



## Conference Report

## Report: Council for Ayurveda Research - Industry Roundtable and Global Consortium for Collaborative Research in Ayurveda, 2021

## A B S T R A C T

**Keywords:**

Ayurveda research  
Ayurveda industry  
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The Council for Ayurveda Research (CAR) organized a three-day international event titled 'Global Consortium for Collaborative Research in Ayurveda (GCCRA) from September 17 to 19, 2021. The Consortium event was preceded by a pre-conference Industry Round Table (IRT), on September 16, 2021. The IRT and GCCRA events hosted industry heads, Ayurveda and integrative scholars and subject matter experts from several countries. The event's main objective was to initiate, facilitate, and conduct classical and cutting-edge research in Ayurveda and identify current gaps in research and research methodologies. The idea was also to develop consensus on key research areas. It was decided to form a Council for Ayurveda Research-Industrial Conclave (CAR-IC) to foster and support research on the industry side, with regular periodic meetings to enable dialogs and exchange of information and thoughts. Similarly, a Council for Ayurveda Research-Global Consortium for Collaborative Research in Ayurveda (CAR-GCCRA) was accepted to lead the initiative for providing clear, contemporary, and futuristic directions to research in the practice side of Ayurveda.

### 1. Background

Council for Ayurveda Research (CAR-USA) [1] is a pioneering initiative to promote and establish Ayurveda as an evidence-based health science globally. Currently there is a lack of clear understanding in a large section of the Ayurveda research fraternity regarding the global standards of research and research practices. At the same time, there is a growing interest in the West to explore 'alternate methods of healing' and develop integrative healthcare models. CAR-USA and Ayurvediya Anusandhan Abhiyan Foundation (AAAF-INDIA) organized this 4-day international event focusing on research topics related to products and practice of Ayurveda to bridge this gap.

### 2. Event details and outcomes

The Industry Round Table (IRT) event was sectioned into the invited speakers' segment and three distinct panels with panelists from diverse backgrounds and experiences. The GCCRA event was open to the public for the first two days and concluded with a closed-door session on the third day. Several experts shared and highlighted various topics, ideas, strategies, and directions for research in Ayurveda [2–8]. The list of speakers/panelists is presented in the [Appendix](#).

Among the invited speakers were Ayurveda and integrative medicine experts, clinicians, academicians, researchers, and scientists from some of the leading Institutes/Universities in the

US, India, and other countries, who have the background, experience, inclination, and resources to initiate, facilitate and conduct classical as well as cutting edge research in Ayurveda. Topics covered ranged from – current gaps in research and research methodologies being used in Ayurveda, innovations and new directions for research in Ayurveda, research about sustainability of herbs, quality assurance in Ayurvedic products, herb exports, challenges in expanding the Ayurvedic formulary, Ayurceuticals, Nutraceuticals, etc.

The one-day IRT event had Industry heads, Government of India representatives, and experts in Ethnobotany, Nutraceuticals, and Ayurceuticals from several countries. Both events were free and open to the public, except for a closed-door discussion session on September 19, 2021 with 30 invited participants. The event had more than 800 registrations for both events with registrants from several countries. Individually, the pre-conference Industry Roundtable had 227 registrations, and the Consortium had 580 registrations. Close to 50 speakers and more than 15 different organizations and companies were represented at the events. Both events had the presence of dignitaries such as Vaidya Rajesh Kotecha (Secretary, Ministry of AYUSH) and Dr. Manoj Nesari (Advisor, AYUSH Ministry), Dr. Srikanth (DG-In charge, CCRAS) and Dr. Jeffrey White from (Director, National Cancer Institute, USA). The event also had the support of the Indian Embassy in the USA.

### 3. Pre-conference Industry Round Table (IRT) – September 16, 2021

The pre-conference Industry Roundtable was a 4-h session held on Sep 16, 2021, chaired by AYUSH Ministry Adviser Dr. Manoj Nesari. He spoke about Ayurveda being recognized in 16 countries and how licensing can pave the way for increasing exports of Ayurvedic products to European countries and countries like the USA. The invited presentations by Dr. Dilip Ghosh, Prof. Ikhlas Khan and Shri Anurag Sharma, were followed by three engaging panels moderated by Shri Ranjit Puranik, Dr. C.K. Katiyar and Dr. Pratibha Shah.

The panel covered a wide range of topics, guided by the critical and thought-provoking questions asked by the moderators and the informative responses by the diverse group of industry heads and other learned experts. Dr. Rangesh Paramesh talked about the need for integrating modern technology and standards such as HPTLC (High-performance thin-layer chromatography) in Ayurveda industry. Mr. Praveen Mittal highlighted the importance of meticulous and diligent documentation of biodiversity in the country and that the formation of AEPC (AYUSH Export Promotion Council) is a step forward.

Dr. Dilip Ghosh emphasized the integration of ethnopharmacology and bioresources in the future vision of Ayurveda and the value of codified as well as non-codified knowledge of plants. Dr. Amit Agarwal spoke about initiatives such as the Regional Raw Drug Repository started by the National Medicinal Plants Board (NMPB) and seed-shelf standardization. Dr. Mukund Chorghade underlined the need for more molecular research in Ayurveda. He added that new bills and acts would impact export of Ayurvedic herbs and supplements to the USA.

### 4. GCCRA Day-1: September 17, 2021

On the first day of the Consortium, Keynote Speaker Vaidya Rajesh Kotecha talked about a worldwide shift in healthcare from a treatment approach to a wellness approach. Dr. Kotecha mentioned about increasing collaboration with several countries for the globalization of Ayurveda through MOUs between AYUSH and foreign government agencies. He also talked about the AYUSH Research Portal which has a large and increasing database of publications related to clinical, pre-clinical, fundamental and drug research, among other AYUSH initiatives and projects.

### 5. GCCRA Day-2: September 18, 2021

On the second day of the consortium, Dr. Bhushan Patwardhan (National Research Professor – AYUSH), said that modern research has reached a saturation point and emphasized the need to change the language of biology in research and make it inclusive of Ayurvedic concepts like *Shat Kriya Kaal*, *Prakriti* and *Agni* and make Ayurveda research a collaborative effort with the other stakeholders of healthcare and integrating science and technology in the efforts.

### 6. GCCRA Day-3: September 19, 2021

Day 3 of the consortium was a closed-door session with invited attendees and speakers from Days 1 and 2 of the Consortium. The Keynote address was delivered by Prof. Ashok Vaidya, followed by presentations from plenary delegates and opinion sharing from invited speakers.

Based on the presentations and discussions, it was concluded that a Council for Ayurveda Research-Industrial Conclave (CAR-IC) will be founded to foster and support research on the industry

side, with regular periodic meetings to enable dialogs and exchange of information and thoughts. Similarly, a Global Consortium for Collaborative Research in Ayurveda (GCCRA) CAR-GCCRA was incepted to lead the initiative for providing clear, contemporary, and futuristic directions to research in the practice side of Ayurveda. Both bodies were poised to be announced with clear Charters [9], Advisory Boards and Steering Committee by Dec 2021.

Key areas of research discussed were:

- Ayurvedic Pharmacoepidemiology
- Observational Studies in Ayurveda
- Reverse Pharmacology
- Ayurgenomics
- Integrative Nutrition & Ayurceuticals
- Community Ayur-Yoga
- Fundamental Research in Ayurvedic concepts
- Epistemology & Evidence

The Vision identified for the consortium is to investigate “Ayurveda for positive health/wellness, prevent illnesses, heal, and cure diseases, delay aging and make dying comfortable, with an eye to integral development/fulfillment of a person”. And the Mission is to “create a global consortium of organizations of Ayurveda, Yoga and Life Sciences for historical, theoretical, basic, and applied collaborative R&D, with a fidelity to basic principles, but with state-of-the-art methods of current sciences and designs for evidence”. The main objective is to conduct renewal, revival, and renaissance research for the global mainstreaming of Ayurveda with the state-of-the-art scientific methods. The following activities have been recommended for the consideration of the global consortium:

- Leadership role: A vision for global institutions for Ayurvedic R&D
- Educational seminars and research training workshops globally
- Advisory to World Health Organization (WHO) countries, and regulatory bodies on R&D
- Disseminating globally robust evidence of Ayurvedic R&D data
- Enthusing Vaidya-Scientists for early career development awards
- Rewarding outstanding research in Ayurveda by recognitions
- Scholarships in dynamic historiography and archival research
- International collaborative projects with optimal resources
- Research to inform Pandemic preparedness for the future

The detailed version of the report with additional details can be accessed on the CAR website under the Projects [10].

## 7. Conclusions

Global collaborative efforts to facilitate interdisciplinary research are needed to take Ayurveda forward. Practitioners, Educators and Industry need to work together to generate scientific evidence for Ayurvedic concepts, modalities and products. Ayurveda Organizations such as CAR-USA and AAAF-India will play a nodal role in this global dialog on how we understand and facilitate research in Ayurveda, identifying suitable research models and methodologies.

### Source of support

None.

### Conflicts of interest

None.

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## Appendix

**Table 1**

List of speakers/panelists for the Industry Round Table (IRT).

Industry Round Table: name, affiliation & country		
Dr. Manoj Nesari	Advisor, AYUSH Ministry	India
Shri Anurag Sharma	MP (Lok Sabha), MD-Baidyanath	India
Dr. Dilip Ghosh	Director, NutriConnect	Australia
Prof. Ikhlas Khan	Director, NCNPR, University of Mississippi	USA
Mr. Ranjit Puranik	MD, Shree Dhootpapeshwar	India
Dr. Rangesh Paramesh	CSO, Himalaya Global Management Ltd., Dubai	UAE
Dr. Amit Agarwal	Director, Natural Remedies	India
Mr. Kartikeya Baldwa	CEO, Ixoreal Biomed	India
Mr. Arvind Varchaswi	MD, Sri Sri Tattva	India
Dr. C K Katiyar	CEO, Emami Ltd.	India
Dr. Pulok Mukherjee	Director, Institute of Bioresources & Sustainable Development	India
Dr. JLN Sastry	Executive Director, Dabur	India
Mr. Praveen Mittal	Senior Director at FICCI	India
Dr. N. Srikanth	Deputy Director, CCRAS	India
Dr. Pratibha Shah	Founder, President CAR & CEO of My Ayurved LLC	USA
Dr. Mukund Chorghade	CSO, Thinq Pharma	India
Mr. Nimai Pandit	MD, Kottakkal USA	USA
Ms. Harpinder Kaur	Director, Komal Herbs	USA

**Table 2a**

List of speakers for the Consortium event (GCCRA).

Global Consortium Day 1: Name, Affiliation & Country		
Dr. Rajesh Kotecha	Secretary, Ministry of AYUSH, Govt. of India,	India
Dr. Abhimanyu Kumar	Vice Chancellor, Dr. Sarvapalli Radhakrishnan Rajasthan Ayurved University	India
Dr. Jeffrey White	Director, Office of Cancer Complementary and Alternative Medicine, National Cancer Institute, Rockville, MD	USA
Dr. Rabinarayan Acharya	Dean, IPGT&RA, Professor and Head, Department of Dravyaguna, IPGT&RA, Gujarat Ayurved University	India
Dr. Bal Ram Singh	Professor and President at Institute of Advanced Sciences, Dartmouth, MA	USA
Dr. Robert Schneider	Dean of the College of Integrative Medicine, Professor of Physiology & Health, Director of the Institute for Natural Medicine & Prevention – Maharishi International University	USA
Dr. Asmita Wele	Hon. Professor, University of Debrecen, Hungary, and full Professor at Bharati Vidyapeeth Pune	India
Dr. Darshan Mehta	Medical Director, Benson–Henry Institute for Mind Body Medicine & Assistant Professor of Medicine, Harvard Medical School	USA
Dr. Madan Thangavelu	Genome Biologist at Cambridge University, General Secretary and Research Director of the EUAA – European Ayurveda Association	UK
Dr. Sriranjini Jaideep	Research Consultant, Ramaiah Indic Specialty Ayurveda Restoration Hospital	Canada
Dr. Bhavana Prashar	Principal Scientist, CSIR-IGIB, New Delhi	India

**Table 2b**

List of Delegates & Speakers for the Ayurveda Research Consortium

Global Consortium Day 2: Name, Affiliation & Country		
Dr. Bhushan Patwardhan	National Research Professor, AYUSH and Interdisciplinary School of Health Sciences, Savitribai Phule Pune University	India
Dr. Geetha Krishnan	Technical Officer, Traditional, Complementary, and Integrative Medicine (TCIM) Unit, WHO, Geneva	India
Dr. Rammanohar P	Research Director of Amrita School of Ayurveda	India
Dr. Julia Arnold	Program Director, Translational Research Program, Division of Cancer Treatment and Diagnosis, National Cancer Institute	USA
Dr. Rama Jayasundar	Associate Professor, Department of NMR, All India Institute of Medical Sciences	India
Dr. Ashwini Kumar Raut	Director, Clinical Research & Integrative Medicine- Medical Research Centre-Kasturba Health Society	India
Dr. Rammohan Rao	Principal Research Scientist, Apollo Health	USA
Dr. Ghanshyam Marda	Doctor Researcher at Suraj Ayurveda Clinic and research	India
Dr. Archana Purushotham	Assistant Professor and Stroke Neurologist, Baylor College of Medicine and Michael E. DeBakey VAMC	USA
Dr. Aakash Kumbhavi	Professor and Director of PG Studies at SGVVTS SJG Ayurvedic Medical College and Hospital, Koppal, Karnataka, India	India
Dr. Anupama Kizhakkeveetil	Professor & Program Director, Ayurvedic Medicine at Southern California University of Health Sciences	USA
Dr. Ashwini Godbole	Associate Professor, Centre for Ayurveda Biology and Holistic Nutrition, TDU, Bengaluru, India	India
Dr. Supriya Bhalerao	Associate Professor, Obesity Research Lab, Interactive Research School for Health Affairs (IRSHA), Bharati Vidyapeeth, Pune, India.	India
Dr. Namyata Pathak	Integrative Ayurveda Specialist, Ayucare	USA

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