

# CUTTING EDGE RESEARCH IN HOMEOPATHY

6th HRI International Homeopathy Research Conference 20-22 June 2025







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## Welcome

We would like to extend a warm welcome to HRI Greece 2025, the Homeopathy Research Institute's 6<sup>th</sup> International Research Conference.

Over the first decade of HRI Conferences (HRI Barcelona 2013 to HRI London 2023), our events have consistently demonstrated to a wide audience that, contrary to some claims, high-quality evidence supporting the effectiveness of homeopathy does exist. In 2025, we are proud to once again showcase the best of global homeopathy research, as reflected in the experience of our keynote speakers and the breadth of studies featured across the scientific programme.

We are especially pleased to return to mainland Europe for this year's conference, gathering in the culturally rich city of Thessaloniki, to continue our tradition of international collaboration. This year's event holds special significance as it is held under the auspices of the Ministry of Health of Greece and the Athens Medical Association - the country's largest medical body with 25,000 members. We are honoured to welcome Dr George Patoulis, President of the Athens Medical Association, who will give an online address during the Opening Ceremony.

HRI Greece 2025 offers an unrivalled forum for idea-sharing and building global scientific partnerships. Continuing our theme of 'Cutting Edge Research in Homeopathy', the programme highlights the latest developments in clinical, fundamental, laboratory-based, pathogenetic and veterinary research.

We invite you to join us in making the most of this opportunity to share knowledge and strengthen our international community.

## **HRI Management Team**



Dr Alexander Tournier HRI Chairman BSc DIC MASt Cantab PhD LCHE RSHom

Honorle Tourie



Rachel Roberts HRI Chief Executive BSc(Hons) MCH FSHom FFHom(Hon)

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### HRI Greece 2025 - Key facts

- Over 130 abstracts submitted
- · 37 oral presentations and 29 poster presentations
- · 60 presenters from 17 countries
- Over 200 delegates from 25 countries

#### **Conference Organising Committee**

HRI Greece 2025 has been organised by the HRI Core Team, with additional input from the HRI Scientific Advisory Committee (see overleaf).

## About HRI

HRI is a UK-based charity dedicated to promoting high quality research in homeopathy at an international level. The charity was founded by physicist, Dr Alexander Tournier, who previously worked as an independent researcher for Cancer Research UK, conducting interdisciplinary research at the boundaries between mathematics, physics and biology.

HRI is dedicated to the evaluation of homeopathy using the most rigorous scientific methods available and communicating the results of such work beyond the usual academic circles. In addition to providing academic and financial support to multiple active research projects around the world, HRI plays a leading role in challenging misinformation about the scientific evidence base in homeopathy and developing strategic priorities for future research in this field.

The Institute's day-to-day operations and management are the responsibility of Rachel Roberts (Chief Executive) and Dr Alexander Tournier (Chairman), guided by our Board of Trustees. The HRI Scientific Advisory Committee (SAC), a team of independent world experts in homeopathy and complementary/integrative medicine research, provide the strong scientific foundations essential to our work.

## **HRI Core Team**



Dr Esther van der Werf Clinical Research Lead PhD, MSc, Dip IACH



Chris Connolly Communications Manager



Fleur Kortekaas Research Associate *MSc* 



Armelle Demmers Research Associate *MSc* 



Amy Hurlstone Events Manager



Amy Taylor Communications Assistant

## **HRI** Patrons

The entire team at HRI wish to express our gratitude for the financial support we have received from our patrons, past and present, who have provided significant funds to drive HRI activities. Without their help, we would not have been able to achieve all that we have so far, or be able to continue the work which means so much to us all.



## **Charles Wansbrough**

"I am interested in the scientific paradigm shift which homeopathy may represent. We trust modern medicine and technology and distrust homeopathy because it refuses to abide by present scientific models of reality. In order to overcome such inherent prejudice we need to fund institutes that dare to question the widely accepted scientific world view, and explore new models that expand our understanding.

Homeopathy is far too well established and valued for it to be banished entirely, but until its mechanism of action is understood it will continue to court controversy. The lack of a coherent model to explain how it works restricts the impact homeopathy can have on world healthcare, despite the powerful perspectives at its heart, such as mind/body correlations and new ideas about the properties of matter. It is therefore essential that we fund institutes such as this which encourage scientists in their efforts to answer the key question – how does homeopathy work?"

## Scientific Advisory Committee



#### Prof Stephan Baumgartner PhD

Lecturer, Institute of Complementary & Integrative Medicine, Univ. of Bern, Switzerland Senior Researcher, Institute of Integrative Medicine, Univ. of Witten/Herdecke, Germany



**Prof Dr Iris Bell** MD PhD Professor Emeritus, Department of Family and Community Medicine University of Arizona College of Medicine, USA



**Prof Dr Paolo Bellavite** MD Teaching Fellow of General Pathology School of Medicine, Verona University, Italy



**Prof Dr P. Christian Endler** PrD PhD Head and Scientific Director Interuniversity College for Health and Development, Graz, Austria



**Prof Dr Jennifer Jacobs** MD MPH Clinical Assistant Professor in Epidemiology School of Public Health and Community Medicine, University of Washington, USA



**Dr Robert Mathie** PhD Independent Researcher, UK



**Prof Ashley Ross** BMus PGDip MTech PhD Head of Department of Homeopathy, Durban University of Technology, South Africa



**Dr Elizabeth Thompson** BAOxon MBBS MRCP DM(Oxon) FFHom CEO and Lead Clinician National Centre for Integrative Medicine, Bristol, UK



**Dr Alexander Tournier** BSc DIC MASt Cantab PhD LCHE RSHom HRI Chairman, UK Senior Researcher, Institute of Complementary & Integrative Medicine Univ. of Bern, Switzerland

## Conference Programme

Conference Registra	tion	THURSDAY 19 JUNE 2025
19:00 – 20:30 19:00 – 20:30	<b>Registration</b> – Conference Foyer, <b>Welcome Drinks</b> – Veranda, Maker	
Day 1 – Cutting Edge	e Research in Homeopathy	FRIDAY 20 JUNE 2025
	Full Day Plenary Sessions – Ale	exandros I
09:30 – 09:50	Opening Ceremony Opening remarks: Dr George Pat President, Athens Medical Associa	
09:50 – 11:00	Provings/Economics Chair: Dr Alexander Tournier Prof ASHLEY ROSS, South Africa Ensuring the dependability of mod Prof THOMAS OSTERMANN, Ge make or not to make the economic	dern Materia Medica ermany. Homeopathy: To
11:00 – 11:30	Coffee	
11:30 – 13:00	Clinical Research 1 Chair: Prof Ashley Ross Rachel Roberts, UK. Evolving evid NHMRC 'Australian Report' on hom Dr Marcus Reif, Germany. Antibiotic therapy in homeopathic, anthropos primary care in the treatment of acu infections – a non-interventional stu Dr Harleen Kaur, India. Manageme add-on homoeopathic medicines – placebo-controlled pilot study Prof Ubiratan Adler, Brazil. Home adjuvant approach in treating major 1 study and physicochemical analysi	neopathy prescription and course of ophic and conventional ute upper respiratory tract udy ent of trigeminal neuralgia with A double blind, randomised, opathy as a personalized r depressive disorder: An N-of-
13:00 – 14:30	Buffet Lunch	
14:30 – 15:50	Basic Research 1 Chair: Dr Subhash Kaushik Dr Alexander Tournier, Switzerla work? A scoping review of propos Dr Maria Fernanda Aguilar Duei dilutions and their immunological evidence from a randomised single	ed modes of action ñas, Mexico. Ultra-high impact in healthy patients:

	<b>Prof Oskan Tasinov</b> , Bulgaria. In vitro effect of Ferrum phos- phoricum D12 on translation of inflammation and iron metabolism related proteins in LPS stimulated J774A.1 mouse macrophages <b>Dr Sandra Tribolo</b> , France. Anas barbariae 200K improves phagocytosis, modulates cell stiffness and oxidative stress in microglial cells in vitro
15:50 – 16:20	Coffee
16:20 - 17:30	Organisation Updates & Poster Talks Chair: Prof Ubiratan Adler
	HRI, CCRH, GIRI and FYR updates
	Dr Christa Raak, Germany. Gene expression analyses of Sulfur activated CD4+ T lymphocytes from patients with periodontal inflammation and a healthy control group – a protocol Christoph Dombrowsky, Switzerland. NMR T1 and T2 relaxation times of potentized preparations Dr Petra Weiermayer, Austria. Assessing the feasibility of a two-cohort design to assess the potential of homeopathic medicinal products to reduce antimicrobial resistance in turkeys – study protocol
17:30 - 19:30	Poster Session & Drinks Reception – Aristotelis II
20:00	<b>Dinner</b> Maiami Seafood Restaurant, Kalamaria
Day 2 – Cutting	Edge Research in Homeopathy SATURDAY 21 JUNE 2025
	Morning Plenary Sessions – Alexandros I
09:30 – 11:00	Agrohomeopathy Chair: Prof Carla Holandino Prof PEDRO BOFF, Brazil. Homeopathy for agriculture and the environment: an integrative approach Paul Doesburg, Switzerland. Development of a simple bioassay to enable citizen science projects in basic homeopathic research Dr Leonardo Faedo, Brazil. The use of homeopathy in agriculture: a systematic literature review Agrohomeopathy Roundtable
11:00 – 11:30	Coffee
11:30 – 12:50	Clinical Research 2 Chair: Prof Thomas Ostermann Dr DANIEL GALLEGO-PÉREZ, Colombia. Integration of traditional, complementary, and integrative medicine (TCIM) in the institutionalization of evidence-informed decision-making Dr Esther van der Werf, UK. Homeopathy and antimicrobial resistance: a research program to enhance research quality and evidence

	<b>Robbert van Haselen</b> , France, and <b>Dr Martin Loef</b> , Germany. Comparative clinical research on homeopathy: a series of systematic reviews with meta-analyses (HOMA) – project outline Clinical Research Roundtable
12:50 – 13:00	HRI Poster Prize Award
13:00 – 14:30	Buffet Lunch
	Afternoon Parallel Sessions
14:30 – 15:50	<ul> <li>Clinical Research 3 – Alexandros I</li> <li>Chair: Dr Robbert van Haselen</li> <li>Aaron Ka Lun To &amp; Dr Yvonne Fok, Hong Kong. Validating the repertory of the future – Towards data- driven homeopathy</li> <li>Dr Andrea Flores, Mexico. The importance of knowing the patients: Characteristics and motivations of people who choose homeopathic treatment in Mexico and Latin America</li> <li>Dr Hélène Renoux, France. HOMEOPRO qualitative trial – Homeopathy in chronic conditions</li> <li>Dr Deepti Singh, India. Usefulness of individualized homoeopathy versus standard allopathic treatment in acute uncomplicated Urinary Tract Infection (UTI): a randomised comparative trial</li> </ul>
	<ul> <li>Basic Research 2 – Aristotelis I</li> <li>Chair: Dr Michel van Wassenhoven</li> <li>Dr Francesca Truzzi, Italy. Biological effects of xerosydryles obtained from Arnica and Belladonna 12CH homeopathic dilutions</li> <li>Prof Leoni Bonamin, Brazil. Solvatochromic dyes as probes of dynamized high dilutions under different experimental conditions</li> <li>Dr Steven Cartwright, UK. The electrical, magnetic and photonic properties of homeopathic potencies</li> <li>Dr Bindu John Pulparampil, India. Cell cycle inhibition and apoptosis induction by Calcarea carbonica 6C in SW 982 and SKOV-3 Cell lines</li> </ul>
15:50 – 16:20	Coffee
16:20 – 17:40	<ul> <li>Basic Research 3 – Alexandros I</li> <li>Chair: Prof Leoni Bonamin</li> <li>Dr Imane Lejri, Switzerland. Neuroprotection via high-dilution Gelsemium: mitochondrial optimization and Akt/mTOR path way activation</li> <li>Dr Tiziana Di Giampietro, Italy. Symphytum officinalis's anti- inflammatory and regenerative effects on human fibroblast and osteoblast cell lines with extracellular vesicle profiling</li> <li>Prof Carla Holandino, Brazil. Anti-tumoral potential of ultra- diluted Viscum album preparations in murine melanoma cells: insights from in vitro studies</li> <li>Dr Ritika Narula, India. Evaluation of therapeutic potential of selected plant derived homeopathic medicines for their action against cervical cancer</li> </ul>

#### Clinical Research 4 – Aristotelis I

Chair: Dr Daniel Gallego-Pérez

**Dr Jean-Lionel Bagot**, France. Applying the Delphi method to the new integrative homeopathic cancer care recommendations of the International Homeopathic Society for Supportive Care in Oncology (SHISSO)

Prof Vania Emerich Bucco de Campos, Brazil. Homeopathic intervention for tobacco addiction: a Brazilian experience Dr Bhuvaneswari Rajachandra sekar, India. Insights on effectiveness of homeopathy in alcohol use disorder in individuals with a family history of alcoholism-a retrospective study Dr Debadatta Nayak, India. Effectiveness of Eupatorium perfoliatum 30C in preventing dengue fever - a prospective, community-based, open label, parallel cohort study in Delhi, India

20:00Gala Drinks Reception20:45Gala Dinner – Veranda, Makedonia Palace Hotel

## Day 3 – Cutting Edge Research in Homeopathy

SUNDAY 22 JUNE 2025

#### Half Day Plenary Sessions – Alexandros I

09:20 – 10:40	Fundamental ResearchChair: Dr Steven CartwrightDr Daniel Wrzałko, Poland. Patient-specific responsestowards homeopathic preparations revealed by chromatographicpatterns of an in vitro human blood testDr Michel van Wassenhoven, Belgium. Characterization of thematerial and electrodynamic aspect of high Homeopathic potenciesProf Stephan Baumgartner, Switzerland. A narrative review of30 years of basic research in homeopathyMode of Action Roundtable
10.40 – 11:10	Coffee
11:10 – 12:30	<ul> <li>Veterinary Research</li> <li>Chair: Prof Stephan Baumgartner</li> <li>Dr Ritika Narula, India. Therapeutic potential of selected homoeopathic drugs in different potencies against neonatal calf diarrhoea</li> <li>Dr Cidéli Coelho, Brazil. Treatment of platynosomiasis in callitrichids using the biotherapeutic Platynosomum sp 30 cH and ultrasound monitoring</li> <li>Prof PATRIZIA BRICARELLO, Brazil. Homeopathy for the promotion of One Health in agroecosystems</li> </ul>
12.20 12.40	Closing coromony

12:30 – 12:40 Closing ceremony

## **Keynote Speakers**



**Prof PEDRO BOFF** Researcher (Agronomy) EPAGRI, Santa Catarina State, Brazil

Prof Pedro Boff is an Agronomist, with a PhD in Production Ecology and Resource Conservation from Wageningen University in 2001 (Netherlands). He is currently a researcher at the Agricultural Research and Rural Extension Agency of Santa Catarina State (EPAGRI), Brazil, where he leads research projects on Agro-Ecology and Homeopathy at the Laboratory of Homeopathy and Plant Health since 2003. Prof Boff is also a professor on the graduation programmes of Plant Science at the University of Santa Catarina State (UDESC), on the Agroveterinary Science Centre (CAV), focusing in Agroecology and Homeopathy for Crops, and at the Interdisciplinary Health and Environment graduation programme at University of High Lands of Santa Catarina State (UNIPLAC), Southern Brazil.



## Prof PATRIZIA BRICARELLO Veterinary Researcher Federal University of Santa Catarina, Brazil

Patrizia Ana Bricarello is a veterinarian, with a PhD in Science and specialised in Homeopathy. She has experience in the area of Preventive and Integrative Veterinary Medicine. Patrizia is currently an Associate Professor in the Department of Animal Science and Rural Development and in the Postgraduate Program in Agroecosystems at the Center for Agricultural Sciences at the Federal University of Santa Catarina (UFSC) in Florianópolis, SC, Brazil.



## **Dr DANIEL GALLEGO-PÉREZ**

Post-Doctoral Research Fellow, Integrative Medicine University of North Carolina, Chapel Hill

Daniel F. Gallego-Pérez, MD, DrPH, is a post-doctoral research fellow at the Program on Integrative Medicine, at the University of North Carolina, Chapel Hill, and a visiting fellow of the Australian Research Center for Complementary and Integrative Medicine (ARCCIM), University of Technology Sydney.

His research focuses on strengthening Primary Health Care and Health Systems, evidence and information synthesis and dissemination, and Therapeutic Pluralism (Traditional, Complementary, and Integrative Health and Medicine). After graduating from medical school, he served as a primary care physician and public health practitioner in a protracted refugee setting in Ghana, West Africa, for almost half a decade. After returning to Colombia, his native country, he designed and implemented a pilot project to develop complementary medicine services in public hospitals in Bogota between 2009 and 2013.

He has been a consultant for the Pan American Health Organization / World Health Organization (PAHO/WHO), first at the Nicaragua Country Office, later at PAHO headquarters in Washington DC, and the PAHO/WHO's Latin American and the Caribbean Center for Health Sciences Information in São Paulo, Brazil. He cofounded the TCIM Americas Network and the Virtual Health Library on TCIM. He is the immediate past chair of the Integrative, Complementary, and Traditional Health Practices (ICTHP) Section of the American Public Health Association (APHA)



#### **Prof THOMAS OSTERMANN**

Chair of Research Methodology and Statistics, Dept of Psychology and Psychotherapy Universität Witten-Herdecke, Germany

Thomas Ostermann received his MSc in Mathematics and Physics in 1995 from the University of Osnabruck. After finalizing his doctoral degree at the Institute of Physiology, Witten/Herdecke University on Speech recognition he worked as Senior Methodologist at the Institute for Integrative Medicine at Witten/Herdecke University. In 2006 he received his PhD in "Health Services Research" which in 2009 was extended for "Informatics, Medical Biometrics and Epidemiology". In 2011 he became Professor for Research Methodology and Information Systems in Complementary Medicine and in 2015 he was appointed to the newly created Chair of Research Methodology and Statistics in Psychology. In 2016 he was elected as Head of the Department of Psychology and Psychotherapy. His research interests include the development and application of statistical methods for Health Services Research and Psychology, Research in Digital aspects of Creative Arts Therapies and the development of E-Health and M-Health applications.



**Prof ASHLEY ROSS** Head of Department of Homeopathy Durban University of Technology, South Africa

Professor Ashley Ross is an Associate Professor and the former Acting Executive Dean of the Faculty of Health Sciences at the Durban University of Technology (DUT) in South Africa. He currently heads the Department of Homeopathy at DUT. Alongside his academic role, he runs a private practice and has been teaching homeopathic philosophy and materia medica for 28 years. He is actively involved in both clinical supervision and research mentorship.

Professor Ross has delivered lectures and seminars in South Africa, India, Latvia, and the United Kingdom, and has presented research papers at congresses in 15 countries. Widely recognised as an expert in the field of homeopathic provings, he also serves as a peer reviewer for six international medical journals.

From 2006 to 2016, he represented Homeopathy on the Allied Health Professions Council of South Africa (AHPCSA), and from 2017 to 2022, he served on the Professional Board for Homeopathy, Naturopathy, and Phytotherapy. He is currently the Secretary for Research of the Liga Medicorum Homoeopathica Internationalis and a Trustee and Scientific Advisory Committee Member of the Homeopathy Research Institute (UK).

## **HRI Poster Prize**

We are delighted that, for the first time, HRI Greece 2025 will feature a prize for Best Poster. This initiative reflects our commitment to recognising and encouraging the research of the future.

We look forward to showcasing the high quality work of our poster presenters and celebrating the valuable contributions they make to advancing homeopathic research. We extend our thanks to Vithoulkas Compass for making this possible.

The posters will be judged by an independent panel and the prizes awarded by Vithoulkas Compass Founder, Michael Stassinopoulos, before the Saturday lunch break.

## Sponsors



World leader in homeopathy, Boiron laboratories have been contributing for 90 years to a more humane, more respectful and more sustainable medicine. Since 1932, we have been involved in the manufacture of homeopathic medicines in order to provide everyone, patients and health professionals, with useful, safe and effective solutions. With rigor and professionalism, we cultivate a duty of excellence by systematically seeking to associate respect for the homeopathic tradition and innovation. Boiron laboratories are present in next to 50 countries, and have 2,810 employees worldwide.



Living Homeopathy was founded in 1994 by Prof. Aaron To Ka Lun, dedicated to the promotion of Classical Homeopathy, dedicated to understanding the concepts of holistic medicine, and redirecting patient's paths towards physical, emotional and spiritual health.



Celebrating its 102nd year, the American Association for Homeopathic Products (AAHP) has been the leading voice of the homeopathic industry since 1923. The non-profit association works to promote excellence and compliance in homeopathic manufacturing, distribution, and marketing within the United States.

AAHP member companies of manufacturers, distributors, and marketers provide 80 percent of homeopathic products in

the U.S. market. Membership is also open to pharmacists, individuals in the homeopathic field, and allied organizations. AAHP provides members with resources and knowledge to successfully operate in the marketplace. The association also represents the industry through positive and productive dialog with lawmakers and regulators to bring about effect legislation.

Members pledge to comply with requirements, criteria, and published guidelines in the Homeopathic Pharmacopoeia of the United States, relevant Federal statutes, as well as other industry regulations and compendia. Together, AAHP members ensure safe, effective homeopathic medicines for consumers, retailers, and healthcare practitioners across the United States — and elevate the reputation of homeopathic medicines.



RadarOpus is the world leader in homeopathic software solutions. Since 1982 we have inspired homeopaths with a suite of cutting edge tools, supporting all aspects of homeopathic clinical practice. Proudly providing Synthesis Repertory, the largest digitalised homeopathic library in the world, powerful Patient Management Systems, and modules from the great Masters of Homeopathy.



Dferential is an Artificially intelligent online tool to help you find a first aid remedy with experts' experience anytime, anywhere! It aims to bring its users closer to professional homeopaths by providing a first-aid experience, helping the

user to gain knowledge on homeopathic remedies for acute prescription, then allowing the user to find a homeopath and develop their relationship into a healthier life.



Vithoulkas Compass

VithoulkasCompass is a comprehensive online toolbox organized to support effective practice and help elevate the success rate of any homeopath, from beginner to master. Our Vision is Building on what works in Homeopathy, using scientific methods, large scale clinical evidence and state-of-the-art technology.

- The most advanced homeopathy software representing unique, groundbreaking research.
- A complete toolbox of innovative functions to assist you in locating the optimum remedy case.
- A friendly system helping you to reach the maximum potential of success in your practice.

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Homeopathy Foundation of the Association of German Homeopathic Doctors

"Homoeopathie-Stiftung des DZVhAE"

www.homoeopathie-stiftung.com

**OUR VISION** is that homeopathy becomes an acknowledged, integrative part of modern medicine. In collaboration with The German Association of Medical Doctors, DZVhAE, and The Scientific Society for Homeopathy, WissHom, we promote the following:

## **RESEARCH IN HOMEOPATHY**

Projects concerning different fields of research in homeopathy, including fundamental research and a growing team of young academics involved, are facilitated.

## EDUCATION IN HOMEOPATHY FOR MEDICAL DOCTORS AND STUDENTS

We support the development of online study programs and courses for medical students and continued education training for medical doctors, veterinarians and dentists. Approvement and certification is the European Diploma of Homeopathy.

## WORLD-WIDE AVAILABILITY OF HOMEOPATHIC LITERATURE

Digitalisation is taking place in the European Library for Homeopathy in Köthen, Germany, enabling people around the world to order scans of original documents, dating back to Hahnemann's works.

## INTEGRATION OF HOMEOPATHY

We inform the public and decision-makers about results in relevant aspects of research, at times financing Open-Access Publications to propagate current findings and facts.



The purpose of the Foundation is to support and develop any activity of general interest of a scientific nature with the objectives of promoting scientific and technical research and development relating to Homeopathy (Analog medicine according to HAHNEMANN), modeling mathematics and the development of computerized diagnostic systems in this same field, the development of homeopathic medication for professionals in the health world (laboratories, prescribers, etc.), as well as for patients and the general public, the exploration of avenues opened up by Homeopathy, the advancement of scientific and medical knowledge in this field, and more generally the support of scientific research programs contributing to the development of both human and veterinary medicine, but also the development of plants and treatments promoting their growth, culture and defense, while respecting environment.



When Helios was founded in 1986 it was with a simple mission: to create a new source of potent, accurate and effective homeopathic remedies of integrity, to bring profound healing and relief of suffering.

Nearly four decades later, our passion for healing and homeopathy is as strong as ever and we now have a remedy bank of over 3,800 remedies, in a wide range of potencies and forms, six remedy kits, creams and 12 Helios Tissue Salts serving customers worldwide.

Our remedies are made by homeopaths to traditional methods, using trituration and hand succussion procedures as laid down in Hahnemann's 5th and 6th edition of the Organon, and we are pioneers in LM potencies with an extensive range of remedies available.

All Helios remedies and products are backed by a fast responsive service and friendly, expert advice from our team of highly qualified homeopaths and pharmacists.

Our gratitude to all at HRI for the work you do in supporting the furtherance of homeopathy and the wider homeopathic community, our very best wishes for a successful 2025 conference.

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# WELEDA

## Weleda – Pioneering Health and Sustainability for Over 100 Years

Weleda is the world's leading manufacturer of certified natural cosmetics and anthroposophic medicines. The company was founded in 1921 as a pharmaceutical laboratory by Rudolf Steiner, Ita Wegman, and Oskar Schmiedel – with the aim of harnessing the healing power of nature for human well-being.

Headquartered in Arlesheim, Switzerland, with its largest

site in Schwäbisch Gmünd, Germany, Weleda produces around 1,000 medicines and 120 natural cosmetic products. The brand is present in over 50 countries and employs 2200 people worldwide.

Weleda's purpose – to unfold health and beauty in harmony with body, soul and spirit – continues to guide everything the company does. It reflects Weleda's commitment to responsible business practices, natural efficacy and sustainability. All products are based on natural ingredients from biodynamic cultivation and fair trade partnerships. They are free from microplastics, silicones, synthetic fragrances, and paraffins.

As a true pioneer of sustainability, Weleda has long promoted biodiversity, soil regeneration and climate-resilient agriculture. The company runs six of its own medicinal plant gardens and supports numerous cultivation projects worldwide.

## Exhibitors



## SCHOOL OF HOMEOPATHY \*

www.schoolofhomeopathy.com

The gold standard in homeopathic training worldwide.

Established in 1981, the School of Homeopathy has been helping people become professional homeopaths for over 40 years. With students in more than 100 countries and licensed partners in China, Japan, and Turkey, we are the only school in the world with accreditation in the UK, USA, Canada, and Australia.

Our award-winning courses can be studied from anywhere in the world online or through attendance in the UK. In addition to our team of over 60 dedicated teachers, mentors and supervisors, we are honoured to have six of the world's leading homeopaths as Patrons, supporting our educational quality and vision: Rajan Sankaran, Jan Scholten, Miranda Castro, Jeremy Sherr, Frans Vermeulen, and Massimo Mangialavori.

The School of Homeopathy is a family-run institute, founded by Misha Norland - often referred to as the grandfather of UK homeopathy - and now led by his eldest son, Mani Norland. Mani's wife Amanda and brother Luke are also actively involved in the School.

Our passion for advancing and spreading homeopathy at the highest level has given our programmes a leading edge and helped establish a national and international benchmark for excellence.



The International Research Group on Very Low Doses and High Dilution Effects (GIRI) was officially founded in 1986 on Professor Madeleine Bastide's initiative. It is registered in France as an "Association 1901," a non-profit scientific society.

Currently, GIRI is a professional, scientific society unifying researchers working in different fields of science and coming from all over the world who are engaged in research on very low doses and high dilutions, including homeopathy.

Although the mechanism of action of the very dilute solutions of active principles on biological systems is an important concern of GIRI, the Group's primary interest is directed toward the possible medicinal and therapeutic relevance of high dilutions. The proceedings of GIRI meetings get published in a peer-reviewed open-access journal (International Journal of High Dilution Research; IJHDR) hosted by GIRI (https://www.highdilution.org/ index.php/ijhdr).

GIRI organizes yearly meetings, providing its members and associated scientists with the opportunity to present their research, exchange experiences, make new contacts, and develop international joint research projects. The new list of GIRI members includes around 150 researchers from 20 different countries, and membership is free.

The next GIRI meeting (XXXVIII) will be held in Thessaloniki, Greece, at Makedonia Palace Hotel, on June 23-24, 2025, as a hybrid event (https://giri-society.org/next-meeting/). Non-GIRI members / invited can follow the conference online only.



The Aurum Project is a not-for-profit organisation dedicated to improving health and wellbeing through natural medicine research and is the peak body for homeopathic research in Australia. Our Teal organisational model encourages us to be wholistic, collaborative and dynamic in our research conduct and because researchers are clinicians it means that the challenges encountered in every day practice

become a research topic. Practitioners work together in a Research Pod and the purpose of a Pod is twofold. Firstly it is to build relationships between colleagues, and increase resilience within our profession of homeopathy. The second is the research activity the Pod undertakes together. Pods are different to traditional research teams in the way they are self organising. Current Pod topics include respiratory diseases, molluscum contagiosum, recurrent urinary tract infections, a systematic review of homeopathic research in Australia since 1990 and a workforce survey of Homeopathy in Australia. A recent past topic was a national survey to measure the demographics of homeopaths and their patients in Australia. This was the first time such a study had been conducted. Our operational capacity is funded through membership and running an online homeopathy book shop.

# FREZYDERM

FREZYDERM is a Greek company founded in 1986 which develops and manufactures innovative cosmetics and medical devices in its privately-owned production plant in

compliance with the strictest pharmaceutical standards. Its Research & Development Department, staffed with highly trained and experienced scientific personnel, makes fruitful use of the latest developments in contemporary Cosmetology to produce care products set to improve quality of life.

Our commitment is to develop innovative formulas, featuring raw materials of high pharmaceutical grade that ensure their safety and effectiveness, which are ideal for both independent use and in synergy with pharmaceutical treatments, thus providing Health Professionals with a wide spectrum of alternatives for tailor-made treatment protocols.

FREZYDERM approaches Homeopathy with the primary and basic goal of alleviating the patient's skin symptoms and caring for the affected skin, in synergy with the homeopathic per os medicine, according to the choice of the treating physician.

FREZYDERM dermocosmetic products do not contain pharmaceutical molecules, exploit the therapeutic potential of plants and the data of ethnopharmacology, are dermatologically tested and do not contain active ingredients that counteract medication.

Wissenschaftliche Gesellschaft für Homöopathie Scientific Society for Homeopathy The Scientific Society for Homeopathy (WissHom) was founded in 2010 in Koethen (Anhalt) in Germany with the following goals:

- · Evaluation of existing homeopathic knowledge
- · Creation of new homeopathic knowledge
- · Promotion of homeopathic research
- · Development of innovations in education and training
- · Establishment of homeopathy in the academic discourse

## Recent highlights

- Guidelines project on clinical and basic research in homeopathy is finalised, all guidelines are published in peer-reviewed journals
- Various articles submitted or published by homeopathy sceptics are countered & further research articles are published in cooperation with numerous professors and other colleagues
- Organization of annual ICE congresses on research, practice and education, symposia and online lectures on potentiation research
- Planning, conduction and reporting of research projects in cooperation with universities & establishment of several university research teams in the DACH regions & participation at an international university One Health project (GIFTS-AMR)
- Development of an E-learning program & lectures at universities on homeopathy in human and veterinary medicine



European Central Council of Homeopaths congratulates Homeopathy Research Institute on the 6th International Research Conference CUTTING EDGE RESEARCH IN HOMEOPATHY

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Cutting Edge Research in Homeopathy

23

Meet our expert

Friday, 20/06/25

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# Come & See

14h30 to 15h50

## Our latest results on the effects of homeopathic dilution on oxidative stress

International Journal of Molecular Sciences (IF 4.9)

**A 2025 study** published in the International Journal of Molecular Sciences highlights:

- The reduction of oxidative stress, a key factor in inflammation
- The restoration of normal cellular conditions after the activation of the immune response
- The modulation of cellular rigidity and the reorganization of the cytoskeleton

Conference Team Member

Dr Sandra Tribolo

## get in touch

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BOIRON

## Partner events

#### XXXVIII GIRI Meeting 23-24 June Makedonia Palace Hotel

## From Hippocrates to Del Giudice: Workshop on a deep understanding of the similia principle

This year, we celebrate 40 years since the creation of GIRI, which was born during "Les Entretiens Internationaux de Monaco" from an initiative of Professor Madeleine Bastide. GIRI was officially founded in 1986 when it was registered in France as an "Association 1901", a non-profit scientific society. Since then, annual meetings have been held on a traveling basis, and from 2022 onwards, the meetings have adopted a hybrid format, increasing the participation of aspiring members and students, as travel costs are no longer a barrier to their involvement.

In 2025, HRI and HDScience will host the XXXVIII GIRI meeting in Greece. It holds symbolic value, as it celebrates 40 years of the GIRI in Hippocrates' land, serving as a satellite event of the HRI meeting 2025—a large-scale Congress focused on disseminating cutting-edge scientific results in high dilutions and homeopathy. In short, it is a point of convergence between past and future, an opportunity to deepen discussions on the results of basic research, both physical-chemical and biological, to establish bridges with the results of clinical research, and to do justice to Hahnemann's legacy by giving contemporaneity to studies related to his original discoveries

#### Forum of Young Researchers seminar Thursday 20 June

The Forum for Young Researchers (FYR) meeting takes place on Thursday 19 June. The FYR initiative aims to create a platform for exchange, collaboration, and networking between young researchers who are at the beginning of their scientific career or new to the field of homeopathy research. Supported by the Homeopathy Research Institute and sponsored by Ceres and additional private donors, FYR has organized a half-day seminar, taking place ahead of HRI Greece 2025. The seminar offers an exciting opportunity for discussion and exchange of ideas for up-and-coming researchers, with senior keynote speakers, an open discussion session, and a common dinner in the evening, providing plenty of room for networking and informal exchange.

Sponsored by CERES

## **Oral Presentations**

## Prof Ubiratan Cardinalli Adler

Homeopathy as a personalized adjuvant approach in treating major depressive disorder: an N-of-1 study and physicochemical analysis of homeopathic preparations

<u>Ubiratan Cardinalli Adler</u><sup>1</sup>, Maristela Schiabel Adler<sup>1</sup>, Renan dos Santos Nogueira<sup>2</sup>, Márcio Normando Borges Coelho Filho<sup>2</sup>, Eugênio de Moura Campos<sup>3</sup>, Patrícia Andréa da Fonseca Magalhães<sup>4</sup>, Antonio Brazil Viana Júnior<sup>4</sup>, Anderson Carneiro Costa<sup>5</sup>, Raelle Ferreira Gomes<sup>6</sup>, Regina Celia Monteiro de Paula<sup>6</sup>, Rosemayre Souza Freire<sup>7</sup>, Francisco Luan Fonsêca da Silva<sup>8</sup>, Eduardo Mello Barroso Filho<sup>8</sup>, Caren Nádia Soares de Sousa<sup>6</sup>, Lia Lira Olivier Sanders<sup>3,5</sup>

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**Background and Aims**: Major Depressive Disorder (MDD) is difficult to treat pharmacologically, highlighting the need for personalised approaches like homeopathy. This study examines the efficacy and safety of a standardized homeopathy protocol for MDD through N-of-1 trials. Findings from the first participant are reported, along with an analysis of the medications used.

**Methods**: A 28-week crossover, double-blind, placebo-controlled N-of-1 trial was conducted. The participant, diagnosed with a major depressive episode, showed a 50% reduction in baseline depressive symptoms during homeopathic treatment (Sulphur LM2 and LM3). Three treatment blocks were completed, each with masked periods (Sulphur LM4-7 or placebo) lasting 2, 4, and 8 weeks. Primary outcomes were depressive symptom progression, assessed using the Beck Depression Inventory – Second Edition (BDI-II). Secondary outcomes included Clinical Global Impression Scale scores and the Mental (MCS-12) and Physical (PCS-12) Components of the SF-12 Health Survey. Adverse events were monitored. The composition of Sulphur LM2-7 was analysed using Scanning Electron Microscopy (SEM), Dynamic Light Scattering (DLS), and Inductively Coupled Plasma Mass Spectrometry (ICP-MS).

**Results**: Linear regression showed a significant increase in BDI scores during placebo periods, but not with homeopathic treatment. MCS-12 scores decreased during placebo, in line with BDI findings. No significant trends appeared in PCS-12 scores. CGI-S scores improved from "markedly ill" to "borderline mentally ill" during the run-in period and remained stable. CGI-I scores improved to "very much improved" and remained unchanged throughout the trial. SEM identified nanoparticles in *Sulphur* LM4, while DLS and ICP-MS confirmed nanomaterials in *Sulphur* LM2-7.

**Conclusions**: Preliminary findings suggest the homeopathic protocol is more effective than a placebo in treating MDD. Homeopathy may be considered a form of personalized nanomedicine.

Keywords: Depression, Homeopathy, N-of-1 studies, Translational Research, Nanomedicine

Fri 20 June, 12:30

#### Dr María Fernanda Aguilar Dueñas

## Ultra-high dilutions and their immunological impact in healthy patients: evidence from a randomised single-blind study

#### María Fernanda Aguilar Dueñas<sup>1,2,3</sup>

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**Background**: The proposal to induce a controlled inflammatory response is gaining ground in treating chronic diseases. Recent studies have explored the influence of homoeopathic medicines on sick patients, but there is limited data on their impact on healthy individuals. Belladonna Atropa, an alkaloid with recognised pharmacological properties, could influence cytokine production, opening new possibilities for understanding homoeopathy. Here, we show that the homoeopathic remedy can produce a controlled inflammatory response in healthy patients, which may explain its therapeutic effects in sick patients by stimulating the same inflammatory mechanisms by the law of similars.

**Objective**: To evaluate the modifications in inflammatory cytokine levels in healthy individuals following repeated administration of Belladonna Atropa in a homoeopathic dilution.

**Methods**: Six patients were included and divided into two groups: control group (n=3) and experimental group (n=3). Peripheral blood samples were collected at baseline (day 1) and 24 hours post-intervention. The experimental group received *Belladonna Atropa* 200c diluted in water, while the control group consumed water with 10 drops of alcohol. Both groups consumed their solutions every two hours for 10 hours. The concentration of inflammatory cytokines (IL-6, IL-8, IL-12p70, IL-18, IL-23, and IL-33) was determined using flow cytometry.

**Results**: Significant changes in inflammatory cytokine levels were observed in the experimental group. The percentage increases compared to baseline values were: IL-6 (93.87%), IL-8 (85.04%), IL-12p70 (84.57%), IL-18 (53.15%), IL-23 (70.16%), and IL-33 (55.19%). The differences were statistically significant, with p-values < 0.05 for all cyto-kines mentioned.

**Conclusions**: Repeated administration of Belladonna Atropa in a homeopathic dilution is associated with a significant increase in the production of inflammatory cytokines in healthy individuals. These findings suggest that this medicine may have an inflammatory role in immune responses, opening new avenues for its study in contexts of inflammation and immunomodulation.

Keywords: Inflammation, Immunology, Cytokines, Immune response

### **Dr Jean-Lionel Bagot**

# Applying the Delphi method to the new integrative homeopathic cancer care recommendations of the International Homeopathic Society for Supportive Care in Oncology (SHISSO)

<u>Jean-Lionel Bagot</u><sup>1</sup>, Mariya Lilova<sup>1</sup>, Jean-Claude KARP<sup>2</sup>, Véronique Lavallée<sup>3</sup>, Isabelle Fischer<sup>4</sup>, François Roux<sup>5</sup>, Yecenia Lopez Marquez<sup>6</sup>, Joëlle Pecqueur<sup>7</sup>, Ingrid Theunissen<sup>8</sup>

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**Context**: Since 2017, the International Homeopathic Society for Supportive Care in Oncology (SHISSO) has been developing thirty homeopathic integrative care guidelines using the "recommendations by formalized consensus" method. It led to the publication of guidelines according to patient symptoms. However, challenges have emerged. How can we benefit from the experience of experts from other parts of the world? How can we avoid a situation where certain experts take the lead and influence others? How can we be sure that our recommendations meet the consensus of all the different homeopathic schools?

**Material and method**: We decided to use the Delphi methodology (DM), a qualitative and quantitative method, based on open and closed questions, developed by a group of analysts and sent anonymously to a panel of international experts, representing all 5 continents and different homeopathic schools of thought. Each question will begin with : *If you had to give advice to a colleague, to help a patient you don't know, with one of the following symptoms, which homeopathic medicine(s) would you suggest as first-line treatment?* Consensus answers (> 75% agreement) are retained, while the others are subjected to a second or even third round, each accompanied by a synthesis. Consensus responses are published, while others are rejected.

**Results**: The design of the study is done, the choice of the experts is undergoing, and the final results are expected in six months' time and will be presented to the HRI congress in June 2025.

**Conclusion**: The DM is particularly suited for homeopathic research, as it provides a first level of evidence through expert consensus. This process strengthens homeopathic practice by offering validated recommendations for clinical use and helps justify homeopathic protocols to health authorities. Moreover, it can serve as a precursor to clinical research protocols, ensuring their relevance and feasibility.

Keywords: Homeopathy, Guidelines, Delphi method, Oncology

### **Prof Stephan Baumgartner**

### A narrative review of 30 years of basic research in homeopathy

Annekathrin Ücker<sup>1</sup>, Alexander Tournier<sup>2</sup>, Stephan Baumgartner<sup>1,3,2</sup>

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**Background**: The research field of basic homeopathic research is diverse – covering multiple areas, from physical investigations to animal research. Even though there still are a lot of open research questions, it is also possible to extract trends and testable hypotheses from the variety of approaches and results hitherto obtained. Taking the working group coordinated by Stephan Baumgartner as an example, the development and the results from the different experimental assays used over the last decades were assessed.

**Methods**: A narrative literature review of all original research (including replication trials and cooperations) published over the last 30 years by members and cooperation partners of the Baumgartner working group was performed. After literature search, all publications were categorized into the different experimental assays. Results were extracted and discussed.

**Results**: Twenty experimental assays were identified, covering the fields of physical investigations, bioassays with plants and micro-organisms, and cell-based assays. A total of 32 original research articles were published, including seven publications on replication trials. The assays introduced the concept of systematic control experiments for investigating the stability of experimental setups. Treatment groups involved potency levels above the inverse of Avogadro's constant in 28 publications. 24 publications reported significant differences between control and treatment groups and additional three publications reported day-dependent effects.

**Conclusion**: Overall, 20 experimental assays were used within 30 years. They showed the relevance of replication trials to detect possible influencing factors and outlined the value of systematic control experiments. Synthesizing and comparing all results obtained, some tentative overarching trends and patterns were identified, such as influences of the physiological status of organism on the effects of homeopathic preparations. These patterns and trends can be developed into testable hypotheses to approach the mode of action of potentised preparations.

Keywords: Literature review, Basic homeopathic research, Potentisation research

## **Dr Pedro Boff**

## Homeopathy for agriculture and the environment: an integrative approach

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Agriculture involves diverse and complex biosystems, making it essential to define which organisms/ systems are suitable for homeopathic treatment. This theoretical essay aims to explore how homeopathy can be extended to agriculture and the environment, following principles closely aligned with classical homeopathy but considering agrosystem as such. Our perspective is based on 20 years of experience in academic research, education, and extension services, all developed within the same homeopathic study team in Southern Brazil. Over the years, courses (120h, 180h, 40h), meetings, and talks (8h, 4h) have been conducted using the Hahnemannian approach, reaching more than 15,000 people. These were open to all interested individuals, regardless of formal education. Participants included researchers, students, teachers, farmers, technical assistants, and healthcare professionals (physicians, nurses, pharmacists, etc.), as well as the general public. Course topics were organized into philosophy, semiotechnics, materia medica, and practical case studies. Action research was the primary approach for case studies, with 2-3 participants guided by an experienced homeopath. The case study followed key steps: conducting an anamnesis, defining the core issue for healing, repertorization, applying homeopathy, and assessing effectiveness. We came out that homeopathy can also serve as a social process, empowering vulnerable communities to break free from the dependencies of various inputs. That is following Agroecology science, which emphasizes eco and social principles and homeopathy and offers low-cost solutions. Re-enchanting agriculture is another possibility by homeopathy practices once recover the farmer's dignity that was completely lost started from the green revolution, and with homeopathy, the farmer feels an active part/ of the knowledge built up through study cases. The integrative homeopathy approach fosters harmony among animals, plants, soil, water, and humans, promoting a dynamic and holistic agricultural system.

Keywords: Integrative homeopathy, Popular homeopathy, Agro-homeopathy

#### Prof Leoni Bonamin

## Solvatochromic dyes as probes of dynamized high dilutions under different experimental conditions

Leoni Bonamin<sup>1</sup>, Ivana Suffredini<sup>1</sup>, Steven Cartwright<sup>2</sup>

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**Background and aims**: This is an overview of results obtained from seven published articles from our group concerning the use of solvatochromic dyes (SD) as probes to identify solution changes on interacting with homeopathic potencies. This method was developed by SJC and since 2017 has been tested by LVB with different experimental samples obtained from varied experimental conditions.

**Methods**: A series of dyes covering the whole visible spectrum were selected as probes for tracking dynamized high dilutions (DHDs). Culture media, seawater and water harvested from natural sources exposed to DHDs were tested, along with the DHDs themselves. In some cases, samples were submitted to a static magnetic field of 2400 Gauss before testing.

**Results**: DHDs of *Antimonium crudum*, *Mercurius corrosivus*, *Phosphorous*, *Glyphosate*, *Nitricum acidicum* and *Mercurius solubilis* at different potencies, along with homeopathic complexes, have been selectively tracked in a range of environmental situations using a number of different SDs. In all cases SD-DHD specificity has been demonstrated. Prior treatment of DHDs with static magnetic fields appears to enhance the interaction with SDs.

**Discussion**: This overview of seven papers indicates specificity between DHDs and SDs and a potential resonant interaction between them that can be enhanced by prior exposure of DHDs to static magnetic fields. These results suggest that a field effect should be considered in any attempt to understand the mechanisms of DHDs.

**Conclusions**: SDs can interact with a wide range of DHDs of different potencies and exhibits specificity. SDs are able to track DHDs both under laboratory conditions and in natural water courses that have been seeded with remedies. In some cases, prior treatment of samples with magnets is necessary to improve the method sensitivity. Results overall point to the usefulness of this method to identify DHD signals in water, both in the laboratory and ecological contexts.

Keywords: Tracking signals, Homeopathic potencies, Water, Magnetic field, Method

### **Prof Patrizia Bricarello**

## Homeopathy for the promotion of One Health in agroecosystems

#### Prof Patrizia Ana Bricarello<sup>1</sup>

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One Health encompasses the interactions between animals, plants, humans and the environment and how these interactions and imbalances affect the occurrence and spread of disease. The toxic, harmful effects of contaminants currently widely used in agriculture and livestock farming pose a threat to One Health. Residues of veterinary pharmaceuticals and their metabolites in products of animal origin, such as meat, milk, eggs and honey, pose serious risks to food safety.

In agroecological production systems, the use of veterinary medicines is restricted. In these systems, homeopathy is an indispensable, sustainable first-choice remedy for the prevention and treatment of infectious and parasitic diseases as well as behavioural and reproductive disorders. It is currently gaining new momentum and proving to be a viable option for technological remedies aimed at the health of living beings and food security, sharing the principles of agroecology and environmental sustainability. In several countries, homeopathy is used in livestock farming and agriculture, mainly to reduce the use of antibiotics and insecticides in animal husbandry. In agroecosystems, homeopathy can help grow vegetables, control diseases and pests, reduce pesticide use and improve water quality.

Homeopathic medicines do not harm animals, consumers of animal products or the environment. Homeopathy can help combat the development of antibiotic resistance and is recommended by the European Union for organic livestock production. An important contribution of homeopathy to the environment is that it returns excrement to the soil without residues, promoting the natural development of insects and microorganisms responsible for the transformation and incorporation of organic matter into the soil. In this way, it allows the soil to be healthy and produces balanced and healthy plants that, together with the animals that consume them, become higher-quality food for human consumption, directly promoting One Health. Homeopathy can treat every living thing in the agricultural organism. The One Health concept promotes a joint approach between the three axes of animal, human and environmental health to address a number of complex problems in agriculture and livestock farming. Homeopathy is a safe and viable option to be further included in this approach.

**Keywords**: One Health, Homeopathy, Agroecology, Livestock farming, Antibiotic resistance

### Prof Vania Emerich Bucco de Campos

#### Homeopathic intervention for tobacco addiction: a Brazilian experience

<u>Vania Emerich Bucco de Campos</u><sup>1</sup>, Lucia Castanheira Barreira<sup>2</sup>, Jeronice Maria de Souza<sup>3</sup>, Juliana Patrão de Paiva<sup>4</sup>, Adriana Passos de Oliveira<sup>2</sup>, Carla Holandino<sup>2</sup>

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**Background and Aims**: The National Tobacco Control Program (PNCT) in Brazil aims to reduce smoking prevalence and the morbidity associated with tobacco use. This project seeks to compare the efficacy of homeopathy and conventional treatment in reducing or eliminating smoking addiction.

**Methodology**: A comparative study was conducted to evaluate the effectiveness of homeopathy versus nicotine patches at the Municipal Health Secretary of Duque de Caxias (SMSDC) in Rio de Janeiro, Brazil. The PNCT protocol was applied, consisting of four weekly meetings and monthly follow-ups over one year. During this period, participants received cognitive-behavioral therapy combined with either nicotine patches or homeopathic tablets. The study involved 79 volunteers, following ethical authorization (SMS-DC-DVS/2022). Recruitment occurred in two distinct years: 2019 and 2023. This temporal separation allowed for a comparison of interventions: in 2019, 39 volunteers were treated exclusively with nicotine patches, while in 2023, 40 volunteers underwent individualized homeopathic intervention. The homeopathic intervention was personalized, with each participant treated using smoke extracted from their cigarette of dependence through the Isomaker® apparatus. The extracted smoke solutions were dynamized according to the Brazilian Homeopathic Pharmacopeia, and lactose tablets were prepared using the 6cH potency.

**Results**: As recommended by the PNCT protocol, evaluations were conducted after the fourth meeting. The results from 2019 were compared to those from 2023. Among the 40 volunteers in the homeopathic group, 13 reduced their daily cigarette consumption by half, 19 completely quit smoking, and 1 continued smoking. In contrast, of the 39 participants treated with nicotine patches in 2019, 16 quit smoking, none reduced their consumption, and 5 continued smoking.

**Conclusion**: Homeopathic treatment appears to be a safe and cost-effective intervention for reducing or ceasing cigarette consumption. This project is ongoing at SMSDC to further validate these promising results with homeopathy.

**Keywords:** Homeopathy, Smoking Addiction, Integrative and Complementary Therapies, Public Health System

## **Dr Steven Cartwright**

## The electrical, magnetic and photonic properties of homeopathic potencies

#### Steven Cartwright1

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**Background**: Studies on homeopathic potencies using solvatochromic dyes have produced results that indicate remedies both produce an electrical field, and are stabilised and enhanced by applied static magnetic fields, whilst being negated by the application of an electric current.

**Aims and Methods**: Guided by these studies, parallel investigations have been conducted with an ultra-sensitive, extended range luminometer capable of detecting low level photon emissions and separately, ferric oxide nanoparticles of an average size of 10nm have been used to detect changes in ambient magnetic fields associated with potencies. Throughout the above investigations potencies of *Arsenicum album* have largely been used in order to be able to draw direct comparisons between the results of different investigative methods, supplemented with potencies of other remedies as required.

**Results**: Weak photon emissions in the UV and visible regions of the electro-magnetic spectrum have been detected from a range of potencies of *Arsenicum album* on application of an electric current. In addition, ferric oxide nanoparticles show changes in their spectra in the presence of potencies of *Arsenicum album* consistent with a weak magnetic field.

**Discussion and Conclusions**: The results obtained using luminometry and with ferric oxide nanoparticles complement and extend results already obtained using solvatochromic dyes. The range of data now available from these studies shows how the electrical, magnetic and photonic properties of potencies might interact and be common expressions of an underlying dynamic structure. In particular, there are a number of paradoxes apparent from the studies which need to be resolved. These include the observations that potencies seem to be sensitive to EM radiation, yet emit light themselves. They produce an electrical field, yet are sensitive to applied currents and they are both stabilised and enhanced by applied static magnetic fields and also produce their own magnetic field.

Keywords: Solvatochromic, Luminometer, Electrical, Photons, Magnetic

#### Dr Cidéli de Paula Coelho

## Treatment of platynosomiasis in callitrichids using the biotherapeutic *Platynosomum sp* 30 cH and ultrasound monitoring

<u>Cidéli de Paula Coelho</u><sup>1,2</sup>, Soraya Kezam Malaga<sup>3</sup>, Jéssica Amâncio Martins<sup>1</sup>, Melina Castilho de Souza Balbueno<sup>4</sup>

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Platynosomum sp infection in non-human primates (NHP) leads to a chronic and progressive disease that affects the bile ducts and liver, often resulting in the death.Diagnosis is challenging due to nonspecific clinical signs, making ultrasonography an essential diagnostic tool to detect hepatic parenchyma and bile duct alterations caused by parasitism. The severity of lesions is believed to be associated with the duration of the infection and the parasitic load. The aim was to evaluate the effectiveness of the medicine Platynosomum sp 30cH in treating platynosomiasis in Callithrix spp, monitored through ultrasonographic imaging. Thirty-six Callithrix spp individuals under human care were selected based on ultrasonographic findings suggestive of biliary system parasitism, with or without associated hepatic lesions. Ethical approval from CEUA (Nº.57/2021)and SISBIO (Nº.78874-1). The ultrasonographic examinations were performed using a Logic E device(GE, USA) equipped with a linear 10-22MHz probe. Animals were positioned supine after a 4-hour fasting period, and anaesthesia was induced with isoflurane. Parameters assessed included the size, shape, echotexture, and echogenicity of the liver; size, content, and wall thickness of the gallbladder; and bile duct characteristics. The biotherapeutic was administered daily (10globules/1L of drinking water). Serial ultrasonographic examinations were conducted at 30, 60, and 90 days to classify parasitism severity.

**Results**: After 30 days, 24 of 36 individuals had biliary alterations: 13 absent, 18 mild, 1 moderate, and 4 severe. At 60 days, one animal died of natural causes; among 35 individuals, 15 had alterations: 20 absent, 7 mild, 1 moderate, and 8 severe. By 90 days, 11 of 35 individuals exhibited alterations: 24 absent, 7 mild, 1 moderate, and 3 severe. Hepatic lesions remained stable, except for one animal, which progressed to fibrosis.

**Conclusions**: The *Platynosomum sp* 30cH showed efficacy in managing platynosomiasis in NHP, as demonstrated by ultrasonographic monitoring.

Keywords: Homeopathy, Isopathy, Non-human primates, Platynosomum

### Dr Tiziana Di Giampietro

## *Symphytum officinalis's* anti-inflammatory and regenerative effects on human fibroblast and osteoblast cell lines with extracellular vesicle profiling

<u>Tiziana Di Giampietro</u><sup>1</sup>, Maria Cristina Curia<sup>2</sup>, Natalia Di Pietro<sup>3</sup>, Adriano Piattelli<sup>3</sup>, Domenica Lucia D'Antonio<sup>3</sup>, Paola Lanuti<sup>3</sup>

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**Introduction**: Homeopathic literature states *Symphytum officinale* (SO) ability to stimulate bone growth, fracture consolidation and reduce inflammation and painful sequelae of bone and periosteal trauma. The Mother Tincture is prepared with roots that contain allantoin and rosmarinic acid, with healing and anti-inflammatory properties respectively. To date, however, the molecular mechanisms through which SO exerts its effects remain largely unexplored, particularly in inflammation and tissue regeneration.

**Objective**: This study aims to investigate the anti-inflammatory effects of homeopathic dilutions of SO on human gingival fibroblasts (HGF-1) inflamed with TNF- $\alpha$  and to evaluate its regenerative effects on human osteoblasts (hFOB) by assessing osteogenesis markers. Furthermore, the study seeks to characterize extracellular vesicles (EVs) released following SO treatment, specifically focusing on their proteomic profiles to identify potential mediators of SO's therapeutic effects.

**Methods**: Experimental assays were conducted using HGF-1 and hFOB cell lines. The methodologies included: (i) MTS and LDH assays to assess cell viability and cytotoxicity; (ii) Real-Time PCR to analyze the expression of key inflammation and regeneration markers; (iii)Flow cytometry and proteomics to characterize EVs release, including size distribution and protein content. Symphytum dilutions (1CH, 2CH, 3CH, 6CH, 12CH, 15CH, 30CH) were applied at 10  $\mu$ L per well, with treatment durations of 24 and 48 hours. Experiments were performed in quintuplicate to ensure reproducibility.

**Preliminary Results**: HGF-1 cells treated with SO at dilutions of 12CH, 15CH, and 30CH demonstrated a moderate (~20%) increase in proliferation compared to controls at 24 and 48 hours. Flow cytometry and proteomic profiling are in progress to identify EV release and key proteins modulated by SO treatment.

**Expected Outcomes**: It is expected that SO will exhibit anti-inflammatory and regenerative effects, with modulated EVs release and proteomic changes shedding light on its mechanisms. These findings may provide valuable insights into SO's therapeutic potential for inflammation and tissue regeneration.

**Keywords**: *Symphytum officinale*, Osteoblasts Fibroblasts, Inflammation, Tissue regeneration, Extracellular vesicles

#### **Paul Doesburg**

### Development of a simple bioassay to enable citizen science projects in basic homeopathic research

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**Introduction**: Homeopathy is a form of complementary medicine that, despite the controversial debate in the media, is frequently used in several countries worldwide. Criticisms of homeopathy primarily concern the process of potentisation, arguing that high dilutions are unlikely to contain any active ingredient. To overcome the current impasse, citizen science may offer a promising means of encouraging dialogue and collaboration. Accordingly, our objective was to develop a very simple bioassay that would facilitate replication and multi-centre trials without the need for sophisticated equipment.

**Materials and methods**: Cress seeds (*Lepidium sativum* L.) were grown in vitro within  $Ca(NO_3)_2$  salt tolerance levels resulting in a moderate reduction of the seedling length compared to cress grown in water. Screening experiments were conducted with seven homeopathic preparations (*Aurum muriaticum natronatum*, *Nitricum acidicum*, *Carbo vegetabilis*, *Natrium muriaticum*, *Nux vomica*, *Phosphorus* and *Silicea*) in the potency levels 10x, 20x, 30x (applied as commercially available globules) with 160 cress seeds per condition. Outcome was the total seedling length.

**Results**: The experiments demonstrated unequivocal, highly significant growth-modulating effects compared to control (unimpregnated globules) for multiple preparations in different potency levels.

**Conclusion**: The results of this very simple bioassay provide a foundation for future citizen science initiatives in homeopathic basic research. Further replication experiments are necessary to identify potential influencing factors, including seasonal effects.

Keywords: Bioassay, Citizen science, Lepidium sativum

#### **Dr Leonardo Faedo**

#### The use of homeopathy in agriculture: A systematic literature review

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**Background**: Global food systems are grappling with agronomic and ecological challenges, driving the need for innovative, sustainable food-production methods that minimize pesticide and synthetic fertilizer use while safeguarding yields and the environment. Homeopathy in agriculture has emerged as a promising agroecological approach. Over the last decade, its adoption among conventional and organic farmers has increased, supported by growing research initiatives and training opportunities. Despite its rising popularity, systematic research in this field remains limited. A systematic literature review has been conducted using academic sources from eight databases, encompassing a comprehensive search strategy in five languages. Preliminary findings provide insights into existing research and will inform the development of a technical guide for farmers.

**Method**: An international expert panel guided the identification of suitable research terms and databases in multiple languages (English, Portuguese, Spanish, German, and French). Literature was searched and screened according to PRISMA guidelines and evaluated using the Manuscript Information Score (MIS). The search strategy combined synonymous terms in five languages for "Homeopathy," "Dynamized High Dilutions (DHDs)," and "Agriculture."

**Results**: A total of 3300 references were identified, with 178 currently under evaluation based on MIS criteria. Conclusion: Preliminary findings indicate that homeopathy may enhance plant biostimulation, resilience, and crop yields, supporting sustainable food production. These results underscore the potential of homeopathy to contribute meaning-fully to the development of environmentally friendly and productive agricultural systems. Further analysis will refine these insights and support practical applications.

**Keywords**: Agrohoeopathy, Agroecology, Homeopathic preparations, DHD`s, Systematic review

#### **Dr Andrea Flores**

### The importance of knowing the patients: Characteristics and motivations of people who choose homeopathic treatment in Mexico and Latin America

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**Introduction**: Homeopathy is popular throughout the world, with Latin America playing a key role. Mexico, the first country to officially recognize homeopathy, shows a high acceptance of complementary therapies. However, studies exploring the characteristics and motivations of homeopathy patients remain limited.

**Description**: This study examines the sociodemographic profile, motivations, diseases treated, and perceived efficacy of homeopathy among its users.

**Objectives**: To identify the sociodemographic characteristics, attitudes, and motivations for choosing homeopathy, analyze the diseases treated, and assess users' perceptions of its effectiveness.

**Methodology**: A quantitative, cross-sectional study was conducted with 450 homeopathy patients in Mexico, selected through non-probabilistic convenience sampling. A validated structured survey with closed questions collected data on demographics, motivations, illnesses treated, and treatment efficacy. The results were analyzed by descriptive statistics, using frequencies, percentages and measures of central tendency, complemented by discriminant analysis to determine the differences between groups among the variable of frequency of consultation and the variables of sociodemographic and motivational profile. The study is being replicated in Argentina, Brazil, Colombia, and Ecuador.

**Results**: The majority of respondents were women (77%) aged 26-59. Most used homeopathy for acute and chronic conditions (39.3%) or for combined physical and mental symptoms (55.6%), with 73% relying exclusively on homeopathy. Key motivations included the ineffectiveness of other treatments (48.4%) and personal recommendations (46.7%). Discriminant analysis revealed frequent users are primarily women treating chronic and mental conditions, often combining homeopathy with other therapies.

**Conclusions**: The study evidences that homeopathy is positively accepted by users, particularly among women. Efforts should focus on promoting its use among men and pediatric populations. Future qualitative studies and international research will complement these findings, supporting public policies to integrate and promote homeopathy in society.

Keywords: Homeopathy, Patient motivations, Sociodemographic profile

#### Dr Daniel Gallego-Pérez

### Integration of traditional, complementary, and integrative medicine (TCIM) in the institutionalization of evidence-informed decision-making

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The "knowledge-to-practice gap" in health care has been well documented. The divergence between what is known through research and what is implemented in clinical practice has dire consequences, impacting health outcomes, guality of care, and the overall effectiveness of health care systems. Several knowledge translation strategies have been deployed to address this gap, including Evidence-Informed Decision Making (EIDM). EIDM seeks to ensure that health care practice and policy decisions are informed by the best available research evidence and other contextual factors such as acceptability, feasibility, sustainability, and equity considerations (WHO, 2021). Several initiatives have taken root to promote EIDM in health care systems, including the World Health Organization (WHO)'s Evidence-informed Policy Network (EVIPNet), which has made available guidelines and resources for EIDM institutionalization. There are, however, other gaps that could be characterized as "knowledge-to-practice" ones, including the marginality that Traditional, Complementary, and Integrative Medicine (TCIM) knowledges and approaches continue to experience within health systems. Albeit research evidence in TCIM has exponentially grown, it continues to be unrecognized; 87.6% of participant countries in the most recent WHO TCIM report (2019) referred to 'the lack of research data' on TCIM as their main challenge. The WHO has promoted the integration of TCIM into national health systems for several decades, yet the inclusion of TCIM in EIDM processes has recently been explored. This presentation will describe ongoing efforts to adequately incorporate the diversity of TCIM knowledges and approaches in EIDM processes and the implications of this intersection.

**Keywords**: Evidence-Informed Decision Making (EIDM); Traditional, Complementary, and Integrative Medicine (TCIM); Knowledge Translation; Policymaking

#### **Professor Carla Holandino**

### Anti-tumoral potential of ultra-diluted *Viscum album* preparations in murine melanoma cells: insights from *in vitro* studies

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**Background and aims**: Cytotoxic effects of *Viscum album* mother tinctures (VAMT) have been demonstrated on different tumoral cell lineages. A metabolomics approach has highlighted the influence of the host tree on the biological properties of VAMT. This study investigated the effects of different VAMT potencies on murine melanoma cells (B16F10 lineage) through *in vitro* assays.

**Methods**: VAMTs were prepared using fresh plant material harvested during the European summer from two host trees: *Quercus robur* (VAMTQ) and *Abies alba* (VAMTA). Homeopathic protocols were employed to prepare the potencies 3X, 12X, 30X, 6C, 12C, 200C, 2LM, 3LM, and 5LM, which were then evaluated on B16F10 cells. Biological effects were assessed using MTT assays (mitochondrial activity), crystal violet staining (cell viability), flow cytometry (cell death mechanisms, reactive oxygen species [ROS] generation, and cytokine release), and optical microscopy (cell morphology via Giemsa staining). Succussed water, ethanol, and carboplatin were used as controls.

**Results**: Both VAMTs significantly reduced tumoral metabolism (p<0,001) with the highest cytotoxic values observed after 1 hour of incubation. Morphological changes indicative of karyolysis and pyknosis were noted, along with increase of ROS and inflammatory cytokines levels at 1 and 24 hours of post-incubation, respectively. The 12X and 5LM potencies derived from VAMTQ induced alterations in cell replication and oxidative stress, accompanied by a significant reduction in MCP-1 cytokine release (p<0,0001). In contrast, the 200C potency of both VAMTs exhibited the highest inflammatory profile, triggering cytotoxic effects alongside elevated ROS production and inflammatory cytokine production after 24 hours of incubation.

**Conclusion**: The homeopathic 12X and 5LM potencies showed modulation of cellular metabolism and a promising anti-inflammatory effect highlighting the potential anti-tumoral properties of *Viscum album* preparations *in vitro*.

Keywords: Viscum album, Homeopathic potencies, ROS, Inflammation

#### **Dr Harleen Kaur**

### Management of trigeminal neuralgia with add-on homoeopathic medicines – A double blind, randomised, placebo-controlled pilot study

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**Background**: The trial evaluates whether Homoeopathy can offer clinical benefits as an add-on therapy in reducing pain in Trigeminal Neuralgia (TN) patients.

Method: Parallel arm, double blind, randomised, placebo-controlled pilot trial. 750 patients were screened at the neurology department of a tertiary care hospital in India, for at least 3 attacks of severe, electric shock-like unilateral facial pain lasting <2 minutes; occurring in one/more divisions of trigeminal nerve. Based on a computer-based randomization software, 60 diagnosed patients, aged ≥30 years, enrolled by blinded investigators, were assigned (1:1) as per simple randomization to receive either conventional treatment + placebo identical to homeopathic medicines (conventional group), or conventional treatment + individualised homeopathy, administered orally (adjunct group) and followed up for 6 months. The primary objective was to observe the change in TN pain through BPI-Facial score in 3 months. Secondary objective was to assess the holistic improvement in the participants through total and individual domain scores of BPI-Facial which included pain intensity, general (GADL) and face-specific activities of daily living (FADL) at 6 months.

**Results**: Through per protocol analysis, significant reduction of  $83.27\pm40.18$  to  $20.55\pm21.022$  was found in BPI-facial score within 3 months in adjunct group; as opposed to  $65.30\pm31.525$  to  $62.86\pm31.08$  in conventional group (p=0.001). At six months, GADL reduced from  $30.10\pm17.251$  to  $5.86\pm10.74$  and  $22.33\pm14.456$  to  $21.29\pm13.19$  (p=0.001); FADL reduced from  $33.70\pm17.68$  to  $8.27\pm14.16$  and  $25.50\pm15.21$  to  $21.47\pm13.91$  in adjunct and conventional groups, respectively (p=0.006). Pain intensity reduced from  $19.47\pm8.908$  to  $5.27\pm7.05$  in adjunct, and  $17.47\pm8.701$  to  $16.82\pm9.208$  in conventional group, conventional medication could be reduced in 9 participants, without relapse.

Conclusion: Homeopathy may be a viable integrated approach for sustainable healthcare in TN.

**Keywords**: Neuropathic pain, Tic douloureux, Prosopalgia, Homoeopathy, Homeopathic medicines, Neuralgia pain, Chronic pain

#### Dr Imane Lejri

### Neuroprotection via high-dilution *Gelsemium*: Mitochondrial optimization and Akt/mTOR pathway activation

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**Background and aims**: Mitochondria are essential for cellular energy production, maintenance, survival, and the regulation of synaptic plasticity. As the primary energy producers, they are also major sources of reactive oxygen species (ROS). The brain, with its high energy demands, is particularly susceptible to mitochondrial dysregulation, which can impair bioenergetics and neurite outgrowth, contributing to conditions such as anxiety, depression, and age-related neurodegenerative disorders. Previous studies demonstrated that low doses of *Gelsemium sempervirens* L. (*Gelsemium*) at centesimal (C) dilutions (3C, 5C) promote neurite outgrowth by stimulating mitochondrial bioenergetics. This study aimed to evaluate the neuroprotective effects of *Gelsemium* homeopathic dilutions (9C, 15C, 30C) on mitochondrial function after prolonged treatment.

**Methods**: We investigated the effects of chronic treatment (14 days) with *Gelsemium* preparations 9C, 15C, and 30C on mitochondrial bioenergetics, including ATP production and respiration, cell survival, and ROS generation. Additionally, we assessed their impact on neurite outgrowth and analyzed the underlying signaling pathways in human neuroblastoma cells, focusing on the Akt/mTOR axis.

**Results**: Chronic treatment with high-dilution *Gelsemium* (9C, 15C, and 30C) demonstrated significant neuroprotective effects by:

- i) Enhancing ATP production and mitochondrial respiration.
- ii) Promoting cell survival and modulating mitochondrial superoxide anion radical levels.
- iii) Facilitating neurite outgrowth via activation of the Akt/mTOR signaling pathway.

**Conclusions**: These findings suggest that high-dilution *Gelsemium* preparations (9C, 15C, and 30C) may provide neuroprotective benefits in brain disorders when used as part of prolonged treatment strategy. Their effects are mediated through modulation of mitochondrial function and associated signalling pathways, highlighting their potential therapeutic value.

Conflict of interest: This study was funded by Laboratoires Boiron, France, which actively participated in the study's design, data collection, analysis, interpretation.

**Keywords**: Gelsemium homeopathic preparations, Mitochondria, Chronic treatment, Neuroprotection, Bioenergetics

#### Dr Martin Loef and Robbert van Haselen

### Comparative clinical research on Homeopathy: a series of systematic reviews with Meta-Analyses (HOMA) – project outline

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**Background and aims**: Only a few meta-analyses are available on the therapeutic or preventive effects of homeopathic medicinal products (HMPs) in specific health conditions. The HOMA project aims to conduct systematic reviews (SRs) and meta-analyses (MAs) on the clinical efficacy and real-world effectiveness of HMPs for 12 clinical indications and of two medicines.

**Methods**: First, a framework study will provide an overview of the applicability of different evidence synthesis tools to homeopathy as well as other whole system approaches. A template protocol will define the methods that will be applied to the 14 SRs. Eligible studies need to include patients treated therapeutically or preventatively with any kind of HMP (individualized, clinical, complex). Peer-reviewed studies as well as grey literature, of randomized and non-randomized comparative studies in various languages will be selected. Risk of bias will be assessed using ROB-2 and ROBINS-I. Reporting quality, model validity, and generalizability will be evaluated using a specially developed Critical Appraisal Tool of Homeopathic Interventions Studies (CATHIS).

If a meta-analysis is possible and feasible, the complexity of interventions and heterogeneity of the study pool will be examined in various analytical steps. The GRADE approach will be used for assessing the certainty of evidence.

The 14 SRs will be conducted by multidisciplinary teams comprising of methodologists, homeopaths, and clinicians with expertise in the specific indications under review.

**Results**: The template protocol will be registered in spring 2025 and then published. The protocols for the 14 SRs will be registered separately. The framework study and the 14 SRs will be conducted and published sequentially during four years, starting in 2025.

**Conclusions**: This series of SRs and MAs aims to establish a reliable evidence base to support informed discussions about efficacy and effectiveness of homeopathic medicinal products, and to identify topics for further research.

Keywords: Homeopathy, Anthroposophy, Meta-analysis, Comparative effectiveness

#### Dr Ritika Narula

### Evaluation of therapeutic potential of selected plant derived homeopathic medicines for their action against cervical cancer

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**Background**: Plant-derived Homeopathic Medicines (HMs) are cheap and commercially available but are mechanistically less explored entities than conventional medicines.

**Aim**: To evaluate the impact of selected plant-derived HMs derived from *Berberis aquifolium* (BA), *Berberis vulgaris* (BV), *Mentha piperita* (MP), *Curcuma longa* (CL), *Cinchona officinalis* (CO), *Thuja occidentalis* (TO) and *Hydrastis canadensis* (HC) on cervical cancer (CaCx) cells *in vitro*.

**Method**: Mother tincture (MT) and 30C potencies of the selected HMs were screened for anti-proliferative and cytotoxic activity on Human Papillomavirus (HPV)-negative (C33a) and HPV-positive CaCx cells (SiHa and HeLa) by MTT assay. Total phenolic content (TPC) and the free-radical scavenging activity of each homeopathic medicine was determined using standard assays. Phytochemicals reportedly available in these HMs were examined for their potential inhibitory action on HPV16 E6 by *in silico* molecular docking.

**Result**: All tested MTs induced a differential dose-dependent cytotoxic response that varied with cell line. For C33a cells, the order of response was TO>CL>BA>BV>HC >MP>CO, whereas for SiHa and HeLa cells the order was HC>MP>TO>CO>BA>B V>CL and CL>BA>CO, respectively. Analysis revealed anti-oxidant content of BA, BV and HC had the lowest contribution to their anti-CaCx activity. Using *in silico* modelling of molecular docking between the HPV16 E6 protein crystallographic structures and main phytochemical components of BV, BA, HC, CL and TO, their potential to inhibit the HPV16 E6 protein carcinogenic interactions was identified.

**Conclusion**: The study showed a comparative evaluation of the potential of several plant-derived HMs to affect CaCx cell line survival *in vitro* and their theoretical molecular targets *in silico* for the first time. Data demonstrated that MTs of BA and BV are likely to be the most potent HMs that strongly inhibited CaCx growth and have a strong anti-HPV phytochemical constitution.

Keywords: Cervical cancer, Molecular docking, Homoeopathy

#### Dr Ritika Narula

### Therapeutic potential of selected homoeopathic drugs in different potencies against neonatal calf diarrhoea

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**Introduction**: Neonatal calf diarrhea is a common and potentially life-threatening condition in young calves. Conventional treatment often relies on antibiotics, mostly prescribed based on empirical observation rather than a confirmed diagnosis. Addressing the life-threatening risks of antibiotic misuse, homoeopathy offers a safe and effective alternative for managing this clinical condition in neonatal calves. The present work was a collaborative research project undertaken by CCRH with IVRI.

**Aim**: To evaluate the effect of *Echinacea angustifolia, Veratrum album* and *Arsenicum album* in different potencies in naturally occurring neonatal calf diarrhoea.

**Methodology**: Neonatal dairy cattle calf (01-28 days) of either sex (n=06) suffering from diarrhoea of infectious/non infectious origin were included for this therapeutical trial and were randomized into the treatment and the control group. Stool of all the diarrhoeic calves were subjected for bacteriological stool culture examination. Antibiotic sensitivity test on *E coli* isolates were performed to observe distinct Zone of Inhibition. Improvement in clinical signs and symptoms along with haematobiochemical & oxidative stress parameters were assessed before and after therapy.

**Result**: Calves receiving *Echinacea 200C* recorded best recovery by 2<sup>nd</sup> day in clinical signs & symptoms and blood biochemical & oxidative stress parameters. Faster recovery was observed in *Veratrum Album*  $\theta$  by 2.5<sup>th</sup> day > *Veratrum Album* 30 C& 200 C *by* 3.1<sup>st</sup> day >Standard antibiotic by 3.6<sup>th</sup> day. *Arsenicum album* demonstrated clinical and hematological improvements at potency 6C within 1.6 days of therapy. *Arsenicum album* 6C, *Echinacea* 200C, and *Veratrum album*  $\theta$  outperformed ceftriaxone antibiotic group.

**Conclusion**: Arsenicum album 6C may be recommended to treat neonatal calf diarrhea for rapid resolution of clinical signs and symptoms in the milieu of emerging antimicrobial resistance.

Keywords: Diarrhoea, Homoeopathy, Neonate calf, Veterinary

#### Dr Debadatta Nayak

### Effectiveness of *Eupatorium perfoliatum* 30C in preventing Dengue Fever-A prospective, community-based, open label, parallel cohort study in Delhi, India

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**Objective**: The study was undertaken to evaluate the protective effect of *Eupatorium perfoliatum* (EP) 30C on the incidence of dengue fever.

Design: This study was designed as a prospective, open label, parallel cohort study.

**Interventions**: Participants were enrolled in two medicine cohort (MC) communities and one control cohort (CC) community. Participants in MC who were more than 5 years of age received four medicated globules and those aged between 1 and 5 years received two medicated globules of EP 30C once a week for 10 weeks. Participants in CC received no medical intervention. Both cohorts received information and educational material regarding dengue.

**Outcome measures**: The primary outcome was incidence of dengue cases based on laboratory confirmation or the clinical definition of dengue as per the case definition notified by the National Vector-Borne Disease Control Program, Government of India, during the 14 weeks of intervention and observation.

**Results**: The analysis included 20,607 participants residing in three slums of Delhi, of which MC and CC included 15,298 and 5,309 participants respectively. The overall protective effect of EP 30C in MC against probable/laboratory-confirmed dengue was 59.59% (95% confidence interval [CI], 50.74 to 66.85, p = 0.0001). The overall protective effect of EP 30C against laboratory-confirmed dengue was 72.78% (95% CI, 54.45 to 83.74, p = 0.0001): 26 cases per 15,298 (0.13 per 1,000 person-weeks) in MC versus 33 cases per 5,309 (0.46 per 1,000 person-weeks) in CC.

**Conclusion**: The use of EP 30C was associated with some protection against probable and laboratory-confirmed dengue.

Keywords: Eupatorium perfoliatum, Dengue, Homeopathy, Prevention

#### **Prof Dr Thomas Ostermann**

#### Homeopathy: To make or not to make the economic case - a critical appraisal

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Homeopathy has a long tradition in delivering care to patients. Already in the early years of homeopathy in the 19th century, alongside solving the controversies about its mechanisms of action, costs were considered as an important argument for political decision-makers. This is still the case today and costs, together with the effectiveness of interventions, are a main parameter used to assess, for example, reimbursability by health insurances. This keynote based on current research aims at shedding light on this aspect and attempts to use the findings to highlight implications for further research.

After an introduction to the terminology of health economics and an overview of the status of the relevant research in integrative medicine, a focus is placed on the study situation in homeopathy. This is done using the results of an actual systematic review of 21 health economic studies on homeopathy from the last 30 years. Based on an examination of the quality of included studies using the Consensus on Health Economic Criteria (CHEC) List, pitfalls as well as methodological strengths and weaknesses are identified using examples from this review. In addition, the two streams of health economics evident from the review, namely the modeling approach and the classic study based on raw data, are contrasted.

Eventually, we will show that, despite the increased awareness for conducting high quality clinical trials in Homeopathy, health economic evaluations in this area are still fragile in terms of guideline adherence and methodological rigor that harbors the danger of the entire and entirely justified approach being discredited. Based on the positive examples of health economic evaluations, suggestions for a comprehensive methodological framework as to how and why various health economic approaches may be applied to Homeopathy in a sound and accurate way are presented and will conclude this keynote.

Keywords: Homeopathy, Health economic evaluation, Quality, Modelling, Review

#### Dr Bindu John Pulparampil

### Cell cycle inhibition and apoptosis induction by *Calcarea carbonica* 6C in SW 982 and SKOV-3 Cell lines

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An *in vitro* study was meticulously designed to explore the effects of *Calcarea carbonica* 6C (CC 6C) on various cell lines, specifically focusing on SW982 and SKOV-3. SW982, a synovial sarcoma cell line, and SKOV-3, an ovarian carcinoma cell line, were chosen due to their relevance in cancer research. Different concentrations of the CC 6C drug (1:25  $\mu$ l, 1:50  $\mu$ l, 1:100  $\mu$ l, 1:200  $\mu$ l, and 1:400  $\mu$ l in 500  $\mu$ l of DMEM) were serially diluted, treated, and incubated for 24 hours to evaluate their cytotoxic effects.

Following the incubation period, cell viability was assessed using the MTT assay, which measures cellular metabolic activity as an indicator of cell viability, proliferation, and cyto-toxicity. The results indicated a dose-dependent decrease in cell viability for both cell lines. Specifically, the IC50 values were determined to be 0.0242  $\mu$ L/mL for SW982 and 13.737  $\mu$ L/mL for SKOV-3, with SW982 cells showing maximum lethality.

Morphological changes post-treatment were documented using phase contrast microscopy, revealing significant alterations in cell structure. Apoptosis induction by CC 6C was confirmed through various methods, including fluorescent staining to visualize apoptotic cells, Caspase 3 and 7 ELISA to measure caspase activity, and Annexin V FITC flow cytometry to detect apoptotic cells.

Further analysis demonstrated that serially diluted CC 6C exhibited a consistent pattern of cell cycle inhibition, as evidenced by FACS analysis. This suggests that CC 6C impacts the cell cycle regulation in these cancer cell lines. Additionally, the anti-metastatic potential of CC 6C was confirmed through cell migration and aggregation assays, highlighting its ability to inhibit cancer cell spread.

Keywords: Synovial sarcoma, Ovarian carcinoma, Homoeopathy

#### Dr Bhuvaneswari Rajachandra sekar

### Insights on effectiveness of homeopathy in alcohol use disorder in individuals with a family history of alcoholism - a retrospective study

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**Background**: Alcohol use disorder (AUD) is a serious psychological and medical condition affects 1-3% of the global population, with higher prevalence in India and Kerala. Despite available treatments, relapse rates remain high. Individuals with a family history of alcoholism are at increased risk, when compounded by emotional instability and neuroticism. Homeopathy has shown potential in managing AUD and alleviating withdrawal symptoms without adverse side effects.

**Aim**: This study aims to evaluate the effectiveness of homeopathic treatment for alcohol dependence along with withdrawal symptoms in individuals with a family history of alcoholism. The Clinical Institute Withdrawal Assessment Scale for Alcohol, Revised (CIWA-AR) measures withdrawal severity, and the Severity of Alcohol Dependence Questionnaire (SADQ) assesses level of dependence.

**Methods**: A six-month retrospective study was conducted at NHRIMH, Kottayam, with ethical approval granted on 13.02.2024. Patients were selected from the OPD/IPD records between January 2022-2024. Out of 140 screened cases, 100 met the inclusion criteria as per ICD-10 diagnostic guidelines. The severity of withdrawal symptoms was measured using CIWA-AR at baseline, day 3, and day 5; Alcohol dependence was assessed using SADQ at baseline, 3rd month, and 6th month. Data was analyzed using the Friedman test.

**Results**: Out of 140 cases, 100 met the inclusion criteria. Shapiro-Wilks test showed significant deviation in SADQ and CIWA scores. Friedman test revealed significant reduction in SADQ scores (baseline: 35, three months: 15, six months: 3;  $\chi^2$  =180.529, p<0.001) and CIWA scores (baseline: 12, day three: 5, fifth day: 0;  $\chi^2$  =193.401, p<0.001) Homeopathic remedies are found like *Arsenicum album, Ranunculus bulbosus* for withdrawal symptoms, and *Nux vomica, Medorrhinum, and Lycopodium clavatum* for AUD.

**Conclusions**: Homeopathy shows effectiveness in treating alcohol dependence along with withdrawal symptoms in individuals with a family history of alcoholism. Further validation through larger studies is recommended.

Keywords: Alcohol use disorder, Homeopathy, SADQ

#### **Dr. Marcus Reif**

# Antibiotic prescription and course of therapy in homeopathic, anthroposophic and conventional primary care in the treatment of acute upper respiratory tract infections – a non-interventional study

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**Background and aims**: Antibiotics are indispensable in modern medicine. However, in 2019, the World Health Organization included anti-microbial resistance (AMR) in the ten greatest global threats to human public health. Research on the potential of existing non-antibiotic medicines, in particular homeopathic-anthroposophic preparations, can support strategies against AMR.

For treating uncomplicated acute upper respiratory tract infections and acute otitis media (URTI/AO) antibiotics are often unnecessary but nevertheless frequently used. We set out to investigate whether URTI/AO patients treated in homeopathic or anthroposophic practices, which aim to rigorously abstain from prescribing antibiotics whenever possible, show recovery patterns at least as good as conventional practices.

**Methods**: This is a non-interventional, prospective, controlled study conducted in German family medicine, pediatric and ENT primary care practices, treating patients with statutory health insurance. Practices declare themselves as either homeopathic/anthroposophic (referred to as 'complementary'), or conventional. A total of 650 URTI/AO patients 6 months of age or older (or their legal guardians), consenting to the documentation of their clinical data, complete symptom and quality-of-life questionnaires during the current visit, 7 days later, and a daily symptom diary for maximally 28 days. Primary outcome is the proportion of patients reporting complete/substantial recovery after 7 days. Additionally, therapy costs are assessed. Statistical analyses comparing complementary and conventional practices will rely on causal inference modeling which can adjust for systematic bias resulting from the non-random allocation of patients to the practices.

**Results**: Data recording started November 5<sup>th</sup>, 2024. Currently (December 1<sup>st</sup>) about 60 physicians in 50 practices have documented 137 patients. Recruitment is scheduled to last until May 2025.

**Conclusions**: This study aims to yield scientifically sound comparisons on antibiotic prescription rate and course of therapy of URTI/AO patients for complementary and conventional primary care practices.

Keywords: Anti-microbial resistance, Upper respiratory tract infection

#### **Dr Hélène Renoux**

#### HOMEOPRO qualitative trial – Homeopathy in chronic conditions

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**Background and aims**: After controversial interpretations of RCTs applied to evaluate homeopathy's clinical results, a qualitative approach has been chosen to explore in depth the patients' perspective aiming at describing the whole lived experience with homeopathy being used in chronic conditions, taking into account all the parameters identified by the very actors of the therapeutic process

**Method**: This qualitative, multicenter, prospective and longitudinal study has used the IPSE protocol (Inductive Process to analyze the Structure of lived Experience): qualitative research methodology elaborated by Pr Anne Révah-Levy's team and published in *BMC Medical research Methodology*. IPSE is based on an inductive and exploratory process, without any starting assumption. This phenomenological approach captures a phenomenon through the detailed descriptions provided by individuals who have experienced it. Thus an independent researchers' team has interviewed a panel of patients identified by their homeopaths.

22 participants were individually interviewed, using homeopathy for their chronic condition. a focus group was conducted to get a feedback on the results and content validity of the items generated

**Results**: Data analysis produced two structures of experience : (1)the perceived efficacy of the treatment on symptoms, crises, and overall health; and (2) the global experience of the homeopathic treatment.

Based on the results (axes, themes, categories) of each structure, items were generated using patients' verbatim to build a Patient Reported Outcome (PRO) measurement scale. The chosen rating system was Likert.

**Conclusion**: Through an exploratory and in-depth investigation of patients' experiences with homeopathic treatment, we developed a measurement tool intended for evaluating the treatment.

This PRO can be used in its complete version or divided into two scales: perceived efficacy and treatment experience. This work could be considered as preparatory for further quantitative trials.

**Keywords**: Homeopathy, Qualitative Research, Patients Reported Outcomes, Real life experience

#### **Rachel Roberts**

### Evolving evidence – Analysis of the third NHMRC 'Australian Report' on homeopathy

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In August 2024, Australia's National Health and Medical Research Council (NHMRC) completed a new systematic review of homeopathy – one of 16 reviews commissioned by the Australian Government to assess the evidence for effectiveness of a range of Natural Therapy modalities.

The NHMRC 2024 homeopathy review concludes that, "For the populations (or conditions) assessed, homeopathy appears to provide little to no benefit when compared with placebo [...] for most of the priority outcomes for which there is evidence available."

Given the ongoing debate around the status of the homeopathy evidence base, NHMRC's review is likely to be widely cited. As such, it is necessary to gain a clear understanding of the methodology used; the review's subsequent strengths and limitations, and the accuracy of the conclusions reached.

From a preliminary analysis, it is apparent that the wording of the conclusion is inappropriate, as it fails to sufficiently reflect two aspects of the results i.e. the mixed nature of the findings and the low-very low level of certainty of the results overall. Furthermore, NHM-RC's findings need to be interpreted with appropriate consideration of the limited scope of this evaluation: of the 305 randomised controlled trials identified as suitable for review, only 93 trials were included (30%), covering only 20 of 136 conditions for which relevant evidence was available.

Despite this significant limitation, the new 'Australian Report' identified positive evidence for effectiveness of homeopathy (moderate to low certainty) in at least five medical conditions, informing priorities for further research. This outcome is particularly notable when considered in the context of NHMRC's two previous homeopathy reviews. The findings from a comparative analysis of the three 'Australian Reports' (2012; 2015 and 2024) will be presented, examining the reasons for inconsistencies in their results and conclusions, which go beyond simple evolution of the clinical trial evidence base over time.

Keywords: Homeopathy, NHMRC, Australian Report, Systematic review

#### **Prof Ashley Ross**

#### "Similia Similibus Curentur": Ensuring the dependability of modern materia medica

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Pathogenetic trials (provings) are a critical pillar of homeopathic science, and form the basis of the application of the *similia* principle in clinical practice. The last two decades have seen a groundswell of proving enthusiasm, and a plethora of new provings derived by a range of methodologies and often obscure analyses. Many of these have been incorporated into our materia.

In this paper, the author identifies challenges impacting the consistency and reliability of proving outcomes, the traceability of proving data, and global efforts to 'firm up' the scientific and regulatory dependability of proving outcomes through the formulation of guidelines. He draws on his experience within this critical area of homeopathic research to foreground the central importance of pathogenetic trial research within homoeopathic science, the incontestable requirement of dependable and traceable materia medica in a clinical context, and shares methodological insights around protecting the inherently artistic nature of the proving experiment in an increasingly regulatory environment.

Homeopathic practice, as a consistent application of the similia principle, is critically dependent on a materia medica that accurately and dependably traces the clear pathogenetic effects of proved substances on healthy human beings. In this regard, the author also shares his perspective on the clear differentiation of experimental effects, analysis and tracing of proving data, and the risks of incorporation of spurious proving outcomes into our primary materia medica and repertorial sources.

Keywords: Materia Medica, Provings, Guidelines

#### **Dr Deepti Singh**

### Usefulness of individualized Homoeopathy versus standard allopathic treatment in acute uncomplicated Urinary Tract Infection (UTI): A randomised comparative trial

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**Introduction**: Urinary tract infection (UTI) is among the most prevailing infectious diseases with a substantial financial burden on society. Antimicrobial resistance (AMR) in UTIs represents a critical global healthcare issue hence there is a necessity of exploring evidence based potential alternative treatment options.

**Objectives**: The Primary objective of this study is to assess and compare clinical outcome of treatment with homoeopathic medicine and allopathic medicine in uncomplicated UTI using the validated Urinary Tract Infection Symptom Assessment (UTISA) questionnaire. The secondary objective is to compare the changes in quality of life, urine culture and recurrence in both groups.

**Methods**: A multicentric open label randomized comparative trial was undertaken on patients of both sexes aged 18-60 years presenting with clinical signs & symptoms of uncomplicated UTI. Participants were randomized to receive either individualised Homoeopathy (H) prescribed by qualified Homoeopathic physician or allopathic (A) treatment including the antibiotic therapy by an allopathic consultant engaged in the study. A per-protocol approach was used for analysis.

**Results**: 70 eligible participants who agreed to participate in study were enrolled and randomised in H-group (n=36) and A-group (n=34). Statistically significant reduction was found in mean UTISA severity scores from 10.00 to 1.68 and 10.53 to 1.94 in H & A groups respectively by 10th day. The symptom severity reduction was more (51%) in the H-group as compared to A-group (38%) by 3rd day. The impact of symptoms on QoL was significantly improved in both groups, however the bothersomeness score in the H group reduced by 55% as compared to 40% in A group by 3rd day. Overall recurrence rate in 6-month follow-up was less in H-group (17.65% Vs 37.5%), however, microbiologic success at 10th day was more in A-group. In Homoeopathy, *Cantharis, Natrum Mur, Pulsatilla, Sulphur* and *Apis Mel* were useful medicines.

**Conclusions**: The individualised homoeopathy might be an effective treatment for symptomatic relief and prevention of recurrence in acute uncomplicated UTIs. This gives a promising option for delayed antibiotic approach based on severity. However, large scale RCT should be conducted to validate the results.

Keywords: Cystitis, Homoeopathy, Uncomplicated UTI, UTI, Antimicrobial resistance

#### Assoc. Prof. Oskan Tasinov

### In vitro effect of *Ferrum phosphoricum* D12 on translation of inflammation and iron metabolism related proteins in LPS stimulated J774A.1 mouse macrophages

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**Background and Aims**: *Ferrum phosphoricum* (FP) is a homeopathic remedy used to treat early stages of fever and colds or flu, and iron deficiency anemia. Previously, we analyzed the effects of FP D12 *in vitro* on cell proliferation and transcription levels of inflammation, oxidative stress, and iron metabolism-related genes in mouse J774A.1 macrophages +/- bacterial lipopolysaccharides (LPS, E. coli O26:B6) stimulation. In this study, we aimed to evaluate the effects of FP D12 on the translation of selected proteins, including NfkB p65, ferritin, CD86, and NADPH oxidase, in the same cell culture model.

**Methods**: Translation levels of selected proteins were analyzed using PAGE gel electrophoresis followed by Western blot analyses. Relative protein levels were quantified densitometrically using ImageJ software, with  $\beta$ -actin serving as an endogenous control. Statistical analyses were conducted using GraphPad Prism V6 software. The effects of FP were compared to untreated control cells and LPS-stimulated cells.

**Results**: FP alone significantly increased protein levels of NfkB p65 (up to 3.2-fold, p<0.001), CD86 (up to 2.9-fold, p<0.001), and ferritin (up to 12-fold, p<0.001) compared to untreated cells. These effects were comparable to, and in some cases exceeded, those of 200 ng/ml LPS treatment. However, FP alone did not affect NADPH oxidase levels. Under LPS stimulation, FP further enhanced the translation of CD86 (up to 2.7-fold, p<0.001) and ferritin (up to 3.8-fold, p<0.001) but significantly reduced LPS-induced NfkB p65 and NADPH oxidase levels.

**Conclusions**: Our findings align with previous studies reporting immunostimulatory and iron uptake potential of FP by affecting gene expression in LPS-stimulated macrophages. This study highlights FP's ability to modulate translation of key proteins involved in immune response and iron metabolism. The results provide further evidence supporting FP as a potential immunomodulator and therapeutic agent for managing iron deficiency anemia, particularly through its action on beneficial protein synthesis.

Acknowledgements: Alphen Pharma AG Ltd., Bulgaria, financially supported this study.

**Keywords**: *Ferrum phosphoricum*, Protein expression, Macrophages, Lipopolysaccharides

#### Validating the repertory of the future – Towards data-driven homeopathy

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**Background and aims**: The Repertory can be seen as an index to the collective experience of homeopaths. This invaluable tool needs to be maintained and consolidated with the help of modern technology and statistics. In the Clificol® COVID-19 Support Project, worldwide clinical experience with treating COVID-19 patients was reported. We present lessons learnt from this project, including implications for the validation and future of homeopathic repertories.

**Methods**: The Clificol<sup>®</sup> COVID-19 registry is a cloud-based, worldwide clinical case registry of patients with confirmed or suspected COVID-19. In most countries, homeopaths could freely enter the repertory rubrics that informed the remedy prescription, whilst, in China, the collection of symptoms was structured with the aid of a questionnaire. Repertory rubrics, remedies prescribed, and outcomes were assessed and analysed.

**Results**: In total, 1227 cases from 29 countries (other than China) were recorded and analysed. In line with the Pareto principle ("20/80 rule"), we found that 20% of the most commonly used rubrics informed >80% (91%) of the prescriptions, and the 18% most commonly prescribed remedies comprised 80% of the prescriptions. This is to be contrasted with the findings from China where structured questionnaire were used and no such distribution was observed. Rare, potentially highly individualizing rubrics, were not associated with faster recovery.

**Conclusions**: The great majority of rubrics in repertories are only rarely used, greatly constraining our ability to validate repertory entries via statistical means. For this reason, the repertory of the future should combine three levels of validation: 1) *historical* (current repertories), 2) *high-quality clinical case reports* for uncommonly used symptom rubrics and remedies and 3) *statistical* for commonly used rubrics and remedies. Cloud-based technology and advances in artificial intelligence will assist in this task as the field of homeopathy integrates modern data-driven approaches.

Keywords: Validation, Repertory, Clinical Case Registry, Pareto Principle

#### **Dr Alexander Tournier**

#### How does homeopathy work? A scoping review of proposed modes of action

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**Background**: There is currently no generally accepted theory able to explain the observed clinical efficacy of homeopathy. The aim of this scoping review was to identify all theoretical approaches that have been used to explain homeopathy, with the objective of establishing a basis for identifying promising hypotheses and theories.

**Methods**: Medline, Embase, Scopus, Web of Science, PhilPapers, several online library catalogues, and personal libraries were searched for original studies up to 12th July 2024. Screening and data extraction were performed independently by two reviewers. The aspect of homeopathy addressed by each study was extracted: the Principle of Similars and/or Potentisation. The theories identified in this review could be grouped into fourteen overarching theoretical frameworks.

**Results**: 2118 records were screened, 500 full texts were assessed for eligibility, and 216 studies were included in this review. Starting in 1832 until the late 20th century, only sporadic contributions were found. From the 1990s, a marked increase in scholarly output was recorded. Most first authors were established in Germany, the United States, the United Kingdom, or India. The frameworks with the highest number of contributions were Humanities, Complex Systems, Water Structures, and Weak Quantum Theory. 22% of included publications described theoretical approaches that tried to cover both main aspects of homeopathy, 46% only Potentisation, 20% only the Principle of Similars (and 11% were unspecific).

**Conclusions**: This scoping review offers an overview of theories and models on the mode of action of homeopathy. These could be classified into 14 largely non-overlapping frameworks. Unexpectedly, the placebo did not emerge as such a framework. In a next step, we aim to perform an in-depth assessment of these theories in order to tease-out the most promising areas for future research.

Keywords: Theory, Mode of action, Review

## Anas barbariae 200K improves phagocytosis, modulates cell stiffness and oxidative stress in microglial cells *in vitro*

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**Background and aims**: In clinical practice, *Anas barbariae* 200K, a homeopathic medicine, is traditionally used for influenza-like illnesses. During a viral infection, innate immunity response, which is the first line of defence, involves phagocytosis and oxidative stress. We investigated the effects of *Anas barbariae* 200K on phagocytosis, cell stiffness and reactive oxygen species production using microglial cells, a subpopulation of macrophages specific to the central nervous system often used to study the inflammatory processes, oxidative stress and phagocytosis generated during influenza-like episodes.

**Methods**: To measure phagocytosis, the resting microglial cells were incubated with pHRodo BioParticles conjugated to *E coli* and the engulfment of the beads by the cells was measured using fluorescence microscopy technique. The production of total intracellular and mitochondrial reactive oxygen species (ROS) was measured with Cell-ROX or MitoSOX probe in inflamed cells using fluorescence microscopy technique. To study the cellular stiffness, the resting or inflamed cells were incubated with *Anas barbariae* 200K and the stiffness was assessed using atomic force microscopy.

**Results**: The results showed *Anas barbariae* 200K significantly enhanced by 1.5-fold phagocytosis compared with vehicle in resting cells. In inflamed microglial cells, *Anas barbariae* 200K significantly decreased ROS production by 40% (total intracellular ROS) and by 67% (mitochondrial ROS) compared with vehicle.

Moreover, *Anas barbariae* 200K rapidly increased cell stiffness in resting cells by 41% compared with vehicle and on the opposite, in inflamed cells, cell stiffness was decreased by 21% with *Anas barbariae* 200K compared with vehicle. *Anas barbariae* 200K caused a reorganisation of filamentous actin in inflamed cells, with marked relocation of actin at the cell extremities.

**Conclusion**: These results strongly demonstrate an effect of *Anas barbariae* 200K at cellular level on cell elasticity, mitochondria and phagocytosis-stimulating activity. The effect of *Anas barbariae* 200K on cell stiffness might modulates phagocytosis and actin reorganisation.

**Keywords**: *Anas barbariae* 200K, Phagocytosis, Cell stiffness, Antioxidant, Atomic Force Microscopy

#### Dr Francesca Truzzi

### Biological effects of xerosydryles obtained from *Arnica* and *Belladonna* 12CH homeopathic dilutions

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**Background**: Homeopathic ultramolecular liquid dilutions exhibit qualities typical of farfrom equilibrium, self-organizing, dissipative systems, unexpected for simple water molecules. They release, after lyophilization, a certain amount of solid material, named Xerosydryle, whose chemical composition is mostly composed by water. When re-dissolved into new water, Xerosydryles transfer the physical-chemical properties of the homeopathic remedies they come from, to the new solution. When Xerosydriles from *Arnica* and *Belladonna* have been proved in pathogenetic trials, they have shown a remarkably similarity in experimenter symptoms to their origin medicines. These observations have led us to hypothesize Xerosydryle obtained from those medicines as one, or the "active principle" of homeopathic ultramolecular potencies.

**Objectives**: To assess the biological properties of Xerosydryles on *in vitro* systems and to set up an experimental model system to test homeopathic remedies.

**Methods**: Xerosydryles obtained from *Arnica* and *Belladonna* 12CH liquid potencies, were resuspended in water so that their concentration was 100 times more than the homeopathic remedy they came from. Then they were tested on fibroblasts and CaCo2 cells with a classic MTT to assess their cytotoxic activity as well as their anti-inflammatory properties.

**Results**: Xerosydriles from *Arnica* showed a significant effect on reduction of inflammation on fibroblasts both in a preventive way or in a curative one. *Belladonna* Xerosydriles showed a different behavior onto those cells reducing their vitality.

**Discussion**: Xerosydriles appear to show some biological properties on *in vitro* systems. These properties seem somehow linked to the properties of the substance of origin (in ex: inflammation and Arnica). So, they might represent a suitable model system to manipulate and test highly diluted homeopathic medicines for their very subtle biological effects.

Keywords: Xerosydriles, Ultramolecular, Nanoparticles, Inflammation

#### Dr Michel van Wassenhoven

### Characterization of the material and electrodynamic aspect of high homeopathic potencies

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**Background**: The focus of DynHom (DYNamisation HOMeopathy) project, launched in 2014, is to study the physicochemical properties of homeopathic medicines, especially in high dilutions, and to characterize the effect of dynamization during the manufacturing process.

**Methods**: A wide range of analytical methods were used to determine the nature of homeopathic dilutions (NTA, freeze-drying), their molecular structure (NMR), chemical composition (HPLC, FTIR), appearance (SEM-EDX, EPA) and electrical (pH) properties. Various remedies (soluble, insoluble) were prepared according to the European Pharma-copoeia (dynamization), with or without dynamization (simple dilution) and compared to their respective control (ethanol, lactose, water) prepared under the same conditions. The impact of the container (glass, PET) was also evaluated. Conventional statistics and data conversion methods adapted to step-by-step manufacturing process were applied.

**Results**: All these techniques and statistical methods have allowed us to show that: a) homeopathic dilutions are not simply water solutions (e.g. particle size distribution [SPAN] for *Cuprum met* cH *versus* lactose cH, difference of means=0.189, t=2.584, p=0.01); b) dynamization is not a simple dilution (e.g. SPAN for *Gelsemium* cH *versus Gelsemium* dil, difference of means=0.162, t=2.549, p=0.022), c) a homeopathic preparation made from one raw material can be distinguished from another, even at the highest levels of dynamization, and d) the highest dynamizations still contain matter which does not correspond to the initial stock, but all homeopathic medicines are made up of the same molecules, in proportions specific to the raw material.

**Conclusion**: Thanks to various techniques, we can observe the different elements that make up homeopathic medicine. These are structured in a specific way for each remedy, which will have specific potential for action. The key words to remember are the particulate and molecular structure of homeopathic solutions, which become polarized systems with the potential to regulate dysfunctional genes in living beings.

**Keywords**: Pharmacognosy, Nanoparticles, Serial dilutions, Highly dynamizations, Morphogenic water

#### Dr Esther van der Werf

### Homeopathy and antimicrobial resistance: a research program to enhance research quality and evidence

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The primary aim of research is to create impact, and in the field of medical and public health research, this means improving health outcomes. Research serves as the foundation for evidence-based decision-making, shaping medical guidelines, policies, and treatment approaches. Incorporating research findings into clinical guidelines is crucial, and for Traditional, Complementary, and Integrative Medicine (TCIM), this will represent a significant step toward integration.

To achieve this integration, the quality of research is paramount, as its credibility and strength determine whether findings are considered for inclusion in clinical guidelines. The strength of research is determined by the quality of evidence, which is established through rigorous methodologies and study designs. Among these designs, systematic reviews, randomised controlled trials (RCTs) and large Real-World Evidence (RWE) studies hold the highest position in the hierarchy of evidence-based research. Consequently, there is a growing need for research that employs robust methodologies to ensure reliability, reproducibility, and clinical relevance.

However, research impact requires time and a structured approach, necessitating a well-organised and sustained research program to systematically build evidence and translate findings into practice. A compelling example of such an approach is HRI's research programme on homeopathy and antimicrobial resistance (AMR), which, to date, includes three systematic reviews and meta-analysis (Otitis Media, Tonsilitis and Sinusitis) and studies on the determination and validation of Core Outcome Sets (COS) for future primary care infection research (Acute Otitis Media and Sinusitis).

This initiative, through a combination of high-quality research, interdisciplinary collaboration, and standardised methodologies, will strengthen the evidence assessing homeopathic treatment for primary care infections, ensuring safe and effective treatment alternatives for patients and thus contributing to the long-term goal of reducing antibiotic dependence.

**Keywords**: Antimicrobial resistance (AMR), Homeopathy, Primary Care Infection, Antibiotics, Evidence-Based

#### Dr Daniel Wrzałko

### Patient-specific responses towards homeopathic preparations revealed by chromatographic patterns of an *in vitro* human blood test

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**Background**: Classical homeopathy is a medical system that focuses on the individualized treatment of patients. To investigate the effects of homeopathic preparations on human blood *in vitro*, an ascending paper chromatography test known as the Kaelin blood test was adapted, with an emphasis on possible inter-individual differences in response rates.

**Methods**: Blood samples treated with EDTA were collected from thirteen patients prescribed homeopathic remedies. Each sample was divided into subsamples, which were then treated *in vitro* with four different interventions: either the patients> individually prescribed remedy, *Pulsatilla*, *Natrium muriaticum*, or placebo. Potency levels were either 30c or 200c. All samples were analyzed using the Kaelin blood test. To assess the stability of the experimental setup, thirteen analogous systematic negative control (SNC) experiments were conducted. Additionally, 16 untreated blood samples were analyzed in a separate investigation to correlate the chromatographic pattern features with blood parameters. The scanned chromatograms from both experimental series were evaluated using computerized image analysis.

**Results**: Two-way analysis of variance (ANOVA), with patient and treatment as independent factors, revealed statistically significant interactions (p < 0.05) in all ten pattern evaluation parameters, and only three parameters showed significant main effects (p < 0.05) across all patients. The findings suggest that the response of blood samples to homeopathic treatments was dependent on individual patients, highlighting patient-specific effects. Strong correlations were identified between pattern features and blood parameters related to haemoglobin and liver function. The SNC experiments showed no statistically significant effects, indicating a robust and stable experimental setup.

**Conclusions**: The Kaelin blood test holds significant potential as an experimental model for basic homeopathy research, particularly as an *ex vivo in vitro* tool to investigate individualization in homeopathy. Further studies are required to assess the test's sensitivity, robustness, repeatability, and practical applicability.

**Keywords**: Individualized homeopathy, Human blood model, Ascending paper chromatography, Pattern evaluation

### **Poster Presentations**

Caliê Castilho

**P1** 

Fri 20 June, 17:30

### Effect of a homeopathic complex on the in vitro production (IVP) of bovine embryos: A study with Nellore cows

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The use of homeopathy has increased in livestock production in recent years, mainly to mitigate losses in the disposal of milk and meat, in addition to having no side effects and being environmentally friendly. In vitro embryo production in Brazilian cattle occupies a prominent position, as it represents approximately 50% of the embryos produced worldwide, and is still undergoing commercial expansion. In this study, the effects of the homeopathic complex Homeo-Vita Fertilidade® (Homeo-Vita, Umuarama, PR, Brazil) on the percentage of viable oocytes, cleavage rates and blastocysts on day 7 post-fertilization in Nellore cows were investigated. Nineteen adult cows were divided into two groups: Control (G-C, n=9) and treated (G-H, n=10). G-H received 20 g/day of the homeopathic complex consisting of Aristolochia clematitis CH6, Folliculinum CH6, Ovarinum CH6, Pulsatilla nigricans CH6, and Sulfur CH9 in a calcium carbonate preparation, administered over 119 days (35 days with mineral salt and 84 days with silage). G-C received the vehicle only. G-H showed a 7% (p=0.0494) increase in blastocyst rate (30.5% vs. 23.7%), with no significant effect on the percentage of viable oocytes (58.9% vs. 63.5%; p=0.1677) or cleavage rate (66.4% vs. 69.8%; p=0.3403). These results suggest that homeopathic treatment can increase blastocyst production and therefore represents a promising tool in bovine reproduction biotechnology. Further studies are needed to confirm these results and understand the mechanisms involved.

Keywords: Oocyte, Blastocyst, Zebu cattle, Pulsatilla nigricans, Ovarinum

#### Dr Suman Chandra

# Individualized homoeopathic medicines as adjunctive to standard care for improving symptoms of peripheral diabetic neuropathy in middle-aged individuals: Double blind, randomized, placebo-controlled trial

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**Background**: Peripheral diabetic neuropathy (PDN) constitutes a heterogeneous spectrum of clinical entities characterized by dysfunction of the peripheral nervous system, manifesting in diverse symptomatology. Patients afflicted with this condition often exhibit a range of sensorimotor disturbances, including paresthesia, dysesthesia, analgesia, and muscular weakness, accompanied by varying intensities of nociception, encompassing superficial, deep-seated, or intractable pain, frequently exacerbated nocturnally.

**Method**: Three months, double-blind, randomized, placebo-controlled trial on 116 participants was carried out at D. N. De Homoeopathic Medical College and Hospital to identify the differences between individualized homeopathic medicines and identical-looking placebos in the treatment of PDN. Participants were randomized into either Individualized homeopathic medicinal products (IHMPs) (n = 58) or identical-looking - placebos (n = 58) in the mutual context of Standard Diabetic care. The primary outcome measure was Neuropathy total symptom score (NTSS6); secondary outcome measures were, Douleur Neuropathique 4 questionnaire (DN4), McGill pain questionnaire short form (SF-MPQ), Diabetic Neuropathy Examination score (DNE), Glycosylated hemoglobin percentage (HbA1C%). All were measured at baseline, and every month, up to 3 months, except HbA1C%, measured only at baseline and after 3 months. Group differences and effect sizes were calculated on an intention-to-treat sample.

**Results**: Group differences achieved statistical significance favoring IHMPs over placebos, in all the specified outcomes NTSS 6 (F1,114 = 228.470, P < 0.001), DN4 score (F1,114=69.008, P < 0.001), SF-MPQ total score (F1,114=185.019, P < 0.001), DNE score (F1,114=777.153, P < 0.001), and HbA1C% (P < 0.001, d=1.467). The most frequently employed remedies included Sulphur (27.1%), *Natrum muriaticum* (10.2%), *Lycopodium clavatum* (7.6%), *Medorrhinum* (7.6%), *Pulsatilla* (5.9%).

**Conclusion**: Thus, homoeopathic medicines worked significantly better than placebos in reducing the pain of PDN. Replicating multi-centric research with a robust sample is warranted to substantiate the findings.

**Keywords**: Homeopathy, Placebo, Randomized controlled trial, Peripheral diabetic neuropathy

**P2** 

Dr Stéphanie Chanut

#### Evaluation of homeopathic dilutions on cell redox homeostasis

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**Background and aims**: Redox homeostasis is crucial for cells and it is well established that redox imbalance in favor of oxidant burden is a significant cause of several diseases. Any molecule or group of molecules that can help maintaining cellular redox homeostasis are of potential interest and are defined as antioxidant species. It has long been accepted that antioxidant compounds are molecules capable of scavenging reactive oxygen species (ROS) by monoelectronic reaction but the concentrations that can be achieved *in vivo* cannot overcome the kinetic limitation of the chemical reaction. Only certain compounds like glutathione, because of their reaction kinetics and high intracellular concentration, can react with ROS. On the contrary, it has been demonstrated in the last decades that, most of these antioxidants provide cellular protection indirectly by enhancing cellular endogenous antioxidant defenses through a pro-oxidant signal. Here, we aimed to address the potential antioxidant capacity of different homeopathic dilutions of *Arnica montana* (AM) and *Gelsemium sempervirens* (GS) preparation through their capacity to enhance endogenous antioxidant defenses.

**Methods**: We first analyzed *in cellulo* the radicals scavenging capacity of the homeopathic dilutions' preparations (3-5-9-15-30CH) using electron paramagnetic resonance. Their antioxidant capacity was then investigated by comparing ROS production measured by fluorescence using  $H_2DCFDA$  in SH-SY5Y cells pre-incubated with homeopathic dilutions or vehicle before and after menadione treatment, a potent ROS inducer.

**Results and conclusion**: The results clearly demonstrate a significant ability of AM 30CH compared to vehicle to protect the cell from the toxicity of menadione after a 24-hour treatment while a prooxidant behavior was evidenced during the two first hours, underlining a classical antioxidant property. GS 15CH showed a mild endogenous antioxidant capacity after a 6-hour treatment but not correlated to a pro-oxidant capacity while a strong super-oxide radical scavenging property was observed independently of the dilutions.

**Keywords**: *Arnica-montana*, *Gelsemium-sempervirens*, Antioxidant-defenses, Free-radicals, Redox-homeostasis

**P**3

#### Dr Stéphanie Chanut

**P4** 

### *In vitro* effects of phosphorus homeopathic dilutions on biological markers in inflammation

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**Background and aims:** The chemical element phosphorus is related to its large metabolic ubiquity which explains its important place in the traditional homeopathic therapeutic arsenal. Phosphorus is a polychrest which has several pathogenic targets including blood vessels, skin, mucous membrane and all parenchyma: hepatic, renal, pulmonary, cardiac, osteoarticular and neuro cerebral. Phosphorus is generally prescribed to relieve disorders associated with inflammation syndrome.

Phosphorus homeopathic dilutions were tested to evaluate anti-inflammatory effects using inflamed cell culture models in vitro.

**Methods:** *Phosphorus* 5CH, 9CH, 15CH and 30CH dilutions were assessed on biological markers in inflammatory state in various cell types: interleukin-1 b (IL-1b), tumor necrosis factor a (TNFa) produced by macrophages, InterCellular adhesion molecules-1 (ICAM-1) by endothelial cells and oxidative stress (reactive oxygen species - ROS) by microglial cells. The cells were first treated with Phosphorus homeopathic dilutions and then inflamed with lipopolysaccharide + interferon gamma (LPS+IFNg) for macrophages, TNFa for endothelial cells and LPS for microglial cells. After the treatments, the effects of Phosphorus homeopathic dilutions were measured by ELISA and fluorescence microscopy techniques.

**Results:** *Phosphorus* 30CH significantly decreased by 34% IL1-b and by 24% TNFa production compared with vehicle in macrophages. *Phosphorus* 15CH and 30CH decreased by 13% to 27% ICAM-1 production compared with vehicle in endothelial cells, respectively. Phosphorus 5CH and 9CH significantly decreased by 25% total ROS production compared with vehicle in microglial cells.

**Conclusions:** Phosphorus homeopathic dilutions have anti-inflammatory and antioxidant properties, in various inflamed cell models. *Phosphorus* decreased inflammatory biological markers (15CH and 30CH for ICAM-1 and 30CH for IL-1b and for TNFa) and the oxidative stress (5CH and 9CH) in vitro.

Keywords: Phosphorus, Biological effect, In vitro cell models, Anti-inflammatory

#### Dr Anupriya Chaudhary

## Comparison of adjuvant homoeopathy and allopathy with nonsurgical periodontal treatment (NSPT) in patients with chronic periodontitis: A randomized double arm study

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**Background and Aim**: Periodontitis is a public health problem of concern owing to its high prevalence. It may lead to tooth loss and disability, negatively affect oral health, chewing function and aesthetics, and can also be a source of impaired quality of life. A study was undertaken to compare the effect of homoeopathy and allopathy as adjuvant to nonsurgical periodontal treatment (NSPT) in patients with chronic periodontitis with respect to Clinical Attachment loss (CAL) and other dental parameters.

**Methods**: A prospective, open-label, double-arm study was undertaken on persons with mild/moderate chronic periodontitis (CAL  $\leq$  5 mm). Participants were randomized to receive for a period of 9 months, adjuvant individualized homeopathic treatment (group H) or allopathic treatment-anti-inflammatory/antiseptic/antibiotic (group A) after NSPT. The primary outcome was CAL while other dental parameters were secondary. Changes in oral health were evaluated using WHO- Oral health assessment tool (OHAT). All measurements in either group were made by the conventional dentist. Intergroup and intragroup analysis was carried out using independent t test and paired t-test respectively.

**Results**: 65 participants were enrolled after screening 122 patients. 54 participants (H= 31, A= 23) who completed 9 months follow-up were analyzed. Mean age was  $36.54 \pm 15.61$  years. Groups were comparable at baseline. The mean CAL (in mm) at end of 9 months in group H was  $1.96 \pm 1.02$  (95% CI [1.60, 2.33]) compared to  $2.10 \pm 0.80$  (95% CI [1.78, 2.43]) in group A. While mean reduction in CAL was 45.84% in the group H, a 42.56% decrease was observed in the group A at 9 months. Both the treatments showed improvement in CAL (Mean difference = 0.07, t (52) = 0.258, p = 0.798). However, the change was more in the group H (Mean of change in CAL=  $1.65 \pm 1.03$ ) as compared to Group A (Mean of change in CAL=  $1.58 \pm 0.94$ . OHAT scores were similar in both the groups at 9th month and showed 77 % improvement. H group didn't require any anti-inflammatory or antiseptics. While 2 persons from group H improved to mild from moderate category of CAL, no patients of group A showed such a change.

**Conclusion**: Homeopathy can be used as a safe adjunctive treatment for improving CAL and oral health in chronic periodontitis.

Keywords: Homoeopathy, Chronic periodontitis, NSPT

#### Dr Anupriya Chaudhary

**P6** 

## Clinico-epidemiological profiling and treatment response of suspected omicron infected COVID-19 patients attending homoeopathic outpatient departments across India during third wave: A data collection study

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**Background and Aim**: The global surge in COVID-19 cases during the third wave, driven by the Omicron variant, spread to over 80 countries by December 2021. In India, homeopathy was widely used for prevention and treatment during the pandemic, with many patients consulting doctors at routine OPDs for care. A clinico-epidemiological study was conducted at homeopathic OPDs across India, assessing prescription patterns and treatment responses.

**Methods**: A data collection study was undertaken at homoeopathic OPDs in 25 cities (12 states). The sample comprised 947 COVID 19 positive participants aged between 2-92 years. Multivariable logistic regression was conducted to estimate the association between demographic characteristics, vaccination status, previous COVID-19 history and presence of symptoms. Participant data was also analyzed for response/ clinical recovery by the 7th day categorized as per the treatment taken.

**Results**: The clinical course of the disease was "mild". Fever, cough, fatigue, myalgia, and headache were the major symptoms reported. History of COVID-19 had 2.42 times higher odds (95% CI:1.47-3.98) of having a sore throat and 1.83 times higher odds (95% CI:1.15-2.93) of having a running nose while vaccination showed lower odds for systemic symptoms like fever and fatigue. While 58.5% patients took only homoeopathic treatment (H group), 41.4% consumed adjuvant allopathic medicines (H+A group). By the 7th day of treatment, 79.56 % of patients recovered in H group compared to 74.87% in H+A group. Time to recovery was similar. (H:  $5.28\pm0.086$  days, (95% CI [5.11, 5.44]) and H+A:  $5.45\pm0.1$  days; (95% CI [5.24, 5.65]); p=0.09. Arsenicum album and Bryonia alba were the most frequent prescriptions.

**Conclusion**: During the third wave of COVID-19 in India, patients at homeopathic OPDs had mild disease, and homeopathic treatment, alone or with allopathy, was beneficial.

Keywords: Homoeopathy, Third wave, COVID-19

#### Dr Cideli de Paula Coelho

**P7** 

#### Homeopathic treatment of leucorrhoea in dogs: A retrospective analysis of 15 years

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Leucorrhoea, characterised by abnormal vaginal discharge, can be acute, chronic, or recurrent and often indicates underlying health issues such as vaginitis, pyometra, inflammation, or neoplasia. This retrospective study analyses 15 years of homeopathic treatments applied to 120 dogs, following the principle of similitude as described by Samuel Hahnemann. The most frequently prescribed remedies included Pulsatilla nigricans (22%), Sulphur (20%), Calcarea carbonica (17%), Causticum (11%), Natrum muriaticum (8%), Silicea terra (8%), Aesculus (8%), and Mercurius solubilis (6%), with potencies ranging from 6 cH to 200 cH. Pulsatilla nigricans is a crucial remedy for gynaecological disorders, particularly in cases of mucous or mucopurulent discharge that is thick, yellowish, or greenish. It is indicated for affectionate, attention-seeking animals and is especially effective in hormonal imbalances, such as those occurring post-oestrus, or as supportive therapy in conditions like vaginitis and uterine inflammation. Sulphur, a broad-spectrum remedy, plays a fundamental role in treating leucorrhoea in dogs, particularly when the discharge is yellowish or greenish with a foul odour, especially in chronic or recurrent cases. Its significance lies in its deep action on vital force regulation, promoting detoxification and overall systemic balance. Calcarea carbonica is primarily indicated for thick, whitish discharges, especially in animals with a history of immune weakness or slow metabolism. The treatments, with an average duration of 10 days, achieved complete remission of symptoms, underscoring the importance of individualised remedy selection based on the physical and mental characteristics of each patient. The closer the similarity between the remedy and the dog/s clinical presentation, the higher the potency employed. The treatment/s effectiveness reflects homeopathy/s ability to restore the balance of vital force and promote systemic harmony.

Keywords: Homeopathy, Pulsatilla, Individualised Treatment

**P8** 

# Inactivation of biological activity of homeopathically prepared tin (*Stannum metallicum* 30x) following exposure to close proximity cell phone-emitted electromagnetic radiation

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**Introduction**: The pervasive use of cell phones raises concerns about potential adverse health effects due to the electromagnetic fields (EMF) they emit. For pharmaceuticals, these effects are considered analogous to those of conventional heating, while the effect on homeopathic preparations remains inconclusive. Accordingly, we investigated whether EMF affect homeopathic preparations regarding their biological effects.

**Materials and methods**: *Stannum metallicum* 30x (and lactose 30x as control) were subjected to 14h close proximity cell phone irradiation (2G open vocal call) or remained untreated. Biological effects were investigated in a *Lepidium sativum* bioassay, assessing four independent outcome parameters. Experiments were performed in parallel at two independent laboratories. The experimental stability was monitored throughout the entire investigation with systematic negative control experiments.

**Results**: Untreated *Stannum metallicum* 30x exhibited significant effects for all four parameters, while cell phone irradiation nullified these effects.

**Conclusion**: This is the first investigation that provides conclusive data that exposure of a homeopathic preparation to cell phone-induced EMF inactivates the homeopathic preparation regarding its biological effects. This finding cannot be extrapolated to other preparations or organisms, but warrants further investigation for potential implications in the clinical use of homeopathic preparations. This observation may substantiate hypotheses regarding the mode of action of ultra-molecular homeopathic preparations.

Keywords: Cellphone, Electromagnetic radiation, Non-thermal effects

**P9** 

### Time modulated treatment effects in basic homeopathic research. The moment matters!

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**Introduction**: Homeopathy is a form of medicine that has been practised for over two centuries and is popular in many parts of the world but remains controversial. To address this controversy, we developed a very simple bioassay to facilitate replication and multi-center trials without the need for sophisticated equipment. Cress seeds (*Lepidium sativum* L.) were grown in vitro within  $Ca(NO_3)_2$  salt tolerance levels, on the assumption that homeopathic preparations would induce compensatory effects, which would likely be more pronounced in impaired plants. Preparation screening experiments revealed unambiguous, highly significant growth-modulating effects for several preparations at different potentisation levels. During a subsequent experimental phase we assessed possible chronobiological effects of the 30x preparations.

**Materials and methods**: Hereto, verum and systematic negative control (SNC) experiments were performed with *Acidicum nitricum, Carbo vegetabile, Natrium muriaticum, Nux vomica and Phosphorus* at 0.5 g/L  $Ca(NO_3)_2$  applying 160 cress seeds per condition, in ten independent experiments.

**Results**: The initial treatment effect could not be replicated. Instead, highly significant (p < 0.001) or significant ( $p \le 0.01$ ) time-modulated treatment effects were identified for cress treated with either *Carbo vegetabile*, *Nux vomica*, and *Phosphorus*, or *Natrium muriaticum*, respectively. Interestingly, the mean treatment effect for all individual preparations was consistently higher in the initial screening experiment. As was the case in the screening experiments, no significant modulation of seedling lengths was found for cress treated with *Nitricum acidicum* compared to the placebo control.

Evaluation of the SNC experiments indicated a stable experimental setup and a reliable treatment effect.

**Conclusion**: The phenomenon of temporal modulation of homeopathic treatment effects has been repeatedly reported in basic homeopathic research and may represent a more common phenomenon that is under-reported. Possible reasons for such effects are discussed.

**Keywords**: Simple bioassay, Ctizen science, Ultra-molecular homeopathic preparations, Chronobiological effects.



**Christoph Dombrowsky** 

#### NMR T1 and T2 relaxation times of potentized preparations

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**Background**: The physicochemical properties of potentized homeopathic preparations, created through serial dilution and succussion, often exceeding the Avogadro limit, have long been a subject of debate. Despite the lack of a clear scientific consensus, certain potentized preparations have demonstrated biological effects in plant assays. This study assesses basic molecular characteristics of such preparations using Nuclear Magnetic Resonance (NMR), focusing on preparations previously shown to be bioactive in plant-based assays. NMR measures the longitudinal (T1) and transverse (T2) relaxation times of hydrogen nuclei, which are sensitive to supramolecular structures and nano-sized phenomena that might explain their biological effects.

**Methods**: NMR T1 and T2 relaxation times were measured using a Bruker minispec mq20 at 20 MHz with inversion recovery and Carr-Purcell-Meiboom-Gill sequences, respectively. The experimental design followed rigorous protocols, including randomization, blinding, positive controls, and multiple production lots, to ensure accuracy and reproducibility. To track and correct environmental influences, such as temperature fluctuations, we systematically monitored key parameters and used NaCl and MgCl<sub>2</sub> control solutions to detect drifts and assess environmental impacts. This study replicates methodologies outlined by Demangeat and others, enhancing experimental rigor with systematic negative controls and environmental monitoring.

**Results**: Data analysis is currently underway. Results will be presented at the conference and are expected to provide insights into the potential structural characteristics of biologically active homeopathic preparations.

**Conclusion**: This research seeks to provide robust, reproducible evidence regarding the physicochemical properties of potentized homeopathic medicines. By replicating key experiments, incorporating stringent environmental controls, and using NMR spectroscopy, the study aims to uncover molecular-level phenomena that could explain the bioactivity of these preparations. The final results will contribute to the ongoing investigation into the mechanisms underlying homeopathic potentiation.

Keywords: NMR relaxation times, Physicochemical investigations



Linlee Jordan and Dr Sujata Naik

### The possible effect of homeopathy on paediatric molluscum contagiosum patients: A literature review

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**Background**: Molluscum contagiosum (MC) is a self-limiting, benign, highly contagious and increasingly prevalent paediatric skin infection with no agreed upon conventional treatment protocol. Current lack of clear and effective treatment options for MC warrants investigation of homeopathy as potential treatment for MC as it has historically been used to treat lesions with molluscum-like characteristics.

**Aims**: This study aims to explore the literature on homeopathy, a holistic intervention, as a possible effective treatment for MC and also aims to investigate changes in non-MC-related concomitant symptoms during treatment.

**Method**: The databases CINAHL, PubMed, GoogleScholar and hand searched peer reviewed articles for clinically diagnosed MC cases were studied. Extracted data from RCT, case series and case reports of children (2 to 17 years) was assessed: timeline (onset of lesions, time of intervention and time of lesion resolution), number and location of lesions, geographical location of patient and any change in non-MC-related concomitant symptoms.

**Results**: In total 12 articles, published between 1997 to 2023, 178 participants were found. Lesion resolution time with homeopathy was markedly less compared to no treatment. Remarkably, an association was observed between lesion locations and geographical location of the children, with location of lesions being predominantly facial in India and non-facial in Australia. Of 15 unrelated concomitant conditions, improvement was reported in symptoms of the digestive, nervous, urinary and endocrine systems. Current use of the HomCARE guidelines have improved the accuracy of reporting the MC onset.

**Conclusion**: With literature review reporting improvement in resolution of skin lesions along with that of unrelated concomitant symptoms after treatment, Homeopathy appears to be a potential therapeutic approach for MC. Further large scale studies are needed to extrapolate the above findings to define the potential role of homeopathy in treatment of MC in paediatric patients.

Keywords: Molluscum contagiosum, Homeopathy, MCV

Dr Hardik Khamar

### Enhancing homeopathic healthcare delivery: design thinking as a transformative framework

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**Introduction**: The delivery of homeopathic healthcare challenges, including high patient dropout rates, communication barriers, and prevalent misconceptions about its effectiveness. These issues necessitate innovative, patient-centered approaches. Design thinking, a human-centered framework, provides tools to reimagine healthcare delivery, address these challenges, and improve patient outcomes.

**Objective**: To address communication barriers, reduce patient dropouts, and optimize operational efficiency in homeopathic outpatient departments (OPDs).

**Methods**: The study employed design thinking tools, including empathy canvas mapping, journey mapping, and the "How Might We" framework, to identify pain points such as extended consultation times and myths about homeopathy. Co-design workshops with patients and staff facilitated the creation of tailored communication strategies, empathy-driven educational materials, and digital health solutions. Prototypes were iteratively tested to ensure usability and effectiveness.

**Results**: Interventions resulted in a 30% increase in patient satisfaction and retention. Redesigned patient journeys enhanced understanding of homeopathy and fostered trust, while digital health solutions streamlined service delivery and improved accessibility. These innovations addressed key challenges and contributed to a more efficient and patient-centered care model.

**Conclusion**: This study demonstrates how design thinking principles—empathy, co-design, and process innovation—can revolutionize homeopathic healthcare delivery. By challenging traditional practices, rethinking patient journeys, and integrating digital tools, a sustainable and holistic approach to homeopathy can be achieved, setting a new standard for patient-centered care.

**Keywords**: Design-Thinking, Homeopathy, Patient-Centered-Care, Digital-Health, Empathy

#### Renate Künne

P13

#### Can Hahnemann's understanding of the human organism provide helpful ideas for the mode of action of homeopathic remedies?

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**Background and aims**: According to Hahnemann, the force of a homeopathic remedy is of the same nature as the vital force of the treated organism. Recently, concepts describing non-physical causes got introduced again in the scientific discussion in the life sciences. Therefore we investigated the following questions:

A) Can Hahnemann's idea of a vital force be used as a scientific concept today?

B) Does Hahnemann's concept of a vital force include aspects potentially relevant for understanding the mode of action of homeopathic remedies?

**Methods**: We analyzed the written texts by Hahnemann from 1829, when he first characterized the vital force, until 1842. We checked for consistent usage of the term *Lebensk-raft* (vital force), extracted its meaning and its epistemological classification, compared the findings with knowledge from modern biology, and investigated possible consequences regarding the mode of action of homeopathic remedies.

**Results**: Hahnemann used the concept of the vital force consistently. It denotes an entity which acts quantitatively as a force, but also qualitatively by regulating physiological processes. This notion matches with the concepts of *agency* and *orchestration* in biology and is therefore compatible with modern biology. The wholeness of the living body, postulated by Hahnemann, follows from the orchestrating entity acting as a nonlocal unifying principle, which regulates molecular processes.

Presuming that the force of a homeopathic remedy is of the same nature as the vital force, the latter's specific properties, which cannot be deduced from physical or chemical laws, must be taken into account.

**Conclusions**: Hahnemann's concept of a vital force still appears to be suitable as a scientific concept today. The idea of a nonlocal orchestrating entity, which qualitatively organizes biological processes, potentially provides a noteworthy aspect helpful for understanding the mode of action of homeopathic remedies.

Keywords: Vital force, Mode of action



**Prof Theodoros Lilas** 

### Exploring homeopathic knowledge through knowledge graphs and vector-based artificial intelligence

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**Background and Aim**: Given the vastness of homeopathic resources, we explored Artificial Intelligence (AI) navigation methods to acquire reliable, precise, and controlled information that exceed traditional algorithms processing capabilities.

**Methods**: We developed Advanced Graph Representations and Vector Search Techniques, used Natural Language Processing (NLP) methods to pre-process Materia Medica (MM) texts: Kent's Lectures of MM, H.C. Allen's Keynotes, W. Boericke's MM, and 6th edition of Kent's repertory.

**Results**: Through these developed Advanced Graph Representations and Vector Search Techniques, key information representing links between concepts were identified and extracted. Relevant excerpts were tagged in relation to the remedies described and the symptoms referenced. This data was then transformed into high-dimensional vectors and incorporated into a comprehensive knowledge graph, offering an interconnected network that surpasses the 2-dimensional tree model traditional repertory.

This combination of this Knowledge Graph and Retrieval-Augmented Generation (RAG) framework enables context-aware responses to user queries in order to provide relevant context and to support the repertorization process.

We implemented this method in a text of more than a million words, out of 3.140 queries, which resulted in 5.076 intriguing metadata information which refer to 286 remedies, mostly polychrests.

**Conclusion**: Preliminary evaluations indicate that such systems significantly out-perform traditional keyword-based searches. This enables precise remedy comparisons by further intricating relationships between pathologies and related treatments, eventually supporting informed decision-making in complex cases.

Keywords: Homeopathy, Artificial intelligence, Knowledge graphs.



#### Homeopathic treatment of 69 patients who developed symptoms after Covid vaccination

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**Introduction**: In the last years, the homeopathic community observed an increase in the number of cases that appear to be related to Covid vaccination. The Covid vaccines can increase the risk of serious adverse events significantly, Pfizer's own study showed. An effective treatment strategy is necessary. Homeopathy is promising, as it is known to be effective in the treatment of vaccination side effects.

**Objectives**: We tested the hypothesis that the intensity of symptoms, which developed after covid vaccination, can be considerably reduced applying classical homoeopathy.

**Methodology**: We collected 69 cases treated in homoeopathic practices that collaborate with the SHI Homoeopathic School, in which symptoms developed shortly after one of the covid vaccinations. The cases were analysed, repertorised and described as case studies.

**Results**: The 69 patients suffered from a variety of covid vaccination side effects like depression, fatigue syndrom, myocarditis, pneumonia, vertigo, paraesthesia, renal insufficiency and amenorrhea. On average, the patients had suffered from these symptoms during 6 months, and the treatment period was 2 months. In 75% of the cases, the symptoms deriving from covid vaccination were healed completely, 25% improved strongly. *Carcinosinum* (14%) and *Medorrhinum* (13%) were the remedies prescribed most frequently. *Silicea* and *Sulfur* were used in 12% and 9% of the cases, respectively. In 10% of the cases one of the covid vaccine nosodes was prescribed.

**Conclusions**: The intensity of symptoms deriving from covid vaccination can be reduced applying classical homeopathy. Prescriptions based on the individual symptoms and characteristics of the patient were successful. In cases, in which mainly new symptoms developed after covid vaccination, the covid vaccination nosodes were applied. *Carcinosinum, Medorrhinum, Silicea* and *Sulfur* were prescribed most frequently. The study could open new perspectives in the treatment of patients suffering from covid vaccination side effects. However, further studies on a larger scale are needed.

Keywords: Carcinosinum, Medorrhinum, Vaccination side effects



#### Dr Debadatta Nayak

### Concurrent utilization and medication adherence of *Arsenicum album* 30C as prophylactic against COVID-19: A cross-sectional, community-based study

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**Background**: Arsenicum album 30C was recommended by the Govt. of India as a COVID-19 prophylactic. During the Azadi ka Amrit Mahotsav (AKAM) program from September 2021 to August 2022, 3.5 million people received Arsenicum album 30C. This study aimed to estimate its utilization in the general population as prophylactic.

**Methods**: A multi-centric pan-India cross-sectional study on drug utilisation involved 23,101 participants from 23 cities between September and November 2022. To reduce recall bias, only those who received the medicine within the last month were enrolled. Health workers randomly approached the public for consent. The main outcome was adherence to *Arsenicum album* 30C over the past month, self-reported by participants. Those who took all three scheduled doses were classified as having perfect adherence; those who took less than two doses had partial adherence, and those who took none were categorized as no adherence.

**Results**: Out of 23,101 participants, 79.89% (n=18,457) showed perfect medication adherence by completing the three-dose prophylactic schedule. Partial or no adherence was seen in 16.81% (n=3,885) and 3.28% (n=759), respectively. The multivariate binary logistic regression analysis, adjusting for confounding factors, indicated that participants aged 18 to 40 [AOR 1.35 (1.20-1.52)], those from the upper socioeconomic class [AOR 1.71 (1.19-2.48)], and COVID-19 vaccinated individuals (AOR = 1.64, 1.35-2.01, p = 0.0001) had higher perfect adherence. The main reason for non-adherence was forgetfulness [52.08% (n=2419)].

**Conclusion**: This study indicates high adherence to the three-dose regimen among COVID-19 vaccinated individ=uals, emphasising the effectiveness of government distribution programs in promoting public health compliance. Future research should examine longitudinal trends, address unintentional non-adherence, and explore homeopathy's role in public health.

Keywords: Arsenicum, COVID-19, Drug utilization, Homeopathy

P17

## Gene expression analyses of *Sulfur* activated CD4+ T lymphocytes from patients with periodontal inflammation and a healthy control group – a protocol

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**Background:** Periodontitis is an inflammatory disease of the gingiva and the periodontium leading to tooth loss if left untreated. A moderate form of periodontitis affects every second adult and one in ten adults suffers from a severe form. From an immunological point of view, certain leukocyte subpopulations are located at the site of the inflammatory response. In preliminary work in fundamental research projects with potentised substances, activated CD4+ T lymphocytes and granulocytes from periodontitis blood donors have been observed. In particular, a specific immunomodulatory effect of potentised Sulfur on human cells can be assumed. Earlier work in the field of fundamental research on homeopathy has already taken up gene expression models. However, little is known about the gene expression of homeopathically stimulated immunomodulatory human cells from a periodontitis donor group versus a healthy control group.

**Aim:** To investigate the CD+4 T lymphocytes and their gene expression under Sulfur stimulation in periodontitis, a molecular biology approach will be used to investigate CD+4 T lymphocytes and their gene expression under Sulfur stimulation in periodontitis. *Sulfur* D12 will be tested on a number of genes involved in immune modulation in inflammation.

**Methods:** In this monocentric, prospective, two-arm controlled in-vitro matched-pairs study, gene expression profiles of isolated CD 4+ T lymphocytes from whole blood after stimulation with *Sulfur* D12 from 25 periodontitis patients and 25 healthy volunteers were prepared. The study will be launched in spring 2015.

**Results:** Preliminary results of the experiments will be presented.

**Discussion:** These in-vitro experiments could close an existing gap in research: The question of the mechanisms of action of potentised substances on human cells as well as the transferability of the results into clinical practice in the sense of translational research is at the focus of this approach.

Keywords: Gene expression, Sulfur, T lymphocytes



#### **Barbara Roberts**

P18

### Practice characteristics, tensions, challenges, risks and opportunities for homeopaths in New Zealand, a survey

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**Background and Aims**: In New Zealand Homeopathy is a healing modality that is largely unrecognised by the population, and there is a growing perception amongst Homeopaths that the profession has been declining. This survey aimed to find out more about Homeopaths in New Zealand, including demographics such as age and geographic spread, practice characteristics, and challenges for setting up practice and the profession as a whole.

**Methods**: An online survey targeting self-identified homeopaths in New Zealand, distributed through snowballing method, collected data from 181 participants. The survey examined demographics, practice characteristics, professional satisfaction, engagement with professional bodies, and perceived challenges, and results were analysed using descriptive and mixed methods statistical analyses.

**Results**: Participants were predominantly female (95%), with an average age of 57, and most practiced independently. Key challenges included low public awareness (26.1%), financial pressures from a lack of government support, professional isolation (particularly in rural areas), and the need to work outside of homeopathy to supplement income (66% of respondents). Despite these issues, respondents reported high job satisfaction, with 74% identifying client relationships and clinical outcomes as the most fulfilling aspects of their work. Nearly 60% were registered with the New Zealand Council of Homeopaths, though engagement levels varied.

**Conclusions**: The study underscores the need for targeted support structures, such as business training, improved public awareness campaigns, and professional networking opportunities. Addressing these factors could reduce isolation, strengthen professional identity, and enhance the sustainability of homeopathy within New Zealand's healthcare landscape.

**Strengths and Limitations**: This study provides novel insights into an unregulated profession within New Zealand's CM sector. However, self-selection bias and a small sample size may limit the generalisability of findings. The survey was partially funded by grants from the NZ Homeopathic Society and New Zealand Council of Homeopaths.

Keywords: Homeopathy, New Zealand, Professional challenges

P19

#### Effect of *Ferrum phosphoricum* D12 on mitochondrial function and COX-2 expression in human peripheral blood mononuclear cells

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*Ferrum Phosphoricum* D12 (*FP* D12) has antioxidant potential and anti-inflammatory action with a proven therapeutic effect in the early stages of fever, inflammation, muscle fatigue and anaemia. Therefore, we aimed to investigate the influence of different concentrations of *FP* D12 on mitochondrial function and inflammation in human peripheral blood mononuclear cells (PBMC). Our study provides additional evidence to the limited number of studies on homeopathic *FP* D12 as a medication in inflammatory conditions. PBMCs treated with *FP* D12 showed activated mitochondrial function and increased maximal respiration and respiratory reserve capacity. The tissue salt also reduced the gene levels of Cyclooxygenase - 2 (COX-2) and Interleukin - 1 beta (IL - 1 $\beta$ ) and demonstrating anti-inflammatory potential.

We report new data on the effects of *FP* D12 on mitochondrial activity and gene expression of inflammatory molecules such as COX-2 and IL-1ß. *FP* D12 appears to be a reliable therapeutic agent in cases of acute inflammation and mitochondrial dysfunction.

Keywords: Ferrum Phosphoricum, COX-2, PBMC, Mitochondria



#### **Dr Claudia Scherr**

## *Carbo vegetabilis* 30x significantly affected cress (*Lepidium sativum L*.) seedlings grown in calcium nitrate solution

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**Background and aims**: The question of the mode of action of homeopathic remedies has not been resolved yet. Bioassays with plants sensitive to homeopathic remedies can provide valuable tools for examining this topic. We therefore aimed at establishing a reliable, easy and fast bioassay with garden cress (*Lepidium sativum L*.) treated with the homeopathic remedy *Carbo vegetabilis* 30x as basis for future investigations on the effect of homeopathic remedies.

**Method**: Cress seedlings were grown upright on chromatography paper in hanging plastic bags and stressed with calcium nitrate solution (0,5 g/l), which increased shoot length and decreased root length in comparison to pure water. Cress was treated with dissolved globules of *Carbo vegetabilis* 30x or with dissolved unimpregnated sugar globules as control or was left untreated. After a growth period of 5 days at 14.5°C, the bags with the seedlings were scanned and the length of the seedlings was analysed using a digital tablet with the software ImageJ. Outcome parameters were shoot length, root length, total length and root to shoot ratio. Systematic negative control (SNC) experiments were performed to assess the stability of the experimental system. In total, 12 independent experiments were performed involving around 25000 seedlings in total.

**Results**: Experiments showed a slight but significant increase in shoot length of 0.05 cm (p=0.002) through application of *Carbo vegetabilis* 30x in comparison with the control. The parameters root length and total length were not significantly affected. The root to shoot ratio of the seedlings treated with *Carbo vegetabilis* 30x was significantly decreased (p=0.003).

**Conclusion**: The SNC experiments confirmed that the experimental set up was stable. The data obtained are in favour of a possible effect of *Carbo vegetabilis* 30x on cress seedlings. This test system can be used in future investigations to examine the mode of action of homeopathic remedies.

Keywords: Homeopathy, Bioassay, Cress, Plant model

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**Charlotte Southall** 

#### Exploring novel plant defence stimulators for reducing downy mildew in grapevines in Brazil

#### Charlotte Southall 1,2,3

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In older vineyards, copper concentrations from prolonged use of copper-based fungicides can build up in the soil, harming soil life, plants and sometimes local aquatic life due to run-off. Copper levels of up to 496 mg/kg of soil have been found in vineyards in Europe and over 1800mg/kg in vineyards in Brazil, whereas, the level that adversely affects earthworms has been demonstrated to be 45mg Cu/kg of soil. In 2019, European law changed to dramatically reduce the allowed amount of copper used in viticulture to 4kg/Ha averaged over 7 years, and so it is important to find an alternative strategy for the control of downy mildew (*Plasmopara viticola*) which can otherwise devastate a grape crop, this is particularly important for organic viticulture which currently has no alternatives.

This research aims to evaluate the effect of different homeopathic and biodynamic preparations on the resistance of grapevines to downy mildew (*Plasmopara viticola*) by measuring the levels of protein and some protective enzymes in the vine leaves before and after treatment. Twelve homeopathic and biodynamic preparations were first screened for their effectiveness in increasing leaf protein levels of Isabel vines. The best of these were used in a larger scale experiment using 80 Pinot Noir and 80 Chardonnay vines. All the treatments were double blinded and distilled water controls were used. The leaves were collected at four harvest times and then extracts made and the protein and protective enzyme concentrations measured using spectrometry. Early results indicate that some homeopathic and biodynamic preparations elicit an increase in protein and some protective enzyme levels indicating possible increased plant protection to downy mildew (*Plasmopara viticola*). Severity and incidence experiments are now needed and if the vines are found to be more resistant to downy mildew (*Plasmopara viticola*) then field trials will follow.

Keywords: Plasmopara viticola, Homeopathic, Biodynamic, Viticulture



P22

#### Recording data on cases with diabetes mellitus approached through classical homeopathy

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**Background and Aim**: Diabetes Mellitus (DM) is a common metabolic disorder with a growing lifetime prevalence. The aim of this retrospective study is to record cases with DM from an online database and identify patterns within this pool of data.

**Methods**: From cases between June 2014 and May 2024, we analyzed trends that included the symptom "GENERALITIES - DIABETES MELLITUS." Parameters such as age, gender, geographical distribution, and prescribed remedies were documented. The selection of prescriptions was made after applying specific inclusion criteria, such as those with documented follow-ups within a defined timeframe.

**Results**: Out of a total of 485,793 cases with various pathologies recorded over 10 years, 10,384 cases included the symptom "GENERALITIES - DIABETES MELLITUS". Out of the 485,793 total cases, 38.6% were male and 61.4% were female. Among the 10,384 cases with DM, 50.8% were male, and 49.2% were female. The most frequent age range for cases of DM is between 40 and 79 years. Out of a total 10,384 cases with DM only 945 prescriptions met our inclusion criteria. The number of uniquely prescribed remedies amounts to 123. The 10 most common remedies covering 500 cases are: *Sulphur, Natrium muriaticum, Phopshorus, Calcarea carbonica, Lycopodium, Pulsatilla, Carcinosin, Arsenicum, Staphysagria* and *Lachesis*. The 5 most frequent symptoms included in DM cases are "hypertension", "desire for sweets", "anxiety about health", "hereditary history of diabetes" and "ailments from grief".

**Conclusion**: In our study, the prevalence of DM is higher in males compared to females. The difference in this percentage is smaller than observed in the global population, as homeopathy tends to have a higher proportion of female patients.

While this pilot study offers intersting observations, further research is essential to establish more precise remedies and symptom correlations for the homeopathic approach of DM.

Keywords: Diabetes mellitus, Homeopathy, Retrospective study.

**Dr Alexander Tournier** 

P23

## HOMIS database of Homeopathic Intervention Studies in Human Diseases: an update

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**Objectives**: Therapeutic effects of homeopathy have faced controversy since its early development, despite a substantial empirical body of research. Over the last decades, researchers have been steadily expanding the body of literature. Maintaining an updated database of the literature, such as HOMIS, is important to organise clinical evidence, to help inform future studies.

**Design**: Seven online sources as well as one print library were scanned for homeopathy for the years 2021 to 2024. We included studies that compared a homeopathic product or intervention with a control regarding the therapeutic or preventive outcome of a disease (classified according to the International Classification of Diseases-11). The data were extracted independently by two reviewers and analysed descriptively. The data was merged with the data from the previous HOMIS review.

**Results**: Sixty investigations met the inclusion criteria, which added to the 636 studies references in the earlier HOMIS reviews comes to 696 studies in total. Of the newly added studies 45 had a therapeutic purpose, eleven had a preventive purpose, and three had both. 93% were randomized controlled trials (n=55), whereas the rest were non-randomized studies (n=4). The leading comparator was placebo (n=42). The type of homeopathic intervention was classified as complex(n=6), individualized(n=36), routine (n=17). The included studies explored the effect of HOM mainly on COVID-19 infection (n=13) and a total of 23 medical conditions. The overall picture emerging from the 696 studies shows a professionalisation of the field with a predominance of peer-reviewed studies published in English.

**Conclusions**: This revised bibliography outlines the state of clinical research on homeopathy in terms of intervention studies. The information it provides will support future reviews, potentially examining the most researched conditions, their clinical effects, and the potential biases in the studies included.

**Keywords:** Homeopathy, Controlled studies, Intervention studies, RCT, Placebo, Bibliography



## Methodological perspectives on variability in homeopathic practice: detecting the signals by reducing the noise

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**Background and aims**: The Clificol<sup>®</sup> COVID-19 Support Project is an innovative international data collection project aimed at tackling some of the core questions in homeopathy, including the key aspect of treatment individualization. We observed high levels of variability in both rubric selection and remedy prescriptions. This presentation elaborates further on both wanted and unwanted variability in homeopathy from a methodological perspective.

**Methods**: Two types of variability can be distinguished: wanted variability and unwanted variability. Sources of wanted variability in homeopathic prescribing are explored and identified. Unwanted variability is referred to as 'noise'. The topic of noise is explored further from a methodological perspective.

**Results**: The nature, and possible sources, of variability in homeopathic practice are illustrated. The topic of noise, as distinct from bias, in homeopathic practice is explained. Noise-reducing measures are proposed and illustrated, including A) the use of question-naires, B) the use of symptoms that can be ranked, such as polar symptoms, and C) the grouping of similar symptoms for analytical purposes. Standardizing the data collection process by using questionnaires was found to be the single most effective noise-reducing measure. The possibilities and limitations of standardizing data collection, including the role of algorithms, are explained.

**Conclusion**: Noise in homeopathic practice is a poorly understood topic, despite the fact that it can seriously hamper the ability to learn lessons from homeopaths' individual and collective experiences. Partly standardizing data collection is an important, and under-utilized tool for improving the success of homeopathy. Elaborating on the nature and sources of both wanted and unwanted variability and on how the latter can be reduced has important implications for the future of homeopathy practice.

**Keywords**: Noise, Clinical Case registry, Variability in homeopathic practice, Decision-making

Sandra Venables

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## Mapping the terrain: Findings from the Australian Homeopathic Workforce Survey (HWFS) pilot study

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**Background**: Mapping the terrain of Australian homeopaths is an examination of our lifeforce. Research question: What are the main characteristics and demographics of the homeopathic workforce in Australia?

In Australia, the regulated national healthcare workforce has been surveyed since 2009. Homeopaths are not currently surveyed. In 2018, the *First Australian Survey of Homeopaths* identified knowledge gaps about practitioner qualifications, training, and views about the profession. The need for a survey to address these gaps exists.

Standard workforce questions from the Australian Health Workforce Data survey were adapted. Additional questions were added to enrich the understanding about the workforce.

In 2024, a pilot study was undertaken, amongst ARoH registered homeopaths, the first year of a five year project.

Ethics approval: NIIM: 0138E\_2024

**Methodology**: Descriptive survey of 31 questions, 26 quantitative and 5 qualitative. All data was collected using the Qualtrics platform. Descriptive statistics assessed the quantitative data. Reflexive Thematic Analysis was applied to the qualitative dataset.

**Results**: The sample size (n =130) comprised 88% female, 11% male. 78% were 50 years or more. 84% hold qualifications other than homeopathy, while 34% hold more than one homeopathic qualification. 26% trained outside of Australia and qualifications changed in line with the education offerings in Australia. 47% began to practice within 6 months of graduation; 36% practiced prior to qualification; 82% registered with ARoH within a year of qualifying; 91% registered within 2 years of qualifying; general indication to practice beyond retirement age while the professional identity and title lacks cohesion.

**Conclusion**: Results indicate that homeopaths are predominantly female, aged over 50 years, identifying an aging workforce. Qualifications are diverse. Questions arose about when practitioners enter the workforce and concern for financial viability. Practice prior to qualification raises concern about public safety and professional legitimacy that needs further exploration.

Keywords: Homeopath, Workforce, Australia, Demographics, Survey

**Justine Verre** 

P26

## Influenzinum and *Echinacea angustifolia*: boosters of innate immune response *in vitro*

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**Background and aims**: Some homeopathic medicines are traditionally used in medical practice to strengthen immunity and reduce inflammation. In particular, *Influenzinum* is used in clinical practice for the prevention of influenza-like illness, the management of possible symptoms following an anti-influenza vaccination and post-infectious convalescence. *Echinacea angustifolia* is the best known for its beneficial effects on the immune system and infectious syndrome. During an infection, the innate immunity is the first body response. It is an immediate inflammatory reaction which involves, among other factors, phagocytosis and oxidative stress at the cellular level. The aims were to evaluate *in vitro* the effect of homeopathic dilutions *Influenzinum* 9CH and 15CH in inflammatory response and *Echinacea angustifolia* 5CH in non-inflammatory conditions during phagocytosis.

**Methods**: We investigated the effects of *Echinacea angustifolia* 5CH on phagocytosis in microglial cells and monocytes The effects of *Influenzinum* were assessed on reactive oxygen species (ROS) production on inflamed microglial cells and pro-inflammatory markers on inflamed macrophages and endothelial cells.

**Results**: In inflamed conditions, *Influenzinum* 9CH significantly increases the production of IL-6 (Interleukin-6) by 30% and MCP-1 (Monocyte Chemoattractant Protein-1) by 39% in macrophages, which help to eliminate pathogens. In endothelial cells, *Influenzinum* 9CH and 15CH significantly decrease ICAM-1 (InterCellular Adhesion Molecule-1) production by 20% limiting the vascular inflammation. Furthermore, *Influenzinum* 9CH and 15CH significantly decrease total ROS by 40% in inflamed primary microglia cells. In non-inflammatory conditions, *Echinacea angustifolia* 5CH significantly increases the phagocytosis by 14% in monocytes and 33% in microglial cells.

**Conclusions**: We demonstrated that *Influenzinum* and *Echinacea angustifolia* have a biological action in cell models *in vitro*. In inflammatory conditions, *Influenzinum* 9CH and 15CH have immunostimulant effect, anti-inflammatory effect on vascular cells and antioxidant effect. *Echinacea angustifolia* 5CH stimulates phagocytosis. Overall, *Influenzinum* and *Echinacea angustifolia* have a boosting effect on various biological markers of innate immunity.

**Keywords**: Influenzinum, *Echinacea angustifolia*, Innate immunity, Phagocytosis, Oxidative stress



### A pilot comparative study of the children with autism spectrum disorder with and without individualised homeopathic treatment

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**Background and aim**: Autism spectrum disorders (ASD) are lifetime neurodevelopmental disorders with challenges across functional domains. This pilot study compares psychometrics and parental reported outcome monitoring, behavioural and developmental outcomes, co-occurring breadth of concerns for children with ASD along with co-morbidities, with and without homeopathic treatment.

**Methodology**: After screening with Autism Behavior Checklist (ABC), utilizing a randomised control design and parental informed consent, this study compared children aged 2 to 12 years, divided into an experimental group receiving individualised homeopathy alongside occupational/ speech therapy (HG), and a control group receiving only latter (CG). Seven-year data was collected and analyzed through standardized behavioural assessments, speech-language assessments, parental questionnaires and observational methods.

**Results**: A total of 38 children with ASD completed the study [HG n = 19 and CG n = 19]. Childhood Autism Rating Scale (CARS) scores reduced in HG from 49.8 (SD = 5.6) to 28.6 (SD = 4.7) (p < 0.001) in contrast to CG where it reduced from 48.9 (SD = 3.9) to 41.9 (SD = 4.0) (p = 0.85). Social Responsiveness Scale (SRS) mean socre in HG reduced from 85.2 (SD = 10.5) to 73.4 (SD = 9.8) (p < 0.01) contrasting with CG 86.2 (SD = 10.7) to 80.8 (SD = 9.90) (p = 0.96)]. Autism Treatment Evaluation Checklist (ATEC) mean socre in HG reduced from 76.5 (SD = 15.2) to 62.3 (SD = 14.6) (p < 0.01) comparing with CG 77.4 (SD = 16.1) to 70.3 (SD = 14.8) (p= 0.98)]. Parents reported an improved emotional regulation with a decrease in anxiety-related behaviours, reduced co-morbidities and Neuro Developmental Parent Report for Outcome Monitoring (ND-PROM).

**Conclusion**: These findings indicate that individualised homeopathic treatment appears promising for children with ASD for integrating within conventional care frameworks.

Keywords: Autism Spectrum Disorder (ASD), Homeopathy



**Dr Petra Weiermayer** 

# Assessing the feasibility of a two-cohort design to assess the potential of homeopathic medicinal products to reduce antimicrobial resistance in turkeys - study protocol

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**Background**: Antimicrobial resistance (AMR) is a serious public health concern worldwide. The European Union requires a reduction in the use of antibiotics by 50% by 2030, with separate regulations on organic production that give preference to homeopathy and phytotherapy in organic farms before the use of conventional medicines (including antibiotics). We have therefore designed a two-phased project whose overarching aim is to investigate the potential role of homeopathic medicinal products (HMPs) in combating AMR in turkeys (the HOMAMR project): a two-cohort feasibility study using turkey-farm data that have been collected and analyzed retrospectively, followed by a prospective two-cohort study in turkey farms that would examine the impact of HMPs on changing antibiotic use.

**Objective**: The objective of this paper is to describe the protocol for the first phase of HOMAMR, which is a study under field conditions to assess the feasibility of collecting data retrospectively about turkeys that have been managed conventionally only or with HMPs.

**Methods**: Surveys performed on farms in Germany and Austria, including interviews with consenting farmers, will determine the feasibility of comparing retrospectively gathered data on antibiotic use and performance/production data in two cohorts of turkeys: (1) homeopathic treatment with conventional care (antibiotics) added if necessary or (2) conventional care (antibiotics) only. Co-primary outcomes to be studied are the amount of antimicrobial use and production period-related mortality. In addition, other production/performance parameters will be compared between the two treated cohorts.

**Conclusion**: To our knowledge, this is the first feasibility study on the treatment of turkeys using homeopathy, and whose retrospectively obtained data will inform a prospective study that would examine the impact of HMPs on antibiotic use in commercial turkey raising, fattening and breeding production.

**Keywords**: Observational study, Turkeys, Antibiotics, Veterinary homeopathy, Homeopathic medicinal product

P29

Dr Esther van der Werf

## A Core Outcome Set for Acute Otitis Media (COS-AOM) for primary and community care studies.

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**Background and objective**: Outcome heterogeneity reported in Acute Otitis Media (AOM) research hinders evidence accumulation. Identification of a Core Outcome Set (COS) to report on in future studies in AOM is warranted.

#### Methods:

**Phase 1**: Candidate outcomes identification by reviewing previously reported outcomes in systematic reviews of AOM.

**Phase 2**: In a Parent and Public Involvement (PPI) meeting candidate outcomes were discussed on their importance, presence, and absence.

**Phase 3**: The clinical perspective of health professionals and pharmacists was anonymously gained through a ranking task.

**Phase 4**: An International Steering Committee (ISC) discussed the ranked outcomes and advised on the final COS.

**Results**: 51 candidate outcomes were identified from 3 reviews and summarised to 20 overarching outcomes in Phase 1. Eight parents participated in the PPI meeting. 28 participants (11 GPs, 11 Traditional Complementary and Integrative medicine (TCIM) Professionals, 6 Pharmacists) ranked the 20 outcome cards. Moderate agreement in ranking was reached within all 3 medical groups, with pharmacists showing the highest agreement (0.540) and the TCIM professionals the lowest (0.421). Correlation coefficients between the groups show a sufficiently high agreement (P<0.01).

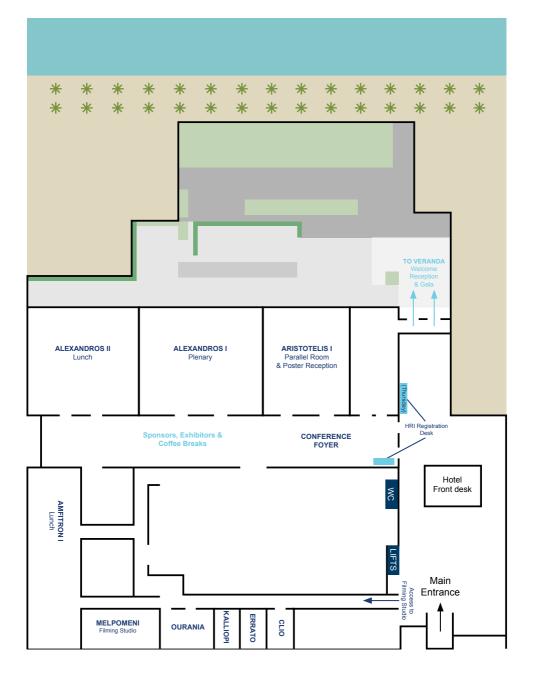
The ICS confirmed the final COS-AOM including 8 acute outcomes and 2 mid-long-term outcomes. Agreement for each outcome was reached with 100%.

**Conclusion**: The proposed COS defines a minimum set of outcomes to be measured and reported in primary care and community studies on AOM, including TCIM clinical trials, to enhance evidence-based knowledge. Future research should focus on validating commonly used measurement tools for these outcomes and enhancing findings' generalisability beyond the UK, Europe and primary care settings

**Keywords:** Acute Otitis Media (AOM), Traditional Complementary and Integrative Medicine (TCIM), Core Outcome Set (COS), Randomised Controlled Trial (RCT)



#### Venue Plan



#### Programme at a glance

THURSDAY	
19:00 - 20:30	Registration
19:00 - 20:30	Welcome Drinks
FRIDAY	
08:30	Registration, Conference Foyer
Alexandros I 09:30 – 09:50	Plenary Sessions Opening Ceremony Dr George Patoulis
<b>09:50 - 11:00</b> 09:50 10:25	Provings/Economics Prof Ashley Ross Prof Thomas Ostermann
11:00 – 11:30	Coffee
<b>11:30 – 13:00</b> 11:30 11:50 12:10 12:30	Clinical Research 1 Rachel Roberts Dr Marcus Reif Dr Harleen Kaur Prof Ubiratan Adler
13:00 – 14:30	Buffet Lunch
<b>14:30 – 15:50</b> 14:30 14:50 15:10 15:30	Basic Research 1 Dr Alexander Tournier Dr Maria Fernanda Aguilar-Dueñas Prof Oskan Tasinov Dr Sandra Tribolo
15:50 – 16:20	Coffee
<b>16:20 – 17:30</b> 16:20	Updates & Poster Talks HRI, CCRH, GIRI & FYR updates
16:50 17:00 17:10	Dr Christa Raak Christoph Dombrowsky Dr Petra Weiermayer
17:30 - 19:30	Poster Reception
20:00	Dinner Maiami Seafood Restaurant
SATURDAY	
Alexandros I 09:30 - 11:00 09:30 10:00 10:20 10:40	Plenary Sessions Agrohomeopathy Prof Pedro Boff Paul Doesburg Dr Leonardo Faedo Agrohomeopathy Roundtable

11:00 - 11:30

Coffee

12:40	Dr Martin Loef Clinical Research Roundtable	
12:50 – 13:00	HRI Poster Prize Award	
13:00 – 14:30	Buffet Lunch	
Alexandros I 14:30 – 15:50 14:30 14:50 15:10 15:30	Parallel Session Clinical Research 3 Aaron Ka Lun To & Dr Yvonne Fok Dr Andrea Flores Dr Hélène Renoux Dr Deepti Singh	
Aristotelis I 14:30 – 15:50 14:30 14:50 15:10 15:30	Parallel Session Basic Research 2 Dr Francesca Truzzi Prof Leoni Bonamin Dr Steven Cartwright Dr Bindu John Pulparampil	
15:50 – 16:20	Coffee	
Alexandros I 16:20 – 17:40 16:20 16:40 17:00 17:20	Parallel Session Basic Research 3 Dr Imane Lejri Dr Tiziana Di Giampietro Prof Carla Holandino Dr Ritika Narula	
Aristotelis I 16:20 – 17:40 16:20 16:40 17:00 17:20	Parallel Session Clinical Research 4 Dr Jean-Lionel Bagot Prof Vania Emerich Bucco de Campos Dr Bhuvanweswari Rajachandra sekar Dr Debadatta Nayak	
20:00 20:45	Gala Drinks Reception Gala Dinner	
SUNDAY		
Alexandros I 09:20 – 10:40 09:20 09:40 10:00 10:20	Plenary Sessions Fundamental Research Dr Daniel Wrzałko Dr Michel van Wassenhoven Prof Stephan Baumgartner Mode of Action Roundtable	
10:40 – 11:10	Coffee	
<b>11:10 – 12:30</b> 11:10 11:30 11:50 12:30	Veterinary Research Dr Ritika Narula Dr Cidéli Coelho Prof Patrizia Bricarello Closing ceremony	
13:00 – 14:30	Buffet Lunch	
Cutting Edge Research in Homeopathy 103		

11:30 – 12:50 Clinical Research 2

Dr Daniel Gallego-Pérez

Dr Esther van der Werf

Robbert Van Haselen &

11:30

12:00

12:20



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