



Thursday 5 November EU-India PARTNERING EVENT

PROFILE FORM

ORGANISATION DETAILS				
Organisation name Halberg Hospital and Research Institute				
Street * Civil Lines,				
ZIP *	244001	City *	Moradabad	Country * India
Phone *	0591 2417437		Fax	
Email *	icn2005@sancharnet.in		Web	
Employees	<input type="checkbox"/> 1-10	yes	<input type="checkbox"/> 51 - 250	<input type="checkbox"/> 250 +
Organisation type	<input type="checkbox"/> University <input type="checkbox"/> Research Center <input type="checkbox"/> Industry <input type="checkbox"/> SME <input type="checkbox"/> hospital <input type="checkbox"/> Other			
Department	Medicine and Cardiology			
Short description of your company/organization	Its small 25 bed hospital including 4 bed intensive care unit, xray, ultrasonography, laboratory for routine blood tests and assay of antioxidant vitamins and minerals. We treat primary to tertiary care patients and educate people in prevention of diseases. And conduct research.			

PARTICIPANT			
Gender	yes	<input type="checkbox"/> Ms	Title Professor
First name	Ram		
Last name	Singh		
Position	Director		

PARTNERSHIP PROPOSAL	
<p>EU-India partnering event session participation:</p> <p><input checked="" type="checkbox"/> Sustainable production and management of biological resources from land, forest and aquatic environment yes</p> <p><input checked="" type="checkbox"/> Life sciences, biotechnology and biochemistry for yes</p>	
<p>Areas of activity (Free keywords) Patient Care, health promotion and Disease prevention by functional foods and designer foods.</p>	

PROJECT DESCRIPTION	
<p>Title of your research project in one sentence</p>	<p>Effects of Functional Foods and Designer Foods and Ingredients on Clinical, Biochemical and bio- markers in metabolic Syndrome,a randomized,double blind,placebo controlled trial.</p>
<p>Short description of project</p>	<p>Background: The increased prevalence of metabolic syndrome(MS) appears to be due to greater consumption of refined starches and sugar, w-6 fatty acids, trans fats and saturated fats and low intake of functional foods, rich in fibre, w-3 fat ,antioxidants and phytochemicals and sedentary lifestyle.However, no randomized clinical trial has examined whether incorporating designer functional foods, developed by farm to fork approach a hypocaloric dietary pattern, increases weight loss with beneficial effects on cardiovascular disease(CVD) risk factors and new biomarkers of MS.</p> <p>Objective: The aim of this study would be to determine the effects of designer foods w-3 fatty acids, in conjunction with prudent dietary pattern, on blood concentration of w-6/w-3 ratio and clinical and biochemical markers of MS and other coronary risk factors as a mark of development of functional designer foods, under EU-India SST Agreement</p> <p>Subjects and Methods: Obese adults, aged 50-65 years (50 men,50 women) with MS would be randomly assigned to receive dietary advice, either to receive w-3 rich designer foods dietary pattern(n=50) or typical fast food ,NCEP-step 1diet(n=50). All participants would be given the same dietary advice, in other respects for weight loss during a total follow up period of 28 weeks. Designer,s foods would be supplied by the BNL Foods of companies(Belgium). Biochemical markers would be studied, at College of Engineering and Technology by scientists, blind to groups.</p> <p>Results: Body weight, waist circumference and percentage body fat, particularly in the abdominal region, may decrease significantly in the designer food group compared to control group receiving fast food diet. The ratio of w-6/w-3 fatty acids in the dietary pattern</p>

	<p>and in the blood may be < 5, possibly 1:1 in the intervention group compared to control group. Markers of inflammation; IL-6, IL-2, IL-18, TNF-alpha, C-reactive protein may show significant reduction in the designer food group than control group. Blood glucose, plasma insulin, catecholamines, serotonin, cortisol, leptin, angiotensin converting enzyme, triglycerides, total cholesterol (TC), LDL-C and small dense LDL, apo B etc would show significant reduction and HDL, apo A, adiponectin, ghrelin would show a significant increase in the intervention group without such changes in the control group. Parameters of oxidative stress; malondialdehyde (MDA), TBARS, Diene conjugates, and superoxide dismutase would show significant reduction with increase in antioxidants; flavonoids, vitamins, E and C in the intervention group than in the control group. Genetic markers such as activating protein-1, early growth response protein-1, nuclear factor kappa B, fetuin-A may show significant reduction in the intervention group without such changes in the control group.</p> <p>Imaging study of atheroma plaque in the carotids and intima-media thickness indicating endothelial function would show marked reduction in intervention group without such effects in the control group. MRI spectroscopy and positron emission tomography if available may show beneficial effects in the endothelial cells and cardiomyocytes in the intervention group without such benefits in the control group. Blood pressure variability may show significant reduction in vascular variability disorders in the intervention group compared to control group.</p> <p>Conclusions: Designer functional foods dietary pattern may be effective means of providing healthy ratio of w-6/w-3 fatty acids in the blood resulting in to marked reduction in inflammation and cardiovascular risk factors and other biomarkers of MS. This finding may result in to development of designer, functional foods in India by the EU-Indian partnership.</p>
Description of expertise offered	<p>Dr RB Singh, MD, Former Professor of Medicine, Subharti Medical College, Meerut, Presently Hon fellow, Halberg Chronobiology Center, Univer. Of Minn Medical School, Minneapolis, USA. Member and fellow of more than 15 national and international societies.</p> <p>Contributed >350 research papers in peer reviewed journals and books.</p> <p>Editor, World Heart Journal (Novascience, USA), The Open Nutra Jour (Bentham Science, USA)</p> <ol style="list-style-type: none"> 1. Receive 12, national and international awards 2. Contributed 6 books on nutrition in health and Disease, including monographs on Hypertension and Coronary Artery Disease. 3. International expert on Preventive Cardiology; drug trials, Nutrients, foods, diet and Nutraceuticals; magnesium, heart disease in women, Brain-heart interactions, HRV, BPV. 4. Discovered new antioxidant formulations for reversal of heart failure, renal failure and prevention of remodeling.: 3 patents in the Indian patent office, one heart failure given. 5. Founder President, International College of Cardiology, 2nd Congress in Slovakia, April 23-27, 2002, 3rd Congress in Taiwan, Nov. 2004, 4th ICCD, Mumbai, 2005, 5th ICCD at Kosice, Slovakia 2009. 6. Founder, International College of Nutrition, 9th World Congress in London, June 24-26, 2002, 10th WCCN at Phuket, Dec 1-3, 2004, 12th WCCN, Canada, 2006, 14th at Kosice, Slovakia 2009. 7. Former member, Council on Arteriosclerosis of the World Heart Federation, Switzerland, 19

	1998.
Description of requested partner expertise	<p>1. Dr Daniel Pella, MD, PhD, Prof of Medicine, Head Deptt of Sports Medicine</p> <p>Contributed 50 research papers and delivers more than 200 lectures in conferences.</p> <p>2. Dr Jan Fedacko, MD, Faculty of Medicine,</p> <p>PJ Safaric University, Kosice, Slovakia, Tel 421 55 6403869, Fax 421 51 7725118</p> <p>Email janfedacko@hotmail.com, pellad@hotmail.com</p> <p>3. Fabien De Meester (47), Ph.D., was until recently the President & CEO of the Luxembourg-based family-owned group BNLfood (www.bnlfood.com), formerly Belgian-based Belovo SA, Egg Science & Technology. The brand 'Belovo' stands for 'Belgian Egg' (Latin translation). The group has specialised itself in the fractionation of eggs into value-added ingredients for the Food, Infant Food, Cosmetic and Pharmaceutical Industries. In addition, the company has developed the Columbus Concept (www.columbus-concept.com), a program that pioneers "wildtype lipid nutrition", ie balanced essential dietary/plasma fatty acid ratio and healthy dietary/blood cholesterol.</p> <p>Dr. De Meester is a PhD in Protein Chemistry from the University of Liège (ULg) in Belgium. He was a Post-Doctoral Fellow at the Weizmann Institute of Science (WIS) of Israel where he specialized in Molecular Biology. Then, he returned to Belgium, studied for an Executive Master Degree in General Management (CEPAC) at the Solvay Business School (SBS) and finally joined the family company at the age of 30 where he initially led the Research-Development-Production departments while reshuffling the management of the company onto modern ISO standards.</p> <p>In early 99, upon retirement of his father, he became the President & CEO of the Belovo company and on 1st January 2006 the BNLfood group was established. On 1st May 2009, he decided to step down from d2d management at BNLfood and to create his own venture, DMF, to further develop and promote his ideas on the market.</p> <p>His goals and strategy are to catalyse sustainable changes in the Egg/Food Industry towards the inception of a modern Science- & Technology-led Business in the Global Economy.</p> <p>Dr. De Meester has published over 50 research articles, patents and communications on topics related to Organic Chemistry, Enzymology, Biochemistry, Molecular Biology, Food Science & Business, and has organized a series of international workshops on the Columbus Concept. He has recently launched a 2-D concept of holistic health (www.tsimtsoum.net) that studies bodymind interactions at chrono-biological level.</p> <p>4. Industry Collaborator; BNL foods ltd, www.bnlfood.com, www.columbus-concept.com</p>