

Scholars Conferences

45 Willowford Place, Newcastle Upon Tyne
Tyne and Wear England, UK, NE15 6DZ



14-15
SEPTEMBER



2026

SINGAPORE
PUBLIC HEALTH AND
NURSING LEADERSHIP CONFERENCE

GLOBAL MENTAL WELLNESS &
PSYCHOLOGY LEADERSHIP SUMMIT

SCIENTIFIC PROGRAM

DAY 01

MONDAY | SINGAPORE

08:30-09:00

Registrations

09:30-09:40

Inaugural Ceremony

KEYNOTE FORUM

Session Chair

Weixi Shen, *Shenzhen Tianyou Medical Institute, China*

Title: Multisystemic Therapy for Child & Youth Behaviour

09:40-10:15

Mark Robert Porter, *W.A. Child & Adolescent Mental Health Service, Australia*

Title: Safeguarding Humanity from Severe Harm of Infectious Disease Outbreaks by Decipher Scientific Enigmas of Cytokine Storm

10:15-10:50

Wei-Xi Shen, *Shenzhen Tianyou Medical Institute, China*

REFRESHMENTS BREAK | 10:50-11:10

11:10-11:45

Title: Why Founders Must Build Architecture before Products

James E Spence Jr, *EMERFund, USA*

11:45-12:20

Title: Orchestrating the Wellbeing Economy: Climate KIC's Open Innovation Platform as a Bridge between Corporate Strategy and Regenerative Entrepreneurship

Sebastian Bustamante Gonzalez, *Climate KIC, Netherlands*

12:20-12:55

Title: From Rule of Man, through Self-Governance, to Governance by Non-Action Sunrise's Core Tier Management Culture in Practice

Daniel Zhu, *Inner Mongolia Sunrise New Material Co.Ltd, China*

GROUP PHOTO @ 12:55-13:00

LUNCH AND NETWORKING BREAK @ 13:00-13:50

Speaker Sessions

Session Chair

Weixi Shen, *Shenzhen Tianyou Medical Institute, China*

Title: South Africa: A Conceptual Framework for SMME Access to Financial Support

13:50-14:15

Melvin Sello Mothoa, *Mangosuthu University of Technology, South Africa*

14:15-14:40	Title: Organizational Culture: The Influence of Leadership in Improving Institutional Health Processes
	Montserrat Legorreta Rojas , <i>Instituto Mexicano del Seguro Social, Mexico</i>
14:40-15:05	Title: The Association between Physical Activity and Employment Among U.S. Adult Cancer Survivors
	Alexis Clouser , <i>University of Arkansas for Medical Sciences, USA</i>
15:05-15:30	Title: Association of Coal Mine Air Pollution Exposure and Triglyceride-Glucose-Related Indices With Hypertension: Risk Assessment and Mediation Analysis
	Wang Manli , <i>Anhui University of Science and Technology School of Public Health, China</i>
15:30-15:55	Title: Association between Multiple Metal Exposures and Hyperglycemia Among Coal Miners
	Wei Qiannan , <i>Anhui University of Science and Technology School of Public Health, China</i>
Poster Presentation @ 15:55-16:15	
EP001	Title: Associations of Multiple Metal Exposures With Serum Uric Acid and Hyperuricemia Among Coal Miners: Potential Mediating Role of Serum Lipids
	Ye Dongqing , <i>Anhui University of Science and Technology School of Public Health, China</i>
EP002	Title: Association Between Mixed Occupational Air Pollution Exposure and Pulmonary Ventilatory Dysfunction: Mediating Role of Oxidative Stress
	Min Mu , <i>Anhui University of Science and Technology School of Public Health, China</i>
PANEL DISCUSSIONS & B2B MEETING	

Day 01 | Closing Ceremony

15:00-15:15	Introduction
KEYNOTE FORUM	
15:15-15:45	Title: Dementia Prevention Initiatives: Evidence From Europe & Repercussions of Climate Change Situation on Health of Elderly Population Santosh Kumar Mishra, <i>S.N.D.T. Women's University, India</i>
15:45-16:15	Title: Applications of Statistics and Artificial Intelligence in Environmental Research Nilo Antonio de Souza Sampaio, <i>State University of Rio de Janeiro, Brazil</i>
16:15-16:45	Title: Workplace Social Support as a Protective Factor Against Lifetime Prevalence of Depression in Women Who Had Hypertensive Pregnancy Jose Marques Neto, <i>UEFS/AFYA EDUCATION, Brazil</i>
16:45-17:15	Title: Multiplier Wellness Research at Royal Hospital: Coaching Based Interventions for Stress, Sleep, and Performance Salwa Al Ubaidani, <i>Royal Hospital in Oman, Oman</i>
REFRESHMENTS BREAK @ 17:15-17:30	
17:30-18:00	Title: From Idea to Growth: What Startups Really Need to Succeed Mina Kerols, <i>NmoHub, Saudi Arabia</i>
18:00-18:30	Title: Artificial Intelligence in the Workplace: Insights From the Perspective of Disability Management With a Focus on Early Intervention and Occupational Rehabilitation Anne Rosken, <i>ANED - HSG - PCU, Germany</i>
18:30-19:00	Title: The Impact of Digital Innovation and Lifestyle Medicine on Public Health & Nursing Roles and Practices David John Wortley, <i>WLMES, United Kingdom</i>
Speaker Sessions	
19:00-19:25	Title: The Relationship Between Emotional Intelligence and Generation Z Entrepreneurs: Implications for Leadership, Innovation, and Sustainable Business Performance Houda Jorio, <i>UM6P, Morocco</i>

19:25-19:50	Title: Evaluation of Modifiable Factors in Type 2 Diabetes Patients Using a Four-Layered Hidden Markov Model Surnam Narendra, <i>Woxsen University, India</i>
19:50-20:15	Title: Building Women-Led Entrepreneurial Communities that Move the Needle: Designing Societies that Turn Membership into Entrepreneurial Confidence Tadiwa Mazvita Ndadzungira, <i>Hult International Business School, United Kingdom</i>
20:15-20:40	Title: From Clinical Photographs to Trustworthy Health Data: Governing Source-Image Quality for Digital Health and AI Francis G James, <i>Wound Care Collaborative Community, USA</i>
REFRESHMENTS BREAK @ 20:40-21:00	
Speaker Sessions	
21:00-21:30	Title: Child Development Leading to the Pursuit of Virtues and the Avoidance of Vices Gerald H Katzman, <i>Wayne State University, USA</i>
21:30-22:00	Title: Tame the Caveman in Your Brain™: Power Habits® for Entrepreneurs and High-Performance Leaders Noah St John, <i>NoahStJohn.com, USA</i>
22:00-22:30	Title: Mathematical Analysis of Epidemiological Models and Their Forecasts Carlos Oscar Rodriguez Leal, <i>University of Guadalajara, Mexico</i>
22:30-23:00	Title: Protective Role of Magnetite Nanoparticles (ICNB) in Maintaining the Molecular Integrity of Erythrocyte Protein-Lipid Membranes Andrey Belousov, <i>Kharkiv National Medical University, Ukraine</i>
PANEL DISCUSSIONS & B2B MEETING	

Day 02 Virtual End | Closing Ceremony

Joint Event

Singapore Public Health & Nursing Leadership Conference

Global Mental Wellness & Psychology Leadership Summit

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Multisystemic Therapy for Child & Youth Behaviour

Mark Robert Porter

Western Australia Child & Adolescent Health Service, Australia

The issue: Child & youth conduct disorders include aggression, violence, rule-violation and anti-social behaviour. Untreated, these disorders often predict substance abuse, various adult mental health problems, under employment, inter-personal difficulties, criminality, incarceration and high costs to the state. Conduct disorders are common, but the families often poor, marginalised and difficult to engage/help. However effective engagement with this population can be cost-effective to decrease criminality, substance use, family violence, mental illness and unemployment in Australian & other communities.

Intervention: Multi-systemic Therapy (MST) is an intensive outreach family therapy designed to help parents with children (12-16 years) having severe behavioural disorders. This 4 - 5 month intensive intervention teaches parents monitoring, communication & problem-solving skills to manage children's behaviour. The West Australian Health service has operated two MST clinical teams in Perth city metropolitan area since 2005, that employs clinical psychologists who teach client families relevant parenting skills.

Analysis: The West Australian Health service implemented a comprehensive longitudinal research program to determine if MST would be effective with high-risk Australian families. The research outcomes indicate most families achieve significant enduring improvements in mental health of all family members and maintain youths living at home, engaged in school and pro-social activities. Child Behaviour Check List (CBCL) measures of internalising and externalising factors indicate broad and enduring improvement in youth behaviour, and measures of "Parenting Style" indicate enduring improvements in parents.

Outcomes: The W.A. MST program is unique in Australian Public Health services and since been recognised with leading state and national awards for crime and violence prevention, substance use prevention, and mental illness treatment. This is robust evidence it is very cost-effective to help divert high risk youth from chronic unemployment, substance abuse, mental illness, imprisonment and premature death.

Biography

Mark Porter is a 4th generation Fremantle resident who travelled in S.E. Asia, India, East Africa and North America as a young man before returning to Australia for tertiary studies. He obtained a science degree from University of Western Australia majoring in Human Biology & Anatomy, and Human Movement & Recreation Studies; then obtained Masters and Doctorate in Clinical Psychology. He has been a registered Psychologist for 25 years, and an accredited Yoga teacher (IYTA) for 33 years. He implemented and managed the first specialist residential treatment service in Western Australia for the treatment of complex substance abuse with comorbid mental health issues (1997-2005). Since 2006, he implemented then managed the most successful and enduring MST program in Australia. The program has been recognised with multiple state and national prevention and treatment awards.



Safeguarding Humanity from Severe Harm of Infectious Disease Outbreaks by Decipher Scientific Enigmas of Cytokine Storm

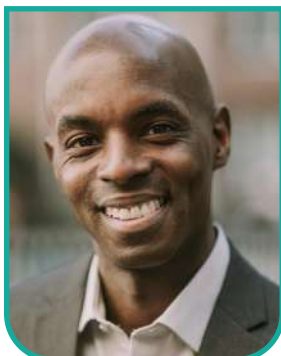
Wei-Xi Shen

Shenzhen Tianyou Medical Institute, China

The infectious disease outbreaks posed substantial threats to public and society. Consequently, establishing scientific prevention/treatment measures to combat such outbreaks is of paramount importance. The key harm of infection outbreaks stems in their high mortality rate. As there are no specific drugs for viruses, it is mainly viral outbreaks that may pose serious harm to humanity. Medical research has demonstrated that the death caused by viral infections is cytokine storm (CS). If medicine can solve CS, develop precision diagnostics/therapeutic strategies, significantly reduce the mortality, infectious outbreaks will not cause substantial harm. After 30 years of comparative research on Chinese and Western medicine, the author has established a new medical theory for precisely diagnosing/treating CS. Its core pattern are as follows: The meaning of CS is an overall dysfunctional status of cytokine network, which is characterized by dual abnormalities in the cytokine expression pattern and intensity. For example, cytokine pattern of COVID-19 is marked by abnormally elevated activity of TGF- β . The number of cytokine patterns for human diseases is limited, totaling around 10+ types. The characteristics of cytokine patterns can be identified based on manifestations of diseases. The author has established a new medical theory for identifying cytokine patterns through manifestations. Contemporary medical practices using hormones and antibodies to treat CS represent blind therapy and are not optimal approaches, whereas integrated Chinese and Western medicine offers the best comprehensive treatment method. The closed-loop theoretical framework of “characteristic assessment—precise classification—targeted intervention,” constructed based on manifestations, has resolved the long-standing key scientific challenges of CS perplexed medicine for the five decades. Regardless of the outbreaks that may emerge globally in the future, the theory can promptly identify CS based on manifestations, providing authoritative guidance to the medical community, governments, the WHO in formulating scientific response strategies, precision treatment protocols.

Biography

Wei-Xi Shen graduated from Peking University as MS in 1989 and from Peking Union Medical College, Chinese Academy of Medical Sciences with MD in 1999. He is president of Shenzhen Anti-cancer Association, Shenzhen Chairman of Tumor Prevention and Treatment Union, Council Member of Tumor Committee of World Chinese Medicine Union. Over 100 papers have been published in national and international journals. His specialization focuses on comparative research on TCM and western medicine and medical oncology. He is director of Hongkong Tianyou Medical Research Institute and Shenzhen Tianyou Medical Institute, professor of Shenzhen People's Hospital, Southern University of Science and Technology. He presided over the National Basic Research Program of China (973 Program) projects under the Ministry of Science and Technology, National Natural Science Foundation of China projects, and major projects in Shenzhen.



Why Founders Must Build Architecture Before Products

James E Spence Jr

EMERFund, USA

Most entrepreneurship frameworks encourage founders to move rapidly from problem identification to product development. However, observations across multiple venture-development efforts suggest that many failures occur before execution because founders attempt to solve problems without first understanding the underlying systems that create them. This work introduces the Founder Architect perspective, a venture-development framework developed through the creation and evaluation of ventures spanning financial access, behavioral health, workforce systems, and technology innovation. The framework was derived from repeated observations that products frequently address visible symptoms while the deeper incentives, constraints, relationships, and behavioral dynamics responsible for creating those symptoms remain insufficiently understood. Analysis across multiple venture-development efforts revealed a consistent pattern: opportunities became clearer, solution pathways improved, and product concepts became more adaptable when founders first focused on understanding the architecture of the problem rather than immediately designing solutions. The findings suggest that entrepreneurship may benefit from a shift in emphasis from product-first thinking toward architecture-first thinking. The Founder Architect perspective proposes that sustainable innovation emerges from understanding the structures that generate problems rather than exclusively focusing on the products intended to solve them. These observations support a broader conclusion: products solve problems, but architecture explains why those problems exist. Founders who understand architecture before products may improve opportunity recognition, venture design, and long-term innovation outcomes.

Biography

James E Spence Jr. is the founder of EMERFund and CEO of 12 Spies Management, LLC. He develops venture frameworks, behavioral systems, and innovation architectures across financial access, behavioral health, workforce development, and technology sectors. His work focuses on how founders interpret uncertainty, identify underlying system structures, and design ventures around architectural understanding rather than product-first assumptions. He is the creator of the Founder Architect perspective, a framework that explores how sustainable innovation emerges from understanding incentives, constraints, relationships, and behavioral dynamics before solution development begins.



Orchestrating the Wellbeing Economy: Climate KIC's Open Innovation Platform as a Bridge Between Corporate Strategy and Regenerative Entrepreneurship

Sebastian Bustamante Gonzalez

Climate KIC, Netherlands

Entrepreneurial ecosystems remain largely anchored to a growth-at-all-costs logic that fragments the relationships between people, planet, and prosperity, even as corporates, funders, and policymakers increasingly seek frameworks reconnecting economic value with resilience and social wellbeing. This keynote examines how Climate KIC, Europe's leading climate innovation agency, is translating the emerging wellbeing economy paradigm into practice through its Open Innovation Platform, a neutral brokerage model connecting corporate demand with startup supply across three strategic axes: Cities and Regions, Land Use, and Industry.

Drawing on a decade of systems-innovation experience, including a network spanning 70 countries, over 6,000 climate-positive ventures supported, and 6.7 million euros in investment attracted to startups, the presentation outlines a replicable three-step methodology: aligning private-sector interests around priority value chains, co-defining thematic innovation challenges with public and private stakeholders, and launching structured calls that engage entrepreneurship support organisations to pilot and scale solutions. This is illustrated through bespoke incubation and acceleration challenges, corporate innovation matchmaking, and capacity building for climate startups.

The talk argues that reusable infrastructure, including alumni networks, due-diligence frameworks, and shared methodology, combined with an EIT-backed, non-profit broker position, lets corporates future-proof their strategies by embedding care, resilience, and regeneration into how value is created, rather than treating sustainability as an add-on. Findings point to a practical pathway for corporate and strategic entrepreneurship: moving startup collaboration from isolated pilots toward a coherent, wellbeing-oriented innovation strategy. The session closes with implications for entrepreneurship support organisations and investors seeking scalable, regenerative models of corporate-startup collaboration.

Biography

Sebastian —Management Engineer & MBA (ESM Madrid); City Health Diplomacy (Graduate Institute Geneva), Accelerate UK, Impact Mgmt SDGs (Duke), Digital Societies & IoT (Linnaeus, Sweden), Master's Sustainability Science-Environment-Decision Making (Gävle, Sweden). 16+ yrs private-educational-entrepreneurial sectors: sustainability, innovation, partnerships mgmt, biz dev, project mgmt; 12 awards; Fellow: UNLEASH Lab 2017 (Denmark), Rice Baker Institute Americas Project (Texas). Worked Spain-Colombia-Mexico-Argentina-Chile-Uruguay; visited 60 countries; managed 300+ people; 80+ talks. Co-founded/led Impact Hub Medellín-Cali-Bogotá (relaunch)-Barranquilla; since 2018: 2,000+ orgs, 70+ programs, 3,000+ SMEs, covering concept/ToC-fundraising-planning-recruiting-ops-M&E, relationship-partnership focus. Entrepreneurship Programme & Fundraising Lead, Climate KIC; Enterprise Europe Network Colombia Coordinator.



From Rule of Man, through Self-Governance, to Governance by Non-Action Sunrise's Core Tier Management Culture in Practice

Daniel Zhu

Inner Mongolia Sunrise New Material Co.Ltd, China

Biography

Mr Zhu Shuangdan is the founder and chairman of Sunrise Group. A self-made entrepreneur who built the company from the ground up, he has led Sunrise's evolution from a manufacturing enterprise into an innovation-driven, value-creating group whose core businesses span metal-based new materials and related fields. He created and champions the "Single-Double Method," which turns strategy into daily action, and upholds a management philosophy of "managing human nature, connecting with people's hearts." He places particular emphasis on building the culture of the company's Core Tier, always regarding its members as the bearers of corporate culture and the practitioners of its values. His deepest conviction — that a great organization ultimately moves from "rule by man," through "self-governance," to "governance by non-action" — has become the cultural cornerstone of Sunrise and a reference point for enterprises across the region and beyond.

Joint Event

Singapore Public Health & Nursing Leadership Conference

Global Mental Wellness & Psychology Leadership Summit

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South Africa: A Conceptual Framework for SMME Access to Financial Support

Melvin Sello Mothoa

Mangosuthu University of Technology, South Africa

Access to financial support remains a persistent challenge for small, micro, and medium-sized enterprises (SMMEs), particularly within South Africa's manufacturing sector. This study adopts a convergent mixed-methods approach, integrating quantitative data from a structured survey with secondary qualitative analysis of policy documents, case studies, and peer-reviewed literature. It investigates the financial barriers encountered by manufacturing SMMEs in Gauteng and proposes an integrated conceptual framework—grounded in capital structure, credit rationing, and pecking order theories—to enhance financial accessibility. The quantitative strand of the study draws on a stratified random sample of 385 manufacturing SMMEs, analysed using SPSS® 29 to examine key determinants of financial access. Complementing this, qualitative thematic analysis of 15 publicly available sources captures the lived experiences of entrepreneurs navigating financing constraints, institutional inefficiencies, and adaptive informal financing strategies. Findings indicate that collateral requirements, inconsistent policy implementation, and rigid banking practices significantly constrain financial access. The study introduces an Integrated Support Framework that incorporates both firm-level and institutional factors including digital finance platforms, demographic variables, and stakeholder coordination. By triangulating empirical and contextual insights, the study contributes to a deeper understanding of financial exclusion and provides a strategic roadmap to foster inclusive economic growth within South Africa's SMME sector.

Biography

Melvin Sello Mothoa is a researcher and higher education professional at Mangosuthu University of Technology (MUT), South Africa, where he is involved in research development, postgraduate support, and the advancement of institutional research initiatives. His academic interests include entrepreneurship, innovation, small and medium-sized enterprises, financial access, enterprise development, and research management.

He has contributed to research examining the challenges and opportunities affecting entrepreneurship and SMME development in South Africa, with particular interest in factors influencing access to financial support and sustainable enterprise growth. He is also actively involved in supporting postgraduate research development and strengthening research capacity within higher education institutions.

His work brings together academic research, entrepreneurship, innovation, and institutional development, with a particular interest in generating research that contributes to practical solutions for enterprise development and economic participation in emerging economies.



Organizational Culture: The Influence of Leadership in Improving Institutional Health Processes

Montserrat Legorreta Rojas

Instituto Mexicano Del Seguro Social, Mexico

This study aims to analyze the influence of leadership on organizational culture and its impact on improving institutional processes in healthcare services.

It focuses on examining the characteristics, training, and performance of leaders in public and private institutions, as well as the implications of their decisions on the quality of care and the organizational climate.

Methodologically, a theoretical-reflective analysis was developed based on a review of specialized literature and a critical discussion of key concepts such as organizational culture, managerial skills, and decision-making. Classical and contemporary contributions on leadership are also integrated and contrasted with the operational reality of the healthcare sector in Mexico.

Regarding the results, it was found that a significant proportion of healthcare leaders lack formal managerial training, which, coupled with deficient information systems, favors empirical decision-making and limits the achievement of objectives. A gap is observed between clinical experience and the managerial skills necessary to lead complex organizations, as well as significant differences between leadership in the public and private sectors, particularly in terms of accountability and professionalization.

The scope of the study allows us to understand how these deficiencies negatively impact organizational climate, staff motivation, and ultimately, the quality and safety of healthcare.

It is concluded that it is essential to strengthen academic training and the development of managerial skills in the healthcare sector, as well as to promote the use of reliable information systems for decision-making. The consolidation of transformational leadership represents a key element for improving institutional processes and ensuring more efficient, safe, and population-centered healthcare services.

Biography

Montserrat Legorreta Rojas is a public health professional from Mexico with expertise in medicine, hospital management, and strategic leadership. She holds a medical degree from Anahuac University, postgraduate training in public health and administration, and a Doctorate in Senior Management.

Her career includes leadership roles at the Mexican Social Security Institute (IMSS), where she has contributed to innovation in healthcare systems, including the development of institutional tools for improving data recording. She has also worked as an epidemiologist, supervising physician, and has been involved in hospital infrastructure projects.

Recognized for her contributions during the COVID-19 pandemic, she received an Honorary Doctorate in 2021. She is actively engaged in academic and professional forums and is a member of AECHAC, supporting collaboration and social development initiatives.



The Association Between Physical Activity and Employment Among U.S. Adult Cancer Survivors

Alexis Clouser

University of Arkansas for Medical Sciences, USA

Background: Employment is closely connected with overall quality of life, treatment adherence, recovery, and financial security. Most working-age cancer survivors wish to retain or resume employment; however, many survivors experience long-term cancer or treatment-related side effects, reducing the likelihood of returning to the workforce. Physical activity (PA) is a critical, modifiable health behavior, and has been shown to combat some of these side effects. However, the association between employment and PA remains understudied, especially in the United States.

Methods: This cross-sectional study used pooled National Health Interview Survey (NHIS) data from 2020, 2022, and 2024 which contained nationally representative samples of U.S. cancer survivors ($n = 11,049$). Hosmer and Lemeshow's method ($p < 0.20$) identified 12 key covariates. We utilized a stepwise sensitivity analysis to measure the individual attenuating effects of age, education, poverty-to-income ratio, and biological sex on the PA-employment relationship. Multivariable logistic regression was used to calculate Odds Ratios (ORs) for fully adjusted models.

Results: Unadjusted results showed survivors meeting PA guidelines were twice as likely to be employed (OR: 2.07; 95% CI: 1.84–2.32). After adjusting for 12 covariates, a significant independent association remained (aOR: 1.17; 95% CI: 1.04–1.31). Sensitivity analysis revealed that age group was the strongest confounder (1.65), followed closely by education (1.30) and poverty ratio (1.29). Biological sex (1.21) also exerted a small but notable influence on the final model.

Conclusion: Despite the heavy influence of socioeconomic factors, PA remains a critical, modifiable driver of employment among cancer survivors. These findings suggest the future of public health requires a comprehensive, tailored approach addressing both PA and socioeconomic influence. Supporting cancer survivors in their return to work should include promoting PA as well as designing interventions that account for socioeconomic barriers.

Biography

Alexis Clouser is Epidemiology PhD student at the University of Arkansas for Medical Sciences in the Fay W. Boozman College of Public Health. She is interested in behavioral epidemiology with a focus on exploring the intersection of health behaviors and socioeconomic outcomes. Born and raised in the Southern U.S., she understands the nuances that accompany research in this area. Her research leverages large national datasets to understand how health behaviors such as physical activity and sleep influence labor force participation. As she progresses through her formal public health education, she hopes to continue exploring how occupation type impacts health outcomes and potentially design and implement workplace interventions in the future.



Association of Coal Mine Air Pollution Exposure and Triglyceride-Glucose-Related Indices With Hypertension: Risk Assessment and Mediation Analysis

Wang Manli

Anhui University of Science and Technology, China

Objective: To investigate the associations of underground coal mine air pollution exposure and triglyceride-glucose (TyG)-related indices with hypertension risk, evaluate the contributions of individual pollutants, and clarify the mediating role of TyG-related indices.

Methods: A cross-sectional study was conducted among 1,627 coal miners in northern Shaanxi, China. Individual cumulative exposures to coal dust (CD), carbon monoxide (CO), nitric oxide (NO), and nitrogen dioxide (NO₂) were assessed. The TyG index and seven composite indices (TyG-BMI, TyG-WC, TyG-WHtR, TyG-WWI, TyG-ABSI, TyG-BRI, and TyG-CVAI) were calculated. Multivariable logistic regression was used to estimate associations with hypertension, weighted quantile sum regression was used to evaluate mixture effects and pollutant weights, and mediation models were used to estimate the proportions mediated by TyG-related indices.

Results: The prevalence of hypertension was 24.4%. In the air pollution mixture, CO had the largest contribution weight (74.2%), followed by CD (11.6%) and NO (11.1%). All eight TyG-related indices were positively associated with hypertension. Compared with the lowest tertile, the highest tertiles of TyG-BMI and TyG-WHtR were associated with odds ratios of 5.77 (95% CI: 4.11-8.10) and 5.71 (95% CI: 4.07-8.01), respectively. High CO exposure was also associated with hypertension (OR = 1.32, 95% CI: 1.03-1.82). TyG-WHtR, TyG-WWI, TyG-ABSI, TyG-BRI, and TyG-CVAI significantly mediated the association between CO exposure and hypertension; TyG-CVAI showed the largest mediated proportion at 18.279% (95% CI: 4.591%-39.844%).

Conclusion: High CO exposure is a major environmental risk factor for hypertension among underground coal miners. TyG-CVAI and TyG-WC may be useful metabolic indicators for hypertension risk screening in this occupational population. The association between CO exposure and hypertension may be partly mediated by impaired glucolipid metabolism and visceral adiposity.

Biography

Manli Wang, female, Teaching Assistant, received her master's degree from Nanjing Medical University. She mainly teaches undergraduate courses including Nutrition and Food Hygiene, Preventive Medicine, and Environmental Hygiene.



Association Between Multiple Metal Exposures and Hyperglycemia Among Coal Miners

Wei Qiannan

Anhui University of Science and Technology, China

Objective: To investigate the association between urinary multi-metal co-exposure and hyperglycemia among coal miners, and to identify key contributing metals for occupational metabolic-risk prevention.

Methods: A cross-sectional study was conducted among 1,418 coal miners who underwent routine occupational health examinations in a coal mining enterprise in Northern Shaanxi, China, in 2023. Demographic characteristics, lifestyle factors, occupational information, physical measurements, and biochemical indicators were collected through questionnaires, physical examinations, and laboratory tests. Ten urinary metals, including Pb, V, Fe, Zn, Cu, As, Cr, Cd, Mn, and Ni, were measured by inductively coupled plasma mass spectrometry and corrected for urinary creatinine. Hyperglycemia was defined as fasting plasma glucose ≥ 6.1 mmol/L or physician-diagnosed diabetes with glucose-lowering medication. Multivariable unconditional logistic regression assessed single-metal associations, while weighted quantile sum regression, quantile g-computation, and Bayesian kernel machine regression evaluated mixture effects and major contributors.

Results: Among all participants, 144 cases of hyperglycemia were identified, corresponding to a prevalence of 10.2%. Compared with the first quartile, the fourth quartiles of urinary Zn, Cu, and Fe were associated with higher odds of hyperglycemia, with odds ratios of 3.61 (95% CI: 2.14-6.32), 2.65 (95% CI: 1.61-4.47), and 1.98 (95% CI: 1.20-3.31), respectively. The weighted quantile sum model indicated a positive mixture effect (OR=2.27, 95% CI: 1.63-3.16), mainly driven by Zn, Cu, Ni, and Fe. Quantile g-computation also showed an increased risk (OR=1.55, 95% CI: 1.08-2.21), with Zn, Fe, and Cu contributing most to positive weights and V contributing most to negative weights. Bayesian kernel machine regression confirmed that higher overall metal mixture exposure was associated with increased hyperglycemia risk, with Zn, Cu, and Fe showing positive effects and V showing an inverse association.

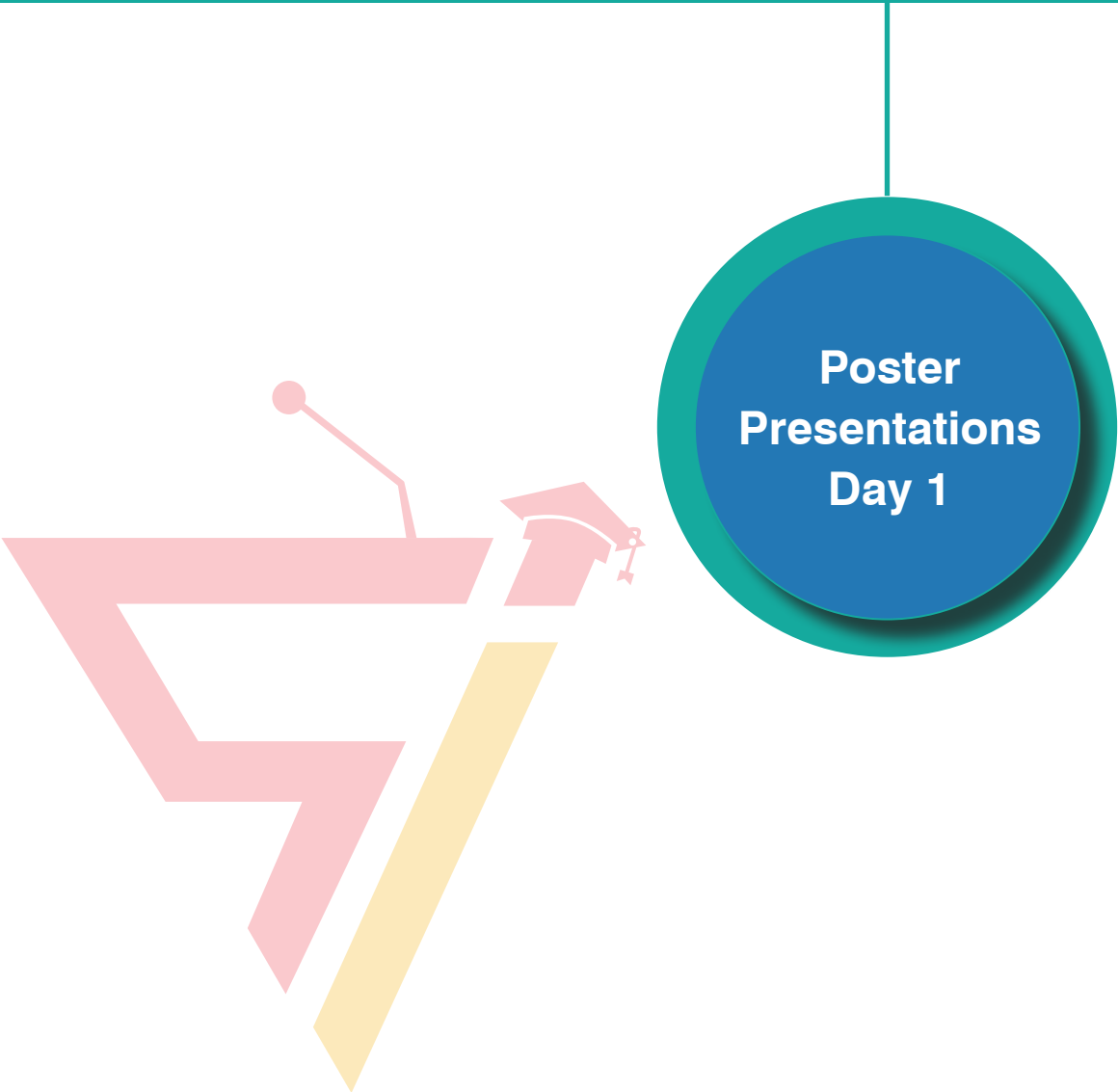
Conclusion: Urinary multi-metal mixture exposure was associated with elevated hyperglycemia risk among coal miners. Zn, Cu, and Fe were the main risk-related metals, whereas V may represent a potential protective signal.

Biography

Wei Qiannan, PhD, received her doctoral degree in Occupational and Environmental Health from Sun Yat-sen University in 2025. She is currently affiliated with the School of Public Health, Anhui University of Science and Technology. She has led or participated in three national and provincial/ministerial-level research projects. She has published multiple scientific papers, including six SCI-indexed articles as first author or co-first author. Her main research interests include environmental epidemiology, environment, and health.

Joint Event

Singapore Public Health & Nursing Leadership Conference Global Mental Wellness & Psychology Leadership Summit

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**Poster
Presentations
Day 1**



Associations of Multiple Metal Exposures With Serum Uric Acid and Hyperuricemia Among Coal Miners: Potential Mediating Role of Serum Lipids

Ye Dongqing

Anhui University of Science and Technology, China

Objective: To investigate the associations of occupational single-metal and metal-mixture exposures with serum uric acid (SUA) and hyperuricemia (HUA) among coal miners, and to evaluate the potential mediating role of serum lipids.

Methods: A cross-sectional study was conducted among 1,407 male coal miners in Shenmu, Shaanxi, China, in 2023. Fifteen urinary metals were measured by inductively coupled plasma mass spectrometry. HUA was defined as SUA ≥ 420 $\mu\text{mol/L}$ or a physician diagnosis. Multivariable linear and logistic regression models assessed single-metal associations; least absolute shrinkage and selection operator regression selected key metals; restricted cubic splines assessed dose-response relationships; and weighted quantile sum regression and Bayesian kernel machine regression estimated mixture effects. Mediation by triglycerides (TG), high-density lipoprotein cholesterol (HDL-C), low-density lipoprotein cholesterol (LDL-C), and total cholesterol (CHOL) was examined.

Results: Higher urinary Zn, As, Tl, Cu, Co, and Pb concentrations were associated with higher SUA and greater odds of HUA. Zn, As, and Tl showed approximately linear positive dose-response relationships. Mixture analyses indicated positive overall effects, with Zn and Tl carrying the largest weights. TG, LDL-C, and CHOL mediated 9.8%, 6.7%, and 10.5% of the association between urinary Zn and HUA, respectively; lipid mediation was not significant for As or Tl.

Conclusion: Single-metal and metal-mixture exposures were associated with increased SUA and HUA among coal miners, with Zn and Tl identified as the primary contributors. Lipid abnormalities partially mediated the association between Zn exposure and HUA. These findings support occupational metal-exposure control and routine monitoring of serum lipids and uric acid in high-risk workplaces.

Biography

Ye Dongqing, Dean of School of Public Health at Anhui University of Science and Technology, is a National Leading Talent and Fellow of Royal Society for Public Health (UK). He serves as Vice Chair of Epidemiology Branch, Chinese Preventive Medicine Association and Founding Editor-in-Chief of Chinese Journal of Disease Control & Prevention. With 15+ national research grants and 200+ publications, he ranks among China's Top 100 Most Influential Scholars in both rheumatology and public health. His epidemiology textbooks won National Excellent Teaching Awards, and he received Elsevier's China Highly Cited Researcher honor (2025). His research focuses on epidemics of major inflammatory and occupational health and safety.



Association Between Mixed Occupational Air Pollution Exposure and Pulmonary Ventilatory Dysfunction: Mediating Role of Oxidative Stress

Min Mu

Anhui University of Science and Technology, China

Objective: To investigate the association between mixed occupational air pollution exposure and pulmonary ventilatory dysfunction (PVD), and to evaluate the mediating role of oxidative stress among coal miners.

Methods: A cross-sectional study included 1,647 coal miners from northern Shaanxi, China. Cumulative occupational exposures to coal dust (CD), carbon monoxide (CO), carbon dioxide (CO₂), nitric oxide (NO), and nitrogen dioxide (NO₂) were assessed. PVD was defined as FEV1/FVC <70% or FVC% predicted <80%. Weighted quantile sum (WQS) regression, quantile g-computation, and Bayesian kernel machine regression were used to evaluate mixture effects. Urinary 8-hydroxy-2'-deoxyguanosine (8-OHdG), a biomarker of oxidative DNA damage, was measured by LC-MS/MS. Mediation analysis assessed the role of 8-OHdG, and machine-learning models were developed to predict PVD.

Results: Mixed occupational air pollution exposure was positively associated with PVD. In the WQS model, CD and NO₂ contributed the largest weights, approximately 33% and 31%, respectively. The associations of CD, NO₂, and their combined exposure with PVD showed significant nonlinear dose-response relationships, and CD interacted positively with other occupational hazards. Urinary 8-OHdG mediated 15.43% of the association between combined CD and NO₂ exposure and PVD. The Adaptive Boosting model achieved the highest predictive performance (AUC = 0.832).

Conclusion: Occupational exposure to CD and NO₂ was positively associated with PVD among coal miners, and this association was partly mediated by oxidative stress. These findings support strengthened control of mixed underground air pollutants and targeted respiratory health surveillance in occupational settings.

Biography

Min Mu, Associate Professor and Master's Supervisor, serves as Vice Dean of the School of Public Health at Anhui University of Science and Technology. She is a committee member of the Public Health Branch of the Chinese Medical Doctor Association, a council member of the Anhui Preventive Medicine Association, and a standing committee member of its Environmental Health and Epidemiology Committees. She also serves on the Occupational Health and Occupational Disease Committee of the Anhui Preventive Medicine Association and the Marine Engineering Safety and Health Committee of the China Occupational Safety and Health Association. She has led one National Natural Science Foundation project and several provincial/ministerial research projects, published numerous papers, including 34 SCI-indexed articles as first or corresponding author, and received two Anhui Provincial Teaching Achievement Awards.

Joint Event

Singapore Public Health & Nursing Leadership Conference Global Mental Wellness & Psychology Leadership Summit

A graphic consisting of a large blue circle with a teal border. A teal line extends from the top of the circle up to a teal horizontal bar. To the left of the circle is a large, stylized graphic in pink and yellow, resembling a 'V' or a path, with a small pink graduation cap icon at its top right.

**Keynote
Speakers
Day 2**



Dementia Prevention Initiatives: Evidence From Europe

Santosh Kumar Mishra

S.N.D.T. Women's University, India (Retired)

Dementia (defined as “a serious condition caused by brain disease or injury which affects the ability to think, remember and behave normally”) is a growing health crisis in the European Union (EU) nations, with around 10 million people currently affected, a number projected to nearly double by 2050, placing immense strain on health systems, especially as populations age. What is of major concern is that women are disproportionately affected, and the burden of care remains significant. It has been found by health care providers that despite substantial efforts, preventive strategies in dementia are not effective in Europe (and elsewhere). This is the reason behind design and implementation of several dementia prevention initiatives (programs) in the European Union (EU) region. This paper aims to present an insight into description on dementia prevention initiatives in Europe. Secondary data (largely qualitative in nature) have been used and method of data analysis is descriptive. Analysis of data in this work indicates that key initiatives involve public-private partnerships that are aimed at understanding and facilitating the early detection and prevention of dementias. One of the significant initiatives is the European Dementia Prevention Initiative (EDPI). The EDPI is a collaborative network of European researchers formed to tackle challenges in dementia prevention trials. The EDPI's approach shifts focus to identifying high-risk groups and testing lifestyle/vascular interventions. It helps build the evidence base for effective, implementable prevention strategies within diverse healthcare systems. It is pertinent to note that collaboration helps EDPI members to strengthen data set before new trials are designed. This abstract briefly concludes that countries in the EU address dementia prevention through various Pan-European collaborative projects and national strategies. Interventions aiming at dementia prevention should be pragmatic and easy to implement on a large scale in different health care systems, without generating high additional costs.

Biography

Santosh Kumar Mishra is an Independent Researcher (Scholar) and retired from the Population Education Resource Centre, Department of Lifelong Learning & Extension, S.N.D.T. Women's University, Mumbai, India. He received Government of India Fellowship training in Demography (1986–1987) and earned his Ph.D. from the University of Patna in 1999. His other qualifications include a Post-Master's Diploma in Adult & Continuing Education, a Certificate in Hospital and Health Care Management, and a Diploma in Human Resource Development. His research interests include demography, sustainable development, health, and allied areas. He has authored/co-authored 4 books, 6 booklets, 32 book chapters, 111 journal articles, 2 monographs, and 7 research studies, and presented 126 papers at national and international conferences.

He received the Certificate of Excellence in Reviewing in 2017, 2018, 2021, and 2022, and the Excellence of Research Award in 2021 for outstanding contributions to agricultural research.



Repercussions of Climate Change Situation on Health of Elderly Population

Santosh Kumar Mishra

S.N.D.T. Women's University, India (Retired)

As greenhouse gas emissions (GHGs) blanket the earth, the sun's heat is trapped. This situation results in global warming (long-term heating of earth's surface) and climate change (CC). GHGs are gases in the earth's atmosphere that trap heat. CC (defined as: "a long-term change in the average weather patterns") has the potential to increase outdoor air pollutants, besides resulting in (a) wildfire smoke, and (b) dust from droughts. In addition, air pollution resulting from CC increases the risk of heart attacks for elderly people (aged 65 years and over), especially among those who have diabetic illness and are or overweight. Those with asthma suffer more. This paper aims to highlight the implications CC has on health of elderly population (or older adults). Secondary data ('qualitative' in nature) have been used by the author, and method of analysis is 'descriptive'. Analysis of data in this paper indicates that as people grow older, their bodies do not cope with the effects of environmental hazards, such as air pollution. Their health conditions make them more sensitive to consequences of CC (e. g., heat, and air pollution). CC worsen their existing illnesses. Further, since several of older adults have limited mobility (which is part of aging process), they are at increased risks 'before', 'during', and 'after' an extreme weather event. Furthermore, some medications change older persons' ability to respond to heat. As the climate warms, this situation puts them at increased risks for (a) heat illnesses, and (b) death. Respiratory illness is another consequence. More specifically, elderly people who live in buildings that are older or have poor ventilation are confronted with more risk for exposure to indoor air pollutants, like bacteria. This paper briefly concludes that older adults should (a) be aware of health impacts of CC, and (b) take required age-appropriate precautions.

Biography

Santosh Kumar Mishra is an Independent Researcher (Scholar) and retired from the Population Education Resource Centre, Department of Lifelong Learning & Extension, S.N.D.T. Women's University, Mumbai, India. He received Government of India Fellowship training in Demography (1986–1987) and earned his Ph.D. from the University of Patna in 1999. His other qualifications include a Post-Master's Diploma in Adult & Continuing Education, a Certificate in Hospital and Health Care Management, and a Diploma in Human Resource Development. His research interests include demography, sustainable development, health, and allied areas. He has authored/co-authored 4 books, 6 booklets, 32 book chapters, 111 journal articles, 2 monographs, and 7 research studies, and presented 126 papers at national and international conferences.

He received the Certificate of Excellence in Reviewing in 2017, 2018, 2021, and 2022, and the Excellence of Research Award in 2021 for outstanding contributions to agricultural research.



Applications of Statistics and Artificial Intelligence in Environmental Research

Nilo Antonio de Souza Sampaio

State University of Rio de Janeiro, Brazil

The growing complexity of environmental problems requires analytical tools capable of dealing with large volumes of data, uncertainties and non-linear patterns. In this context, Statistics and Artificial Intelligence (AI) have played central roles in analysis, prediction and decision-making in environmental research. Statistics, traditionally used in environmental studies, allows for exploratory data analysis, hypothesis testing and probabilistic modeling. For example, statistical time series analysis has been widely applied to detect trends in climate data such as temperature and precipitation[5,6]. Statistical models are also essential for making inferences about water quality samples, species distribution and environmental risks[1]. On the other hand, Artificial Intelligence, especially Machine Learning techniques, has complemented Statistics by enabling the processing of large volumes of data with complex patterns. Artificial neural networks, random forests, and support vector machines (SVM) are commonly used in air quality forecasting, deforestation detection, and land use classification from satellite images[3]. The synergy between statistics and AI also allows for the development of hybrid models, combining statistical inference with the predictive power of AI algorithms, expanding.

Biography

He holds a bachelor's degree in Chemical Engineering from the Lorena School of Engineering EELUSP (1994), a master's degree in Mechanical Engineering from the University of Taubaté UNITAU (2005), and a doctorate in Mechanical Engineering from the São Paulo State University Júlio de Mesquita Filho UNESP (2011). He is currently an Associate Professor at the State University of Rio de Janeiro, teaching undergraduate engineering courses, the Master's in Environmental Engineering (PEAMB), and the Doctorate in Environmental Engineering (DEAMB). He is the leader of the Environmental and Climate Data Analysis Research Group: statistical treatment and use of artificial intelligence, registered with CNPq. He has experience in the field of Mathematics and Statistics, with an emphasis on Applications of Statistics and Mathematics in Science, Mathematical Modeling, Optimization and Design of Experiments, Multivariate Statistics, Process Monitoring, and Artificial Intelligence.



Workplace Social Support as a Protective Factor Against Lifetime Prevalence of Depression in Women Who Had Hypertensive Pregnancy

Jose Marques Neto

UEFS/AFYA EDUCATION, Brazil

Lifetime prevalence of depression (LPD) is a multifactorial condition influenced by biological, psychological and social factors. Hypertensive during pregnancy (HP) increases vulnerability to depressive disorders. The workplace environment plays a central role in mental health, and workplace social support (WSS) -emotional, instrumental, and relational support provided by colleagues and supervisors- may act as a protective factor (PE), reducing the impact of adverse clinical conditions. To investigate whether WSS exerts a PE against LPD in women with a history of HP. This study aimed to assess women who had HP and their risk of LPD among public service employees in ELSA-Brasil, a multicenter cross-sectional study on chronic diseases conducted by public institutions of education. This sample of 6.559 female workers. Psychosocial factors in the workplace were measured using the Job Stress Scale (JSS) and analyzed within Demand-Control Model (DCM). Depressive symptoms were assessed using the Clinical Interview Schedule-Revised (CIS-R). Statistical analysis was using Poisson regression with robust variance. HP was associated with a higher prevalence of LPD (PR = 1.60; $p=0.00062$). WSS showed a protective effect (PR = 0.64; 95% CI) highly significant ($p=0.00014$), representing a 36% reduction in the risk of LFD who reported workplace support, adjusted potential confounders. WSS proved to be an important protective factor against LPD in women who had HP. Prevention strategy, the implementation of psychological and multidisciplinary support programs in the environment is recommended, along with informal and formal support networks. Contributing to more inclusive and supportive work environments and promotes lifelong resilience.

Biography

Jose Marques Neto is PhD student in Public Health at UEFS (2021-); Professor at DomPedro II University/AFYA Education (2023-); Professor of Medicine at UniFTC/ZARNS (2017-2020); Master's in Public Health (2006); Medical Residency Preceptor (HGCA); Specialist Title in Internal Medicine and Cardiology (1991); and Echocardiography (1991); High-risk Pregnancy Cardiologist at HEC (2018-2020); Currently a Cardiologist and Echocardiographer at SESAB; Former Scientific Director of the Brazilian Society of Cardiology. Developed and implemented the Hypertensive and Diabetic Care Project (1993). Director of the Medical Department at SMS-FSA (1993); Has experience with an emphasis on Cardiology and Public Health, mainly working on the following topics: Hypertension, Echocardiography, Heart Disease in Pregnancy, and Occupational Stress.



Multiplier Wellness Research at Royal Hospital: Coaching Based Interventions for Stress, Sleep, and Performance

Salwa Al Ubaidani

Royal Hospital, Oman

Stress and sleep disruption are increasingly recognized as critical determinants of mental wellbeing and functional performance, particularly within high pressure healthcare environments. Despite this, many wellness and mental health models continue to address these factors in isolation or as secondary outcomes. This presentation shares findings from the Multiplier Wellness Research conducted at Royal Hospital, which examined the relationship between stress, sleep quality, and performance, and evaluated the impact of a structured coaching based wellness intervention.

The study explored how targeted coaching interventions support stress regulation, improve sleep quality, and enhance cognitive, emotional, and functional performance. Findings suggest that improvements in stress management and sleep generate a compounding or “multiplier” effect, leading to broader gains in resilience, engagement, and sustained performance. Rather than positioning wellness as an adjunct or short term intervention, the Multiplier Wellness framework reframes stress and sleep optimization as foundational drivers of mental wellness and leadership effectiveness.

This session outlines the research context, intervention approach, and key outcomes, while highlighting practical implications for mental wellness leadership, workforce wellbeing, and integrated psychological care models. Drawing on real world insights from the Royal Hospital setting, the presentation offers an evidence based perspective on how coaching based wellness interventions can be embedded within organizational and healthcare systems. The findings contribute to global discussions on translating mental wellness research into scalable, culturally adaptable strategies aligned with leadership, performance, and sustainable wellbeing.

Biography

Salwa is a physician, PCC credentialed coach (ICF), and Coaching Ambassador with the Ministry of Health. She led the Multiplier Wellness Research at Royal Hospital, examining the effects of coaching based wellness interventions on stress, sleep, and performance among professional female healthcare staff. Her research interests focus on workforce wellbeing, women’s mental health, and the intersection of psychological health, sleep science, and performance in high demand healthcare environments. She is particularly committed to advancing evidence based, scalable wellness models that support sustainable performance, resilience, and mental wellbeing within healthcare systems and organizational leadership contexts.



From Idea to Growth: What Startups Really Need to Succeed

Mina Kerols

NmoHub, Saudi Arabia

Many startups do not fail because their founders lack ambition or ideas. They struggle because they move too quickly from an idea to building a product, raising investment, or entering a new market without first understanding the problem they are trying to solve. This talk presents a practical view of what early-stage startups really need to move from an idea toward sustainable growth.

Drawing on hands-on experience supporting founders, startup programs, incubators, accelerators, and entrepreneurship initiatives, the session focuses on five simple areas: starting with a real problem, speaking directly with customers, building and testing before scaling, approaching investment at the right time, and developing a network that can support growth. Rather than presenting entrepreneurship as a fixed formula, the talk highlights the importance of learning from the market and making decisions based on evidence and customer feedback.

The session also reflects on common challenges faced by startups in emerging markets, including the pressure to raise funding too early, weak market validation, and the difficulty of moving from a promising idea to a business that can actually grow. Practical examples from working with entrepreneurs and startup ecosystems will be used to connect these challenges with actions founders can take.

The main conclusion is straightforward: startup growth is not only about having more resources or investment. It begins with understanding the customer, testing assumptions, learning quickly, and building the right relationships. By keeping these fundamentals clear, founders can make better decisions and build ventures that are more prepared for growth.

Biography

Mina Kerols is a business development and venture growth professional with extensive experience supporting entrepreneurs, startups, incubators, and accelerators across the Middle East. He has supported and mentored more than 100 startups and has delivered entrepreneurship and business development training to thousands of participants. His work focuses on startup growth, market entry, business model development, founder support, and strengthening entrepreneurship ecosystems. He has also contributed as a mentor, judge, and speaker in entrepreneurship and innovation initiatives and has academic interests in entrepreneurship, innovation management, and the application of artificial intelligence in venture development. Based in Riyadh, Saudi Arabia, He combines practical ecosystem experience with business development and venture growth work.



Artificial Intelligence in the Workplace: Insights From the Perspective of Disability Management With a Focus on Early Intervention and Occupational Rehabilitation

Anne Rosken

ANED – HSG – PCU, Germany

Objectives and Focus of the Study: The objectives are to gain a clearer understanding of capabilities and options on the effectiveness of AI in Disability Management for disabled workers with a focus on early intervention and occupational rehabilitation.

Methodology: The starting point for the study comprised one overarching question about the dimensions of AI in the workplace. A structured document analyze and semi-structured expert interviews were used. The analyze strategy follows the principles of the method by Mayring.

Results of the Study: The results from the document analyze show a lot of difficulties and heterogeneous approaches by discussing and talking about AI solutions in the field of Disability Management in the workplace. There is no clear and homogen understanding what is best and what can/should be achieved in this context in present and in future. In this presentation the most important findings, the four main areas, will be presented and how to use AI in the workplace in a respectful way for people with and without disability.

Summary and Conclusion: In summary, it can be said that it is important to have intensive conversations and to carry out education across the entire area. In concrete terms, this means more exchange in each of the different areas and between them. A much more interdisciplinary approach is recommended so that the individual areas learn more from each other. Clear legal regulations with a flexible approach are crucial. This is immanent because AI and humans learn in an ongoing process. These developments should be incorporated into the design process. Legal regulations must respect this phenomenon and offer good opportunities to rework the paragraphs in line with the running learning approaches from theory and practice. In consequence, regulations must be flexibly adapted to these solutions.

Biography

Anne Rosken is Professor of business administration with a focus on: Artificial Intelligence & Work – Health & Work – Leadership – Human Resources Management – Dis-(Ability) Management. Expert in the Academic Network of European Disability Experts (ANED). She also works at the University of St. Gallen and at the Pacific Coast University, Vancouver/Canada. Previously, she was a professor at the University of Hamburg and director and professor at the Carinthia University of Applied Sciences. Anne Rosken is one of the leading experts for Artificial Intelligence & Work as well as Health & Work. She is also a senior consultant, coach and author. She also has many years of leadership and management experience in national and international organizations and projects.



The Impact of Digital Innovation and Lifestyle Medicine on Public Health & Nursing Roles and Practices

David John Wortley

WLMES, United Kingdom

The rapid evolution of digital innovation and the growing emphasis on lifestyle medicine are transforming the landscape of healthcare delivery and public health, redefining nursing roles and practices. This presentation explores how technological advancements such as telemedicine, wearable health devices, artificial intelligence (AI), and electronic health records (EHRs) are reshaping nursing responsibilities, enabling more efficient, personalized, and preventative care. Concurrently, the rise of lifestyle medicine—focusing on nutrition, physical activity, stress management, and patient empowerment—places nurses at the forefront of promoting sustainable health behaviors.

Digital innovation enhances nurses' ability to monitor and manage chronic diseases remotely, improve diagnostic accuracy, and engage patients through interactive platforms. However, it also demands upskilling in data interpretation, cybersecurity, and virtual communication. Lifestyle medicine expands nurses' roles as educators and coaches, equipping them to guide patients in adopting evidence-based interventions that reduce dependency on pharmacological treatments.

In parallel with this, public health strategies are moving away from centralized bureaucratic hospitals to community based "neighbourhood of the future" health and wellness hubs focused on prevention rather than cure.

This dual paradigm shift presents challenges such as ethical considerations, disparities in technology access, and the risk of caregiver burnout. It also necessitates interdisciplinary collaboration and continuous professional development to bridge the gap between technology and human-centered care.

By highlighting case studies and recent research, this presentation underscores the pivotal role of nurses in integrating digital tools and lifestyle medicine into everyday practice. Attendees will gain insights into strategies for adapting to these changes, fostering resilience, and maximizing the potential of innovation to enhance patient outcomes and advance the nursing profession.

Biography

David Wortley is a Non-Executive Director of the World Lifestyle Medicine Education Services (WLMES) and a VP of the International Society of Digital Medicine (ISDM). He is a Fellow of the Royal Society of Arts and Commerce and a global thought leader and innovator on enabling technologies for health, education and the environment. He is on the editorial board of the Digital Medicine Journal. He is an Associate Member of the Royal Society of Medicine and a Visiting Fellow at the Faculty of Health and Social Sciences at Bournemouth University. As the Founding Director of the Serious Games Institute (SGI) at Coventry University, his team established an International Centre of Excellence for Applied Research and Innovation in the field of serious games and immersive technologies for a wide range of applications. His areas of special interest are technologies for preventative healthcare, collaboration, virtual reality and interactive rich media knowledge sharing. He is a professional virtual event facilitator, webinar host and publisher.



Child Development Leading to the Pursuit of Virtues and the Avoidance of Vices

Gerald H Katzman

Wayne State University, USA

Optimizing the social, emotional, moral and cognitive development of children will support prosocial behavior and peaceful societies. To accomplish these goals, efforts need to start from birth with authoritative parenting to achieve secure attuned attachment between caregiver and child. Such parenting should eliminate the toxic stress associated with the authoritarian approach and the lack of direction seen with permissive or uninvolved parenting. Early literacy is the key to building character using the vehicles of modeled behaviors, reading stories with a moral and that teach a lesson and Human Relations Programs for Children. Benevolent mindfulness characterized by emotional empathy, compassion and helping behaviors will result from proper parenting and successful character education. The resultant ability to think in a complex fashion where virtues are pursued and vices avoided should facilitate resistance to false narratives and non-violent conflict resolution. Avoiding Adverse Child Experiences has been shown to minimize depression, violence perpetration and other problem behaviors and disorders. When there are educational and professional resources in play to support the development of children in communities, a responsible, caring citizenry can be anticipated.

Biography

Gerald H Katzman served his pediatric residency at the University of Chicago and Children's Hospital of Michigan. After spending two years in the Navy, he entered a fellowship in Neonatal-Perinatal Medicine at Temple University Hospital. He is board certified in Pediatrics and Neonatal-Perinatal Medicine. He is also certified by the American College of Physician Executives as a Physician Executive. Over the years, he has published a number of papers in both Neonatology and Pediatrics, an initial interest in Human Relations Programs for Children in the 1980s evolved into an effort to understand the ways children are taught to hate and how such indoctrinations can be prevented.



Tame the Caveman in Your Brain™: Power Habits® for Entrepreneurs and High-Performance Leaders

Noah St John

NoahStJohn.com, USA

Entrepreneurship demands peak cognitive performance, emotional resilience, and sustained leadership effectiveness under conditions of chronic pressure, uncertainty, and rapid change. Yet many entrepreneurs and business leaders unknowingly operate with an internal performance barrier — referred to as The Invisible Brake™ — a set of subconscious neurological and psychological patterns that silently limit decision-making quality, innovation capacity, and leadership effectiveness. Despite the growing body of neuroscience research linking mindset and behavioural habits to organizational outcomes, most entrepreneurial education continues to focus on external strategies while overlooking the internal psychological mechanisms that drive or inhibit peak performance.

This presentation introduces Dr. Noah St. John's evidence-based Power Habits® framework — a neuroscience-informed system developed over 30 years of research and applied across thousands of entrepreneurs, executives, and high-performance organizations worldwide. Drawing on behavioural psychology, cognitive neuroscience, and real-world business application, this session explores how entrepreneurs can identify and systematically remove subconscious performance blockers to unlock measurable improvements in productivity, leadership, team cohesion, and revenue growth. Attendees will be introduced to the AFFORMATIONS® methodology — a patented mindset tool that restructures self-limiting thought patterns through empowering question-based neural rewiring — and will participate in a structured live exercise demonstrating its immediate practical application. The session will further outline how the Power Habits® system has been applied in entrepreneurial and corporate environments to reduce burnout, strengthen decision-making under pressure, and accelerate business performance outcomes.

This presentation bridges neuroscience, behavioral change theory, and entrepreneurial leadership development, offering conference participants actionable tools to immediately strengthen personal resilience, improve team dynamics, and build the internal foundation required to sustain high-performance entrepreneurship in today's competitive business environment.

Biography

Noah St. John is a Neural Performance Specialist, TEDx speaker, and bestselling author of 27 books published in 18 languages, including Power Habits® and the 7-Figure Expert. Widely recognized as the only performance coach with documented results across entrepreneurial, corporate, healthcare, and clinical environments, He has worked with thousands of entrepreneurs, executives, and high-performance organizations worldwide. His groundbreaking AFFORMATIONS® methodology — a patented system for rewiring self-limiting thought patterns — has been adopted across business, healthcare, and leadership development contexts globally. His work has been featured on ABC, NBC, CBS, Fox, ESPN, and NPR, with over 1,000 media appearances to date. He is the founder of NoahStJohn.com and is dedicated to helping entrepreneurs and leaders remove their Invisible Brake™ and build the internal foundation for sustainable high performance and business growth.



Mathematical Analysis of Epidemiological Models and Their Forecasts

Carlos Oscar Rodriguez Leal

University of Guadalajara, Mexico

In this article I present analyses of the existence and uniqueness, as well as the convergence, consistency, and stability, of various analytical (such as Lie algebras) and approximate methods (both existing -deterministic and stochastic-, such as numerical methods, machine learning, and neural networks, and some I have developed -discrete Taylor series, Rodriguez's linearizations, new neural network models, predictions using cyclical behaviors, etc.-) for solving equations arising from models (some existing and others I have created) of the growth of several types of epidemics; where besides I integrate technical analysis (correlative models) with fundamental analysis (explanatory models), and apply inverse problem methods (both existing ones and others I have developed) to fit parameters in the equations. It is worth mentioning that I achieve good and interesting results in all the above mentioned. Finally, I conduct a comparative analysis of the different models and synthesize them in order to develop more accurate forecasts of the growth of these epidemics, as said models correct each other. Through this synthesis of methods, I manage to achieve some improvement in forecasting the progression of epidemics, at least in the short term, and a slight improvement in the medium term. It remains for future research to develop and refine all these procedures.

Biography

Carlos Oscar Rodriguez Leal is a physicist-mathematician, who did his doctorate in physics in the University of Guadalajara. He is also a self-taught philosopher and has experience in the application and modeling of mathematics, physics, AI and machine learning in specific areas of medicine, such as epidemiological models and neuroscience. He has published papers and books, and participated in international conferences on mathematics, physics, philosophy and medicine.



Protective Role of Magnetite Nanoparticles (ICNB) in Maintaining the Molecular Integrity of Erythrocyte Protein-Lipid Membranes

Andrey Belousov

Kharkiv National Medical University, Ukraine

This study was devoted to the learning changes in the structure of erythrocyte membranes at the level of molecular bonds during their storage at a positive temperature by means method of infrared spectroscopy (IR). Objects of research were red blood cells (RBCs) into bags containing preservative CPD and RBCs into bags containing preservative CPDA-1. As membrane protective used saline which had previously been treated with magnetite nanoparticles (ICNB) by the Belousov's method. The physiological solution that was treated with nanoparticles was added to the preserved RBCs according to the developed method. Sample of control was the addition of intact saline. Analysis of changes occurring in the IR spectra of samples of control and test in the CPD medium was showed that during the first 28 days storage of: 1. In the suspension of control of the RBCs, noticeable destructive changes in the molecular structure membrane of erythrocytes at the 14th day storage begins. After three weeks, the molecular structure membrane of erythrocytes is completely destroyed; 2. In the sample of test there was a weakening and rupture of molecular bonds only at the 28th day storage of RBCs. Complete destruction of the structure of membrane of erythrocytes occurs at the 35th day storage. Analysis of changes occurring in the IR spectra of samples of control and test in the CPDA-1 medium was showed that during 49 days storage of: 1. In the suspension of control of RBCs noticeable destructive changes in the molecular structure begins in four weeks, and after six weeks storage the molecular structure of erythrocytes membrane are completely destroyed; 2. In the sample of test, a significant weakening of intra-and intermolecular bonds in the structure of erythrocytes membrane occurs after six weeks. However, the complete destruction of the structure is not observed. After seven weeks storage of erythrocytes obvious violations of the molecular structure of lipids and proteins that make up the RBCs are visible but some of the strongest compounds still remain. In general, the results clearly showed that the presented method of application of nanotechnology significantly increases the storage time of RBCs in different versions of preservatives due to mechanisms to reduce violations of the molecular structure of proteins and lipids in the erythrocyte membranes. Presented method of application of nanotechnology is not only safe for use in practice in the Blood Service, Transfusiology and Hematology, but also is the most promising innovation project.

Biography

Andrey Belousov PhD, DM, Professor - a Ukrainian medical scientist and pioneer in nanotechnology, who developed the world's first biocompatible nanomedical drugs (Micromage-B, MCS-B, ICNB), officially registered and introduced into clinical practice since 1998. His work established a translational foundation for medical nanotechnology, linking fundamental biophysics with clinical applications in detoxification, hemocorrection, and neuroprotection. The published more 360 scientific works on results application of nanotechnology preparation in experimental and practical medicine. At now Andrey Belousov - the Head of Laboratory Applied Nanotechnologies, Professor of Department Anesthesiology, Intensive Care and Pediatric Anesthesiology of Kharkiv National Medical University, Ukraine. His research interests include nanomedicine, detoxification technologies, critical care pharmacology, and blood rheology correction. He continues to lead multidisciplinary research on the clinical application of nanostructured materials in medicine, contributing to the advancement of personalized and non-invasive therapies.

Joint Event

Singapore Public Health & Nursing Leadership Conference Global Mental Wellness & Psychology Leadership Summit

A blue circle with a teal border, containing the text 'Speaker Sessions Day 2'. A teal line connects the top of the circle to a teal bar at the top of the page.A stylized graphic consisting of a pink zigzag line, a yellow diagonal bar, and a pink graduation cap with a tassel.



The Relationship Between Emotional Intelligence and Generation Z Entrepreneurs: Implications for Leadership, Innovation, and Sustainable Business Performance

Houda Jorio

UM6P, Morocco

The entrepreneurial landscape is undergoing a profound transformation as Generation Z (Gen Z) increasingly enters the global economy as business founders, innovators, and change agents. Unlike previous generations, Gen Z entrepreneurs operate in a highly digitized, volatile, and socially conscious environment that demands not only technical competence but also advanced emotional and interpersonal capabilities. Emotional intelligence (EI), defined as the ability to perceive, understand, regulate, and utilize emotions effectively, has emerged as a critical determinant of leadership effectiveness, resilience, and organizational success. This article examines the relationship between emotional intelligence and Gen Z entrepreneurship, integrating psychological theory, generational research, and entrepreneurial studies. Drawing on established EI models and contemporary entrepreneurship literature, the paper explores how emotional intelligence influences leadership style, decision-making, innovation, team dynamics, mental wellbeing, and long-term venture sustainability among Gen Z entrepreneurs. The article further discusses challenges, developmental pathways, and practical implications for educators, policymakers, and startup ecosystems. The study concludes that emotional intelligence functions as a strategic competency that amplifies the unique strengths of Gen Z entrepreneurs while mitigating the risks inherent in modern entrepreneurial environments.

Biography

Houda Jorio is an international business professor and a scholar. Her academic field is varied and enriched by her deep expertise in learning and leading. She carries a strong background in academia and is highly involved in the Entrepreneurship field. She holds the position of an entrepreneurship expert at University Polytechnic Mohamed VI. Her mission is to instill the entrepreneurship, quality, management, leadership and power skills amongst youth in general and females, in particular.



Evaluation of Modifiable Factors in Type 2 Diabetes Patients Using a Four-Layered Hidden Markov Model

Surnam Narendra

Woxsen University, India

Aim: This study aims to understand the fluctuations in glucose levels by analysing various modifiable hidden factors using a four-layered Hidden Markov Model (4LHMM). The factors include five prognostic variables: cholesterol, creatinine, triglycerides, systolic blood pressure, and the disease marker HbA1c, with HbA1c serving as the emission layer.

Methods: The forward algorithm was used to calculate the probability of an emission state sequence. A probability mass function for the occurrence of each particular state was derived to understand the influence of each factor on diabetic conditions.

Results: The transition from systolic blood pressure to HbA1c categories underscored the challenge of managing diabetes in individuals with varying levels of blood pressure control. While tight blood pressure control was associated with better glycaemic outcomes, individuals with uncontrolled blood pressure were more likely to experience poor glycaemic management.

Conclusion: The findings demonstrate the ongoing persistence of adverse health conditions over time, which carries significant implications for public health policy and intervention strategies.

Biography

Surnam Narendra is a Researcher and Educator currently serving as an Assistant Professor in the Department of Mathematics at Woxsen University. His research primarily focuses on statistics, stochastic modelling, and Markov models, with applications in healthcare analytics, time-series modelling, and data-driven decision-making. His academic expertise includes Hidden Markov Models, reinforcement learning, statistical modelling, and data analysis. Through his research, he aims to develop practical and innovative statistical approaches to address complex real-world challenges. Alongside his research, he is passionate about teaching and academic mentorship. He is committed to simplifying complex statistical concepts and creating an engaging learning environment that enables students to develop strong analytical and problem-solving skills. His combination of academic research, teaching experience, and data-analysis expertise also positions him well for interdisciplinary and industry-oriented applications in data science and analytics.



Building Women-Led Entrepreneurial Communities That Move the Needle: Designing Societies That Turn Membership Into Entrepreneurial Confidence

Tadiwa Mazvita Ndadzungira

Hult International Business School, London, United Kingdom

Objectives: Many student and community entrepreneurship societies judge success by membership numbers and event attendance, yet few convert participation into lasting entrepreneurial confidence; a gap that is especially costly for women, who remain underrepresented among founders and in access to funding. This presentation asks how women-led entrepreneurial communities can be designed so that membership translates into measurable confidence, capability, and action.

Scope and methods: The work draws on two applied leadership case studies: my tenure as President of Women in Business, where I led a board of seven and delivered four flagship initiatives, including the Women Connect Conference, and my role as Vice-President of Hult Business in Africa. From this, a repeatable community-design model emerged. Methods included structured board delegation, speaker curation across diverse professional backgrounds, detailed event playbooks and marketing planning, and cross-departmental coordination, with member engagement and feedback tracked across the membership cycle.

Results and discussion: Intentional design, not the sheer volume of events, drove impact. Across four initiatives, the society strengthened member impact by an estimated 80% and delivered events with roughly 90% planning accuracy through detailed playbooks, while the Women Connect Conference expanded reach by connecting members with role models and professional networks. The engagement ladder in Figure 1 and the comparison in Table 1 identify which levers- belonging, visible role models, structured mentorship, and action-based formats- most reliably move members from attending to doing.

Conclusion: Women-led entrepreneurial communities move the needle when they are engineered for confidence, not merely attendance. A confidence-first model, combining psychological safety, role-model visibility, structured mentorship, and action-based events, offers societies, universities, and networks a replicable blueprint for converting membership into real entrepreneurial outcomes and a stronger pipeline of women founders.

Biography

Tadiwa Mazvita Ndadzungira is a Marketing MSc candidate at Hult International Business School, London, where she also earned her Bachelor of Business Administration in Entrepreneurship (Marketing minor), graduating in the top 1% with honours as a Hodges Scholar and a four-year Dean's List student with a 4.0 GPA. A dedicated advocate for women in business, she served as President of Women in Business, leading a board of seven and delivering four initiatives, including the Women Connect Conference, and as Vice-President of Hult Business in Africa. She has also led operations for TEDxHultLondon and won the Dolce & Gabbana Live Client Challenge for a Saudi Arabian market-entry campaign. Originally from Zimbabwe and shaped by education across Southern and East Africa and the UK, she is passionate about designing communities that turn membership into real entrepreneurial confidence for women.



From Clinical Photographs to Trustworthy Health Data: Governing Source-Image Quality for Digital Health and AI

Francis G James

Wound Care Collaborative Community, USA

Clinical photographs are increasingly used by nurses and interdisciplinary teams as source data for documentation, telehealth, longitudinal assessment, research, reimbursement, and artificial intelligence (AI)-derived analysis. Yet, unlike many clinical data sources, photographs are often acquired without objective standards for fidelity, reproducibility, or fitness for downstream use. This invited presentation draws on the presenter's work across two recent peer-reviewed publications: a structured review of color accuracy in wound photography and the Wound Care Collaborative Community's proposed addendum to the 2006 US Food and Drug Administration guidance on chronic wounds. Together, these works frame image quality not simply as a technical concern, but as a governance requirement for digital health, nursing practice, clinical research, and AI. The review evaluated 90 full-text articles, of which 22 provided sufficient methodological rigor and quantitative evidence, and incorporated observational analyses showing substantial variability in non-standardized photographs. In a 50,900- image dataset, a single known reference color was reproduced as tens of thousands of distinct values; standardized acquisition and objective color calibration reduced mean color difference from ΔE 21.6 to 5.8. The proposed addendum separately recommends standardized photographic documentation and digital wound assessment technologies within modernized clinical study design. Building on these evidence bases, the presentation proposes a practical source-image governance model addressing standardized capture, visible reference targets, measurable quality thresholds, traceability, and fitness-for-use requirements. As photographs become longitudinal and machine-interpretable health data, trustworthy source-image standards are essential infrastructure for responsible digital-health innovation and the future of public health.

Biography

Francis G. James, SOC, is Vice-Chair of the Wound Care Collaborative Community Tools Work Group and leads its Color Science and Clinical Data Workstream. He is an independent healthcare product and clinical data advisor specializing in visible-light clinical photography, standardized image capture, color accuracy, digital health, and trustworthy photo-derived data for AI. He founded TRUE-See Systems and developed patented technologies for standardized clinical photography. James is lead author of a 2026 peer-reviewed review on color accuracy in wound photography and a contributing author to the WCCC's 2026 proposed addendum modernizing recommendations related to the FDA's chronic wound guidance.

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healthcare@scholarevents.org
<https://scholarsconferences.com/nursing-healthcare/>

6th Global Women's Empowerment & Leadership Summit

November 23-24, 2026 | Bangkok, Thailand
gwf@scholarevents.org
<https://women-forum.com/>

6th Asia-Pacific Mental Health and Well-being Congress

November 23-24, 2026 | Bangkok, Thailand
dileep@scholarsconferences.com
<https://scholarsconferences.com/asia-pacific-mental-health/>

5th World Congress on Advances in Mental Health and Psychiatry

March 22-23, 2027 | Paris, France
mentalhealth@scholarconferences.org
<https://mentalhealth.scholarsconferences.com/>

3rd World Congress on Advances in Preventive Medicine and Public Health

June 07-08, 2027 | Barcelona, Spain
preventivemedicine@frontiersmeetings.org
<https://preventivemedicine.scholarsconferences.com/>

