

## FUNDAMENTAL AND COLLABORATIVE RESEARCH

- No. of studies concluded: 09
- No. of studies initiated: 05
- No. of studies ongoing: 08
- No. of articles published: 09

S.no.	Title of research study	Period of study	Brief Outcome	Publication source
<b>Initiated: 05</b>				
1.	Physicochemical studies of homeopathic drug formulations by using volumetric, acoustic, viscometric, optical and conductometric measurements. Dyal Singh College, New Delhi	Oct. 2017 (3 years)	Proposed study is expected to provide accurately measured physicochemical data of density, viscosity, ultrasonic speed, refractive index, conductivity, etc. of homeopathic medicines, reflect the effect of various additives on physicochemical behavior of homeopathic formulations and investigate the effect of temperature and time on the behavior of these homeopathic formulations.	
2.	Pharmacological screening of Homeopathic drugs used in rheumatoid arthritis, AIIMS, New Delhi	Feb 2017 (2 years)	Aim of the present study is to determine the safety potential of homeopathic drugs and to evaluate the anti-inflammatory and anti-arthritis activity of homeopathic drugs.	
3.	In vitro approaches to investigate the efficacy and mechanism of action of homeopathic medicines against hormone dependent and independent Breast and Prostate Cancer, AMITY University, Noida	May 2017 (2 years)	Screening of homeopathic remedies for their differential anti-cancer activities in various breast and prostate cancer cell lines (which address hormone dependent and independent forms of these cancer) as well as in normal cell lines. The remedies under study will be; Sabal serrulata (MT, 30C, 200C), Thuja occidentalis (MT, 30C, 200C), Conium maculatum (MT, 30C, 200C), Hydrastis canadensis (MT, 30C, 200C) along with certain remedies reported in literature to have anticancer properties which will be provided by CCRH.  2. Qualitative and quantitative evaluation of apoptotic activity of cancer cells after treatment with homeopathic remedies.	
4.	Preparation of NOSODE from Escheirchia coli and Vibrio cholera: their preclinical	September 2017 (2 years)		

	effectiveness and safety evaluation. NICED, Kolkata			
5.	A pilot research proposal to explore the mechanism of action by anti-dengue homeopathic medicine, Eupatorium perfoliatum, ICGEB, New Delhi	September 2017 (May 2018) (1 year)	The study will help us to compare priming of innate immune cells, adaptive immune cells, and serum soluble mediators in subjects taking placebo versus homeopathic medicine, Eupatorium perfoliatum. It will help us to compare alterations in global gene expression profiles in subjects taking placebo versus homeopathic medicine, Eupatorium perfoliatum.	

**Concluded: 09**

1.	Evaluation of anti-fungal activity of certain Homoeopathic medicines on growth of human pathogenic fungi " <i>Candida albicans</i> " using in-vitro assays.	December 2013  Concluded March 2018 (4 years 3 months)	Experiments were conducted and further experiments were planned for validation.	Indian J Res Homoeopathy 2017; 11; 4, 237-243.
2.	Evaluation of anti-fungal activity of certain Homoeopathic medicines on growth of human pathogenic fungi " <i>Aspergillus niger</i> " using in-vitro assays.	December 2013  Concluded March 2018 (4 years 3 months)	Experiments were conducted and further experiments were planned for validation.	
3.	Evaluation of anti-fungal activity of certain Homoeopathic medicines on growth of human pathogenic fungi " <i>Microsporiumcanis</i> " using in-vitro assays.	December 2013  Concluded March 2018 (4 years 3 months)	Experiments were conducted and further experiments were planned for validation.	
4.	Screening of antibacterial activity of certain homoeopathic medicines on the growth of human pathogenic Gram negative bacterial strain Escherichia coli in-vitro models, CRI, Noida.	March 2014  Concluded March 2018 (4 years)	Experiments were conducted and further experiments were planned for validation.	
5.	Screening of antibacterial activity of certain	March 2014  Concluded	Experiments were conducted and further experiments were planned for validation.	

	homoeopathic medicines on the growth of human pathogenic Gram negative bacterial strain Klebsiella pneumonia in-vitro models, CRI, Noida.	March 2018 (4 years)		
6.	Screening of antibacterial activity of certain homoeopathic medicines on the growth of human pathogenic Gram negative bacterial strain Proteus mirabilis in-vitro models, CRI, Noida.	March 2014  Concluded March 2018 (4 years)	Experiments were conducted and further experiments were planned for validation.	
7.	Efficacy of the Homoeopathic preparation of Berberis vulgaris to alleviate acute oxalate toxicity: An insight into lithogenic events with special reference to crystallization and inflammation, ALMPGI, Madras University	March 2015  Concluded September 2017 (2 years 6 months)	The study aims to: <ul style="list-style-type: none"> <li>• Develop effective natural therapeutic strategy to alleviate hyperoxaluric stress associated oxidative, nitrosative disturbances and inflammatory aberrations on the basis of biochemical, molecular and immunological analysis (with special reference to lithogenic protein expression and Bonn Risk Index) and thereby identifying the potency of the homeopathic preparation of <i>Berberis vulgaris</i> in acute oxalate toxicity.</li> <li>• Find out whether the homeopathic preparations of <i>Berberis vulgaris</i> in 0, 6C, 30C, and 200C potencies are effective in lowering the lithogenic risk factors such as promoters and inhibitors by computation of Bonn Risk index.</li> <li>• Analyze whether the oxalate induced altered expression of genes and proteins are reverted by the drug</li> <li>• Explore whether the homeopathic preparation mediates the salubrious effect by altering p38MAPK/p42, 44 MAPK.</li> <li>• Delineate whether the drug is capable of preventing mitochondrial collapse induced by oxalate.</li> </ul>	Indian Journal of Research in Homoeopathy / Vol. 9 / Issue 3 / Jul-Sep 2015  ForschKompleme ntmed 2014;21:7-12 <a href="#">Link</a>
8.	Safety studies and	May 2016	This study aims to investigate the	

	pharmacological screening of Homoeopathic Drugs- Dengue Nosodes developed from Dengue virus. AIIMS, New Delhi	Concluded December 2017 (1 year 6 months)	safety of <i>Eupatorium perf.</i> , <i>Crotalus horridus</i> , and <i>Dengue nosode</i> on mouse model.	
9.	Understanding the Mechanism of action of homoeopathic medicine at molecular level in nano domains in-vivo and in-vitro systems, CIRE, Kolkata	March 2015  Concluded March 2018 (3 years)	The main objective is to establish homeopathy as nano medicine and in vitro study of effect of homeopathic medicines at different potencies on membrane physical properties, in vivo study of effect of homeopathic medicines at different potencies & characterization of homeopathic medicines.	Energy Education Science and Technology Part A: Energy Science and Research 2017 Volume (issues) 35(3): 249-254  International Journal of High Dilution Research 2017; 16(2): 01-04  International Journal of High Dilution Research 2016; 15(3): 18-22  Materials Research Innovations, DOI: 10.1080/14328917.2016.1196563  International Journal of High Dilution Research; 2016; 15(1): 10-17  Indian J Res Homoeopathy 2016;10:52-8  International Journal of High Dilution Research 2015; 14(4):2-7 Available at <a href="http://www.highdilution.org">www.highdilution.org</a>

