9th Edition

Aging & Gerontology

April 21, 2025

PROCEEDING BOOK

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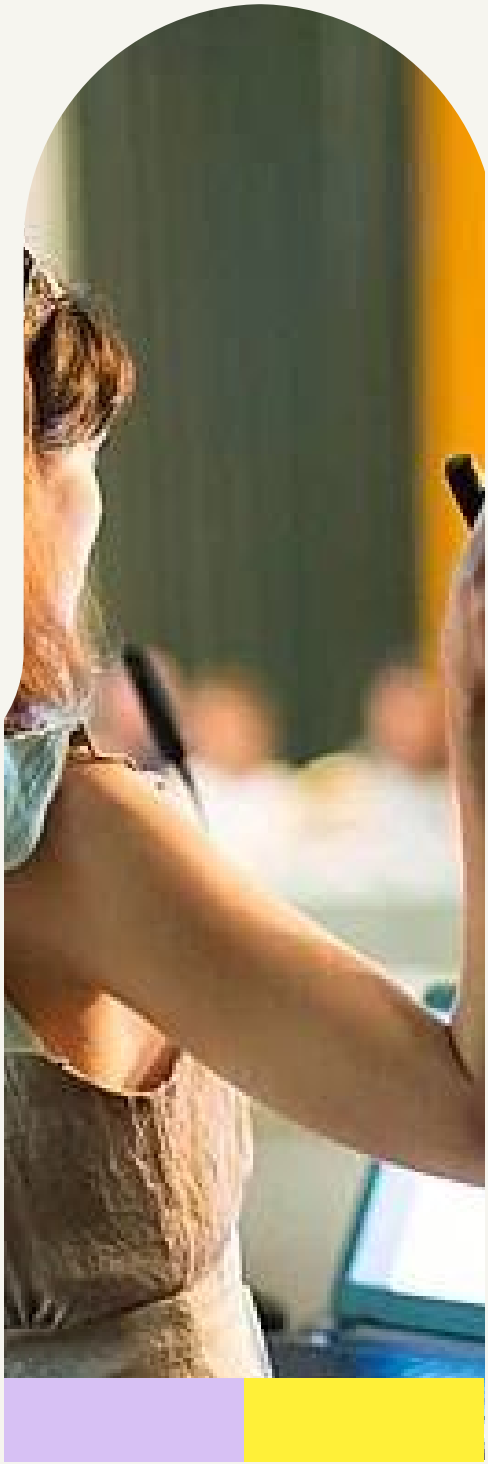
Introduction

The 9th Edition of the Aging & Gerontology Conference, held on April 21, 2024, was a landmark event that brought together professionals, researchers, and thought leaders from around the world to discuss and explore the latest advancements in aging and gerontology. Organized by the Sciinov Group, the conference provided a unique platform for attendees to share research, develop collaborations, and engage in thought-provoking discussions on the pressing challenges and emerging trends in the field of aging.

Keynote Presentations



Social inequalities of wellbeing, life course and healthy ageing: a decade impact assessment of SDGs in Nigeria

Elias Olukorede Wahab
Lagos State University Nigeria, Nigeria

Abstract:
Healthy Ageing is recognized as determined by old age disease patterns and health needs and as a cumulative inequalities between socio-economic positions (SEP) especially older women, those with disability, & those suffering discrimination & exclusion based on economic status. The outcome is to strengthen the capacities of key stakeholders to enable more effective health delivery system of this marginalized group and enhance healthy ageing through inclusion. Using mixed methodology from 800 older persons aged 60-85(mean=74, standard deviation=4.5). lifecourse model was used as predictors healthy ageing. Odd ratio analalysis showed that the link between health disease pattens, health needs and healthy ageing was mediated by education, occupation and especially, income level. Findings point to the importance of considering the mediators of lifelong impact on health diease patterns, health needs and healthy ageing and how different extended families produces different pathways to healthy ageing. This is to strengthen capacity of health care personnel on the health needs of the older persons. This invariably will strengthen capacity of networks of older people at all levels for influencing policy and practice. There will be advocacy and dissemination of the findings. This will raise awareness on elderly abuse; healthy ageing and their health needs.

Biography:
Elias Olukorede Wahab, B.Sc.(Hons) (LASU); M.Sc. (Ibadan); Ph.D (Ibadan); LL.B (Hons)(LASU) is a Professor of Sociology with research focus in Demography of Ageing/ Gerontology/ Disability Concern, Department of Sociology at the Lagos State University, Nigeria and a Visiting Profesorial Research Fellow, National Institute for Policy and Strategic Studies (NIPSS), Kuru, Jos, Nigeria. A former Visiting Scholar/Professor, Institute of Population Ageing, University of Oxford, UK. He is the immediate Past Deputy Vice Chancellor (Academic), Lagos State University, Nigeria. He is a Fellow, Nigeria Sociological and Anthropological Practitioners Association (FNASA), 2023; Fellow, Institute For Criminology and Strategic Studies, Nigeria (FICSS), 2024;
Fellow, Institute of Social Work of Nigeria (FISWN), 2022;
Fellow, Chartered Institute of Leadership, Education and Development (FCILED), 2021;
Fellow, Society for Educational Administrators of Nigeria (FSEAN), 2017. And nominee for Commonwealth Fellowship, 2002; Fulbright Junior Staff Development, 2007; Infrastructure Prize for Sociology by the European Institute, Fiesole/Florence, 2023; Kohli Prize for Sociology by the European University Institute, Fiesole/Florence, 2023.

Healthy Ageing Lifestyle Medicine Satnav

David John Wortley
International Society of Digital Medicine, United Kingdom

Abstract:
In recent years, advancements in wearable and embedded technologies have transformed how personal health is monitored and managed. This presentation examines current and future digital health innovations through the metaphor of the human body as a vehicle navigating life from birth to death. Just as modern vehicles now feature diagnostic tools to monitor their health and provide journey options, wearable and embedded technologies are emerging to offer similar insights for human health.
A central concept introduced is the "digital health satnav," a system designed to guide individuals in making healthy lifestyle choices throughout their life journey. The integration of artificial intelligence (AI) plays a key role in enhancing the functionality of these systems, enabling real-time health monitoring and personalized recommendations. AI-powered algorithms analyze vast amounts of health data, offering tailored insights and predictive guidance, helping users make informed decisions about their wellbeing.
Gamification is another vital component of this system, motivating users to stay engaged with their health journey. By introducing elements of competition, rewards, and progression, gamification encourages consistent interaction with health data and fosters long-term healthy behaviors. Together, AI and gamification work to create an intuitive, user-friendly "satnav" for healthy aging, empowering individuals to proactively manage their health, extend their lifespan, and improve their quality of life. This exploration highlights the potential of digital health technologies to revolutionize personal health management on both individual and global scales.

Biography:
David Wortley is CEO & Founder of 360in360 Immersive Experiences 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.

From Likes to Lifestyle: The Impact of Social Media on the Health and Longevity Sector

Miguel Medina
Nova School of Business and Economics, Portugal

Abstract:
In an era where social media shapes public perception and behavior, health influencers have emerged as powerful agents of change, capable of driving awareness and promoting healthy lifestyles. While traditional healthcare systems aim to reduce the burden of chronic diseases, social media platforms have enabled a new form of health communication that can reach a diverse and global audience instantly. This presentation explores the evolving role of health influencers in promoting healthy behaviours and longevity, with a specific focus on addressing modifiable risk factors such as physical inactivity, unhealthy diets, and mental well-being.

Drawing on both academic research and real-world experience, I will provide a status quo of the current social media and health influencer landscape and present findings from a collaborative research project conducted during my participation in the Healthy Longevity Talent Incubator at the Academy for Healthy Longevity, National University of Singapore. Additionally, I will share insights from my hands-on experience in influencer management and brand building, where I managed to grow accounts to 2 million followers on Instagram, TikTok and YouTube. The presentation will showcase benefits as well as risks of social media usage and influencer power in the health and longevity context, with the intention of educating about issues, motivating to take action and planting seeds for how we can actively shape a desirable future in the field.

Biography:
Miguel Medina Stanivukovic completed the first part of his double degree Master's program at Nova School of Business and Economics in International Management with a focus on Medicine and Health Economics. Next, he will start the CEMS program at London School of Economics and PoliticalSciences. He has been involved in various longevity projects such as the Healthy Longevity Talent Incubator at the National University of Singapore. As a founder of Medina Studios B.V., he has gained extensive expertise in social media strategy and influencer management, achieving more than 250 million views for his clients across social media platforms.

LDL & Blood Sugar: Management in the Healthy Longevity Clinic

Swapneil Parikh
MediCircle Health, India

Abstract:
The talk, "LDL & Blood Sugar: Management in the Healthy Longevity Clinic," explores the critical role of LDL cholesterol and blood sugar in promoting healthy aging, focusing on their impact on longevity and biological age. This presentation delves into the basic biochemistry of these biomarkers, elucidating LDL's role in cholesterol transport and glucose's function as the body's primary energy source. The pathophysiology of elevated levels is examined, highlighting how high LDL contributes to atherosclerosis and cardiovascular events, while high or suboptimal blood sugar leads to the formation of advanced glycation end products, accelerating aging and disease. Normal versus optimal levels are discussed, emphasizing longevity-focused targets and those for high-risk individuals. Clinical findings link high LDL and glucose to increased cardiovascular and metabolic risks, while related tests, including lipid panels, HbA1c, CGMs are reviewed for comprehensive assessment. Pharmacological therapy targets are outlined, emphasizing a longevity perspective that balances benefits against risks like hypoglycemia and drug toxicities. Various pharmacological therapeutic options are discussed, highlighting their unique benefits in extending healthspan. Recent scientific literature, including studies on LDL's complex role and the benefits of glucoregulatory control for healthspan, is reviewed to provide evidence-based insights. This talk is aimed at both clinicians and non-clinicians to help all attendees better understand these critical biomarkers and strategies to optimize them, integrating standard medical practices with healthy longevity medicine principles to enhance patient outcomes and extend healthspan.

Biography:

Dr. Swapneil Parikh is a Mumbai based internal medicine physician focusing on diabetes, obesity, lipidology, longevity & sports medicine. He's a penguin random house best selling author and a research consultant at several Indian biomedical companies.

Oral Presentations

The Rise of Concierge Precision Longevity

Jean-Philippe Diel
The Symbioniq Foundation Ltd, New Zealand

Abstract:

Introduction:
- Brief framing: why traditional healthcare is ripe for disruption.
- The shift from reactive, mass-market health care toward proactive, personalized precision longevity.

Section 1: Why Concierge?
- Limitations of mass-produced, impersonal health advice.
- Growing consumer desire for personalized, on-demand experiences.
- Emergence of premium services, personalized health apps, and human-AI hybrid solutions.

Section 2: Precision Longevity as the New Standard
- What precision really means: actionable insights from genetic testing, real-time biometrics (CGM, wearables, AI-driven predictive modeling).
- Data integration across quantified self, medical records, genomics, and lifestyle.
- The role of AI and ML in making sense of complex health data.

Section 3: The Business Opportunity
- Market size: explosive growth in mHealth, digital fitness, telehealth, DeSci, and precision medicine.
- Potential of blockchain/Web3 for decentralizing and securing individual health data.
- How concierge precision longevity can scale, leveraging communities and personalized incentive structures (social, financial, tokenomics).

Section 4: The SymbionIQ Ecosystem – A Model in Action
- A brief showcase of our ecosystem: NeoXR, NeoLife, NeoTrackR.
- How concierge precision longevity becomes actionable with SymbionIQ's tech stack and decentralized platform (Linux for Health model).
- Illustrate the financial and health outcomes for both individuals and health professionals.

Conclusion: Vision and Call to Action
- Painting the future: longer, healthier lives as a standard expectation.
- Our core thesis: longevity as a service, powered by personalized data and human-machine symbiosis.
- Invite collaboration from investors, partners, researchers, and entrepreneurs.

Biography:

Jean-Philippe Diel is a seasoned entrepreneur with over 30 years of experience leading innovation. He started his career in FMCG before quickly transitioning into consumer technology during the mobile phone boom, eventually becoming General Manager of Marketing at Samsung. Since 2009, Jean-Philippe has been self-employed, marking nearly 16 years as an entrepreneur. A lifelong technology enthusiast and self-proclaimed "nerd," his career uniquely blends business acumen with deep-rooted curiosity and technical proficiency.

Driven by personal experiences with the pressures and challenges of maintaining work-life balance and significant health fluctuations—including a critical metabolic health diagnosis—he founded the SymbionIQ Foundation, a not-for-profit dedicated to creating a precision longevity ecosystem to empower individuals through personalized, data-driven insights and self-experimentation, championing an "N=1" approach.

SymbionIQ is developing a unique AI powered health wallet designed to empower users through personalized insights, gamification, and complete ownership of their health data, while also facilitating escalated access to healthcare professionals. Additionally, it serves as a robust no-code platform for the rapid deployment of innovative health and wellness services. Jean-Philippe's own transformative health journey, marked by losing over 20 kilograms and reversing critical health markers, underscores his commitment to authenticity, humility, and continuous learning. His mission is clear: defeat aging by democratizing precision longevity, adding years of health and vitality to everyday lives through personalized, concierge-driven solutions.

Measuring and Programming One's Health

Suresh Poosala
Acasta Health Pvt Ltd, India

Abstract:
Aging has traditionally been seen as an inevitable decline, where wisdom often comes alongside frailty and weakness. Yet, recent advancements reveal that aging is not merely an unavoidable process—it's a condition with identifiable and potentially modifiable symptoms. Experts have long debated a single underlying cause for aging; instead, they've reached a consensus on multiple biological "hallmarks of aging." Today, we recognize 12 hallmarks of aging, each representing a measurable aspect of the process that can guide targeted interventions and support healthier, more resilient aging. By leveraging these hallmarks, we can gain critical insights into an individual's health trajectory, allowing us to proactively "program" health to counteract age-related decline and promote healthy aging.

This talk will explore the hallmarks of aging, emphasizing how targeted, evidence-based approaches can be applied to support proactive health interventions. Specifically, we will introduce Age-MAP™, a pioneering health assessment tool that identifies biomarkers critical to measuring real biological age. Through a combination of genomic and proteomic analysis, Age-MAPTM offers a cost-effective and non-invasive way to evaluate these markers, providing actionable insights that guide personalized interventions.

By leveraging these biomarkers, Age-MAPTM enables individuals to monitor and manage their aging process effectively, paving the way for accessible, preventive strategies to optimize healthspan. This talk aims to inspire a collaborative approach to aging, empowering individuals to actively manage and enhance their longevity through precision health tools and actionable insights.

Biography:
Dr. Suresh Poosala has an extensive background in comparative medicine and aging research, serving as the Chief of Comparative Medicine and Program Director at the NIH. Currently, he is a key leader at Acasta Health, focusing on advancing healthspan and longevity through cutting-edge innovations. With decades of experience, Dr. Poosala has contributed to numerous high-impact publications and has been instrumental in shaping strategies to enhance aging research. As an advocate for translational science, he actively collaborates with global organizations to develop solutions for improving human health and well-being.

Plasma Exchange: Therapeutic Applications & Potential Anti-Aging Effect

Ibrahim Abu-Shemala
American Society of Regenerative medicine, UAE

Abstract:
Plasma is a major component of blood representing 55% out of the blood volume. Basically, plasma is a dissolvent in which all blood components are swimming in, traveling in the vascular system through intercellular membranes maintaining a balanced equilibrium as a unified fluid, in a status in which it can affect the function and stability of all other body organs. Other function of the plasma is the transportation of nutrients & waste as a side product of our non-stop metabolism process in addition to the control of body temperature in a continuous process in any living body.
Interest in the plasma component started with the study & clinical applications of plasma transfusion for the clotting factors need in heavy bleeding & invention of dialysis process to treat nephrology patients, helping them process the waste products of metabolism and successfully excrete them out of the body; where the accumulation of such products in the human body can affect on the long term the viability of all organs, with potential tissue damage, increasing cells mortality rate, causing them eventually to collapse and crash down. With the modern technology and recent studies, we know that autoimmune diseases cause the body to produce disease factor (Antigens) in which the body itself starts producing (Antibodies) as a defensive act, in a process that is affecting the function of an organ or even the whole body like Myasthenia Gravis & Gulian Barre Syndrome. Such diseases usually are treated using medication. However, removing the disease mediators can be a better solution, not to expose the patient to chemical-based medications and its potential side effects. As a conclusion, plasma exchange procedure might have the solution to treat autoimmune disease & other plasma related diagnosis, as we will see in the following clinical applications.
This literature review, trying to shed the light on the potential use of plasma exchange in therapeutic applications and potential use as an antiaging procedure and if there are any clinical evidence or tangible indictors that can be used to identify the potential outcomes.

Biography:

Abu-Shemala, is International Member of the American Society of Regenerative medicine, with a Background in Medical analysis & Extended Experience in research methodologies & Laboratory Market in UAE, as an international member of ASRM has Wide Exposure on Regenerative Medicine applications and potential fields of treatment, in addition to the Transfusion Medicine & Therapeutic Application of Apheresis Technology to treat different autoimmune diseases.

The evaluation of frequency and predictors of delirium and its short-term and long-term outcomes in hospitalized older adults

Yamini Ajmera
All India Institute of Medical Sciences, New Delhi, India

Abstract:
Delirium is a common complication in hospitalized older adults with multifactorial etiology and poor health outcomes. Our aim was to determine the frequency and predictors of delirium and its short-term and long-term outcomes in hospitalized older adults. A prospective observational study was performed in patients admitted consecutively to geriatric ward. Potential risk factors were assessed within 24 hours of hospital admission. Delirium screening was performed on admission and daily thereafter throughout the hospital stay using Confusion Assessment Method (CAM). Patients were followed up at 1-year post-discharge. The study included 200 patients with mean age 73.1 ± 8.83 years. Incidence and prevalence rate were 5% and 20% respectively. Multivariable regression analysis revealed emergency admission (OR= 5.12 (1.94–13.57), p=0.001), functional dependency (Katz index of Independence in Activities of Daily Living (Katz-ADL) score <5) 2 weeks before admission (OR= 3.08 (1.30–7.33), p=0.011) and more psychopathological symptoms (higher Brief Psychiatric Rating Scale (BPRS) total score) (OR=1.12 (1.06–1.18), p=0.001) to be independently associated with delirium. Patients in delirium group had significantly high in-hospital mortality (OR= 5.02 (2.12–11.8), p=0.001) and post-discharge mortality (HR= 2.02 (1.13–3.61), p=0.017) and functional dependency (Katz-ADL score <5) (OR= 5.45 (1.49–19.31), p=0.01) at 1-year follow up. To conclude, delirium is quite frequent in geriatric inpatients and is associated with high in-hospital and post-discharge mortality risk and long-term functional dependency. Emergency admission, pre-hospitalization functional dependency, and more general psychopathological symptoms are independently associated factors. Hence, earliest identification and treatment with early implementation of rehabilitation services is warranted.

Biography:
Dr. Yamini Ajmera is a well-known researcher in the field of Geriatric Medicine with multiple national and international publications in reputed journals. She has obtained her M.D. in Geriatric Medicine from AIIMS, New Delhi and after that, worked for 3 years as Senior Resident at National Centre for Aging, Department of Geriatric Medicine, AIIMS, New Delhi. She was conferred with best thesis award by Research wing of Indian Academy of Geriatrics in 2021. She is founder and chairman of Vayodha Senior Care.

Is Mitochondrial Dysfunction the Hidden Culprit Behind Longevity

Sonam Bhatia
xLongevity, UAE

Abstract:

Dr. Sonam Bhatia, Director of Science & Quality Control, xLongevity Chirayu Pvt. Ltd., Bengaluru, Karnataka- India

Mitochondrial dysfunction—the decline in mitochondrial performance due to damage, stress, or inefficiencies—is a hallmark of aging and a major contributor to age-related diseases. As key regulators of cellular energy production, metabolism, and signaling, mitochondria are central to healthspan and longevity. Mitophagy—the selective autophagic removal of damaged or dysfunctional mitochondria—plays a critical role in maintaining mitochondrial quality and cellular homeostasis. Impairments in mitophagy exacerbate mitochondrial dysfunction, leading to oxidative stress, chronic inflammation, and cellular senescence. This makes the restoration of mitochondrial health a crucial target in the pursuit of extended lifespan and resistance to age-related degeneration.

Recent advances in longevity science highlight the potential of nutritional and supplemental interventions to combat mitochondrial dysfunction and promote mitophagy. Compounds such as Nicotinamide Mononucleotide (NMN), Liposomal Ubiquinol, Glycine-NAC (GlyNAC), Pyrroloquinoline Quinone (PQQ), and Urolithin A have emerged as promising tools. NMN restores NAD+ levels, a critical coenzyme for mitochondrial energy metabolism. Liposomal Ubiquinol acts as a potent antioxidant with enhanced bioavailability. GlyNAC boosts glutathione synthesis, mitigating oxidative stress and enhancing mitochondrial function. PQQ supports mitochondrial biogenesis, while Urolithin A directly stimulates mitophagy, rejuvenating aging mitochondria.

By addressing mitochondrial dysfunction and enhancing mitophagy, these compounds provide a powerful strategy to combat aging and extend healthspan. Inspired by the Mediterranean and Okinawan diets—rich in longevity-promoting bioactives like resveratrol and spermidine—these interventions bridge cutting-edge science with practical dietary-supplemental approaches. Furthermore, mitochondrial health can be monitored through biomarkers such as the lactate-to-pyruvate ratio, NAD+/NADH ratio, and mitochondrial membrane potential, offering personalized insights for optimizing longevity strategies.

Biography:

Sonam Bhatia completed her PhD at the age of 26 from NIPER, Mohali, and was later invited for postdoctoral studies at the School of Pharmacy, University of Alberta, Canada. She is currently the Director of Science and Quality Control at xLongevity, where she oversees innovative research and development in nutraceuticals. With over 15 years of experience in R&D and nutraceutical development, Sonam has published more than 40 research papers in reputed journals and continues to contribute to advancements in longevity-focused health solutions.

Lifestyle interventions for healthy aging: Nutrition and psychology approaches

Clara Mazloum
Biongevity, UAE

Abstract:
Emerging research suggests that our daily habits, particularly diet and lifestyle choices, play a crucial role in influencing telomere length, the protective cap of our DNA that determines cellular aging. Poor dietary patterns, high in processed foods and sugar, have been linked to accelerated telomere shortening, while nutrient-dense diets rich in polyphenols, omega-3 fatty acids, and fiber have been associated with longer telomeres and improved cellular longevity (Epel et al., 2004; Boccardi & Paolisso, 2014). Additionally, advancements in AI, genomics, and precision medicine are revolutionizing the healthcare industry by offering personalized longevity interventions. AI-driven predictive models can analyze genetic and lifestyle data to recommend tailored health strategies, while genomics and epigenetics provide insights into how external factors influence gene expression and aging pathways (Levine et al., 2018). Precision medicine, integrating AI and big data, enables individualized treatment plans that enhance healthy aging and disease prevention (Topol, 2019). As the intersection of behavioral science and technology evolves, understanding how habit modification and scientific innovation impact cellular health will be crucial in extending both lifespan and healthspan.

Biography:

Clinical Dietitian with extensive experience providing individualized nutrition care through a holistic approach focusing on longevity, prolonged aging, incorporating precision health related protocols,dna testing, genomics and microbiome, working in a 360 multidisciplinary approaches with doctors and physicians. I am also a Certified Sports Nutritionist guiding high-performance athletes.

Lifestyle interventions for healthy aging: Nutrition and psychology approaches

Diya Ganguly Mallick
Biongevity, UAE

Abstract:
As global life expectancy increases, maintaining cognitive and physical health in aging populations has become a key area of focus. Psychological research highlights the crucial role of behaviour modification in promoting healthy aging through sleep, diet, and exercise. This presentation explores the psychological mechanisms underlying behaviour change, emphasizing habit formation, motivation, and the role of play in enhancing neuroplasticity.
The first section examines sleep, diet, and exercise through the lens of psychology, discussing how cognitive-behavioural strategies can improve adherence to health-promoting routines. Research suggests that adequate sleep supports memory consolidation and emotional regulation (Walker, 2017), while dietary patterns rich in antioxidants and omega-3 fatty acids contribute to neuroprotection and reduced cognitive decline (Gomez-Pinilla, 2008). Additionally, exercise, particularly aerobic and resistance training, has been shown to stimulate brain-derived neurotrophic factor (BDNF), which fosters neural growth and plasticity (Erickson et al., 2011).
The second section explores habit formation and motivation strategies for older adults, emphasizing the role of intrinsic motivation, self-efficacy, and reinforcement in sustaining long-term behaviour change (Deci & Ryan, 2000). Techniques such as implementation intentions and goal-setting can significantly enhance adherence to health routines, making positive lifestyle choices more automatic and sustainable.
Finally, the discussion highlights the science of play and its role in neuroplasticity, demonstrating how engaging in novel and enjoyable activities such as music, games, and creative pursuits that stimulates cognitive flexibility, problem-solving skills, and social connectedness (Brown & Vaughan, 2009). Play has been shown to activate the brain's reward system, enhancing motivation and encouraging lifelong learning, which is vital for preserving cognitive function in aging individuals.
By integrating psychological principles and practices with lifestyle interventions, this presentation underscores the importance of a holistic and proactive approach to aging. Understanding how behavioural science can drive sustainable health and wellbeing habits provides a foundation for improving quality of life and cognitive resilience in older adults.

Biography:

Academic Programme Director, Educator, Social Entrepreneur, Psychologist and Longevity and Neuroplasticity expert with industry experience in healthcare technology, medical systems, risk management, media advocacy, corporate consultancy, coaching, leadership development, brand building & psychological assessments. I blend psychology with neuroscience and lifestyle interventions for my clients looking for cutting-edge holistic wellbeing plans and preventative health solutions. Successfully designed & conducted customized training sessions, lectures, and webinars & launched courses and workshops for employees & corporations across diverse communities in India, Sri Lanka, Maldives, UAE and the UK.

The Science of Timeless Beauty: Anti-aging and Gerontology Redefined with Merreh

Tsvetelina Nikolova
Merreh LTD, Bulgaria

Abstract:
In a world where the population is aging rapidly and longevity is becoming a global aspiration, the intersection of anti-aging science and gerontology presents a profound opportunity to redefine the way we approach beauty and well-being. This presentation explores how Merreh, a pioneering lifestyle brand, merges cutting-edge research with natural ingredients to offer holistic solutions that go beyond aesthetics, targeting cellular health, vitality, and emotional balance.

Grounded in the principles of gerontology, Merreh's innovative approach is centered on the integration of advanced anti-aging science and the powerful properties of grape-derived antioxidants such as resveratrol. These ingredients, combined with sustainable practices and a commitment to personalized wellness, position Merreh as a leader in the movement towards timeless beauty.

The discussion highlights:

1. The challenges of modern aging and the need for holistic solutions.
2. The role of gerontology in developing scientifically-backed, lifestyle-oriented approaches to aging gracefully.
3. How Merreh's products and therapies support cellular regeneration, longevity, and overall well-being.

By reimagining aging as an opportunity rather than a limitation, Merreh empowers individuals to embrace a life of vitality and elegance. This session invites attendees to explore the transformative potential of blending science, nature, and sustainability to create a new paradigm in the anti-aging industry.

Biography:
Tsvetelina Nikolova – Entrepreneur, Visionary, Leader, Trendsetter

Tsvetelina Nikolova is a leader who not only recognizes opportunities but creates them. With over two decades of experience in managing complex strategic projects, Tsvetelina has built recognizable brands across three key industries—wine, cosmetics, and hospitality. Her expertise is focused on innovation, the development of sustainable business models and a culture of quality.

With the cosmetics brand Merreh, she successfully entered the dynamic beauty industry, setting new standards. Merreh is not just a line of cosmetic products—it's a lifestyle. From skincare rituals to healthy nutrition and the creation of spaces for serenity, it embodies holistic living.

Tsvetelina is also the author of the book Wines of Bulgaria. She received a lot of international awards. Her strong academic background complements her vision and strategic thinking.

Today, Tsvetelina is dedicated to creating long-term and sustainable projects that transform industries and inspire generations. For her, success is not just an achievement but a responsibility—to the people she inspires, the trust she has built, and her vision for a brighter future.

Tsvetelina Nikolova is an excellent mentor, a passionate storyteller, a future enthusiast, and someone unafraid to do things differently.

"I believe that a true leader is one who not only dreams of change but creates it—with vision, passion, and dedication to the people and the world around us."

Shaping a Longevity-Ready Society: From Labs to Communities to Culture

Alvaro Luis
Join Longevity, Denmark

Biography:
Alvaro Valdivia is actively involved in spreading longevity awareness through coaching, public engagement, and online initiatives. He currently offers longevity coaching and runs workshops designed to make the science of healthy aging accessible to the general public.

He also leads a fast-growing newsletter and Instagram page under the name Join Longevity, a platform aimed at providing value both to those already working in longevity and to newcomers just discovering the field.

With a background in BSc Computer Science and MSc Chemical Engineering, Alvaro combines scientific understanding with strong communication skills to bridge the gap between research and real-world application. His mission is to raise public awareness and help unite the longevity community, believing that collective effort and increased support are key to accelerating progress in the field.

Taking rejuvenation research to escape velocity

Aubrey de Grey

President and Chief Science Officer, LEV Foundation, United States

Biography:

Dr. Aubrey de Grey is a biomedical gerontologist based in Mountain View, California, USA, and is the Chief Science Officer of SENS Research Foundation, a California-based biomedical research charity that performs and funds laboratory research dedicated to combating the aging process. He is also VP of New Technology Discovery at AgeX Therapeutics, a biotechnology startup developing new therapies in the field of biomedical gerontology. In addition, he is Editor-in-Chief of Rejuvenation Research, the world's highest-impact peer-reviewed journal focused on intervention in aging. He received his BA in computer science and Ph.D. in biology from the University of Cambridge. His research interests encompass the characterization of all the types of self-inflicted cellular and molecular damage that constitute mammalian aging and the design of interventions to repair and/or obviate that damage. Dr. de Grey is a Fellow of both the Gerontological Society of America and the American Aging Association, and sits on the editorial and scientific advisory boards of numerous journals and organizations.

Touch in Times of Skin hunger

Els Messelis Lachesis
Office of Expertise on Ageing and Gender, Belgium

Biography:
Els Messelis, Master in Gerontology from the Free University of Brussels, is (co)author of 17 books on ageing. She has published several papers in reputed journals on the topic of sexuality, intimacy and skinhunger in later life. She has been serving as an editorial board member of different ageing organisations.

Small Mobile Stem Cells Potential for Rejuvenating Tissue Parenchyma in Ageing Individuals

Abdulkader Rahmo
SMSbiotech, United States

Abstract:
SMALL MOBILE STEM CELLS POTENTIAL FOR REJUVENATING TISSUE PARENCHYMA IN AGEING INDIVIDUALS
Lung emphysema is a prevalent parenchymal structural disease, a component of Chronic Obstructive Pulmonary Disease (COPD) for which there is currently no effective cure. It is a progressive degenerative lung disease that is manifested in the destruction of the lung alveoli. Normal ageing, however, is known to exhibit the same structural changes in lung parenchyma, albeit to a lesser extent.
Small Mobile Stem (SMS) cells, isolated from peripheral blood of an adult human and cultured extensively in vitro, have demonstrated a strong and selective binding to key regenerative cells: parenchymal progenitor cells, mesenchymal stem cells, endothelial cells and fibroblasts. The binding results in stimulation or inhibition of proliferation, and in significant, in terms of tissue regeneration, meaningful gene expression changes.
SMS cell in vivo effect on the regeneration of lung alveoli have been examined using healthy Rats and Rat elastase emphysema model. The instillation of SMS cells through the trachea resulted in a strong and quick regeneration of the rat alveoli. Functional testing of the rat emphysema animal models using exercise further corroborated the histopathological analysis of alveoli destruction and regeneration in the rat model.
The histopathological parameter related to alveoli destruction, the mean linear intercept (MLI), indicates a shift to values that are consistent with the presence of more alveoli than in healthy controls. This, in principle, is consistent with a reversal of the lung age parenchymal state and could be of future benefit to individuals suffering from age related lung functional decline.
Based on SMS cells quite favorable characteristics, such as low immunogenicity, proliferative capacity and high resilience, SMSbiotech is currently pursuing the development of an allogenic cell therapy for the age-related COPD indication.

Biography:
Co-Founder, President, CSO of SMSbiotech
Bachelor in biochemistry from the Swiss Federal Institute of Technology (ETH) in Zurich; Ph.D. in Biochemistry from the University of Southern California (USC) in Los Angeles and postdoc at a major clinical laboratory in Munich Germany.
As a former associate professor, he has over 30 years of experience in basic and applied research, 11 years primarily focused on SMS cell discovery, development, and technology. Experienced in clinical laboratory medicine, GXP compliance, and biomanufacturing. Co-Founded and lead several private and public entities including the National Commission for Biotechnology where he became the head of the medical Biotechnology section.

Varicardstar-Hypoxic Technology of Ancient Mechanisms for Radical Healthspan

Valeriy Starodubtsev
Varicardstar, United States

Abstract:
Human DNA, formed in encoded form many millions of years ago, passing through many generations, retains its unique individual identity for each soma and at the same time matches 99%+ in composition and structure for the entire species population of our humanity. Having such a reliable and stable version of the genome construction, we can confidently assume that all the information and many programs of the ancient mechanisms inherent in us initially for all occasions are turned on and off epigenetically, depending on the external and internal conditions in which our body is located. The search, discovery and practical application of natural ancient mechanisms opens the door to knowledge, understanding and management of a new level of the foundation of unlimited possibilities on the path of a giant leap of perfection, where there are no limits, even in such an eternal issue as aging.
And here nature gives us examples, both in flora and fauna, that there are certain species and representatives of this World do not age at all or age slowly, falling into the category of neglected aging.
But if we draw a parallel and combine them by quality and general characteristics - for this majority the center line is high resistance to hypoxia and a stable ecological environment - which clearly indicates the use of natural ancient mechanisms and, by luck and certain circumstances, they have not degraded and are included constantly unlike others, even of the same species, but when they find themselves in other eco-environments, they lose the ability to activate and run them.
Our database has also demonstrated that all of humanity now lives in conditions where the need for natural ancient mechanisms, inherent in us initially and for that ecological gas environment, and now another, and those three main reasons indicated below after 25- 30 years is the beginning and main signaling for the launch of the self -destruction program, if additional effective and/or alternative sources of energy and resources at the cellular level is not enough to maintain this balance, then the entropy process is turned on.
These main reasons for aging were clarified and established, according to our data and they are as follows:
* Violation of the balance and ratio of CO2 (carbon dioxide) and O2 (oxygen). After 25-30, this trend towards lowering CO2 and increasing the excess level O2 - a classic example - hypertension - normally the CO2 level in our body is 6-7%, with an increase in pressure and crises, its level reaches 3.5% and lower ...
* Violations of the pH of the medium after 25-30 years towards acidification
* A decrease in an integral energy potential after 25-30 years with a gradual increase in entropy.
The main reason after 25-30 years, this is when our brain ends completely its formation becomes the most energy and the most (20-25% of the total energy) despite its small weight of 1.5 kg-2 kg). Almost, before this age, we are protected by the ontogenesis program and then depends on everyone, and nature gives us this chance of what development path to go. Unfortunately, a comfortable lifestyle of modern society has finally disconnected the possibilities of using ancient mechanisms that support the holistingly high level of functioning of all organs and systems - this degradation, automatically includes a program of such a phenomenon as aging, activated at all the subsequent stages of our lives, signaling paths and its manifestation in the very most various forms of pathologies and disorders growing as a snowball with age.
For someone, this process is accelerated, someone usually like most and the third even more active slightly slower (example of veteran sports) but also with a predictable outcome.
To stop the aging and turn back - as some representatives of the flora and fauna do it - you need to search and activate these ancient mechanisms, but if only the conditions in which they are relevant, then for us it is no longer fundamentally, regardless of climate and geographical Places of residence. We can activate them and support them consciously anywhere in the world.

This approach, in our opinion, was found and is now confirming in practice.

Biography:

Valeriy Starodubtsev has completed his MD at the age 24 from Irkutsk Medical School, Soviet Union (1986) and PhD studies from Omsk Physical Academy.(1999). He is CEO Varicardstar LLC in Eugene, OR, USA . Published book "Age Methuselah: Mith or Reality?!, Irkutsk.: 2020.-p.282 and 35 paper in national journal

Decentralized AI for Decentralized Science

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Abstract:
Today, centralized institutions that prop up the healthcare system are under threat, and to protect the scientific method we propose to solidify using decentralized AI on the distributed ledger of blockchain. In our sculpting of a new decentralized health infrastructure we have the opportunity to protect our network against perverse incentives, inequity, monopolization, and viral falsehoods through the use of modern AI. We will discuss algorithms that protect science and democracy in decentralized institutions on the blockchain. Under the philosophy that intelligence comes from societies not individuals, our Generative Cooperative Network (GCN) uses the principle of the sociology of knowledge to construct a holistic reality from individual reductionist scientific studies as well as from individual AI models. We capture the emergent social nature of knowledge from multiple neural network intelligent agents, in a more distributed archetecture than other neural network ensembles. For example, instead of assigning one intelligent agent to decide the roles that other agents will play, roles between agents emerge through distributed consensus. The GCN uses the principles of free markets to bring about a meritocracy of multiple intelligent agents that use model submissions in competing teams to solve longevity-related problems, in a system of emergent roles where agents are ranked by emergent price signals. It uses an underlying technology called SISTER, the Symbolic Interactionist Simulation of Trade and Emergent Roles, to create agent teams, each individually powered with AI, that solve longevity problems.

Biography:
Dr. Deborah Duong is Chief Technology Officer of Rejuve.AI. Holding a PhD in Computational Sciences and Informatics, Deborah boasts decades of expertise in the AI domain, specializing in neural networks, coevolutionary computation, and intelligent multi-agent simulation modeling. Her knowledge spans across fields such as medicine, NLP, social networks, and national security. She has contributed to over 40 peer-reviewed articles, chapters, and conference papers focused on Complex Adaptive Systems, providing insights into natural and social phenomena. Notably, she pioneered the first intelligent agent social simulation in 1991.

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