



5<sup>th</sup> International Meeting on

### **COMPLEMENTARY AND ALTERNATIVE MEDICINE & THERAPIES**

September 18-19, 2017 Charlotte, USA

**Posters** 



September 18-19, 2017 Charlotte, USA

Study of different TCM syndromes in the same disease and same TCM syndrome for different diseases in post-operative liver and colorectal cancer underlying the multiplex biometric immunoassay technology

Shi-Bing Su, Jian Chen, Xiao-Yan Li, Fei-Fei Cai, Xue-Qing Hu and Yi-Yu Lu Shanghai University of Traditional Chinese Medicine, China

**Aim & Method:** To study the significant expression of cytokines of different traditional Chinese medicine (TCM) syndromes in the same disease and same TCM Syndrome for different diseases in postoperative liver (PLC) and colorectal cancer (PCC).

**Methods:** Plasma samples of patients with PLC and PCC were collected. The different expression profiles of 45 cytokines were detected by multiplex biometric immunoassay. TGF-β1 and significant expressed cytokines were verified with ELISA. ROC curve for TCM syndromes diagnosis and biological pathways were analyzed.

**Results:** There were different expression profiles of cytokines in postoperative liver and colorectal cancer with different TCM syndromes. Six cytokines including IP-10, RANTES, MIP-1β, IL-18, IL-1RA and IFN-γ were found significantly expressed in PLC patients with different TCM syndromes (P<0.05), and five cytokines including RANTES, BDNF, PDGF-BB, IL-9 and FGF-2 were found significantly expressed in PCC patients with different TCM syndromes(P<0.05). Compared with absence of symptoms, RANTES in the liver and kidney Yin deficiency syndrome (LKDYDS) and TGF-β1 in the spleen deficiency syndrome (SDS) were expressed approximately (P>0.05), while no common cytokines were found in both PLC and PCC with the Damp-heat syndrome (DHS). ROC analysis used IP-10, RANTES, MIP-1β, BDNF, BDGF-BB, TGF-β1 combination shows that AUC was 0.837 in LKDYDS, 0.871 in SDS and 0.833 in DHS and 0.936 in NS, respectively. Biological pathway analysis shows that Cytokine-cytokine receptor interaction pathway, Cytosolic DNA-sensing pathway, Influenza A pathway and Toll-like receptor signaling pathway were related to PLC with LKDYDS, SDS, DHS and NS, and MAPK signaling pathway, Cytokine-cytokine receptor interaction pathway and Melanoma pathway were related to PCC with LKDYDS, SDS, DHS and NS.

**Conclusion:** There were specific cytokines in LKDYDS, SDS and DHS, and the alternations of the cytokines may involve in the formation of the TCM syndromes in PLC and PCC.

#### **Biography**

Shi-Bing Su, Medicine Doctor (PhD in medicine), is a Professor of Integrative Medicine and Traditional Chinese Medicine (TCM), Director of the center for complex systems, Shanghai University of TCM, leading scientist of TCM System Science Discipline, Distinguished Researcher of Shanghai TCM Internal Medicine E-institute, Visiting Professor of Nanjing University of TCM, Guest Professor of Henan college of TCM, Academic Journal editor for Integrative Medicine International, Journal of Integrative Medicine, Journal of TCM Science, etc. He got his B Sc in TCM at Nanjing University of TCM, M Sc in Pharmacy and Medicine Doctor degree in Gastroenterology at Cancer Institute, Kanazawa University, and Docent at China Pharmaceutical University. Currently his research focus on TCM syndrome classification-based treatment in clinical and basic studies applied by system biology. He has published 160 papers and 10 books in academic Journals.

**Notes:** 





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### **COMPLEMENTARY AND ALTERNATIVE MEDICINE & THERAPIES**

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**Accepted Abstracts** 



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### Comparison of anxiolytic effects of the homeopathic complex vita-C 15 in comparison with *Aconitum napellus* in the acutely stressed C57BL6 mice

**Charis Liew Siaw** 

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nxiety, phobias and stress are the main mental health problems among the Malaysian population, with global prevalence varying from 8% to 18%. Even so, less than 30% who suffer these disturbances seek treatment. The objective of this study is to evaluate and compare the anxiolytic effects of Aconitum napellus and Homeopathic complex Vita-C 15 in the acutely stressed C57BL6 mice by using the fecal corticoid test, open field test (OFT) and c-fos, NMDAR 2B, NPY 1R and NPY 2R activity through the hippocampus. A double blinded randomized controlled study is conducted at Animal Laboratory of Cyberjaya University College of Medical Sciences (CUCMS). All the animals are acclimatized to constant laboratory conditions for 14 days before starting the experiments. Prior to the experiment, a pilot study is performed to identify the most suitable and ideal potency for the homeopathic remedy of Aconitum napellus. The animals are tested (n=3) per group on the potency of 6 C, 30 C and 200 C. The treatments are carried out over 9 days. 48 male C57BL6 mice (n=6), 4-5 weeks of age are used. They are randomly selected and divided into two groups. Group I is the healthy control group of mice which are not exposed to acute stress. Group II (stress group); comprise of mice expose to acute restraint stress. Prior to restraint stress, the treatments given are Aconitum napellus 30 cH, Homeopathic complex Vita-C 15, Diazepam, and placebo. Then the results are evaluated by fecal CORT test and open field test by comparing the anxiolytics between pre-test and post-test. Aconitum napellus 30 cH and Homeopathic complex Vita-C 15 are expected to be more effective and can reduce the occurrence of anxiety in the acutely stressed C57BL6 mice. Thus research into prevention and supportive therapies is necessary and beneficial for this disorder.

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September 18-19, 2017 Charlotte, USA

#### Fibromyalgia and chronic fatigue syndrome

Tamar Ference

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Treating fibromyalgia and chronic fatigue syndrome with complementary medicine in an integrative approach is extremely important. During this workshop, I will explain my theory for the pathogenesis of Fibromyalgia and Chronic Fatigue Syndrome. I will then present an integrative holistic approach to the treatment of these complex conditions using natural means. I will also speak about the multiple symptoms associated with these conditions and the use of complementary Medicine to treat pain, fatigue and insomnia. It is imperative that Medical care specialists use complementary medicine in an integrative approach to supplement the use of medications for fibromyalgia and chronic fatigue syndrome.

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September 18-19, 2017 Charlotte, USA

#### Central meditation imagery therapy to decrease dementia caregiver distress

Christina Arostegui Viterbo University, USA

Currently there are over 15 million family members and friends who provide unpaid care to persons with dementia. Dementia caregivers experience disproportionately greater morbidity, mortality, heath care costs, anxiety, and depression. According to the literature, dementia caregivers may benefit from a meditation intervention to reduce stress, to promote self-awareness and problem solving skills, and to manage judgmental attitudes and negative emotions. Central Meditation Imagery Therapy (CMIT) has been shown to reduce depression, insomnia, anxiety, and improve mindfulness in dementia caregivers (Jain, 2014).

**Purpose:** The purpose of this project was to reduce caregiver distress through the delivery of a low-cost, evidence-based intervention designed for community-dwelling dementia caregivers.

**Design:** An evidence-based, in-person, guided imagery, and meditation intervention, informed by Younger's theory of mastery (1991), was provided to six dementia caregivers who participated in weekly 90-minute sessions held over the course of four weeks. Participants were asked to practice at least four times per week and to journal about feelings and thoughts related to their meditative practice. Scores from anxiety, insomnia, mindfulness, and quality of life psychometric instruments were collected from participants pre-and post-intervention. Quotes from participant's journals were evaluated for themes.

**Results:** A reduction in anxiety, insomnia, and an improvement in quality-of-life measures and mindfulness was reported post-intervention. Themes that emerged from participant's journals were indicative of conscious breathing, greater relaxation, improved sleep, and heightened compassion and self-awareness. Participants reported qualitative shifts in their ability to problem solve and improved relationships with the person with dementia.

Clinical Implications: CMIT is an effective, low-cost intervention that is less complex than multidimensional interventions and can be implemented in either a group or home setting. Other caregiver populations such as parents of special need children, caregivers of person with disabilities, or even professional caregivers may also benefit from the intervention.

**Conclusions:** A reduction in anxiety, insomnia, and an improvement in quality-of-life measures and mindfulness were noted in the wellness and health promotion program. Themes that emerged from participant's journals were indicative of more conscious breathing, greater relaxation, improved sleep, heightened compassion, and self-awareness. Participants reported qualitative shifts in their ability to problem solve and improve relationship with the person with dementia.

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September 18-19, 2017 Charlotte, USA

### Chronic back and leg pain: An evidence-based review of the common causes of chronic back and leg pain as demonstrated on imaging

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In this day and age, it's becoming more and more common for the patient to bring a disk(s) of their latest Limaging findings to the consultation and then expect the primary health care provider to interpret these images on the spot and then explain the findings in layman's terms. And because of the litigious nature of our society, radiologist no longer willingly provides their interpretations of these imaging. Therefore, oftentimes you're on your own. Would you be able to load up their disk in Onis 2.5 and show the patient the different potential pain generators on their imaging, and then make a working diagnosis based on these images and your examination findings? This important information is currently being taught in a very popular upper quarter class by Dr. Gillard, who, in addition to his teaching duties, has a unique consultation service where he speaks with patients from all over the world regarding their chronic pain situation and offers an diagnosis based on the history, medical record review, and their image findings, which he goes over with the patient via GoToMeeting. He has accumulated a large collection of imaging over the last 15 years which he uses for his presentations, with permission. Besides demonstrating simple cases which involve, for example, degenerative spondylolisthesis and disc extrusion, he would also review some not-so-simple cases which are becoming more and more common these days. For example, are you familiar with rhBMP-2 and its controversy in spine surgery? The doctor will present a recent case where severe heterotopic bone grew from the fusion site and completely obliterated the lateral recess and most of the neuroforamen resulting in severe nerve root compression and subsequent radicular pain.

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September 18-19, 2017 Charlotte, USA

### Effect of the complementary spiritist therapy for pain, muscle tension, well-being, and negative affect in HIV/AIDS inpatients: A randomized controlled trial

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The aim of this study was to evaluate pain, perception of muscle tension and well-being and negative affect in HIV/AIDS inpatients submitted to complementary Spiritist Therapy compared to conventional treatment. Randomized controlled trial, patients were randomly allocated into group Intervention: Three days complementary spiritist therapy sessions (prayer, spiritist passe, fluidic water or magnetized water and spirit education), during 10 minutes, (n=21) associated with conventional treatment, and control: conventional treatment, (n = 23). Pain, muscle tension and well-being were assessed by analogue scales and scale well-being subjective in the field negative affect. Categorical variables were analyzed using the Chi-square test or Fisher's exact. Repeated measure data were analyzed by the Wilcoxon test and Analysis of Variance (ANOVA) Friedman. Differences were considered to be statistically significant when p<0.05. The sample consisted of 44 patient's age between 24 and 78 years. The sociodemographic characteristics of the patients were similar in the study groups. There was a significant reduction of intensity pain (p=0.023), perception of muscle tension (p=0.014) and negative affect (p=0.045) in the group exposed to Complementary Spiritist Therapy compared to conventional treatment. Conclusions: It is inferred in this study that 3 days of complementary Spiritist therapy may reduce intensity pain, muscle tension and negative affect compared to conventional treatment.

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September 18-19, 2017 Charlotte, USA

### Effect of homeopathic complex Homeopatila 100® on performance, production and hatching of zebrafish eggs

Lauro Vargas

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This research verifies the influence of the homeopathic complex Homeopatila 100® on productive and reproductive parameters of zebrafish (Danio rerio). The composition of the homeopathic complex Homeopatila 100® for 1.000mL was: 250mL of *Iodum* 12cH, 250mL of Sulphur 30cH, 250mL of *Natrum muriaticum* 200 cH, 250mL of *Streptococcinum* 30 cH and q.s.p. medium (ethyl alcohol 30° GL). Six females and six males were distributed in each of 16 aquaria of 25 L, totalizing 48 fish per treatment and 192 in the experiment. The control treatment as well as three concentrations of the homeopathic complex Homeopatila 100® were administered as follows: T1 (control), 20 mL hydroalcoholic solution (alcohol 30° GL); T2, 20 mL; T3, 40mL; and T4, 60mL of Homeopatila 100® per kg of meal, with four repetitions for each treatment. The hepatosomatic (HSI) and gonadosomatic (GSI) indices of eight females and eight males were calculated in each treatment. Reproductions of six couples of each treatment were established to evaluate the number of eggs per female and hatch rate. The data was submitted to analysis of variance and Tukey test for comparison of means (p < 0,1). The weight of the animals did not differ statistically between the treatments. The animals fed the control diet had lower GSI for males and lower larvae hatch rate (57.1%). Lower HSI of females fed a diet containing 20mL of Homeopatila 100® compared to control was observed. The hatching rate was higher for T2 and T4 animals, being above 75.0%.

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September 18-19, 2017 Charlotte, USA

#### Antihypertensive activity of flowering twigs of Calotropis procera (Ait.)

**Niaz Ali, Wahib Ullah** and **Salman Khan** Khyber Medical University, Pakistan

**Background:** Young flowering twigs of *Calotropis procera* are used in treatment of hypertension in the local tribes of Kohat regions, Pakistan. The current work is an attempt to document scientific rationale for the traditional anti-hypertensive use of flowering twigs of *Calotropis procera*.

**Methods:** Acute toxicity study of crude methanol extract of *Calotropis procera* was performed using mice model. The crude methanol extract and its fractions were screened for possible antihypertensive activity in experimentally induced HTN in rats. Rabbits' aortic strips were tested in presence and absence of I  $\mu$ M of norepinephrine. The tests samples were also screened on the KCl (80mM) - induced contractions and a tension of 1 g in intact tissues. The same series of experiments were carried out in denuded aortic strips to find out mechanisms. Phytochemical screenings were also performed.

**Results:** Phytochemical screenings suggested for the presence of saponins abundantly. *Calotropis procera* produced significant fall in hypertension ( $P \le 0.05$ ). The Aortic stripes were relaxed by the test samples both on NE induced contractions and KCl induced contractions. However, denuded tissues were not relaxed suggesting the involvement of NO releasing mechanism. The 1  $\mu$ M NE induced contractions were relaxed that suggests for the involvement of receptors operated channels. Relaxing effect on the KCL induced contraction also suggest the inhibition of voltage gated calcium channels ( $P \le 0.05$ ).

**Conclusion:** Flowering twigs of *Calotropis procera* have antihypertensive activity which is mainly due to saponins.

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September 18-19, 2017 Charlotte, USA

#### The prevalence and perceived efficacy of medicinal plants used for stomach ailments in the Amathole district municipality, Eastern Cape, South Africa

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The high rate of immuno-compromised individuals in South Africa has been associated to the increase of different kinds of stomach related infectious diseases such as persistent diarrhoea, gastroenteritis and candidemia. An estimated 70-80% of black people in South Africa consult with traditional healers before consulting with formal health care services. The aim of this study was therefore to evaluate the prevalence and perceived efficacy of medicinal plants used in the management of stomach ailments in the Eastern Cape, South Africa. The study was carried out by interviewing 101 local inhabitants in 4 locations of the Amathole District of the Eastern Cape. A total of 101 informants with a mean age of 33.56 participated in the study, comprising 53 (52%) males and 48 (48%) females. Twenty three plant species distributed in 15 families and 19 genera were cited for the treatment of one or more stomach disorders. The most representative family was Xanthorrhoeaceae (3 species) while Apiaceae, Apocynaceae, Euphorbiaceae, Fabaceae and Lamiaceae were represented by 2 species each. The species with the highest use-values (UV) were Aloe tenuior (UV=12), Strychnos henningsii (UV=11), Sonchus asper (UV=10), Ricinus communis (UV=12), Hypoxis argentea (UV=10), while Acacia mearnsii, Acokanthera oppositifolia and Zingiber officinale each had a use-value of 9. Herbs constituted 44%, trees 13% and shrubs 43%. The leaves (57%) were the most frequently used plant part for the treatment of the stomach diseases, followed by the bark and root (10%) each. Seven methods of preparations were mentioned, among which infusion (34%) was the most frequently mentioned, followed by decoction (23%) and juice (16%). Administration of the different plant parts was mainly oral (100%).

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September 18-19, 2017 Charlotte, USA

#### The effects of tactile touch (TT) on chronic pain in Parkinson's disease

Örjan Skogar

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**B** ackground: During 2006 to 2011 data were collected in a clinical study concerning the effects of Tactile Touch in patients with Parkinson's Disease (PD). The systematic study was preceded by Patients reports of own experiences of pain relief during and after the sessions of this form of superficial whole body massage. Pain is one of the most bothersome non motor sympyoms (NMS) of PD, well described as much more common than in a general population. Pain can be interpreted as a form of chronic stress of the body. Cortisol is a well established surrogate marker for stress. Cortisol is immediately secreted to saliva and the measure of salivary cortisol concentration was a validated fast reactive surrogate marker for stress relief. The normal diurnal fluctuations of cortisol concentrations are of great importance for interpretation of the results from interventions with impact on stress levels. A systematic study was performed at three different sites in Southern Sweden. All massage therapists were trained by the same teacher the systematic method was described in detailed written instructions to ensure that the intervention group received equivalent treatment. Each session was of similar duration and with the same external circumstances concerning room temperature, quiet soft music instructions. The massage oils were from the same manufacturer. A control group of patients with Parkinson's Disease and chronic Parkinson related pains were assigned via a lottery system performed by a non-participating and neutral person. These patients received" rest to music" but no tactile touch. Accurate validated scales were used before and after the study. Interventions were performed ten times after randomization during eight weeks, followed by a 26 weeks long follow up period. The results of this study showed significantly decreased salivary cortisol concentrations after intervention with TT and to a lesser extent after RTM but no significant differences between groups. The quality of sleep, improved significantly within the TT group in the beginning of the study. Health Related Quality of Life (HRQoL), compared to a Swedish healthy reference population (SF-36, Swever.) improved in both groups. Only in the treatment group but normal values compared to a healthy Swedish population aged by age and gender were only shown in the short time follow up in the TT group.

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September 18-19, 2017 Charlotte, USA

### Herbal drug discovery from grassroots innovations and traditional knowledge: An inimitable journey of national innovation foundation India

Pawan Kumar Singh and Vipin Kumar National Innovation Foundation, India

raditional herbal medications had become integral part of different human societies across the globe, since time immemorial. Recently, World Health Organization (WHO) estimated that globally more than 80% population uses herbal indigenous medications to cater their basic healthcare necessities. National Innovation Foundation (NIF) India, established in year 2000 scouts, documents, validates and adds value to the grassroots innovations (GRI) and traditional knowledge (tk), NIF, with the help of the Honey Bee Network (HBN) and other partners, has created a National register which presently comprises more than 275,000 ideas, innovations and tk from over 585 districts of the country. Interestingly, about 40% of this unique database contains herbal human health, veterinary and agriculture practices. Since more than a decade, NIF is actively involved in translating GRIs and tk into effective and safe solutions, through land-to-lab-to-land approach. NIF closely works with premier public and private research institutions including Indian Council of Medical Research (ICMR), Council of Scientific and Industrial Research (CSIR), top medical institutions and Contract Research Organizations (CROs) across the country with an aim to translate the herbal leads into alternative solutions for preventive and curative health care. NIF shortlists only those unique lead for validation, value addition and product development which contain non-codified plants that are not mentioned in any codified classical or modern literature. The drug discovery pathway followed at NIF includes in depth analysis and understanding of the unique practices through interactive discussions with the grassroots healers and its translation into formal scientific language, identification of plants and diseases and selection of appropriate standard experimental models (in vitro, in vivo) for validation to establish the proof of concept. Most of the pre-clinical scientific validation studies strongly support the claims of the herbal healers, evident by the positive outcomes in terms of efficacy and safety. The funneled potential leads are further put into the pipeline of clinical trial phases, following stringent adherence with the regulatory guidelines. Most of these herbal practices are already being used by the knowledge holders as preventive and curative solution for various health issues. These herbal leads are the low hanging fruits which can be converted into evidence based novel medications if precise drug discovery mechanisms are followed. The present model can be adapted for the herbal drug development in different parts of traditionally rich countries, across the globe.

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September 18-19, 2017 Charlotte, USA

#### Psychophysiology of Yoga and its' application in therapy

Raghavendra Bhat

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raditionally, Yoga has eight classical techniques called astanga yoga. Three of these eight techniques A are widely practiced world over, they are: Yoga postures [asanas], voluntarily regulated yoga breathing [pranayama] and meditation [dhyana]. This presentation gives an overview of psycho-physiological studies on yoga postures, regulated breathing and meditation. Yoga (postures) practice has shown to increase brain GABA levels suggesting application of yoga in treating anxiety and depression. Yoga breathing is a collection of specific breathing patterns. Breathing through left and right nostrils has distinct physiological effects. Breathing through right nostril [surya anauloma-viloma] has shown to be physiologically arousing with increased oxygen consumption, heart rate, respiratory rate and an increased in the low frequency component of heart rate variability analysis. Whereas breathing through left nostril [Chandra anulom-viloma] is physiologically relaxing which is evident through decreased heart rate, respiratory rate, increased galvanic skin resistance and decrease in oxygen consumption. Interestingly, breathing through alternate nostrils [anuloma-viloma] had a balancing effect. All forms of meditation induce relaxation responses. Our studies on meditation have shown increased alertness and reduced arousal (sympathetic activity) following meditation. This is in line with traditional understanding of meditation as a state of 'alertful rest'. Further, concept of health and disease in modern medicine and Yoga texts will be presented. According to yoga, man is in perfect health and homeostasis in his normal state. All diseases are classified as (a) stress-related (adhija) and (b) not stress related, e.g., injuries (anadhija). Yoga has been considered especially useful in the management of stress related disorders.

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September 18-19, 2017 Charlotte, USA

#### A2 milk may hold secrets of contrast medicine for immune booster

Rahul Hajare<sup>1,2</sup> and Ramesh Paranjape<sup>2</sup>
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ilk has fully accepted as an essential and extraordinary complementary importance. There are two types of milk. A1 milk which is produce by jersey and there is an Indian version desi cow which has hump on his back that cow is source of A2 milk. The hump in vedic cow has a specific vein called surva ketu nadi, which is absent in non-Vedic cows. This nadi (vein) absorbs all the energies and radiation from sun, moon, and all luminaries from universe and puts them in cow products like milk, urine, dung, ghee (clarified butter). Indian cow has unique surya ketu vein on interaction with solar rays produces gold salt in her blood. Desi Cow is the only divine living being that has a Surya Ketu Nadi (vein connected to sun) passing through her backbone. It has believed to that this nadi absorbs the medicinal essence from the sun. They possess dewlap (prominent specific fold of skin hanging below neck). This dewlap gives immunity power to cow and cow products. Each ingredient produces remarkable benefits to the health of all living beings and immunity booster. Surva ketu nadi vedic cow can be find in mi[;[;]k 6 types of vitamins, 8 types of protein, 25 types of minerals, 21 types of amino acids, 4 types of basic phosphorus, 2 types of glucose, cerebrosides, strontyne, MDGI, carotene with golden abstracts. Surketunadi of vedic cow regerent indian hump cow with sebam gland, so absorb the sun rays. So cow milk is yellow in colour. A2 milk of indian humped cows is more beneficial as it has micronutrients like cytokine and minerals which enhance the immune system A2 beta casein protein. Most of the Desi cows produce A2 milk while other cows give A1 give. This milk is considered nutritious, rich in alpha-2 casein proteins which is useful for healthy living and immune booster

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September 18-19, 2017 Charlotte, USA

#### Treating disc disease in dogs with acupuncture and herbal medicine

#### Ronald Koh

Louisianan State University School of Veterinary Medicine, USA

There is evidence that acupuncture may significantly improve the long-term neurologic recovery in spinal cord injured subjects. Neurophysiologic mechanisms for acupuncture's effects and its potential uses to treat intervertebral disc diseases (IVDD) will be discussed. Common TCM patterns, acupoint selections, acupuncture techniques, herbal recommendations, and important guidance for treating IVDD will also be discussed. Case examples will be presented.

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September 18-19, 2017 Charlotte, USA

#### **Epigenetics to nutragenetics**

Sally Schutz ophthalmic surgeon, USA

The effects of nutrition and nutrients on peak cellular energy and their effects on the mitochondria as well as the expression of genes is studied in this case. This is a refinement of epigenetics, the effect of the environment on the genetic expression. I go deeper into a subcategory of the environment, namely nutrition and nutrients as the ability of nutrients to improve genetic expression. This will include a review of the mitochondria, and their role in peak cellular energy. It will include a short description of the key features of metabolism. And how adequate nutrition by innovative and disruptive technology can up regulate metabolism allowing the body to do what it is genetically mandated to do. I will reference in particular a genetic predisposition to reward deficiency syndrome as described by Ken Blum, PhD which now can be unregulated with dramatic clinical results through the use of a game changer nutrigenomic.

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September 18-19, 2017 Charlotte, USA

#### Integrative remedial care of irritable bowel syndrome

Senthamil R Selvan

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Irritable Bowel Syndrome (IBS) is a functional gastrointestinal (GI) disorder that has both physical and mental causes. Albeit these causes, only limited studies that address the impact of Yoga on IBS patients. Therefore, there is a need for a systematic study to develop a practical and concise Yoga module that could be used to relieve the symptoms of IBS. We evaluated the outcome of a randomized controlled trial (RCT) and a follow-up maintenance intervention of a designed Remedial Yoga Module (RYM) in improving the severity of IBS. The RCT comprised Yoga, Combination, and Control groups of patients. Yoga and Combination groups received RYM practices for an hour, three times a week for 12 weeks, and Control group maintained their current life style. The Wait-list Control group from the 12-week RCT was offered the same RYM practices. All patients who completed the 12-week RYM intervention were offered an additional 12 weeks of once a week, one hour RYM intervention. Patient-reported outcomes were assessed. There were significant improvements in IBS-SSS and IBS-QOL scores in Yoga and Combination groups compared to Control group. Further, HADS, Autonomic Symptom Score, IBS-GAI, physical flexibility, and autonomic functions were significantly improved in the Yoga intervention groups. In correlation, the amount of medicine and supplement use was significantly reduced in these groups. Wait list-Yoga group reflected the improvements of IBS symptoms as observed in Yoga and Combination groups. Results of Follow-up Group revealed that all the significant improvements observed at Week 12 were sustained at Week 24. The study suggests that RYM is effective not only in relieving symptoms of IBS and also impacting overall wellbeing. The presentation will discuss in the context of Eastern and Modern understanding of IBS and how Yoga can be a viable stand-alone treatment or an integrative option with other modalities for IBS patients.

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September 18-19, 2017 Charlotte, USA

### Ginkgo biloba L extract enhances the anti-tumor effects of PDTC

Fanzhu Meng, Shuhan Xiong and Shuping Ren Jilin University School of Public Health, China

To explore whether combination of *Ginkgo biloba L* extract (EGB) and pyrrolidine dithiocarbamate (PDTC) will produce a better inhibition on the growth of H22 cells in the experiment animals. H22 was injected at the right thigh of the mice at the concentration of 1X106 cells/ mouse followed by random distribution of these mice into 4 groups, PBS, PDTC, EGB, EGB+PDTC. 24 h later, the mice were administered PBS, or PDTC, or EGB, or EGB+PDTC based on their group. The administration was conducted consecutively for 26 days when all the mice in PBS group developed palpated tumor. The tumor weight and volume, the levels of MDA and ROS in serum, the activities of SOD and GSH-Px in serum and the expression of NF-κB65 were compared among different groups. Compared with the mice treated with EGB, or PDTC, the mice treated with both EGB and PDTC showed significantly smaller tumor weight and volume, significantly longer of latency of tumor growth; significantly higher activities of SOD and GSH-Px, significantly lower level of MDA and ROS, significantly lower level expression of NF-κB. Combination of *Ginkgo biloba L* extract (EGB) and pyrrolidine dithiocarbamate (PDTC) can produce a better inhibition on the growth of H22 cells in the experiment animals.

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September 18-19, 2017 Charlotte, USA

#### Yogic breathing as potential adjunct therapeutic option in chronic illnesses

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Yogic breathing (also known as Pranayama) is an ancient practice of breathing regulation for physical and mental health. Although practiced for thousands of years, the biological mechanisms underlying Pranayama are only beginning to be understood. Deeper scientific insights into this ancient wisdom will enable the practitioners understand the underlying mechanistic principles. Towards this goal we conducted a clinical trial. We found that after 20 minutes of Yogic breathing when compared to quiet reading (attention control) there were significant alteration to salivary biomarkers related to the nervous system, tumor suppression, and inflammation. We further study the usefulness of yogic breathing among cancer patients and caregivers. This talk will cover data on how Yogic breathing could be useful in clinical settings, and how salivary biomarkers could be a valuable tool to assess Yoga outcome measures.

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September 18-19, 2017 Charlotte, USA

#### Concussion treatment using soft tissue techniques; a case report

Svlvia Burns

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**Background:** Concussion, its recognition diagnosis and treatment is a growing public health issue. Massage practitioner who specialize in rehabilitation deal with a variety of injury cases that involve concussion, including those incurred by falls, motor vehicle incidents and sports injuries.

**Purpose:** This case study presents a unique massage and manual therapy approach to concussion trauma treatment.

**Participant:** Male 23 year old intramural soccer player diagnosed with post-concussion symptoms resulting from a fall. Intervention: Assessment and treatment was done in two sessions of 45 minutes spaced 2 days apart. Massage and manual therapy techniques were applied to the injury areas.

**Results:** The balance error scoring system (BESS) and self-reports the outcome measures show diminished concussion symptoms and regained ease in range of motion in the cervical area.

**Conclusion:** Positive results indicate the importance of massage and manual therapy work to reduce symptoms of headache, dizziness and nausea in phases of concussion recovery and to return to person to normal function.

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September 18-19, 2017 Charlotte, USA

### Development of autoimmune disease, a comprehensive approach to stabilization and arresting future progression

Tom O'Bryan

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Autoimmune diseases are listed as the third leading cause of morbidity and mortality in the industrialized world. That means it's in our offices every day. The number of people diagnosed with an autoimmune disease is increasing exponentially in the world today. Estimates are that anywhere from three to seven out of every 10 new patients coming into your office are suffering with an autoimmune mechanism (whether it has progressed into an autoimmune pathology or not). The volume of information now of the underlying mechanisms that set the stage and contribute to the development of autoimmune disease is overwhelming. Without recognizing and addressing the underlying mechanisms triggering the presenting complaints, the Practitioner may be proverbially 'chasing the tail' of the pathology with temporary symptom relief.

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September 18-19, 2017 Charlotte, USA

#### Different hematopoiesis and response to 5-azacytidine treatment in Tp53 mutation mice

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 $T^{P53}$  R172H missense mutation and deletion are nightly occurred in patients. The most common adult myeloid malignancy. In order to study the role of TP53 mutation in a large material  $T^{P53}$  mutation including  $T^{P53}$  R172H missense **P53** R172H missense mutation and deletion are highly occurred in patients with myelodysplastic syndrome hematological system, we used four mouse models carrying Tp53 mutation including Tp53 R172H missense mutation (R172H/WT and R172H/R172H) and Tp53 deletion mice (Tp53+/- and Tp53-/-). We characterized the hematopoiesis and studied the blood chimerism after 5'-Azacytidine (AZA) treatment in these mouse models. Tp53 R172H missense mutation mice have a minor reduction in myeloid-erythroid progenitors (MEP) compared to wide type (WT) mice. Tp53+/- and Tp53-/- mice have a higher percentage of hematopoietic stem cells (HSC) and lineage-/Sca+/Kit+ bone marrow (BM) progenitor cells (KLS) compared to WT mice. Competitive BM repopulation transplant studies showed that stem cells from all four Tp53 mutation mouse models have a competitive advantage over WT competitor stem cells, with Tp53-/- stem cells having the largest advantage based on peripheral blood chimerism. BM cells from donor (CD45.2 Tp53 mutation mice) and competitor (CD45.1 WT mice) were mixed and competitive repopulation assays were performed followed by AZA treatment. The Tp53-/- mice have a competitive disadvantage after AZA treatment compared to PBS treatment, in which inhibition of T cell development and maturation mostly contributes to the phenotype observed. Our studies showed that Tp53 mutation affects hematopoiesis in mice. Inhibition of T cell development and maturation by AZA may be a mechanism for the effectiveness of AZA in treating MDS patients carrying Tp53 deletion.

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Pharmacokinetics of major bioactive compounds after oral administration of Majiepingchuan extracts and transdermal administration of Majiepingchuan cataplasm in beagles

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ajiePingchuan (MJPC) cataplasm, composed of ephedra, mustard, corydalis, bitter almond, and ginger Ljuice, is a new type of topical preparation in traditional Chinese medicine. Our previous study showed that MJPC cataplasm extractive could inhibit the degranulation of RBL-2H3 cells activated by compound C48/80 and treat asthma by enhancing the reactivity of Th1 cells and Tregs, limiting the reactivity of Th2 and Th17 cells, and regulating the balance of Th1/Th2 cells and Th17 cells/Tregs. To explore the differences between two types of administration, the pharmacokinetics of major bioactive compounds after the oral administration of Majiepingchuan extracts and transdermal administration of Majiepingchuan cataplasm were investigated in beagles. Established HPLC-MS/MS methods were applied for the pharmacokinetic study of Majiepingchuan cataplasm. The results showed that ephedrine and pseudoephedrine were able to cross the skin into the bloodstream, while amygdalin, tetrahydropalmatine, and sinapine thiocyanate could not. In addition, double peaks were observed for the first time in serum concentration-time profiles of ephedrine and pseudoephedrine after transdermal administration of Majiepingchuan cataplasm. The mean retention time of ephedrine and pseudoephedrine after transdermal administration were prolonged compared to that of oral delivery. Bioavailability studies showed that the area under the curve (AUClast) of ephedrine by Majiepingchuan cataplasm was 1.01 times higher than that by Majiepingchuan extracts, which indicated that Majiepingchuan cataplasm had higher bioavailability and long-term efficacy. In this study, we hypothesized the reasons for the failure of compounds to enter the bloodstream as well as the mechanism underlying the double-peak phenomenon of ephedrine and pseudoephedrine epimers following transdermal administration of Majiepingchuan cataplasm.

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