physical therapy, Traditional Chinese Medicine and other healthcare professions. It is most commonly used to address musculoskeletal pain and [published evidence indicates it has relative efficacy in the management of low back pain, neck pain and headaches of cervical spine origin. Multiple international clinical practice guidelines recommend non-pharmacological management of pain and SM is included as guideline concordant care.

Despite its relative clinical efficacy, the mechanism of action of SM is not well established. Local, articular and fascial changes may be responsible for some clinical effects but there is emerging information suggesting SM affects neurological processes. The goal of this narrative review is to assess the literature for evidence for neurological effects of SM.

Methods: A narrative review followed a literature search of the following databases: CINAHL with full text, MEDLINE with Full Text, PubMed, Springer Nature Journals, Directory of Open Access Journals, Science Direct, Gale OneFile: Health & Med and Google Scholar using keywords including: ("Spinal Manipulation"[Mesh] OR "Spinal Manipulative Therapy" OR "Manual Therapy" OR "Chiropractic Adjustment") AND ("Neurophysiology"[Mesh] OR "Nervous System Physiological Phenomena"[Mesh] OR "Pain Threshold"[Mesh] OR "Proprioception"[Mesh] OR "Autonomic Nervous System"[Mesh] OR "Electromyography"[Mesh])

Results: A review of the literature suggest that SM may impact neurological processes including, (1) moderating pain by reducing central sensitization and activating descending inhibitory pathways; (2) affecting cortical activity by influencing how the brain processes sensory input and motor control, (3) Autonomic Nervous System output by shifting sympathetic or parasympathetic tone; (4) proprioception and sensorimotor integration, and (5) neuroplastic changes which may explain modification of motor control and pain. Most neurological effects in the published studies reviewed are short-term and clinical impacts are not well understood.

Discussion: There is evidence that SM directly impacts central and peripheral nervous system functions. Clinical observations of the efficacy of SM to address back and neck pain as well as some types of headaches may be explained by neurological effects of the intervention. Mechanisms remain speculative and not fully appreciated.

Biography

Robb Russell, D.C. is a graduate of San Diego State University and Los Angeles College of Chiropractic. Robb Russell practiced privately from 1982 until 2012, joining Southern California University of Health Sciences (SCU) in 2012 and serves as Assistant Vice President & Clinical Chief of Staff at SCU Health. Since 2014 Robb Russell has held an appointment as an attending chiropractic doctor within the Veterans Administration (VA) Integrated Clinical Practice Residency at VA Greater Los Angeles Healthcare System. Robb Russell has authored articles published in peer-reviewed, scientific journals, made presentations at healthcare conferences on six continents and has co- authored chapters in two books.



Robert Ladouceur, Ph.D.

Université Laval, Canada

Responsible gambling & drinking: What is “Responsibility” and the role of different stakeholders, including the operators and the consumers

During this presentation, we will closely examine the notion of “Responsibility” and its different implications for Responsible Gambling and Drinking. An operational definition of Responsibility will be suggested and the various impacts on consumers’ and patrons’ activities. Furthermore, we will consider some of the complex value judgments and related conceptual difficulties that underpin attempts to promote “Responsible Gambling”. Finally, the role of responsibility for different stakeholders such as operators, regulators, consumers, etc. will be examined. The conclusion will sort out the importance of including the notion of “Responsibility” in the understanding, prevention and treatment of gambling and drinking behaviors.

Biography

Professor Robert Ladouceur, Ph.D., is Professor Emeritus of Psychology at Laval University, Canada. Robert is a pioneer in the field of Gambling research. His scientific production in the field of Gambling includes 175 scientific publications in peer review journal, made 250 presentations and published 5 books, some has been translated in Italian, Spanish, and Chinese. His cognitive treatment for pathological gamblers developed at Laval University is widely used around the world. Robert set up the Centre Québécois d’ Excellence pour la Prévention et le Traitement du Jeu. This research Center made many major contributions in the domain of gambling. (experimental, prevalence, prevention, treatment and responsible gambling). His books written with Stella Lachance entitled ‘Over coming pathological Gambling’ a therapist and client guides was published by Oxford press in 2007 and is used around the world.



Sam Vaknin

CIAPS, Cambridge, United Kingdom

Profilicity: When your profile replaces your authentic self (Narcissism, Spectacle and Simulacrum)

Profilicity is replacing authenticity. Nietzsche's "Become who you are!" is being transformed into Moeller's: "become who you wish to be seen as."

Outcome of crisis of authenticity.

Niklas Luhmann's social systems theory: second-order observation.

Charles Taylor's *Secular Age* (2007) of authenticity.

Nothingness as antidote to Narcissism.

Ironically, authenticity by itself gave rise to collectivist identity politics at the expense of individualism.

Authenticity is asocial: The Other and social expectations obstruct it.

Sartre ("hell is other people", *No Exit*), Heidegger in *Das Man*.

SIMULACRUM (simulacra)

Spectacle, Integrated spectacle, *Détournement*, *Recuperation*

Biography

Sam Vaknin (<http://samvak.tripod.com/mediakit.html>) is the author of *Malignant Self-love: Narcissism Revisited* as well as many other books and e-books about topics in psychology, relationships, philosophy, economics, international affairs, and award-winning short fiction. He is a Professor of Clinical Psychology and Management Studies in CIAPS (Commonwealth of International Advanced Professional Studies), Cambridge and Birmingham, UK; Ontario, Canada; Lagos, Nigeria; a Visiting Professor of Psychology and Economics in South East European University (SEEU); and a former Visiting Professor of Psychology, Southern Federal University, Rostov-On-Don, Russia.

He was the Editor-in-Chief of *Global Politician* and served as a columnist for *Central Europe Review*, *Pop Matters*, *eBook Web*, and *Bella online*, and as a United Press International (UPI) Senior Business Correspondent. He was the editor of mental health and Central East Europe categories in *The Open Directory* and *Suite101*. His YouTube channels garnered 100,000,000 views and 450,000 subscribers.

**Thomas J. Webster**

Brown University and Hebei University of Technology, Providence/Tianjin, USA/China

Eliminating implant failure in humans: 30,000 cases and counting

Nanomedicine is the use of nanomaterials to improve disease prevention, detection, and treatment which has resulted in hundreds of FDA approved medical products. While nanomedicine has been around for several decades, new technological advances are pushing its boundaries. For example, this presentation will present an over 25-year journey of commercializing nano orthopedic implants now in over 30,000 patients to date showing no signs of failure. Current orthopedic implants face a failure rate of 5 – 10% and sometimes as high as 60% for bone cancer patients. Further, Artificial Intelligence (AI) has revolutionized numerous industries to date. However, its use in nanomedicine has remained few and far between. One area that AI has significantly improved nanomedicine is through implantable sensors and neurological applications. This talk will present research in which implantable sensors, using AI, can learn from patient's response to implants and predict future outcomes. Such implantable sensors not only incorporate AI, but also communicate to a handheld device, and can reverse AI predicted adverse events. Examples will be given in which AI implantable sensors have been used in neurology to inhibit implant infection and promote prolonged neural function. Moreover, in vitro and in vivo experiments will be provided that demonstrate how nanotechnology can be incorporated into neurology to help human health.

Biography

Thomas J. Webster's (H index: 132) degrees are in chemical engineering from the University of Pittsburgh (B.S., 1995; USA) and in biomedical engineering from RPI (Ph.D., 2000; USA). Thomas has formed over a dozen companies who have numerous FDA approved medical products currently improving human health in over 30,000 patients. His technology is also being used in commercial products to improve sustainability and renewable energy. Thomas is currently helping those companies and serves as a professor at Brown University, Saveetha University, Hebei University of Technology, UFPI, and others. Dr. Webster has numerous awards including: 2020, World Top 2% Scientist by Citations (PLOS); 2020, SCOPUS Highly Cited Research (Top 1% Materials Science and Mixed Fields); 2021, Clarivate Top 0.1% Most Influential Researchers (Pharmacology and Toxicology); 2022, Best Materials Science Scientist by Citations (Research.com); and is a fellow of over 8 societies. Prof. Webster is a former President of the U.S. Society for Biomaterials and has over 1,350 publications to his credit with over 55,000 citations. Thomas was recently nominated for the Nobel Prize in Chemistry. Prof. Webster also recently formed a fund to support Nigerian student research opportunities in the U.S.



Prof W S El Masri, FRCS, FRCP PHF

Clinical Professor of Spinal Injuries Keele University UK

Consultant Surgeon in Spinal Injuries

Robert Jones and Agnes Hunt Orthopaedic Hospital - Oswestry – UK

Neurological outcomes of acute traumatic spinal cord injuries with active physiological conservative management and without interventions

Historical: Before WWII the great majority of patients with acute traumatic spinal cord injuries died within a year or two from injury. However, for many decades prior to WWII there was no shortage of Physicians and Surgeons experimenting with the management of the injured spine. The survival of patients was made possible during the 2nd World War when a Holistic Model of Service Delivery was developed by Sir Ludwig Guttman (an experienced neurosurgeon) who studied in depth the patho-physiological and other medical and non-medical effects of condition. In order to achieve best results, Guttman found it necessary to ensure the simultaneous management of the injured spine as well as the systemic medical and non-medical effects of cord and cauda equina damage from the early hours or days of injury. This is to prevent complications that can cause further morbidity as well as prevent further neurological damage of the injured and physiologically unstable neural tissue. His Model of Holistic Service Delivery and Methods of Management were had significantly improved outcomes to be adopted by many other Centers in the UK and overseas. These Centres Guttman had demonstrated that patients not only survived but could also lead healthy, enjoyable, dignified, contributory and often competitive long lives. The long term survival of patients enabled clinicians and scientists to study the condition further in the short, medium and long term.

Hans Frankel and colleagues in 1965 onward studied the neurological outcomes of 612 patients with acute spinal cord and cauda equina injury admitted to Stoke Mandeville Hospital within two weeks of injury and treated by Guttman and his methods of management. They observed that most patients who were admitted with sensory sparing and without any visible, palpable or voluntary motor power invariably recover motor power useful for function and many will walk again. They published what has been known as the Frankel Classification demonstrating that neurological recovery which results in functional improvement is predictable within the first two weeks of injury.

Characteristics of Patients with ATCSCI: The incidence of Acute Traumatic spinal cord injuries (TSCI) and Cauda Equina Injuries (CEI) is small ranging between 10-50/millions of population/year. The effects of acute TSCI and CEI are however devastating and life-changing medically, physically, psychologically, socially, financially, vocation- ally, environmentally, sexually & matrimonially. The combination of consequent Multi-System Physi- ological Impairment and Malfunction and sensory impairment/loss renders the patient at risk of a wide range of potential complications, morbidity and death as well as a wide range of disabilities.

Patients are particularly vulnerable in the acute stage following injury and during the transition between the stage of Spinal & Autonomic Shock and the return of these reflexes. The sensory impairment/loss in particular prevents patients from exhibiting the expected symptoms and signs of complications. This results in delayed diagnosis and treatment that usually lead to increased morbidity, disability and added psychological devastation and potential mortality. The Principles of management of the spinal injury being different in patients with and without neurological damage, the Principles of management of complications in patients with and without neurological damage also being different and the very small incidence of the condition together present significant difficulties and challenges to clinicians who have not trained in the field of spinal injuries and have not observed the outcomes of various models and methods of treatment in a large number of patients in the short, medium and long term after the injury.

No correlation between the Radiological & Neurological Presentations & outcomes: One of the most important observations Frankel and his colleagues made is that the radiological presentation on Xrays did not correlate with the neurological presentation of the patient nor the neurological outcome. El Masri & Katoh subsequently demonstrated that there was no correlation between the neurological and the radiological presentations on CT and on MRI. In other words patients with a significant degree of malalignment, canal encroachment or both can present with incomplete cord injuries and recover further without any intervention on the injured spine.

El Masri explains the discrepancy between the radiological and neurological presentation and outcomes of patients with incomplete spinal cord and cauda equina injuries is due to the loss of energy of the force that damages the bony spine with a lesser force reaching the neural tissues

Improvement of motor functions in patients with incomplete injuries: Recovery of some motor power is almost assured in patients with sensory sparing and complete motor loss. Significant improvement in functionally useful motor can be assured in patients with sensory and any degree of motor sparing. This is provided:

- No further damage to the neural tissues is caused by poor management of the injured spine.
- No further damage by systemic complications due to the poor medical management the systemic medical effects of cord and cauda equina damage.

It must be appreciated that systemic complications such as hypotension, hypoxia, generalised sepsis, hypothermia, electrolyte imbalance can further cause non-mechanical damage to the acutely injured and physiologically unstable neural tissues.

Requirements of Management by a multidisciplinary team of professionals: The combination of a small number of patients, diagnostic difficulties due to sensory impairment/loss, impaired physiology of the various Systems of the body, multiple system malfunction, multiple disabilities, dynamics between the psychological social and medical effects of neural tissue damage necessitates the provision of management by a Multi-disciplinary well managed and well-coordinated team of trained and experienced Health Care Professionals with the appropriate attitude to patients with such devastating problems. It is paramount that all the members of this team are familiar with all medical and non-medical aspects of the condition and provide the necessary service to patients in a humane and effective way.

I will in my presentation discuss in some details the effects of acute TSCI & CEI, the methods of management, the discrepancy between the radiological and neurological findings, the prevention of further neurological damage and the expected neurological with Active Physiological Conservative Management of the injured spine and the multi-system effects of neural tissue damage

Biography

Professor W. S. El Masri (Y), MB, BCH, FRCS, FRCP, PHF, is a Clinical Professor of Spinal Injuries at Keele University and an Emeritus Consultant Surgeon in Spinal Injuries at the Robert Jones and Agnes Hunt Orthopaedic Hospital. He also served as Past President of the International Spinal Cord Society. WEM specifically trained between 1971 and 1983 in the specialty of traumatic spinal injuries (tSCI) and its allied specialties at Stoke Mandeville, Oxford, Guys Hospitals in the UK & the USA. WEM lectures worldwide in developed and developing countries. He contributed to the literature with 155 publications. He held the offices of: President of the International Spinal Cord Society, Chairman of the British Association of Spinal Cord Injury Specialists and Executive Member of the BSRM; Founder Member and trustee of SPIRIT Educational Charity in Spinal Injuries and Transhouse Charity as well as Trustee of the Institute of Orthopaedics at the Robert Jones and Agnes Hunt Orthopaedic Hospital in Oswestry, Shrop., UK.

He was advisor to WHO's & Co-author of the WHO International Perspectives on Spinal Cord Injury which was published in 2013 and was Member of the NICE Guideline Developing Group on acute spinal injuries. He received a number of awards including: An "A" Excellence award of the NHS, Medal of the International Spinal Cord Society, National Hospital Doctor Team Award for Innovation, Paul Harris Fellowship of the Rotary Club, Outstanding achievement award from the Chinese Society of Spinal Injuries, Outstanding Consultant Achievement award by the Spinal Injury Association, Hon. Presidency of the Romanian Spinal Cord Society. He was commended for his Service twice in the House of Lords as example of good practice (Hansard) on the 8th April 2003, vol 647, no.79, p204 and 9th March 2006 vol 679, no 117, p88 and 28th February 2009.

**Weina Liu**

Key Laboratory of Adolescent Health Assessment and Exercise Intervention of Ministry of Education, College of Physical Education and Health, East China Normal University, Shanghai, China

Physical exercise activates a PVN-NAc oxytocin circuit to relieve stress-induced depressive-like behaviors

Physical exercise is known to reduce depression, but the underlying brain mechanisms remain unclear. Based on a chronic restraint stress model in mice, we showed that 4-week treadmill exercise profoundly maintained normal neural activity in the nucleus accumbens (NAc), in association with the prevention of depressive-like behaviors. Microarray analysis conducted in the NAc revealed that the oxytocin (OT) receptor displayed the most significant differential expression, implying a crucial involvement of OT signaling in exercise-induced antidepressant effects. In vivo fiber photometry revealed disrupted OT release in the NAc and altered activity of OT neurons in the paraventricular nucleus (PVN) and their projections to the NAc in stressed mice, which were restored by exercise. Moreover, we found that stress-induced depressive-like behaviors were prevented by activation of PVN-NAc OT circuit. Additional inhibition of PVN-NAc OT circuit blocked the antidepressant effects of exercise in stressed mice. In summary, our findings reveal a novel role of PVN-NAc OT circuit in regulating depressive-like behaviors, which is required for the antidepressant effects of exercise. This novel neural circuit mechanism provides an explanation for brain network adaptations upon exercise and also suggests a promising therapeutic target for depression.

Biography

Weina Liu, the young scholar of "Changjiang Scholars Programme of China" rewarded by the Ministry of Education, the Vice Dean of College of Physical Education and Health, East China Normal University. She has published more than 60 academic papers, 25 papers were Indexed in SCIE and SSCI as the first/corresponding author (12 in top journal), 13 papers in Sports Science-the authoritative journal of sports science in China. She has presided over more than 10 projects, including the National Natural Science Foundation of China and the Key Program of National Social Science Fund of China, etc.



Zhenhuan Liu

Nanhai Maternity and Children Hospital Affiliated to Guangzhou, University of Chinese Medicine, China

Neuroimaging by evaluation nerverenovate and neuroplasticity of acupuncture in children with cerebral palsy

Objective: To investigate the effect of and Acupuncture on brain plasticity and motor development in children with cerebral palsy. Investigate effect on mechanism of apoptosis of brain nerve cells, regulating the expression of neurotrophic factors, promoting the remodeling of nerve synaptic structure and motor development in young rats with cerebral palsy. Two: To evaluate the effect and mechanism of acupuncture on cerebral palsy. Three: The nerve repair effect of acupuncture on cerebral palsy.

Methods: In this study, 146 cases of brain injury and 1078 cases of cerebral palsy were included by randomized controlled study with ICF Gross motor function measure, Peabody fine motor function, Gesell, muscle tension, joint activity, activity of daily living transcranial doppler, skull B ultrasound, Brain Nuclear Magnetic Resonance Imaging MRI, Positron Emission Tomography SPECT, Diffusion tensor tractography evaluation method.

Results: the recovery rate of extracellular space (92.3%) was significantly higher than that of the control group (70.8%) ($P < 0.05$), Transcranial Doppler, TCD total efficiency (79.3%) was significantly higher than that in the control group (51.8%) ($P < 0.05$). Acupuncture to promoting the development of neurological and cognitive movement under 6 months' children, effectively reduce the neurological sequelae. The total effective rate of the children with cerebral palsy was 87% in the acupuncture group, which was significantly higher than that of the control group ($P < 0.01$). The total effective rate of Brain MRI was 59.55% in the acupuncture group and 13.25% higher than that in the control group ($P < 0.01$). The total effective rate was 91.3% in the 1year follow-up group, which was significantly higher than that in the control group ($P < 0.01$). the FA value of white matter fiber bundle was significantly higher than that of acupuncture at 60 times ($P < 0.05$). The recovery rate of ultra-sinus brain injury (86.7%) in acupuncture group was significantly higher than that in control group (64.4%) ($P < 0.05$). The recovery rate of brain SPECT in acupuncture group was 96.4%, which was significantly higher than that in the control group ($P < 0.01$).

Conclusion: Acupuncture rehabilitation not only promote the development of white matter and gray matter in children with cerebral palsy, but also promote the brain function of children with cerebral palsy remodeling and compensation, and promote social adaptation, language and other cognitive function development, children with cerebral palsy movement and Fine motor function development and recovery, improve the children's self-care ability.

Keywords: Cerebral palsy; Acupuncture; Nerve repair; Remodeling; Motor function

Biography

Zhenhuan Liu professor of pediatrics, Pediatric acupuncturist Ph.D. tutor. Zhenhuan Liu has been engaged in pediatric clinical and child rehabilitation for 40 years. Led the rehabilitation team to treat more than 40,000 cases of children with intellectual disability, cerebral palsy and autism from China and more than 20 countries, more than 26800 children's deformity returned to school and society and became self-sufficient. The rehabilitation effect ranks the international advanced level. Vice-chairman of Rehabilitation professional committee children with cerebral palsy, World Federation of Chinese Medicine Societies. Visiting Professor of Chinese University of Hong Kong in recent 10 years. Zhenhuan Liu is most famous pediatric neurological and rehabilitation specialists in integrated traditional Chinese and Western medicine in China. Liu has edited 10 books. Zhenhuan Liu has published 268 papers in international and Chinese medical journals.

**Zhenhuan Liu**

Nanhai Maternity and Children Hospital Affiliated to Guangzhou, University of Chinese Medicine, China

Neuromodulation of scalp electroacupuncture in the treatment of autism spectrum disorder

Background: Autism spectrum disorders (ASD) are a series of neurodevelopmental disorders characterized by social disorders, rigid behaviors and narrow interests. The World Health Organization (WHO) estimates that the prevalence of ASD has been increasing over the past 50 years. With one in 48 children, ASD has become a global public health problem. Currently, there is no effective drug treatment for children with ASD, and there is no effective medical treatment. Education of these ASD children by special education methods alone has a poor outcome, with 75% of ASD children failing to achieve normal or cure. And 80% of ASD children suffer from mental retardation, ADHD, epilepsy, emotional sleep disorders and so on. It can cause pain and suffering for ASD children and their parents. The effects may persist into adulthood.

Objective: The purpose of this study was to investigate the effect of scalp acupuncture of painless therapy on core symptoms, quality of life and communication ability of children with ASD. Our team conducted a controlled study of scalp acupuncture therapy in 198 children diagnosed with ASD. The clinical diagnostic criteria of children with ASD who were selected for met the DSM-5 criteria. Each child and parent signed an informed consent form.

Methods: 198 children with ASD were randomly divided into two groups. One group 89 cases received painless scalp electroacupuncture therapy and the other group 89 cases received Pediatrics rehabilitation care and special education for 6 months. Clinical evaluation methods were ATEC, ABC, CARS and Gesell developmental scales. Pre - and post-treatment assessments were performed. The age of the two groups was 3-7 years old, and the gender, degree of illness, comorbidities, family education and rearing methods, course of disease and other factors were statistically analyzed. There was no significant difference between the two groups, and there was a certain comparability between the two groups. Painless scalp electroacupuncture therapy method, acupuncture and precise scalp surface projection in functional language area of cerebral cortex were selected for scalp acupuncture. Broca and Wennicken area were simultaneously stimulated by acupuncture. Painless scalp acupuncture is performed every other day. After Painless scalp acupuncture acupuncture, electrical acupuncture was given to stimulate the language area for 15 minutes, every 10 times of acupuncture, rest for 15 days. A second clinical evaluation was conducted 6 months after painless scalp acupuncture.

Results: The improvement of core symptoms in the painless scalp electroacupuncture treatment group

was better than that in the control group. The initial clinical improvement was in abnormal visual communication, improvement of sleep and mood, and the following clinical effects were alleviation of rigid behavior, improvement of attention, and improvement of verbal and social communication ability. Assessment of these scales reflects a gradual improvement in these core symptoms. But these changes were not significant in the control group.

Conclusion: The research results showed that painless scalp acupuncture therapy could significantly improve the core symptoms of ASD children, such as extreme loneliness, eye contact disorder, language repetition, compulsive agreement, and indifference, significantly regulate the abnormal EEG of ASD children, and positively promote the cognitive level of low-functioning ASD children. The clinical efficacy of the treatment of ASD was not closely related to age. Painless scalp electroacupuncture can be used as an effective supplement and alternative medicine therapy in the clinical treatment of ASD. The popularization and application of painless scalp acupuncture therapy can improve the quality of life of ASD children and reduce the economic burden of society and family.

Since 2004, Nanhai Women's and Children's Hospital Affiliated to Guangzhou University of Chinese Medicine has applied our original pediatric neurorehabilitation scalp acupuncture therapy to treat ASD and achieved good clinical efficacy. In order to further promote the application, our research group obtained the exact clinical effect confirmed by scientific evaluation through the clinical validation study and clinical follow-up of 1000 cases of ASD. We also receive pediatricians from all over the world who come to our hospital in China to study head acupuncture therapy for ASD. Doctors and rehabilitation therapists from Switzerland, Australia, the United States, Germany, Egypt, Russia, Kazakhstan and other countries have come to our hospital to study the clinical application of head acupuncture therapy in ASD.

Keywords: Autism spectrum disorder, Electroacupuncture, Scalp, Painless

Biography

Zhenhuan Liu professor of pediatrics, Pediatric acupuncturist Ph.D. tutor. Zhenhuan Liu has been engaged in pediatric clinical and child rehabilitation for 40 years. Led the rehabilitation team to treat more than 40,000 cases of children with intellectual disability, cerebral palsy and autism from China and more than 20 countries, more than 26800 children's deformity returned to school and society and became self-sufficient. The rehabilitation effect ranks the international advanced level. Vice-chairman of Rehabilitation professional committee children with cerebral palsy, World Federation of Chinese Medicine Societies. Visiting Professor of Chinese University of Hong Kong in recent 10 years. Zhenhuan Liu is most famous pediatric neurological and rehabilitation specialists in integrated traditional Chinese and Western medicine in China. Liu has edited 10 books. Zhenhuan Liu has published 268 papers in international and Chinese medical journals.



MAR 23-25

JOINT EVENT ON
INTERNATIONAL CONFERENCE ON
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INTERNATIONAL CONFERENCE ON
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NEUROSCIENCE**

Special Talks

**Nick Jonsson**

Executive Loneliness, Evolve Publishing, Australia

From executive loneliness to holistic leadership: Breaking the silence on addiction, mental health, and recovery

Background: Addiction and mental health challenges remain hidden epidemics in leadership. For executives, isolation, burnout, and reliance on substances often develop behind closed doors. Drawing from both lived experience and extensive professional research, this presentation explores the intersection of executive loneliness, addiction, and recovery-offering a holistic leadership model that addresses mental, emotional, and social wellbeing.

Methods: Over the past decade, the world's #1 in the world thought leader on Executive Loneliness, Nick Jonsson has conducted global research with more than 1,000 senior executives through peer groups, surveys, and interviews, culminating in his bestselling book *Executive Loneliness*. His findings demonstrate a consistent pattern: leaders face unique barriers to help-seeking due to stigma, fear of career impact, and cultural expectations. By integrating evidence-based coaching, addiction recovery principles, and psychological safety frameworks, Nick developed the 5 Steps to Holistic Leadership (Surrender, Purpose, Connection, Goals, Discipline) as a pathway to sustainable recovery and high performance.

Results: Application of this model across corporate workshops, coaching engagements, and recovery groups has shown measurable improvement in self-reported wellbeing, reduced relapse risk, and stronger team cohesion. In organizations that adopted holistic leadership practices, employees reported increased openness to discuss mental health, higher resilience, and reduced turnover. At the individual level, clients described improved physical health, restored relationships, and renewed purpose.

Conclusions: Addiction in leadership cannot be solved by medical treatment or workplace policies alone. Effective recovery requires a whole-person approach — addressing physical health, mental resilience, emotional regulation, social connection, and accountability. By combining executive and life coaching with recovery-informed practices including counselling and therapy, leaders can transform addiction and loneliness into purpose-driven growth. This presentation highlights practical strategies for clinicians, coaches, and organizational leaders to support executives on their recovery journey, reduce stigma, and foster cultures of holistic wellbeing. By the time of the conference, Nick will also have completed his Postgraduate Diploma in Psychotherapy and Counselling at the School of Positive Psychology in Singapore (expected end of 2024), further demonstrating his academic commitment to advancing this field.

Biography

Nick Jonsson is an international keynote speaker, bestselling author of *Executive Loneliness*, and a Certified Master Coach (CCMC) and Professional Certified Coach (PCC, ICF). Recognized as the world's #1 thought leader on Executive Loneliness by Google, Wikipedia, and global AI platforms, Nick brings lived experience of addiction and recovery together with professional expertise in leadership development. By 2026, Jonsson will also have completed a Postgraduate Diploma in Psychotherapy and Counselling at the School of Positive Psychology in Singapore, underlining his dedication to this field. His work has been featured in 40+ media outlets and 100+ podcasts worldwide.



Peter Lyndon James

Shalom House, Perth, Western Australia, Australia

The Shalom House model: A holistic approach to rehabilitation

The Shalom House Model represents a transformative and holistic approach to rehabilitation, focusing on addressing the root causes of addiction and destructive behaviours rather than merely treating their symptoms. Founded in Perth, Western Australia, Shalom House is recognised as one of the strictest yet most effective rehabilitation centres in the nation. Its methodology combines personal accountability, structured discipline, faith-based principles, and intensive community engagement.

The program works through a staged process, guiding individuals from crisis and instability to self-reliance and community reintegration. Each stage incorporates practical life skills, emotional regulation training, vocational preparation, and family restoration, ensuring participants develop the capacity to sustain change. Uniquely, the model integrates spiritual care with evidence-based therapeutic practices, providing a balanced pathway to recovery that acknowledges both psychological and moral dimensions of rehabilitation.

Results from the Shalom House experience demonstrate significant reductions in relapse rates, strengthened family relationships, and marked improvements in participants' social and economic stability. By fostering a culture of honesty, respect, and responsibility, the program not only transforms individuals but also positively impacts their families and the wider community.

The Shalom House Model offers an alternative blueprint for rehabilitation that challenges conventional harm-minimisation approaches, advocating instead for complete life transformation. This presentation will detail the program's philosophy, structure, outcomes, and potential applications in broader rehabilitation contexts.

Biography

Peter Lyndon-James is the Founder and CEO of Shalom House, widely regarded as Australia's strictest rehabilitation centre. Drawing from his own lived experience of addiction and incarceration, Peter developed a holistic, faith-based model that addresses the root causes of destructive behaviour. Since its inception, Shalom House has helped countless men rebuild their lives, restore family relationships, and reintegrate into society as contributing members. Peter is a sought-after speaker, author, and advocate for transformative rehabilitation.



BOOK OF ABSTRACTS

Oral Sessions

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Balancing confidentiality and coordination: Legal and ethical challenges in SUD data sharing

Introduction: Continuity of care for individuals with Substance Use Disorders (SUD) is critically dependent on timely, accurate, and complete information exchange among providers, treatment programs, and referral networks. Yet, many behavioral-health organizations still rely on manual methods—fax, phone, email—to share data, creating fragmentation, delays, and confidentiality risks. This study situates these operational realities within the broader regulatory, ethical, and policy frameworks that govern SUD care.

Objective: Our objective was to explore behavioral-health providers' experiences with SUD data sharing and to identify the regulatory, ethical, technical, and organizational barriers and enablers to interoperability. Specifically, we examine how privacy regulations (e.g., 42 CFR Part 2, Health Insurance Portability and Accountability Act of 1996), consent practices, institutional policies, and data-sharing workflows intersect and impact patient care.

Methods: Funded by NIH, we conducted 11 focus groups (n = 31) and five validation interviews (n = 5) with behavioral-health professionals from four SUD treatment organizations serving clients across 14 U.S. states. Participants included physicians, social workers, program directors, and health-IT staff. We applied thematic analysis and workflow modeling—creating Unified Modeling Language (UML) diagrams—to trace data-sharing processes, including consent capture, data interoperability workflows, referrals, mandatory controlled-substance queries, and discharge summaries. Workflows were mapped to four clinical quality measures relevant to SUD continuity of care.

Results: Five interrelated themes emerged:

- **Patient reluctance to share:** Stigma and lack of trust led many clients to decline or delay sharing behavioral-health/SUD records with other providers.
- **Limited data access and incomplete information:** Organizations reported missing or delayed data during inter-institutional data exchanges, or when controlled-substance records lacked substance-use specifics and referral transcripts were absent.
- **Poor provider coordination and manual processes:** Excessive reliance on faxed records, telephone follow-up, and email led to inconsistent and delayed communication, increasing administrative burden.

- **Regulatory and policy complexity:** Providers indicated significant confusion about overlapping rules (HIPAA vs. 42 CFR Part 2), consent workflows, and responsibility for sharing data—especially when patients were involved in decriminalization or justice-involved care.
- **Ethical and policy implications for rights and equity:** Participants emphasized the ethical imperative to respect patient privacy and autonomy, while also ensuring that incomplete data sharing undermines care continuity and may exacerbate disparities.

Providers recommended three strategic priorities: (a) Embedding interoperable, consent-aware data-sharing platforms into EHRs that accommodate SUD-specific rules; (b) harmonizing privacy regulation language and institutional policy to reduce confusion and administrative burden; and (c) designing policy interventions that incentivize secure, timely data exchange while protecting patient rights.

Conclusion: Fragmented, consent-dependent workflows pose substantial barriers to coordinated SUD care. As laws, ethics, and policy frameworks continue to evolve in the realm of addiction medicine, our findings highlight the urgent need for infrastructure and governance models that support both patient autonomy and effective care delivery. By aligning technology, workflow design, and policy reform, stakeholders can reduce administrative burden, enhance data completeness and timeliness, and promote equitable access to care for individuals with SUD.

Biography

Dr. Maria Adela Grando is a Professor of Biomedical Informatics at Arizona State University. Her research focuses on patient-centered data sharing, interoperability, and privacy-preserving clinical workflows. Adela Grando leads an NIH-funded study exploring secure information exchange for substance use disorder care and the development of standards-based consent management tools. Dr. Grando's interdisciplinary work bridges informatics, behavioral health, and health policy to improve continuity of care and patient trust in digital health systems.



Adelina Pjetra

The International BWRT Institute, Tirana, Albania, Albania

BWRT the therapy of the future available today

Brain Working Recursive Therapy gets its name from the way the brain works, continually reassessing the environment and making adjustments as necessary - and with this therapy, the adjustments lead inexorably to fast-acting but long-term self-improvement. The current highly effective model was developed by Terence Watts, and expanded via later collaboration with his research partner, the eminent South African Clinical Psychologist, Rafi Lockhart, who now uses this model of work exclusively in his clinic in Cape Town. All Brain Working Recursive Therapy professional therapists have been properly trained in this specific technique. It is an amazingly fast and complete tool for helping people with all manner of presenting problems where any degree of psychological work is concerned. A lot of the time, it could alleviate symptoms in just a single session - though if multiple symptoms are present need more.

Biography

Adelina Pjetra is a Clinical Psychologist, Psychotherapist, and internationally recognized Trainer, Supervisor, and Examiner in Brain Working Recursive Therapy (BWRT®). With a career dedicated to advancing mental health, Adelina integrates cutting-edge neuroscience with evidence-based therapeutic approaches, empowering clients and professionals alike to achieve transformative change. As the founder and director of Mental Health Albania, Adelina has become a leading figure in introducing and expanding modern psychotherapies in Albania and beyond. Her work bridges clinical practice, education, and international collaboration, ensuring that mental health professionals are equipped with the latest, most effective tools. Adelina holds advanced credentials in BWRT®, EMDR, clinical hypnosis, trauma treatment, and psychosexual dysfunctions, along with a strong background in medical and coaching fields. Adelina has completed specialized trainings across multiple countries, and her certifications have been awarded by leading international institutes, including The International BWRT® Institute (UK).

In her role as an International Trainer, Adelina has trained and supervised hundreds of psychologists and psychotherapists across Europe and North America, delivering professional programs in Albania, Canada, & UK, and other international hubs. Adelina is highly regarded for her ability to translate complex psychological concepts into clear, practical strategies for therapeutic success. A frequent speaker and media contributor, Adelina is committed to raising awareness about mental health, reducing stigma, and promoting resilience in individuals and communities. Her mission is to foster a new generation of professionals who are equipped to respond to the challenges of a rapidly changing world while maintaining the highest standards of ethics, professionalism, and care.

**Adriana-Elena Bulboaca*, Alexandra Ina Bulboaca**

"Iuliu Hatieganu" University of Medicine and Pharmacy, Romania

Migraine and oxidative stress

Migraine is a chronic neurovascular disorder characterized by acute, debilitating attacks, posing a significant public health challenge. The severity and duration of pain, along with the limited effectiveness of treatments for some patients, underscore the ongoing need for research in this field. Despite extensive studies on migraine pathophysiology, many mechanisms remain unclear. A deeper understanding of these processes could pave the way for effective, personalized therapies. A strong connection exists between oxidative stress, nitro-oxidative stress, and inflammation, forming a crucial pathogenic link in migraine development. This relationship serves as a foundation for multiple anti-migraine treatment strategies. Experimental research on animals has highlighted the role of oxidative stress and nitric oxide (NO) in triggering migraine attacks. These studies have been instrumental in evaluating the efficacy of various medicinal compounds with antioxidant and anti-inflammatory properties. Additionally, several nutraceuticals have demonstrated promising results as standalone or adjunct treatments in experimental migraine models, primarily due to their antioxidant and anti-inflammatory effects (ref). Given that oxidative stress and NO acts both as a trigger and amplifier of migraine pain, as well as its role in endothelial dysfunction, assessing its blood levels alongside other biomarkers of oxidative stress and inflammation could offer valuable insights into migraine pathogenesis. This presentation explores the role of NO and oxidative stress, the interplay between reactive molecules, the contribution of these molecules to migraine-related inflammation and endothelial dysfunction. Targeting oxidative and nitro-oxidative stress with novel therapeutic approaches may open new avenues for more effective and personalized migraine treatments. Moreover, since migraines are a well-recognized risk factor for cerebrovascular diseases, enhancing anti-migraine therapies could serve as a preventive strategy against such conditions.

Biography

Prof. Adriana-Elena Bulboaca holds academic memberships in the European Academy of Neurology, the International Association for the Study of Pain, and the World Institute of Pain. Her areas of expertise include neuro-ophthalmology, neuropathic pain, migraine, trigeminal neuralgia, neurogenic inflammation, and oxidative and nitrosative stress.



Aleksey Shchulkin

Ryazan State Medical University, Ryazan, Russia

Ethylmethylhydroxypyridine succinate (Mexidol®): Mechanisms and clinical evidence in ischemic stroke

Ethylmethylhydroxypyridine succinate (Mexidol®) is a medication whose efficacy is due to the combination of antioxidant, antihypoxic, and membrane-stabilizing effects. Ethylmethylhydroxypyridine succinate displays antioxidant activity by binding superoxide anion radicals, increasing the activity of antioxidant enzymes (superoxide dismutase and glutathione peroxidase), and activating the transcription factor NRF2. This compound also increases cellular resistance to hypoxia by supporting the mitochondrial respiratory chain under reduced oxygen tension, activating the succinate receptor (SUCNR1), and influencing the HIF1a transcription factor (doi: 10.17116/jnevro201811812287). Experimental studies have shown that ethylmethylhydroxypyridine succinate reduces neuroinflammation and apoptosis, and stimulates neuroplasticity (doi: 10.17116/jnevro2025125021107). Acute focal cerebral stroke was modeled in rats and the compound was administered intravenously, intramuscularly, and orally at three dosages. When comparing the clinical symptom severity among groups receiving the investigational drug and placebo, statistically significant reduction in symptoms was noted 24 hours after surgery, with all experimental groups showing more pronounced symptoms than the sham-operated group. Micro-CT data indicated positive dynamics with a decrease in hemorrhagic lesion size in treated animals.

In a double-blind, placebo-controlled MIR study, 304 patients in the acute and early recovery periods of ischemic stroke were randomized (ClinicalTrials.gov ID NCT06437626; doi: 10.17116/jnevro202512508240). Groups were balanced by sex, age, and anthropometric parameters. Statistically significant differences supported the efficacy of ethylmethylhydroxypyridine succinate therapy: the active drug group showed a reduction in disability (mRS scale), improved neurological functions (NIHSS), enhanced mobility (Rivermead Index), and a trend toward reduced cognitive deficits (MoCA test). Significant results favoring the drug were observed for median changes in mRS at Visit 4 ($p = 0.003$), NIHSS ($p < 0.001$), and Rivermead Index ($p = 0.014$). The rate of disabled patients decreased ($p = 0.016$), and the proportion of patients scoring 0–1 on mRS at Visit 4 increased ($p = 0.002$) compared with placebo. Adverse events occurred in 35 (23%) patients in both the drug and placebo groups (total 42 vs. 43 AEs, $p = 1.000$). The long-term sequential therapy profile in terms of safety was similar for ethylmethylhydroxypyridine succinate and placebo. Therefore, ethylmethylhydroxypyridine succinate (Mexidol®) is viewed as a promising drug for ischemic stroke therapy.

Biography

Dr. PhD Aleksey Shchulkin is a professor of the Pharmacology Department and head of the Pharmacokinetics Laboratory at the Ryazan State Medical University, Russia. Dr. A. Shchulkin is a specialist in the fields of pharmacokinetics and neuroprotection.

**Amira Hamed Darwish**

Professor of Pediatrics, Pediatric Neurology Unit, Department of Pediatrics, Faculty of Medicine, Tanta University Hospital, Tanta, Egypt

Attention-deficit/hyperactivity disorder screening: A step for addiction prevention in many adolescents

Attention-Deficit/Hyperactivity Disorder (ADHD) is a common neurobehavioral disorder affecting school-age children and adolescents. ADHD is characterized by inattention, decreased self-inhibitory capacity and motor over activity. ADHD is a risk factor for substance misuse, Substance Use Disorder (SUD), and addiction in adolescents and adults. Treatment of ADHD with behavior therapy and stimulant medication is associated with reduced substance use risks. However, stimulant medications misuse can occur. Thus, early diagnosis and adequate treatment of children and adolescents with ADHD and counselling about the potential for SUD and addiction can decrease risk of addiction in adolescents and adults.

Biography

Prof. Amira Darwish is a Professor of Pediatrics, Pediatric Neurology. Amira holds a MD in Pediatrics from Tanta University. Prof. Amira Darwish has published on child neurology. Amira is currently Professor of Pediatrics, Pediatric Neurology Unit, Department of Pediatrics, Faculty of Medicine, Tanta University Hospital, Tanta, Egypt.

**Amy Weber**

Colorado Christian University, Gillette, WY, USA

Reframing counselor education: Reducing stigma toward borderline personality disorder through attachment-based training

Borderline Personality Disorder (BPD) is one of the most stigmatized mental health diagnoses, even among mental health professionals. Negative perceptions can impact the therapeutic alliance and hinder effective care. While existing literature addresses stigma among seasoned clinicians, limited research explores the attitudes of graduate counseling students or how counselor education might better prepare them to support individuals with BPD.

This presentation introduces a conceptual training model designed to reduce stigma and improve clinical readiness among counseling students by integrating attachment theory into education on BPD. Drawing on current research surrounding emotional dysregulation, attachment trauma, and therapeutic alliance challenges in BPD treatment, the proposed model aims to enhance empathy, clinical understanding, and student self-efficacy.

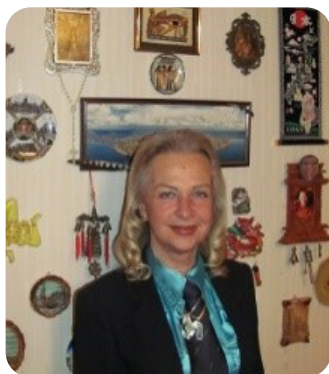
The presentation will (1) review the stigma and misconceptions associated with BPD, (2) highlight current gaps in counselor education, and (3) outline a newly developed attachment-informed psychoeducational program. The program is a structured 3-hour training designed to increase knowledge, shift attitudes, and improve perceived self-efficacy. It focuses on attachment theory and clinical strategies for working with emotionally dysregulated clients.

Although the full study is ongoing, the presentation will share the research design, including planned quantitative methods to assess student attitudes, knowledge, and self-efficacy before and after the training. The research will examine whether the attachment-based approach leads to significant improvements in these areas, addressing a critical gap in counselor education literature.

By encouraging a shift in counselor training, this presentation contributes to broader conversations around stigma reduction, therapist development, and evidence-informed pedagogy in mental health care. It is especially relevant for educators, clinical supervisors, and training directors seeking to improve preparation for working with clients diagnosed with personality disorders, particularly BPD.

Biography

Amy Weber is a PhD candidate in Counselor Education and Supervision and a licensed mental health counselor in the USA. Her clinical work and research focus on personality disorders, attachment, and counselor development. With experience in both academic and clinical training settings, Amy is committed to improving how future counselors are prepared to work with complex clinical populations. Her dissertation explores the impact of attachment-based training on counseling students' attitudes, knowledge, and self-efficacy in working with individuals diagnosed with borderline personality disorder.



Andreyanna Ivanchenko^{1*}, Vitalii Khrystenko², Taras Olefirenko³, Alexander Mytnyk⁴

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²Ukrainian Center for Psychological Assistance and Support «Indestructible Kharkiv», Kharkiv, Ukraine

³Kyiv M. P. Dragomanov National Pedagogical University (Dean of the Faculty of Education), Kyiv, Ukraine

⁴Kyiv M. P. Dragomanov National Pedagogical University (Head of the Department of Practical Psychology), Kyiv, Ukraine

Mental health of Ukrainians liberated from Russian occupation: War-aggression impacts and restoring means

Mental health restoration is critically important, especially in war and constant socio-economic stress times. Military conflicts seriously affect the psychological state at the individual-collective level. Occupation, which is often accompanied by torture, abuse, forced isolation, is characterized, besides, by prolonged psycho-emotional exhaustion, which disrupts functioning of nervous/biophysiological systems and damages neural substrates that underlie the body somato-physiology and person's behaviour. Chronic stress, persistent difficulties in occupation/post-occupation conditions can provoke even greater deterioration in mental health than the direct impact of war.

Our study had two aims: assess the mental health state of Ukrainians, aged 6-87 (n=3779: 2065 females, 874 males, 840 children aged 6-17 from the de-occupied territories of the Kharkiv region, who lived in their settlements during Russian aggressors' occupation); pick and compose a set of methods/techniques to restore normal mental state. All participants gave voluntary-informed consent.

There were used valid standardized methods of visual psychodiagnostics (surveys and participant observation), also interview-method to collect clarifying information on the accompanying risk phenomena. Thus, this was a qualitative mixed-method study, conducted between September 2022 and September 2023 on the basis of Ukrainian Center for Psychological Assistance and Support «Indestructible Kharkiv».

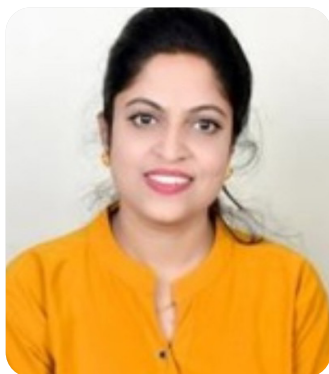
As established, the main causes worsening the psycho-emotional/mental health of Ukrainians under military occupation were: stress, anxiety and psycho-trauma; loss of loved ones; forced migration; feelings of grief, confusion and hopelessness; limited access to health care; constant flow of traumatic news from mass-media. The aforementioned factors stimulated the appearance of negative symptoms on psycho-behavioural and somatic-physiological levels, especially in participants survived sexual violence: 1 recurring memories, flashbacks, constant anxiety, sleep disturbances, feelings of alienation/isolation provoked by traumatic stress; 2) psychosomatic disorders stimulated muscle/heart pain, headache, digestive problems, increased fatigue, and skin diseases (psoriasis, eczema) associated with

disruption of the immune system and nervous regulation; 3) constant fear, mistrust, suspiciousness, distrustful wariness, feelings of loneliness/isolation as a consequence of limited communication with the outside world (neighbours, relatives) during the occupation; 4) almost everyone who lived through the occupation experienced the «deferred life syndrome» (DLS), the so-called feeling of "lost time and of being "behind" the rest of his country; this syndrome is also named the «frozen life effect»: it is a psychological/mental state in which, due to external circumstances that a person perceives as temporary but limiting, he postpones the implementation of important life goals, so, a person is waiting for a better time and demonstrates passivity, procrastination; 5) the hardest hit manifested children, women, refugees: children/teens have experienced palpitations, trembling, sweating, disturbed sleep, nightmares; depression; abnormal behaviour; persistent memories of traumatic events (flashbulb memories); anxiety/fear of repeating the stressful events; avoidance of places/people/situations associated with trauma; loss of interest in playing/learning – in anything that previously brought a joy.

To overcome trauma and normalize mental health, investigators used trauma-therapy, cognitive-behavioural and bio-suggestive therapies; psychoeducation; various relaxation techniques and physical activity; for children – creative methods (art/play/fairy tale therapies), group therapy with peers and psychological assistance from the family. As a result, the applied means significantly improved the mental health of 73% of participants.

Biography

Prof. Andreyanna Ivanchenko, Ph.D. in Psychology, title of Doctor of Psychological Sciences, works at Kyiv M.P.Dragomanov National Pedagogical University and Kharkiv Institute "Interregional Academy of Personnel Management". Andreyanna Ivanchenko has over 40 years of teaching Psychology and Foreign languages (Italian, English, Russian), published over 130 article, 50 abstracts at international conferences/congresses. In 2005 Andreyanna Ivanchenko became Reiki Master/Teacher of theoretic-practical self-rehabilitation bases according to ancient-Eastern psychological-philosophical tradition "Usui Reiki Ryoho", taught by Italian and Japanese Reiki Masters/Teachers. Her research interests: Psychology of Creativity as a vital dynamic orientation, Victimology, Crisis-extreme Psychology, psychosomatics, stress-resistance, psycho-bioenergy, coping means, ancient-Oriental self-restoring arts, psycholinguistics, Sport/Political Psychology.

**Anita Handore Salunke**

Phytoelixir Pvt.Ltd, India

Smartphone addiction, mental health, and screen trap of digital age

The rapid evolution of digital technology has reshaped how people connect, communicate, and access information. While smartphones have become indispensable tools for education, work, and social interaction, their excessive use has led to the emergence of a behavioural disorder widely recognized as smartphone addiction. Often expressed through compulsive gaming, prolonged social media use, and continuous online engagement, this condition mirrors substance use disorders by presenting cravings, withdrawal-like symptoms, and impaired control. However, smartphone addiction is uniquely reinforced by its universal accessibility, constant availability, and deep integration into everyday life, making it difficult to identify, manage, and prevent.

The roots of smartphone addiction are multifaceted, spanning neurobiological, psychological, and environmental dimensions. Neuro -biologically, it is driven by dopamine-mediated reward pathways that are repeatedly activated through online validation, gaming achievements, and instant notifications. Psychologically, smartphones offer an escape from stress, loneliness, or low self-esteem, while simultaneously reinforcing dependency through gratification and social comparison. Environmental and societal factors, including peer influence, unrestricted digital access, and persuasive marketing strategies, further exacerbate this dependency. Vulnerability is especially high among adolescents and young adults due to developmental immaturity, identity-seeking behaviours, and reduced self-regulation.

The adverse impacts of smartphone addiction are profound and far-reaching. Psychologically, it is associated with anxiety, depression, irritability, attention deficits, and disrupted sleep cycles. Socially, excessive smartphone use contributes to strained family dynamics, academic underperformance, workplace inefficiency, and increased isolation from real-world interactions. Physiologically, prolonged use leads to vision strain, musculoskeletal discomfort, sedentary lifestyle disorders, obesity, and fatigue. Cognitively, affected individuals often experience reduced impulse control, impaired decision-making, and compulsive checking behaviours, all of which undermine productivity and overall well-being. Collectively, these effects form a cycle of dependency that compromises mental, physical, and social health.

Effective prevention and recovery require a holistic, multi-level approach. Preventive strategies include digital literacy programs, awareness campaigns, and school- or community-based interventions that promote responsible use and digital hygiene. Parental monitoring and guidance play a crucial role in early prevention. Clinically, interventions such as Cognitive Behavioural Therapy (CBT), mindfulness-based therapies, and motivational interviewing have demonstrated effectiveness in curbing compulsive behaviours. Technology-assisted measures like app blockers, screen-time regulators, and digital detox programs offer practical support for behaviour modification. Long-term recovery, however, extends beyond reducing screen time; it necessitates lifestyle restructuring, resilience building, social re-engagement, and the adoption of meaningful offline activities to ensure sustainable balance between digital use and wellbeing.

Framing smartphone addiction as a legitimate behavioural disorder within the context of mental health and psychiatry underscores its significance as a global public health concern. A collaborative approach that integrates clinical care, educational reform, community engagement, and evidence-based policy development is vital to mitigate its impact. By addressing both the risks and potential solutions, societies can move toward healthier digital habits that safeguard mental well-being, foster resilience, and promote productivity in the digital age.

Keywords: Smartphone, Digital age, Behavioural addiction, Gaming disorder, Social media, Mental health, Psychiatry

Biography

Dr. Anita V. Handore is the visionary Founder and Director of Phytoelixir Pvt. Ltd., an innovation based Phyto- Biotech start up, Nashik, MS, India. A highly accomplished bio scientist and entrepreneur. She holds Ph.D. in Microbiology and M.Phil. in Environmental Science and recognized with her remarkable achievements including two process patents granted in Microbiology and Phyto -Biotechnology sector. Her next patents are filed in the fields of Agriculture-Biotechnology, Food Technology and Healthcare, Phyto-nutraceuticals. Her work exemplifies the harmonious integration of science, innovation, and societal benefit. With over two decades of expertise in innovative research and development, she has excelled in translating laboratory research into value driven technologies, significantly impacting sectors including Phyto-Biotechnology, Microbiology, Phyto-Nutraceuticals, Phytocosmeceutical, Functional Foods and Beverages, Education, Agriculture and Environment, Healthcare, etc. At Global platform, she has been honoured as distinguished speaker for delivering scientific talks at prestigious International conferences and symposia. She is working as Editorial board member and prolific author, contributing extensively to International research journals and books of global repute. Over 102 research publications, presentations and, talks with reputed International and National Research Journals & platforms along with numerous book chapters and books published with world leading publishers are to her credit. Sequences database of several novel and rare endophytes discovered by her submitted to NCBI Gen Bank is creditable.

Dr. Anita has commendably and successfully shouldered managerial and administrative responsibilities and effectively serving as Program Advisory Committee member for research foundations and prestigious National universities. As a research guide, she has been effectively guiding and mentoring M.Sc. and PhD students of recognized Indian Universities. Her social and scientific endeavours extend beyond the research. She actively participates in community-driven initiatives, leveraging her knowledge and expertise to raise awareness and uplift society. To date, this versatile personality has been honoured and appreciated with over 21 awards from State, National, and International forums in recognition of her noteworthy research contributions to diverse sectors including Social Welfare. Driven by her profound vision, Dr. Anita has started journey as an entrepreneur with the purpose to serve hidden treasure of nature & bring resilience by revitalizing

living beings, through her scientific and innovative power for addressing some global challenges & create value for society at large.

Research Interest: Novel, Rare Endophytes, Phyto-Biotechnology, Phyto Nutraceuticals, Phyto-Cosmeceuticals, Microbial Biotechnology, Environmental Biotechnology, Agro Biotechnology, Functional Foods & Beverages, Oncology & Complementary Therapies, Adjuvant Therapies, Sustainability & Circular Economy.



Dr Annabelle Prosser*, Dr Rohan Mehra

Frimley Park Hospital, Camberley, UK

A case of enterovirus rhombencephalitis associated with ocrelizumab therapy used to treat multiple sclerosis

Background: Ocrelizumab is a B-cell-depleting monoclonal antibody used in the treatment of Relapsing–remitting multiple sclerosis (RRMS). It binds to the CD20 antigen expressed on B cells, leading to their depletion and a reduction in immune-mediated damage to the central nervous system. This immunosuppressive effect can impair humoral immunity and increase susceptibility to opportunistic infections (1), including rare but potentially severe complications such as entero-virus rhomb encephalitis (EV-RE).

Methods: We report the case of a woman in her 40s receiving regular ocrelizumab infusions for her RRMS who presented with vertigo, dysarthria, and muscular rigidity. Initial diagnostic investigations were inconclusive, and the patient was started on empirical antibiotics following the development of pyrexia. She deteriorated with progressive bulbar failure, necessitating intubation and a transfer to a specialist neurological hospital. Five days after admission, EV-RE was diagnosed based on characteristic MRI findings and a positive enterovirus polymerase chain reaction result from cerebrospinal fluid analysis.

Results: A few months into her admission, she developed a rhythmic tremor that was confirmed as post-encephalitic parkinsonian syndrome by electromyography and Dopamine Active Transporter (DAT) imaging. After several months of antivirals, intravenous immunoglobulin, and steroids, the patient demonstrated symptomatic improvement, albeit below her pre-admission baseline.

Conclusions: This case underscores the importance to consider opportunistic infections in patients receiving B-cell depleting therapies, specifically EV-RE with ocrelizumab use. Early recognition and timely involvement of specialist centres are essential to prevent further neurological deterioration and improve clinical outcomes.

Biography

Dr Annabelle Prosser graduated from Newcastle University Medical School in 2024, achieving a merit in her 2nd year for academic excellence. She completed an 8-week elective in Bach Mai Hospital in Hanoi, Vietnam and Ramathibodi Hospital in Bangkok, Thailand during her studies. At the age of 24, she is now working as a rotational resident doctor at Royal Surrey County Hospital, just outside of London. She has published an article on the UK Foundation Programme website that has recently been created into an E-book.

**Arwen Podesta**

Louisiana Psychiatric Medical Association, United States

Methylation and mental health and addiction

Dr. Arwen Podesta utilizes Methylene tetrahydrofolate Reductase (MTHFR) testing and treatment in daily practice when treating patients with varieties of addiction and mental health issues. MTHFR is a vital enzyme involved in one-carbon metabolism, critical for folate processing, homocysteine regulation, and DNA methylation—processes integral to brain function and psychiatric health. Certain polymorphisms in the MTHFR gene reduce enzymatic activity, leading to impaired methylation capacity and elevated homocysteine levels, both of which have been increasingly linked to susceptibility and clinical manifestations of mental health disorders and addiction.

MTHFR-related hypo methylation disrupts gene expression in neural circuits governing mood regulation, cognition, and reward pathways. This epigenetic dysregulation influences neurotransmitter synthesis, including serotonin, dopamine, and norepinephrine, thereby impacting mood stability, motivation, and stress response—core elements in depression, anxiety, bipolar disorder, schizophrenia, and substance use disorders. Moreover, DNA methylation changes have been implicated in the formation and maintenance of addictive behaviors, contributing to the transition from recreational drug use to compulsive dependence.

From a clinical standpoint, there is growing evidence supporting the use of targeted nutritional interventions, such as supplementation with methylated folate (L-methyl folate), vitamin B12, and other methylation cofactors, to ameliorate methylation deficits in patients harboring MTHFR polymorphisms. This upstream approach may enhance the efficacy of conventional pharmacotherapy by restoring methylation balance and optimizing neurotransmitter synthesis. Genetic testing for MTHFR variants can help identify patients likely to benefit from such personalized interventions, thereby tailoring treatment plans that integrate epigenetic insights to improve psychiatric and addiction outcomes.

Advances in understanding MTHFR polymorphisms and methylation biology and their phenotypes reveal a compelling link between genetic-epigenetic mechanisms and mental health disorders, underscoring the potential for precision medicine approaches that incorporate methylation-targeted therapies in addiction and psychiatric care.

Biography

Practicing in New Orleans, Arwen Podesta, MD is a board-certified adult psychiatrist with sub-specializations in addiction medicine, forensic psychiatry, and integrative medicine. Dr. Podesta's primary focus is access to integrative mental health and addiction treatment, with a whole health focus for all. Arwen Podesta teaches (Tulane and LSU), consults for states opioid task force, is Medical Director of Steps Detox/Residential and Lake Wellness IOPs, and author of HOOKED. Arwen Podesta is the immediate past president of the Louisiana chapter of the American Society for Addiction Medicine (ASAM) and is the immediate past President of the Louisiana Psychiatric Medical Association. Arwen Podesta is a distinguished fellow of both the American Psychiatric Association and the American Society of Addiction Medicine. Dr. Podesta regularly travels to teach and speak on the topics of Addiction Medicine and Integrative Psychiatry.

**Arwen Podesta**

Louisiana Psychiatric Medical Association, United States

Neurobiology of addiction: Back to basics

Dr. Arwen Podesta provides a foundational and clinically relevant overview of addiction's underlying mechanisms, connecting the dopamine reward system, genetic and epigenetic influences, and practical treatment strategies. Designed for clinicians and researchers, this session elucidates how addictive substances hijack the brain's reward circuitry, predisposing individuals to compulsive behaviors and chronic relapse.

Addiction is characterized by the overstimulation of the brain's reward system, primarily via dopamine in the nucleus accumbens. Substances like opioids, stimulants, and alcohol trigger unnaturally high dopamine surges, fostering reinforcement that leads to compulsive drug use even in the face of adverse consequences. Chronic use induces neuro adaptive changes, reducing dopamine receptor availability and diminishing the ability to experience pleasure from ordinary activities (anhedonia). This cycle drives further substance use and contributes to difficulties with abstinence.

The presentation explores how genetic and epigenetic mechanisms shape vulnerability to addiction. Differences in neural gene expression, mediated by DNA modifications and chromatin structure changes, underlie individual susceptibility. Both inherited and environmentally-driven epigenetic alterations — influenced by early life adversity or trauma — may predispose certain individuals to substance use disorders or alter their course of illness.

Evidence-based treatment interventions are highlighted, encompassing medications (FDA-approved and off-label with demonstrated efficacy), nutritional support, and trauma-informed care. Pharmacological strategies target cravings and withdrawal by modulating the reward circuitry and stress pathways. Nutrition, co-factor and trauma support address biological and psychosocial contributors, recognizing the multidimensional nature of addictive disorders.

Grounded in the latest neurobiological evidence and translational research, this presentation empowers clinicians to better understand the neuro circuitry underpinnings of addiction, and employ holistic, evidence-driven interventions for effective patient care.

Biography

Practicing in New Orleans, Arwen Podesta, MD is a board-certified adult psychiatrist with sub-specializations in addiction medicine, forensic psychiatry, and integrative medicine. Dr. Podesta's primary focus is access to integrative mental health and addiction treatment, with a whole health focus for all. Arwen Podesta teaches (Tulane and LSU), consults for states opioid task force, is Medical Director of Steps Detox/Residential and Lake Wellness IOPs, and author of HOOKED. Arwen Podesta is the immediate past president of the Louisiana chapter of the American Society for Addiction Medicine (ASAM) and is the immediate past President of the Louisiana Psychiatric Medical Association. Arwen Podesta is a distinguished fellow of both the American Psychiatric Association and the American Society of Addiction Medicine. Dr. Podesta regularly travels to teach and speak on the topics of Addiction Medicine and Integrative Psychiatry.

**Axel Steinhage*, Christl Lauterbach**

Future-Shape GmbH, Hoehenkirchen, Germany

Analysing human behaviour and health by means of a large-area capacitive sensor floor

People are in almost constant contact with the floor throughout the day. With high-resolution sensors discreetly installed under the floor covering, data on the number, location, direction of movement, and speed of individuals can be recorded continuously. In addition to detecting emergencies such as falls, immobility, nightly wandering etc., the data sets can also be used to draw conclusions about behaviour, daily routines, activity levels, sleep quality, social isolation and even health status. The latter is particularly possible through the analysis of gait patterns, which can be used to detect physical and neurological diseases at an early stage.

We show examples from nursing homes that are fully equipped with sensor flooring, as well as from hospitals that use the sensor technology in geriatric care and casualty units for gait analysis and initial assessment. We present data from several studies in which the indications of the test subjects were known and assigned to gait patterns.

While even a layperson can recognize deviations from normal gait patterns in many cases, experts can detect the onset of pathological changes by analysing the gait parameters automatically extracted by the system. By tracking these parameters over a long period of time across multiple data recordings, the development of impairments and the success of rehabilitation measures can be quantitatively recorded. We also address the fact that the invisibility of the sensor technology under normal flooring allows for natural behaviour without people feeling like they are in a test situation.

In addition to a brief description of the sensor technology, we also discuss the AI methods that are used to extract those behaviour-relevant features from the data sets that are not visible to the naked eye. Previous scientific work that we have carried out in cooperation with the universities of Lübeck, Munich, and Ostrava suggests that it may even be possible to estimate gender and age from gait patterns and, with sufficiently large data sets, even to identify individuals from a defined group based on their gait.

We will discuss these current research topics at the end of our presentation. In addition, we hope that intensive discussions with the medical experts present will open up new questions that we could address in the future using the sensor system described.

Biography

Dr. Steinhage is co-founder, managing director, and CTO of Future Shape, a company that has been developing, manufacturing, and marketing large-area floor sensor technology for over 20 years. The sensor floor is used worldwide by nursing homes and hospitals for AI-supported behavior and emergency detection as well as for gait analysis. In 1998, Mr. Steinhage received a physics-Ph.D. from the Institute for Neuroinformatics at the University of Bochum, Germany, specializing in neuroinformatics and anthropomorphic robotics. He participated in more than 20 national and European research projects in the fields of sensor technology, AI, robotics, and ambient assisted living in a leading role.



Dr. Barasha Saharia

Registrar, Department of Psychiatry, Jorhat Medical College & Hospital, Jorhat, Assam, India

Growing up online: How the new digital playground creates emotional domino effects in Gen Z & Gen Alpha

Today's children are growing up in a rapidly evolving digital landscape in which digital media shape communication, identity formation, and emotional development. Recent international data show that 96% of 15-year-olds have access to digital devices at home and 98% own a smartphone. Smartphone ownership is occurring at younger ages, with ~70% of ten-year-olds owning one, though national rates range widely—from 29% in Türkiye and 40% in France to >90% in Latvia, Poland, and Nordic countries. Digital engagement is substantial; while a quarter of 15-year-olds report ≤20 hours/week online, at least half exceed 30 hours/week in most countries. Problematic patterns are emerging: 1 in 8 girls and 1 in 13 boys (11–15 years) show problematic social media use, including impaired time management, disruptions to daily routines, interpersonal conflict, and dissatisfaction with digital habits.

Research shows that problematic digital usage and addictive engagement are associated with symptoms of anxiety, depression, body image distress, poor sleep, cognitive decline, academic failure and psychosocial strain in young people, especially when use interferes with daily functioning and offline support systems.

This presentation synthesizes current data and conceptual frameworks to explore how the digital environment functions as a modern developmental context influencing emotional trajectories among Gen Z and Gen Alpha. We discuss mechanisms such as algorithmic reinforcement, social comparison, and digital communication norms, and outline implications for child and adolescent mental health practice, prevention strategies, and policy development.

Biography

Dr. Barasha Saharia is a consultant psychiatrist and de-addiction specialist. Dr. Saharia has one international, three national and 3 state level publications. She has interest in Addiction psychiatry, sleep medicine, child and adolescent mental health. She has presented symposium in national conferences. She has won awards in several paper and poster presentation at national and state level conferences. She is currently practicing in a government medical college in Assam, India.

**Bess Yin-Hung LAM*, Prof. Edmond YU & Prof. Calvin Kai-Ching YU**

Department of Counselling and Psychology, Hong Kong Shue Yan University, Hong Kong

The effect of High-Definition Transcranial Direct Current Stimulation (HD-tDCS) on psychological functions in drug addicts: A pilot study

Aim: This study aims to examine the effect of HD-tDCS on reducing antisocial behavior and psychological function.

Method: Primary measures including drug cravings and antisocial behavior are administered to all participants at 2 time points: 1) before the tDCS sessions (pre-assessment), and 2) after all tDCS sessions (post-assessment). In addition, the demographic information of from each participant (e.g., age, sex, and social adversity) are obtained at the pre-assessment. Each participant is randomly assigned to either 1) active HD-tDCS group or 2) no stimulation (sham group). Each participant receives either active or sham 13-minute HD-tDCS stimulation twice a day with an interval of 20 minutes for 5 days within 2 weeks. The stimulation (1.5 mA to each OFC site) is administered using a system called Soterix HD-tDCS. The anodal electrode is placed on the right OFC (equivalent to the location of FP2) using the 10–20 international EEG system. For both groups of participants, their adverse effects and mood are assessed after the active or sham stimulation.

Results and Conclusion: A number of psychological functions are improved after the HD-tDCS stimulation. With the pilot findings of this study, there is a number of clinical and theoretical beneficiaries that can give insight to different stakeholders including correctional and rehabilitation officers as well as the policymakers in the criminal and judicial system for the prevention and intervention of antisocial behavior.

Biography

Bess's research focuses on the neural and psychosocial mechanism of social cognition, antisocial behavior, and schizophrenia-spectrum disorders. In recent years, she has extended her research work to the neural, motor and social functions in autism, children with special education needs, and drug addicts as well as the gut microbiome and the brain. She has been engaged in inter-disciplinary research studies in Hong Kong, Mainland China, Canada, Australia and the United States.

**Chirag Karia**

Bright Fox Health, Dubai, United Arab Emirates

Early preventative mental wellbeing coaching for young people in the UAE: A structured 10-week skills-based model supporting mental health and addiction risk reduction

Background: Across the United Arab Emirates and globally, young people are experiencing increasing academic pressure, emotional distress, and social comparison. When unaddressed, these stressors may contribute to the later development of mental health disorders and maladaptive coping behaviours, including substance and behavioural addictions. International mental health strategy increasingly emphasises early, preventative, and non-clinical interventions that strengthen emotional regulation, resilience, and adaptive functioning before clinical severity emerges.

Aim: This presentation introduces Bright Fox Health, a structured 10-week preventative mental wellbeing coaching programme for young people aged 11–25 in the UAE. The model is designed to deliver practical psychological skills within a non-diagnostic, early-intervention framework that complements clinical mental health and addiction services.

Methods / Programme design: The Bright Fox model integrates evidence-informed principles drawn from cognitive behavioural therapy, dialectical behaviour therapy skills training, strengths-based coaching, and sports-psychology-based mental skills development. Programme structure includes:

- **Week 1:** Comprehensive wellbeing and functional assessment
- **Weeks 2–9:** Structured coaching sessions targeting emotional regulation, stress tolerance, attention, confidence, and adaptive coping
- **Week 10:** Review, consolidation, and forward planning with optional family involvement

Delivery is culturally responsive to UAE family systems and educational environments, positioning coaching as an accessible preventative layer of care situated between education and specialist clinical services.

Implications for mental health and addiction prevention: Strengthening emotional regulation, coping capacity, and self-efficacy during adolescence and early adulthood may reduce vulnerability to later psychiatric morbidity and addictive behaviours. Preventative coaching models may therefore represent a scalable public-health strategy that complements treatment-focused systems while reducing long-term clinical burden.

Conclusion: Bright Fox Health presents a structured, culturally attuned model for early mental wellbeing intervention in young people within the UAE. Ongoing evaluation will examine feasibility, acceptability, and measurable psychological outcomes to inform future research and regional implementation across mental health and addiction prevention pathways.

Biography

Chirag Karia is the founder of Bright Fox Health, a Dubai-based preventative mental wellbeing service for young people and families. He holds an MSc in Psychology and Neuroscience of Mental Health from King's College London and is trained in CBT, DBT, and integrative counselling approaches. His work focuses on early intervention, emotional regulation, and resilience development within culturally responsive frameworks in the UAE. He has lived and worked across the UK, Europe, and the Middle East and is committed to advancing preventative models that bridge education, mental health, and addiction prevention.



Danièle Lapointe

Université Laval, Québec (Canada)

Study of resilience in cases of incest, father-daughter, step-father and step-daughter in the pre-pubber and puberous period among adult women and mothers: How to overcome the traumatism of an incestuous relationship?

Sexual abuse of a child is a form of maltreatment. Among recent studies in this area, the Canadian study (Burczycka and Conroy, 2017) indicates that 70.3% are intrafamilial abuse and that of all cases of sexual abuse, 81% of victims are female (Silva and Collin-Vézina, 2017) and that the majority of victims feel deleterious effects (Bilan DPJ-DP, 2017; Koçtürk and Yuksel, 2019). However, over the past thirty years, research has highlighted the possibility of recovery for victims of incest (Berthelot et al., 2019). These "so-called resilient" people used adaptive strategies allowing them to protect themselves from the trauma of the abuse of which they were victims (Barnes and Josefowitz, 2014; de Becker and Maertens, 2015). This thesis reports the results of research carried out with 33 adult women and mothers who experienced incest during childhood and/or adolescence at the hands of their father or stepfather. To do this, a mixed analysis (Student's t test and multiple regression analysis) was used to establish two profiles and to respond to the following three hypotheses: adaptation strategies, the attachment bond and mentalization. The first results converge with the state of knowledge on the issue, since 21 refers to participants with traditional clinical impacts and 12 refers to participants engaged in a resilience process. Student's t test results showed no difference, but Cohen's (1988) effect size indicated higher at subscales and multiple regression analysis showed three unexpected results. The results of the qualitative analysis are in the same direction as those above. To conclude, the present doctoral study corroborates research which shows that resilience is difficult to operationalize.

Biography

Dre, Lapointe (Ph.Ds., M.Sc. Counseling, B. Sc. Ps.) is a clinical psychologist practicing in private practice. For several years, she has been a lecturer at Université Laval and Université of Montreal for undergraduate and graduate students. She also supervises psychologists and psychotherapists, as well as foreign students. Lapointe has participated as speaker in symposia, conferences, and scientific congresses. Lapointe was an expert in family matters at the Quebec Youth Chamber, and she was the clinical director of the Traumatys Center. She has several scientific publications. Lately, she is also evaluating for the Swiss National Science Foundation (SNSF).

**Deepak Sharan^{1*}, Abirami Roy², Summiya Javeed³**

¹Consultant in Orthopedic Surgery, Rehabilitation, Ergonomics, Occupational Health, Precision, Anti-Aging, Functional, and Lifestyle Medicine, RECOUP Health, Bengaluru, Karnataka, India

² Fellow Coach, RECOUP Health, Bengaluru, Karnataka, India

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The association between adverse childhood experiences and neuroplastic pain in adults

Background: This study aimed to explore the association between adverse childhood experiences (ACEs) and neuroplastic musculoskeletal pain in adults, using the ACEs scale and the PPDA (psychophysiologic disorder) symptom checklist, and assess the extent to which ACEs predict PPDA symptom severity.

Methods: A retrospective cross-sectional design was employed using data from 150 adult patients (aged 18–65) with chronic musculoskeletal pain at Recoup Health, Bengaluru, India. Patients had completed the ACE questionnaire and the PPDA Checklist. Correlation and regression analyses were conducted to examine the relationship.

Results: A strong positive correlation was found between ACE and PPDA scores (Spearman's $\rho = 0.852$, $p < .001$). Regression analysis revealed that ACEs significantly predicted PPDA symptoms ($R = 0.525$, $R^2 = 0.276$, $p < .001$), accounting for 27.6% of the variance in symptoms.

Conclusions: Childhood adversity significantly correlates with and predicts neuroplastic pain severity. The findings support integrating trauma-informed psychological care in chronic pain management.

Biography

Dr. Deepak Sharan is a Consultant in Orthopedic Surgery, Rehabilitation, Ergonomics, Occupational Health, Functional and Lifestyle Medicine, and the Founder and CEO of RECOUP Health, Bengaluru, India. Deepak is the Chairperson of the Scientific Committee on Musculoskeletal Disorders of the International Commission on Occupational Health and the President of the International Myopain Society. He has over 600 International scientific publications and conference presentations. Deepak is the winner of the National Disability Award and the world's highest Research Awards in Orthopedics and Pediatric Orthopedics. He has successfully treated over 1 million patients from 45 countries. He is the Ergonomics and Occupational Health Consultant to several Fortune 500 companies.

**Dibyakanti Mishra^{2*}, Pushpendra Singh Sisodia², Uttam Pipaliya², Niraj Lalwani²**¹Topia Medtech Limited, 14 Havelock Place (MS), Harrow, UK HA1 1LJ²Topia Medtech Limited, Vadodara, India

An approach of automating hippocampal volumetric tool for brain

Alzevita is a cloud-based AI tool developed to assist neuroradiologists and imaging professionals in brain MRI analysis through automated hippocampal segmentation and volumetric reporting. It provides improved consistency, speed, and clinical confidence in quantitative neuroimaging workflows. For model development, a total of 200 MRI brain scans from India were used for training, and 298 MRI scans from the USA were utilized for validation. The tool's efficiency was evaluated using Dice Score and Hausdorff Distance metrics.

Alzevita enables users to upload brain MRI scans in compatible formats, after which the system automatically segments predefined brain regions using AI, computes precise volumetric measurements, and generates standardized reports for clinical review or research archiving. This facilitates efficient data processing, cross-operator standardization, and scalability across both clinical and research environments.

The platform's cloud-based processing allows fast computation without dependence on high-end hardware, making it accessible from any device. Alzevita reduces manual workload, enables longitudinal and structural comparisons, and supports future expansion into multi-region brain analysis. By enabling accurate and consistent volumetric analysis, Alzevita supports early diagnosis, disease monitoring, and clinical decision-making in neurological conditions such as Alzheimer's disease, ultimately empowering clinicians with AI-enhanced precision.

Abbreviations: MRI – Magnetic Resonance Imaging; AI – Artificial Intelligence

Keywords: Alzevita, Hippocampal volumetry, Dice score, Hausdorff distance, MRI, Artificial intelligence

Biography

Dibyakanti Mishra is a Scientist and industry professional with deep expertise in neurodegenerative disorders. Her PhD research from Indian Institute of Technology Delhi (IIT Delhi) focused on elucidating the role of optineurin gene mutations in Amyotrophic Lateral Sclerosis (ALS) through cellular studies and whole-exome sequencing of Indian ALS patient DNA, advancing understanding of disease mechanisms and potential therapeutic pathways. Post PhD, Mishra served as a Scientist and Project Investigator at Sun Pharma Advanced Research Company Ltd., where Mishra led and optimized key studies in the neurodegenerative disease domain using advanced biological research methodologies. Currently, Mishra leads techno-commercial initiatives at Topia Lifesciences Ltd. and Topia Medtech Ltd., spearheading the launch of a cutting-edge neurodiagnostic software platform designed for early and precise identification of neurological disorders. Their work bridges scientific research, innovation, and real-world clinical application, with a strong focus on collaborative R&D and translational impact.



Dr Elnike Brand^{1*}, Dr Angela Ratsch²

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Between sanity, sexuality, and sentences: Understanding intimacy in forensic patients

Background: Serious Mental Illness (SMI) has a significant and extensive impact on overall development, quality of life, and sexual functioning. Sexual functioning and Mental Health (MH) are interconnected. Sexual functioning and sexuality—including sexual knowledge, sexual development, sexual health and sexual experiences—has been explored in many populations, including the Australian general and prisoner populations. However, little is known of the sexual function of community-based Forensic Patients (FPs). FPs endure at the intersection between the MH and the justice system. These patients often have a SMI and have committed indictable offences, creating a situation where both their health and their custodial sentences are managed within the restrictions of relevant MH legislation. The gap in knowledge around this group's sexual health impacts on the provision of comprehensive MH care endorsed under the Recovery Framework.

Methods: The study was conducted in three face-to-face phases with community-based FP in south-east Queensland. The first two phases informed the final qualitative phase.

Phase 1: Survey - quantitative data on sexual knowledge.

Phase 2: Survey - quantitative data on sexual experiences.

Phase 3: Semi-structured interviews - current and ideal sexual functioning, and participants perceived barriers and attitudes to MH clinicians' involvement in patients' sexual health needs.

Of the Queensland adult community-based forensic patient population, 43 males and 7 females participated. Most were Australian born, with a mean age of 41.2 years and proficient in English. All were prescribed psychotropic medications for SMI, with most 'in remission'.

Results: Robust sexual education, mainly by the educational system, was lacking. Deficits in sexual knowledge were evident in all domains: physiology, sexual intercourse, pregnancy, sexually transmitted diseases, contraception, and sexual terminology. Quantitative results indicate that sexual development was on par until the teenage years, before rapidly declining.

Overall, the results showed the participants had less sexual encounters, longer periods between sexual encounters, and had significant sexual difficulties compared to other populations. Sex toys were seldom used,

with no participation in alternative sexual practices, including role-play or swinging. Risky sexual behaviour, including low contraception use, was evident in this group. Most of the participants found sex pleasurable, wished to have more sex, and engaged in frequent sexual fantasies.

Most preferred daily sex stimulation and experienced positive reinforcement after sex and agreed that improvement in their sexual experiences resulted in a better quality of life. Qualitatively, participants were generally sexually inactive, although eager to engage in sexual activity. Barriers to achieving sexual health satisfaction included: active MH symptoms, limited social networks, poor communication skills, and medication-related sexual dysfunction. The participants strongly endorsed the role of MH clinicians in assisting them to improve their sexual functioning and quality of life.

Discussion and conclusion: Enhancing forensic clinicians' awareness of gaps in the assessment, treatment, and evaluation of sexual functioning could improve clinical competencies and inform the development of interventions that promote safe and fulfilling sexual experiences for FPs. Empirical evidence should guide policymaking, clinician education, and clinical interventions while shaping future studies aimed at supporting recovery, optimising sexual health, and ultimately enhancing the quality of life (QOL) for FPs.

The normalcy and legitimacy of sexual expression as fundamental human experiences should be recognised in FPs. Sexual functioning has a valuable role in procreation, experiencing pleasure, fostering intimacy and emotional connection, and enhancing self-worth and individuality. Acknowledging these aspects is essential for supporting the well-being and rehabilitation of patients.

Biography

Dr Elnike Brand is a fully registered Specialist General Adult and Forensic Psychiatrist with AHPRA and a fellow of RANZCP. She holds a medical degree from Pretoria and specialist qualifications in Forensic Psychiatry. Dr Brand has completed impairment evaluation training in QLD and NSW and holds postgraduate certificates in child custody and ADHD assessment. A PhD scholar at UQ, she is also a member of the Society of Australian Sexologists. She has extensive experience across community, custodial, and forensic settings, and provides medico legal reports and expert evidence. Dr Brand is Director of Specialist Mind Care. Full CV available on request. Her full curriculum vitae are available upon request.

**Eva Ein-Eli**

Independent Work Psychologist, Evreux, France

Work addiction: Understanding, practical strategies, and empowering testimonies

Work addiction (or "work holism") is a behavioral disorder characterized by an uncontrollable need to work excessively, often to the detriment of health, relationships, and overall well-being. Unlike burnout, which is reactive and often triggered by external pressures, work addiction is driven by internal compulsions reinforced by socio-cultural validation of overwork. In a society where productivity is prized, this condition is often overlooked and underdiagnosed.

This presentation will explore the multidimensional nature of work addiction, integrating psychological research with real-world testimonies. Drawing from Bryan E. Robinson's framework and recent WHO data (2021), the talk will highlight the psychological and physiological consequences of work addiction, including stress-related disorders, cardiovascular risks, and chronic sleep disturbances. It will further investigate the role of perfectionism, social isolation, and the blurred boundaries between personal and professional life—especially in the digital age.

Preventive strategies will be discussed across three levels: Raising awareness to challenge harmful work norms (primary), early detection and use of mindfulness (secondary), and CBT with sustained mental health support (tertiary, per Maslach & Leiter, 2016).

The presentation will conclude with personal narratives that illustrate both the suffering caused by work addiction and the possibility of recovery through workplace reform, therapeutic support, and self-compassion practices. These insights aim to equip mental health professionals, employers, and policymakers with tools to better recognize and address this hidden addiction.

Keywords: Work holism, Occupational health, Burnout, Prevention, Psychological well-being, Behavioral addiction.

Biography

Eva Ein-Eli is a work psychologist specializing in occupational mental health and trauma. With a PhD in psychology and extensive experience in both academic research and private practice, Eva Ein-Eli works at the intersection of organizational behavior and psychological resilience. Eva Ein-Eli also delivers training and consulting services to public institutions and private companies.

**Dr Gunter Friedrich Wagner MD**

Medical Director Drug Rehabilitation Unit Villa Lilly Bad Schwalbach, Hesse, Germany

Developments after partial legalization of cannabis in German

Cannabis used to be strictly illegal in Germany since 2017, when Cannabis has been allowed for medical reasons without specific controls, but still under controlled prescription. In April 2024 personal use of Cannabis has been allowed, with own cultivation, and "cannabis social clubs" were legally established. The prescription has been changed to normal prescription. With the exception of reduction of petty offenses that are no longer prosecuted – no significant general changes have been observed in almost two years. An increase in admission to psychiatric hospitals with cannabis associated disorders has not been found statistically significant. Much More prescriptions in official pharmacies have been observed.

Biography

Dr. Gunter Wagner is specialist in psychiatry, psychotherapy, psychosomatic medicine, addiction, forensic and Social-Medicine. He was director of many psychiatric, psychosomatic and rehabilitative Units and has his own private office. He also has been responsible for many forensic evaluations. After retirement he is still responsible as medical director for drug rehabilitation clinic (Villa Lilly. Bad Schwalbach).



Dr. Hamidreza Rahmanian*, Dr. Amirhosein Banki

South West London & St. George's Mental Health NHS Trust, London, UK

The relationship between ADHD and addictive behaviors, a review

Although Attention-Deficit Hyperactivity Disorder (ADHD) has long been thought to be a disabling and common disorder that occurs only in childhood, more recent research, including prospective longitudinal follow-up studies, suggests that ADHD persists into adulthood in a high proportion of cases. Attention-deficit hyperactivity disorder is a serious risk factor for comorbid psychiatric disorders including substance misuse, antisocial personality disorder, and affective disorders. The presence of ADHD complicates the treatment of the addiction. Moreover, the correlation between ADHD, impulsivity symptoms, and behavioral addictions such as internet and shopping addiction highlights the necessity of managing ADHD symptoms in adults, particularly when coupled with substance use disorders. Research also suggests a bidirectional relationship between ADHD and addictive behaviors, with ADHD symptoms potentially contributing to the development of substance dependence and behavioral addictions. Chronic use of addictive substances has been observed to exacerbate ADHD symptoms like poor impulse control. In adults, the use of stimulants in comorbid ADHD and SUD has always been challenging because of their addictive properties, which carry a greater risk of misuse, especially in individuals with a history of stimulant/cocaine abuse. Concerning treatment management, in clinical practice, an important distinction is between ADHD subjects with and without stimulant/cocaine addiction. The complexity of the relationship between ADHD and addiction is underscored by studies emphasizing the role of ADHD in both the development and severity of addictive behaviors, often leading to a faster progression from mild to severe substance use disorders. In terms of a management plan, routine screening is recommended for ADHD in adolescent patients in substance abuse treatment and for SUD in adolescent patients with ADHD in mental healthcare settings. Long-acting stimulants are recommended as the first line treatment of ADHD in adolescents with concurrent ADHD and SUD, and pharmacotherapy should preferably be embedded in psychosocial treatment.

In conclusion, the current literature supports the association between ADHD and addictive behaviors, emphasizing the need for conducting a comprehensive assessment and tailored interventions to address ADHD symptoms as well as addictive behaviors for enhancing outcomes and effectively managing both conditions.

Biography

Dr. Hamid-Reza Rahmanian is a Consultant Psychiatrist at South West London and St George's NHS Trust, where he also serves as Associate Clinical Director for Sutton Community Mental Health Services. He is an Honorary Senior Lecturer at St George's, University of London, where he contributes to undergraduate and postgraduate medical education, supervises research, and mentors trainees. He qualified as a medical doctor in 1998 and went on to complete specialist training in psychiatry, gaining his CCT in General Adult Psychiatry in 2014. He is a Fellow of the Royal College of Psychiatrists (FRCPsych) and has subspecialty experience in perinatal psychiatry. Dr. Rahmanian's clinical interests span mood disorders, psychosis, ADHD, eating disorders, personality disorders, and neurodevelopmental conditions. He has a strong commitment to transcultural psychiatry and is fluent in Farsi, ensuring culturally sensitive assessments and treatments for diverse populations. His leadership work includes service redesign, quality improvement, and innovation in community psychiatry. He has recently led on transformation initiatives such as implementing a single consultant model and skill-mix workforce strategies in community services. Dr. Rahmanian is also actively involved in medical education, delivering lectures, supervising projects, and contributing to training programs. His approach to psychiatry is holistic, grounded in the biopsychosocial model, and always aligned with NICE evidence-based guidelines.



Hei Wai MA*, Bess Yin-Hung LAM

Department of Counselling and Psychology, Hong Kong Shue, Yan University, Hong Kong

The mediating role of personality problems in the relationship between screen time (internet addiction) and depressive symptoms in young people

Background: While prior research has consistently linked screen time (internet addiction) to depression, the underlying mechanism has been underexplored. This study addresses the gap in existing literature by examining the potential mediating role of personality problems, specifically borderline and schizotypal personality traits, in the relationship between screen time (indexed by internet use) and depression.

Methods: The study included 116 adults (32.8% men and 67.2% women), aged 18 to 25 years with the mean age of 20 years old. Online survey with Chen Internet Addiction Scale (CIAS), Patient Health Questionnaire-9 (PHQ-9), Borderline Symptoms List (BSL-23) (BSL-23), and Schizotypal Personality Questionnaire- Brief (SPQ-B) was administered to all participants. Sociodemographic information and sleep quality information were obtained from the participants. Mediation analysis was conducted to explore the role of personality problems in the relationship between screen time and depressiveness.

Result: Excessive screen time (measured by the internet addiction level) was significantly associated with depressiveness, borderline personality and schizotypal personality problems after controlling gender, age and sleep quality ($PS < 0.001$). Furthermore, borderline personality problems ($b = .14$, CI 0.0977, 0.2008) and schizotypal personality problems ($b = .057$, CI 0.0209, 0.1071) partially mediated the relationship between screen time and depressiveness.

Conclusion: These findings showed that personality problems accounted for the relationship between screen time and depressive symptoms in young adults. As such, the focus on reducing screen time or internet addiction to combat depressiveness may not suffice, warranting an intervention to personality problems including borderline and schizotypal personality problems. These findings give insight to different stakeholders who work with depressive problems and excessive screen time use in young adults for the development of efficient intervention.

Keywords: Internet addiction, Depression, Borderline personality, Schizotypal personality, Screen time

Biography

Daphne is a graduate of The Chinese University of Hong Kong, where Hei Wai MA completed her Bachelor's degree in Public Health, and later earned her Master's degree in Psychology from Hong Kong Shue Yan University. Her academic background bridges the domains of population health and individual psychological processes, offering a well-rounded perspective on health, behaviour, and well-being. Although her professional experience spans several industries beyond the immediate scope of her academic disciplines, Hei Wai MA remains deeply committed to evidence-based practice and interdisciplinary dialogue. Hei Wai MA is particularly interested in the ways research can be translated into practice, and how cross-sector collaboration can foster community health.

**Hema Dadhwal**

Founder & Director, Hal Glow-Bal's Marketing & Content Creation Agency, Singapore

Self-care for healing

Statement of the problem: There is a growing lack of awareness and understanding around the importance of self-care in daily life. Many individuals neglect their own well-being due to busy schedules, societal pressures, or guilt associated with prioritizing themselves. This lack of self-care can lead to chronic stress, burnout, hormonal imbalances, and emotional fatigue. Simple and accessible methods of self-care are often overlooked, though they hold the potential to create significant positive changes in one's physical, emotional, and mental health.

Methodology & theoretical orientation: This approach draws from a review of holistic wellness literature, real-life practices, and ancient wisdom blended with modern techniques. The focus is on integrating self-care into daily routines without guilt or complexity. Practical methods include mewing for jaw alignment and energy flow, lymphatic drainage techniques to support detoxification, and the use of essential oils for mood regulation and skin care. Other methods involve foot massages before sleep, applying oil to the navel and soles, and incorporating detox drinks and skin-care rituals. These practices support the body's natural healing and promote balance across physical and emotional domains.

Findings: Consistent implementation of these simple self-care techniques shows noticeable improvements in mood, energy levels, hormonal balance, sleep quality, and overall well-being. Individuals who practice mindful self-care experience reduced stress, enhanced self-esteem, and a greater sense of control over their health.

Conclusion & significance: Self-care is not a luxury—it is a necessity. The presented model encourages a guilt-free, sustainable, and enjoyable approach to self-care that can be personalized to individual needs. Regular self-care practices nurture physical, emotional, spiritual, and mental health. This holistic approach is highly adaptable and can be introduced in schools, homes, wellness workshops, and healthcare settings. It is not a medical intervention but a movement to empower people to take charge of their well-being through awareness and consistent, simple efforts.

Biography

Hema Dadhwal is an award-winning digital creator, entrepreneur, and holistic wellness advocate based in Singapore. She is the Founder and Director of Hal Glow-Bal's Marketing & Content Creation Agency, where she leads innovative digital storytelling and brand strategy initiatives. Hema has been honoured with the International Women Gloria Award 2025 by The International Awards Forum (TIAF), USA–Singapore, and was also recognized as Most Engaging Content Creator at Digital Confex 2025. A prominent presence across Instagram, YouTube, TikTok, and Facebook, Hema is a passionate promoter of holistic wellness, biohacking, sustainable living, natural healing, and conscious fashion, inspiring global audiences through impactful and purpose-driven content



Jacqueline London
University Paris Cité, France

Trisomy21/down's syndrome: From main chromosome 21 genes to potential future therapies

Trisomy 21 affects around 5000000 persons worldwide. The persons born with trisomy 21 have very different phenotypes according to their parental genes, to the way they are breeding and educated. The life expectancy of these persons is around 65 years in developed countries but lower in many other countries. Having a baby with trisomy 21 is still very frightening and conduct in many countries to abortion. But if scientist could find innovative therapies for very early fetus or child development, the choice may be different. A few chromosome 21 genes have been investigated in that direction. The present talk will give insight especially on 2 of them for approaching early development and two for early neurodegenerative aspects.

Biography

Jacqueline London (Emeritus Professor at University Paris-Diderot) has completed her PhD in the Pasteur Institute under the direction of Pr. Jacques Monod and Professor M. Goldberg in the field of protein folding and bacteriology. Jacqueline moved to immunology in Necker's hospital under the direction of Pr JF Bach and then was a visiting scientist at NIH. After coming back to Paris Jacqueline settled a laboratory in molecular biology at the Blood Center and cloned glycophorins A and B (13 papers). Jacqueline then moved again to Necker's Hospital where she joined the group working on Down syndrome (Trisomy 21) and published some 35 papers on different aspects of trisomy 21 using transgenic mice for some chromosome 21 genes : APP, CBS, DYRK1A and SOD1. Since many years she tried to push the correlation between Alzheimer disease (AD) and Down syndrome (DS) and recently worked on neurotransmitters in some transgenic mice APP, and DYRK1A in the laboratory settled in the University Paris Diderot called now Paris-Cité University. Jacqueline was teaching Parkinson disease and Alzheimer disease and protein aggregates since many years. Jacqueline also settled in 1990 AFRT (French Association for Research on Trisomy 21) and is now AFRT Vice-president. AFRT initiated in 2005 the International Day for Trisomy 21 which is now recognized as World Down Syndrome Day (WDSD and JMT21 in french).



Haichao Wei, Farshad Homayouni Moghadam, Chia-Chen Lu, Jia Qian Wu*

University of Texas, McGovern Medical School at Houston, TX, USA

The identification of a distinct astrocyte subtype that diminishes in Alzheimer's disease

Understanding astrocyte heterogeneity underlying AD by snRNA-seq

Background: Alzheimer's disease (AD) is characterized by the presence of two hallmark pathologies: the accumulation of Amyloid Beta (A β) and tau proteins in the brain. There is a growing body of evidence suggesting that astrocytes, a type of glial cell in the brain, play crucial roles in clearing A β and binding to tau proteins. However, due to the heterogeneity of astrocytes, the specific roles of different astrocyte subpopulations in response to A β and tau remain unclear.

Methods: To enhance the understanding of astrocyte subpopulations in AD, we investigated astrocyte lineage cells based on single-nuclei transcriptomic data obtained from both human and mouse samples. We characterized the diversity of astrocytes and identified global and subpopulation-specific transcriptomic changes between control and AD samples.

Results: Our findings revealed the existence of a specific astrocyte subpopulation marked by low levels of GFAP and the presence of AQP4 and CD63 expression, which showed functional enrichment in A β clearance and tau protein binding, and diminished in AD. We verified this type of astrocytes in mouse models and in AD patient brain samples. Furthermore, our research also unveiled significant alterations of the ligand-receptor interactions between astrocytes and other cell types. These changes underscore the complex interplay between astrocytes and neighboring cells in the context of AD.

Conclusion: Overall, our work gives insights into astrocyte heterogeneity in the context of AD and reveals a distinct astrocyte subpopulation that holds potential for therapeutic interventions in AD. Targeting specific astrocyte subpopulations may offer new avenues for the development of novel treatments for AD.

Biography

Prof. Jiaqian Wu earned her doctorate from Baylor College of Medicine where Jiaqian led the NIH Mammalian Gene Collection effort. Her postdoctoral training was at Yale and Stanford University. Jiaqian joined the University of Texas McGovern Medical School at Houston in 2011. Currently, Jiaqian holds the UT Health Houston Distinguished Professorship. Her research focuses on neurodegeneration and regeneration in Neurotrauma and Neurodegenerative Disease, and her publications have been cited more than 25000 times. Dr. Wu's work has been recognized with prestigious honors, including the NIH Pathway to Independence (PI) Award (K99/R00), and the Senator Lloyd and B.A. Bentsen Investigator Award etc.



Joseph Y. Chu, MD, FRCPC, FACP, FAHA, FAAN

Assistant Professor of Medicine (Neurology), University of Toronto, Canada

Neurological complications of immune check point inhibitor therapy: A report of two cases from Canada

Introduction: Presentation of 2 challenging cases of severe neurological complications of cancer immunotherapy.

Learning neurology: One case at a time: Review the pathogenesis of immune-related adverse events (irAEs) of Immune Checkpoint Inhibitors (ICI) cancer therapy. Discuss current and potential treatment strategies for neurological irAEs.

Methods and results: Detail presentation of clinical presentation, neuro-imaging results, investigations including immunological and paraneoplastic workup results and extensive treatment modalities provided.

Conclusion and discussion:

- Immune-Related Adverse Events (irAEs) due to Immune Checkpoint Inhibitors (ICI)
- ICI has become the forefront for novel therapy for many cancers refractory to traditional radiation therapy and chemotherapy. (@ 2011)
- Neurological complications due to ICI treatment has become more prevalent, although very rare (< 1%) and many case series has been reported in the scientific literature: Unintended immune-mediated inflammation of the Nervous system.
- CNS: Meningitis, meningo-encephalitis, immune-mediated encephalitis, cerebellar-ataxia syndrome.
- PNS: Acute polyradiculopathy (Guillain-Barre Syndrome), Myasthenia Gravis, Inflammatory myositis.

Commonly used ICI in cancer immunotherapy:

- (1) CTLA-4: IPILIMUMAB first approved for metastatic melanoma.
- (2) PD-1: PEMBROLIZUMAB and NIVOLUMAB FDA approved for renal cell carcinoma, non-small cell lung cancer (NSCLC), metastatic melanoma, metastatic head and neck cancer.
- (3) PDL-1: Atezolizumab, Avelumab and Durvalumab all approved for urothelial carcinoma and second-line therapy for NSCLC.

Biography

Dr. Chu graduated from the Faculty of Medicine, University of Toronto in 1978. Chu subsequently completed his residency training in Internal Medicine and Neurology at University of Toronto obtaining his FRCPC in both specialties. Joseph opened a private Neurological consultative practice in Etobicoke in 1984 with special interests in electromyography and clinical neuromuscular disorders. Other areas of interests include Stroke, Epilepsy, Movement Disorders including Botox injections and Dementia. Chu is an Assistant Professor of Medicine (Neurology) at the University of Toronto and is an associate staff Neurologist at the Toronto Western Hospital-University Health Network. Chu is also a consultant Neurologist at the William Osler Health System in Toronto. Chu was past president of the Chinese Canadian Medical Society of Ontario. In addition, Chu had published extensively in peer review journals on the Epidemiology of Cerebrovascular Diseases among Chinese Canadians. Joseph was Chairman of the Research Committee, Chinese Canadian Council of the Heart & Stroke Foundation and now the Chinese Canadian Heart and Brain Association (CCHABA). Joseph has been a popular invited visiting Professor giving lectures in Hong Kong, Peoples' Republic of China, Taiwan and USA. Since 2020, Dr Chu had been leading a team of researchers/clinicians in carrying out population-based research on the epidemiology of COVID-19 and its cardiac and neurological complications among visible minorities in Ontario. His research work is supported by the Ontario Ministry of Health, the Ontario Health Data Platform (OHDP) and the Department of Medicine, University of Toronto and CCHABA.



Joseph Y. Chu, MD,^{1,2*}, Gordon W. Moe, MSc, MD,^{3,4}, Manav V. Vyas, MBBS, PhD,⁵, Robert Chen, MB, BChir,², Chi-Ming Chow, MD, MSc,^{3,4}, Milan Gupta, MD,⁴, Yosuf Kaliwal, MPH,⁶, Maria Koh, MSc,⁶, Dennis T. Ko, MD,^{6,7}, and Peter P. Liu, MD^{4,8,9}

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Neurological and cardiac complications of COVID-19 among Chinese and South Asians in Ontario-waves 1,2 and 3: A population-based Canadian study

Background: Although we had previously reported the cardiac and neurologic outcomes of Chinese and South Asian Ontarians in wave 1 of COVID-19, data on subsequent waves of COVID-19 remain unexamined. This is an extension study of this cohort in waves 2 and 3.

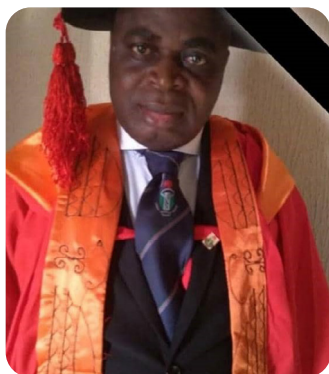
Methods: We identified adult Ontarians with a positive COVID-19 polymerase chain reaction test from January 1, 2020 to June 30, 2021, and they were classified as being Chinese or South Asian using a validated surname algorithm; we compared their outcomes of mortality, and cardiac and neurologic complications with those of the general population using multivariable logistic regression models.

Results: Compared to the general population (n. 439,977), the Chinese population (n. 15,208) was older (mean age 44.2 vs 40.6 years, $P < 0.001$) and the South Asian population (n. 46,333) was younger (39.2 years, $P < 0.001$). The Chinese population had a higher 30-day mortality (odds ratio [OR] 1.44; 95% confidence interval [CI] 1.28-1.61) and more hospitalization or emergency department visits (OR, 1.14; 95% CI, 1.09-1.28), with a trend toward a higher incidence of cardiac complications (OR, 1.03; 95% CI, 0.87-1.12) and neurologic complications (OR, 1.23; 95% CI, 0.96-1.58). South Asians had a lower 30-day mortality (OR, 0.88; 95% CI, 0.78-0.98) but a higher incidence of hospitalization or emergency department visits (OR, 1.17; 95% CI, 1.14-1.20) with a trend toward a lower incidence of cardiac complications (OR, 0.76; 95% CI, 0.67-0.87) and neurologic complications (OR, 0.89; 95% CI, 0.73-1.09). There was also a significant difference in these outcomes between wave 1, 2 and 3, with a greater mortality in all groups in waves 2 and 3.

Conclusions: Ethnicity continues to be an important determinant of mortality, cardiac and neurologic outcomes, and healthcare use among patients with COVID-19, requiring further studies to understand factors driving these differences.

Biography

Dr. Chu graduated from the Faculty of Medicine, University of Toronto in 1978. Chu subsequently completed his residency training in Internal Medicine and Neurology at University of Toronto obtaining his FRCPC in both specialties. Joseph opened a private Neurological consultative practice in Etobicoke in 1984 with special interests in electromyography and clinical neuromuscular disorders. Other areas of interests include Stroke, Epilepsy, Movement Disorders including Botox injections and Dementia. Chu is an Assistant Professor of Medicine (Neurology) at the University of Toronto and is an associate staff Neurologist at the Toronto Western Hospital-University Health Network. Chu is also a consultant Neurologist at the William Osler Health System in Toronto. Chu was past president of the Chinese Canadian Medical Society of Ontario. In addition, Chu had published extensively in peer review journals on the Epidemiology of Cerebrovascular Diseases among Chinese Canadians. Joseph was Chairman of the Research Committee, Chinese Canadian Council of the Heart & Stroke Foundation and now the Chinese Canadian Heart and Brain Association (CCHABA). Joseph has been a popular invited visiting Professor giving lectures in Hong Kong, Peoples' Republic of China, Taiwan and USA. Since 2020, Dr Chu had been leading a team of researchers/clinicians in carrying out population-based research on the epidemiology of COVID-19 and its cardiac and neurological complications among visible minorities in Ontario. His research work is supported by the Ontario Ministry of Health, the Ontario Health Data Platform (OHDP) and the Department of Medicine, University of Toronto and CCHABA.



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Gender disparities in patterns and outcomes of substance use disorder: A retrospective study in the psychiatric ward of Federal Medical Center (FMC) Umuahia Nigeria

Background: Substance Use Disorder (SUD) is an increasing mental health challenge in Nigeria, with significant implications for public health, productivity, and social stability (National Bureau of Statistics & United Nations Office on Drugs and Crime [NBS & UNODC], 2019). Studies worldwide have demonstrated that gender significantly influences the patterns, progression, and outcomes of SUD (Miller et al., 2023; McKee & McRae-Clark, 2022). However, little is known about these disparities within Nigerian psychiatric inpatient settings. This research aimed to examine gender differences in the prevalence, clinical characteristics, and treatment outcomes of patients diagnosed with SUD at the psychiatric ward of the Federal Medical Centre (FMC), Umuahia, Abia State, Nigeria.

Methods: A retrospective descriptive and analytical review was conducted on patient records from January 2018 to December 2024. All patients aged 18 years and above admitted with a primary diagnosis of SUD during this period were included. Prior to data extraction, patients were contacted via telephone and verbal consent was obtained for the use of their clinical information in the study. Data were extracted from case files using a structured proforma. This included sociodemographic information, types of substances used, duration of use, comorbid conditions, treatment modalities, and clinical outcomes such as length of hospital stay, relapse, and discharge status. Statistical analysis was performed using SPSS version 26. Chi-square tests were used to explore associations between gender and categorical variables, while independent t-tests assessed differences in continuous variables. Logistic regression was employed to evaluate gender as an independent predictor of poor treatment outcomes.

Results: Of the 286 eligible cases reviewed, 198 (69.2%) were males and 88 (30.8%) were females, indicating a male-to-female ratio of approximately 2.3:1. Males were more likely to use multiple substances ($p < 0.01$), especially cannabis and alcohol, while females more often reported non-medical use of prescription drugs such as opioids and sedatives ($p < 0.05$). Females also had a higher prevalence of psychiatric comorbidities, notably depression and anxiety ($p = 0.02$). Although both genders benefited from inpatient treatment, males had a significantly higher rate of discharge against medical advice and relapse within six months ($p = 0.03$). Gender remained a significant predictor of poor treatment adherence in multivariate analysis.

Conclusion: Significant gender differences were observed in the patterns and outcomes of SUD among psychiatric inpatients at FMC Umuahia. Male patients were more likely to present with severe substance-related complications and lower adherence to treatment, whereas female patients showed higher rates of psychiatric comorbidity. These findings underscore the need for gender-responsive interventions, policies, and rehabilitation strategies tailored to the unique needs of each group.

Biography

Dr. Kazeem Abimbola Uthman is a Consultant Psychiatrist specializing in addiction psychiatry. Dr. Uthman is a Fellow of the National Postgraduate Medical College of Nigeria. Dr. Uthman has worked in both private and public sectors in the field of addiction psychiatry. Dr. Uthman is currently the Head of Department of Psychiatry, Federal Medical Center, Umuahia, Abia State, Nigeria.



Filip Michal^{1,2}, Kozlovskaya Anastassiya^{1,2}, Kender Martin^{1,2*}, Dolezel Jakub^{1,2}, Novák Jan Sebastián¹, Přeček Daniel¹, Jurčíková Jarmila¹, Filipová Jitka¹

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Virtual and augmented reality in neurosurgery (First experiences in education and clinical practice)

Virtual Reality (VR) and Augmented Reality (AR) are innovative technologies that enhance the way surgical techniques are taught. In simulating surgical procedures, we integrate the Immersiveness of Virtual Reality (IVR) with the method of Cognitive-Motor Dual Tasking (CMDT), similar to its use in rehabilitation. Augmented Reality (AR) combines the real world with digital information. In neurosurgery, it is beginning to be used in surgical planning, allowing, for example, the synchronization of a robot and VR image in brain and spinal surgeries. Based on initial experiences with teaching surgery (4 surgery modules) using these technologies, we can confirm:

1. Improved visualization of anatomical structures.
2. Increased student motivation with feedback in real time from instructors.
3. Shortened learning curve - being verified within the project.
4. Reduced error rates, thereby increasing patient safety - being verified within the project.

Overall, VR and AR represent a significant step forward in the field of medical education and practice. The project was supported by the Just transition operational program of the state environmental fund of the Czech Republic as part of the LERCO project (CZ.10.03.01/0 0/22_003/0000003).

Biography

I am a medical doctor specializing in neurosurgery I graduated in General Medicine from Palackého University in Olomouc in 2019. Currently working at Tomáš Baťa Regional Hospital in Zlín, Czech Republic. Alongside clinical practice, I am involved in the LERCO project at the University of Ostrava since 2023, focusing on development of neurosurgical training modules in virtual reality.



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The disease of sympathetic overdrive—A forgotten neurological disease?

The sympathetic nervous system participates in the functional regulation of numerous tissues and organs; its long-term excessive activation is closely associated with many related disorders. However, to date, the understanding of this symptom has been fragmented. The disease of sympathetic overdrive (DSO) hypothesis systematically elaborates on the related problems. DSO encompasses a wide range, featuring the coexistence of multiple systems, somatic and psychological diseases, with lifestyle diseases as the predominant type; the associated risk factors are numerous, characterized by superposition, complexity, and a focus on lifestyle. A systematic comprehension of DSO can remedy the odd situation of the lack of disease diagnosis in the sympathetic nervous system, more profoundly identify the common pathological basis of many common diseases, and propose new strategic directions for the coordinated prevention and control of related issues.

Biography

Dr. Kong Jian is a Chinese physician specializing in cardiology, metabolic syndrome, geriatrics, and DSO. He received his Bachelor's degree in Medicine in 1983 and Master's degree in 1990 from the Medical University of Bethune, and later obtained his PhD in Medicine from Jilin University in 2004. He worked as a Resident Doctor in Cardiology at the First Hospital of the Medical University of Jilin from 1983 to 1987. Since 1990, he has been serving at the Geriatric Center of the First Hospital of Jilin University, progressing through roles including Visiting Doctor, Vice Professor, Professor, and Professor-in-Chief. He was also a visiting researcher at the University of British Columbia, Canada (1995–1996). His research interests include cardiology, metabolic syndrome, and geriatric medicine.



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Lysosomes, autophagy in brain cells of db/db mice with experimental diabetes

Lysosomes, autophagy in brain cells of db/db mice with genetic model of diabetes. Diabetes T2 is connected with forming of neurodegeneration development, especially in ageing. These changes include some symptoms of Alzheimer Disease (AD), mechanism of their development were not studied until now, as well as their prevention. It was shown that the common mechanism of brain cells damage can be autophagy decreasing, which can be potential target for therapy. So, we used autophagy inducer trehalose to prevent and restore autophagy changes in experimental model of diabetes T2 – db/db mice of 5 months old (genetic model of diabetes). Db/db mice were characterize also by obesity, typical symptom for human diabetes. Trehalose as 3% water solution was used during 30 days, mice had free to food and drink *ad libidum*. Earlier we have shown that treatment of young db/db mice by disaccharide trehalose activated autophagy in liver by m-TOR-independent mechanism. In these experiments we have shown that trehalose treatment decreased obesity, hyperglycemia, decreased neuroinflammation and oxidative stress, restoring partially cognitive disturbances. The aim of our work was to study brain cells (neurons and glial cells) ultrastructural changes and autophagy gene expression (*Atg8*, *Becn1*, *Park2*) in brain cells was studied. In neurons and glial cells of db/db mice there was increased amount of lipofuscin (pigment of ageing), trehalose treatment did not influence significantly on this process. Trehalose treatment was not followed by activation of autophagy transcription genes; decreased expression of insulin gene expression (*Insr*) has been shown. Different effect of trehalose drinking was shown in young db/db mice (2 months old) compared to old db/db mice, which related possibly with ageing process.

Biography

Dr. Tatiana Korolenko is a Biochemist, graduated from Novosibirsk Medical Institute. Tatiana Korolenko holds a PhD (candidate dissertation) in the Moscow Institute of Psychiatry, and doctoral dissertation in Novosibirsk Medical Institute. Korolenko was working in Central Research Laboratory of Novosibirsk Medical Institute as biochemist. Her research was devoted to study of lysosomes in liver pathology and lysosomotropic drugs. Currently Korolenko is principal scientific research worker, Professor in the Scientific Research Institute of Neuroscience and Medicine, Novosibirsk, had in general 14 aspirants and one doctorant.

**Dr. Mahmoud Gharaibeh**

Associate Professor, Al-Ain University, Abu Dhabi, UAE

Predicting dyslexia in Arabic-speaking children: Developing instruments and estimating their psychometric indices

Dyslexia is a reading disability that is characterized by when an individual has trouble in rapid and accurate word decoding. This study developed, piloted and assessed the validity and reliability of three instruments: Rapid Automatized Scale (RANS), Arabic Reading Ability Scale (ARAS) and Phonological Awareness Scale (PAS), on a sample of 700 students (aged 8–9 years). Four groups ($n = 30$) were formed based on the participants' results of the three instruments; Double Deficit (DD), Rapid Automatized Naming Deficit (RAND), Phonological Awareness Deficit (PAD) and No Deficit groups. Content validities of the instruments were supported using published reports; though educational experts further revised RANS. It found a significant inverse correlation between the PA test score and RAN (mistakes and time) score ($r = -.44$; $p < .001$), and a significant positive correlation between RAN mistakes and RAN time ($r = .47$; $p < .001$). Acceptable internal reliability of the RANS was demonstrated by a Cronbach's alpha test coefficient of $\alpha = .85$ ($> .70$; acceptable). High inter-rater reliability tests were observed for the three instruments ($r \geq .86$, $p < .001$). The three instruments can predict reading difficulties and dyslexia in Arabic-speaking populations

Biography

Dr. Mahmoud Gharaibeh is an Associate Professor at Al-Ain University in Abu Dhabi, UAE, specializing in Language Disability, dyslexia, and special education. Gharaibeh holds a Ph.D. in Language Disability from the United Arab Emirates University and has a Master's degree in Speech, Language, and Communication from City, University of London. With over two decades of experience, Dr. Gharaibeh has dedicated his career to developing inclusive educational strategies and programs tailored for diverse learners, particularly those with disabilities. Dr. Gharaibeh is an active researcher and has received a three-year grant from the Ministry of Education in the UAE to enhance assessment tools for disabilities. Gharaibeh has published over 30 articles in reputable Scopus-indexed journals focusing on reading, dyslexia and inclusive education methodologies. Gharaibeh is also an Editorial Board Member for journals and serves as a reviewer for multiple international journals.

**Manuel F. López-Aranda**

Departamento de Biología Celular, Genética y Fisiología, Facultad de Ciencias, Universidad de Málaga, Málaga, Spain

Instituto de Investigación Biomédica de Málaga (IBIMA), Málaga, Spain

Severe postnatal infections increase autism risk in genetically predisposed males: Mechanistic and therapeutic implications

Emerging evidence indicates that environmental insults, particularly immune activation early in life, can be a risk factor for neuropsychiatric disorders. Early-life environmental factors, especially immune system activation, can amplify the effects of genetic vulnerability in shaping neuropsychiatric outcomes. Tuberous Sclerosis Complex (TSC), a genetic disorder affecting ~1 in 6,000 individuals, carries a markedly elevated risk for Autism Spectrum Disorder (ASD), with prevalence rates of 40-60% compared with 1-2% in the general population. In this study, we investigated whether early postnatal immune activation influences social and cognitive phenotypes in *Tsc2*^{+/-} mice, a model of TSC.

Our findings show that immune challenges during early development produced striking social impairments specifically in males, including deficits in social memory and atypical communication. Mechanistically, these alterations were linked to dysregulated Mammalian Target of Rapamycin (mTOR) dependent interferon signaling and microglial dysfunction. Remarkably, treatment with rapamycin both prevented and durably reversed the social memory deficits, while genetic deletion of the interferon receptor IFNAR1 conferred similar protection against the adverse effects of early immune activation in male *Tsc2*^{+/-} mice.

To determine the relevance to humans, we analyzed medical records from over three million children. We found that severe infections requiring hospitalization during early life were significantly associated with later ASD diagnosis in boys but not in girls, paralleling the sex-specific vulnerability observed in mice.

Together, these findings uncover a mechanism through which severe postnatal infections and genetic predisposition converge to disrupt social and communication development. They also point to potential therapeutic opportunities targeting mTOR and interferon pathways in neurodevelopmental and neuropsychiatric disorders.

Biography

Manuel F. López Aranda, Ph.D., is a Distinguished Researcher at the University of Málaga (Spain) under the Beatriz Galindo Program. Manuel F. López Aranda earned his Ph.D. in Neuroscience from the University of Málaga and completed postdoctoral training at the University of California, Los Angeles (UCLA), where he later served as Assistant Project Scientist. His research investigates neurobiological mechanisms of learning and memory deficits in disorders such as Autism Spectrum Disorder and Alzheimer's disease, with emphasis on microglia and immune activation. Manuel F. López Aranda has published in high-impact journals, including Science, Nature Reviews Neuroscience, and Science Advances.



Mario C Salvador

Sant Cugat del Vallés, Barcelona, Spain

From connection to survival, a topography of our survival system

This lecture presents a methodology informed by polyvagal theory (from connection to survival) about how we organize our survival mechanisms (psychological defenses) when the search for social connection has failed or is explicitly harmful. It addresses the importance of relationships, specifically the therapeutic relationship, in helping the patient's system (their nervous system) return to a relationship that is now perceived as safe and reliable.

An illustrated topographical model of the organization of the defensive system is presented. At the top are the defenses most dependent on learning: introjects and social masks; these still work to maintain the bond with others, at the cost of inhibiting a part of our authenticity. In the middle are what the author calls archeopsychic defenses, which are more extreme and highly phobic in relation to others. These attempt to suppress, even amputate, internal vulnerability. Also at this level are interpersonal defenses such as mistrust. They severely disrupt both internal and interpersonal contact, leaving our psychological wounds in solitude and therefore inaccessible to human relationship. This prevents their healing.

The model's proposal guides the therapist to offer this entire defensive system, which defends itself and reacts to the relationship with a caregiver (transference), in more extreme cases excluding the relationship with another as a means of appeasing and healing pain, a defense that provides respect and compassionate presence in which the defenses are given the opportunity to feel honored in their functions and fears. In this new relationship, the defenses experience the paradox of feeling connected, sharing the suffering of having been in harmful past relationships. The rejected, banished parts of the self are placed on the lower level of the topography. These remain excluded from internal life and external relationships with others. Psychotherapy aims to access the wound in order to facilitate its processing and transformation in a kind and compassionate manner.

The dimension of the Compassionate Inner Observer (self-compassionate mindfulness) occupies its own place in the topographical system as an integrative dimension of the inner world. From this dimension of consciousness, the patient can embrace and honor their pain and history of survival so that it can finally be processed, transformed, and consolidated into a new perception of self and others. This is where the self-healing capacity of our brain-body resides. The end result of any psychotherapy will be for the patient to maintain a compassionate connection with their inner world of sensations, emotions, and experience.

Biography

Psychologist and specialist in clinical psychology, he is co-director of ALECES, Institute of Integrative Trauma Psychotherapy with 40 years of experience. He is an international trainer, current president of the Iberian Association of Brainspotting and Founder of the Ibero-American Association of Psychotrauma (AIBAPT). Is an international trainer, lecturer and author of the 5 books: Beyond the Self: Healing Emotional Trauma and Brainspotting (2016, 2022), Who Am I? from dissociation to integration, (2022), and The Two Faces of Nina (2024), Our Internal Citadel (2025) and co-author of the book The Power of Brainspotting (2018).

**Mehmet Erkan Ustun**

Private Office, Türkiye

Microsurgical flow reconstruction targeting adventitial layer for long-segment cervical ICA tubular stenosis accompanying with distal grade 2 or 3 kinking: Clinical outcomes of 19 cases

Objective: To evaluate the efficacy of perivascular sympathectomy in managing long-segment tubular stenosis of the cervical segment (C1) Internal Carotid Arteries (ICAs) accompanying Grade 2 or 3 kinking distally. Due to the lesion's deep and distal location, conventional medical and endovascular interventions and proximal to distal anastomosis or bypass procedures may not be viable options for this condition.

Methods: We retrospectively analyzed the clinical outcomes of 19 patients (10 males, 9 females; age range 43–66 years) who underwent perivascular sympathectomy for long-segment (>5 cm) tubular stenosis of the cervical ICA, co-occurrence with distal Grade 2 or 3 kinking, between 2017 and 2022. The authors investigated the symptoms such as hemiparesis, motor dysphasia, focal epileptic seizures, tinnitus, and migraine attacks associated with transient ischemic attacks (TIAs) pre- and postoperatively at the 1,3,6,12,24 month follow-up. Radiological assessment and follow-up were conducted using MR/CT angiography and CT/MR perfusion studies. Paired t-tests were used to compare preoperative and postoperative measurements. Significance was set at $p < 0.05$. Analyses were performed using SPSS version 26.0.

Results: Postoperatively, 8 out of 9 migraine sufferers (88.9%) reported complete cessation of symptoms, while one patient (11.1%) experienced a reduction in frequency and intensity. In cases of epileptic seizures, 5 out of 6 patients (83.3%) reported complete resolution, with one patient (16.7%) experiencing reduced seizures. All 15 patients (100%) with initial hemiparesis (40–50% loss of motor function) and 8 with motor dysphasia showed complete recovery postoperatively. Additionally, 8 out of 10 patients (80%) with tinnitus showed significant improvement, while two (20%) reported no change. No TIA attacks were observed among the patients during the mean two-year follow-up period.

Conclusion: Adventitia layer-focused arteriolysis and perivascular sympathectomy have demonstrated promising results in alleviating symptoms and preventing recurrent cerebrovascular events in this cervical ICA pathology. These findings support the potential of this procedure as an effective treatment option for this challenging vascular condition.

Biography:

Mehmet Erkan Ustun completed his medical education at Hacettepe University, School of Medicine in 1986. Mehmet Erkan Ustun then pursued his residency training in Neurosurgery at Ankara University, Avicenna Hospital, completing it in 1992. During this period, Mehmet Erkan Ustun had the opportunity to train under renowned experts in vascular and functional neurosurgery, which greatly shaped his professional development. In 2009, Mehmet Erkan Ustun was promoted to the academic rank of Professor in Neurosurgery. Subsequently, Mehmet Erkan Ustun earned a PhD in Anatomy in 2011, further deepening his understanding of neuroanatomical structures and functions.

Today, in addition to performing standard neurosurgical procedures, Mehmet Erkan Ustun specialize in vascular and functional neurosurgical operations. These procedures aim to restore lost or impaired neurological functions, often providing significant improvements in patients' quality of life. Mehmet Erkan Ustun have over 1500 citations in journals listed in SCI (Science Citation Index) or SCI-Expanded. Using new techniques in the treatment of carotid and vertebrobasilar insufficiency, Mehmet Erkan Ustun operated on more than 200 patients (83 with carotid and 122 with vertebrobasilar insufficiency). We have identified a novel etiopathogenetic factor in carotid insufficiency, which has been published in the journal Brain Sciences.



Efecan Cekic , İskender Samet Daltaban , Mehmet Erkan Ustun*

Private Office, Türkiye

Complementary advantages of microsurgical treatment for vertebral artery dolicoarteriopathies: Mitigating symptoms of restless leg syndrome in refractory vertebrobasilar insufficiency

Objective: This retrospective study examines the impact of microsurgical treatment on vertebral artery (VA) dolicoarteriopathies and associated restless leg syndrome (RLS) in patients with refractory vertebrobasilar insufficiency (VBI).

Patients and methods: We analyzed 78 patients with grade 2 and 3 kinks, and found out that the targeted microsurgical interventions, primarily designed to address VBI, improved secondary RLS symptoms in 12 patients. Procedures included arteriolysis and, depending on severity, grafting. Statistical analysis was conducted using Stata 16 (StataCorp LP, Texas, USA).

Results: In twelve patients aged 55 to 72 years with refractory VBI and drug-resistant RLS, micro-neurosurgical correction of V1 segment dolicoarteriopathy, abnormal elongation and kinks in the artery, demonstrated promising outcomes. Postoperatively, 83.33% (10 patients) reported complete resolution of RLS symptoms, and 16.66% (2 patients) experienced partial symptom relief ($p < 0.05$).

Overall, 86.8% of various VBI-related symptoms were significantly improved or resolved ($p < 0.05$). The microsurgical technique, avoiding traditional flow-arresting procedures, proved to be highly effective in this preliminary study with no mortality and minimal temporary complications, underscoring its potential treatment avenue for such complex neurovascular conditions.

Conclusion: This study illuminates the relationship between VBI and RLS, proposing a potential vascular etiology for RLS, and highlights the need for a broader diagnostic approach for patients with refractory VBI.

Biography:

Mehmet Erkan Ustun completed his medical education at Hacettepe University, School of Medicine in 1986. Mehmet Erkan Ustun then pursued his residency training in Neurosurgery at Ankara University, Avicenna Hospital, completing it in 1992. During this period, Mehmet Erkan Ustun had the opportunity to train under renowned experts in vascular and functional neurosurgery, which greatly shaped his professional development. In 2009, Mehmet Erkan Ustun was promoted to the academic rank of Professor in Neurosurgery. Subsequently, Mehmet Erkan Ustun earned a PhD in Anatomy in 2011, further deepening his understanding of neuroanatomical structures and functions.

Today, in addition to performing standard neurosurgical procedures, Mehmet Erkan Ustun specialize in vascular and functional neurosurgical operations. These procedures aim to restore lost or impaired neurological functions, often providing significant improvements in patients' quality of life. Mehmet Erkan Ustun have over 1500 citations in journals listed in SCI (Science Citation Index) or SCI-Expanded. Using new techniques in the treatment of carotid and vertebrobasilar insufficiency, Mehmet Erkan Ustun operated on more than 200 patients (83 with carotid and 122 with vertebrobasilar insufficiency). We have identified a novel etiopathogenetic factor in carotid insufficiency, which has been published in the journal Brain Sciences.

**Michael Altenhofer**

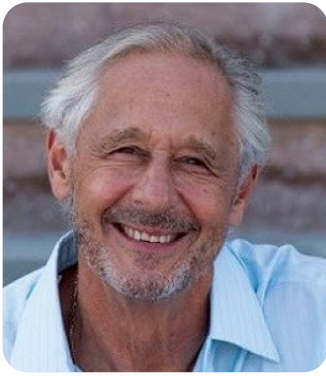
VR Coach GmbH, Salzburg, Austria

Virtual reality in addiction treatment

The main component of sustainable addiction treatment is establishing coping strategies in high-risk situations to avoid relapses. The problem is that these are very theoretical exercises. In virtual reality therapy, these risk situations are experienced, and the craving is deliberately provoked to test and improve the effectiveness of the coping strategies. Patients experience typical consumption situations in homes, while shopping, or at parties during the VR exposure. They learn to handle triggers confidently and practice alternative actions to consumption. This makes the therapy more vivid and practical. From learning psychology, we know that content designed interactively has about a 90% probability of being recalled when needed. This also benefits addiction therapy.

Biography

Michael Altenhofer is a psychological advisor specializing in behavioral therapy. In 2019, Michael founded VR Coach GmbH to develop interactive VR therapy software for addiction treatments and other mental health disorders. Michael supports university hospitals in Frankfurt and Tübingen in implementing various research projects. The VR system is already in daily practical use in Germany, Canada, Türkiye, England, and Hong Kong's.



Dr Michael Conforti

The Assisi Institute, United States

"O Teach me how I should forget to Think...Thou canst not teach me to forget* Addiction to Forgetting: Shackled to a sisphysian patterns of repetition

From Latin addictionem (nominative addictio) "an awarding, a delivering up," and from the verb addicere "to addict, to deliver, award, consecrate, to sacrifice

We are addicted to many things, but perhaps nothing more pernicious, contagious, or enduring as the addiction to forgetting and its twin--denial. To forget is an attempt to remove from our heart, a central aspect of life, exiling, forcing memories into the darker regions of the unconscious where they fester, and live hidden from consciousness, while actively sabotaging our psychological and spiritual growth. We have learned a great deal from the fields of psychology and thermodynamics about the effects of damming up energy. Ultimately, psychic energy, like all other forms of energy will not be contained or thwarted, as it will always find its way to expression.

This natural law is true of the migration of memories is especially evident in Shakespeare's Macbeth. Here the haunting, never-ending presence of their murder of King Duncan brings both Macbeth and Lady Macbeth to their ruin, and ultimately to Lady Macbeth's death. In a desperate attempt to escape from the inner madness caused by the endless flood of unwanted memories of her merciless part in the Kings brutal murder, she commits suicide.

On the other hand, memories are revered and play a central role in many of the world's religions. In Judaism, we learn, "That to forget is to abandon, to forget is to repudiate...without memory truth becomes only the mask of truth. Remember that only memory leads man back to the source. Only memory matters. No not a phantom which I see only at midnight, I know one cannot see a memory. But I can. I see it as the shadow of a shadow which constantly withdraws and turns inwards... Then I hear it cry out, I hear it whimper softly. It is gone, but I see it as I see myself."

Far too many drunken and drug induced nights lived as a desperate attempt to outrun the ghosts that can never be evaded or denied. Regardless of the wreckage and ruin caused by the addictions, and the never ending bleeding in of our memories, like Sisyphus we try day in and day out to push that stone up the mountain only to see it fall back down in the morning. An all too familiar and endless

cycle of pain, and forgetting, until we find the strength, to face those ghosts whose presence never let forget the life we have lived or feared to live. In such moments, grace allows the healing process to begin. Hand and hand in this dismantling of the addictive life, is the need to remember. Now out of the shadows and away from those unsavory denizens frequented for far too long, allowing us to imbibe on some exotic elixir promising forgetfulness, perhaps we can finally look at our self in the mirror without contempt feel compassion and the courage to begin the life that has been waiting for is in potentia for so many years.

Healing process begins helping us to begin the process of dismantling their addiction and to remember and all those moments and experiences which have shaped our lives. Now out of the shadows and those denizens we have frequented for far too long, perhaps we can finally look at our self in the mirror without contempt and now for the first time in more years than we care to remember, feel compassion for the life we now have to live.

Suicide is not the only way we try to avoid unwanted memories. Many people turn to alcohol and drugs as a desperate attempt to outrun their pain that can never be evaded or denied even through the reliance on these substances. Like the mythic Sisyphus, they try yet again, day in and day out to push that stone up the mountain only to see it fall back in the morning. This endless cycle repeats until they find the strength, courage and grace to face soberly the consequences of their transgressions, and to consciously live with and suffer the guilt and shame for what they have done, so that their life's energies are again free to begin the process of dismantling their addictions and begin the process of redeeming their life's meaning. The wisdom of these stories encourages us to listen to the inner pleas offered by Psyche, who holds a promise of a future we had given up on.

Biography

Dr. Michael Conforti is a Jungian analyst and the Founder and Director of the Assisi Institute. He is a faculty member at the C.G. Jung Institute of Boston, and New York, and for many years served as a Senior Associate faculty member in the Doctoral and Master's Programs in Clinical Psychology at Antioch New England. A pioneer in the field of matter-psyche studies, Dr. Conforti is actively investigating the workings of archetypal fields and the relationship between Jungian psychology and the New Sciences. He has presented his work to a wide range of national and international audiences, including the C.G. Jung Institute - Zurich and Jungian organizations in; Australia, Austria, Canada, Colombia, Denmark, Ecuador, Greece, Indonesia, Israel, Italy, Romania, Russia, South Africa, the Ukraine and Venezuela.

He is the author of *Threshold Experiences: The Archetype of Beginnings* (2007) and *Field, Form and Fate: Patterns in Mind, Nature and Psyche* (2002). His articles have appeared in *Psychological Perspectives*, *The San Francisco Jung Institute Library Journal*, *Roundtable Press*, *World Futures: The Journal of General Evolution*, and *Spring Journal*. His books have been translated into Italian, Russian, and Spanish. Dr. Conforti maintains a private practice in Mystic, CT and consults with individuals and corporations around the world. He provides his insights as a sought-after consultant to businesses, government institutions, and the film industry. He was selected by The Club of Budapest and the University of Potsdam to be part of a 20member international team of physicists, biologists, and dynamical systems theorists to examine the role and influence of informational fields. He is a recipient of the Vision Award presented by the Association for the Advancement of Psychoanalysis.

**Nikki Mattocks**

Kings College London, United Kingdom

Lived experience of addiction - Recovery through the lens of Maslow's hierarchy of needs

To quote Gabor Mate, it's not "why the addiction, it's why the pain?" This question would have helped me a lot when I was in active addiction. After all, for me, using my drug of choice was a way of escaping reality, numbing my intolerable feelings, and surviving the unimaginable. Maslow's hierarchy of needs has been a long admired theory, with its applications still relevant today.

To demonstrate, I will share how leaving a violent relationship, securing suitable housing, and financial stability were the first steps in achieving sobriety. My presentation will take you on a journey, sharing how addiction impacted every aspect of my life for 5 years; work, education, relationships, mental and physical health, and my self-esteem. I will also emphasize the importance of peer support, therapy, and compassion in helping individuals achieve recovery - and maintain it.

Biography

Nikki Mattocks has had a significant impact through using her lived experience of trauma, distress and mental health issues to educate, inform and inspire. Since the age of 16, Nikki has been sharing her story in the media, at universities, even internationally at the European Parliament and with the World Health Organization. Nikki is also the author of 5 books, multiple academic papers, and in her spare time hosts the podcast 'It Can Happen to Anyone'. Ultimately, her goal is to help others feel less alone.

**Nile Stanley**

University of North Florida, United States

Poetry Therapy (PT): A promising frontier for addiction treatment and resilience building

Poetry therapy embodies a compassionate, empowering blend of art and science, offering an integrated approach to addiction treatment. By facilitating emotional expression, enhancing insight, and nurturing community, PT can spark lasting change. Furthermore, long-term data from a non-profit, northeast Florida organization that uses the arts and poetry to support underserved youth for 12 years, demonstrates improvements in emotional awareness, stress reduction, resilience, and adaptive coping—key factors in preventing return in incarceration, addiction relapse, and supporting sustained recovery. One of the remarkable qualities of poetry is its portability; it can be accessed anytime and anywhere, making it a simple yet powerful tool to promote joy and mental well-being. As technology advances and research deepens, integrating PT into mainstream addiction services promises more accessible, personalized, and holistic recovery pathways. Embracing this poetic revolution can transform lives and redefine addiction care's future.

Biography

Dr Nile Stanley is an Associate Professor of Literacy Education and the Arts at the University of North Florida. He has 36 years of experience as a reading specialist, poetry educator, artist in residence, educational diagnostician, and visiting scholar of narrative psychology in China, Germany, and Vietnam. He has published research in the *Journal of Poetry Therapy*, *Reading Psychology*, and *Language Magazine*. He is an editorial board member of the *Journal of Poetry Therapy* and a past editor of the *Florida Reading Journal*. Dr Stanley is a founding board member of Hope at Hand, Inc., a non-profit centre that provides art and poetry interventions for underserved youth. The AETNA Insurance Company awarded Hope at Hand, Inc., as one of the best non-profit mental health providers in North Florida.



Peyman Esmaeili Fard Barzegar^{1*}, Arbues Santa Cruz Minano¹, Abbas Raisi², James M. Hook³, Keng-Yin Lai¹, Antonio Lauto¹

¹School of Science, Western Sydney University, Penrith, NSW, Australia

²Department of Clinical Sciences, Faculty of Veterinary Medicine, Lorestan University, Khorramabad, Iran

³School of Chemistry, University of New South Wales, Sydney, NSW, Australia, 2052

Progress in suture-free nerve repair: Integrating novel bioadhesives with electrical stimulation for enhanced regeneration

Peripheral Nerve Injury (PNI) is a major clinical challenge, with symptoms depending on the severity of axonal damage. Although the mechanisms of nerve degeneration and regeneration are increasingly understood, achieving complete functional recovery remains difficult. Current treatments often result in slow and incomplete regeneration.

In addition to traditional surgical repair, several non-surgical approaches have been explored to enhance nerve healing. Bio adhesives have emerged as alternatives to sutures for nerve coaptation, including self-sealing and light-activated adhesives. Fibrin glue is one of the most widely used due to its biocompatibility; however, it has limited adhesive strength and mechanical stability, which restricts its effectiveness. To overcome these limitations, researchers have developed modified fibrin formulations and alternative materials such as chitosan-based adhesives, which provide improved mechanical properties and better support for nerve regeneration.

Another promising strategy is Electrical Stimulation (ES), which has been shown to accelerate axonal regeneration and improve functional outcomes. ES can be delivered through direct wired systems or wireless technologies, reducing the need for complex implanted devices.

In our study, we use a wireless graft-antenna system to deliver electrical stimulation at the nerve injury site to enhance regeneration. The therapeutic effects are evaluated through behavioral, electrophysiological, and histological assessments, including BBB locomotor scoring, von Frey sensory testing, Hargreaves test, electrophysiology, and histological analysis, to measure functional recovery and nerve regeneration.

Biography

Meet Peyman, a Doctor of Veterinary Medicine (DVM) graduate who is currently pursuing a Ph.D. in neurosciences and biotechnology to evaluate the application of a novel biomaterial on sciatic nerve and spinal cord and increasing the healing speed via laser and wireless electromagnetic field stimulation, at Western Sydney University, Australia. Meanwhile, I am the research assistant (RA) and teaching assistant (TA) at School of Science. I have a keen interest in research in regenerative medicine, neuroscience, biotechnology and biomaterials and previously spent two years as a veterinarian and surgeon in Iran.

Robert Schwartz

University of Pittsburgh School of Medicine, United States

A global affective state variable for consciousness-based models and digital neuropsychiatry

Contemporary neurology and psychiatry rely on diverse mood and symptom scales, yet most affective measures remain post hoc and weakly tied to explicit models of consciousness. This limits cross-study comparability, integration with computational frameworks, and translation into digital biomarkers. The States of Mind (SOM) framework addresses this gap by deriving a single affective state variable from a formal reflexive architecture of consciousness. Building on Lefebvre's algebraic model of self-awareness, SOM represents positive and negative evaluations of self and other across three levels of reflection, yielding an emotional balance ratio PPN bounded between 0.00 and 1.00.

Boolean computations over this architecture generate a small set of discrete balance-point states (approximately .50, .63, .72, .81, .88) corresponding to dysfunctional, coping, normal, optimal, and peak psychological functioning. These balance points are produced by the model itself rather than inferred from empirical curve fitting, and have shown convergent support across clinical trials, longitudinal case studies, and cross-cultural samples. In computational terms, SOM is proposed to function as a global affective readiness-to-respond variable. Within this framework, higher SOM balances (optimal, peak) are hypothesized to favor exploratory, opportunity-seeking policies, whereas lower balances (subnormal, dysfunctional) are hypothesized to constrain behavior and promote risk-avoidant or threat-focused policies.

This presentation outlines the SOM architecture, reviews key empirical findings, and illustrates how the SOM state variable can serve as a portable affect index for neurology and neuropsychiatry. Because SOM is measure-agnostic—it can be instantiated wherever positive and negative affect are assessed—it is readily implementable as a candidate digital biomarker in self-monitoring platforms, mobile applications, and wearable devices. We discuss implications for individualized tracking of treatment response, resilience, and relapse risk, and for integrating affect more rigorously into AI-assisted neurology and brain-inspired systems.

**Roger H. Coletti, MD**

Interventional Health, PA, Lewes, DE, USA

Putting an end to chronic opioid use for chronic back pain with the CMECD® procedure

Chronic back pain is likely the most common indication for the chronic use of opioid medications. Even patients that undergo back surgery have a significant risk of chronic back pain. This is called "Post Laminectomy Syndrome" and is reported in 20-40% of patients following back surgery. Chronic muscle spasm is frequently if not predominantly the cause of chronic back pain. Despite the availability of multiple modes of therapy, it is uncommon for cessation of opioid use once begun for this indication. The CMECD® procedure that I have developed and use for the past 15 years provides a unique method of relieving chronic muscle spasm. It involves EMG guidance to identify muscles in chronic spasm demonstrating spontaneous electrical activity (SEA) that is responsible for maintaining the muscle in chronic spasm. Injection to all sites in the muscle demonstrating SEA with a cocktail of phenoxybenzamine/lidocaine/dexamethasone resolves the SEA. The effect is long lasting as the phenoxybenzamine forms a covalent bond on the alpha-adrenergic receptor and replacement of the inactive receptors takes two to three months. Muscle relaxation and pain relief is immediate and long lasting. Patient surveys showed statistically significant relief of chronic pain. It was also demonstrated that the length of time the muscle was in spasm did not affect the success in relief of spasm and pain. Muscles in chronic spasm for over 20 years were as successfully treated as those in spasm for a few months. Patients with relief of chronic pain were frequently able to stop use or at least decrease use of opioid drugs. Phenoxybenzamine is an FDA approved drug used in an off-label manner in the CMECD® procedure and can be compounded by any sterile compounding pharmacy. Information on the procedure is available at the physician teaching website CMECD.info. The accompanying presentation will provide further background and practical information for the procedure.

Biography

Dr. Coletti received a BA from Georgetown University College of Arts and Sciences. Dr. Coletti received a Master of Arts from Hofstra University. Dr. Coletti received his MD from State University of New York at Downstate. His medical internship and residency was performed at Nassau County Medical Center in East Meadow, NY. Dr. Coletti did two years of cardiology fellowship at Columbia Presbyterian Medical Center in New York and then transferred to Westchester County Medical Center where Dr. Coletti completed one year of Interventional Cardiology fellowship. Dr. Coletti was awarded FACC, FASNC, and FSCAI fellowship status. Current interest is chronic muscle spasm and pain.



Salim Hirani

Neurophysiology Department, Ysbyty Gwynedd Hospital, Bangor, North Wales, UK, LL57 2PW

Refine Carpal Tunnel Syndrome (CTS) nerve conduction grading tool with case presentation

Background: The severity of Carpal Tunnel Syndrome (CTS) may be categorized in a number of ways utilizing one of a range of presently available grading tools. Detail grading system explained in this paper with case presentation.

The aim of this research is to establish, using the best available evidence, a clinically appropriate revision of the current CTS nerve conduction grading tool, and to give idea to improve the present grading system which is 25 years old. The revised grading system confirms the previously publish research paper in 2019.

The proposed revised grading system is based on descriptive categories, ranging from Normal to Early Sensory, Mild Sensory, Mild Sensory Motor, Moderate Sensory, Moderate Sensory Motor, Severe Sensory Motor, Extremely Severe Sensory Motor, and Complete absence.

Method: One case of each grading category was introduced for the understanding of each grade. All previously raised questions and their answers was also included which was raised in different National and International Neurophysiology conferences.

Result: Each grade shows a clear information of each grading which was previously recommended in my research paper in 2019. This research paper was published in BMC Journal in 2019.

Conclusion: The revised grading tool clearly offer a more numerical grading to the Clinical Physiologist. This could help the surgeon to ascertain the level of severity in order to decide on either a conservative or surgical approach to treatment if they decide to use the proposed grading.

Key takeaways for the audience: The revised grading tool could offer a more numerical grading to the Clinical Physiologist and could help the surgeon to ascertain the level of severity in order to decide on either a conservative or surgical approach to treatment if they decide to use the proposed grading which could support them to defend their decision in cases of litigation.

Biography

My name is Salim Hirani and I studied BSc in Karachi University, Pakistan in 1990. I am Reg. Technologist from ECNE board UK in 1999. I have completed my on-the-job training in the field of Physiological Measurement services of one year 6 months from The Aga Khan University Hospital, Karachi Pakistan in 1989. I am registered with RCCP. I have almost 28 years' experience in Neurophysiology and 5 years in Cardiopulmonary field. I worked in three different countries in the field of Neurophysiology. I established a new Neurophysiology department in Torbay Hospital. My paper on Refine grading of CTS published in MBC open access journal which achieve great welcome. Few other research papers has been published on ulnar nerves study in different stages, across wrist and across elbow and double crush syndrome which are available on google website as open access.



Salim Hirani

Neurophysiology Department, Ysbyty Gwynedd Hospital, Bangor, North Wales, UK, LL57 2PW

Placement of reference electrode position in motor nerve conduction study of ulnar nerve while recording from FDI

Background: Ulnar nerve is the second most common entrapment neuropathy in the hand at the wrist and at across elbow. There are various techniques have been developed to diagnosed the entrapment. Ulnar nerve supply to wrist at the two main muscles First Dorsal Interosseous (FDI) and Abductor Digiti Minimi (ADM). Many research shows that FDI muscle is used to diagnose an early entrapment across elbow. Recording from FDI muscles, there is an issue in placing the reference electrode placement due to its positive deflection.

The aim of this research to identify which is the best position to place the reference electrode in FDI muscles.

Method: A total of 46 hands were included in this study. Data was collected based on the extensive and detailed description mentioned in different research papers. The tests were performed by a qualified clinical physiologist (Neurophysiology) using a Key point 9033A07 machine, used in line with departmental protocol (Ulnar nerve screening protocol 1.1, 2020). All data was recorded numerically to ensure methodological reliability.

Result: Out of 46 hands tested for the nerve conduction study (NCS) by placing reference electrode in five different places i.e. tendon of the FDI muscles at the base of digit II, over the thumb, tendon of ADM muscles at the base of digit V, At the radial pathway of the wrist and other hand at the FDI tendon. Tendon of the FDI muscles at the base of digit II shows positive deflection in all hands with amplitude rage between 6-15 mV. Over the thumb show the baseline slightly elevated to get accurate distal motor latency with amplitude between 5-8mV. And tendon of ADM muscles at the base of digit V shows correct baseline for accurate distal motor latency with the amplitude rage 10-18mV.

Conclusion: This study shows that to record the best and clear response by placing the reference electrode at the tendon of ADM muscles at the base of digit V is more reliable as compare to other two areas.

Key takeaways for the audience It is crucial to place the reference electrode in proper place with the normative data should be collected.

Biography

My name is Salim Hirani and I studied BSc in Karachi University, Pakistan in 1990. I am Reg. Technologist from ECNE board UK in 1999. I have completed me on the job training in the field of Physiological Measurement services of one year 6 months from The Aga Khan University Hospital, Karachi Pakistan in 1989. I am registered with RCCP. I have almost 28 years' experience in Neurophysiology and 5 years in Cardiopulmonary field. I worked in three different countries in the field of Neurophysiology. I established a new Neurophysiology department in Torbay Hospital. My paper on Refine grading of CTS published in MBC open access journal which achieve great welcome. My next paper on grading of ulnar nerve at elbow published in Research Gate and is almost ready for publication in other journal. Two other research is under process.



San-Yuan Huang*, Shin-Chang Kuo, Mei-Chen Shih

Department of Psychiatry, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan, R.O.C

Differential effect of the dopamine genotype on inflammatory cytokine responses during abstinence in amphetamine-dependent

Amphetamine exposure impacts innate and adaptive immunity, and DRD3 may modulate the effect of amphetamine on the immune response. We assessed the immune-cytokine markers in 72 female patients with Amphetamine Dependence (AD) at baseline and after 4 weeks of drug abstinence and in 51 healthy women. A multiplex magnetic bead assay was used to measure plasma cytokine expression levels in all participants simultaneously, and the DRD3 rs6280 polymorphism was genotyped in patients. We demonstrated an increase in the T helper 1 (Th1) cytokines (IL-2), Th2 cytokines (IL-4, IL-5, IL-6, and IL-10), and other cytokines (IL-1 β) in the entire AD cohort. A similar cytokine pattern, along with significantly decreased IL-8 and IL-10 levels, was observed after 4 weeks of abstinence. Among AD patients with the DRD3 rs6280 TT genotype, the cytokine expression profile was consistent with that of the total AD cohort at baseline and revealed a significant down-regulation of plasma levels of Th1, Th2, and other cytokines, except for IL-6, after 4 weeks of abstinence. In the AD group with DRD3 rs6280 C allele carriers, we found that IL-2 levels were significantly higher than those of healthy controls at baseline and remained higher, accompanied by a borderline increase in IL-4, IL-6, and IL-1 β levels after 4 weeks of abstinence. Our results suggest that chronic use of amphetamine increased both pro- and anti-inflammatory cytokines in AD patients, indicating the immune imbalance that may persist for 4 weeks or more. Besides, the DRD3 rs6280 TT genotype may be associated with favorable recovery in general inflammatory cytokines during the period of abstinence.

Biography

Dr. San-Yuan Huang graduated in medicine at the National Defense Medical Center, Taipei, Taiwan, ROC. San-Yuan Huang completed his psychiatry residency at Tri-Service General Hospital, Taipei, Taiwan. After completing his psychiatry resident training, Dr. Huang received his Ph.D. degree from the National Defense Medical Center. His academic research focuses on gene-gene and gene-behavior-environment interaction in substance use disorders such as alcohol dependence, depressive alcoholism, and other illegal drug abuse. After earning a Ph.D. degree, his main academic interests/ research are in gene, brain image with SPECT and PET, psycho-immunology in addiction and mental-related disorder.

**Aashoo Joshi¹, MD, Sarvesh Amatya^{2*}, Joey Huang³**

¹Florida Atlantic University, Charles E. Schmidt College of Medicine*, Boca Raton, Florida, USA

²Alexander Dreyfoos School of the Arts, West Palm Beach, Florida, USA

³Columbia University, Fu Foundation School of Engineering and Applied Science, Department of Computer Science, New York, USA

Precision glioma grading using voting-based feature selection and ensemble machine learning with clinical and molecular data

Approximately 80,000 individuals in the United States are diagnosed annually with primary brain tumors, with gliomas accounting for nearly 25% (20,000 cases annually). Gliomas range from low-grade tumors median-survival sixteen years to high-grade malignancies glioblastoma multiforme (GBM)—median-survival eight months. In 2021, The World Health Organization released a revised classification of gliomas based on molecular features. Molecular information has greatly enhanced precision diagnosis and facilitated treatment decisions. However, as molecular profiling techniques advanced, molecular mutation landscape data for gliomas continued to expand, necessitating testing across the growing number of mutations that numbers at least twenty by now. Such expensive molecular testing imposes a massive burden on cost and resources.

Using publicly available TCGA glioma data, we implemented a voting-based feature selection framework integrating seven complementary feature selection methods. The selected features were evaluated using an ensemble of six machine-learning(ML) classifiers, producing 57 baseline ensemble configurations, which were expanded to 171 through the addition of hard voting, soft voting, and stacking strategies. The voting based and ensemble method was compared with standard Lasso-method for feature efficiency and diagnostic accuracy.

The voting-based framework reduced the optimal feature set to eight molecular and clinical variables from the original set of 23 features, compared to fourteen features selected by Lasso, while maintaining similar predictive performances. Stacking ensembles—particularly SVM+SGD and AdaBoost+SVM+SGD—achieved the highest mean accuracy (0.881), and stacking ensembles using Lasso selected features reached a comparable peak accuracy (0.882) for glioma classification. These findings demonstrate that voting-based feature selection and ensemble method significantly outperforms Lasso in feature efficiency while maintaining the same high predictive accuracy. By using a streamlined molecular feature set, this approach achieves cost-effective glioma grading with high diagnostic accuracy, while improving equity in healthcare access.

Biography

Sarvesh Amatya is a tenth-grade student at Alexander W. Dreyfoos School of the Arts in West Palm Beach, Florida, where he is currently ranked first in a class of 365 students. He has been pursuing research in artificial intelligence since seventh

grade and has presented his work at the Junior Science and Humanities Symposium (JSHS) and local chapters of the International Science and Engineering Fair (ISEF). This year, he will present his research at the Florida state level. In addition to his academic pursuits, Sarvesh is an accomplished pianist who has received awards in national competitions and performed at Carnegie Hall in New York. For this project, he worked under the mentorship of Dr. Ashoo Joshi and will be presenting the research on her behalf.

**Sleh Eddine Saadi**

Mental Health Service, Mohamed Tahar Maamouri Hospital, Mrazka, 8000 Nabeul, Tunisia

Personality traits and problematic online gambling: A study among Tunisian internet bettors

Online pathological gambling represents an increasingly prevalent form of behavioral addiction, driven by the rapid expansion of digital technologies and the accessibility of gambling platforms. This study sought to examine the associations between problematic online gambling and various personality traits, as defined by the Five-Factor Model. A total of 120 participants aged over 18 years were recruited for this cross-sectional investigation. Personality traits were assessed using the Big Five Inventory-2 (BFI-2-S), which measures five broad domains: neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness. The severity of problematic gambling behavior was evaluated using the Problem Gambling Severity Index (PGSI). The Mann–Whitney test revealed that individuals classified as problematic gamblers obtained significantly higher scores in neuroticism and significantly lower scores in conscientiousness than those without problematic gambling behavior. Spearman's rank correlations further supported these findings, indicating a strong positive association between neuroticism and gambling severity, and a moderate negative association between conscientiousness and PGSI scores. A moderate positive correlation was also observed between extraversion and gambling severity, whereas no significant correlations emerged for agreeableness or openness to experience. In addition, the Kruskal–Wallis test was applied to compare levels of personality traits across three groups defined by increasing levels of gambling severity. The results confirmed significant differences in neuroticism and conscientiousness across severity groups, whereas no statistically significant differences were found for the other personality domains. Overall, these findings provide empirical evidence for the role of certain personality traits in online gambling behavior, particularly those related to emotional instability and self-regulation. This study sheds light on individual psychological profiles and may contribute to advancing our understanding of this phenomenon, as well as informing prevention and treatment efforts.

Biography

Sleh Eddine Saadi is a clinical psychologist and psychotherapist specializing in various therapeutic modalities, including hypnosis, psychodrama, and schema therapy. Sleh Eddine Saadi holds a master's degree in clinical psychology from the University of Tunis and completed a Certificate of Advanced Studies in Brief Therapies at the Faculty of Medicine of Tunis. His main areas of interest include mental health, addictions, and cognitive development in children. Sleh Eddine Saadi is currently working as a clinical psychologist and psychotherapist in the Mental Health Department at Mohamed Tahar Maamouri Hospital in Nabeul, Tunisia.

**Dr. Stavroula Rakitzi^{1*} M. D, Dr. Polyxeni Georgila²**

¹Clinical Psychologist and Cognitive Behavioral Psychotherapist, Private practice, Athens, Greece

²Psychiatrist, Private practice, Athens, Greece

Recovery-oriented treatments in chronic mental health disorders

Background: The rehabilitation and reintegration of patients with chronic mental health disorders is achieved solely through a combination of evidence-based interventions, namely pharmacotherapy and cognitive behavioral psychotherapy, and rehabilitation aimed at recovery.

Methods: Two newly developed evidence-based treatments, the RECOVERYTRSGR for treatment-resistant schizophrenia and the RECOVERYTRSDGR for treatment-resistant bipolar disorder, which were developed by our research teams and published in 2024 will be presented.

Results: The clinical experience with these therapies will be presented.

Conclusions: Two newly developed recovery-oriented therapies for chronic mental health disorders will be presented and discussed.

Biography

Dr. Stavroula Rakitzi is a clinical psychologist, and cognitive behavioral psychotherapist in Athens Greece and works in her own private practice. She published papers and books during the last years and conducts research protocols regarding the efficacy and effectiveness of the combination of pharmacotherapy and cognitive behavioral psychotherapy and rehabilitation. Stavroula Rakitzi offers lectures regarding clinical psychology and cognitive behavioral psychotherapy at her own private practice or at universities. Rakitzi offers also supervision to colleagues, who are participating in the training of cognitive behavioral psychotherapy. <https://orcid.org/0000-0002-5231-6619>

**Stephanie Leopold, CRNA, APRN**

KNEW Integrative Health, Colorado, USA

Medical innovations in addiction relapse prevention: Neurobiologic targets and emerging therapeutic approaches

Substance Use Disorders (SUD) remain a leading cause of morbidity and mortality worldwide, with relapse rates frequently exceeding 50% despite established treatment modalities. Current approaches, including medication-assisted treatment, psychotherapy, and behavioral interventions, effectively reduce harm and stabilize patients; however, long-term remission remains difficult to sustain for many individuals. Increasing evidence suggests relapse is not solely a behavioral failure but reflects persistent neurobiologic dysregulation involving reward circuitry, stress-response systems, conditioned learning, and impaired cognitive flexibility.

Chronic substance exposure produces neuroadaptations within mesolimbic dopaminergic pathways, prefrontal cortical regulation, and salience attribution networks. Trauma exposure further compounds vulnerability through dysregulation of the hypothalamic-pituitary-adrenal (HPA) axis, autonomic imbalance, sleep disruption, and heightened cue reactivity. During early recovery, patients commonly experience anxiety, dysphoria, insomnia, and emotional instability, which may represent persistent neurophysiologic withdrawal states rather than lack of motivation. These biologic states frequently precede relapse.

This presentation reviews emerging treatment innovations targeting underlying neurobiology rather than symptoms alone. Advances in neuroplasticity-focused therapies—including ketamine-assisted treatment and psilocybin-assisted psychotherapy—have demonstrated promising outcomes in early clinical trials for alcohol use disorder, nicotine dependence, and treatment-resistant depression, conditions closely associated with relapse vulnerability. Proposed mechanisms include modulation of the 5-HT_{2A} receptor system, increased network connectivity, decreased default mode network rigidity, and facilitation of adaptive learning and emotional processing.

Safety considerations, screening, structured therapeutic support, and evolving regulatory frameworks will be discussed. These therapies are not presented as replacements for established treatments but as potential adjunctive approaches within comprehensive addiction care.

Reframing relapse as a predictable neurobiologic state has implications for patient engagement,

stigma reduction, and treatment planning. Integrating emerging therapies with existing medical and behavioral interventions may improve durability of recovery and guide future research directions in addiction medicine and psychiatry.

Biography

Stephanie Leopold, CRNA, APRN, is a Certified Registered Nurse Anesthetist with more than 20 years of clinical experience in critical care, anesthesia, and perioperative medicine. She has held leadership roles including Chief CRNA and has served on professional nurse anesthesiology boards. She is the founder of KNEW Integrative Health, which focuses on integrative approaches to addiction and trauma recovery. A graduate of the Changa Institute's legal psilocybin facilitator training program, she lectures internationally on addiction relapse prevention, neurobiology of trauma, and emerging therapeutic approaches including psychedelic-assisted therapy.



Ms. Suchi

Laughter Therapist, Singapore

Dealing with addiction with happy hormones

Statement of the problem: There is a lack of awareness about what are happy hormone's and what can be done to get them. People tend to feel unhappy for multiple reasons and sort towards Addiction & Alcoholism and commit suicides in some cases.

Methodology & theoretical orientation: Review of books and research shows that feeling good and taking care of our emotional wellbeing will resolve the problems of Addiction, Alcoholism and it will decrease suicide rates as well. Adopting Laughter therapy and getting hormone's which makes one feel good will help many to recover from Depression & Anxiety thus reducing suicidal rates.

Findings: One needs to work on his/her energies using Laughter Therapy and boosting Happy Hormones which is a positive approach for not having Depression & Anxiety or use it as a Holistic way to recovery.

Conclusion & significance: The Laughter therapy which includes ways to get the dosage of happy hormones promotes overcoming Depression & Anxiety using a fun way. Leading fulfilling lives encourages people to get a new life away from Addiction & Alcoholism. Repeated sessions to be conducted to remind people that the new life should go beyond just seeking medical and counselling help and also include rebuilding Spiritual, Physical, Emotional, Relational and Mental health. The model has been put together from for testing in many settings including hospitals, elderly homes and senior citizen centres. This is not a research book or paper. It is just an effort to demystify the help available for Depression & Anxiety. It is an attempt to motivate and encourage people to seek help and take a simple approach to remember and work on all aspects of their recovery.

Biography

Ms. Suchi is an experienced International Pre-School Principal/Manager who enjoys conducting 'Laughter Therapy' at conferences, summits, offices, hospitals, elderly homes, dormitories and senior Activity Centres worldwide. Suchi provides individual and group therapy in educational and home settings. A former Manager / Trainer is now a Life Coach who engages in building social awareness about Holistic approach for recovery. Be it Depression, Anxiety caused by physical or emotional pain, Death in the family and the harm the unhappiness brings to people, families and communities, her aim is to encourage people to seek help early and get on the path to recovery. Her works has been featured in Local press, TV and Radio. Suchi has also been awarded at various community clubs and health institutions for recognition of her social work. Suchi is a Silver Generation Ambassador and Asia's Woman Leadership Award Winner. Suchi is a top Google Reviewer with millions of views.

**Sue Feldman*, Akanksha Singh**

University of Alabama at Birmingham, Birmingham, AL, USA

Overdose data to action: Toward addiction prevention using data in Alabama

Even though opioid prescriptions in AL have decreased, overdose deaths continue to rise. It is generally agreed that there is not a single silver bullet to attack the opioid crisis, but rather multiple approaches with multiple stakeholder groups focusing on expanding reach, evaluating, and modifying in multiple iterations over time. The Alabama Dept. of Public Health, as part of a wider initiative, is conducting an evaluation of program activities and better understand their impact on the overdose deaths in AL. This study uses sequential and appended monthly primary data collection across a 11 stakeholders and places emphasis on the role or peer navigation as the primary linkages to care. Data are then aggregated by zip code to identify target areas of need.

Findings suggest that barriers such as hiring freezes, awareness, and coroner participation contribute to adequate and accurate data collection. Throughout the two years of this initiative, those barriers have remained, but various community events and faith-based events have increased awareness and participation at the community person level. Community events are the primary mechanism to increase awareness. With an average of 75 individuals at each of the 38 community events with 75% of the individuals provided services and 1589 provided linkages to care through peer navigation. In total, we have reached almost 12,000 individuals through community events. Surveillance activities have been enhanced through data visualization activities to create a shared understanding of surveillance activities. Initially, there were barriers with hospital participation in surveillance activities, but now we have 93/94 participants. Clinician participation in our prescription drug monitoring program (PDMP) has been challenging and thus fosters doctor shopping for prescription drugs. We have increased PDMP participation by over 400 prescribers with 4 hospitals participating in a clinical alert software program. In terms of prevention and harm reduction, we include programs around naloxone distribution and fentanyl test strips. Over 3000 naloxone kits have been distribute over 94 zip codes. Other various harm reduction activities included over 21,000 service encounters across 126 zip codes. We have conducted over 600 trainings on the proper use of fentanyl test strips and have actually noted a reduction in fentanyl seizures due to the new administration and increased border security, although Marijuana, Methamphetamine, and cocaine continue to be the top seizures in AL. Additional programs with our carceral system has broadened the participation on addiction prevention activities. Overall, we continue this initiative and with iterative recommendations from every reporting period. It remains a challenge to ensure that all stakeholders are reporting monthly and to that end, ADPH needs better enforcement to ensure sustained data collection.

Biography

Sue Feldman, RN, MEd, PhD, FACMI, is Professor and Director of Graduate Programs-Health Informatics in the School of Health Professions at the University of Alabama at Birmingham. Her research focuses on health information systems for social good and social protections. Her international and domestic research in health, wellness and social-benefit initiatives has been funded by The World Bank, The Asian Development Bank, The Centers for Disease Control and Prevention, and The Centers for Medicaid and Medicare Services. Awards include Change maker in Health, Mentor of the Year, Faculty Innovator of the Year. Sue Feldman graduate of Claremont Graduate University.



T. Fulop^{1*}, A. Khalil¹, H. Berrougui¹, T. Bunt², O Van Tellingen³, J. Witkowski⁴, A. Cohen⁵ and M. Alami¹

¹Université de Sherbrooke, Sherbrooke, Qc, Canada

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³Division of Pharmacology, The Netherlands Cancer Institute, Amsterdam, the Netherlands

⁴University Medical School, Gdansk, Poland

⁵University of Columbia, New York, USA

Potential disease-modifying treatments for neurocognitive disorders

Alzheimer's Disease (AD) is a worldwide unsolved medical problem. Furthermore, despite the introduction of monoclonal antibodies treatments, there are no reliable disease-modifying therapies. These last years, it has become evident that AD is a clinical spectrum and the causes are multiple. Therefore, the treatment approach should also be multimodal. In recent decades, infections and metabolic alterations have been emerged as the most important causes. Our aim was to test whether some well-known drugs can modulate the basic pathological hallmark of AD. We aimed to explore the modulatory role of the anti-retroviral raltegravir and SGLT2 inhibitors on monomeric human amyloid beta 1-42 (m-A β 1-42)-induced molecular alterations in cellular models of AD. H4 neuroglioma and HMC3 microglia cells were used to evaluate the effect of raltegravir and empagliflozin/dapagliflozins on m-A β 1-42-induced oxidative stress, neuroinflammation, Tau-phosphorylation, and Tau-related Kinases/phosphatases. Flow cytometry technique was employed to quantify protein expression of NLRP3-inflammasome, phospho-Tau181 (p-Tau181), GSK-3 β , Cdk5, and HDAC6. We show that raltegravir significantly abolishes the m-A β 1-42-stimulating effect on p-tau 181, and that this effect involves the upregulation of PP2A α + β . Additionally, raltegravir significantly attenuated IL-1 β production through the downregulation of the NLRP3-inflammasome signaling pathway. m-A β 1-42 significantly reduced cell viability and increased apoptosis, which were reversed by gliflozins, particularly when co-dosed with elacridar, a P-gp/BCRP inhibitor. SGLT2i treatments significantly reduced m-A β 1-42-induced reactive oxygen species generation and down-regulated NLRP3-inflammasome. Gliflozins diminished Tau-pathology by reducing p-Tau181 levels. Collectively, our in vitro findings can be considered as preliminary mechanistic observations that support raltegravir's and gliflozin's repurposing in the framework of AD.

Keywords: Alzheimer's disease; Raltegravir; Gliflozins; Tau-pathology; Monomeric human amyloid beta 1-42

Biography

Prof. Tamas Fulop M.D, PhD, FRCPC is an internist-geriatrician and senior researcher at the Research Center at the Université de Sherbrooke. He completed his medical studies at the faculty of medicine of the University of Geneva. He made his PhD at Hungary. He was a postdoctoral fellow at Paris XII. He moved to the Université de Sherbrooke in 1993. His main research field is immunology in aging and age-related diseases, especially neurodegenerative diseases. He authored more than 400 papers. He led the memory clinic for more than 10 years. He is Editor-in-Chief of Gerontology. He is a fellow of the Canadian Academy of Health Sciences, Fellow of the Gerontological Society of America and corresponding member of the French Medical Academy.



Tammy D. Seeker, D.S.W., LMSW, LCDC

Angelo State University, San Angelo, Texas, USA

The assessment and treatment of disruptive behavior disorders comorbid with cannabis use disorder

Disruptive Behavior Disorders (DBDs), including oppositional defiant disorder and conduct disorder, frequently co-occur with Cannabis Use Disorder (CUD). Youth presenting with this comorbidity often show higher levels of family conflict, school failure, and juvenile justice involvement than peers with a single diagnosis. Research highlights the need for integrated approaches that address both behavioral regulation and substance misuse (Burke et al., 2010; Pardini & Fate, 2010). This presentation reviews recent literature on assessment tools, biopsychosocial risk factors, and evidence-based treatments. Emphasis is placed on structured interviews, behavior checklists, and validated substance use screeners for accurate differential diagnosis. Treatment approaches were evaluated based on fidelity, developmental appropriateness, and system-level coordination. Findings show that integrated, multi-systemic interventions are most effective. Cognitive-Behavioral Therapy (CBT) improves problem-solving and emotion regulation; Multi Systemic Therapy (MST) reduces delinquency and substance use by targeting family and peer systems; Motivational Interviewing (MI) enhances readiness for change; and contingency management strategies reduce cannabis use. Family involvement consistently strengthens treatment outcomes, and early intervention predicts reduced recidivism and improved long-term functioning (Henggeler et al., 2009; Waldron & Turner, 2008).

In conclusion, youth with DBDs comorbid with CUD require coordinated, evidence-based care that integrates clinical, family, school, and community systems. Early identification and holistic assessment are essential. The most effective interventions are those that are flexible, culturally responsive, and grounded in collaboration across multiple service systems.

Biography

Tammy D. Seeker, D.S.W., LMSW, LCDC earned her Doctoral degree in Social Work from Angelo State University, a Master of Social Work from The University of Texas at Arlington, and a Bachelor of Science in Social Psychology, Clinical and Abnormal Psychology from Park University. Tammy serves as an Adjunct Instructor and Program Coordinator, bringing extensive clinical and administrative experience in behavioral health, substance use treatment, and criminal justice. Her research interests focus on evidence-based interventions for justice-involved youth, the integration of substance use treatment in state hospital settings, and workforce development in social services.

**Thanompong Sathienluckana**

Faculty of Pharmacy, Siam University, Bangkok, Thailand

Pharmacological pathways for suicide reduction in psychiatric patients

According to the WHO, more than 700,000 people die per year due to suicide. 90% of individuals who die by suicide have a history of psychiatric illnesses. Suicide is a complex phenomenon involving several systems and neurobiological pathways. Neurobiology of suicide are multi-mechanisms including neuro inflammation, serotonin system, reduction of brain-derived neurotrophic factor, HPA axis hyperactivity. To date, no medications have proven efficacious for treating acute suicidal crises.

Pharmacotherapy for treatment and prevent of suicide rely mostly on the treatment of primary psychiatric disorders and manage factors that associated with suicide. Factor that associated with suicide including sleep disturbance, substances, no adherence of psychotropic medications and other factors (comorbid physical illnesses, psychosocial features, cognitive impairment). Medication for suicide reduction based-on evidence including antidepressant in Major Depressive Disorders (MDD), clozapine in schizophrenia, lithium in mood disorders and ketamine or intranasal ketamine in mood disorders. Clozapine is approved by US FDA for reduced the risk of suicide in schizophrenia or schizoaffective disorder. Anti-suicidal effects of CLZ seem to be independent of antipsychotic effect. Effective dose of CLZ for suicide reduction (mean dose 275 mg/d) is lower than for treatment-resistant schizophrenia (300-600 mg/d). Discontinuation of CLZ is associated with increase suicidality. Lithium has direct anti-suicidal effect (independent of mood stabilizing effect) and evidence-based found reduced suicide in patients with mood disorders (both MDD and bipolar disorders). Therapeutic level of lithium is approximately 0.5-1 MEQ/L. Discontinuation of lithium increased risk of suicide. Therefore, lithium should be consider treating patients with bipolar disorder or treatment-resistant depression with high risk suicide. Intranasal ketamine was approved in adult treatment-resistant depression and adult MDD with acute suicidal ideation / behavior. Intranasal ketamine was rapid onset and significantly reduced depressive symptoms more than placebo within 2-4 hours. Safety monitoring of intranasal ketamine at least 2 hours' post-dose under medical supervision is essential because of its dissociative, sedative, and cardiovascular effects, as well as risk for abuse. For serotonergic antidepressants in MDD patients with suicidal ideation, evidence-based found serotonergic antidepressants especially SSRIs and suicidal reduction effect depend-on age. SSRIs found reduced suicide in adult and elderly patients with MDD. However, in children and adolescent with MDD, SSRIs may increase or no change the risk of suicide when compare with placebo.

Biography

Thanompong Sathienluckana, Pharm. D, Board Certified Pharmacotherapy (BCP), is a clinical pharmacy lecturer in the Faculty of Pharmacy, Siam University. Current position is Associate Dean for Academic Services at Faculty of Pharmacy, Siam University and Academic chair of Pharmacotherapy council of Thailand. My area of interest is the pharmaceutical care in neurologic and psychiatric disorders. I also practice with multidisciplinary team at the Somdet Chaopraya Institute of Psychiatry, Bangkok, Thailand. I graduated Pharm. D. degree at faculty of pharmacy, Srinakharinwirot University, Thailand in 2009. Then, I graduated pharmacy residency program at The College of Pharmacotherapy of Thailand and received Board Certified Pharmacotherapy (BCP).

**Xavier NOËL**

Free University of Brussels, Belgium

Understanding gambling addiction in the digital era: What online play reveals

Digital gambling platforms provide an unprecedented opportunity to study addictive behaviors in real-world conditions through large-scale behavioral tracking. Between-session chasing—returning to gamble more rapidly after previous gains or losses—emerges as a hallmark of gambling escalation and a promising target for early detection. Using digital play data, including findings from our own work, we observed a robust win-chasing effect: gamblers tended to return more quickly after wins than after losses. Importantly, this relationship was moderated by gambling involvement. While most gamblers primarily chased wins as a form of reward-seeking (“to feel better”), highly involved gamblers showed reduced differentiation between outcomes, suggesting a stronger sensitivity to losses, possibly as a way to relieve negative affect (“to feel good”).

These converging mechanisms may sustain persistent engagement in digital gambling. A central open question is whether, in vulnerable individuals, gambling behavior becomes increasingly decoupled from outcome-based expectations—a shift consistent with habit formation. Early identification of these behavioral signatures, together with a better understanding of the underlying motivational processes and individual differences, may inform the development of more effective and personalized prevention strategies. Such approaches could specifically target chasing and the earliest stages of escalation in online gambling behavior.

Biography

Xavier Noël, PhD, is a Research Associate at the Belgian National Fund for Scientific Research (FNRS) and a Professor at the Université Libre de Bruxelles (ULB). As an expert in the neuropsychology of addiction, his research focuses on the mental mechanisms underlying behavioural phenotypes of addictions, with a particular emphasis on gambling and alcohol-use disorders. He recently developed the theoretical framework of Compulsivity as Constrained Goal Pursuit.

**Zahra Ibadina Silmi^{1*}, Nining Febriyana²**

¹Psychiatric resident of Medical Faculty of Airlangga University & Dr. Soetomo General Academic Hospital, Surabaya, East Java, Indonesia

²Child and Adolescent Psychiatrist and Lecturer of Dr. Soetomo General Academic Hospital, Surabaya, East Java, Indonesia

Acceptance and commitment group therapy as an intervention for adolescent with internet gaming disorder: A randomized clinical trial

Background: Internet Gaming Disorder (IGD) is increasingly prevalent among adolescents. Acceptance and Commitment Group Therapy (ACGT), a trans diagnostic psychotherapeutic approach that focuses on enhancing psychological flexibility. This study evaluates the effectiveness of ACGT in reducing symptoms of IGD, depression, anxiety, and stress among high school students.

Methods: A randomized experimental design was used with 40 participants assigned to an intervention group (n = 20) or a control group (n = 20). The intervention consisted of eight weekly ACGT sessions (90 minutes each). Assessments were conducted using the Indonesian versions of the Game Addiction Scale (GAS) and the Depression Anxiety Stress Scale–Youth (DASS-Youth) at baseline (week 0), post-intervention (week 9), and follow-up (week 21).

Results: ACGT significantly reduced IGD scores in the intervention group ($p < 0.000$), with effects remaining stable through week 21. Significant improvements were observed in the domains of salience, mood modification, relapse, withdrawal, conflict, and problems, while tolerance showed inconsistent results. Depression, anxiety, and stress scores also decreased significantly ($p < 0.05$), although the reduction in depression was less pronounced compared to anxiety and stress. In contrast, the control group exhibited a progressive increase in IGD scores from baseline to follow-up. A weak positive correlation was found between IGD and anxiety at week 9 ($p = 0.025$).

Conclusion: ACGT was found to be effective in reducing IGD symptoms and improving anxiety and stress among adolescents.

Keywords: Adolescents, Internet Gaming Disorder (IGD), Acceptance and Commitment Group Therapy (ACGT)

Biography

Zahra Ibadina Silmi, MD, is a psychiatry resident at the Medical Faculty of Airlangga University and Dr. Soetomo General Academic Hospital, Surabaya, Indonesia. Zahra Ibadina Silmi has strong interests in psychotherapy and addiction, and has

undergone training in Acceptance and Commitment Therapy, Cognitive Behavioral Therapy, Psychodynamic Psychotherapy, and Dialectical Behavior Therapy both nationally and internationally. Zahra Ibadina Silmi serves as a counsellor with Peduli Remaja Indonesia and supports schizophrenia, bipolar, and mood disorder communities in Surabaya. Dr. Zahra is also the President of the Indonesian Psychiatric Trainees Association (IPTA) 2024–2025. Her current research focuses on psychotherapeutic interventions for youth and behavioral addiction.

**Zhifei Fu**

Fujian Medical University, Fuzhou, China

A highly stable monomeric red fluorescent protein for advanced microscopy

The stability of fluorescent proteins (FPs) is crucial for many imaging techniques, including long-term live cell imaging, super-resolution microscopy, correlative light and electron microscopy (CLEM), and tissue clearing. Although several stable green and yellow FPs are available, the options for stable monomeric red fluorescent proteins (RFPs), commonly used as spectral counterparts for dual-color imaging, are significantly limited. Here, we developed an extremely stable monomeric RFP named mScarlet3-H and determined its structure at 1.5 Å resolution. Remarkably, mScarlet3-H exhibited exceptional resistance to high temperature, chaotropic conditions, and highly oxidative environments, facilitating its efficient applications in CLEM imaging of various organelles and rapid (less than 1 day) whole organ tissue clearing. Furthermore, our findings indicate that mScarlet3-H's thermal and chemical stabilities were accompanied by its high photostability, enabling the tracking of the fusion and fission of mitochondria using 3D structured illumination microscopy for up to 2 hours with minimal photobleaching. Importantly, the outstanding photostability of mScarlet3-H makes it a unique RFP for stimulated emission depletion microscopy (STED), allowing dual-color STED imaging of the dynamic interactions between endoplasmic reticulum and mitochondria with a high signal-to-noise ratio and strong specificity. Systematic benchmarking of mScarlet3-H against high-performing RFPs established it as a highly stable monomeric RFP suitable for multi-modality microscopy of cell cultures and model organisms, such as zebrafish, mice, and *Nicotiana benthamiana* plant, complementing existing green FPs for multiplexed imaging.

Biography

Fu's lab is dedicated to the development and application of super-resolution correlative light and electron microscopy (SR-CLEM), with the focus on creating novel fluorescent proteins, optimizing super-resolution algorithms, and improving SR-CLEM imaging techniques. Related articles were published in *Nature Methods* (2020 and 2025), *Nano Letters* (2020), *Journal of Visualized Experiments* (2024), *Sleep* (2022), and *Journal of Cell Biology*, etc. Currently, his lab is utilizing SR-CLEM and volume electron microscopy (VEM) to map neural circuits.



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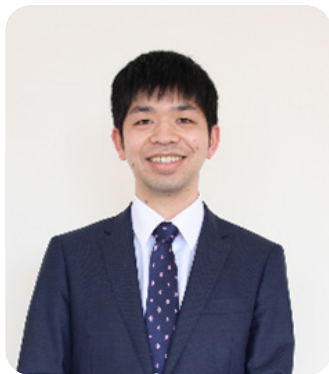
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Daiki Matsuda^{1*}, Takefumi Moriuchi², Akira Nakashima², Kengo Fujiwara³, Yuta Ikio⁴, Toshio Higashi²

¹Fukuoka International University of Health and Welfare, Fukuoka, Japan

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Enhancing motor imagery through TMS-based neurofeedback: A randomized controlled study in healthy adults

Background: Motor imagery (MI) engages neural networks that overlap extensively with actual motor execution and is widely used in motor learning and neurorehabilitation. However, the effectiveness of MI depends strongly on an individual's ability to generate vivid imagery, which varies across participants and can limit training benefits. Neurofeedback (NF) has been proposed as a method to enhance MI quality by providing real-time information about neural activity. While NF using EEG, fMRI, and NIRS has shown promise, the long-term effects of transcranial magnetic stimulation (TMS)-based NF using motor evoked potentials (MEPs), a direct physiological index of corticospinal excitability, remain unclear. This study examined whether TMS-based NF can modulate corticospinal excitability and improve subjective MI vividness over multiple training sessions.

Methods: Twenty-two healthy adults were randomly assigned to a feedback (FB) group or a control (CON) group (n = 11 each). Participants performed MI-based mental practice three times per week for two weeks, completing 60 MI trials in each session. During a coincidence-timing task, TMS was delivered at a precise moment to elicit MEPs. The FB group received visual NF based on trial-by-trial normalized MEP amplitudes, whereas the CON group practiced without feedback. Corticospinal excitability was quantified as %MEP relative to resting values, and MI vividness was evaluated using a visual analogue scale (VAS) before and after each session.

Results: A significant interaction between group and training day was observed for %MEP. The FB group demonstrated consistent increases in corticospinal excitability from Day 2 to Day 6, whereas the CON group showed a significant increase only on Day 5. For MI vividness, VAS scores increased significantly on Days 5 and 6 in the FB group, while no significant changes were observed in the CON group. These findings suggest that physiological modulation of corticospinal excitability may occur earlier than improvements in subjective MI vividness.

Conclusion: TMS-based NF enhanced corticospinal excitability and improved MI vividness across training sessions. These results support the feasibility of MEP-guided NF as a method for optimizing MI-based training. Given that MEP reflects corticospinal output, this approach may also provide a meaningful foundation for developing brain-computer interface (BCI) applications and future neurorehabilitation

strategies. Further research should clarify whether these physiological improvements translate to behavioral performance gains and evaluate applicability in clinical populations.

Biography

Daiki Matsuda is a researcher specializing in motor imagery, neurofeedback, and neurorehabilitation. Daiki holds academic positions at Fukuoka International University of Health and Welfare. His work focuses on TMS-based neurophysiological assessment and the development of neurofeedback approaches to enhance motor learning. Daiki has published research on MEP-based neurofeedback and continues to explore its applications in brain–computer interfaces and rehabilitation sciences.

**David Abbott**

Institute of Mental Health, Singapore

Implementing an exercise-based intervention in a specialist inpatient stabilisation programme for adults with substance addiction in Singapore

Background: For drug-dependent individuals, physical exercise offers numerous health benefits by improving physical functioning, mental wellbeing, and quality of life, while reducing cravings. Regular exercise enhances mood and motivation through the release of natural feel-good chemicals such as endorphins, serotonin, dopamine, endocannabinoids, adrenaline, and noradrenaline. These chemicals help regulate sleep, reduce stress, improve appetite, and enhance focus. Individuals with substance addiction often prioritise drug-related activities, resulting in unhealthy lifestyle patterns and withdrawal from mainstream social environments. Integrating structured exercise into addiction treatment may help re-establish healthier routines and support long-term recovery.

Methods: Reference guidelines for implementing exercise interventions were drawn from previous exercise-based studies and the Ministry of Health Singapore's recommendations. After establishing the programme structure, modifications were made to ensure alignment with local inpatient hospital policies within the Inpatient Stabilisation Programme. Participants were drawn from the National Addiction Management Service (NAMS) Inpatient Stabilisation Programme at the Institute of Mental Health, Singapore. All individuals admitted to the programme were automatically enrolled in the study. Eligibility criteria included being at least 18 years old, completing the detoxification phase as assessed by the medical team, and reaching the readiness-for-action stage on the Stages of Change Model.

A weekly 1-hour progressive aerobic and strength-training session was conducted in the Mind-set Rehabilitation Gym. Each session consisted of a 5-minute warm-up followed by four exercise components with 3-minute breaks. These included two 10-minute bouts on the exercise bike or cross-trainer, followed by group Tabata exercises; two 6-minute segments using fixed gym equipment; and floor-based exercises incorporating free weights and kinaesthetic techniques. Sessions concluded with stretching, breathing exercises, and a discussion on "opportunities for action" to encourage participants to integrate exercise into their long-term recovery plan post-discharge. After each weekly session, participants completed a survey evaluating their previous physical activity engagement, their experience of the in-house programme, and their intentions to use exercise as part of their lifestyle changes post-discharge.

Results: Data were collected from August 2025 to 25 November 2025. Twenty-six participants completed the survey using a 1–5 rating scale. Of these, 38.5% had not engaged in regular exercise in the six months prior to admission. All participants reported increased confidence after completing one session, and overall feedback about the programme was positive. Additionally, 85% rated their confidence to continue exercising after discharge at 4 or above. Participants identified enablers and barriers to sustaining regular exercise. Top enablers were having a coping strategy, access to resources, and adequate skills. The main barriers reported were mood, addiction-related challenges, and time constraints.

Conclusion: This study highlights strong participant interest and increased confidence gained from engaging in structured exercise during inpatient treatment. Exercise may serve as a low-cost, non-invasive adjunct to established addiction programmes and support long-term recovery.

Biography

David is an occupational therapist with over 15 years of experience in the UK and Singapore, primarily working with adults in mental health. During his time in the UK, David gained extensive experience in forensic services, alcohol services, inpatient adult mental health, and community mental health services for older people. David is currently based in Singapore at the Institute of Mental Health, where David works in addiction services and psychiatry wards with adults who have acute and chronic mental health needs. David provides assessments to support their rehabilitation goals and overall life aspirations.

**Davy Dries**

AZ Groeninge, Belgium

Intravenous esketamine in treatment-resistant depression

Background: Treatment-Resistant Depression (TRD) is a severe psychiatric condition associated with high morbidity and increased suicide risk. Standard antidepressant therapies often fail, necessitating alternative approaches. Intravenous esketamine has emerged as a rapid-acting treatment for TRD.

Objective: To provide a concise clinical protocol for the administration of intravenous esketamine in patients with TRD, outlining indications, contraindications, monitoring, dosing, and management of adverse effects.

Methods: Patients with inadequate response to at least two antidepressants or with severe suicidal ideation may receive intravenous esketamine under strict psychiatric supervision. Treatment is administered in a monitored inpatient setting, with continuous observation of vital signs. Adverse effects are managed symptomatically, and laboratory monitoring includes renal and liver function every three months. Dosing is individualized, typically starting at 25 mg every two weeks, with escalation to 37.5–50 mg or increased frequency as needed.

Results: Intravenous esketamine demonstrates rapid antidepressant effects, with improvement in depressive symptoms often within hours. Most adverse effects (e.g., hypertension, dissociation, nausea) are transient and reversible. Chronic use requires monitoring for hepatic and urinary complications.

Conclusion: Intravenous esketamine is a safe and effective option for selected patients with TRD when administered in a controlled, multidisciplinary setting. This protocol ensures structured, evidence-based application while minimizing risk.

Biography

Davy Dries holds a Master of Medicine degree, completed in 2014, followed by a Master of Specialised Medicine in Psychiatry in 2019. In 2023, Davy further advanced professional expertise by completing a postgraduate qualification in Family and System Therapy.



Gabriel Ong Rui Ming*, Andrew Peh*, Patrick Teo, Ng Yoke Chiang, Lim Chau Sian, Hatta Santoso Ong, Jonathan Seow, Ivy Lau, Andrew Kwek, Loi Pooi Ling, Sakktivel, Lew Zhen Wei, Lim Hui Khim, Joyce Leong, Loy Xing Qi

Changi General Hospital, Singapore



Quality improvement project: Enhancing access to addiction services for patient with alcohol use disorder

Background: Many alcohol-related problems often go undetected and untreated. It poses a major implication on public health. Among hospitalized patients, it was found that the prevalence of alcohol use disorder ranged from 7.4% to 48%, which was greater compared to the general population. Despite the high prevalence of alcohol use disorder, this psychiatric condition often neglected by our medical team and as a result, is undertreated in the restructured hospitals.

Objectives: This quality improvement project aimed to enhance the referral rate of alcoholic patients from the Gastroenterology ward to addiction counselling services

Methods: A baseline measurement revealed that there were total of 25 referrals of alcoholic patients to addiction counsellors from June 2022 to June 2023 prior to the proposed intervention. Plan-Do-Study-Act methodology was employed to bring about improvements and test change interventions.

Results: Through one Plan-Do-Study-Act cycles that targeted in educating the junior doctors on the importance of referral to addiction counsellors in patient with potential alcohol use disorder, there had been substantial improvement of 32% of referral rates from July 2023 to July 2024. (Total 33 cases)

Conclusions: The project was a success overall, with improvements in the referral rates by 32%. The interdepartmental quality improvement project had demonstrated the effectiveness of collaborative efforts in enhancing patient care.

Biographies

Dr. Gabriel Ong Rui Ming is psychiatric doctor who has been working in the field of psychiatry for about 10 years. Currently, he is practicing in Changi General Hospital, Singapore.

Dr. Peh obtained his medical degree and Masters in Medicine (Psychiatry) from the National University of Singapore, is a fellow of the Academy of Medicine (Singapore) and is currently working in the area of general psychiatry. Dr Peh is currently a senior consultant with the Department of Psychological Medicine at Changi General Hospital (CGH) and is the programme director for the CGH Assessment and Shared Care Team (ASCAT), which is a community mental health project. Dr Peh is a clinical assistant professor with the Duke-NUS Graduate Medical School and senior clinical lecturer with NUS Yong Loo Lin School of Medicine. Dr Peh is also part of the clinical faculty for the National Psychiatry Residency as well as for the Sing Health Family Medicine Residency.

Jae Sung Park, MD, PhD

Konyang University Hospital, Daejeon, South Korea

Facial motor evoked potential with paired transcranial magnetic stimulation for hemifacial spasm

Objective: Microvascular Decompression (MVD) is widely considered the treatment of choice for Hemifacial Spasm (HFS), but not all patients immediately benefit from it. Numerous electrophysiological tests have been employed to monitor the integrity of the facial nerve prior to, during, and after MVD treatment. The authors sought to verify if Facial Motor Evoked Potential (FMEP) with Paired Transcranial Magnetic Stimulation (pTMS) can be utilized as a tool to predict prognosis following MVD for HFS.

Methods: FMEP using pTMS was performed preoperatively and postoperatively for 527 HFS patients who underwent an MVD treatment. Various interstimuli intervals (ISIs), which included 2, 10, 20, 25, 30, 75, and 100 msec, were applied for each paired stimulation and pTMS(%) was obtained. A graph of pTMS(%) versus each ISI was drawn for every patient and its pattern was analyzed in accordance with patients' clinical outcomes.

Results: With ISIs of 75 and 100 msec, pTMS(%) was physiologically further inhibited, whereas it was relatively facilitated under ISIs of 20, 25, and 30 msec; loss of this specific pattern, that is, further inhibition-relative facilitation, indicated impaired integrity of the facial nerve. Those patients who immediately benefited from an MVD and experienced no relapse tended to show proper restoration of this further inhibition-relative facilitation pattern ($p = 0.01$). Greater resemblance between the physiological pattern of pTMS(%) and postoperative pTMS(%) was correlated to better outcome ($p = 0.019$).

Conclusion: FMEP with pTMS can be used as adjunctive tool in diagnosis of HFS and it may offer a significant improvement in predicting the prognosis of HFS following MVD.

Biography

Dr. Jae Sung Park is a neurosurgeon specializing in both functional neurosurgery and endovascular intervention. Jae Sung Park holds a PhD in neurosurgery from Sungkyunkwan University, Seoul, Korea as well as MD from Chung Ang University, Seoul, Korea. Jae Sung Park was employed by the Cleveland Clinic, Ohio, USA in 2007, followed by Ohio State University Hospital. After working as a tumor/functional specialist in the US for two and a half year, Jae Sung Park returned to his home country, South Korea, and became a professor at Konkuk University, School of Medicine. Jae Sung Park is currently a tenured professor at Konyang University, Daejeon, Korea.



Kitti Bessenyei^{1*}, Igor Yakovenko²

¹Department of Psychology & Neuroscience, Dalhousie University, Halifax, Nova Scotia, Canada

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Social, psychological and behavioral profiles of emerging adult social media users and their association with mental health risk

Background: Intensive and problematic social media use were linked to an increased mental health risk. Research studies examining increased risk among social media users focused on associations between singular social, psychological, or behavioral risk factors and mental health outcomes which does not support the detection of risk patterns.

Objective: The current study examined whether there are separate risk profiles which are associated with different levels of mental health risk in emerging adult social media users.

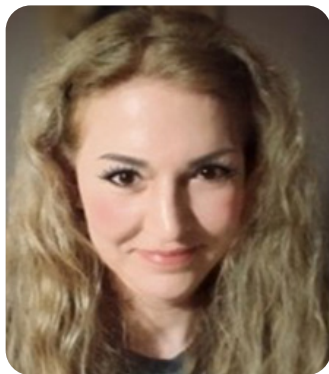
Methods: A 1447-person sample of Canadians between 18-24 years were recruited online. Eleven social, psychological and behavioral risk factors were measured: cyberbullying victimization, in-person and online social support, self-esteem, upward social comparison, fear of missing out, peer social media literacy, problematic social media use, social media, sleep, and physical activity time. Depressive and anxiety symptoms, self-harm, suicidal ideation and attempt were measured as primary outcomes. Alcohol and drug use and substance-related problems were assessed as secondary outcomes. LPA was used to identify user profiles. Logistic regression and ANOVA were utilized to examine the association between profile membership and mental health and substance use outcomes.

Results: Four different risk profiles were identified which varied in mental health risk: Healthy, Frequent, Avoidant, and Problematic Users. Distinct user groups may benefit from different interventions tailored to their profile-specific risk factors. Interventions aiming to decrease social media use may only benefit Frequent Users. Avoidant and Problematic users may benefit from learning effective coping with cyberbullying victimization, with special focus on problematic social media use in Problematic Users and excessive sleep and physical activity time in Avoidant Users. Interventions should specifically aim to reach Problematic Users who are the most vulnerable to develop anxiety and depressive symptoms and attempt suicide.

Conclusions: Profile-specific interventions are necessary to address mental health risk in social media users requiring pre-intervention assessment of profile membership.

Biography

Kitti Bessenyei is a Clinical Psychology Ph.D. Candidate at Dalhousie University, Canada. Her broad research interests focus on substance use and other addictive or unhealthy behaviors that impact people's mental health. Within this wider area, her research concentrates on healthy versus unhealthy use of modern technologies and exploring ways to take advantage of technological advances in mental health care. Her dissertation work examines determinants of mental health problems in emerging adult social media users.

**Maria I. Dalamagka MD, MSc, PhD**

Consultant Anesthesiologist at General Hospital of Larissa, Larissa, Greece

Pediatric neurodegenerative disorders and anesthesia considerations

Pediatric neurodegenerative disorders encompass a wide range of conditions that result from progressive damage to cells and nervous system connections that are essential for mobility, coordination, strength, sensation, and cognition. Neurodegenerative diseases affect millions of people worldwide. Neurological disorders are disorders that involve the brain, spinal cord or nerve and muscle. Children with neurological disorders may have disorders such as epilepsy, developmental delay, cerebral palsy, meningitis, genetic/metabolic diseases or diseases of muscle or nerve such as muscular dystrophy or peripheral neuropathy. These illnesses are frequently severe and potentially have long lasting consequences for the affected children. The pathologies most frequently responsible for psycho-physical disorders can be summarized into three groups: collaboration difficulties (autism spectrum disorders, intellectual impairment, phobia); motor dysfunction (cerebral palsy, epilepsy, other brain pathologies, neuromuscular disorders), and craniofacial anomalies (Down syndrome, other genetic syndromes). Due to their clinical history, and the lack of collaboration, in pediatric non-cooperative patients with Special Needs (SN), the anesthesiological risk may result difficult to assess, despite the fact that they meet the criteria of the outpatient management applied for the patient without disabilities. The perioperative management of pediatric patients with psycho-physical disorders with related relational and cognitive problems must be carefully planned, in order to make the entire hospitalization process as comfortable and as less traumatic as possible. General anesthesia is the most suitable type of anesthesia in pediatric patients with Special Needs (SN), although anesthetic complications are more frequent in these patients, mainly due to comorbidities, taken drugs and anatomical peculiarities. Some studies observed no correlation between multiple anesthesia exposures and neurodevelopmental deficits, while others reported that even a single exposure could increase the risk of deficits. An increased risk of developmental or behavioral disorders as the consequence of surgeries requiring general anesthesia was observed. Based on current studies, it is necessary to endeavor to limit the duration and numbers of anesthesia and the dose of anesthetic agents. The evaluation must include history and physical examination pertaining to the conditions requiring special anaesthetic considerations. Early diagnosis and intervention are crucial in managing these neurological disorders in pediatric patients to improve overall quality of life and long-term outcomes.

Biography

Dr. Maria Dalamagka, MD, MSc, PhD, is a consultant anesthesiologist at the General Hospital of Larisa, Greece. Her expertise spans anesthesia management in pediatric, autistic, surgical, orthopedic, urological, obstetric, and otorhinolaryngological cases, as well as emergency treatments. During the COVID-19 pandemic, Maria played a critical role in managing ICU patients in the operating room recovery unit. Additionally, Maria has explored acupuncture as an early intervention for chronic pain. Dr. Dalamagka is an active editor for various medical journals and has contributed significantly to the field through her research and editorial work.



Vivienne Perry^{1*}, Dr Elnike Brand²

¹University of the Sunshine Coast, Specialist Mind Care, Maryborough, Queensland, Australia

²University of Queensland, Specialist Mind Care, Hervey Bay, Queensland, Australia

Folie à deux: Love, loyalty, and the limits of reality

Induced delusional disorder, historically termed Folie à Deux, is a complex clinical phenomenon in which delusional beliefs are transmitted from one individual to another within the context of a close relationship. It remains clinically relevant in situations characterised by social isolation, intense intimacy, and untreated psychiatric vulnerabilities.

This case study involves a married couple whose children were placed in kinship foster care after their infant daughter sustained near-fatal injuries. Both parents provided consistent and unwavering accounts, asserting that the infant experienced a single fall from a floor-based baby bouncer while the mother was briefly not supervising her. Despite medical evidence to the contrary, both parents denied the possibility of abuse and maintained their shared narrative under prolonged scrutiny.

Clinical assessment revealed striking similarities between the partners. Their histories, dating back to early adolescence, as well as their presentation, personality features, and results of psychometric testing were near-identical. The rigidity of their shared accounts, combined with these overlapping personality structures and their resistance to contradictory evidence, raised the possibility of induced delusional disorder. The case further illustrates established risk factors, including a longstanding intimate partnership, limited social engagement, and personality vulnerabilities.

The discussion considers the diagnostic complexities of induced delusional disorder, its implications for child protection, and therapeutic approaches. Particular attention is given to the potential role of conjoint psychotherapy in disrupting entrenched shared belief systems, as well as the importance of multidisciplinary collaboration in safeguarding children and supporting families.

Recognition of shared delusional dynamics is essential in family assessments. Failure to identify such processes may compromise child safety and hinder effective treatment planning. This case highlights the need for heightened awareness of induced delusional phenomena within forensic, clinical, and child welfare contexts.

Biography

Vivienne Perry is nearing completion of her Bachelor of Social Work at the University of the Sunshine Coast, with completion expected in November 2025. Vivienne Perry is currently finalising her placement at Specialist Mind Care, where

Vivienne Perry has contributed to clinical assessments, psychometric testing, and medico-legal report writing. Vivienne Perry operates a sole trader business and is in the process of collaborating with other professionals at Specialist Mind Care to launch two new ventures—one focused on emotional support animals, and the other on educational guidance and assessment reporting. Vivienne is dedicated to ethical, evidence-based practice in forensic mental health and plans to pursue further tertiary education. Vivienne Perry will maintain an ongoing mentoring relationship with USC, supporting future students in the field.



Yuyang Li

Zhejiang University Interdisciplinary Institute of Neuroscience and Technology, Zhejiang University School of Medicine, Hangzhou, Zhejiang, China

Targeting a modifiable GABAergic deficit in the left DLPFC for preemptive intervention in at-risk individuals with high trait anxiety

Trait anxiety, characterized by a stable predisposition to perceive environmental stimuli as threatening, represents a significant vulnerability factor for anxiety disorders in non-clinical populations.

Neurobiological models posit that impaired inhibitory control within the dorsolateral prefrontal cortex (DLPFC) underlies anxiety symptomatology, though the specific neurochemical correlates in individuals with high trait anxiety, a non-clinical vulnerability phenotype, remain elusive.

Here, we utilized ultra-high-field 7-Tesla magnetic resonance imaging to systematically compare neurochemical and brain function profiles between individuals with high and low trait anxiety. We identified a specific reduction in γ -aminobutyric acid (GABA) concentration within the left DLPFC in the high trait anxiety group, while glutamate levels and the GABA/glutamate ratio remained unaltered. This impairment in GABAergic neurotransmission was accompanied by aberrant local spontaneous neural activity. Furthermore, correlation analysis across the full anxiety spectrum revealed a significant negative relationship between GABA levels and anxiety scores—a continuous relationship that was obscured when examining the restricted ranges within separate high- and low-anxiety groups, thus supporting GABA as a continuous neurochemical substrate of anxiety vulnerability.

Critically, a subsequent transcranial direct current stimulation intervention targeting the left DLPFC in high trait anxiety individuals demonstrated a trend toward increased GABA concentration alongside improved anxiety symptoms, suggesting the potential malleability of this identified neurochemical deficit. Our study provides the first in vivo evidence of a specific GABAergic deficit in the left DLPFC in high trait anxiety, independent of glutamatergic function. These findings not only establish localized inhibitory dysfunction as a key neural mechanism underlying trait anxiety but also offer empirical support for its plasticity, thereby identifying a promising target for early non-invasive neuromodulation strategies in at-risk populations.

Biography

Yuyang Li is a Direct-Entry PhD candidate in the Department of Brain Science and Brain Medicine at Zhejiang University School of Medicine. Her research focuses on the neurobiological mechanisms of emotion regulation and the application of neuromodulation techniques, with a particular interest in trait anxiety and related neural circuitry.

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