

5<sup>th</sup> Edition of  
International Conference on  
**Traditional Medicine,  
Ethnomedicine and  
Natural Therapies**

**22-23 May, 2023**

*Tokyo, Japan*

**Venue:**

Ana Crowne Plaza Narita 68,  
Horinouchi, Narita-Shi, Chiba, 286-  
0107, Tokyo, Japan



22-23<sup>MAY</sup>

BOOK OF  
ABSTRACTS



5<sup>TH</sup> EDITION OF INTERNATIONAL CONFERENCE ON  
**TRADITIONAL MEDICINE,  
ETHNOMEDICINE AND  
NATURAL THERAPIES**

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# Speakers



**Abbas Abel Anzaku**  
Institute of Human Virology,  
Nigeria



**Agzamova A Manzur**  
S.Yu.Yunusov Academy of  
Sciences, Uzbekistan



**Ajai Prakash Gupta**  
CSIR-Indian Institute of  
Integrative Medicine, India



**Alfonso Lagaya**  
Quirino Memorial Medical  
Center, Philippines



**Amrita Sharma**  
GRDU, India



**Ana Valado**  
University of Coimbra,  
Portugal



**Andre Ferraz**  
iQuilbre Center of Educational  
Research, Brazil



**Antonia Demas**  
Food Studies Institute,  
United States



**Byeonghyeon Jeon**  
Wonkwang University  
Jangheung Integrated Medical  
Center, Korea, Republic of



**Cynthia Husted**  
Global Institute for Tibetan  
Medicine Science and Spirit  
Institute, United States



**Dana Crawford**  
Albany Medical College,  
United States



**Darshana  
Wickramasinghe**  
District General Hospital  
Hambantota, Sri Lanka



**Debbie Novick**  
Novick Integrated Medicine,  
United States



**Devendra Prasad  
Mishra**  
Ayurveda Oase, Center of  
Excellance, Germany



**Dieu-Thuong Thi Trinh**  
Faculty of Traditional  
Medicine, Vietnam



**Doan Thi Ngoc Anh**  
China Medical University,  
Vietnam



**Elizabeta Popova  
Ramova**  
MIT University Skopje,  
Macedonia



**Erzsebet Bogyo**  
Be Fit For Ever Ltd, Hungary



**George Kudolo**  
University of Texas Health  
Science Center at San  
Antonio, United States



**Ghalem Bachir Raho**  
University of Mascara, Algeria



**Han Pei Lin**  
Ministry of Health and  
Welfare, Taiwan



**Hicran USAN**  
Yuksekt Ihtisas University,  
Turkey



**Isabel Wendt  
Christodoulou**  
Medosophos-Institute,  
Germany



**Jennifer Finegold**  
Owner of Fiery Sage Healing,  
United States



**Julieta Songco**  
JAS Consulting Services,  
United States

# Speakers



**Jung Han Lee**  
Won Kwang University, Korea,  
Republic of



**Kamaka Kassimu**  
Ifakara Health Institute,  
Tanzania, United Republic of



**Karol Chandler-Ezell**  
Stephen F Austin State  
University, United States



**Komgrit Eawsakul**  
Walailak University, Thailand



**Krashenyuk Albert  
Ivanovich**  
Academy of Hirudotherapy,  
Russian Federation



**Leslie Whitcomb**  
Akamai University, United  
States



**Li Li**  
Shanghai Academy of  
Traditional Chinese Medicine,  
China



**Lobsang Dhondup**  
Global Institute for Tibetan  
Medicine, United States



**Mangala Kotnis**  
Private Practitioner, India



**Mara Bishop**  
Whole Spirit LLC, United  
States



**Maria Penchyna**  
Technological of Monterrey,  
Mexico



**Melinda Connor**  
Akamai University, United  
States



**Michele Quintin**  
Center for Relaxotherapy and  
Prevention, Belgium



**Mohammad Kamil**  
Lotus Holistic Health Institute,  
United Arab Emirates



**Mohanlal Ghosh**  
Hooghly Mohsin College, India



**Paola Santander  
Gonzalez**  
Juan N Corpas University  
Foundation, Colombia



**Pongrapee Laorodphun**  
Chiang Mai University,  
Thailand



**Poonam Singhal**  
Indian Institute of Technology,  
India



**Punitha Isaac Samraj**  
Endeavour College of Natural  
Health, Australia



**Qiong Di Wu**  
Q&D Acupuncture & Herb  
Clinic, Ireland



**Rishu sharma**  
Board of Ayurvedic & Unani  
Systems of Medicine, India



**Roberto Campos  
Navarro**  
National Autonomous  
University of Mexico, Mexico



**Ryszard Kozlowski**  
Journal of Natural Fibers  
Editor-in-chief, Poland



**Sarunpron Khruengsai**  
Mae Fah Luang University,  
Thailand



**Shahryar Eghtesadi**  
Azad University, Iran (Islamic  
Republic of)

# Speakers



**Sheilla L. Rodriguez  
Madera**  
Florida International  
University, United States



**Sherly E A**  
Singhania University, India



**Talent Chipiti**  
Tshwane University of  
technology, South Africa



**Tlotlo Radebe**  
Central University of  
Technology, South Africa



**Vikram Patial**  
CSIR-IHBT, India



**Weixi Shen**  
Shenzhen Tianyou Medical  
Institute, China



**Wenbin Zheng**  
National Agency for Shantou  
University Medical College,  
China



**Wonbae Ha**  
Won-Kwang University, Korea,  
Republic of



**Xandy Melissa  
Rodriguez Mesa**  
Juan N Corpas University  
Foundation, Colombia



**Yamuna U**  
Swami Vivekananda Yoga  
Anusandhana Samsthana,  
India

# Welcome Message

Welcome to the 5th Edition International Conference on Traditional Medicine addressing Ethnomedicine & Natural Therapies. The conference provides international perspectives to improve the health and well-being from heart-centered approaches. The sessions address critical elements that impact individuals, families, community's worldwide restoring hope and promoting healing. Please come forward with your ideas and unifying suggestions that serve all equally without prejudice regarding nationality, faith tradition, gender, sexual orientation, disabilities or limitations. We need to step up and step out with leadership pathways that uplift souls to come out of darkness into the light. Network, learn, inspire and activate strategies that move the world forward in a positive direction. I personally will miss being there in person but send virtual greetings of love and light to the electromagnetic waves that surround us in person & virtually. Enjoy the connections!

Yours Sincerely

**Mary Jo Bulbrook**

Akamai University, United States





# Welcome Message

On behalf of the International Conference on Traditional Medicine, I take great pleasure in welcoming you to the “5th Edition of International Conference on Traditional Medicine” in the magical city of Tokyo (Narita), Japan. We are a dedicated team of professionals who value traditional medicine and its vital role in today's society. The theme of this year's conference “Navigating the Future of Healthcare and Humankind Through the Healing Power of Nature.” We believe that traditional medicine, with its ancient wisdom and proven practices over centuries, can harmoniously coexist with modern medicine. We seek to unite the best of both worlds, incorporating traditional approaches that complement conventional medicine. In addition, we are committed to promoting education and knowledge about traditional medicine through events, lectures and workshops. We believe that sharing information and continuous learning are key to advancing the field of traditional medicine. Welcome to the 5th Edition of International Conference on Traditional Medicine, Ethnomedicine and Natural Therapies.

Yours Sincerely

**Leonel Pereira**

University of Coimbra, Portugal



# Welcome Message

On behalf of the International Conference on Traditional Medicine, I take great pleasure in welcoming you to the '5th Edition of International Conference on Traditional Medicine, Ethnomedicine and Natural Therapies in the magical city of Tokyo, Japan. The theme of this year's conference "Navigating the Future of Healthcare and Humankind Through the Healing Power of Nature." This will focus on creating a more sustainable and economical system for alternative medicine and better health, with powerful speakers who share their in-depth knowledge in research and facts. Together with your attendance I hope that you take this opportunity to network, share and collaborate with international experts. All of us at the International Conference on Traditional Medicine would take great pleasure in meeting you in person and learning about your astounding work. I wish you a highly enjoyable and fruitful conference. I hope you enjoy your stay in this magnificent city, making use of your pre and post conference times to enjoy the many wonderful sites. We sincerely look forward to welcoming you. Enjoy the conference.

Yours Sincerely

**Sunita Teckchand**

The Holistic Alternatives FZ LLC, United Arab Emirates



# Welcome Message

On behalf of the Scientific Committee, I am delighted to welcome you to the Traditional Medicine Conference in the vibrant city of Tokyo. This year's theme, "Navigating the Future of Healthcare and Humankind Through the Healing Power of Nature," will focus on exploring traditional medicine and natural therapies to improve patient health and well-being. While you are here, I hope you take the opportunity to network, learn, share and collaborate with international experts and other colleagues. I wish you an enjoyable and productive conference and hope you take advantage of your time in this wonderful city. We are excited about your attendance and participation. Enjoy the conference!

Yours Sincerely

**Charles Shang**

Baylor College of Medicine, United States



# Welcome Message

On behalf of the Scientific Committee, I take great pleasure in welcoming you to the 5th Edition of the International Conference on Traditional Medicine, Ethnomedicine, and Natural Therapies here in the beautiful city of Tokyo. The theme of this year's conference, "Navigating the Future of Healthcare and Humankind Through the Healing Power of Nature," will focus on discussing some of the key findings derived in the past decade along with recent trends and innovations from the global community of researchers, scientists, academicians, healthcare professionals, and other field experts. While you are here, I sincerely hope that you take the opportunity to network, learn, share, and collaborate with international experts. All of us on the Scientific Committee would take great pleasure in meeting you in person and learning more about your amazing work. I wish you an enjoyable and productive conference. I hope you enjoy your stay in this wonderful city and use pre- and post-conference times to enjoy the sites. We are enthusiastic about your attendance and participation. Enjoy the conference!

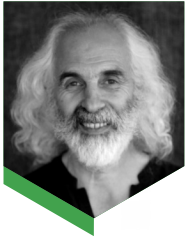
Yours Sincerely

**Hideko Pelzer**

Acupuncture & Integrative Medicine College, Berkeley,  
United States



# Keynote Speakers



Riehl Andre  
UEY, France



Kenneth R. Pelletier  
University of California School  
of Medicine, United States



Girish Momaya  
Maharishi European Research  
University, Netherlands



Mary Jo Bulbrook  
Akamai University,  
United States



Charles Shang  
Baylor College of Medicine,  
United States



Hideko Pelzer  
Acupuncture and Integrative  
Medicine College,  
United States



Michelle Gellis  
Acupuncture Physician,  
United States



Neil Gumenick  
Institute of Classical Five-  
Element Acupuncture Inc,  
United States



Sunita Teckchand  
The Holistic Alternatives FZ  
LLC, United Arab Emirates



Leonel Pereira  
University of Coimbra,  
Portugal



Michael Kuzeff  
Albury Central Medical Clinic,  
Australia



Zhenhuan Liu  
University of Chinese  
Medicine, China



Lukui Chen  
Integrated Hospital of TCM,  
China

*Thank You  
All...*



## ABOUT MAGNUS GROUP

Magnus Group (MG) is initiated to meet a need and to pursue collective goals of the scientific community specifically focusing in the field of Sciences, Engineering and technology to endorse exchanging of the ideas & knowledge which facilitate the collaboration between the scientists, academicians and researchers of same field or interdisciplinary research. Magnus Group is proficient in organizing conferences, meetings, seminars and workshops with the ingenious and peerless speakers throughout the world providing you and your organization with broad range of networking opportunities to globalize your research and create your own identity. Our conferences and workshops can be well titled as 'ocean of knowledge' where you can sail your boat and pick the pearls, leading the way for innovative research and strategies empowering the strength by overwhelming the complications associated with in the respective fields.

Participation from 90 different countries and 1090 different Universities have contributed to the success of our conferences. Our first International Conference was organized on Oncology and Radiology (ICOR) in Dubai, UAE. Our conferences usually run for 2-3 days completely covering Keynote & Oral sessions along with workshops and poster presentations. Our organization runs promptly with dedicated and proficient employees' managing different conferences throughout the world, without compromising service and quality.



## ABOUT

### Traditional Med 2023

Magnus Group is excited to extend an invitation to the upcoming scientific gathering, the 5th Edition of International Conference on Traditional Medicine, Ethnomedicine, and Natural Therapies, scheduled to take place as a hybrid event on May 22-23, 2023, in Tokyo, Japan, and virtually. The conference aims to explore the theme of "Navigating the Future of Healthcare and Humankind Through the Healing Power of Nature." The summit aims to bring together a diverse mix of traditional medicine experts, researchers, practitioners, academicians, students, and other related healthcare professionals to discuss and examine innovative developments in the field of traditional medicine. The conference will focus on topics such as Ayurveda, acupuncture, herbal medicine, massage therapy, homeopathy, traditional Chinese medicine, and other relevant areas of traditional medicine. All attendees will have the opportunity to enhance their knowledge and interact with international colleagues, leaving the event with scientifically revitalized ideas.

We hope you will have an enjoyable and productive conference experience, gaining valuable insights into the latest advancements in traditional medicine and establishing meaningful connections within the traditional medicine community.





22-23<sup>MAY</sup>

DAY 01

KEYNOTE FORUM



5<sup>TH</sup> EDITION OF INTERNATIONAL CONFERENCE ON

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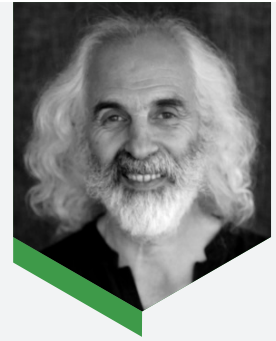
## Nidra yoga, brain & consciousness

**N**idra Yoga, an almost forgotten knowledge dating back to several centuries is a study of the human mind using 4 main types of exercise: Sithilikarana (3 levels of deep relaxation), Dharana (12 degrees of tension free concentration), Prana Kriya Sadhana (8 types of breathing) and Svadhyaya (using the rational thinking for exploration of the content of consciousness)

When all these 4 practices are working together, the mind reaches a state of deep silence bringing a kind of resetting within the mind and the brain, re balancing the whole psycho physiological processes. Ultimately might appear a state of perception where there is more conflicts and division. The study "NIDRA & BRAIN" done through the University of Pisa/Italy will show practical examples of what can be realized by this century's old practice.

### Audience Take Away Notes

- The lecture will be followed by a short practical session where the audience will experience the 1st level of very deep relaxation and the 1st degree of tension free concentration
- Clarity of the mind
- Deep relaxation of the body
- Benefit for the Audience
- Opening to a new way for understanding the human brain functions linked to consciousness
- Linking together the old traditional knowledge and the contemporary scientific understandings
- Discovering practical methodology for very important stress reducing
- Developing an accurate sensitivity helping to integrate both rational thinking and sensitive perception



### Yogi Riehl Andre

Nidra Yoga International (France)  
- Rasa (France): Affiliated to  
European Yoga Union – Brussels  
(Belgium) – AYUSH Ministry -  
New Delhi (India)

### Biography

Yogi Andre Riehl: graduated in Psychology and Socio Ethnology from the Aix –Marseille University (France-1974) from 1978, he then underwent a 21 years deep yoga study into the Traditional lineages of Naths and Uddasin at Hardwar and Ujjain – India. From 1999, he started teaching across Europe, then into the whole world (27 countries on the 5 continents). As a senior trainer he developed a 5 years Teacher Training, acknowledged by the European Union of Yoga and the Indian Yoga Association. From 2015, he started a 7 years research project with the University of Pisa (Italy) on the effects of Nidra Yoga on the brain, the conclusions being published in 2021 by the International Journal of Yoga Therapy, n°31. He is today conducting seminars in Europe, China, South America, Australia and North Africa. Awarded as Yoga ambassador by the United Nations (New York), Advisor for the United Consciousness NGO under the banner of U.N.

## Ayurveda – The science of wholeness of life

Ayurveda, the ancient Indian science of health, perceives life, its emergence, evolution and preservation as a holistic phenomenon. Ancient texts of Ayurveda, such as *Charak Samhita*, and **Sushrut Samhita**, describe health as a state of perfect balance and harmony on all levels of life: balance and harmony at the level of physiological structures and functions; and harmony and happiness on the level of self, mind, and social behaviour. Modern science explores the laws of nature and their applications through an objective approach, whereas ancient Vedic science explores life and its infinite potential primarily through a profound subjective approach. Quantum field theories of modern science have revealed the Unified Field of all the laws of nature at the basis of all phenomena in creation. Vedic Sciences like Ayurveda, Yoga, and Vedanta cognize the unified wholeness of life as the field of pure intelligence, *Atma* (Self), or *Samadhi*. This state, known as *Turiya* or Transcendental Consciousness, is the state of Yoga – a state of perfect balance, harmony, and unity. Maharishi Mahesh Yogi's Vedic Science teaches the simple, effortless technique of Transcendental Meditation to allow the mind to settle, easily and effortlessly, to progressively more refine levels of thinking until the mind experiences its quietest state at the source of thought. Scientific research on Transcendental Meditation comprises hundreds of scientific studies conducted at over 200 independent universities and research institutions worldwide over the past 40 years. These studies have demonstrated comprehensive benefits for the mind, body, behaviour, and society and have appeared in many leading, peer-reviewed journals. Recent epigenetic research shows an increase in telomerase gene expression through the Transcendental Meditation (TM) practice, and through lifestyle changes using extensive health education. Both have been shown to stimulate two genes that produce telomerase. Telomerase maintains telomeres which protect the DNA and thus maintain health and long life. Ayurveda establishes the central importance of preserving health and preventing disease by maintaining life according to natural law. Therefore, Ayurveda utilizes many methods to bring life in accord with natural law from the angles of mind, body, behaviour, and environment. These include knowledge of balanced diet and nutrition; health-promoting daily and seasonal routines and behaviour; herbal food supplements and *Rasayanas*; and programmes of physiological purification and rejuvenation therapies such as *Panchakarma*. Ayurveda has a concept of health of the society by creating coherence in collective consciousness. Twenty peer reviewed studies and more than fifty demonstrations have found that when a relatively small proportion of a population practice Transcendental Meditation and its advanced programs there is a decrease in negative trends such as crime, violence, hospital admissions, and fatalities. This is known as the Maharishi Effect.



### Girish Momaya

Director, St. Maharishi European Research University – MERU, Vlodrop, The Netherlands

#### Biography

Dr Momaya is a director of Maharishi European Research University, a Dutch foundation providing training, and services in the fields of education, Ayurveda health care and social well-being. Dr Momaya is a director at International Maharishi Ayurveda Foundation in the Netherlands, a global organization that serves as a platform to integrate and bring all aspects of Ayurveda into the Mainstream. Furthermore, he is also a director at Maharishi Ayurveda Europe B.V., a Dutch company dealing with manufacturing and distribution of herbal health food supplements. Dr Momaya spent many years working under the guidance of Maharishi Mahesh Yogi, the great scientist of consciousness and the founder of the Transcendental Meditation Programme. He received extensive education and training under Maharishi's guidance in all aspects of Vedic Science.

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**Audience Take Away Notes**

- The audience will learn, in a scientific way, the importance and the means of living wholeness, harmony, and balance in life for benefitting their health, well-being and social harmony
- The audience will learn how the body's inner intelligence can be enlivened to promote good health and the prevention of diseases
- The audience will learn, through the results of scientific research, how the practice of Transcendental Meditation can transform life on a deeper level in a positive way
- The audience will become aware of many subtle and holistic principles, procedures and practices in Ayurveda that can be very useful in preventing disorders at a very early stage, even before they get expressed as symptoms

## Seaweed and the traditional medicine

Seaweed has traditionally been consumed as food in a variety of ways: Raw in salads and as a vegetable, pickle, with allspice sauce, or in vinegar, as a relish or sweetened jellies, and also cooked for vegetable soup. As an herbal medicine, seaweed was generally used for the production of traditional cosmetics, in the preparation of antipyretics, antiseptics, such as vermifuge and for the treatment of cough and for asthma, haemorrhoids, nosebleeds and boils, goitre and scrofula, stomach ailments and urinary. Seaweed has also been used in the traditional medicine of various cultures around the world for many centuries. For example, in traditional Chinese medicine, seaweed is used to treat conditions such as edema, inflammation, and constipation and thyroid problems. In traditional Japanese medicine, seaweed is used to treat thyroid disease, as well as increase vitality and improve immunity. In traditional medicine, seaweed is often used to treat thyroid-related conditions such as goitre, a condition characterized by a swelling of the thyroid gland. This is because seaweed contains high levels of iodine, a mineral essential for thyroid function. However, it is important to remember that excess iodine can be harmful to health, so it is recommended that you consume seaweed in moderation. Seaweed is also used in traditional medicine to treat inflammatory conditions such as arthritis, rheumatism and joint pain. This is because seaweed contains compounds that can help reduce inflammation in the body. In addition, seaweed is also used as a tonic to increase vitality and improve immunity. Some cultures use seaweed topically, applying it directly to the skin to treat irritation and inflammation. Seaweed is also commonly used in traditional cooking, especially in countries with coastal cultures. Although modern science is still studying the health benefits of seaweed, traditional medicine has used these plants for many years and continues to do so today. However, it is important to remember that traditional medicine is not always based on scientific evidence, and that more research is needed to fully understand the health benefits and risks of using seaweed.

**Keywords:** Thyroid disorders, Iodine, Fucoidan, Carrageenan, Alginate, Agar.

### Audience Take Away Notes

- Enumerate the different traditional uses of algae in terms of food and traditional medicine
- It can enrich the knowledge of seaweed species useful in food and therapeutic uses
- All this information will be useful for teaching and disseminating the use of algae in this area of knowledge



**Leonel Pereira<sup>1, 2\*</sup>, Ana Valado<sup>1, 3, 4</sup>**

<sup>1</sup>MARE—Marine and Environmental Sciences Centre, ARNET, University of Coimbra, Coimbra, Portugal

<sup>2</sup>Department of Life Sciences, University of Coimbra, Coimbra, Portugal

<sup>3</sup>Polytechnic Institute of Coimbra, ESTESC- Coimbra Health School, Biomedical Laboratory Sciences, Coimbra, Portugal

<sup>4</sup>Laboratory for Applied Health Research (LabinSaude), ESTESC-IPC, Coimbra, Portugal

### Biography

Leonel Pereira has a degree in Biology (scientific branch), a PhD in Biology (specialty Cellular Biology) and Habilitation in Biosciences, specialty in Biotechnology, by the Faculty of Science and Technology of the University of Coimbra, where he is currently Associate Professor. In addition to teaching at this university, he is an integrated researcher at MARE (Center for Marine and Environmental Sciences). His interests are mainly focused on the areas of Marine Biodiversity (algae), Marine Biotechnology (bioactive compounds from algae) and Marine Ecology (environmental assessment). Since 2008, he has

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been the author and editor of the electronic publication MACOI – Portuguese Seaweeds Website ([www.uc.pt/seaweeds](http://www.uc.pt/seaweeds)), since 2018 he has been a member of the editorial board of the scientific journals “Marine Drugs” and “Applied Sciences”, he is Vice-editor-in-chief of “Traditional Medicine Research” Journal, author of more than 20 books, author of more than 134 indexed articles, and of more than 66 book chapters. He has delivered more than a hundred lectures and oral communications at various national and international scientific events. He is coordinator of the degree in Biology and of several national and international research projects. In 1998 he received the “Francisco de Holanda” award (Honorable Mention) and, more recently, the “Sea King D. Carlos” award (18th edition), and winner of the CHOICE Award - outstanding academic title award 2016 - Book title: Edible Seaweeds of the World, CRC Press.

22-23<sup>MAY</sup>

DAY 01

**SPEAKERS**

5<sup>TH</sup> EDITION OF INTERNATIONAL CONFERENCE ON

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**Sheilla Rodriguez-Madera\*PhD, Nelson Varas-Diaz PhD, Mark Padilla PhD**

School of International and Public Affairs, Florida International University,  
Florida, USA

## **Community auricular acupuncture: An example of necroresistance in Puerto Rico**

Puerto Rico (PR), a Caribbean Island with a Spanish-speaking population of 3.1 million, is marked by coloniality. Since 1898 the Island has been an unincorporated territory of the United States of America (US) that has historically received unequal treatment compared to the other US citizens living on the mainland. One of the detrimental effects of coloniality in PR is manifested in its economy. The local economy has been set up as a captive market for US corporations resulting in a 72-billion-dollar external debt. A sustained economic crisis that started in 2006 has significantly affected PR's infrastructure, including its electrical grid and the healthcare system. The latter collapsed after Hurricane Maria in 2017, leaving more than 3000 deaths mainly due to the interruption of life-sustaining treatments. In addition, during the past years, the massive exodus of physicians to the US mainland further weakened the healthcare system. In a country where more than half of its population has chronic health conditions, allowing its healthcare system to collapse as a result of measures detrimental to public health is a manifestation of necropolitics (i.e., a process whereby the State allows extreme precarious conditions to eliminate certain populations "naturally"). Applying the framework of necropolitics to PR, this presentation focuses on how community auricular acupuncture is being used as a form of necroresistance - the ways in which people defy the threats imposed by necropolitics in their everyday lives.

In this presentation, we will describe findings from our ethnographic study of the "Health and Acupuncture for the People Project" (HAPP), which has been providing free treatments in community settings on the Island since 2015. HAPP was created as a response to the economic and health crisis in PR that has been limiting the access Puerto Ricans have to health care. It emphasizes the importance of expanding Puerto Ricans' access to acupuncture and conceptualizes community work as social justice and a collective healing process. HAPP uses the National Acupuncture Detoxification Association (NADA) acupuncture protocol which involves the placement of up to five small, sterilized, and disposable needles in specific sites on each ear. HAPP focuses on treating primarily symptoms associated with mental health (e.g., anxiety, stress, and trauma) and sleep problems.

The data of the study arise from participant observation and autoethnography (one of the authors is part of HAPP and is certified by NADA), in addition to informal interviews with HAPP leadership, NADA providers and community members, and visual documentation (i.e., photography and film) throughout numerous clinics on the Island from 2020 to the present. We will present qualitative data and segments from the documentary *La Oreja* (The Ear) developed by our team to illustrate the value of auricular acupuncture in community settings as a tool to resist the effects of deadly policies that continue to affect Puerto Ricans. We will discuss the implications of the findings in light of the social and health care upheaval in PR and the role of strategies aimed at restoring the legitimacy of health practices that have been historically invisible or marginalized on the Island.



**Audience Take Away Notes**

- Learn how NADA's auricular acupuncture protocol can improve the overall health of communities in contexts marked by disasters
- Reflect on how the experiences and benefits of auricular acupuncture provided in community contexts can be documented through ethnographic and visual methods
- Critically reflect on how community auricular acupuncture can be seen as a way of resisting necropolises
- Identify which specific health conditions have been treated with NADA in Puerto Rico

**Biography**

Dr. Sheilla L. Rodríguez-Madera, a Professor at Florida International University (FIU), is a social scientist who conducts research in contexts marked by economic and natural disasters, as is the case of Puerto Rico. She is the Associate Director of the Research Network for Health and Society at FIU. Dr. Rodríguez-Madera has received multiple research grants from the National Institutes of Health (NICHD, NIDA, NIMH, NIA, NIMHD, and NCI). She has numerous publications in peer-reviewed journals and edited volumes; published six books; and participated extensively in academic forums worldwide while disseminating her work. As part of her studies in Puerto Rico, she became involved with HAPP and completed the NADA certification to provide auricular acupuncture.



**Lobsang Dhondup<sup>1\*</sup> TTM, Cynthia Husted PhD, Cynthia Husted PhD**

<sup>1</sup>Global Institute for Tibetan Medicine, Temecula, CA, USA

<sup>2</sup>Global Institute for Tibetan Medicine, Greenbank, WA, USA

## Integrative traditional medicines

Previous efforts to link Tibetan and western biomedicine have had challenges because of the attempts to link the concepts of disease diagnosis in the western biomedical views with Tibetan approaches that do not utilize such a disease concept. There is no one-to-one categorical semblance of traditional medicine diagnoses with western biomedical illness diagnoses. This is similar for most if not all traditional medicines. Because both Tibetan and functional medicines do not use a disease diagnosis model but rather look at the whole through a lens of interconnectivities of systems, it is our experience that these two systems best overlap for the integration of traditional and western biomedical systems. The days of reductionist medicine are transforming back to the ways of ancient wisdom with the benefits of modern technology for validation and to expand our understanding of Tibetan and other traditional medical approaches. Prevention is paramount in both Tibetan and functional medicines and in both systems the patient becomes the partner and accepts responsibility for their outcome. Both Tibetan and functional medicines view the body as a connection of interacting biological systems and we share the benefit of the combination of the two medical views for optimal clinical outcomes for a variety of chronic conditions. Tibetan and functional medicines have many commonalities that promote their integration. These commonalities likely overlap with other traditional medical systems, a systemic whole of healing.

1. Both have a mind-body-spirit emphasis.
2. Both maintain a systems biology view that all is connected, not only within the systems of the human body but also with the body and its environment.
3. Prevention is key; food and lifestyle are the best medicines.
4. Both Tibetan and functional medicines do not utilize a disease-diagnosis paradigm but rather a continuum of health and imbalance from the perspective of their system biology views.
5. The tree allegory is used in both Tibetan and functional medicines for educational purposes though those used in Tibetan medicine have more details as relates to physiology, pathophysiology, diagnosis, and treatment.
6. Tibetan medicine defines the body's functional systems based on the five elements, three *nyepa sum*, microorganism balance, seven tissues, and whether they are solid or hollow organs, whereas functional medicine classifies systems based on their biochemical activities and functions. These two can be integrated to simplify the understanding of complex illness.
7. Both medical systems agree that healing begins in the gut. Chronic disease starts in the gut and treatment begins with the gut.
8. Functional medicine integrates nutritional biochemistry with modern labs to evaluate one's biochemical status in deeper ways.
9. Tibetan medicine offers detailed theories on how to personalize individuals and labs into meaningful patterns that simplify complex big data of functional and modern systems biology medicine.

An overview of both Tibetan and functional medicine approaches and their integration will be shared as relates to chronic conditions. Such integration is relevant for traditional medicines in general as relates to modern healthcare needs.

**Audience Take Away Notes**

- The role of the mind in illness and healing
- Familiarity with the uniqueness of Tibetan medicine as relates to other Asian medicines
- Tibetan medical diagnoses of neurodegenerative and immune disorders and appropriate interventions
- Familiarity with the functional medicine model and its overlap with Tibetan medicine
- Benefits of integrating genetics, microbiome, and gene expression analyses with traditional medicines

**Biography**

Dr. Dhondup obtained the degree of Menpa Kachupa in Traditional Tibetan Medicine in 1988 with the Three Great Nobilities Honor for Excellence in Knowledge, Behavior, and Health Standards (an honor rarely offered). After working in a public hospital he relocated to Mongolia where he helped rebuild the teaching and research of Tibetan medicine from 1992-1998, for which he received the Mongolian national presidential award in 2021. In 1999, he relocated to California and soon thereafter met Dr. Cynthia Husted and they have been conducting integrative research since then.

**Karol Chandler-Ezell**

Dept. Anthropology, Geography, & Sociology, Stephen F. Austin State University,  
Nacogdoches, TX USA

**Why do Americans choose herbal and ethnomedicine therapies?  
Ethnobotanical evaluation of the endurance and function of the modern  
herbal synthesis**

After two decades of studying Americans' use of herbal and traditional medical therapies, much has changed, but the core reasons for choosing these "alternative" remedies remain the same. My original study's purpose was to use ethnobotanical methods to understand the current knowledge, beliefs, and use of herbal medicine in the central United States in the late 1990s and early 2000s. The data showed that Western herbal medicine was a "modern herbal synthesis" shaped from three source traditions--classic Western herbalism, Traditional Chinese Medicine, and Native American herbal medicine, and that it was best understood as a part of cultural evolution known as a revitalization movement. In short--when a society's cultural systems (such as medical care) do not meet the needs of a significant portion of people, they seek alternative paradigms that do offer them what they need. Two decades later, this trend continues. Traditional medicine, ethnomedicine, and natural therapies have solidified their place in modern global society and in the United States, in particular, because they meet needs unfulfilled by Western allopathic medicine. Theme and qualitative analysis of modern information sources and popular ethnomedical therapies show that the same core reasons people choose these therapies remains the same. People are more likely to use herbal remedies for illnesses not satisfactorily treated by Western allopathic medicine. These failings could be comfort during treatment, balancing spiritual, cultural, or ethical beliefs during therapy, ideas of acceptable side effects, personal control, or a desire for sustainable solutions.

**Biography**

Dr. Chandler-Ezell studied Biology and Physical Science at University of Central Arkansas, graduating from the UCA Honors College. She then earned an M.S. in Botany from Oklahoma State University. She then joined the University of Missouri Anthropology Dept and worked in the Paleoethnobotany Lab, earning her PhD. in 2003. After a 2-year NIMH post-doctoral fellowship at Washington University School of Medicine, she earned a Masters of Psychiatric Epidemiology before joining the faculty of Stephen F. Austin State University. She researches and teaches in ethnobiology and biocultural anthropology, with a special interest in ritual behavior, adaptive culture, and ethnomedicine.



**Isabel Wendt-Christodoulou**

Postgraduate sin. Med. MA Sinology, Medosophos-Institut, Germany

## **Traditional Chinese medicine as anchor and drive force in the psychosomatic medicine: Based on the Chinese medical classics and ancient philosophy**

Psychosomatic is composed of the combination from the ancient Greek words ψυχή /psyche ('soul, psyche') and σῶμα/soma ('body') and refers the fact that illness and health are to be understood in the relationship between psyche and body. That fact is an important part of the traditional baseline knowledge in the Chinese medicine, which have its seeds in the source of Taoism classics and in the book of changes (yì jīng 易經). The essence of traditional Chinese medicine is not the technical detail; it is the symbolic alchemy of holistic relationship to the cosmic, earth and physical level. The connecting link of the Chinese holistic is the force shén 神 (spirit), which is effective due to the transmissivity (通tōng) in the entire cosmos and in humans in the form of "psyche". If shén 神 is not permeable or continuous, pain (痛tòng) arises at all levels according to the baseline of 不通這痛 (bù tōng zhè tòng - 'If there is no transmissivity, pain will exist.') Therefore, every psychosomatic or somatopsychic perception requires the perception and treatment of shén 神 in the context of its transmissivity (通 tōng).The Chinese classics lead to an understanding of deeper contexts, which turn in a groundbreaking for the diagnosis and therapy of Chinese medicine and carry profitable conclusions for today's' psychosomatic medicine.

### **Audience Take Away Notes**

- Answers from Chinese medical classics will be given and the term "psychosomatic" will be redefined
- Building on this, the most important psychosomatic processes according to the basic natural and civilizational psychosomatic processes will be explained
- Methods and treatment of the holistic, Chinese medicine will be presented

### **Biography**

Ms. Isabel Wendt-Christodoulou is sinologist and completed her postgraduate medical studies at the TCM University of Nanjing and Beijing in original writing and language. After spending several years in China, Ms. Isabel Wendt-Christodoulou worked in Heidelberg in an international research network to prove the effectiveness of alternative and healing medicine. Her spectrum of knowledge in the field of medicine, healing and philosophy in combination with the experience of her daily medical as the leader of the medosophos-institute and scientific work is a rich fund. Her daily work is in the clinic of medosophos, Hamburg, Germany.



## Qiong-Di Wu<sup>1\*</sup>, Jiang Huai Wang<sup>1</sup>, Shulan Tang<sup>2</sup>, Peijuan Wang<sup>3</sup>

<sup>1</sup>Q&D Acupuncture & Herb Clinic, Cork, Ireland

<sup>2</sup>Shulan College of Traditional Chinese Medicine, Manchester, UK

<sup>3</sup>Department of Obstetrics and Gynecology, the Third Affiliated Hospital, Nanjing University of Chinese Medicine, Nanjing, China

### Acupuncture in combination with bushen-wenyang-nuangong fang of Chinese herb medicine improve the successful rate of IVF-ET assisted pregnancy in Irish infertile women

**Background:** In vitro fertilization-embryo transfer (IVF-ET) is the most used artificial assisted pregnancy technology by infertile women worldwide. However, due to the low successful rate of IVF-ET, adjunctive therapies including acupuncture and Chinese herb medicine have been increasingly accepted and widely selected during IVF-ET.

**Purpose:** This study aimed to clarify the effect of acupuncture in combination with Bushen-Wenyang-Nuangong Fang of Chinese herb medicine on improving the clinical efficacy of IVF-ET in Irish infertile women.

**Methods:** A total of 153 cases of Irish infertile women who had at least one or two more failures of IVF-ET and met the diagnostic criteria of traditional Chinese medicine for kidney yang deficiency and uterus cold syndrome were recruited and randomized into two groups. Participants in the acupuncture only group (n=61) or the acupuncture plus Chinese herb medicine group (n=92) were treated with acupuncture alone or acupuncture plus Bushen-Wenyang-Nuangong Fang of Chinese herb medicine. The live birth rate (LBR), clinical pregnancy rate (CPR), embryonic demise and miscarriage rate (ED/MR), number of ovarian follicles (NOF), zygotes (NZ), and embryo blastocyst (NEB) were assessed and compared between the two groups.

**Results:** Compared with acupuncture only, acupuncture plus Chinese herb medicine effectively improved the successful rate of IVF-ET with significantly increased LBR and CPR from 23.0% and 31.1% in the acupuncture only group to 56.5% ( $p<0.0001$ ) and 63.0% ( $p=0.0001$ ), respectively, and simultaneously reduced ED/MR from 26.3% in the acupuncture only group to 10.3%. Notably, acupuncture plus Chinese herb medicine substantially increased both NZ and NEB from 3.857 and 2.635 in the acupuncture only group to 6.012 ( $p=0.0004$ ) and 3.833 ( $p=0.0065$ ), respectively.

**Conclusion:** These results demonstrate that acupuncture in combination with Bushen-Wenyang-Nuangong Fang of Chinese herb medicine improve the successful rate of IVF-ET in Irish infertile women.

#### Audience Take Away Notes

- In this clinical observation study, we have shown that in comparison with acupuncture only, acupuncture in combination with Bushen-Wenyang-Nuangong Fang effectively enhance both live birth rate and clinical pregnancy rate, and simultaneously reduce the incidence of embryonic demise and miscarriage in infertile women undergoing IVF-ET
- Importantly, acupuncture in combination with Bushen-Wenyang-Nuangong Fang substantially increase the number of both zygotes and embryo blastocysts in infertile women undergoing IVF-ET, which could be the underlying mechanism(s) by which acupuncture in combination with Bushen-Wenyang-Nuangong Fang improve the successful rate of IVF-ET in Irish infertile women

**Biography**

Dr. Qiong-Di Wu was trained with western medicine at the Third Medical University, and acupuncture and traditional Chinese medicine at the China Academy College of Traditional Chinese Medicine in Beijing, China, and the Shulan College of Traditional Chinese Medicine in Manchester, UK. She received her MSc degree at the Royal College of Surgeons in Ireland, Dublin, Ireland, and her PhD degree at the Nanjing University of Chinese Medicine, Nanjing, China. Dr. Wu is the director and main practitioner of the Q&D Acupuncture and Herb Clinic, and a member of the Traditional Chinese Medicine Council of Ireland. She has published more than 20 research articles in the SCI journals.



**Michele Quintin**

Center for Relaxotherapy and Prevention, Belgium

## **The grammar of the body in connection with a subtle layer of neurocognitive brain functioning, to reorganize thoughts and process in stress diseases and traumatism**

Traditional techniques, such as yoga and meditation through their empirical and practical approach to the Living, transmit to us their long and deep knowledge of human beings. Neuroscience, psychology and physiology can tap into this intelligence, tested by experience and concreteness, and gain a clearer, more complete and therefore integrative understanding of mental health and balance. I therefore allowed myself to be impregnated by this double belonging to quickly get my fellow men out of their tensions and painful emotions. The functioning of the human organism can be subdivided into different layers: they go from the mechanical, through the organic, the tissue, the cellular and now we are able to unravel the mystery of the microscopic intra-cellular and even more, we are entering quantum space. This dimension of life can be matched with a subtle way of “thinking”, a dimension of brain work that allows psychotherapy to be more economical and above all more ecological in the treatment of traumatic stress.

### **Audience Take Away Notes**

- The participants will be able to be more efficient in the event of post-traumatic stress,
- To understand the double logic of life and survival
- To understand the importance of neurovegetative appeasement in both, common life and in acute situations
- They will be able to use the simple grammar of the unconscious and the gestures of relaxotherapy to help calm an agitated patient quickly
- They can help the person, through the body, to move naturally towards well-being
- And thus set in motion the self-healing processes inherent in Life

### **Biography**

Michele Quintin has a degree in Psychological and Pedagogical Sciences (ULB). In 1985, she founded a psychotherapeutic day center specializing in the problems of stress (chronic and traumatic) and concomitant disorders (anxiety, depressive states, overwork, burnout). She seeks, among the many techniques both bodily and mental, effective tools to remedy the various tensions. She has always worked in a multidisciplinary team. She professes as a psychotherapist, teacher and facilitator of workshops, conferences and seminars on health psychology, stress management and mindfulness. She is particularly keen to prevent the anxiety and aggressiveness inherent in our modern lifestyles. His practice is nourished by Eastern and Western teachers and in particular by the late master B.K.S. Iyengar (Hatha yoga and energetic body arts) and Lama Zeupa, Tibetan Buddhist master.





## Dr Mangala Kotnis

Health care Consultant and Physician, Thane, India

### Standardization of herbal drugs requirement (now/future)

AYurveda is considered one of the oldest medicines accepted worldwide. Herbal drug industry requires following stringent and non-compromising quality control parameters to ensure uniformity and standards of the formulations/products across the industry, hence requirement of standardisation of herbal medicines would be crucial requirement of today. Standardization of herbal medicines is the process of prescribing a set of standards or inherent characteristics, constant parameters, definitive qualitative and quantitative values that carry an assurance of quality, efficacy, safety & reproducibility. It guarantees the content of one or more active constituents and marker compounds and reduces variation in clinical treatment and patient outcome and thus improves the quality of patient care making it safer as well by reduction of potential errors. Standardization also reduces waste, makes treatment predictable and controllable and defines clear responsibilities for all. Today systematic approach and well-designed methodologies which will be shared in session for the standardization of herbal raw materials and herbal formulations are developed. Regulatory authorities across world have derived different safety norms for herbal medicines which is important to understand and implement.

#### Audience Take Away Notes

- Method of standardization, Rules and regulations around standardization of herbal drugs
- Audience will be able to use these details in teaching students; import exporters can use this information to understand regulators requirements
- Students conducting research can learn how to continue doing research and can help them in firms where standardization of herbal drugs is done
- Other faculty could use this as reference to expand their research

#### Biography

Dr Mangala Kotnis graduated as Medical Doctor from University of Mumbai, later completed her postgraduation (PhD) in Science “Standardisation of Herbal medicines using analytical methods” (with patent on the same) and MBA in Entrepreneurship from SGVU and post graduate Diploma in Marketing. Medical Thought Leader with 20 years of experience in pharmaceutical industry Ex Novartis, Ex Abbott with cross functional Medical Leadership Skills, a proactive hands-on approach to Medical Direction, Has ability to work productively with diverse set of internal and external stakeholders, strong expertise in clinical/real-world evidence generation, and has experience of science led business acumen across domestic and international markets with local (CPO India), Regional (AMAC) experience and global experience.

**Sarunpron Khruengsai<sup>1\*</sup>, Patcharee Pripdeevech<sup>1,2</sup>**<sup>1</sup>School of Science, Mae Fah Luang University, Muang, Chiang Rai 57100, Thailand<sup>2</sup>Center of Chemical Innovation for Sustainability (CIS), Mae Fah Luang University, Muang, Chiang Rai 57100, Thailand**Synergistic antibacterial effects of essential oils extracted from plants grown in Thailand**

The antibacterial effects of *Zanthoxylum limonella*, *Zanthoxylum bungeanum* Maxim, and *Zingiber montanum* (J. Koenig) Link ex A. Dietr. Essential oils and their combinations were tested against two bacterial strains including *Staphylococcus aureus* and *Escherichia coli* which are generally known for their implication on wound healing infections. The disc diffusion method with the minimal inhibitory concentration (MIC) and minimal bactericidal concentration (MBC) were employed to evaluate their antibacterial activity. The combined antibacterial effect of essential oils against the tested bacteria was evaluated by the checkerboard method and the fractional inhibitory concentration index (FICI) calculation. The results of the dissemination method demonstrated that all essential oils have antibacterial activity against tested bacteria with MIC and MBC ranging from 0.31-1.25  $\mu\text{g}/\text{mL}$  and 0.62-5.00  $\mu\text{g}/\text{mL}$ , respectively. The volatile compounds of *Z. limonella*, *Z. bungeanum*, and *Z. montanum* essential oils were analysed using gas chromatography-mass spectrometry. 1, 8-Cineole and limonene were major compounds in the *Z. limonella* essential oil whereas 2, 4-dimethylether-phloroacetophenone and terpinene-4-ol were major compounds in the *Z. bungeanum* and *Z. montanum* essential oils, respectively. The evaluation of the essential oils in combination revealed that the combination of *Z. limonella* and *Z. montanum* essential oils showed a synergistic effect against all tested bacteria. The synergistic effect of this combination could be resulted from major compounds in the combination such as 1, 8-cineole, limonene, and terpinene-4-ol which were evaluated to possess strong antibacterial activity.

**Audience Take Away Notes**

- Synergistic antibacterial effect is significantly detected in some mix essential oils
- New products from mix essential oils may be extensively consumed
- Mix essential oils may be applied in other applications due to its synergistic effect

**Biography**

Ms. Khruengsai studied Applied Chemistry at the School of Science, Mae Fah Luang University, Thailand. She is PhD student under supervision of Associate Professor Dr. Patcharee Pripdeevech at the School of Science, Mae Fah Luang University, Thailand. She receives the royal golden jubilee research grant from Thailand Research Fund since 2017 until now. She has worked on her thesis entitled analysis of bioactive compounds and their antimicrobial activity of essential oils and fungi endemic to Thailand.



**Xandy Melissa Rodriguez-Mesa<sup>1</sup>, Leonardo Andres Contreras Bolanos<sup>1</sup>, Geisson Modesti<sup>3</sup>, Antonio Luis Mejia<sup>1,2</sup>, Paola Santander Gonzalez<sup>1,2\*</sup>**

<sup>1</sup>Phytoimmunomodulation Research Group, Fundacion Universitaria Juan N. Corpas, Bogota, Colombia

<sup>2</sup>Alternative therapeutics and plant pharmacology, Fundacion Universitaria Juan N. Corpas, Bogota, Colombia

<sup>3</sup>Phytochemistry Research Group (GIFUJ), Pontificia Universidad Javeriana, Bogota, Colombia

## Immunomodulatory potential of cannabis sativa and a group of medicinal plants grown in Colombia

Throughout medical history, medicinal plants have been used traditionally in the treatment of different diseases of the immune system. Modern scientific research in this field has helped to support the use of such plants to characterize their potential as an immunomodulator in autoimmune and infectious diseases as well as cancers. In Colombia there is a great biodiversity of medicinal plants native to or introduced into the territory, which is used by indigenous or rural communities to manage inflammation. Some of these plants are *Cannabis sativa*, *Acmella ciliata* and *oppositifolia*, *Bidens pilosa*, *Pelargonium graveolens*, and *Kalanchoe pinata*. In our research group, we have established and characterized the immunomodulatory potential of these plants based on the results obtained by regulating or activating *in vitro* different cells of the immune system, such as peripheral blood mononuclear cells, macrophages, and human dendritic cells. The results have allowed us to determine the cytotoxic potential of these plants in mononuclear cells, the changes in their proliferation indices, the macrophage polarization profile (M1 or M2), and the maturation effect that they may or may not produce in human dendritic cells. In the same way, it has also been possible to establish the main chemical components present in these plants, which could be later used to induce such activity on the immune system.

### Audience Take Away Notes

- Descriptions of some medicinal plants cultivated in Colombia that are traditionally used to manage inflammation
- The characteristics of the cytotoxicity, proliferation index and immunomodulatory activity of
- The medicinal plants *Cannabis sativa*, *Acmella ciliata* and *oppositifolia*, *Bidens pilosa*, *Pelargonium graveolens* and *Kalanchoe pinata*
- Knowledge of the main chemical components involved in the immunomodulatory activity of
- Medicinal plants on macrophages and human dendritic cells
- Possible applications of each medicinal plant that our results characterize as pro-inflammatory or anti-inflammatory
- Possibilities for collaborative work between countries and university research groups, focused
- on the development of new Phytoimmunomodulatory drugs

### Biography

Dr. Santander studied Bacteriology at the Pontificia Universidad Javeriana in Colombia. Subsequently, she received a scholarship from the Colombian state to carry out her doctoral studies with the research group of Prof. Fiorentino in Immunology and Cell Biology and her subsequent PhD in 2012 from the same institution. Currently, Dr. Santander is an associate professor at Fundacion Universitaria Juan N. Corpas and leader of the Phytoimmunomodulation research group. She has two registered US patents, has published several original articles, book chapters and recently a book on the medicinal uses of Cannabis.



**Sherly E A\*, Dr. Prabhat Kumar**

Singhania University, Pacheri Bari, Jhunjhunu, Rajasthan, India

## The role of medicinal plants in our immune system

To strengthen the immune systems, people must be urged to take vitamins. The best way to boost our immune systems naturally is by using medicinal plants and herbs. The Vedas and Samhita contain numerous references to medicinal plants and their use, which originate from between 3500 BCE and 800 BCE. India is well known for its ethnobotanical endeavours. The "Vrikshayurveda," which is discussed in Vedic writings including the Atharvaveda and the Rigveda, is where the first mention of herbal medicine may be found. Ayurveda is a conventional herbal medicine practice, with roots in the Indus Valley between 3300 and 1300 BCE. The roots of the name are "Ayur" and "Veda," which combined denotes wisdom and life. Studies on plants' anti-inflammatory and antioxidant capabilities are important since they can be used to benefit human health. The herbal medicines have a social relevance because they are freely accessible, helpful to the underprivileged and tribal groups. Additionally, it is known that herbal products with a variety of health-promoting properties, such as anti-inflammatory properties, are safe to use with no major adverse effects. Plants are a priceless, extraordinary, and traditional source of medicines that can treat a variety of disorders. The majority of medications used as herbal treatments for health care, illness prevention, and treatment have been derived from plants since ancient times. The majority of plants' medicinal properties have been attributed to their secondary metabolites. A multidisciplinary strategy incorporating botanical, ethnobotanical, phytochemical, and biological approaches is used in plant drug development. According to the WHO, over 75 percent of the world's population relies on traditional medicine. There is a long history of them being used as folk medicines and traditional medicines for medical purposes all throughout the world. As a result, herbal treatments have been utilised for millennia due to their security, effectiveness, lack of negative side effects, and cultural acceptability. Plants and their derivatives are harmless, there has been continuing usage of plant products as drugs as an alternative method of treating patients since ancient times. According to recent studies on natural treatments, a variety of herbs have complex effects on immune function and act at various points in the entire cascade of immunological reactions. These herbs may function as significant immune boosters. Generally speaking, we depend on plants and products derived from plants to maintain strong immune systems. This paper focuses on five essential medicinal herbs that the people typically employ to boost their immunity.

### Audience Take Away Notes

- The audience will learn, in a scientific way, the importance of the plants that we are already familiar with have many medicinal values to improve the immune system
- The audience will learn the connection between civilization and the nature to promote good health and the prevention of diseases by taking care of the immunity
- The audience will become aware of their immune system and how these medicinal plants can be very useful in preventing disorders at a very early stage, even before they get expressed as symptoms
- The audience will recognize that growing medicinal plants can generate more cash for farmers than growing other conventional crop

**Biography**

Sherly E A, currently pursuing PhD from Singhania University, Pacheri Bari, Jhunjhunu, Rajasthan, India. My research focuses on two concentrations: (1) Survey of the medicinal plants of rural and urban area of Ranchi and Khunti, commonly used to treat various diseases (2) To keep track of herbal drug compositions, preparation methods and administration methods. In the most recent issue of the International Journal of Innovative Science and Research Technology, I published some work (IJISRT). I'm currently living in Ranchi to finish my research.



**Dr. Mohanlal Ghosh<sup>1\*</sup>, Dr. S.K. Chatterjee<sup>2</sup>**

<sup>1</sup>P.G. Department of Botany, Hooghly Mohsin College, Chinsurah-712101, W.B, India

<sup>2</sup>Agri-Horticulture Society of India, Kolkata, W.B, India

## **Importance of conservation and research on medicinal and aromatic plants used in health care and upliftment of rural economy in eastern part of India**

In recent times, medicinal and aromatic plants are finding diverse uses as raw materials not only for medicines but also for many other articles of cosmetics and perfumery. According to WHO, medicinal plants constitute the principal health care for more than 80% of total population. India exhibits wide range of topography and climate which has bearing on its vegetation and floristic composition. Medicinal and aromatic plants are now on the decline due to deforestation, lack of scientific cultivation and conservation creating problems that demands our immediate attention for greater interest of nation. Survival of the forests leads to the survival of mankind. Somewhere in the forest, there are probably compounds that will alleviate and correct almost every ailment known to mankind. The world will be benefitted from conservation of these species and their proper utilization.

The state of West Bengal (Eastern part of India) comprising plains and hills is gifted with enormous wealth of medicinal and aromatic plants due to its varied ecological conditions. These can be priceless resources with high potential for economic and ecological gains especially in the rural areas, if properly protected and promoted. In order to conserve the natural resources of medicinal and aromatic plants in West Bengal along with their sustainable use with commercial exploitation as nontraditional cash crops for the welfare of rural people, the present authors have attempted for scientific studies viz. survey, traditional use, assessment of depletion, selection of potential target species; agro-technology, photoperiodic and hormonal role on growth, development and metabolic status in relation to the synthesis of active principles; economics of cultivation and conservation strategy of the medicinal plants flora in West Bengal in different agro-ecological conditions. Eight species of medicinal and aromatic plants (*Andrographis paniculata*, *Adhatoda vasica*, *Centella asiatica*, *Catharanthus roseus*, *Cymbopogon flexuosus*, *Cymbopogon martini*, *Ocimum basilicum* and *Mentha piperita*) have been identified as target plants widely used in South Bengal for common diseases and six species of specified antidiabetic medicinal plants (*Gymnema sylvestre*, *Swertia chirata*, *Catharanthus roseus*, *Andrographis paniculata* and *Coccinia grandis*) have been identified in North Bengal.

Specific agronomic inputs have been done successfully with the target species of South Bengal and North Bengal for ex-situ conservation. Conservation studies clearly showed that *G. sylvestre* flourished in Laterite soil and *S. chirata* in sub-Himalayan zone. Clinical studies clearly established that *G. sylvestre* proved to be most effective anti-diabetic plant which showed significant hypoglycemic and anti-lipidic activities. In South Bengal, the studies clearly established that all the eight species of medicinal and aromatic plants can be conserved with the specific agro-technology and also established that the specific requirement of fertilizers, light condition, and hormonal treatments are conducive for optimum growth, development and increased synthesis of essential oils. Also shown morphological and biochemical indexing of the synthesis of essential oils and active principles along with the increased synthesis of metabolites.

**Cost:** Benefit ratio clearly revealed the economic feasibility of *G.sylvestre*, *S.chirata* and *C.roseus* in north Bengal and *C.flexuosus* and *C.martini* in South Bengal. Increased production of herbage yield and essential oil yield per hectare towards optimum treatments with specific agronomic inputs along with physical and chemical treatments and also the economics of cultivation of the two aromatic-cum-medicinal plants viz. *C.flexuosus* and *C.martini* clearly established that the plants would be attractive to the farmers to exploit them as non-traditional cash crops incorporating them in main cropping system in South Bengal utilizing waste land and uplifting of rural economy.

### Audience Take Away Notes

- Importance of herbal medicines which are mostly safe, natural origin, low cost and generally no side effects against synthetic ones which are costly and having side effects as regards dose, duration and interaction
- Opens up enormous areas for research to find out new and unknown medicinal plants producing miracle biomolecules for unknown and dreadful diseases
- To conserve the plants in ex-situ conservation for the greater interest of health care for poor village people and to save biodiversity
- To take care of valuable medicinal plants constructing medicinal plant garden in schools, colleges, national parks to make the common people understand and identify the useful, common and easily available medicinal plants curing common and serious diseases
- Economics of cultivation of medicinal and aromatic plants show interest to the farmer, entrepreneur and self- help groups to grow and cultivate the medicinal plants using agrotechnology established in this research, especially for aromatic grasses which will prove to be profitable non-traditional cash crops growing in fallow land thereby uplifting rural economy, reclamation of waste land and also helps in social forestry programme. Besides, Whole research works will be helpful to attract the industrialists to come forward to set up small scale or large scale pharmaceutical industries region- wise for the fruitful exploitation of the medicinal and aromatic plants which will ultimately help for economic growth and create job opportunities for the local people

### Biography

Dr. Mohanlal Ghosh, M.Sc. (Gold Medalist), Ph.D., trained on MAPs (Vienna), Former Associate Professor and Head, Deptt. of Botany, B.N.College, Hooghly, India; Investigator, CSIR and UGC projects on MAPs, Secretary general, ISMA-P, India, Regional repetitive, ICMAP, Recipient of distinguished scientist award from E.O.A.I., Life time achievement award as a distinguished scientist as a sits on MAPs in UGC sponsored symposium, Kolkata, India; Published more than 50 research papers in national and international journals and proceedings.. Visited Abroad (Austria, Thailand, S.Africa, China, Italy, USA, Bulgaria, Australia, Turkey, UAE, and U.K) for attending international conferences as a speaker, invited speaker, Key note speaker, chairperson. Presently, Engaged as a Hon. Guest Faculty, P.G.Deptt. of Botany, Hooghly Mohsin College, Chinsurah, W.B., also India for teaching-cum research activities, Resource scientist of DST Projects on MAPs and also acting as an Advisor & Consultant for the promotion of MAPs in schools and colleges and rural technology centre. Besides, engaged as a member of academic bodies in different colleges for uplifting teaching and research activities (IQAC).



**Dr Mangala Kotnis**

Health care Consultant and Physician, Thane, India

## Safety rules and regulations for herbal medicines

Herbal products are usually not evaluated for purity and consistency of active compounds, they also often contain contaminants. Furthermore, it is believed that if a drug is effective, it will not totally be safe and will have side effects. Therefore, herbal medicines as drugs may have side effects, too taking the wrong dose or wrong combination or using the wrong part of the plant may cause side effects or be poisonous (toxic). As per WHO (World Health Organisation) for medicines to work safely, it's vital to have strong systems in place to report any undesired side effects or "adverse drug reactions ". Many undesired drug reactions are due to lack of adherence to good manufacturing practice (GMP), poor regulatory measures and adulteration. Many in vivo tests on aqueous extracts largely support the safety of herbal medicines, whereas most in vitro tests on isolated single cells mostly with extracts other than aqueous ones show contrary results and thus continue the debate on herbal medicine safety. It is expected that toxicity studies concerning herbal medicine should reflect their traditional use to allow for rational discussions regarding their safety for their beneficial use. While various attempts continue to establish the safety of various herbal medicines in man, their cautious and responsible use is required. May be due to factors independent of the medicine one of them can be interactions with other drugs (including traditional medicines). Hence there is strong requirement of guidance from regulators. WHO has come up with guidelines for assessing quality of herbal medicines with reference to contaminants and residues which is quite handy. Even FDA has come up with Guidance for Industry on Complementary and Alternative Medicine Products and Their Regulation. Government of India has come up with General Guidelines for safety and toxicity of Ayurvedic formulations. All these documents and data are quite important to understand when we look at herbal medications.

### Audience Take Away Notes

- They will learn the guidelines and regulations
- It will help them to be updated with information if they are in business of herbal drugs
- They can research that other faculty could use to expand their research or teaching
- It explains what all points need to be considered from safety angle
- Companies working in this sector can work towards coming up with standardized product

### Biography

Dr Mangala Kotnis graduated as Medical Doctor from University of Mumbai, later completed her postgraduation (PhD) in Science "Standardisation of Herbal medicines using analytical methods" (with patent on the same) and MBA in Entrepreneurship from SGVU and post graduate Diploma in Marketing. Medical Thought Leader with 20 years of experience in pharmaceutical industry Ex Novartis, Ex Abbott with cross functional Medical Leadership Skills, a proactive hands-on approach to Medical Direction, Has ability to work productively with diverse set of internal and external stakeholders, strong expertise in clinical/real-world evidence generation, and has experience of science led business acumen across domestic and international markets with local (CPO India), Regional (AMAC) experience and global experience.





**Weixi Shen\*, Huiyi Feng**

Hong Kong Tianyou Medical Research Institute, Hong Kong; Shenzhen Hospital, Southern Medical University, Shenzhen Tianyou Medical Institute, Shenzhen, China

## **TCM Syndromes, patterns of cytokine storm and precision diagnosis and treatment of infectious diseases**

The natural science theory follows a "monism" approach, as there is only one ultimate theory of medicine without differentiation between Chinese or Western medicine. While modern medicine excels in diagnosing and treating diseases structurally, traditional Chinese medicine (TCM) uses a functional perspective to understand and address human diseases. Through the integration of both TCM and modern medicine, a complete medical science is formed. However, despite TCM efficacy in treating diseases, there has been a lack of scientific principles to support its treatments. Despite 60 years of research and accumulation of extensive experimental data, Chinese medical community has been unable to break through due to a lack of a medical theorist proficient in both Chinese and Western medicine. In 1996, the authors made an international discovery that pathogenesis of TCM syndromes are the result of an imbalanced state of cytokine network, known as cytokine storm. Various TCM syndromes represent different patterns of cytokine storm. TCM treatment principle is to regulate cytokine storm to achieve therapeutic effects. Building on this, a new theory has been established that combines TCM and Western medicine. This theory enables modern medicine to grasp a new type of basic pathological processes, leading to a better understanding and cognition of changes in the body's dysfunctional status and cytokine storm patterns during the disease process. The new medical theory is vital for infectious disease pandemic control, especially since there are currently no specific drugs available for viral infections. Medical research indicates that viral infectious diseases damage human bodies through cytokine storm. However, modern medicine struggles to distinguish the characteristics of cytokine storms in different diseases and/or patients, leading to inaccurate diagnosis and treatment. The new theory has uncovered cytokine storm patterns, empowering the medical community to develop two major diagnosis and treatment strategies for effective pandemic response. Governments worldwide can now develop scientifically optimized overall pandemic response strategies based on clinical manifestations of infectious diseases, as well as determine the characteristics of cytokine storm to achieve precise diagnosis and treatment based on clinical manifestations of patients. This means that governments have the ability to create comprehensive diagnosis and treatment plans for an epidemic solely based on the disease's clinical manifestations and clinicians can precisely diagnose and treat cytokine storm using only clinical manifestations of the patients. This medical accomplishment is applicable to any major infectious disease outbreak in the future. In late 2019, the COVID-19 pandemic emerged. In January of 2020, we theorized that the basic pathogenesis of COVID-19 was the result of a cytokine storm caused by increased transforming growth factor (TGF- $\beta$ ) activity. In May of 2021, our paper was published in *Frontiers in Public Health*, and the reviewers spoke highly of our disruptive innovation. The authors achieved remarkable results utilizing Chinese drugs that inhibit TGF- $\beta$  activity in treating COVID-19 and related complications. So the authors declare here that we have found specific medicine for the precise pathophysiological treatment of Covid-19 and the findings are significant for the current treatment of Covid-19. Exploring the scientific essence of TCM through modern medical theory represents a significant breakthrough in medical development. By understanding TCM treatment principle, the scientific community will have the opportunity to learn, exchange, and apply

TCM globally. It is unfortunate that current international medical community has yet to comprehend the scientific connotation of this groundbreaking medical theory, limiting its application in clinical diagnosis and treatment. We hope to collaborate with forward-thinking and far-sighted scholars worldwide to undertake this vital research and Covid-19 practice.

### **Audience Take Away Notes**

- understanding the pathogenesis of TCM syndromes and action mechanisms underlying TCM treatment: to regulate cytokine storm
- To understand and grasp the ability of distinguishing the characteristics of cytokine storm based on the manifestations of diseases and/or patients to perform precise diagnosis and treatment for a patient
- understanding the pathogenesis, pathophysiological treatment and specific medicine for Covid-19 infection
- grasping a new type of basic pathological processes due to the disequilibrium and dysfunctional status due to cytokine storm
- Understand the precise diagnosis and treatment ability that can be grasped only based on clinical manifestations of patients
- Enable governments worldwide to develop scientifically optimized overall pandemic response strategies based on clinical manifestations in the outbreak of infectious disease epidemic now and in the future

### **Biography**

Dr. Shen graduated from Peking University with MS in 1989 and from Peking Union Medical College, Chinese Academy of Medical Sciences with an MD in 1999. He is the president of the Shenzhen Anti-cancer Association, Shenzhen Chairman of the Tumor Prevention and Treatment Union, and Council Member of the Tumor Committee of the World Chinese Medicine Union. Over 100 papers have been published in national and international journals. His specialization focus on medical oncology and comparative research on TCM and Western medicine. He is the director of Hongkong Tianyou Medical Research Institute and Shenzhen Tianyou Medical Institute, and a professor at Shenzhen Hospital, Southern Medical University.



### **An Hoa Tran, Minh-Man Pham Bui, Dieu-Thuong Thi Trinh\***

Faculty of Traditional Medicine, University of Medicine and Pharmacy at Ho Chi Minh City, Ho Chi Minh City, Vietnam, University Medical Center Ho Chi Minh City – Branch no. 3, Ho Chi Minh City, Vietnam

## **Thread embedding acupuncture - A potential method in the treatment of GERD**

**Introduction:** Gastroesophageal Reflux Disease (GERD) is now one of the very common diseases, increasing and greatly affecting the quality of life. The treatment of GERD today remains a challenge. According to previous reports, after 4 weeks of Proton Pump Inhibitor (PPI) treatment, up to 50% of patients who received empiric therapy were still symptomatic. Meanwhile, Traditional Medicine (TM) has many methods to treat in which method Thread Embedding Acupuncture (TEA) is applied similar to acupuncture but the effects last longer. Therefore we performed this study to evaluate the efficacy and safety of TEA in the treatment of GERD.

**Methods:** A single-blind RCT study was conducted in 66 GERD patients having GerdQ $\geq$ 8 with a frequency of heartburn and/or regurgitation from 2 days/week, randomized into 2 groups including control and intervention group (33 participants per group). It has been designed according to the Consolidated Standards of Reporting Trials (CONSORT 2010) guidelines as well as the Standards for Reporting Interventions in Controlled Trials of Acupuncture (STRICTA). Both groups received standard treatment including PPI (pantoprazole 40mg once a day), antacid (use as needed), and lifestyle changes. The intervention group was added to method TEA every 2 weeks, using a chromic catgut thread embedded in 13 acupoints including Xiawan (CV-10), Zhongwan (CV-12), Shangwan (CV-13), and Zusanli (ST-36), Neiguan (PC-6), Geshu (BL-17), Ganshu (BL-18), Pishu (BL-20) in both sides of the body. All the treatment was given for 4 weeks. GERD questionnaire score (GerdQ), Frequency Scale for the Symptoms of GERD (FSSG), and TEA adverse effects were monitored for 4 weeks.

**Results:** After 4 weeks of treatment, the median GerdQ score from 11 (25th-75th quartile [IQR], 10-12) on the day of randomization in both groups decreased to 8 (IQR, 8-10) in the control group and 6 (IQR, 6-7) in the intervention group ( $p < 0.0001$ ). The intervention group resolved heartburn symptoms better with 78.8% (26/33) of patients no longer having heartburn, and 39.4% (13/33) for the control group ( $p = 0.001$ ). Similarly, the intervention group resolved 58.1% (18/31) regurgitation, 12.9% (7/33) for the control group ( $p = 0.003$ ). FSSG symptom score decreased sharply from mean (SD) 23.0 (5.9) to 2.2 (2.0), and the control group had a smaller decrease from 23.5 (6.1) to 11.5 (4.0) ( $p < 0.0001$ ). Side effects of concern accounted for 9.1% (3/33) including pain, local hematoma, local swelling, local itching, and local induration. Serious side effects 0% most do not need treatment and leave no sequelae.

**Conclusion:** Thread embedding acupuncture combined with standard treatment brings high efficiency and safety to GERD patients. Intervention studies based on clinical pattern classification should be conducted.

### **Audience Take Away Notes**

- In this presentation, we will share information about our research on integrating Traditional medicine and Western medicine in the treatment of GERD, specifically using the Thread Embedding Acupuncture method (TEA) with chromic catgut thread embedded in acupoints

- This study is the first study in Vietnam and a rare study in the world on the application of TEA in the treatment of GERD. It shows the high efficacy of TEA in combination with Western medicine for the treatment of GERD. In this case, it has great potential to replace traditional acupuncture and is extremely convenient because the patient only needs to come in for the TEA after 1-2 weeks
- Besides, we will also share information about the technique of conducting our featured method - an effective, safe, convenient, and relatively inexpensive method
- Our study sets the stage for studies on TEA such as multicenter studies, intervention studies based on clinical pattern classification, studies combined with herbal medicine, or studies using PolyDioxanOne thread (PDO) with longer drain time expected to be safer, more effective, and more convenient

### **Biography**

Dr. Dieu-Thuong Thi Trinh studied Traditional Medicine at University of Medicine and Pharmacy at Ho Chi Minh City (UMP) and graduated as MD in 2005. She received her PhD degree in 2013 and obtained the position of an Associate Professor in 2018. At the present, she is the Dean of Faculty of Traditional Medicine, UMP and is also the Head of University Medical Center at ho Chi Minh City – Branch 3. She has published about 10 textbooks in Traditional Medicine and Acupuncture, about 10 research articles in SCI (E) journals, and more than 80 research articles in Vietnamese scientific journals.



## **Campos-Navarro Roberto\*, Vargas-Escamilla Bianca, Campos-Ruiz Rodrigo**

Department of History and Philosophy of Medicine, Faculty of Medicine, National Autonomous University of Mexico

### **Medical therapy log (1992-2020) of Rosita Ascencio, a Mexican indigenous traditional healer**

In Mexico, it is uncommon for traditional healers to register their sessions. However, under the advice of a government representative of the Indigenous National Institute, Rosa Ascencio-García, an indigenous traditional healer, consistently logged every patient she treated over 28 years. This resulted in two notebooks containing the name, age, place of origin, diagnosis, and treatment of all the patients visiting her. Rosa Ascencio [a.k.a. Dona Rosita, (1925-2022)] was a traditional healer born in the city of Patzcuaro, state of Michoacan, Mexico. She belongs to the Purepecha indigenous group, established in the west of Mexico. Although she learned western nursing basics, she was mainly instructed by her family, ultimately providing health services to her neighbours. She belonged to an organization of Purepecha traditional indigenous healers which allowed her to visit Canada, U.S, and Costa Rica to share their traditional knowledge. She registered 2296 therapy sessions in her notebooks that included several illnesses not recognized by academic medicine: most of the patients were locals and visitors from neighbouring towns, both male and female. Most child patients were under 4 years old suffering from “caida de mollera” (fallen fontanelle), “empacho” (a kind of indigestion) and “mal de ojo” (evil eye). Meanwhile, adults were mostly treated for “nervios” (i.e., stress and anxiety), gastritis, and digestive and respiratory system infections. In this oral presentation, we would like to show the day-to-day activities of a Mexican traditional healer, who exceptionally, logged in her notebooks the general characteristics of her patients, infant therapeutic attention, and frequent traditional illnesses. This work aims to highlight the importance, persistence, and demand of indigenous traditional medicine in the Mexican society, especially in the treatment of illnesses not recognized by academic medicine. To do so, we will show you the context and statistics obtained from Rosita Ascencio’s logs.

#### **Biography**

Dr. Roberto Campos-Navarro is a family doctor with a Master's and a Ph.D. degree in Social Anthropology from the National School of Anthropology and History (Escuela Nacional de Antropología e Historia, ENAH) and the National Autonomous University of Mexico (Universidad Nacional Autónoma de México, UNAM) respectively. He is a professor in Medical Anthropology at UNAM Faculty of Medicine since 1987. He teaches postgraduate courses in México and Spain and has presented in multiple conferences in multiple countries of Latin America and Europe. He has authored several books, articles, and book chapters on Mexican traditional medicine in the last 40 years. He is also a level 3 (the highest) researcher at the National Bureau of Research and Technology in Mexico (Consejo Nacional de Ciencia y Tecnología, CONACYT) and belongs to the Mexican National Academy of Medicine.



**T. Radebe\*, PH Mfengwana\*, D. Olivier**

Department of Health Sciences, Faculty of Health and Environmental Sciences,  
Central University of Technology, P/Bag X20539, Bloemfontein, 9300, South  
Africa

## Antibacterial effects of *Elephantorrhiza elephantina* on *Staphylococcus aureus* cellular morphology

**Background:** Human pathogenic bacteria are known to cause infections/diseases. Antibiotics are the recommended treatment for infections caused by pathogenic bacteria. Over the years, bacteria have managed to acquire resistance against antibiotics, the so called multidrug-resistant (MDR) bacteria. MDR bacteria have increased at an alarming rate over the recent decades and has caused a substantial health burden. The use of medicinal plants is still regarded as a treatment option in the current healthcare sector and among rural communities. Traditional medicinal plants have been used for many years as they are more affordable, easily accessible and less toxic. Even with the modernisation of the healthcare system, people still trust and rely on traditional medicinal remedies. Research on the antibacterial properties of medicinal plants, may combat the burden on the health sector. This study evaluated the antibacterial properties of *Elephantorrhiza elephantina* to assess its potential as a novel antibacterial drug against MDR bacteria.

**Method:** The phytochemical analysis was evaluated using the qualitative and quantitative assays. Antibacterial activity was evaluated using the broth microdilution method and the disc diffusion method. The effects of *E. elephantina* on *S. aureus*' cellular morphology was observed using scanning and transmission electron microscopy.

**Results:** The results showed a strong antibacterial activity against *S. aureus*. Microscopic examination of the cells showed major structural changes, which included swelling of the cells, damage to cell walls evident from holes on the surface of the cells, loss of cytoplasmic contents resulted in shrinkage and wrinkling of the cells that eventually resulted in cell death.

**Conclusion:** The cellular morphological disruptions of the cell wall of *S. aureus* elucidates the antibacterial properties of *E. elephantina* and supports its probable use in the development of antibacterial drugs using selected medicinal plants.

**Keywords:** Multidrug resistant (MDR) bacteria, Traditional medicinal plants, *Elephantorrhiza elephantina*, Antibacterial activity, Electron microscopy, *Staphylococcus aureus*.

### Audience Take Away Notes

- This study will assist with an improved understanding on the mode of action of the plant's antibacterial mechanism to inhibit the growth of bacteria
- This study investigated the cellular changes the bacteria cell undertook when subjected to the plant extract. This could give more understanding on how the plant disrupts the cell cycle and its stages to lead to cell death
- This study could help with new development of novel antibacterial agents against MDR bacteria. With new drug development it will help with the burdened healthcare sector facing the serious problem of MDR bacteria
- Yes, this study provided new information on the particular plant's antibacterial properties against bacterial cells and supported its existing literature

**Biography**

Tlotlo Radebe is currently participating in the Phase 1: Nurturing Emerging Scholars Programme as an intern within the Health Science department at the Central University of Technology, Free State, South Africa. Her responsibilities include lecturing in the medical laboratory Science programme, conducting research and community engagement. Radebe holds a BSc (Honors) in Medical Laboratory Science and is awaiting her results for her MSc in Health Science qualification. Her research interests are in the areas of traditional medicinal plants, with a focus on the discovery of potential medicinal plants to be used against multidrug resistant bacteria. She has previously published a review article on *Elephantorrhiza elephantina*, and is currently working towards publishing her research findings on the antibacterial effects of medicinal plants on MDR bacteria.



### Ulviye Bunyatova<sup>1\*</sup>, Adnan Berk Dincsoy<sup>2</sup>, Aysel Guven<sup>3</sup>

<sup>1</sup>Program of Biomedical Engineering, Baskent University Organisation/ Assoc. Prof. Dr. Ulviye Bunyatova, Ankara, Turkey

<sup>2</sup>Department of Physiology at the School of Medicine, Hacettepe University, PhD candidate, Ankara, Turkey

<sup>3</sup>Health Services Vocational School, Baskent University Organisation/ Assoc. Prof. Dr. Aysel Guven, Ankara, Turkey

## Cellulose/organoclay based nanocomposite enhanced by silver colloidal and natural fruit acid extract shows high antitumor efficiency against breast cancer

The current study is aimed at preparing a smart functionalized hydrophilic carboxymethyl cellulose (CMC) sodium salt-based nanocomposite using biomimetic synthesis pathway and evaluation its antitumor efficiency on 4T1 mouse mammary carcinoma cells line in vitro. Cancer is one of the most challenging illnesses, designated by the expansion of mutated cells that proliferate and spread to different organs uncontrollably. The traditional therapeutic strategies used in the treatment of cancer are surgery, chemotherapy, radiation, and targeted therapy. Breast cancer is the most common malignant tumor in women worldwide and is the primary cause of cancer-related death in women. Alternative treatment strategies are needed because the drugs used in cancer treatment cause side effects, low quality of life and high cost. Moreover, drugs used in generally often have poor water solubility. Hydrophobic agent decreased the biocompatibility and this needs to be handled in higher dosages to reach therapeutic efficiency. The studies on more biocompatible and cost-effective cancer treatments have speeded up research on the effects of nanoparticles on cancer. Biocompatible hydrogels with active nanoparticles have been a promising method in cancer treatment for the last decades. Presented in this study biocompatible hydrophilic polysaccharide-based nanocomposite offers opportunity to overcome some limitations of conventional anticancer drugs and chemotherapy. In this study the anti-carcinogenic and anti-metastatic effects carboxymethyl cellulose (CMC) sodium salt-based nanocomposite coated silver nanoparticles C@AgNPs is investigated. C@AgNPs nanocomposite has been synthesized using a new nonradioactive light exposed method. This method allows AgNPs to be effective anti-cancer agents at lower doses without disrupting their biocompatibility and without causing free radical formation. Then C@AgNPs has been evaluated using an MTT-based cell viability assay on a triple-negative breast cancer cell line. The toxicity of AgNPs towards 4T1 cancer cells was confirmed by the MTT test and the cell viability assay showed an IC50 value of 8.2 µg/mL (0.0082 mg/mL).

### Audience Take Away Notes

- Cellulose derivatives are employed as excipients in pharmaceutical industrial products for oral, topical or parenteral administration. Their most relevant application, as observed in pharmaceutical industrial products, is to create matrix systems for solid oral dosage forms. Due to their aqueous swelling, the drug release is controlled by its diffusion through the hydrogel layers that they are formed
- This study shows a practical wLED based eco- friendly approach as a solution for drug syntheses: This method allows AgNPs to be effective anti-cancer agents at lower doses without disrupting their biocompatibility and without causing free radical formation



**Biography**

Ulviye Bunyatova is an Associate Professor at Biomedical Engineering Department at Baskent University, Turkey. She had an appointment as a Visiting Research Scholar at Electrical Department at Duke, NC, U.S. Within the Edmund Pratt School of Engineering between 2019-2020 and State University at Buffalo/SUNY, N.Y. U.S. Her current specific interests and expertise include: Design and syntheses of novel visible light sensitive biopolymer /colloidal structure with an antimicrobial/antiviral properties and inhibitors for targeted cancer therapy; Innovative approaches in the development of advanced traditional and alternative medicine compounds on polysaccharide based smart materials. She has over 25 publications that have been cited over 200 times, and her publication h-index is 8. She has been serving as an editorial board member of several reputed journals.

**Aysel Guven<sup>1\*</sup>, Ulviye Bunyatova<sup>2</sup>**

<sup>1</sup>Baskent University, Health Services Vocational School of Pathology Laboratory, Ankara, Turkey

<sup>2</sup>Baskent University, Biomedical Department, Engineering Facility, Ankara, 06790, Turkey

**Deterination of antioxidative properties of kefir made with traditional methods**

**K**efir is a fermented dairy product formed by the symbiotic combination of bacteria and yeasts in kefir grains. Kefir content is used as an important therapeutic food that can help the probiotic effect of the intestinal microflora by stimulating the proliferation of beneficial microorganisms in the stomach and intestines. In this review, the effect of kefir on nutrition regulation is examined biochemically and the importance of it is emphasized, and studies on how a regulation is made on gastrointestinal system diseases are examined and presented together. At the end of the microbiological analysis of kefir, the averages of the total mesophilic aerobic colony counts, lactic acid bacteria, lactic streptococci, enterococci, and yeasts were found to be  $1.04 \times 10(9)$ ,  $9.87 \times 10(8)$ ,  $4.38 \times 10(8)$ ,  $7.80 \times 10(4)$  and  $1.26 \times 10(5)$  CFU/ml, respectively.

**Keywords:** Probiotic, Kefir, oxidative stres, Antioxidan.

**Biography**

Aysel Güven studied Biochemistry at the Baskent University, After She graduated from Firat University, She prepared a thesis on Water Pollution at the Faculty of Environmental Engineering of the same University. She was the Head of the Department of Biology for eight years. She completed her doctorate in the Department of Biochemistry of the Institute of Health Sciences in 2003. She became Associate Professor in 2018. She is the editor of 2 textbooks, and the author of chapters in 10 books. She has research articles in nearly thirty international (SCI) journals and around 70 articles published in peer-reviewed journals. She has been serving as an editorial board member of several reputed journals.



**Dr. Rafiuddin Naser<sup>1\*</sup>, Rafat Unnisa Quadri<sup>2</sup>, Dr. Imtiyaz Husain Zaheed<sup>3</sup>**

<sup>1</sup>Head, Botany Department. Maulana Azad College of Arts, Science & Commerce, Dr. Rafiq Zakaria Campus, Rauza Bagh, Aurangabad. (M.S.) 431001 (India)

<sup>2</sup>Lecturer, Department of Biology, Sir Sayyed College of Arts, Science and Commerce, Roshan Gate, Aurangabad 431001 (M.S.) India

<sup>3</sup>Department of Botany, Abeda Inamdar Senior College, Camp, Pune (M.S.)-India

## **Ethnomedicines used by tribal communities of Gautala sanctuary of India**

The tribal communities like Banjara, Bhil, Andh, Pardhi, Thakar etc. resides in mountain areas of Gautala Sanctuary, are still dependent upon wild plants for their primary healthcare, and treatment of diseases. They collect the useful plant from the forests and cultivated fields and utilizes these plant materials as raw drugs. These communities have acquired good knowledge on the useful and harmful properties of the beneficial plant resources in course of their constant association with forest and agro ecosystems. Gauatala forest located in taluka Kannad Dist. Aurangabad (MS-India) is well known and considered as an important “hot spot” of plants and also of animal diversity. It covers a total area of 26,061.19 hectares (64,399 acres) with Reserved Forest Areas of 19706 ha. Forest dependent communities particularly Banjara, Bhil, Andh, Pardhi, Thakar etc. lives in this areas. Very little work on the Ethnobotany of this region is carried out except for sporadic mention in floristic studies by Naik and his students (1998). But no one has given partial wattage for the study of Ethnobotany and Pharmacognosy of Gautala Sanctuary. Due to this reason present problem is taken for investigation. The generated knowledge is expected to useful for planning of conservation of rare and endangered species in this area. Pharmacognostical investigation is useful for Ayurveda, Unani, Siddaha and all traditional medicinal practices. Information gathered from local informants among indigenouse people like traditional medicinal practitioners such as Shaman, Bhagats Vaidus and Punjaros, and experienced village elders, Knowledgeable women, Farmers etc. and by direct observations on the way of different plant material were being collected and used plants were identified. Some of the plants like *Abelmoschus esculentus* (L.) *Achyranthes aspera* (L.), *Amaranthus spinosus* (L), *Bacopa monnieri* (L.), *Ficus religiosa* (L.), *Nyctanthes arbortistis* (L.), *Operculina turpethum* (L.), *Ventilago denticulata* (Roxb) etc. are utilize by these indigenouse people for various purpose. Present investigation is humble attempt for documentation & conservation of these plants for preservation of the traditional knowledge of the plant resources which is endemic to this area.

**Key Words:** Bhil, Andh, Thakar, Banjara, Pardhi, Shaman, Bhagats, Vaidus and Punjaros.

### **Biography**

Dr. Rafiuddin Naser is a Head, Department of Botany, Maulana Azad College of Arts, Science & Commerce, Dr. Rafiq Zakaria Campus, Aurangabad (MS) INDIA. His specialization is Ethnobotany and Pharmacognocny. He is only the National Awardee Teacher from the region. He is having teaching experience of 33 years. He is a author of 42 books, 400 articles, 39 research papers and more than 140 Radio and TV talks. He travelled more than 18 countries and presented his research papers, he is a visiting faculty and Ph.D. Referee of Cairo University, Egypt. He is a recognized Ph.D.Guide of 4 Universities from Indian Universities. He completed three research projects, and participated more than 90 National and International Conferences inside the country as well as outside the country. He is a recipient of International Awards in France, Bhutan and Nepal. He got Birbal Savitri Sahani International Award 2006, he also got fellowships of IBS, EBSI & SLSC. He also received National Awards on his books from West Bengal, Uttar Pradesh and Maharashtra state Urdu Sahitya Academies. Besides these awards Dr. Rafiuddin Naser received many other awards and recognitions.



**Krashenyuk A.I.**

Academy of Hirudotherapy, St. – Petersburg, Russia

## **Pandemic “covid-19-postcovid syndrome” This name of the pandemic allows us to better understand the meaning of the use of hirudotherapy in treatment**

The author of this message owns a series of publications in the period 2020-2022, highlighting the features of the pathogenesis of a new disease: "COVID-19-POST-COVID SYNDROME", as well as a method of treatment and prevention of this disease based on the scientifically proven medicinal properties of the medical leech *Hirudo medicinalis*. The editors of 4 scientific medical journals adopted the author's concept of the name of the disease - «COVID-19- POSTCOVID SYNDROME » (Open Access Journal of Biomedical Science, 2022, May-June -4(3):1907-1909; J. of Medical & Clinical Nursing, 2022, Volume 3(4): 1- 9.; Journal of Clinical Epidemiology & Toxicology, 2022, Volume 3(4): 1-7.; PriMera Scientific Medicine and Public Health 1.4 (2022), 05-09). This suggests that there is an understanding of a single disease that has two phases: the first phase is an acute process, usually lasting 2-3 weeks ("COVID-19") and the second phase is the development of a chronic process - "POSTCOVID SYNDROME", with duration of 18-24 months. This definition of a new pandemic is important not only from a taxonomic point of view, but above all from a mental point of view, since it gives the doctor an understanding of the complexity of the disease and requires monitoring patients throughout this period, for example, monitoring the dynamics of D-dimers, prothrombin time, platelet count and the level of fibrinogen in the blood of convalescents. Now, these are the most informative markers of the danger of thrombosis. The term "Long Covid" does not reflect the substance of the disease process. In addition, in this series of publications, we analyzed the most reasoned and proven various aspects of the pathogenesis of "COVID - 19 - POST-COVID SYNDROME". As a result of this campaign, our recommendations are as follows: in the acute period of the disease, we conduct leeching courses daily, and in the second phase of the disease - two sessions per week for 18-24 months. This technology is a serious alternative to oral anticoagulants and plasmapheresis. The use of direct anticoagulants has a number of significant contraindications and complications in the defeat of the central nervous system, can cause bleeding, nasal, throat and renal. Plasmapheresis is available only to well-equipped clinics. This alternative treatment is the use of the “System method of leeching” (SML). The proposed solution is based on almost 30- years of experience in the use of SML in elderly people with multi-organ pathology and children treated at the Academy of Hirudotherapy of St.- Petersburg. Our experience in the treatment of “Post-Covid syndrome 2020-2021. Shows, that it is possible, moreover, with high efficiency. Based on the analysis of the mechanisms of pathogenesis of the “COVID-19” virus, our article was published, in relation to the treatment of -«COVID-19- COVID-19-"POSTCOVID SYNDROME “ [1,2]. As the author of the mentioned publications, I want to note a whole series of works published in 2020-2022 in the different journals. In these works, a number of new fundamental data have been published that make it possible to evaluate hirudotherapy as a pathogenetic method of treating complications of “COVID-19-POSTCOVID SYNDROME", and vaccinations against coronavirus, regardless of its strain characteristics. These are the discoveries of new effects of hirudotherapy: energy, neuritstimulating, wave (acoustic), detoxification, negentropic, aquastructuring, antiviral, resonance-wave and others. In addition, the SML

allows you to strengthen the therapeutic effect from synthetic drugs recommended by the national health centers of the world in the treatment of “COVID-19- POSTCOVID SYNDROME “. The proposed treatment technology has proven its effectiveness and the possibility of preventing complications from this disease in Russia, saved many lives.

### **Biography**

Krashenyuk A.I. Graduated from the 1st Pavlov Medical Institute in 1971 in Leningrad, and postgraduate studies in biochemistry at the same institute in 1974 from Professor V.I. Rosengart. In 1974 he received the degree of Candidate of Medical Sciences. From 1974 to 1985 he worked as a senior researcher and head of the laboratory of biophysical methods of research at the Pasteur Institute in Leningrad. He was engaged in the development of vaccines against measles, mumps, influenza, tick-borne encephalitis. From 1985 to 1992 he headed the laboratory of live influenza vaccines and biophysical methods of research. Created the world first purified live influenza vaccine, which was vaccinated 4.5 million people without post-vaccination complications. In 1995 he received the degree of Doctor of Medical Sciences from the Institute of Influenza of the Russian Academy of Medical Sciences (RAS). One of the creators of space biotechnology for the production of highly purified viral proteins in microgravity. In 1996 and to the present time the creator of the world first department and Academy of Hirudotherapy. Honorary Scientist of Europe, Academician of the European Academy of Natural Sciences (Germany), Grand Doctor in Biology and Medicine (Oxford), Full Professor of Oxford.



22-23<sup>MAY</sup>

DAY 01

POSTERS



5<sup>TH</sup> EDITION OF  
INTERNATIONAL CONFERENCE ON  
**TRADITIONAL  
MEDICINE,  
ETHNOMEDICINE AND  
NATURAL THERAPIES**



**Ana Valado<sup>1,2,3\*</sup>, Armando Caseiro<sup>2,3</sup>, Joao Cotas<sup>1,4</sup>, Leonel Pereira<sup>1,4</sup>**

<sup>1</sup>MARE- Marine and Environmental Sciences Centre/ARNET- Aquatic Research Network, Department of Life Sciences, University of Coimbra, Coimbra, Portugal

<sup>2</sup>Polytechnic Institute of Coimbra, ESTeSC - Coimbra Health School, Biomedical Laboratory Sciences, Coimbra, Portugal

<sup>3</sup>Laboratory for Applied Health Research (LabinSaude), ESTeSC-IPC, Coimbra, Portugal

<sup>4</sup>Department of Life Sciences, Faculty of Sciences and Technology, University of Coimbra, 3000-456 Coimbra, Portugal

## Anti-cholesterol and antidiabetic sea gelatin (Gemacol)

Algae are literally sea vegetables (in the same way that carrots or broccoli are land vegetables) and have been used as food for centuries by peoples with different cultures, such as the Chinese, Japanese, Scottish, Irish, Scandinavian, German, etc., who used them as a traditional medicine for different conditions. Algae have been around for 1200 million years (Tang et al. 2020), and traditionally consumed as food in various forms: raw as salad and vegetables, as pickles, as sugared jellies and also cooked for vegetable soup. As an herbal medicine, seaweed is generally used for traditional cosmetics such as antipyretics and antiseptics, vermifuge and treatments for cough and asthma, hemorrhoids, nosebleeds and boils, goiter and scrofula, stomach and urinary diseases (Anggadiredja et al. 2016). Low in fat, algae have phycocolloids (agar-E406, carrageenan-E407, alginates from E400 to E405) behaving, for the most part, as water-soluble fibers, with practically no caloric value. They also show a wide application in the food, cosmetics and pharmaceutical industries. The study involved 45 adult volunteers divided into groups (control and experimental). The experimental group consumed Gemacol based on phycocolloids, jelly made with seaweed extracts (prepared at the Laboratory of Seaweeds, MARE, University of Coimbra). Volunteers consumed 100 mL of Gemacol per day and at dinner, for 60 days. To estimate the impact of Gemacol on the lipid profile, the levels of total cholesterol (TC), triglycerides (TG), high-density lipoprotein cholesterol (HDL-C), low-density lipoprotein cholesterol (LDL-C) and glucose were evaluated, to understand the variation in the metabolism of carbohydrates. Serum values after 60 days of jelly intake revealed a statistically significant decrease in TC levels (5.3%;  $p = 0.001$ ) and LDL-C concentration (5.4%;  $p = 0.048$ ) in females. The daily ingestion of vegetable jelly for 60 days showed a reduction in serum levels of TC and low-density lipoprotein cholesterol in women. Glycemic levels also showed lower mean values after the consumption of vegetable gelatin, leading to the conclusion that phycocolloids have bioactive potential in reducing the concentration of TC and glucose.

**Keywords:** phycocolloids, TC, HDL-C, LDL-C, TG, Glycemic.

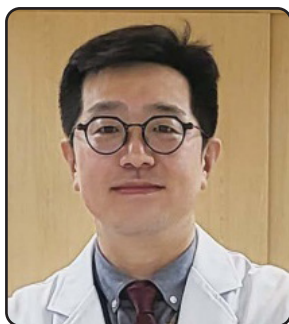
### Audience Take Away Notes

- The study aims to evaluate the effect of vegetable gelatin as a nutraceutical in participants with high levels of cholesterol and blood glucose. Daily consumption of vegetable gelatin, derived from seaweed, reduces cholesterol and glucose levels. The control of these markers is important in the prevention of cardiovascular diseases and diabetes
- The replication of the study allows evaluating other populations

### Biography

Dr Ana Valado studied Clinical Analysis and Public Health at the Coimbra Health School, Polytechnic Institute of Coimbra. In 1999 she finished biology at the University of Coimbra, where she completed a master's degree in cell biology. In 2018 she completed her PhD in biosciences. She was department director and coordinator of the master's degree in clinical analysis. Today she is a coordinator professor at Coimbra Health School, Polytechnic Institute of Coimbra. She is a Researcher at MARE-UC and at LabinSaude-Coimbra Health School. She has authored and co-authored more than 50 articles in national and international publications, as well as oral and poster communications.





### Byeonghyeon Jeon<sup>1</sup>, Wonbae Ha<sup>2</sup>, Jung-Han Lee<sup>2</sup>

<sup>1</sup>Department of Integrative Medicine, Rare Incurable Disease Integrative Medicine Treatment Laboratory, 121 Rojas-Ro, Anyang-myeon, Jangheung-gun, Jeollanam-do 59338, Republic of Korea

<sup>2</sup>Department of Korean Medicine Rehabilitation, College of Korean Medicine, Won-Kwang University, 895 Muwang-Ro, Iksan, Jeollabuk-do 54538, Republic of Korea

## The effects of saengmaekssan beverage infused with antler and *Asparagus cochinchinensis* extracts on improving fatigue and physical strength

Sports drinks work by quickly replenishing fluids and electrolytes lost through sweat during exercise or physical labor and enabling rapid removal of various metabolites. However, to increase the market demand, they contain an excessive amount of sugar which results in severe side effects that are masked by their benefits. This research aims to study the effects of saengmaekssan, an oriental sports drink known to have fewer side effects, to determine whether the intake of saengmaekssan infused with antler and *Asparagus cochinchinensis* extracts after a workout improves fatigue and physical strength. For this experiment, 12 badminton club members ingested saengmaekssan infused with *cochinchinensis* extract three times per session for 2 weeks (500 ml at 2 hours before the workout, 200 ml at 30 minutes before the workout, and 200 ml right after the workout). To compare the hematocrit, creatine kinase (CK), lactate dehydrogenase (LDH), ammonia, and lactic acid levels before and after the recovery period, blood was drawn twice, once 10 minutes after the exercise and then 20 minutes post-exercise during the recovery period. There was a significant improvement in hematocrit levels, indicating fluid regulation ability, but no significant effects on CK and LDH levels, indicating concentration muscle damage. Significant reductions in ammonia and lactic acid levels indicate fatigue. No significant difference was observed before and after the workout regarding reaction time and agility, but a significant difference was observed in balance. Thus, saengmaekssan infused with *cochinchinensis* extract had significant effects on fluid regulation ability and the reduction of fatigue markers, and although not significant, on the reduction of muscle damage markers. Moreover, prolonged intake of saengmaekssan infused with antler and *cochinchinensis* extracts may improve motor abilities. Therefore, it is likely to gain popularity as a natural sports drink with the benefits of regular sports/energy drinks and without the side effects of high sugar and caffeine.

### Audience Take Away Notes

- I questioned the efficacy of a beverage made of natural ingredients, but the results of this study proved its efficacy. This study was initially designed as a pretest-posttest research, but with the results of this study confirming the efficacy of the beverage, further research through a pretest-posttest control group will be conducted. Moreover, natural beverages will be developed tailored to patients with central and peripheral nervous system injuries
- Athletes will prefer sports drinks with natural ingredients that are effective in improving motor skills with fewer side effects than those of regular sports drinks and energy drinks that are high in sugar and caffeine. Moreover, medical workers at rehabilitation facilities can introduce natural sports drinks to patients who need exercise
- In addition to sports drinks, it will be possible to develop various types of products based on natural ingredients, and through further research, these products may be introduced into the market

## Biography

Since May 2009, Lee Jung Han, MD, has been working as a full-time professor in the Department of Oriental Medicine at Wonkwang University, where he fosters the education of undergraduate students and residents in the oriental medical school. He served as a director of education in 2011 and deputy director of medical care in 2013. In September 2016, he was appointed as the chief of the department of oriental medicine, implementing an integrative medical facility combining oriental and western medicine and leading treatment and clinical medical research for patients with spine and joint diseases. Currently serving as a research professor in clinical medicine, he has published approximately 70 papers, and recently, he has led the evidence-based industrialization of oriental medicine through efficacy verification studies of various products used in oriental medicine.

## Biography

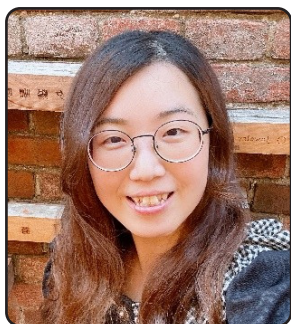


Ha Won Bae, KMD, has been working as a full-time professor in the Department of Oriental Medicine at Wonkwang University Hospital. He is responsible for patient care, research, and undergraduate education. His main focus is on musculoskeletal disorders and rehabilitation therapy after surgery, and he is also involved in research on the efficacy of herbal products and the development of an integrated medical service model. As a specialist in lifestyle medicine, he contributes to improving patients' lifestyles, including nutrition, sleep, and exercise.

## Biography



Byeonghyeon Jeon, has been working as a full-time researcher in the Research Institute for Integrated Treatment of Intractable Diseases at Wonkwang University Jangheung Integrated Medical Center. His research focuses on central nervous system injury rehabilitation and brain stimulation. He has a minor in biomedical engineering and is developing a stimulator that can help with spasticity, sleep disorders, obesity, and other problems after a stroke.

**Han-Pei Lin\*, Zi-Chun Lin**

Department of Dietetics, Chiayi hospital, Ministry of Health and Welfare/  
Chiayi, Taiwan

**Association between osteoporosis and lipid levels in aged care facilities**

**Objectives:** As life expectancy increases, so does the number of people aging in the population. Osteoporosis is an age-related disease characterized by low bone mass. Bone density can be reduced by many factors, including nutrition, age, hormones, and physical activity (PA). Many studies have shown a correlation between lipids and osteoporosis. However, the relationship between lipids and osteoporosis is still controversial. This study investigated the effect of lipid levels on osteoporosis among patients in aged care facilities.

**Method:** We analyzed the data of a total of 86 elderly adults in the aged care facilities of Chiayi hospital, Ministry of Health and Welfare. They were randomly divided into three groups: group normal (n=21), group low bone mass (n=24), and group osteoporosis (n=41). All elderly adults were surveyed for dual-energy x-ray absorptiometry (DXA). Serum levels of albumin (ALB), cholesterol (CHOL), and triglyceride (TG) were also tested. Pearson's correlation test was performed to assess the association between lipid levels and osteoporosis.

**Results:** Data was collected among residents in aged care facilities from 2021 to 2022, and the data showed that they were all older than 60 years old. Among the 86 elderly people, 21 were normal (21 males and 0 females), 24 were low bone mass (15 males and 9 females) and 41 were osteoporosis (5 males and 36 females). We found no significant associations between albumin (ALB) and osteoporosis. Compared with osteoporosis group, normal group have significantly reduced cholesterol (CHOL), triglyceride (TG) levels.

**Conclusion:** Our study indicated that higher cholesterol (CHOL), triglyceride (TG) were associated with higher risk of osteoporosis. But further studies are needed to confirm our findings.

**Audience Take Away Notes**

- Influence of lipid levels on elderly patients with osteoporosis
- Associations of the bone mineral density and osteoporosis in postmenopausal women
- The risk factors and associations behind the malnutrition of the elderly will be discussed to expand on this research

**Biography**

Han-Pei Lin is a current Registered Dietitian (RD) at the Department of Dietetics, Chiayi hospital, Ministry of Health and Welfare. Her research work also includes osteoporosis, malnutrition and elderly people. She has a great interest in research on the subject of elderly people and nutrition.



**Maria Regina Penchyna Nieto**

Tecnologico de Monterrey Campus Hidalgo, Mexico

## **Nutritional medical treatment in patients with Covid-19**

**Introduction:** Coronaviruses are a large family of viruses that can cause disease in both animals and humans. In humans, several coronaviruses are known to cause respiratory infections that can range from the common cold to more serious illnesses such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS).

**Methods:** Nutritional medical treatment is of the utmost importance, given the high energy and protein needs associated with the energy expenditure that the disease entails, and in the recovery phase, which can be long. An inadequate diet, whether it is associated with overweight or obesity or malnutrition, can significantly influence the evolution of Covid-19. Therefore, patients hospitalized for Covid-19 must be properly nourished.

**Keywords:** COVID-19, Treatment for COVID-19 patients, Nutrition for COVID-19 patients.

### **Biography**

Maria Penchyna received a degree in Nutrition and Integral Well-being at the Technological Institute and Higher Studies of Monterrey in Mexico, later on she worked for a year for the same university as a sports nutritionist and is currently a Project Support Coordinator at the PPD and Thermo Fisher company, has various certifications such as ISAK 1 standardized by the international society for the advancement of kinanthropometry and completed a diploma from Stanford University in Nutrition Sciences focused on children and the elderly population. Has published the article: Nutritional Medical Treatment in patients with COVID-19 for the scientific magazine MLS journals in the Health and Nutrition Research edition.



**Xandy Melissa Rodriguez-Mesa<sup>1\*</sup>, Leonardo Andres Contreras Bolanos<sup>1</sup>, Geison Modesti Costa<sup>2</sup>, Antonio Luis Mejia<sup>1</sup>, Paola Santander Gonzalez<sup>1</sup>**

<sup>1</sup>Phytoimmunomodulation Research Group, Juan N Corpas University Foundation, Bogota, Colombia

<sup>2</sup>Phytochemistry Research Group (GIFUJ), Pontifical Javeriana University Bogota, Colombia

## **How components of different polarities obtained from *bidens pilosa* l modulate the activity of macrophages and dendritic human cells towards an anti-inflammatory profile**

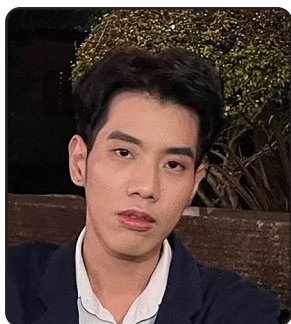
Different immunomodulatory compounds such as fatty acids, terpenes and flavonoids have been identified in medicinal plants such as *Bidens pilosa* L., which is traditionally used by different communities around the world for its anti-inflammatory, antinociceptive and antioxidant properties. Currently, the modulation of antigen cell presentation (APCs) such as macrophages and DCs with extracts or complex mixtures of compounds of plant origin is a field of interest for the development of new treatments, mainly for cancer and autoimmune diseases due to the ability of these cells to activate or attenuate the adaptive immune response. It is unknown whether the immunomodulatory properties reported in *Bidens* is associated with the presence of molecules that modulate the activation profile of DCs and macrophages. Taking into account the described immunomodulatory activity of *B. pilosa*, these studies focused on evaluating the immunomodulatory effects of this plant, as well as on the polarization (M0, M1 and M2) of macrophages and the induction or not of maturation of human DCs. Different extracts and fractions of the aerial part of the plant were obtained. Treatments with immunomodulatory activity were identified through induction of changes in the proliferation index of human PBMCs using the MTT technique. Subsequently, it was evaluated whether the selected treatments modulate macrophage polarization, DC activation, and cytokine production or not using multiparameter flow cytometry. The chemical components present in the extracts or fractions that generate the response modulation in the APCs were identified using mass gas chromatography. The petroleum ether extract, ethyl acetate and hydroalcoholic fractions were determined to have low cytotoxicity and modulate cell proliferation and cytokine secretion of PBMCs. Additionally, it was determined that petroleum ether extract induces macrophage polarization towards an M2 profile and generates a semi-mature profile in the DCs. This immunomodulatory activity of the apolar extract of *B. pilosa* could be related to the presence of low-medium polarity compounds, such as: phytosterol, terpenes and fatty acid esters. These findings demonstrate the specific immunomodulatory effect that the chemical components of the plant could have on antigen-presenting cells.

### **Audience Take Away Notes**

- This work provides scientific evidence that broadens existing knowledge about the immunomodulatory effect of *Bidens pilosa* and addresses its anti-inflammatory potential for the development of medicines based on medicinal plants
- These in vitro studies provide the necessary evidence to continue with in vivo studies that will allow the evaluation of the immunomodulation generated by *B. pilosa*, with a view to future development of clinical studies that have applications with diseases associated with inflammation such as cancer and autoimmunity
- Additionally, it shows the importance of continuing to expand knowledge about the anti-inflammatory effect of *Bidens pilosa* and the possible mechanisms of action that it may have at a biological level

**Biography**

Dr Xandy Melissa Rodríguez studied bacteriology and clinical laboratory at the Colegio Mayor de Cundinamarca University. In 2018 she carried out research at the Colombian Institute of Immunology Foundation. In 2022 she obtained her Master's Degree in Biological Sciences (MSc) at the Pontificia Universidad Javeriana and since 2019 she has been working in the phytoimmunomodulation group of Dr. Santander at Juan N Corpas University Foundation.



**Pongrapee Laorodphun\***, Phatchawan Arjinajarn

Department of Biology, Faculty of Science, Chiang Mai University, Thailand

## **Sphagnum cuspidatum extract ameliorates kidney injury by glucose intolerance, lipid metabolism and antioxidant mechanism in obese-insulin resistant rats**

**Introduction:** Obesity remains a global health problem. High-fat diet (HFD) consumption increases the risk of type 2 diabetes and initiates kidney injury. *Sphagnum cuspidatum* (SC) provides anti-obesity effects through several mechanisms. However, the effects of SC on preventing obesity-related kidney injury in obese-insulin resistance have not been studied. SC containing high levels of phenolic compounds. A novel action of phenolic compound in activating antioxidant enzyme mechanism assembly was reported in *in vitro* via the nuclear factor Erythroid 2-related factor 2 (Nrf2) activation. HFD-induced systemic oxidative stress and apoptosis. Therefore, Nrf2 activation might be a therapeutic target for preventing obesity-related complications. Here, we explored the protective effects of SC in obesity-induced kidney dysfunction and the involved molecular mechanisms. We hypothesized that SC might exert renoprotection against obesity-induced kidney injury through increasing antioxidant enzyme.

**Methods:** Male Wistar rats were fed with HFD and injected nicotinamide followed by low dose streptozotocin for 8 weeks to induce obese insulin resistance. Next, HFD rats were randomly divided into 4 groups: HFD, HFD treated with SC 50 or 100 mg/kg/day (SC50 or SC100) and HFD treated with metformin 100 mg/kg/day (MET). The interventions were orally treated for 4 weeks. At the end of experiment, blood, urine and renal tissue samples were collected for further investigations.

**Results:** After 8 weeks of high-fat diet feeding, obesity and glucose intolerance were presented in HFD compared to normal diet (ND) rats, as indicated by the significant increases in body weight (BW), plasma cholesterol and total area under the curve for glucose (TAUCG). Kidney injury were observed at week 8, as shown by elevated kidney injury score and serum creatinine. Treatment with SC50 or SC100 significantly decreased BW, hypercholesterolemia, glucose intolerance and kidney dysfunction. Interestingly, SC100 markedly decreased malondialdehyde (MDA) compared with HFD. In addition, renal Nrf2 and downstream mechanism expressions were downregulated in HFD which were upregulated by SC100 and MET. Moreover, renal apoptosis markers, Bcl-2-associated X protein (Bax) and cytochrome-C, were increased, along with the suppressing of anti-apoptotic B-cell lymphoma-2 (Bcl-2) in HFD. Treatment with SC100 or MET markedly alleviated renal oxidative and apoptosis.

**Conclusion:** SC exerted renoprotection through attenuating renal oxidative stress and apoptosis as a result of antioxidant mechanism via Nrf2 activation in obese insulin resistance rats. Therefore, SC might be an effective new dietary supplement for treating obesity and its related complications in clinical use.

### **Biography**

Pongrapee Laorodphun studied about Renal Physiology at Department of Biology, the Faculty of Science, Chiang Mai University, Thailand. He is Ph.D. candidate under supervisor of Asst.Prof.Dr. Phatchawan Arjinajarn D.V.M. at Department of Biology, the Faculty of Science, Chiang Mai University, Thailand. He worked on his thesis under the title of Preventive Effects of Peat Moss (*Sphagnum cuspidatum*) Extract on Kidney Injury in Type 2 Diabetic Rats.





22-23<sup>MAY</sup>

DAY 02

VIRTUAL ROOM 01  
KEYNOTE  
FORUM

5<sup>TH</sup> EDITION OF INTERNATIONAL CONFERENCE ON

TRADITIONAL MEDICINE,  
ETHNOMEDICINE AND  
NATURAL THERAPIES

## Aiming for a homeopathic research juggernaut

Effects of homeopathic medicine can be dramatic, and homeopathy is a system of medicine *par excellence* that lends itself to the double-blind randomized controlled trial. Since this is the clinical study design that provides the highest internal validity, the question arises why the literature is not awash with high quality meta-analyses reporting on these effects. The talk will give examples of homeopathic studies that give a clue as to why capturing and reporting effects of homeopathy has been problematic. It will also report on how the current simillimum study in India is circumventing these issues in clinical studies and provides a springboard to perform multiple definitive phases 3 RCTs in homeopathy. This is incorporated almost seamlessly into daily homeopathic practice, with minimal disruption to the practice of practitioner participants. Time permitting, the talk will give a brief overview of work done in Bulgaria, Hungary and Scotland relating to the use of potentized optical isomers or 'mirror image' molecules that are ubiquitous in nature, and provide a robust platform for investigating potency effects.



### Dr Reinhard Michael Kuzeff

Albury Central Medical Clinic,  
Level 1, 566 David Street, Albury  
NSW 2640, Australia National  
Institute of Integrative Medicine,  
21 Burwood Road, Hawthorn VIC  
3122, Australia

#### Biography

Dr Michael Kuzeff graduated in medicine from Monash University in Australia and has been practicing family medicine for 35 years with an interest in homeopathy. He is a consultant in homeopathy at the National Institute of Integrative Medicine in Melbourne, Australia. He was on the advisory board of the US peer-reviewed journal *Alternative Therapies in Health and Medicine* from the journal's inception in 1995 until 2005. Between 1997 and the present, he has published several studies using serially succussed and diluted substances, notably using optical isomers, or mirror-image molecules, for which he is the named inventor on Australian and US patents. Most recently Dr Kuzeff is the propounder and principal author of the simillimum randomized controlled trial currently being undertaken as pilot study in India. This was first discussed during a talk at the Indian consulate in Sydney, Australia, in November 2019.

## Neuroimaging by evaluation nerve repair and remodeling of acupuncture in children with cerebral palsy

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

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

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

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

**Keywords:** Cerebral palsy, Acupuncture, Nerve repair, Remodeling, Motor function.



### Zhenhuan LIU

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

#### Biography

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

## Extracellular vesicles derived from the medicated plasma of Buyang huanwu decoction–Preconditioned neural stem cells accelerate neurological impairment recovery following an ischemic stroke

The acquired neurological impairment of survivors following an ischemic stroke poses a serious risk to their quality of life and health. Due to the disadvantage of direct transplantation, the application of neural stem cell (NSC) transplantation is limited. These cells promote neurogenesis through secreted extracellular vesicles (NSC-EVs), which present an effective therapeutic option. However, the quantity of NSC-EVs in the adult brain is actually insufficient, which restrains their clinical application. Buyang Huanwu Decoction (BHD), a classic traditional Chinese decoction, is promising to alleviate neurological impairment following an ischemic stroke. It was speculated that BHD might promote the recovery of neurological function through the NSC-EVs. The medicated plasma of BHD (MP-BHD) was used to precondition NSCs and then the EVs (BHD-NSC-EVs) were isolated. Middle cerebral artery occlusion (MCAO) models were built and subsequently treated with phosphate-buffered saline (PBS)/BHD/NSC-EVs/BHD-NSC-EVs through intra-gastric administration or tail vein injection respectively. The effects were evaluated via animal ethology, imageology, and histology. The proliferation, differentiation, and migration of the NSCs were also determined in terms of different study groups. Next-generation sequencing (NGS) of micro ribonucleic acid (MIRNA) profiles was performed to explore the mechanism behind the neurogenesis of NSCs induced by BHD-NSC-EVs. The BHD-NSC-EVs treatment accelerated the neurological recovery of the MCAO models and promoted NSC proliferation and differentiation, while more interestingly, the MP-BHD treatment promoted the large-scale generation of functional MIRNA encapsulated in the BHD-NSC-EVs. The NGS revealed that miR-124-5p, miR-9a-5p, miR-137-5p, and miR-184 might play critical roles in the neurogenesis of NSCs induced by BHD-NSC-EVs. The effects of BHD-NSC-EVs were essentially more significant than those of BHD and NSC-EVs alone. In replacing BHD or NSCs, the preconditioned NSC-EVs present a more efficient strategy for ischemic stroke. The preconditioning of stem cells-derived EVs via the medicated plasma of Chinese herbs, based on the clinical efficacy of TCM, may present a newly promising therapeutic strategy for related diseases.

**Keywords:** Cerebral palsy, Acupuncture, Nerve repair, Remodeling, Motor function.



### Lukui Chen

Integrated Hospital of TCM,  
China

#### Biography

Lukui Chen had completed his PhD at the age of 35 years from Central South University, China. He is the director and professor of Neuroscience Center in Integrated Hospital of Traditional Chinese Medicine, Southern Medical University, China, since 2019. He has over 40 publications that have been cited over 1000 times. He has been serving as Guest Editor of Frontiers Journals.

## The holistic approach to multiple sclerosis

Having worked for many years treating people with this debilitating disease, one can just wonder at the amount of mental and physical trauma they suffer. Since Multiple sclerosis is under the label of autoimmune related diseases and there are over 100 of them under that category, it becomes quite challenging to treat these conditions. Sunita's drive into understanding this disease and using 'Natures Pharmacy', pure organic essential oils to support the immunity has shown her that they do indeed work as a complimentary therapy to support patients with this condition. Some of her case studies have profound evidence that Aromatherapy together with other Holistic approaches help the person in need, especially when it is associated with deep pain. In this presentation Sunita will share those case studies and explain how essential oils target our cells and tissues and support our Immune system. There are a lot of papers written on Multiple sclerosis saying that it is caused by the immune system attacking the nervous system, and some theories mention that Multiple sclerosis is not an autoimmune disease but a metabolic neurodegenerative disorder. Whatever the theories are, taking a holistic approach to support someone suffering with this disharmony, is the best way forward.



### Sunita Teckchand

Integrated Holistic Therapist,  
Clinical Aromatherapist - MIFPA  
MNAHA, United Arab Emirates

#### Biography

Sunita Teckchand completed her clinical aromatherapy education in 1998 from Hong Kong, and presently lives and works in Dubai, UAE. She is the owner and principal tutor of 'The Holistic Alternatives', where she teaches the IFPA accredited program on a digital platform. She also markets her own brand of organic essential oils - 'ESSensuals'. She has personally tutored and mentored students that have graduated on to become successful therapeutic massage practitioners and clinical aromatherapists. She has been interviewed on radio, television and magazines. She has also published several articles. She currently is an external examiner, a trustee and board member of the IFPA since 2019. She has also written a chapter in a book 'She is Remarkable' which will be published in February 2023.

## Heart centered initiative – Restoring hope & promoting healing

A heart-centered initiative program focusing on Satir transformational change model & Complementary Integrative Health (CIH) approaches empowering individuals, families, communities to access their inner power to overcome obstacles to their individual, family, community, national, international health, & wellbeing. Wars & natural disasters caused by climate change have impacted the world. We are ONE. Each person, family, community, and nations deserve the right to plan, honor the integrity of its people, its culture & secure self-governance with equal opportunity for all.

**Description:** Training example includes scientific research documenting effective strategies for improved health and wellbeing that is culturally specific and addressed national and international needs and priorities for global healing.

- Support & Help for Recovery from Trauma, Disasters, & War: For Children, Couples, Families, Businesses, Organizations, Communities, & Nations
- Experience Satir Transformational Seed Model with Energy Therapy - Helping Individuals, Families & Organization Survive & Thrive
- Complementary Integrated Health (CIH) Self-Care & Wellness for Health Professionals, Service Providers & Volunteer Helpers

### Audience Take Away Notes

- Describe scientific research addressing problems from war, disasters, shootings, relocation, abuse, misuse of power, segregation, affluent vs poor imbalance, extreme grief and losses of all kinds
- Capturing Your Story for Health, Healing & Renewal
- Expand Intuitive/Spiritual Development to create hope & healing
- Practice Interventions bring Balance & Healing
- Evaluate Positive Growth & Change



**Dr. Mary Jo Bulbrook, BSN, RN, MEd, EdD, CEMP/S/I, CIH**

Akamai University, President, Dean of Institute for CAM Studies, Founder & President of Energy Medicine Partnerships Affiliate, CEO of Global Healing Alliance Affiliate , USA

### Biography

Dr. Mary Jo Bulbrook is uniquely qualified due to her lifetime commitment as a dedicated practitioner and university academic with over 50+ years in Higher Education. She is a master teacher/practitioner/educator with grounded theory and storytelling research serving throughout the USA, Canada, Australia, New Zealand, South Africa, Peru, Chile, and Argentina. Her leadership includes Healing Touch, Transform Your Life with Energy Medicine, and Touch for Health, Bioenergetic Wellness, Transpersonal Psychology and Energy Psychology. Currently she is president of Akamai University leading this innovative program to address worldwide challenges in practice, education, and research.

22-23<sup>MAY</sup>

DAY 02

VIRTUAL ROOM 01  
SPEAKERS



5<sup>TH</sup> EDITION OF INTERNATIONAL CONFERENCE ON

**TRADITIONAL MEDICINE,  
ETHNOMEDICINE AND  
NATURAL THERAPIES**



**Xiao Zhang<sup>1</sup>, Yangyi Gu<sup>1</sup>, Li Li<sup>1, 2\*</sup>**

<sup>1</sup>Guanghua Hospital Affiliated to Shanghai University of Traditional Chinese Medicine, Shanghai 200052, and China

<sup>2</sup>Institute of Arthritis Research in Integrative Medicine, Shanghai Academy of Traditional Chinese Medicine, Shanghai 200050, China

## Protective effect of Chinese herb *Prunella vulgaris* on esophageal injury caused by bile reflux-induced inflammatory carcinoma transformation

**Background:** Bile reflux is one of the main risk factors for Esophageal Adenocarcinoma (EAC). There is almost no effective clinical method to control the reflux type of bile, so early prevention of EAC is still a challenge. This research aimed to investigate the protective effect and mechanism of a commonly used traditional Chinese medicine, *Prunella vulgaris*, on bile reflux-induced esophageal mucositis and carcinoma transformation in a rat esophageal injury model.

**Methods:** SD male rats were anesthetized by intraperitoneal injection of 2% sodium pentobarbital. Rats in the Sham group underwent gastric vascular ligation and suturing. The model rats underwent total gastrectomy-esophagoduodenal anastomosis. The modeled rats were randomly divided into the Model group and the traditional Chinese medicine group (i.e., PV group). Esophageal tissues and peripheral blood were taken from rats in the Sham and Model groups at 2, 4 and 8 weeks postoperatively, respectively. Two weeks postoperatively, water decoction of *Prunella vulgaris* (PV) was given to rats of the PV group by gavage. Gavage was performed for 6 weeks. Then, esophageal tissues were collected for HE staining, CD105 immunohistochemical staining, Ki-67 immunofluorescence staining, and the levels of inflammatory cytokines or chemokines in peripheral blood were verified. The data are presented as the mean  $\pm$  SEM, and differences between two groups were compared using one-way ANOVA or Mann-Whitney U test.

**Results:** In the model rats, the inflammatory response of esophageal tissues became more severe with increasing pathological inflammation scores as the duration of modeling increased. Pathological scores were significantly higher in the Model group at 2, 4, and 8 weeks postoperatively compared to the Sham group at the same time period ( $P < 0.05$ ;  $P < 0.01$ ). PV group which significantly improves pathological inflammation in the esophagus ( $P < 0.05$ ). The overall trend of peripheral blood inflammatory factors and chemokines was increased in the Sham and Model groups of rats at 2, 4 and 8 weeks postoperatively. The concentrations of CXCL1, CXCL10 and VEGF were significantly higher in the Model group than in the Sham group at 8 weeks postoperatively ( $P < 0.05$ ;  $P < 0.01$ ), and in the PV group, the concentrations of VEGF and CXCL1 in the blood ( $P < 0.01$ ). Bile reflux was able to enhance the expression of CD105 and Ki-67 in the esophagus of rats in the Model group significantly ( $P < 0.01$ ), and the expression of CD105 and Ki-67 in the esophagus of the PV group significantly decreased ( $P < 0.05$ ).

**Conclusion:** *Prunella vulgaris* can protect esophageal mucosa from bile injury by inhibiting the inflammatory response and angiogenesis-related factors.

### Audience Take Away Notes

- Bile reflux is one of the main causes of gastrointestinal carcinogenesis, and there is a lack of effective drugs for the treatment of bile reflux. Esophageal adenocarcinoma caused by reflux has a rapidly increasing incidence in the global regurgitation and lacks effective means of early prevention, which is a hot spot in digestive system research in recent years



- This report provides participants with a Chinese herbal medicine *Prunella vulgaris* that can effectively prevent and treat esophageal inflammatory carcinoma transformation caused by bile reflux, thus providing an alternative method for early prevention of EAC
- This study was conducted in an esophago-gastro-duodenal anastomosis (EGDA) rat model. The operative method of the model is definite and clear, which can offer a reference to the other researchers.
- As the process of esophageal inflammatory carcinoma transformation is very complex, this study provides listeners with changes of different pathological factors such as cell proliferation, inflammatory cytokines, and angiogenesis in the process of esophageal inflammatory carcinoma transformation, and provides feasible research directions for other researchers

### **Biography**

Dr. Li studied traditional Chinese medicine in Shanghai University of TCM and received PhD degree in 2009. In 2012, she conducted postdoctoral research in the Department of Pathology of Medicine College, Case Western Reserve University in the United States. She is appointed as associate researcher and the laboratory director at Guanghua Hospital affiliated to Shanghai University of TCM in 2021. Dr. Li focuses on clinical and basic research on digestive system diseases. She has published more than 30 academic papers, been responsible for 8 national or regional scientific research projects, obtained 7 scientific and technological awards, and been authorized invention patent.



**Doan Thi Ngoc Anh\*, Yi-Wen Lin**

Graduate Institute of Acupuncture Science, China Medical University, Taichung, Taiwan

## **Mechanism of electro acupuncture to alleviate TRPV1 overexpression in chronic pain in the ascending pain pathway**

TRPV1 (transient receptor potential vanilloid 1) is a nonselective cation channel that has been associated with the initiation of inflammatory pain. Previously, numerous mouse studies demonstrated the impact of TRPV1 on acute and inflammatory pain. This experiment, however, illustrates that TRPV1 had an impact on chronic neuropathic pain, which is defined to persist for more than three months in human. Furthermore, the ICD-11 classifies chronic pain as a primary condition that requires different treatment than pain caused by other conditions. As a result, this experiment was motivated by a desire to study about the underlying mechanism of pain signaling to the central nervous system. Pain signals are transmitted through many important brain regions, particularly the thalamus, hippocampus, and somatosensory cortex, in second-order and third-order neurons. Acupuncture treatment is a thousand-year-old traditional medicine technique which effects remain being investigated. Electroacupuncture is an acupuncture technique that incorporates electrical stimulation, with low-frequency EA (2Hz) having a stronger analgesic effect than high-frequency EA (100 Hz). Evident showed that EA at 2 Hz at acupoint ST36 decreased neuropathic pain after 1 hour by depressing the C-long-term fiber (LTD). According to ancient documents, acupuncture manipulation causes numbness, pain, fullness, and heaviness in the patient at the acupoint, while the acupuncturist feels tense, tight, and full like a fish biting a hook or the qi sensation comes like a bird flying, this is referred to as de-qi. The intermittent cold stress pain model in mice was used in our experiment to mimic chronic pain. After 2 weeks, the diseased mice in the CSP group (cold stress pain) had a dramatic reduction in the mechanical and thermal pain thresholds, whereas the 2Hz EA applied mice also had an alteration after electroacupuncture, the pain threshold was reduced significantly. After one week of EA treatment, the response threshold of EA group was gradually increased to normal level. The mice in the Sham EA group, on the other hand, did not alter this. For comparison, we included the TRPV1 knock-out group, which then had no reduction in pain threshold when persistent pain was also induced. To better understand the molecular mechanism, we performed a western blot experiment to look for upstream molecules like TRPV1 and downstream molecules like MAPK. The results showed that the percentage of TRPV1 was overexpressed in the CSP group, but there was a significant decrease in the 2Hz EA group. However, this reduction effect was not present in the Sham EA group, and the percentage of TRPV1 expression was significant decreased in the TRPV1 knock out group. In this experiment, we discovered a relation between brain structures and the presence of proteins that occur after chronic pain induction. Low-frequency electroacupuncture has been observed to be successful at inhibiting these pain-related proteins, establishing acupuncture as a potential treatment for chronic pain and revealing the mechanism of chronic pain relief via TRPV1.

**Keywords:** Chronic pain, TRPV1, Central nervous system, Electroacupuncture.

**Audience Take Away Notes**

- The most recent data on chronic pain in clinical and laboratory settings
- Presenting the mechanism of chronic pain clearly which can be used in both thinking practice and teaching
- A new study on the therapeutic effect of acupuncture and the role of TRPV1 in chronic pain
- On the basis of the current research paper, it is possible to conduct related studies in various directions

**Biography**

Dr. Doan Thi Ngoc Anh studied traditional medicine at the University of Medicine and Pharmacy in Ho Chi Minh City, Vietnam, and graduated as a traditional medicine doctor in 2017. She then got the right job at Thu Duc city hospital and worked at there for three years. In 2021, she began to study at China Medical University and graduated with a master of acupuncture in 2022 in the International Master Program of Acupuncture department. At the same time, she joined the research group of Prof. Yi-Wen Lin at the Graduate Institute of Acupuncture Science, at the same university. From February 2023 to now, she has been a doctoral student at the Graduate Institute of Acupuncture Science.



## Amrita Sharma<sup>1\*</sup>, Chander Shekhar Sharma<sup>2</sup>

<sup>1</sup>Assistant Professor, Post Graduate Department of Dravyaguna, DAC, GRDU, Punjab (India)

<sup>2</sup>Professor and Head, Department of Kayachikitsa, DAC, GRDU, Punjab (India)

### Exploring the bountiful beauty of ayurveda in the ancient past - A review

The ancient Indian medical system known as Ayurveda is a collection of organized knowledge that explains the fundamentals of life. The botanical kingdom of India was well-known to the ancient Indian sages. There are numerous examples of the grace of nature in the past Indian literature and Vedic history. In addition to being the oldest kinds of medicine, their pursuit has spawned empires, trading routes, and areas for exploration. In addition, plant modification, which is the foundation of the contemporary pharmaceutical business, has occasionally supplanted centuries of traditional indigenous medical knowledge. The Vedic history and Indian literature are replete with numerous plants listed in the Materia Medica with a variety of names and applications. Various plants found on the Indian subcontinent exhibit the socio-cultural roots of their traditionally used forms, expressing not only their medicinal properties but also their ecological significance to human survival. In addition, these plants were revered for their healing, beautiful, and natural attributes. In order to preserve these plants, our ancestors associated different Gods and Goddesses with a variety of plants, classifying them as sacred plants. These historical myths demonstrate that human interaction with plants contributed to the preservation of plant species and their beneficial traits. Although we still use these plants today in our customs, we eventually forgot the scientific rationale for their use. The current piece highlights plants from a mythical and botanical perspective.

#### Biography

Dr Amrita Sharma did her Bachelors in Ayurvedic medicine and surgery (BAMS) and MD (Ayurvedic Materia medica). Her interest in studies took her back to explore more on alternative medicine, acupuncture, Alternative therapies, naturopathy, and courses on food and nutrition. Later she opted for MBA, human resources. She is registered with Yoga Alliance for e-500 hrs and YACEP. She has trained thousands of students from USA, Canada, Brazil, Australia, Europe, Russia, Chile, Israel, Argentina, Bolivia, Uganda, South Africa, UAE, Dubai, Thailand, Philippines, Poland and India She has more than fifteen years of clinical and teaching experience in field of yoga, Ayurveda and holistic healing therapies. Writing as one of her hobbies she has written articles in different holistic health magazines, she has contributed chapters in various books, research articles in national and international journals. Presented paper and moderated numerous national and international conferences. Through her radio talks and podcasts she has shared her experiences, wellbeing tips and lifestyle leads in day to day life through yoga, Ayurveda, and holistic health care. Presently she is working as Assistant professor in Ayurvedic College, India. She is a diligent social worker and assiduous environmentalist associated with NGO's offering wellbeing programs for community service.



### U. Yamuna<sup>1\*</sup>, PhD Scholar, Apar Avinash Saoji<sup>2</sup>, BNYS, PhD

<sup>1</sup>Research Scholar, Division of Yoga and Life Sciences, Swami Vivekananda Yoga Anusandhana Samsthana, # 19, Eknath Bhavan, Gavipuram Circle, KG Nagar, Bengaluru 560019, Karnataka, India

<sup>2</sup>Associate Professor, Division of Yoga and Life Sciences, Swami Vivekananda Yoga Anusandhana Samsthana, # 19, Eknath Bhavan, Gavipuram Circle, KG Nagar, Bengaluru 560019, Karnataka, India

## Effect of yoga on homocysteine level, symptomatology in industrial workers with chronic venous insufficiency: A randomized controlled trial

**Background and Objectives:** Chronic Venous insufficiency (CVI) is one of the peripheral venous diseases and is often associated with prolonged standing at work. CVI could lead to multiple symptoms. Yoga, as a well-known traditional approach, has helped in mitigating several occupational hazards. The current study was designed to assess the effect of Yoga in reducing the homocysteine level and symptoms of CVI, which was determined by Venous clinical severity scores (VCSS) in industrial workers.

**Materials and Methods:** One hundred industry workers with CVI were recruited and randomly allotted to Yoga and wait-list control groups following an equal allocation ratio. The yoga group received a specially designed Yoga module six days a week for three months. The Control group continued with the routine activities. Hcy and VCSS were assessed at baseline and the end of twelve weeks of intervention. A one-way analysis of covariates (ANCOVA) was used to determine the significant differences between groups in the post-values, controlling for the pre-values as a covariate.

**Results:** A significant change was found between groups in homocysteine (Hcy) levels and VCSS scores with moderate to good effect size after controlling the baseline values and other factors ( $p < 0.001$ ).

**Conclusion:** Yoga interventions would be effective in reducing the homocysteine level and symptoms of CVI and thus help in improving the quality of life in industrial workers, even in a short duration of practice. With the results of this study, Yoga may be added as a lifestyle strategy for workers with prolonged standing to manage CVI.

**Keywords:** Yoga, Occupational Health, RCT, Vascular Health.

### Audience Take Away Notes

- According to the world health organization (WHO), an "occupational hazard" is a condition that causes a risk to workers' health at workplaces. Occupational health is a domain of public health to improve and maintain the most significant degree of physical, psychological, and social prosperity of employees in all occupations. This domain aims to promote employees' health and quality of life and improve their work efficiency. Simple and cost-effective techniques are necessary to tackle occupational hazards
- Yoga is a well-established alternative and complementary therapy acknowledged by WHO. A holistic yoga approach will bring changes in physical, psychological, and social well-being among workers in different occupational settings when it is regularly practiced

### Biography

I, Mrs. Yamuna U, PhD scholar at Swami Vivekananda Yoga Anusandhana Samsthana, (S-VYASA, Deemed to be University) since 2019. I have a great passion for research on the subject of Yoga. A study protocol of my research is published in the journal "Advances in Integrative medicine."



## **Anand S. Bapat B.Sc (O.T.) (Mumbai), Bach. Acup (London)**

Occupational Therapist, Acupuncturist/ Naturopath

### **Shivambu: The miracle cure**

**S**hivambu is the traditional term for using urine as a modality of treatment. We have found Shivambu to be highly effective in a range of conditions – from lifestyle diseases to infections, from chronic diseases to cancers, from kidney stones to skin conditions. Shivambu is an ancient remedy which was used as an elixir for personal growth and higher development. Today it needs to be used for healing the sick, reducing suffering and curing illnesses. Urine becomes Shivambu only after contact with air. This when drunk has got tremendous benefits for the healthy normal man, the sufferer of minor illnesses and the chronic so called incurable conditions of life – like arthritis, cancer, IBS, etc.. Like everything else – it can work optimally only if intervention is commenced early on, in the disease process. Shivambu today has become more objective and welcomed by people as they cannot afford to suffer and the diseases only have a management option. So people looking for cures, turn to Shivambu as the only hope. Diligent followers of the protocol prescribed have gained immensely and become changed people. From the person on his death bed to living life to the full, from people suffering in agony to complete relief within days, from chronic sufferers to better quality of life. Thus are the miraculous stories of Shivambu. My aim is to publicise this fact of reality, which is generally hidden away and not spoken about. The true benefits are:

1. It is completely free and hence affordable to everyone
2. It has virtually no negative effects as long as prescribed protocol is adhered to
3. Urine is known to be completely sterile – so should be no issues for ingestion
4. Changes in the body can start as quickly as within days and generally within 4-6 week period major changes are visible
5. It acts across all spectrums of disease. It appears to be enhancing the body's immunity, thus getting rid of disease
6. It requires proper guidance from Shivambu experts who are well versed in the effects, side effects, dosage and proper prescription for different conditions and people
7. There is immense potential for research in improving understanding about this pathy of Shivambu

#### **Biography**

Anand is an O.T., & Trad. Acupuncturist who has gone on to study natural therapies across the spectrum of yog, pranayam, Suryanamaskar, pH, mantras, Shivambu, etc. and successfully applied it in his practice for the benefit of his patients. He is a world leader in Shivambu & scientific Suryanamaskar. Under the banner of 'Health Siren' he has been instrumental in publishing over 200 videos on 'you tube' across various health giving instruments, across his spectrum of expertise. Today he consults in Pune providing relief to patients wishing genuine natural therapy advice to ease their suffering.



### Dr. Darshana Wickramasinghe<sup>1\*</sup>, Dr. Shyarma P. Hewage<sup>2</sup>

<sup>1</sup>Consultant Microbiologist, District General Hospital, Hambantota, Sri Lanka

<sup>2</sup>Medical Superintendent, Ayurveda Hospital, Beliatta, Sri Lanka

## Accepted the challenge of Covid-19 control: Ayurvedic response to Covid-19 pandemic in Sri Lanka

The World Health Organization declared the COVID-19 outbreak as a global pandemic in March 2020 and the first case of the virus in Sri Lanka was confirmed on 27 January 2020. The COVID-19 pandemic caused by the severe acute respiratory disease Coronavirus 2 (SARSCoV-2) has led to millions of confirmed cases and deaths worldwide and a financial crisis of unprecedented levels across the globe. In Sri Lanka, Covid-19 patients are being treated in allopathic hospitals as usual at the initial stage of the pandemic. However, with the spread of the disease and as there were no specific treatment options Ayurvedic medicine options also started to challenge disease management individually as well as combined with allopathic medicine. The pathological process of this disease can be correlated with fever caused by infections (Abhishangaja Jvara, Aupasargika Roga). The nature of Covid -19 is explained in Ayurveda texts as Janapadodhwansa (epidemic or pandemic). According to Ayurveda, environmental pollution and the Sinful behavior of people (Adharma) are the responsible causative factors of the disease. Though there was a trend in China, India, etc. to implement traditional preventive measures the extent to which traditional methods are adopted in Sri Lanka to prevent or cure COVID-19 infections is not well documented. A Covid management centre in southern Sri Lanka has been able to combat this deadly condition effectively with a combination of Allopathic and Ayurvedic medicine. Therefore, a treatment protocol of combined Allopathic and Ayurveda medicine can be proposed since there is no specific treatment to cure COVID-19 yet. However, further research should be done to conclude these facts scientifically.

**Conclusion:** Integration and mainstreaming of Allopathic and Ayurveda medicine with the intention of better utilization of these services for the betterment of health care, and controlling diseases like Covid 19 will help to reduce morbidity and mortality, especially in resource-poor settings.

### Biography

Dr.Darshana Wickramasinghe, consultant Clinical Microbiologist from Sri Lanka after obtaining MBBS, Dip in Med Micro and MD (Clinical Microbiology). Now working at Medway Foundation Trust, Gillingham, Kent, and UK as a consultant Microbiologist. He was offered Fleming Fund Antimicrobial Resistant surveillance - Human health fellowship in 2019. Also he is an Assessor in ISO/IEC 17043:2010. Among the published research work of his excellent carrier there is some research work on Ayurvedic medicine too.

**Dr. Rishu Sharma**

Department of Panchkarma, Govt. Ayurvedic Medical College, Jammu, J&K, India

**Role of hirudotherapy in diabetic foot ulcer**

**F**oot ulcers are caused by an imbalance between excessive pressure on the sole of the foot and repetitive stress from walking. Normally harmful pressure or motion against the skin will set off a protective pain alarm but unfortunately in people with diabetic neuropathy, this pressure goes undetected and can cause serious injury. In diabetic patients, foot ulcer is estimated to affect 15% of people at some time in their lives. The increasing prevalence of diabetes and its associated complications represent a global health care problem, estimated. Diabetic foot ulcer (DFU) can become infected and lead to osteomyelitis cellulitis and even amputation resulting in morbidity, mortality and very high cost of the health care system. In DFU the debridement is the prime modality of choice. In the DFU debridement, the removal of dead, damaged, infected or callused tissue is being done to ensure the proper blood flow of the affected area and to heal the ulcer. Leaching / hydrotherapy is the natural non- surgical way of wound debridement by virtue of bioactive substances present in the leech saliva including natural steroids.

**Audience Take Away Notes**

- About Diabetic foot ulcer
- Learn about Hirudotherapy to overcome this disease

**Biography**

Dr. Sharma, Post graduated in Ayurveda, has specialization in Panchkarma (Detoxification therapies) from India's most prestigious Institute, Government Rishikul Ayurvedic Medical College. She is a very young and inspiring personality of Ayurveda in India. She has presented more than 20 papers in various national and international Seminars. Besides this, she has written more than 30 articles and case reports in peer reviewed journals. Besides this, she has also written 03 books in the field of Ayurveda. Presently working as Assistant Professor, in the department of Panchkarma at GAMC, Jammu, J&K, and India.





**Bogyo Erzsebet**

Be Fit For Ever Ltd., London, UK

## **How one's own nature has a huge effect on the healing process and how being in nature speeds up the healing process**

In this presentation I will talk about the benefits of practicing qigong, how it has a highly positive effect not only on the physical body, but the emotions and mental state of mind as well. I will highlight how important one's own nature is to the healing process and how one can easily “trick” it into supporting one in their endeavour of getting completely healthy and fit. I will also talk about the body's healing nature, how it happens, what directs the healing process within the body, how the governing channel has a huge say in one's healing process. I will highlight how the three main dantiens and the three brains in the body are related, how the secondary brain/lower dantien function in the healing process is and how they are related to the governing channel and stress one encounters on a daily basis. I will also play a short video where I will show how sedating the governing channel in 30 seconds immediately brings positive effects on the body. I will bring examples from my two days' workshops to showcase what improvement in health can be achieved even in a short span of time even in cases where several years of traditional treatment didn't bring any improvements (Eg. Chrome disease).

### **Audience Take Away Notes**

- They learn how to easily “insert” qigong exercises in their everyday routine
- They learn a 1 minute powerful yet simple exercise routine that relieves stress and “makes” the inner organs function well
- They will be more relaxed, yet more focused, being able to work with a higher span of attention and also to use those exercises to refresh themselves and their bodies in 5 minutes to be able to continue their work fresh again and will be able to pay their full attention to their “job at hand”
- Other faculties can definitely use it to expand their own research. It does provide a practical solution to any kind of Jobs' efficiency. \*Besides the fact that qigong practice helps with one's overall well-being and the improvement of health
- It also helps in improving the attention lifespan and giving energy to be able to complete more tasks in a shorter time flawlessly

### **Biography**

Bogyo Erzsebet studied qigong and tai chi since 2002 from several masters in China, Hungary and England. She also studied martial arts for three years between 2004 - 2007 learning this aspect of qigong as well. She started teaching qigong for free in 2007, then in 2009 started doing her own workshops. In Hungary she studied Alternative medicine, then went on to study Alternative Movement and Massage Therapies, getting her certificate in 2018, which is recognised in Hungary to help people with qigong, joga, 5 Tibetan movements and also with massage techniques. In 2018 she studied from Master Mantak Chia in Thailand and in the same year she studied qigong healing in China for a month. In 2019 she spent altogether 4 month in China to deepen her overall qigong knowledge in China. In January 2020 she spent a month in India in an ashram near Arunachala Mountains deepening her qigong and meditation techniques that improve one's health. Since then she studied online with several Chinese qigong masters and Mantak Chia as well.



### **Elizabeta Popova Ramova**

College for medical cosmetology and physiotherapy, MIT University Skopje,  
Republic of North Macedonia

## **Implementation of alternative medicine methods in conventional medicine, protocols and medicine based on sciences**

**A**lternative healing methods are traditionally used around the world. In modern societies, up to 60% of patients use these methods, despite the existence of high standards for treatment in conventional medicine. The World Health Organization believes that this interest in modern countries is due to several facts, namely: increased resistance to antibiotics, treatment of diseases that can improve the quality of life in progressively chronic diseases, as well as in the treatment of cancer patients, as an additional therapy when the outcome is unfavorable. Conventional medicine has nothing against it if these treatments are carried out as part of the medical team of certified therapists, with a previous overall assessment of the condition and indication for application. We have been studying alternative methods since 2007, and we have done several research studies, and we came to the following conclusion: the diagnosis should be made by experts from conventional medicine, the method should be performed by a certified health worker, the evaluation of the effect of the applied treatment should be evaluated with the same methods used in conventional medicine, quantitatively measuring its effect. Only with precisely pre-defined protocols, the effect of the method can be proven and it can later on evidence-based medicine enter a regular procedure in health care. In our country, there is a law on the right to apply alternative methods, but they are not accepted by the health insurance fund and patients pay for the services themselves. In modern countries it is the patient's right to choose, and it is performed by certified therapists.

**Keywords:** Alternative methods, Implementation, Conventional medicine.

### **Biography**

E.P.Ramova is graduated doctor of ordinary practice in 1987, and specialization in PM&Reha in 1998, at the Medical faculty (MF) in Skopje. She received her master's degree at the MF Skopje in 2002 and doctorate at the FM in Nis, R.Serbia 2010. She has been engaged in educational activity since 2005. She worked as a professor at Uni. St.Clement Ohridski (2007-2018). She works like professor at MIT University, Skopje, now. She has published 210 studies, and 18 professional literature books. She was on a visiting study in Germany (1997, 2000) and in Italy (2016). Member of ISPRM, Cochran Rehabilitation and in Editorial Board of 14 sciences journals abroad.



## Ryszard Kozłowski<sup>1\*</sup>, Agnieszka Kręgielczak<sup>2</sup>, Maria Mackiewicz-Talarczyk<sup>3</sup>

<sup>1</sup>Journal of Natural Fibers (Taylor & Francis, Philadelphia, USA), Poznan, Poland

<sup>2</sup>Department of Prosthodontics and Gerodontology, Poznan University of Medical Sciences, Poznan

<sup>3</sup>Institute of Natural Fibres and Medicinal Plants - National Research Centre (IWNiRZ-PIB), Poznan, Poland

## Flax and hemp and their role in medicine and phytotherapy – The latest achievements

Flax seeds are rich in valuable fatty acids, amino acids, cyclolinopeptides, lecithin, phytoestrogens, lignin, waxes, pectin, and health-promoting mucilages, as well as  $\Omega$ -3 and  $\Omega$ -6 polyunsaturated fatty acids (PUFAs), which are effective in preventing cardiovascular disease. Flaxseed mucilages are recommended for the treatment of diseases of the gastrointestinal tract, skin and throat due to their laxative, protective, and softening effects on intestinal contents. Flaxseed lignans, a class of phytoestrogens, have beneficial effects on the treatment of hormone-dependent diseases, and have been studied for their anti-cancer, antioxidant and antimicrobial properties. Hemp, an extraordinarily useful crop, yielding 10 tons of dry matter per hectare and more, absorbs about 2.5- 5.0 tons of CO<sub>2</sub> from the air, and from the soil it absorbs about 70 g of Pb, 160 Cu, up to 7 g of Cd per hectare, contributing significantly to the protection of our degraded environment. Interest in bast flax and hemp fibres is also growing significantly, due to the production of a wide range of industrial products such as nonwoven fabrics, geotextiles, paper, and biodegradable composite packaging products. Flax and hemp seed cake, a byproduct of cold-pressing seed oil, is also used as a sustainable source of food, nutraceuticals and pharmaceuticals. Between 2000 and 2005, the Institute of Natural Fibres in Poznań launched the production of a flaxseed pharmaceutical preparation called BIOFLAX®. This product was introduced to the Polish and European pharmaceutical market, and contained, among other things, 70% more mucilaginous substances than other preparations, about 10% unsaturated fatty acids, and was recommended for the treatment of duodenal, stomach and intestinal ulcers, and metabolism. They are also used in the production of fodder for fowl and livestock, enriching to higher quality milk, eggs and meat with valuable unsaturated fatty acids. They are also an excellent raw material for obtaining phenolic compounds, especially extracts rich in lignans. Flaxseed dietary fibre contains soluble fibre, which easily ferments in the colon, releasing gases and by-products, and insoluble fibre. An excellent composition rich in essential amino acids, unsaturated fatty acids and the aforementioned fibre, it also has a positive effect on the growth and shine of hair and nails. These aforementioned valuable ingredients are included in many cosmetics, nutraceuticals and functional foods. In health-promoting applications, terpenoids and cannabinoids are used in medicine, cosmetics, food products, aromatherapy, plant protection, and can be extracted with steam, using CO<sub>2</sub> - so-called supercritical extraction - extraction with supercritical CO<sub>2</sub> and also butane. Recently, there are also methods of non-damaging the structure of volatiles using liquid nitrogen for this purpose. More than 104 diverse groups of compounds like CBG, CBC, CBD,  $\Delta^9$ -THC,  $\Delta^8$ -THC, CBL, CBE, CBN, CBND, CBDT, and a group of terpene compounds have been recognized in *Cannabis Sativa* L., for a total of about 550 compounds. In the past two years, the US Food and Drug Administration released Epidiolex, a strawberry-flavored syrup containing cannabidiol, an active analgesic and cardiac agent, as the main CBD ingredient (a product of GW Pharmaceuticals), for the US and European markets.

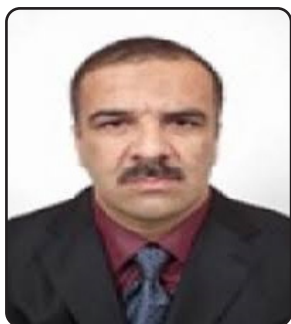
**Keywords:** Flax seeds, Unsaturated fatty acids, Lignans, Mucilage, Cyclolinopeptides, Hemp nuts, Terpenoids, Flavonoids, and Cannabinoids.

### Audience Take Away Notes

- We will present the detailed area of application of flax, and cannabis plants and derived products
- Inspiring the audience about the new possibilities of research and making progress in the area of medicinal possibilities of fibrous plants
- There are so many possibilities to expand their research or teaching; usually flax and hemp (cannabis) were treated as excellent sustainable, fibrous raw materials, but exploring area of by-products connected with these plants give the opportunity to obtain medicinal products and dietary supplements
- Some area of practical application of the seeds of flax and nuts of cannabis are implemented by the Institute of Natural Fibers, Poznan, Poland ([www.iwnirz.pl](http://www.iwnirz.pl)), and will be presented in the slides
- List all other benefits
- I am convinced that my lecture will give several new idea and will expand the research and practical horizons of the audience (multidirectional applications of flax and hemp)

### Biography

Prof. Dr. R. Kozłowski graduated from A. Mickiewicz University, Poznan, Poland (chemical faculty, applied chemistry). Professor of Chemical Technology. Director General of Institute of Natural Fibres (1987 – 2008). 2009 – 2015 scientific advisor at the Institute for Engineering of Polymer Materials and Dyes in Torun. From 2004: editor – in- chief Journal of Natural Fibers (Taylor & Francis, USA). Lecturer in many research centres in the world, including Institute of Herbal and Natural Therapy, Warsaw, Poland. Professor Honoris Causa of Pontifical Catholic University Ibarra, Ecuador. Co-ordinator of FAO ESCORENA European Cooperative Research Network on Flax, Hemp and other Bast Plants Editor and author of chapters in more than 20 books, e.g. Handbook of Natural Fibres. Member of American Chemical Society 26 patents.



**Bachir Raho G**

Department of Biology, University of Mascara, Mascara, Algeria

## **Essential oils as antimicrobial agents against some important plant pathogenic bacteria and fungi**

Plant diseases impact negatively on human well-being through agricultural and economic loss and also have consequences for biodiversity conservation. They are caused by some pathogens like bacteria, fungi, nematodes and viruses. Bacteria and fungi are the most common cause of many diseases of plants. The use of antibiotics for the control of plant diseases is limited due to the possibility to the production of some pathogen populations resistant to fungicides and pathogen populations resistant to antimicrobial agents and the ability to the transfer of responsible resistant genes to human and animal pathogenic microbes. In addition, these chemical compounds can cause undesirable effects on environment due to their slow biodegradation and several serious side effects on mammalian health associated to toxic residues in agricultural products. There is, therefore, a need to develop alternative control agents to pathogenic bacterial and fungal diseases in plants. Essential oils are a concentrated hydrophobic liquid containing volatile aroma compounds derived from the different parts of the plants. They were previously known to possess many biological activities such as antifungal and antibacterial properties. In addition, the potential effectiveness of essential oils against many plant pathogenic bacteria and fungi has been verified by many authors. This review discusses the susceptibility of most important ten bacterial and fungal plant pathogens towards different essential oils and their constituents, which have been reported in scientific references.

### **Biography**

Bachir Raho Ghalem has completed his PhD in 2011 from Sidi bel Abbes University. He is the Co-Director of Process Engineering and Chemistry of Solutions Laboratory, University of Mascara, Mascara, Algeria. He has published more than 50 papers in reputed journals and has been serving as an editorial board member of repute.



### **Dr. Devendra Prasad Mishra**

Ayurveda Oase, Center of Excellence, Yoga Vidya, Horn-Bad Meinberg, Germany

## **A study on the role of agni karma (cauterization) in the management of chronic wounds**

**A**gni Karma is one of the important para-surgical procedures described in Ayurvedic Samhita. Sushruta, Charaka and Vagbhata describe the role of Agni karma in debilitating disorders. Vagbhata even termed it as the best amongst all kind of therapeutic procedures in Ayurvedic armory because of non-recurrence of diseases cured with Agni Karma. Despite many new tools and techniques invented for the management of chronic wounds, it is still a major clinical challenge to the medical fraternity. Sushruta advises sixty procedures for the management of wound healing known as Shasti-Upkrama, Agni Karma is one of them. Charaka specially advocated the role of Agni karma in the management of chronic wounds. Keeping this in mind a careful review of Ayurvedic literature was done along with modern electrical cauterization. It was found that Agni karma has many advantages over actual cautery and is one of the safest methods to be used for the management of chronic wounds.

**Keywords:** Agni Karma, Sushruta Samhita, Cauterization, Wound.

### **Biography**

Dr. Devendra Prasad Mishra, M.S. (Ayurveda) Shalya, Banaras Hindu University, B.A.M.S., P.D.C.R., Dip.Yoga. Teaches and consults at various national and international institutions. He is trained in both traditional Ayurveda and western medicine. He is a master of Ayurveda Marma therapy and pulse diagnosis. Dr. Mishra is the founder-director of the Kewalya Nature Care Society, which is working for the propagation and development of Ayurveda, Yoga and other natural sciences.



**Shahryar Eghtesadi<sup>1\*</sup> PhD, Sanaz Tavasoli<sup>2</sup> M.D. PhD, Amir-Hassan Zarnani<sup>2</sup> D.M.T. PhD, Mohamadreza Vafa<sup>4</sup> PhD, Maziar Moradi-Lakeh M.D<sup>4</sup>, Alireza Sadeghipour<sup>4</sup> M.D, Maryam Eghtesadi<sup>5</sup> M.D**

<sup>1</sup>Azad University, Science and Research Branch, School of Medical Sciences and Technology, Tehran, Iran

<sup>2</sup>Shahid Beheshti University of Medical Sciences, Urology and Nephrology Research Center, Tehran, Iran

<sup>3</sup>Avicenna Research Institute, Tehran, Iran

<sup>4</sup>Iran University of Medical Sciences, Tehran, Iran

<sup>5</sup>Azad University of Medical Sciences, Research Department, Tehran, Iran

## **Hypoinflammatory effect of pomegranate extract treatment on survival rate, bacterial load and organ failure in septicemic rats**

Given the fact that optimal immune and inflammatory responses are needed to contain the infection, the aim of this study was to evaluate the effect of high dose pomegranate extract administration on oxidative and inflammatory responses after infection induction in septic rats. Sepsis was induced by Cecal Ligation and Perforation model (CLP). Adult male Wistar rats were divided into three groups of each, eight animals: Sham; CLP and POMx (which consumed POMx 250 mg of pomegranate fruit extract/kg/day) for four weeks prior to CLP Surgery. Results of the study showed that peritoneal neutrophil myeloperoxidase activity was significantly lower in POMx compared with Sham and CLP groups ( $p < 0.01$  and  $p < 0.05$ , respectively). Despite higher antioxidant enzymes levels in POMx group after sepsis induction, lower serum total antioxidant status (TAS) ( $p < 0.01$  compared with both CLP and Sham groups) and higher liver thiobarbituric acid reactive species (TBARS) levels were obtained in this group ( $p < 0.01$  and  $p < 0.05$ , compared with Sham and CLP groups, respectively). In Conclusion our study demonstrates that pomegranate extract could increase mortality rate via increasing peritoneal cavity bacterial load, in CLP sepsis model. POMx consumption prior to sepsis induction, suppressed the vital function of neutrophils in early hours of sepsis induction, thus resulted in higher oxidative stress observed in POMx group after CLP induction. The results may suggest that despite its anti-inflammatory action in chronic conditions, pomegranate may not work properly in rapid progressing conditions like sepsis.

**Keywords:** Pomegranate Extract, Survival Rate, Bacterial Load, Organ Failure.

### **Biography**

Dr. Shahryar Eghtesadi received Bachelor degree in Nutrition Science and Food Chemistry 1975, from Shahid Beheshti University of Medical Sciences, Tehran; MSPH degree in Nutrition, 1977, from Tehran University of Medical Sciences, Tehran and PhD from University of California at Davis(UCD), USA, in Nutrition (1985). He served as Visiting Scientist in USDA Human Nutrition Research Center on Aging (HNRCA), Boston, USA (1994-1995); Full professor of Tabriz, Iran and Tehran Universities of Medical Sciences and currently serves as Professor of Azad University, Science & Research Branch. He was the chairs of Departments of Nutrition and Biochemistry, Biochemistry & Clinical Nutrition, Public Health Nutrition and Nutrition in aforementioned Universities. Also Served as Associate Dean and Dean of School of Public Health & Nutrition and School of Public Health of Tabriz and Iran Universities of Medical Sciences respectively. He was selected as distinguished professor and Scientist. For long and extended period of time, experienced teaching various courses in nutrition in undergraduate, graduate and postgraduate and international Bureau programs and directed many projects and dissertation of MS and PhD programs and Published numerous peer reviewed articles in journals and also edited several books and finally served as Principal Investigator of World Bank Project for Capacity Building in Nutrition in Iran.



**Dr. Melinda H. Connor, D.D, Phd. AMP, FAM, EHP-C**

Director of Research, Akamai University, Hilo, Hawaii, USA

## **Triggering the repair of T6 spinal paraplegia to L5/S1 with resonance modulation energy healing**

All healing may offer us a unique opportunity to discover the range and capacity of human potential manifested in daily life. Spinal Paraplegia is one of the many difficult injury areas which our scientific community is seeking to understand and resolve. This case of incomplete T6 Spinal Paraplegia had a projected maximum life-time recovery of T9 and in under a year has resolved to a level of L5, S1. Resonance Modulation Distance Healing was used to support and enhance this healing process. The case under discussion offers us insight into the universal aspects of the human healing process.

### **Audience Take Away Notes**

- Specific techniques will be discussed which were used in this case
- Support greater understanding of the potential of the human body to heal
- It is hoped that a search for the chemical the body uses to control spinal cord cells will be found seen in this healing process which holds a potential for people all over the world to benefit
- Discussion about the sounds produced by the human body is relevant information to support body health

### **Biography**

Dr. Melinda H. Connor, D.D., PH.D., AMP, FAM, EHP-C holds degrees from Harvard, Wellesley, University of San Francisco, American Military University, California Coast University and University of Arizona. She was a NIH T-32 post doctoral research fellow at the University of Arizona in the Program in Integrative Medicine. Dr. Connor is the current Director of Research, Akamai University. Board certified, she is a fellow of the American Alternative Medicine Association, and the Royal Society of Medicine (UK). Dr. Connor has written ten books and numerous papers.



**Antonia Demas PhD**

Food Studies Institute President, a Non-profit corporation, Trumansburg, New York, USA

**Making food literacy a global priority**

This presentation is based on years of evidence-based research with diverse a population that demonstrates how to have a sustainable positive impact on behaviours concerning food, nutrition, and the environment through food literacy education. The award-winning curriculum, Food is Elementary (FIE), is based on experiential, multidisciplinary sensory-based strategies for people of all ages and backgrounds that is fun and engages the senses. A goal of this work is to provide the public, beginning at an early age and continuing through adulthood, with accurate information so they make sensible decisions about our global health and the health of the planet. FIE is conceptually based and each unit is catered to the developmental abilities and interest of the audience. There is a need to engage the public with truthful information about how nutrition affects our lives and how what we eat affects climate change. To quote anthropologist Claude Levi-Strauss, “Food is Good to Think”. We need to address this from a serious scientific perspective and provide young people with the intellectual tools they will need to develop strategies to preserve their wellness and that of planet earth for our collective future. The solution is holistic integrated education, or we will continue to be fed false information from the commercial industries involved in our most pressing global issues of public health and climate. The non-profit Food Studies Institute will license the FIE curriculum, train, and work with all interested parties depending on their interests. We offer a variety of options ranging from strategies to begin the program in schools, hospitals, and community centres based on their needs, to designing appropriate evaluation measures and documenting the results.

**Biography**

Antonia Demas is the founder and president of the non-profit Food Studies Institute. She has been engaged in food literacy education since the early 1970's and is the author of the award-winning curriculum Food is Elementary which teaches people of all backgrounds and ages about food, nutrition, cooking, gardening and ecology through hands-on experiential, sensory education. She has a master's and Ph.D. from Cornell University and conducts research to demonstrate that early and ongoing education is essential to promote food literacy as a solution to global health and environmental issues including diet -related diseases and climate change. Dr. Demas has been a Visiting Scholar at Tufts University, Johns Hopkins School of Public Health, and the Medical School at the University of Illinois, Rockford, and the University of Kentucky School of Public Health, Louisville.



**Julieta Andico Songco, MS, MEd, RDN, FAND**

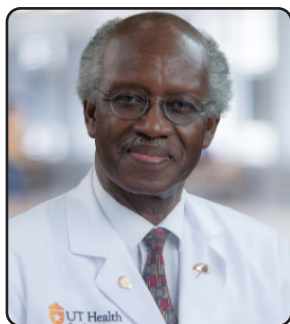
JAS Consulting Services, Livingston, New Jersey, USA

## **Foods and nutrition help in navigating the future of healthcare and humankind through the healing power of nature**

After what we went through with the pandemic, natural disasters, and other devastating conditions and climactic situational changes in the environment, what is the future of healthcare and humankind? After the cost of healthcare to the inhabitants of the world, what's next? This presentation/scientific session will provide some insights and perspectives to define and simplify the role of foods and nutrition – how foods and nutrition will help in navigating the future of healthcare and humankind through the healing power of nature. Foods exist in nature. Nutrition as a science and an art, acts and starts when food is ingested, digested and metabolized for people's good health and wellbeing. Food is an adjunct, spiritual vein to the healing power of nature. Methodically, this proposed presentation will consist of observations and reviews from this author's experiences as an International Speaker, attendee/participant, and poster presenter from four International Congress of Dietetics. since 1984 to present in Montreal, Canada, Paris, France; Manila, Philippines; Sydney, Australia; Granada, Spain; and Cape Town, South. Africa. This author was also a Speaker for an Ambassador program in Beijing, China on health and wellness. Her topics range from "Nutrition Education to the Public," "Nutrition Assessment for Residents' Quality of Life in Long Term Care Facilities," and "Going to Sustainable Eating: A Venue for Nutrition Education," and "We Can Accelerate Change, Improve Nutrition, and Unlock the Potential to End Hunger". The audience at this presentation will be able to learn techniques; teaching styles, and strategies to apply in the classroom and/or practice for students and clients. Through metaphors, storytelling, demonstrations, and questions and answers, participants will show that they engaged during the presentation. Furthermore, this presentation could provide inspiration and practical solutions that they could use to expand their research or teaching with an improvement in their accuracy design for new information in their own lesson plans. Nature at its best has a healing power. What are the ramifications and characteristics of nature that would make this possible? This depends on how you define nature and what disciplines are we talking about. This presenter's experiences as a Consultant Registered Dietitian Nutritionist; a Nutrition Educator for all ages from conception to old age, Author, International Speaker, a Medical Mission Registered Dietitian Nutritionist, Church Lector, a wife, mother and grandmother will be shared to the audience. Lastly, we need to recognize the old adage/debate of nature versus nurture. Nature refers to all of the genes and hereditary factors that influence who we are and our physical appearance to our personality. In this line of thinking, "you are what you eat". Food and nutrition help as they are like husband and wife – a happy, married couple for good health of humankind. They are inseparable and consequently, a staple in navigating the future of healthcare and humankind through the healing power of nature.

### **Biography**

Julieta Andico Songco has a Master of Science in Nutrition and a Master of Education (major in Community Nutrition), both from Teachers college, Columbia University, New York, USA. She is a Fellow of the Academy of Nutrition and Dietetics, a Cum Laude Consultant Dietitian, and a Distinguished Member Awardee of AND Dietetics in Health Care Communities Dietetic Practice Group. She has presented three papers at the International Congress of Dietetics with one as both paper and poster presentations. She has also been an ICD attendee in Sydney, Australia and Montreal, Canada. She was the first Medical Mission RDN.



### George Kudolo

Department of Health Sciences, Division of Medical Laboratory Sciences, MSC 6246, and University of Texas Health Science Center at San Antonio, TX, USA

## Ginkgo biloba extract and selected members of the insulin resistance syndrome

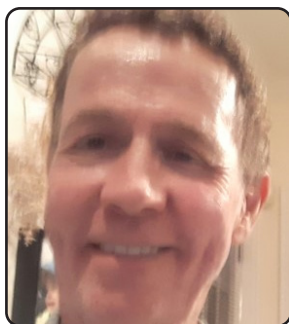
The insulin resistance syndrome represents metabolic defects, which individually or together increase the risk of cardiovascular disease, are usually associated with diabetes mellitus. For example, dyslipidemia (hypertriglyceridemia and decreased HDL-cholesterol and elevated LDL cholesterol) predisposes to coronary artery disease, and hypertension and diabetics have increased risk of kidney diseases. Ginkgo biloba extract is one of the most common herbal dietary supplements in the United States. Because of the Dietary Supplement and Health Education Act of 1994, no health claims can be made by dietary supplement manufacturers, but it is commonly touted to improve mental alertness. Because of the nature of chemical constituents (standardized 50:1 extract contains approximately 24% flavonol glycosides (free radical scavengers) and 6% terpenes (ginkgolides which are antagonists to platelet activating factor)), my laboratory has been interested in its effect on platelet aggregation, especially in diabetics patients who tend to have very hyperactive platelets, predisposing to them to cardiovascular diseases. This presentation summarizes our work over the course of more than 20 years. The oral glucose tolerance (75g of glucose) was used to characterize all study participants as healthy or diabetic (type 2 diabetes mellitus). In a series of studies after participants ingested 120 mg of Ginkgo biloba extract (taken as a single dose) for three months, this significantly (1) decreased platelet aggregation (mediated by collagen) and thromboxane B<sub>2</sub> synthesis, primarily by inhibition of cyclooxygenase -1 enzyme, (2) inhibited accumulation of Thiobarbituric acid reacting (TBAR) free radicals in platelets, and (3) unexpectedly, stimulated pancreatic beta-cell insulin production in healthy and diabetic subjects, especially those with pancreatic exhaustion. Since hyperinsulinemia is a hallmark of resistance, the hyperinsulinemic euglycemic clamp technique was employed to determine if the increased insulin production after ingestion of Ginkgo biloba extract was the result of increased insulin resistance. The results showed that ingestion of Ginkgo biloba extract (120 mg as a single dose) in a randomized double-blind placebo control study does not alter whole body insulin resistance in non-diabetic, pre-diabetic or full-blown type 2 diabetic subjects. Taken together, Ginkgo biloba extract taken at this dose, appears to be very beneficial.

### Audience Take Away Notes

- Describe the essential characteristics of the Insulin Resistance Syndrome
- Describe the two major functions of the Oral Glucose Tolerance Test
- Describe use of the hyperinsulinemic euglycemic clamp technique to measure whole body insulin sensitivity
- Describe the biological activities of the major ingredients in Ginkgo biloba extract on platelet function

### Biography

Dr. George Kudolo is a Distinguished Teaching Professor and the Chairman of the Department of Health Sciences in the School of Health Professions, University of Texas Health Science Center at San Antonio, TX. Dr. Kudolo is a fellow of the Academy of the American Association of for Clinical Chemistry. He received his PhD at the Royal Postgraduate Medical School, University of London, England. His research broad interests include hormone and drug action in the female reproductive tract, in animal models from rodents to non-human primates (Vervet, Sykes monkey and the baboon) and conducted clinical trials in humans studying the effect of Ginkgo biloba extract on the insulin resistance syndrome.



**Kristin P. Bennett<sup>1,2</sup>, John S. Erickson<sup>2</sup>, Zhengwen Xu<sup>1</sup>, and Dana R. Crawford<sup>3\*</sup>**

<sup>1</sup>Department of Mathematical Sciences, Rensselaer Polytechnic Institute, Troy, NY, USA

<sup>2</sup>Rensselaer Institute for Data Exploration and Applications, Rensselaer Polytechnic Institute, Troy, NY, USA

<sup>3</sup>Department of Immunology and Microbial Disease, Albany Medical College, Albany, NY, USA

## Dietary rational gene targeting as a natural therapy

Much of the world's population suffers from chronic disease, in turn leading to pain and suffering and high health care spending. While pharmaceutical drugs have reduced suffering and saved many lives, they are also often expensive and can produce side effects if not outright toxicity. Thus, other treatment approaches that reduce these negative consequences would provide major health care benefit. Healthy diet is one such option. We have developed an innovative therapeutic strategy for treating various health conditions called Dietary Rational Gene Targeting (DRGT). It is a natural-based therapy that uses healthy dietary agents such as blueberries, olive oil and green tea to modulate the expression of key genes involved in a wide range of diseases back toward the normal. This is an extension of nutrigenomic studies and offers numerous advantages over pharmaceutical drug treatment. These include significantly lower cost, healthier treatment, and easy application requiring only simple dietary modification. For example, targeting a key cancer driver gene such as *Her2* for *Her2*-dependent breast cancer with healthy diet to reduce *Her2* expression could help delay and/or reduce development of that cancer as well as lower the chances of recurrence. To achieve this goal, we carried out extensive Bioinformatic mining of public databases (e.g., GEO and PubMed) to identify genes, including key disease-associated genes, whose RNA expressions are modulated by these diets. This data was then used to build an online prototype app dietary guide called Eat4Genes containing numerous accessible and informational features. Our combined Dietary Rational Gene Targeting strategy and Eat4Genes app provide an innovative and publicly-available option for patients, healthcare providers and researchers to treat and prevent numerous health conditions.

### Audience Take Away Notes

- This presentation will provide a new natural therapy perspective for the audience for research, patient treatment and student education
- This represents a new type of translational research that researchers can use for experiments and grants, and we have used this as a part of teaching to more effectively engage students in learning otherwise basic dry facts
- This presents a novel prototype model with the potential to improve the health benefits of healthy diet as part of a natural therapy

### Biography

Dr. Crawford is an Associate Professor at Albany College with a research lab focused on diet and nutrition, immunology and cancer research. He also teaches and has chaired the Capital Region Cancer Research group for the past 16 years. Dr. Crawford holds a PhD from Dartmouth in Biochemistry and Molecular biology, and is a long-time faculty member of the Immunology and Microbial Disease department at Albany Medical College.

**Hal M. Switkay, Ph.D**

Arts and Sciences Department, Goldey-Beacom College, Wilmington, Delaware, United States of America

**What is science?**

The areas of holistic treatment, alternative medicine, and natural therapies are sometimes described as “fringe science” or pseudoscience. Their practitioners and supporters may even be described as “anti-science”. Nothing could be further from the truth. We explore the concept of science from a historical and philosophical perspective, comparing establishment medicine to alternative medicine. We find that alternative medicine has held its own, but that establishment medicine may be guilty of the type of superstitious behavior of which it accuses alternative medicine. Alternative medicine is not only consistent with natural philosophy and a truly scientific worldview; it is often far more humane, less materialistic, less alienating, and more respectful of individual and cultural autonomy.

**Biography**

Dr. Hal M. Switkay earned his B.A. and M.A. in mathematics at the University of Pennsylvania, including a minor in philosophy. He earned a Ph.D. in mathematics at Lehigh University, and later a M.S. in applied statistics at West Chester University. He is a certified facilitator of Tai Chi Easy™, and certified in Thai massage and reiki. He considers himself a syncretic panendeist.

**Andre Ferraz**

iQuilibre Center of Educational Research, CEO, Belo Horizonte, Minas Gerais, Brazil

## Chemistry composition and therapeutic actions of 7 Brazilian essential oils

According to the National Institutes of Health National Center for Complementary and Integrative Health, North-Americans alone spend more than \$30.2 billion annually on complementary health approaches, and according to Grand View Research, it is predicted that the global market of Aromatherapy will grow to \$3.7 billion by 2028. The scientific logic of Aromatherapy is that the therapeutic effects of essential oils come from their chemical constituents, so if we know the chromatography of 250 commercially available essential oils, we will be able to find substitutes. Everyone knows the importance of the quality of essential oils for therapeutic effects. What few people know is how to analyze the different compounds in chromatography to find substitutes for classic essential oils. In this lecture, my proposal is to show you the potential of Brazilian essential oils through chromatography analysis, exploring the most common chemical families and substances that are produced by our native plants. Brazil is the fifth largest country in the world, with the greatest biodiversity and a huge potential to contribute more to the world aromatherapy scene. In addition to the famous Copaiba and Pau Rosa oils, there are several other essential oils that can be used. A prime example is Candeia, wood from which an essential oil with more than 80% alpha-bisabolol is extracted, a substance highly valued in the world cosmetic market. Therefore, in this presentation we will focus on 7 essential oils endemic to Brazil and South America, their chemical compounds and their therapeutic potential.

### Audience Take Away Notes

- Learn 7 Brazilian essential oils that are extremely valuable therapeutically
- Learn to identify essential oil substances in chromatographies
- Learn how to replace essential oils based on chromatography
- Learn about the main chemical families of essential oils found in Brazil

### Biography

Andre Ferraz has a bachelor degree in Psychology at the Federal University of Minas Gerais, Brazil and as is one of the most renowned Brazilian Aromatherapists, with 12500+ students in 26 countries spanning all continents. He's the founder of iQuilibre, an educational platform about Aromatherapy, and co-founder of Plumerya.com, an essential oil brand. He has the biggest Youtube channel about Aromatherapy in the world. André's mother, Vany Ferraz, earned her Ph.D in chromatography analysis in Belgium in early 90's and in the last 30 years became the leading authority in the analysis of essential oils in Brazil.

22-23<sup>MAY</sup>

DAY 02

VIRTUAL ROOM 02  
KEYNOTE  
FORUM

5<sup>TH</sup> EDITION OF INTERNATIONAL CONFERENCE ON

TRADITIONAL MEDICINE,  
ETHNOMEDICINE AND  
NATURAL THERAPIES

## Incorporating facial acupuncture into your practice

Facial Acupuncture is one of the fastest growing subspecialties in our industry. Facial acupuncture is an effective way to treat cosmetic as well as neuromuscular facial conditions. Due to the unique nature of treating the face, specialized skills, precautions, screening, and protocols must be incorporated in order to safely practice facial acupuncture. This lecture will discuss the marketing, prescreening, protocols, and tools used in facial acupuncture in order to provide the highest level of profit, safety and results for your practice.



### Michelle Gellis

Acupuncture Physician,  
United States

#### Biography

Michelle Gellis is a Licensed and Board Certified Acupuncture Physician. She is on the Faculty at Yo San University, Doctoral Program, and a former Faculty Member and Clinic Supervisor at the Maryland University of Integrative Health. She has been teaching facial and cosmetic acupuncture classes internationally since 2006. Michelle Gellis holds a Bachelor of Science Degree from Seton Hall University School of Business in Computer Science, and a Master of Science Degree in Acupuncture from the Traditional Acupuncture Institute. She has been published in The Journal of Chinese Medicine, Acupuncture Today, the Maryland Acupuncture Society Newsletter, and The Acupuncture Desk Reference as well as featured in Her Mind Magazine, Howard County Business News and Be Well World Magazine.



## Successful integration of acupuncture research and modern biomedical sciences

The growth control organizer model of meridian system and acupuncture set the first example in acupuncture research in successful prediction of multiple research results in both acupuncture and conventional biomedicine with many independent confirmations. This is also the only model of acupuncture based on modern sciences which enables a person who has no previous training in acupuncture but good at mathematics to immediately figure out the distribution of hundreds of acupoints and some medians before learning the traditional chart. This model predicts the effect of acupuncture is similar to that of simulated annealing. The optimization of a physiological process or correction of a pathological process is usually not achieved by specific activation or blockade of a signal transduction pathway but by improving the self-organizing capacity of the system. This implies that the efficacy of acupuncture decreases with patients' age and comorbidities as well as overuse of acupoints – especially in patients with multiple comorbidities. In acupuncture, the advantage of low side effect profile and bidirectional normalization effect is at the expense of treatment specificity. A complete review of Cochrane Database on acupuncture related systematic reviews confirms these predictions on the negative correlation of effect sizes of acupuncture clinical trials with the patients' age and number of acupoints used. A promising solution to this problem is promoting transcutaneous electrical acupoint stimulation (TEAS) which can be easily adapted to reduce pandemic risk in acupuncture as it can be self-administered, improve cost effectiveness and healthcare market share of acupuncture – especially for frail, elderly patients with multiple comorbidities who often require more frequent and longer duration of treatment to achieve adequate efficacy. TEAS has many advantages over needle acupuncture including lower cost, lower risk, more convenience for patients, easier to standardize and repeat and can be used in telemedicine.



### Charles Shang

Baylor College of Medicine,  
United States

#### Biography

Dr. Charles Shang received his bachelor's degree on biology at Peking University, master's degree on biochemistry at Harvard University and Doctor of medicine degree at Boston University School of Medicine. He received the Medical Acupuncture Research Foundation award for publishing the first biological model on acupuncture which has multiple independently confirmed predictions in both conventional biomedical sciences and acupuncture research. He is a former faculty member of Harvard Medical School and current faculty member at Baylor College of Medicine and American College of Acupuncture & Oriental Medicine. He has done peer review for the New England Journal of Medicine, Annals of Internal Medicine and British Medical Journal by invitation. He is on the editorial board of Medical Acupuncture, World Journal of acupuncture-moxibustion, and on the University Cooperation Working Committee of World Federation of Acupuncture Moxibustion Societies.

## Change your genes/change your life - Optimal health & longevity

Biology is no longer destiny. Our DNA doesn't determine our health and disease prospects, as geneticists once believed. According to the new science of epigenetics, the vast majority of our genes are fluid and dynamic—and their expression is shaped by what we think and what we do. Our genetic profile may signal an inherited vulnerability to a disease, but our choices and behaviors determine whether these genes will be switched on or off. Each of us can influence our genes to create optimal health and longevity. Dr. Pelletier will discuss the latest epigenetic research, including the Ancestry.com inspired 'Heritability Study' and share timely media coverage including details of the 'CRISPR Babies' and its potential impact on science. He will also reveal the organizations and cutting-edge technology that will forever change the landscape of optimal health and longevity. We encourage you to attend and to engage with Dr. Pelletier in learning how to incorporate these new findings into your own lives.

### Audience Take Away Notes

- Differentiate generics vs epigenetics
- Apply practical, evidence-based epigenetic assays in practice
- Determine "personalized nutrition" based on latest data



### Kenneth R. Pelletier, PhD, MD

Clinical professor of medicine,  
Department of medicine,  
Department of family &  
community medicine,  
Department of psychiatry  
University of California school of  
medicine, San Francisco, United  
States of America

### Biography

Kenneth R. Pelletier, PhD, MD is a Clinical Professor of Medicine, Department of Medicine; Department of Family and Community Medicine; and Department of Psychiatry at the University Of California School Of Medicine, San Francisco (UCSF). At the UCSF School of Medicine, he is Director of the Corporate Health Improvement Program (CHIP) which is a research program between CHIP and 15 of the Fortune 500 corporations including Apple, Cisco, American Airlines, IBM, Dow, Prudential, Cummins, Ford, NASA, and PepsiCo. He also serves as a Vice President with American Specialty Health (ASH).

## Classical five-element acupuncture

This presentation will cover the basics of Classical Five-Element Acupuncture, with emphasis on how this system of medicine uses the sensory skills of the practitioner to determine the principal elemental imbalance of a patient's symptoms: Fire, Earth, Metal, Water, or Wood. This primary imbalance, known as the "Causative Factor" becomes the thrust of treatment. Once this Causative factor has been identified and restored to balance, symptoms tend to clear naturally at the physical, mental, and spirit levels. The use of points for their spiritual connotations will also be discussed.

### Audience Take Away Notes

- Participants will learn to engage their own senses to aid in diagnosis, the use of specific acupuncture points to treat the mental and spirit levels directly and the importance of rapport in reaching the "whole person"



### Neil Gumenick

Institute of Classical Five-Element Acupuncture Inc, United States

### Biography

Professor Neil R. Gumenick is Founder and Director of The Institute of Classical Five-Element Acupuncture, which offers training in this profound system of body/mind/spirit medicine. He has maintained a private practice in Santa Monica, CA since 1981 and has served as Professor at YoSan University and Emperor's College. Neil holds three degrees and an advanced teaching credential from The College of Traditional Acupuncture (UK) awarded by the late Professor J.R. Worsley. Neil was recipient of the 2007 AAAOM Pioneers and Leaders in Acupuncture and Oriental Medicine Award, and is one of the world's foremost practitioners, teachers, and writers on the subject of Classical Five-Element Acupuncture.

## Mechanism of acupuncture on pain relief

Acupuncture has been a mainstream medicine in Asian countries for centuries, especially well-known as a method of pain relief. Since the 1970s, acupuncture has become popular worldwide. In the US, NIH recognized the efficacy of acupuncture pain relief in 1997. There are researchers to attempt to explain the underlying mechanisms of acupuncture's effect on pain effects, but they admit that these mechanisms have not yet been thoroughly explained. It may be because pain is triggered not only by physical damage but also influenced by emotion. Pain is a subjective sense and is strongly associated with the whole person. Therefore, treating pain can be difficult because the healthcare practitioner needs to learn the patient's personality. Some patients may also have a solid attachment to the pain unconsciously. The patients improve faster when anxiety, fear, depression, and sleep are addressed during the treatment. This speech attempts to view the different aspects of the mechanism of acupuncture on pain relief. They are scientific explanations, including local and systemic effects of acupuncture on the tissues and organs, and non-scientific explanations, including a holographic view of the human body, acupuncture channels, and the influence of acupuncture treatment on emotion/mind/spirit and the chakras. Acupuncture treats pain, internal organs, and the spirit. Therefore, acupuncture is one of the best methods to simultaneously treat pain from the patient's physical and mental/emotional aspects.

**Keywords:** Acupuncture, Pain, Scientific explanation, Emotion, Mind, Spirit.

### Audience Take Away Notes

- Scientific and non-scientific explanation of pain relief by acupuncture
- How acupuncturists view the human body
- Influence of acupuncture on the invisible areas of the human body



### Hideko Pelzer, DAIM, L.AC

Acupuncture and Integrative  
Medicine, Berkeley, CA, USA

Suisun Oriental Medicine, Suisun  
City, CA, USA

### Biography

Dr. Hideko Pelzer, DAIM, L.AC. Studied TCM (Acupuncture, Moxibustion, and Chinese herbology) at the Meiji College of Oriental Medicine (presently known as AIMC; Acupuncture and Integrative Medicine College, Berkeley), USA, and graduated with an MS in 1998 and received DAIM (Doctor of Integrative Medicine) degree in 2019 at the AIMC, Berkeley. She has been a faculty member of AIMC since 2001, teaches acupuncture channels/points and acupuncture techniques, and supervises clinic interns. She also has a private practice in Suisun City, CA. More than 50 % of her patients are Workers Comp patients, and her specialty is pain management. She has taught acupuncture to medical doctors at the Academy of Pain Research. She was a speaker at the 1st International Symposium on Kampo Medicine held in Aug. 2022 in Japan.

22-23<sup>MAY</sup>

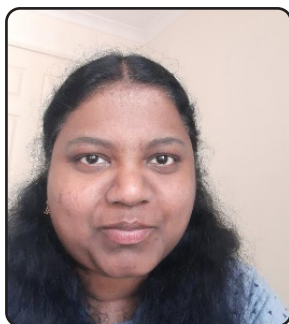
DAY 02

VIRTUAL ROOM 02  
SPEAKERS



5<sup>TH</sup> EDITION OF INTERNATIONAL CONFERENCE ON

TRADITIONAL MEDICINE,  
ETHNOMEDICINE AND  
NATURAL THERAPIES

**Dr. Punitha Isaac Samraj**

Biosciences Department, Endeavour College of Natural Health, Perth, Western Australia

**An integrative approach to uncovering therapeutic strategies in parkinson's disease**

Parkinson's disease (PD) is a progressive, neurodegenerative disorder characterized by dopaminergic neuron degeneration and the appearance of Lewy bodies in the substantia nigra (SN) presented with classical motor and non-motor symptoms. Currently, PD is the second most common neurological disorder according to the emerging evidence, and the incidence of PD increases with age. Moreover, the prevalence and incidence of PD are expected to increase exponentially by at least 30% by 2030, affecting the social and personal life of an individual. Current pharmacological treatment primarily relies on the optimum restoration of dopamine (DA) and its related signalling pathways by administering Levodopa or L-DOPA, a precursor of DA. L-DOPA slows down the disease progression nevertheless, long-term benefits are unlikely. It is administered in combination with carbidopa, a peripheral decarboxylase inhibitor that assists in relieving the side effects, and gastrointestinal and cardiovascular effects of L-DOPA. Another pharmacological treatment approach for PD is the use of monoamine oxidase B (MAO-B) inhibitor drugs. The increased MAO-B enzyme activity promotes DA metabolism and subsequently elevates oxidative stress and mitochondrial dysfunctions. Recently, the use of complementary and alternative medicine has been on the rise worldwide, as has the number of people who favor integrative approaches in PD. Oxidative stress and mitochondrial dysfunction are considered to be possible mechanisms in neuronal cell death. As a result, approaches that ameliorate mitochondrial function and optimize reactive oxygen species (ROS) production are considered effective treatment approaches in the current scenario against PD as both are required for neuronal functioning. Therefore, the presentation aims to discuss the important integrative approaches in the context of neuroprotective potential and in the development of novel therapeutic strategies against PD.

**Audience Take Away Notes**

- The presentation will help the audience to know and uncover the integrative treatment approaches for Parkinson's disease. The presentation will identify neuroprotective compounds in herbs and their therapeutic benefits in disease treatment
- The presentation will provide knowledge and effective use of herbs for neuroprotection to the audience in their role as complementary medicine clinicians, teachers and researchers. Molecular mechanisms behind the neuroprotection for the compounds will be discussed to expand on this research

**Biography**

Dr Punitha Isaac Samraj is currently working as an academic supervisor in the bioscience department at Endeavour College of Natural Health, Perth. She holds a PhD in Pharmaceutical Sciences. She is an academic and researcher experienced in clinical and experimental pharmacology of herbal medicines and research on the quality use of medicines. She has taught extensively various subjects in naturopathy, biosciences, and nutrition departments at Endeavour College. She has original research publications in peer-reviewed journals and presented at international conferences/seminars. She is interested in translating clinical herbal pharmacology research and high-quality clinical trial evidence into real-world practice.



**T U Aravinth**

B M Kankanawadi Ayurveda Mahavidyalaya, India

## Treatment of Parkinsonism W.R to gut microbiome – A case study

Parkinsonism is a group of disorder that affects the central nervous system leading to movement problems like bradykinesia, tremors and stiffness with additional symptoms such as falling, dementia, hallucinations and unresponsiveness. This disorder is slow progressing in nature. Ayurveda emphasis on treating the condition with vitiated vata dosa with respect to gut microbiota as the site of origin for this condition which progresses to the brain further. A case study of a male patient is done treatment based on vata vitiation and progress has been studied. This presentation gives an understanding in treatment of Parkinsonism lies on vata dosha rather than treating the symptoms and administration of dopamine. Various diagnostic methods have been studied and included to proceed with treatment. The article gives an insight into the various diagnostic methods enunciated in Sastras which turns out to be a four-runner of any of modern diagnostic methods.

**Keywords:** Brain & Blood investigations, Anuloma pratiloma of vata, Alpha syncline, Agni and dosha, Mind and body relation, Gut microbiome, Alcoholism.

### Biography

Dr. T.U.ARAVINTH studied Bachelor of Ayurveda Medicine and Surgery at Sri Sairam Ayurvedic College and Research Centre, Chennai, India and graduated in 2022. He is now currently pursuing MD (Kaya Chikitsa – Rasayana evam Vajikarana) at KLE Shri B.M.Kankanawadi Ayurveda Mahavidyalaya, Belagavi, India. He has presented and published a paper at ISSN at the “International Conference on Geriatric Care and Cure” held at Parul University, Gujarat. He has presented himself as a speaker at National Institute of Ayurveda, Jaipur on the national workshop on “Marma chikitsa”. He has presented papers on more than 25 national conferences held all over India.



**Komgrit Eawsakul\*, Tassanee Ongtanasup**

School of Medicine, Walailak University, Nakhon Si Thammarat 80160, Thailand

## Homology modeling, molecular docking, molecular dynamic simulation, and drug-likeness of the modified compounds against targeted protein

**A**canthamoeba species are capable of causing amoebic keratitis (AK). As a monotherapy, alpha-mangostin is effective for the treatment of AK; however, its bioavailability is quite poor. Moreover, the efficacy of therapy is contingent on the parasite and virulent strains. To improve readiness against AK, it is necessary to find other derivatives with accurate target identification. Beta-tubulin (BT) has been used as a target for anti-Acanthamoeba (*A. keratitis*). In this work, therefore, a model of the BT protein of *A. keratitis* was constructed by homology modeling utilizing the amino acid sequence from NCBI (GenBank: JQ417907.1). Ramachandran Plot was responsible for validating the protein PDB. The verified BT PDB was used for docking with the specified ligand. Based on an improved docking score compared to alpha-mangostin (AM), two modified compounds were identified: 1,6-dihydroxy-7-methoxy-2,8-bis(3-methylbut-2-en-1-yl)-9H-xanthen-9-one (C1) and 1,6-dihydroxy-2,8-bis(3-methylbut-2-en-1-yl)-9H-xanthen-9-one (C2). In addition, molecular dynamics simulations were conducted to analyze the interaction characteristics of the two bound BT–new compound complexes. During simulations, the TRP9, ARG50, VAL52, and GLN122 residues of BT-C1 that align to the identical residues in BT-AM generate consistent hydrogen bond interactions with O-3 and O-2. However, the BT-C2 complex has a different binding site, TYR 258, ILE 281, and SER 302, and can form more hydrogen bonds in the range O-4. Therefore, this study reveals that C1 and C2 inhibit BT as an additive or synergistic effect; however, further in vitro and in vivo studies are needed.

### Audience Take Away Notes

- Able to simulate 3D proteins by using amino sequences
- To develop compounds that is derived from plants to be specific to target proteins
- Able to develop medicinal herbs by using computers to define pharmacokinetic
- Able to explain molecular interaction between active substances and target proteins that cause disease

### Biography

Assistant professor of applied Thai traditional medicine Komgrit Eawsakul (FHEA) studied applied Thai traditional medicine at the Walailak University, Thailand and graduated as master of biomedical engineering in 2017. I then joined the research group of Assoc.Prof. Norased Nasongkla at drug delivery system, Mahidol University. After one year, I worked at a stem cell company, Reviva Thailand. Now, I am a lecturer in Applied Thai traditional medicine. My area of knowledge was natural product, drug delivery systems, stem cell, molecular docking and molecular dynamics. However, most of my published work is related to molecular docking and molecular dynamics.





### **Poonam Singhal**

Department of Nutrition, St. Ann's College for Women, Hyderabad  
Centre for Rural Development and Technology, Indian Institute of Technology,  
Delhi

## **Medicinal properties of bamboo shoot**

**B**amboos, a group of large woody grasses belonging to the family Poaceae and subfamily Bambusoideae, are much talked about for their contribution to the environment. Bamboo shoot is not only eaten for its flavor and taste by the tribal communities but is also appreciated as an important plant by the nature for its medicinal role. Use of shoots by the tribal people in various forms to eradicate a disease is well known in Ayurveda since ancient times. This paper reviews the utilization of medicinal properties acquired by bamboo shoot. Further investigation is required by the researchers to make novel nutraceutical products and benefit the society.

### **Biography**

Dr. Poonam Singhal is an Assistant Professor in the domain of nutrition and food science at St. Ann's College for Women, Hyderabad and a visiting faculty at University of Hyderabad. She has done M.Sc (Food and Nutrition, Gold medalist), B.Ed (Home science) from Delhi University and Ph.D (Food science and nutrition, IIT Delhi). With over 12 years of experience in research, teaching and documentation at institutions like IIT Delhi, IIM Calcutta, ISB Hyderabad and NIRDPR Hyderabad, UNICEF etc she aspires to learn, innovate and evolve. She has published several papers in the journals of national and international repute and presented papers at the international conferences.



**Ajai Prakash Gupta<sup>1\*</sup>, Saajan Sharma<sup>1</sup>, Bhawana<sup>1</sup>, Mridul Jamwal<sup>1</sup>, Akshay Tomar<sup>1</sup>, Suphla Gupta<sup>2</sup>**

<sup>1</sup>Drug Testing Laboratory (QMI Division)

<sup>2</sup>Plant Biotechnology Division, CSIR-Indian Institute of Integrative Medicine, Canal Road, Jammu-180001, India

## **Impact on demand of herbal medicinal products after Covid19: Quality control and adulteration**

**H**erbal medicinal products contain ingredients derived from plants. Herbal products are whole plants or parts of plants or plant extract used as pharmaceuticals, or/and as supplements and may be used as food and beverage products. These products are offered in tablets, syrup, powder, capsules, and infusion forms. Generally herbal products have few or no side effects and present safe alternative options to well-being. Medicinal plants are also used as an ingredient for manufacturing beauty products and cosmetics. Herbal ingredients enrich cosmetic products and deliver better functionality in comparison to regular chemicals-based cosmetics. After the onset of the novel corona-virus pandemic, consumers are shifting their focus gradually towards more holistic approach using herbal medicines as general immunity boosters in order to mitigate the risk of virus transmission. Herbal medicinal plant-based products are also being examined as potential treatment options for post-COVID-19 symptoms. The COVID-19 pandemic crisis has pushed the global market of herbal medicines to reach a size of US\$178.4 billion by 2026. The gap in supply and demand, shortage of raw materials needed for the production of herbal medicinal plant products, and the increase in the cost of exported ingredients are the key factors driving introduction of spurious plant usage in the industry. Consequently, the availability of pseudo-herbal products is a major challenge. An adulterant is a substance found within other substances such as cosmetics, pharmaceuticals, and other chemicals that compromise with the safety or effectiveness of the product. Scientifically quality control of the natural products to validate the quality of natural products as well as detection of adulteration is of utmost importance for the safety and efficacy of herbal products.

### **Biography**

Presently working as Director, QA, FSSAI, and New Delhi, India. More than 33 years of post M. Sc. experience in the area of Analytical Chemistry of Natural Products and Pharmaceuticals. Expertise in method development, identification, validation, and quantification of bioactive constitutions of microbes, medicinal plants, and tissue culture samples using sophisticated equipment like GS-MS, UPLC, HPTLC, LC/MS/MS, and HPLC. My area of expertise also includes analysis of Pharmo-kinetics & Pharmo-dynamics (PK-PD) samples, drug metabolites, and their mechanistic studies. Published more than 130 research papers in journals of National and International repute, 11 best paper awards, 37 invited lectures, attended 26 conferences national & International and 11 book chapters.

**Swati Katoch<sup>1,2</sup>, Vinesh Sharma<sup>1,2</sup>, Vikram Patial<sup>1, 2\*</sup>**

<sup>1</sup>Pharmacology and Toxicology Laboratory, CSIR-Institute of Himalayan Bioresource Technology, Palampur-176061 (H.P.), India

<sup>2</sup>Academy of Scientific and Innovative Research (AcSIR), CSIR- Institute of Himalayan Bioresource Technology, Palampur-176061 (H.P.), India

## Natural products as promising therapeutic agents for the management of liver diseases

Liver diseases can affect almost every age group, and their incidence is increasing worldwide due to the extensive spread of hepatitis and the western lifestyle. The primary cause of liver disease includes infection, exposure to drugs/toxic compounds, diet and alcohol, which further contribute to inflammation, fibrosis and even liver cancer. Traditional medicines sought and encompassed a wide range of approaches. They came to practice during the ancient Vedic period and have a long-lasting curative effect, easy availability, a natural way of healing, and negligible side effects. Traditional medicines are gaining importance throughout the world in clinical practice. Natural products are prepared from plant extracts, herbs, fruits, and vegetables and have been used conventionally for treating liver diseases. Various medicinal plants/natural products such as *Picrorhiza kurroa*, *Swertia sp.*, curcumin, etc., have a potential chemoprotective and hepatoprotective effect against common liver diseases. The limitation of applications of natural products as medicines comes from the lack of scientific studies that could provide actual proof of the efficacy of these products. Thus, anecdotal success and personal experience are the often-driving forces for accepting these traditional medicines among the clinical population. Our group is focused on validating the efficacy of natural/traditional drugs in experimental models.

### Audience Take Away Notes

- The audience can learn about the various natural products/traditional drugs having potential hepatoprotective activity
- The presentation will explain the various preclinical animal models used to validate the efficacy of drugs
- Focus will be on to explain the molecular mechanism of action of different products based on our studies

### Biography

Dr. Vikram Patial is veterinarian by profession and graduated as BVSC & AH in 2008 and done post-graduation in veterinary pathology in 2011 from CSKHPKV, Palampur, India. He received his PhD in biological sciences under Academy of Scientific and Innovative Research (AcSIR), Gazia bad, India. His group is working on acute and chronic liver injury animal models for the validation of the therapeutic potential of natural products. He has published 44 papers in the reputed journals and four book chapters.

**Dr. Arjun Gupta**

Department of Shalya Tantra, BKAMCH, Moga, Punjab, India

**Yoga in the management of arsha (hemorrhoids)**

**A**rsha' (haemorrhoids) is an ailment that affects all economical groups of population. Though the disease is within the limits of management, it has its own complications like severe haemorrhage, inflammation and thrombosis, by which a patient gets severe pain and is unable to continue his routine work. Haemorrhoids are inflamed and swollen veins around the anus and lower part of rectum. They usually occur as a result of altered dietary pattern, altered life style, genetics, and pregnancy. One of the most common ailments of the rectum, affecting as much as half the population by the age group of 50. Suffering from haemorrhoids is not only painful but embarrassing as well. They may be classified as either internal or external. Many not only want to know how to heal haemorrhoids but how to heal them fast and naturally. The authors review the role of Ayurveda in the management of haemorrhoids (Arshas). It has been proved by scientific studies that botanicals improve microcirculation, capillary flow and to strength of the surrounding connective tissues of anus and lower rectum.

**Audience Take Away Notes**

- Purpose of this paper is to learn about Arsha
- To create the awareness regarding modification of life style for the prevention of Arshas / piles by regular practise of Yogic Asanas, following strict Pathya Ahara and Viharas according to Ayurveda

**Biography**

Dr. Gupta, Post graduated in Ayurveda, Pursuing Ph.D in Ayurveda has specialization in Shalya Tantra (General Surgery) from India's most prestigious Institute, JIAR. He is a very young and inspiring personality of Ayurveda in India. He has presented more than 10 papers in various national and international Seminars. Besides this, He has written more than 15 articles and case reports in peer reviewed journals. Besides this, he has also written 06 books in the field of Ayurveda. Presently working as Assistant Professor, in the department of Shalya Tantra at BKAMCH, Moga, India.



**Agzamova A. Manzura**

Institute of the Chemistry of Plant Substances named after S.Yu.Yunusov,  
Academy of Sciences Republic of Uzbekistan

## **Evaluation of the cardioprotector potential of cyclosiversioside F isolated from astragalus pteroccephalus bunge plant**

**D**iseases of the cardiovascular system still occupy the first place, both in terms of prevalence and risk to life. Most of these diseases (angina pectoris, ischemic heart disease, myocardial infarction, neurocirculatory dystonia) are accompanied by metabolic disorders, both in the myocardium and in the vessels. Therefore, for the treatment of patients with the aforementioned diseases, a new group of drugs is used - cardioprotectors (cytoprotectors), which have a normalizing effect on the disturbed metabolic processes in the body. In this regard, cycloartan glycosides with cardiogenic activity, hypotensive, diuretic, sedative, analgesic, lipid-lowering actions are very attractive. The sources of cycloartan glycosides in our region are only plants of the genus *Astragalus*. This genus in the flora of Uzbekistan is represented by 239 species. Considered glycosides do not have cumulative properties and high toxicity, having a large breadth of pharmacological action. Therefore, the creation of a metabolic type of cardioprotector on the basis of cycloartan glycosides is regular and highly relevant. Pharmacological studies of Cyclosiversioside F are provided. In the framework of the project dedicated to the creation of a new domestic cardioprotective drug based on cycloartan glycoside, Cyclosiversioside F, isolated from *Astragalus pteroccephalus* Bunge, a study was conducted of the specific activity of the drug. The effects of Cyclosiversioside F on the functional activity, metabolic processes of the myocardium of intact animals and animals in heart pathology were studied. Special attention should be paid to the cardiotropic effect of cyclosiversioside F. In this connection, the functional-metabolic effects of the individual cycloartan glycoside, Cyclosiversioside F, on the myocardium of experimental animals were studied in detail. As a result of the work done, the optimal therapeutic dose of the drug was selected by oral administration. It has been established that the therapeutic dose of glycoside for oral administration is 10 mg. The effect of Cyclosiversioside F on the most important metabolic processes of the cardiac muscle (carbohydrate, lipid, energy) of intact animals was studied in comparison with the classical metabolic drug, riboxin. The effect of this glycoside on the activity of the antioxidant system, as well as on the peroxidation of myocardial lipids in healthy animals, was studied. The influence of Cyclosiversioside F under conditions of pathological damage to the heart on the carbohydrate-energy metabolism of the myocardium was evaluated.

### **Biography**

Agzamova A. Manzura received her Diploma in chemistry in 1983 in Tashkent State University, Uzbekistan, diploma (PhD) in chemistry on «Cycloartane genins and glycosides from five *Astragalus* species», 1991 and Doctor of science diploma (DSc) in 2021 «Triterpenoides of *Astragalus* genus plants: structure, chemical modification and biological activity» from Institute of the Chemistry of Plant Substances (ICPS) named after S.Yu.Yunusov Academy of Sciences Republic of Uzbekistan. She had a training Certificate Graduated group training program on the «Utilization of medicinal and aromatic plants in the pharmaceutical and related industries». Sponsorship UNIDO - Government of Turkey - TBAM Anadolu University, Turkey. Eskishehir. 2015-2017 - the head of the chemistry glycosides laboratory ICPS. At present she received DSc. degree Diploma and work as a leader scientific at the ICPS named after S.Yu.Yunusov 2019 June - Certificate Ministry of Innovative Development Republic of Uzbekistan for Innovative project "Development of production technology and the creation of a cardioprotective drug Cyclosiversioside F". She has published 51 articles in Journal Chemistry of Natural Compounds. 102 scientific articles and thesis's of reports. Her Index Hirsha - 9.



**Dr. Mohammad Kamil**

Director General, Lotus Holistic Health Institute, Abu Dhabi, UAE

## Safety and quality of traditional herbal medicinal products

A vast majority of people depend on traditional medicines for their primary healthcare needs and it can safely be presumed that a major part of traditional therapy involves the use of plant extracts or their active principles. In recent years with ever-growing commercialization in the field of herbal medicines, there has been an instant demand for quality control of the drugs used in this system. The studies on the identity, purity, and quality of the genuine drug will enhance information in checking the adulteration. A set of standards would no doubt be a deterrent to substitution and adulteration and also an aid for 'Drug law Enforcement. The present talk incorporates study from the birth of the plant to its clinical application which is a dire need for all concerned to have knowledge of GAP, GFCP, GLP, CGMP, and the possible adulterations. This study deals with approaches towards establishing Safety & Quality starting from a preliminary examination of a medicinal plant, its morpho-anatomical, pharmacognostic, physicochemical, and analytical parameters, foreign organic matter, pesticide residue, radioactive and microbial contamination, chemical assay, fingerprinting of different extractives using modern extractors, Chromatographic and Spectroscopic techniques, phytochemical screening, quantitative analysis of inorganic constituents and standardization with special reference to marker compounds in plant species and their fingerprinting along with its modern perspectives.

### Audience Take Away Notes

- Most of the herbal medicines that were approved and marketed have now been withdrawn due to serious adverse effect and adulteration
- Because of the high cost of pharmaceutical medications and possible side effects, the use of alternative forms from natural products is considered as a promising tool in the management and treatment of obesity
- Surely, this should be included as a subject
- Traditional medicinal plants and their active phytoconstituents have been used for treatment of different ailments
- Besides food, plants have always been a common source of medicines either as such or as dietary supplements

### Biography

(M.Sc.; M.Phil. Ph.D.; D.Sc.; C.Chem. Chartered Chemist (London); Fellow of Royal Society of Chemistry (London). Worked in various capacities, as In-charge -Drug Lab.(CCRUM), MOH India, Professor at Hamdard University, India; Head Department of Pharmacognostic Science, and Head TCAM Research (ZCHRTM) from 1996-2020. Presently working as Director General, Lotus Holistic Institute, Abu Dhabi, UAE. Recipient of many awards viz Young Scientist's Award, India; Commonwealth Award-London; Convention Award of Chemical Society-India; Academic Exchange Fellowship from Association of Commonwealth Universities -London; Global Award on Unani Medicine, India; Sheikh Zayed International Award in Herbal Research (2020). More than 580 research papers in reputed journals & presentations at international conferences are at his credit).

**Yu Chen**

The Baltimore Healer, Baltimore, United States

**Auricular - Magnet therapy for diabetes mellitus**

**A**uricular - magnet therapy for Diabetes mellitus using magnetic discs instead of acupuncture needles, attached to auricular acupuncture points to reduce blood glucose levels for diabetes mellitus patient was done with successful results. Due to better control of the blood glucose levels, patient's infection in the leg was cured and the gangrenes fall off, the new tissue grew, the retinopathy was improved. The principle of using magnet disc on ear is established in the study. The procedure of this technique is described in detail. In this presentation, we will present the findings and discuss the theory behind the magnetic therapy.



## **Jennifer Finegold L.AC, C.HT, M.S**

Owner of Fiery Sage Healing, Austin, TX United States

### **Hypnotherapy & acupuncture: A powerful combination for healing**

**B**y combining the power of the mind with the healing ability of acupuncture, both modalities simultaneously have an incredible effect for overall wellbeing: physically, emotionally and spiritually. Psycho-emotional disturbances such as anxiety and depression are rampant across the world and throughout humanity. Stress is one of the leading causes of illness, disease, and mental disorders. Many times unchecked stress leads to more chronic and disruptive conditions such as panic disorders, pain, insomnia and digestive imbalances. Jennifer will discuss how using the combination of hypnotherapy along with traditional acupuncture and five element acupuncture can support and heal patients with disorders such as PTSD, anxiety, depression, behavioural disturbances, addiction and more. She will explain how hypnotherapy works and how to tailor the session uniquely to the individual while understanding the therapeutic principles behind acupuncture points and therapy.

#### **Audience Take Away Notes**

- Become aware of how simple hypnotic techniques can create breakthroughs and healing
- Recognize how mind, body and spirit are integrated, especially in a clinical setting
- How retraining our thoughts and creating new neural associations is essential for improved mood and mindset
- Engaging the body and the mind creates better harmony and therapeutic outcomes

#### **Biography**

Jennifer Finegold graduated with an MS in Chinese Medicine from the Colorado School of Traditional Chinese Medicine and completed an additional 3 year training to specialize in Five Element Acupuncture. Jennifer also attended the School of Healing Arts in San Diego to become certified in Hypnotherapy. She has held a private practice in Denver, CO and currently has one in Austin, TX. Jennifer was an instructor for the University of Texas informal courses and teaches workshops for healing. Her patients are veterans, teenagers and everyone in between wanting support on their healing journey.





### **DR. Debbie Novick D.C.**

Novick Integrated Medicine, Clinical Practice, Carlsbad, CA USA

## **Strategies for an effective clinician: A healthy food map**

Creating a food road map that suits each individual according to pre-existing conditions, socio-economic status, degree of DIS-EASE and/or dysfunction, willingness, current stress levels/life demands, and cost to quality of their life. Instructing patients that new food plans require at least 90 -120 days to render measurable affects and results. They may notice improvements as soon as 2 weeks and as long as 90 days, depending on their commitment and compliance with the plans. Educate patients that it takes 120 days to create a whole new set of red blood cells, therefore the dietary, lifestyle changes they engage in, will render evident results in 30-90 days. The more a patient unburdens their body from causative factors, the faster the transformation and quicker the necessary scaffolding is built, to provide significant symptom relief and restoration of functional physiological processes that render a vital healthy human being, who is capable of developing immune and chemical tolerance to living in this “modern” hectic world.

### **Audience Take Away Notes**

- Understanding anti-inflammatory diets, tailoring to the individual and meeting patients where they are.
- By improving their outcomes and delivering effective patient managements and positive outcomes
- Yes, specifically targeting clinical studies
- Yes, by using effective patient management strategies that render results for the practitioner and their patients
- Not for research design, rather for clinical practice managements and reversing dis-ease states and focusing on prevention through patient education and empowerment

### **Biography**

Debbie Novick, D.C., a leading expert on Hashimoto's Thyroiditis, practicing for 27+ years, at the renowned Novick Integrated Medicine in Carlsbad, CA. Educated and trained at Life Chiropractic College West in Hayward, CA, Dr. Debbie has continued her post-graduate studies in functional and integrative medicine, specializing in women's health care, with emphasis on lifestyle, and dietary changes. Professor at Bastyr University CA 2016-2020. She uses a variety of complementary alternative medicine strategies and tools to restore health and balance to her patients. Known as the “Go-to Doctor” for Hashimoto's, Dr. Debbie works in concert with other MD's and Gynecologists, who refer their patients to her for more specialized autoimmune support. Her goal is to empower each person to understand what journey they must embark on to achieve and maintain health and wellness for life. Dr. Debbie believes in embracing the journey of life. She knows that the best way to embrace that journey is in a healthy and whole body. To do that, she uses a variety of complementary alternative medicine strategies and tools to restore health and balance to her patients.



**Cynthia Husted<sup>1, 2\*</sup> PhD, Lobsang Dhondup<sup>3</sup> TTM, Amy Banter<sup>2, 4</sup>  
MD, Garrett TubmanPT<sup>5</sup> DPT**

<sup>1</sup>Global Institute for Tibetan Medicine, Greenbank, WA, USA

<sup>2</sup>Science and Spirit Institute, Greenbank, WA, USA

<sup>3</sup>Global Institute for Tibetan Medicine, Temecula

<sup>4</sup>Opt2Liv Medical, Indianapolis, IN, USA

<sup>5</sup>FlyPhysio, Oakland Park, FL, USA

## **The integration of Tibetan and functional medicines with applications to nervous system disorders**

Current concepts of Tibetan medicine have been in practice for over 1500 years and modern functional medicine is in philosophical agreement of addressing the systems biology whole. The impact of the integration of Tibetan and functional medicines is reported for nervous system disorders. Nervous system disorders are one of the eight branches of Tibetan medicine and unique compared to other Asian medicines. Tibetan medicine, or Sowa rik pa, is an integrative medicine derived before the seventh century from the synthesis of indigenous Tibetan Bon shamanistic medicine with Ayurvedic, Chinese, Persian, and Galenic medical influences, including the outcome of an International Medical Conference held in Tibet in the 8th century over a period of several years. At the heart of this healing system is a deep connection with nature and the main aim is prevention of illness and promotion of longevity, though therapeutic interventions abound. Tibetan medicine incorporates the three-humor theory of Ayurvedic medicine, referred to as nyepa sum, for a definition of three functional energy systems, or loong (wind), tri pa (bile), and baekan (phlegm). We have previously reported that the three nyepa sum structure of the human nervous system differs from the three nyepa sum function. Nervous system structure is baekan (water and earth), nervous system metabolism is tripa (fire), and nervous system function is loong (wind). Likewise, the nyepa sum constitution changes through life. From birth to age six, baekan predominates as the nervous system and myelin are formed, with subtle changes in adolescence at age 15. From 16-50, tripa predominates when one is energetic in life with physical maintenance through optimal lifestyle. From 50 until death, long predominates with inner spiritual growth. The taste and potency of nutrition and herbs are utilized to support such structure, function, and changes through life, including for nervous system disorders and to promote longevity. We review such approaches. We share the overlap of Tibetan and functional medicines as relates to nervous system disorders by comparing and contrasting multiple sclerosis, amyotrophic lateral sclerosis, and Parkinson's disease. We share how the use of functional labs correlates with Tibetan medical theories to provide optimal outcomes for monitoring the effects of Tibetan medicine. Similarly, the theories of Tibetan medicine can help simplify complex data into meaningful patterns and we provide examples of a variety of functional labs that are utilized to help determine Tibetan herb and herb/mineral formulations. This allows targeting nutritional supplements to help stabilize nervous system imbalance. In addition, we review integration of the Neubie direct current device for helping to restore nerve conduction and function. The integration of Tibetan and functional medicines and the Neubie direct current electrical stimulation device provide a synergy that optimizes healing outcomes.

### **Audience Take Away Notes**

- Familiarity with the uniqueness of Tibetan medicine as relates to other Asian medicines
- Tibetan medical diagnoses of nervous system and immune disorders and appropriate interventions
- Familiarity with the functional medicine model and its overlap with Tibetan medicine
- Benefits of integrating genetics, microbiome, and gene expression analyses with traditional medicines
- Benefits of the Neubie direct current electrical stimulation device for nervous system disorders

**Biography**

Dr. Husted obtained a Ph.D. in physical chemistry with a focus on nuclear magnetism and quantum mechanics as a possible link to the energy concepts of traditional medicines. Her research focus was myelin and multiple sclerosis, including postdoctoral studies at UCSF. She was then Director of the Center for the Study of Neurodegenerative Disorders at UCSB, where she implemented integrative approaches to research of neurodegenerative disorders, including managing a three-acre medicinal plant garden. She is now board certified in functional medicine and conducts integrative research through two nonprofits, the Science and Spirit Institute and the Global Institute for Tibetan Medicine.



### **Leslie Whitcomb PhD.**

The Department of Humanitarian Sustainability, Global Equity and Inclusion  
Akamai University, Durham, North Carolina, USA

## **Integrating indigenous ancestral medicine with mental health and acupuncture protocols**

This presentation uses a complexity science approach to explore Integrating Indigenous Ancestral Medicine with Mental Health and Acupuncture Protocols. It is supported by case study experience and empirical research bibliographies. The case study experience includes healing modalities of North American ancestral, transgenerational healing practice, South American Pacha Mama Practice, mainstream mental health practice, and co adjunct collaborations of Indigenous Ancestral Medicine with Mental Health modalities and Acupuncture treatment. Indigenous Ancestral Medicine is a medicine of relationship. Mental Health approaches are designed to heal relationship: with self, other, family, community and society. Acupuncture is a traditional medicine and a science of relationship – the relationship of the body’s meridians, organs, body processes and chi into a larger equilibrium, with health as the optimal state resulting from this equilibrium. Experience of these three systems of medicine in harmonious practice with each other will be facilitated for participants, by the presenter, in zoom format. The presenter will then provide a brief touch point for participants with body based Indigenous physiological patterns, Mental Health relational elements and Acupuncture Meridian systems. The presenter will then clarify didactic understandings of experiential learning; to include one case study in which all the above modalities were employed to address issues of transgenerational trauma. These issues had presentation in fractures of ancestral world view for meaning making, ruptures in relationship of self to self, and self to other, family, kin, community and nature; finally, they had presentations of disequilibrium in five elements acupuncture meridian chi and presentations of hormonal, autoimmune, digestive, and whole health challenges. Following the didactic presentation, participants will be given interactive charts to integrate tools from the presentation into self-efficacy practices to share with their population of service. These mapping exercises are designed to allow practitioners from a variety of health and well-being modalities to consider how their own modalities may become more efficacious and sustainable, through understanding of and respect for Indigenous Ancestral Medicine.

### **Audience Take Away Notes**

- The presentation will facilitate proactive tools of self-equilibrium in the modalities covered – a whole practitioner is an effective practitioner. These tools are transportable to work with clients in the modalities covered. They have been researched to be effective in creating opportunities for health recovery, on all levels of holistic practice for the modalities covered
- The structure of the presentation, the tools accessed through practice within the presentation and transferrable tools to practice will provide participants with two key practice enrichment competencies. The first competency rests in practice of micro skills of adaptive and responsive thinking, perceiving, sensing and intuitively responding with empathy and accuracy. This enhances the practitioner, in any of the modalities covered, to enrich their efficacy in assessing clients and designing self-efficacy based self-care plans for clients to supplement professional practice tools. The second competency rests

in the skills of translational professional agility for translating energy based and relational practices of medicine and mental health, into greater capacities to access research bases and practical skills resources of medicine and mental health

### **Biography**

Leslie Whitcomb, M.Sc., Ph.D. is a proud carrier of her Ketooweh Lenni Lenape ancestral medicine heritage. Her dual heritage, as both Indigenous and white has informed her professional work in Mental Health, Indigenous Ancestral Medicine and co adjunct facilitation with practitioners of Acupuncture, Acupressure and Homeopathy for thirty-five years. Leslie works in partnership with regional ecosystems, international practitioners and academic scholars. Her research and collaboration has made contributions in K-12 school systems, graduate programs, social services training programs and in private practice. She is currently faculty at Akamai University, Engineering Leadership Skills Clinic Facilitator at Cornell University, and in private family facilitation practice.



### **Mara Bishop MA**

Whole Spirit LLC, Durham, NC, United States

## **The Enatured™ method: Strengthening resilience and relationships through mindful engagement with nature and self**

**M**any studies show nature's positive physical and emotional effects on humans. For example, it lowers blood pressure, helps restore mental clarity, and improves mood. Indigenous cultures teach that everything in the natural world is interconnected; humans are a part of nature, as nature is a part of us. Learning to observe and reciprocate fosters health and balance for both individuals and the family system as a whole. Positive psychology teaches us the value of applying our innate strengths and qualities. Mindfulness helps us stay present and regulate our emotions. The Enatured™ method draws from mindfulness, shamanism, psychology, and scientific research about nature. Enatured™ is a learning and wellness tool that recognizes and fosters the powerfully interconnected relationship between humans, animals, plants, elements, and land. The method helps participants consciously engage the environment for relationship, support, and restoration. Participants frequently report increased states of calm and a deepened relationship to nature within and around them. Decreased anxiousness and worry and increased meaningful interaction with the local ecosystem can be factors in increased resilience and ability to cope with challenging circumstances. Once learned, the method can be done as a self-directed process or with a facilitator, in person or remotely. Since access to pristine and private nature is a privilege, Enatured™ focuses on relating to nature everywhere and anywhere. From inner city to suburbs to rural spaces, from inside our homes to inside our bodies: nature is ever present. Not everyone has the same ability to get outside or move around freely. The method is adaptable to any level of physical ability and access to the outside; it can be done almost anywhere. Enatured™ helps strengthen resilience and relationships through mindful engagement with nature and self.

### **Audience Take Away Notes**

- How research on the benefits of being in nature support the benefits of Enatured™
- How mindfulness increases resilience, and combines effectively with ecopsychological and ecospiritual practices
- How setting goals and intentions affect outcomes of interactions with nature
- How creating a structure for fostering relationship to nature provides increased benefit, and is complementary to unstructured time

### **Biography**

Mara Bishop is the founder of Whole Spirit LLC and the non-profit Whole Nature Incorporated. Mara helps clients and students develop meaningful spiritual practices, commune with nature, and avoid burnout in our intensely interconnected world. She presents at universities, research organizations, and wellness centers. Mara has a master's degree in psychology from Columbia University, Teachers College. Her Enatured™ and Personal Evolution Counseling™ methods draw from psychology, mindfulness, shamanism, and nature-based practices. Her latest published works are *Shining Bright without Burning Out* from Sounds True and *Shamanism for Every Day* from Kensington Publishing. [WholeSpirit.com](http://WholeSpirit.com) for more information.



### **Hicran USAN<sup>1\*</sup> MD, Levent TEKCI<sup>2</sup> MD**

<sup>1</sup>Department of Physical Medicine and Rehabilitation, Yuksek Ihtisas University, Ankara, TURKEY

<sup>2</sup>President of the Acupuncture Academy, Developer of Tekci Diagonal Acupuncture System (TDAS), Ankara, TURKEY

## **Introducing a promising new acupuncture approach for treating psychological disorders: The neuro-psycho-pathogene elimination method**

According to Traditional Chinese Medicine, emotions in extreme state cause pathogenicity in the meridians. NeuroPsychoPathogen Elimination (NPPE), is an acupuncture method which aims to eliminate the pathology in the channel systems by optimizing the meridians. The NPPE method is developed by Dr Levent TEKCI. It consists of a combination of Tekci Diagonal Acupuncture Systems (TDAS) and Traditional Chinese Acupuncture points. In TDAS micro acupuncture system, micro and macro holographic images of the organism are projected on the head, face, nose, back, abdomen, feet, ankles, knees and thigh zones. With these somatotopic properties, it is one of the acupuncture techniques that can holographically change all the macro and micro information of the body. Anatomical components of the prefrontal cortex, temporal, parietal, occipital lobes and the limbic system are depicted in the neurocranial zone in the medial thigh. In NPPE method, the somatotopic points of the amygdala, nucleus raphe and hippocampus are used in combination with Traditional Chinese Acupuncture points. In this way, unwanted feelings and thoughts can be erased forever in order not to be remembered again from the memory record. Psychological Disorders and mental health problems can be effectively treated with this method. This method is also effectively used for treating Somatic symptom disorders. The NPPE protocols consist of totally 8 points. These are: TDAS amygdala, nucleus raphe and hippocampus points located on the medial thigh and the Shems point located on the forehead combined with Traditional Chinese Acupuncture points Yintang, bilateral Liver 3 and GV20 points. The aim of this presentation is to introduce this new acupuncture method, which can be used for treating especially resistant mental and psychological disorders.

### **Audience Take Away Notes**

- The audience will be able to use the new method
- With using this method the audience will be able to treat mental and psychological disorders effectively
- This method is also effective in treating even psychological disorders which do not respond to other treatment approaches
- Not only psychological or mental disorders but also Somatic symptom disorders can be treated with this method
- The TDAS acupuncture system is a method that will add a new perspective and richness to existing acupuncture approaches

### **Biography**

Dr. USAN studied Medicine at the Ankara University, Turkey and graduated as MD in 2000. In 2004 she finished the residency program and became Specialist for Physical Medicine and Rehabilitation. After working several years as a physician she was more and more interested in traditional treatment approaches. She finished her certification program on acupuncture in 2017. Since then she is using traditional treatment methods like acupuncture, osteopathy, herbal medicine in her daily practice.



**Kamaka Kassimu<sup>1,2\*</sup>, Florence Milando<sup>1</sup>, Justin Omolo<sup>3</sup>, Abel Mdemu<sup>3</sup>, Gloria Nyaulingo<sup>1</sup>, Hussein Mbarak<sup>1</sup>, Latipha Mohamed<sup>1</sup>, Ramla Rashid<sup>1</sup>, Saumu Ahmed<sup>1</sup>, Mohammed Rashid<sup>1</sup>, Hania Msami<sup>1</sup>, David Damiano<sup>1</sup>, Beatus Simon<sup>1</sup>, Thabit Mbaga<sup>1</sup>, Fatuma Issa<sup>1</sup>, Omar Lweno<sup>1</sup>, Neema Balige<sup>1</sup>, Omary Hassan<sup>1</sup>, Bakari Mwalimu<sup>1</sup>, Ali Hamad<sup>1</sup>, Ally Olotu<sup>1</sup>, Andreas Martensson<sup>4</sup>, Francis Machumi<sup>5</sup>, Said Jongu<sup>1</sup>, Billy Ngasala<sup>2,4</sup> and Salim Abdulla<sup>1</sup>**

<sup>1</sup>Bagamoyo Clinical Trial Facility, Ifakara Health Institute, Bagamoyo P.O. Box 74, Tanzania

<sup>2</sup>Department of Parasitology and Medical Entomology, Muhimbili University of Health and Allied Sciences, Dar es Salaam P.O. Box 65001, Tanzania

<sup>3</sup>Department of Traditional Medicine, National Institute for Medical Research, Dar es Salaam P.O. Box 9653, Tanzania

<sup>4</sup>Department of Women's and Children's Health, International Maternal and Child Health (IMCH), Uppsala University, S-751 85 Uppsala, Sweden

<sup>5</sup>Institute of Traditional Medicine, Muhimbili University of Health and Allied Sciences, Dar es Salaam P.O. Box 65001, Tanzania

## **Is a widely used herbal remedy, maytenus senegalensis, safe for malaria treatment? Study finds promising results**

This presentation will discuss the results of a study aimed at evaluating the safety and tolerability of *M. senegalensis*, a medicinal plant widely used in traditional African medicine for treating infectious and inflammatory diseases. The study design was an open-label, single-arm; dose-escalation that enrolled twelve healthy Tanzanian males aged 18 to 45 years, divided into four study dose groups. Volunteers were administered *M. senegalensis* in various doses (G1: 400mg once, G2: 600mg, G3& G4: 800mg 8 hourly for four days), and their safety and tolerability were monitored through various medical evaluations on days 0 to 7, 14, and 56 post-administrations. The results showed that there were no deaths or serious adverse events in any of the study groups, and no adverse events that led to premature discontinuation. Although there were significant mean changes observed in laboratory parameters, such as WBC, Neutrophils, Lymphocytes, Eosinophils, Alanine aminotransferase, Creatinine, and Total bilirubin, these changes were not associated with any signs of toxicity or clinical symptoms. Furthermore, the study concluded that *M. senegalensis* was safe and tolerable when administered at a dose of 800mg 8 hourly for four days. The presentation will cover the background of the study, including the use of *M. senegalensis* in traditional African medicine and the need to establish its safety and tolerability through scientific evidence. The study design, methodology, and results will be discussed in detail, including the safety evaluations conducted and the laboratory parameters measured. Additionally, the presentation will highlight the significance of the study's findings and the potential for adapting the study design to evaluate other herbal remedies. The audience will learn about the safety and tolerability of *M. senegalensis*, which has been traditionally used in African medicine for centuries. The presentation will provide scientific evidence of the safety and tolerability of the herbal remedy, which can inform the development of new treatments for infectious and inflammatory diseases. Additionally, the study design can be adapted to evaluate the safety of other herbal remedies. This research can benefit researchers, clinicians, and policymakers who are interested in exploring the safety and efficacy of herbal remedies for treating various diseases. The study's findings can inform the development of new treatments for infectious and inflammatory diseases, and the study design can be used to evaluate the safety and tolerability of other herbal remedies. Overall, the presentation provides valuable insights into the safety and tolerability of *M. senegalensis* and its potential for use in modern medicine.



**Audience Take Away Notes**

- The safety and tolerability of *M. Senegalensis* as a medicinal plant for the treatment of infectious and inflammatory diseases in Africa
- The study design and methodology for evaluating the safety and tolerability of herbal remedies
- The laboratory parameters used to assess the safety and tolerability of herbal remedies
- Evaluate the safety and tolerability of other herbal remedies for treating infectious and inflammatory diseases
- Improve the quality and efficacy of traditional medicine by incorporating scientific evidence into their practice
- Develop new research on the safety and efficacy of other medicinal plants

**Biography**

Kamaka Kassimu is a highly motivated research scientist employed by the Ifakara Health Institute. He has been working at the Bagamoyo Clinical Trials Facility for the last 10 years, and has an international track record of success. He is skilled in applying clinical research regulatory requirements in the evaluation of investigational products in clinical research, including herbal products. Currently, Kamaka Kassimu is a PhD candidate in Research and Publications in the Department of Parasitology at the School of Public Health, Muhimbili University of Health and Allied Sciences in Dar es Salaam, Tanzania. He has published more than 18 research articles in scientific journals.



### Abbas Abel Anzaku<sup>1\*</sup>, Ernest Bassey Asikong<sup>2</sup>, Vince Chukwu<sup>3</sup>

<sup>1</sup>Department of Clinical Laboratory Services, the Institute of Human Virology, Nigeria

<sup>2</sup>Department of Microbiology, University of Calabar

<sup>3</sup>Department of Microbiology, Federal University Lafia

## Antimicrobial activity of lauric acid on selected bacterial isolates of clinical importance

**Background:** Coconut oil continued to play a key role in traditional medicine from ancient times. This oil contains antimicrobial properties including lauric acid (C12), medium chain triglycerides that improve human health including enhanced digestion. In this study, we investigated the in vitro antimicrobial activity of lauric acid on bacterial isolates of clinical importance.

**Methods:** After ethics approval, clinical isolates were obtained from the Dalhatu Araf Specialist Hospital (DASH), Lafia, and Nasarawa State, Nigeria. Media preparation and biochemical examination of the isolates were performed according to standard methods. Coconut was processed into milk and was subsequently heated in a water bath in the presence of sodium hydroxide (10M solutions of NaOH) to esterified lauric acid. The oil was subsequently subjected to -35 oC for lauric acid esterification. Bacterial isolates *S. aureus*, *Salmonella* species, *Lactobacillus* species and *E. coli* accordingly. The antimicrobial sensitivity test (AST) was performed according to Bauer-Kirby disc diffusion. Zones of inhibition were measured in diameter. Extracted lauric acid was subjected to a sterility test by incubating overnight at 37°C.

**Results:** Lauric acid demonstrated the highest zones of inhibition on *Staphylococcus aureus* 15 mm ± 1.414 mm and *Streptococcus* species 15 mm ± 0.000 mm at the highest dilution factor of 1:10 followed by *Escherichia coli* having a diameter of 14 mm ± 1.414 mm and the lowest inhibition on *Salmonella* species with a diameter 10 mm ± 0.000 mm equal dilution concentration.

**Conclusion:** In this study, lauric acid demonstrated antimicrobial sensitivity against all tested clinical isolates. This study recommends further study of this acid on other pathogenic organisms including the non-cellular strains viral should be considered.

### Audience Take Away Notes

- Audience will be able to understand the extraction method of coconut oil and lauric acid esterification
- Understand the antimicrobial properties of lauric acid on bacterial strains
- This research will help researchers to go into research in traditional medicines to cure emerging and re-emerging infections
- This study on coconut oil can guide drug design using lauric acid
- Benefits from the study will help inform funders on prioritizing phyto medicine research

### Biography

Abbas Abel A, is a Program Officer with the Institute of Human Virology Nigeria (IHVN), working with Prof. Alash'le Abimiku research group. Experienced in molecular techniques and immuno-assays. He is currently pursuing his post-graduate program in Medical Microbiology. Abbas supports health system strengthening and implementation in Nigeria, including the development of National guidelines for the implementation of bi-directional testing of HIV, TB, and Malaria and other Acute Afebrile Illness (AFI) with COVID-19. He is a Fellow of the H3Africa Consortium. He has published 30 articles in peer-reviewed journals including phyto-medicine. He reviews for *Virology Journal* and *Pan-Africa Medical Journals*.



22-23<sup>MAY</sup>

DAY 02

VIRTUAL ROOM 02  
POSTERS



5<sup>TH</sup> EDITION OF INTERNATIONAL CONFERENCE ON

TRADITIONAL MEDICINE,  
ETHNOMEDICINE AND  
NATURAL THERAPIES



**Gengbiao Zhang<sup>1</sup>, Hongyi Zheng<sup>1</sup>, Jiayan Zhuang<sup>1</sup>, Bixia Wu<sup>1</sup>,  
Xuewen Wang<sup>1</sup>, Jinghua Wu<sup>2</sup>, Wenbin Zheng<sup>1\*</sup>**

<sup>1</sup>Department of Radiology, The Second Affiliated Hospital, Shantou University Medical College, Shantou, Guangdong, China

<sup>2</sup>Beijing Jinrou Traditional Chinese Medicine Research Institute, Beijing, China

## TCM meridian sinew therapy reshapes structural brain networks in patients with neurological dysfunction

**Introduction:** Meridian sinew treatment provides positive therapeutic benefits for neurological dysfunctional disorders, which may be due to the promotion of structural brain network remodelling. The aim of this research was to use a graph-theoretic approach to examine the topology of structural brain networks in patients with neurological dysfunction before and after meridian sinew therapy, to look into the remodelling effect of meridian sinew therapy on structural networks.

**Methods:** A total of 18 patients with neurological dysfunction were selected for the study and divided into two subgroups based on their symptoms - cognitive impairment subgroup (Group A, N=10) and motor impairment subgroup (Group B, N=8). Additionally, 16 healthy volunteers were recruited as the control group. The patients received treatment with Traditional Chinese Medicine (TCM) meridian sinew therapy, and cranial MRI thin-section T1 and diffusion tensor image (DTI) sequences were taken before and 1-3 months after treatment in groups A and B. Baseline data was collected only once for the control group. Using PANDA software, structural brain network matrices were constructed for the patients before and after treatment, and the corresponding networks' topological properties were calculated and compared using GRETAN software and graph theory methods.

**Results:** Most individuals improved their symptoms after treatment. The case group's small-worldness before treatment was lower than the control group's ( $p=0.010$ ), and increased after treatment compared to before treatment ( $p=0.006$ ), with no significant difference compared to the control group. This implies that individuals with neurological dysfunction have defective structural network operating patterns, which are repaired by meridian sinew therapy. Compared to before treatment, the global efficiency of group A decreased ( $p=0.021$ ), and that of group B increased ( $p=0.036$ ) after treatment, with no significant difference compared to the control group. This indicates that meridian sinew therapy can be specifically reshaped based on the type of network damage, and the final network topology of patients will tend to converge with that of healthy individuals.

**Conclusion:** TCM meridian sinew treatment can remodel the structural brain network of individuals with neurological dysfunction, optimizing the network's information processing patterns and thereby alleviating clinical symptoms. This remodelling effect might explain meridian therapy's long-term efficacy.

**Disclosure:** This study was funded by the Joint Research Fund for Enterprise and basic and applied basic research Programs of Guangdong Province of China (NO. 2021A1515 220112) and the Special Funds of Department of Science and Technology of Guangdong Province (NO. 2020ST102).

### Audience Take Away Notes

- TCM meridian sinew therapy can reshape and even optimize the processing mode of the structural brain network

- Functional magnetic resonance imaging coupled with graph theoretical approaches can be used to investigate the processes of traditional medicine's effect on brain networks
- Functional magnetic resonance brain network research can bring new perspectives to the mechanisms of brain influence in traditional medicine

### **Biography**

Wenbin Zheng is the Vice Chair and a Chief Physician at the Department of Medical Imaging in the Second Affiliated Hospital of Shantou University Medical College. She specializes in magnetic resonance imaging, specifically in neuroradiology. Her research interests include magnetic resonance pH imaging using chemical exchange saturation transfer (CEST), brain metabolite mapping through magnetic resonance spectroscopy, brain network connections through fMRI, and early non-invasive detection and characterization of neurodysplasia, neurodegenerative disorders, toxic encephalopathy, and cerebral trauma.



**Chipiti, T.<sup>1\*</sup>, Enslin, G.M.<sup>1</sup>, Viljoen, A.M.<sup>1,2</sup>, Crawford, A.<sup>3</sup>, Maldonado, M.L.C.<sup>3</sup>, Sandasi, M.<sup>1</sup>, Chen, W.<sup>1</sup>, Veale, CGL<sup>4</sup>**

<sup>1</sup>Department of Pharmaceutical Sciences, Tshwane University of Technology, Pretoria

<sup>2</sup>SAMRC Herbal Drugs Research Unit, Tshwane University of Technology, Pretoria

<sup>3</sup>Luxembourg Centre for Systems Biomedicine (LCSB) Universite du Luxembourg, Esch-sur-Alzette, Luxembourg

<sup>4</sup>School of Chemistry and Physics, Pietermaritzburg Campus, University of KwaZulu-Natal, Scottsville, South Africa

## Screening of African medicinal plants for antiepileptic activity using an *in vivo* zebrafish model

A wide range of African plants ( $n = 20$ ), used traditionally for the treatment and management of epilepsy, were selected and subjected to biological assays to assess their effectiveness in combating pentylenetetrazole (PTZ)-induced seizures in six days post fertilisation (DPF) zebrafish larvae. Ground plant material was extracted using solvents of varying polarity, six DPF larvae were incubated with the crude extracts for 18 hrs. To determine the maximum tolerated concentration (MTC) for each plant extract. Of the 120 crude extracts tested, MTC values for 70 crude extracts were determined; the remaining 50 crude extracts were found to be highly toxic in the concentration range tested (10 -1000  $\mu\text{g}/\text{mL}$ ). For the bioactivity assay 70 crude extracts were tested for their effectiveness in reducing convulsions in PTZ-induced seizures in zebrafish larvae. Six crude extracts from *Rauvolfia caffra* Sond, *Rauvolfia vomitoria* Afzel, *Withania somnifera* (L.) Dunal, *Annona senegalensis* Pers. and *Costus afer* Ker. Gawl. were found to be active and marked as potential hits for further study. *Rauvolfia caffra* Sond. And *Withania somnifera* (L.) Dunal. Extracts were found to be highly bioactive and were selected for further studies. Extracts of these two plants were fractionated to give 44 fractions, which were assayed for potential antiepileptic activity using the PTZ assay. Five fractions from *Rauvolfia caffra* Sond. Reduced the locomotor activity of the larvae significantly, indicating their potential effectiveness as antiepileptic agents. From these five fractions, three compounds were isolated using preparative-HPLC. NMR structural elucidation of two of these compounds were identified firstly the known pleiocarpamine (1), as well as a previously unreported compound, to which we assigned the trivial name Rauverine H (2). Pleiocarpamine showed significant activity in reducing PTZ-induced seizures in zebrafish larvae at  $P < 0.05$ . The results of this study provide preliminary evidence to support the traditional use of *Rauvolfia caffra* Sound, in the treatment and management of epilepsy.

### Biography

In 2021, Dr. Talent Chipiti was awarded a doctorate by Tshwane University of Technology in South Africa. As a postdoctoral fellow, he continued his research at the same university in Prof. Alvaro Viljoen's Phytomedicine research group. His research focuses on plant-based bioactive compounds that can be used to treat and manage CNS-related disorders with few or no side effects. He is an expert in the use of the zebrafish model in phytochemical toxicity and bioactivity testing. Several of his master's and doctoral research articles have been published in peer-reviewed journals.

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[traditional-med@magnusconference.com](mailto:traditional-med@magnusconference.com)