

Fourth International Conference on Nutraceuticals and Chronic Diseases	
Program Schedule	
Monday, 23rd September 2019	
7:30 AM – 9:00 AM	Registration
9:00 AM – 9:15 AM	Prayer and welcome
9:15 AM – 10:15 AM	<i>Keynote lecture</i> Bharat B Aggarwal (Inflammation Research Institute, San Diego, USA) Targeting inflammatory pathways by dietary agents for prevention and treatment of chronic diseases: Add spice to your life
10:15 AM – 10:30 AM	<i>High tea</i>
Session I: Traditional Home Medicine to Modern Nutraceuticals: Teachings and Trends DAILAB PIKNIKH Series XXXV-(Platform for Innovating Knowledge to International Know How) Chairpersons: Sunil Kaul & Yoshihiro Ohmiya	
10:30 AM – 11:00 AM	Renu Wadhwa (National Institute of Advanced Industrial Science & Technology, Japan) Ashwagandha for cancer and quality of life - Potentials to products
11:00 AM – 11:15 AM	Kyosuke Yamamoto (National Institute of Advanced Industrial Science & Technology, Japan) Population, community and evolutionary dynamics of bacteria in model microcosms – value for human health
11:15 AM – 11:30 AM	Fayaz Malik (CSIR- Indian Institute of Integrative Medicine, Srinagar, India) Cancer stem cells: A potential therapeutic target in cancer
11:30 AM – 11:45 AM	Yoshihiro Ohmiya (National Institute of Advanced Industrial Science & Technology, Japan) Bioluminescence-based quick and quantitative immunohistochemistry for cancer tissues
11:45 AM – 12:00 PM	Ryoji Kurita (National Institute of Advanced Industrial Science & Technology, Japan) Development of new material and device for biomolecular analysis
12:00 PM – 12:15 PM	Mototada Shichiri (National Institute of Advanced Industrial Science & Technology, Japan) Therapeutic strategies by control of lipid oxidation
12:15 PM – 12:30 PM	Gurcharan Kaur (Guru Nanak Dev University, Amritsar, India) Neuroinflammation and brain health
12:30 PM – 12:45 PM	Yasuo Mitani (National Institute of Advanced Industrial Science & Technology, Japan) Varieties and value of luciferase: Biology to biotechnology
12:45 PM – 2:00 PM	<i>Lunch break</i>
Session IIA: Nutraceuticals and cancer prevention/OMICS Chairpersons: Bharat B Aggarwal & Nilakshi Mahanta	
2:00 PM – 2:20 PM	Subhash C Chauhan (University of Texas Rio Grande Valley, USA) Targeting tumor microenvironment for effective pancreatic cancer treatment
2:20 PM – 2:40 PM	Jyoti Prakash Tamang (Sikkim University, India) Metagenomics and health benefits of Indian ethnic fermented foods and alcoholic beverages
2:40 PM – 2:55 PM	Prabhudas S Patel (The Gujarat Cancer & Research Institute, Ahmedabad, India) Nutraceuticals targeting aberrant glycosylation: A solid groundwork for better cancer management
2:55 PM – 3:10 PM	Ganesh Bagler (Indraprastha Institute of Information Technology, Delhi, India) Computational gastronomy: Transforming food through data-driven food innovations
3:10 PM – 3:25 PM	Sathyanarayan Badekila (Muniyal Institute of Ayurveda Medical Sciences, Manipal, India) Role of ayurvedic diet in cancer prevention and management with special reference to epigenetics
3:25 PM – 3:40 PM	Navneet Agnihotri (Panjab University, Chandigarh, India) <i>Piper longum</i> abrogated DMH/DSS induced chronic inflammation and associated tumor progression in murine model of colon carcinoma
3:40 PM – 3:55 PM	Pallabi Kalita Hui (National Institute of Technology, Papum Pare, India) Nutraceuticals in the prevention and treatment of chronic diseases
Session IIB: Nutraceuticals and cell signaling pathways Chairpersons: Rathin K Bhattacharya & Anil M Limaye	
2:00 PM – 2:20 PM	Dulal Panda (Indian Institute of Technology Bombay, Mumbai, India) Modulation of microtubule stability and dynamics by nutraceuticals for managing cancer and

	Alzheimer's disease
2:20 PM – 2:35 PM	Suresh K Rayala (Indian Institute of Technology Madras, Chennai, India) Aberrant P21 activated kinase 1 (Pak1) signaling confers gemcitabine therapeutic resistance in pancreatic cancers
2:35 PM – 2:50 PM	Santhi Silambanan (Sri Ramachandra Institute of Higher Education and Research, Chennai, India) Role of nutraceuticals in the modification of stress associated mental disorders
2:50 PM – 3:05 PM	A Jayadeep (CSIR- Central Food Technological Research Institute, Mysore, India) Biochemical and molecular level neuro-protective effect through anti-inflammatory mechanism by black rice bran extract
3:05 PM – 3:20 PM	Sheikh Tasduq Abdullah (CSIR- Indian Institute of Integrative Medicine, Jammu & Kashmir, India) Role of trigonelline, a nutraceutically active natural product in prevention of non- alcoholic steatohepatitis (a diet-induced chronic liver disorder)
3:20 PM – 3:35 PM	Latha Rangan (Indian Institute of Technology Guwahati, Guwahati, India) Labdane diterpenes from seeds of <i>Alpinia nigra</i> as promising nutraceuticals
3:35 PM – 3:50 PM	Sumit Biswas (Birla Institute of Technology and Science, Pilani, India) Disruption of <i>Staphylococcus aureus</i> biofilms with <i>Moringa</i> leaf extracts
Session III: Poster presentation 4:00 PM-5:30 PM	
5:30 PM-7:00 PM	Inauguration
7:00 PM-8:00 PM	Cultural program
8:00 PM-10:00 PM	Dinner
Tuesday, 24th September, 2019	
8:00 AM – 9:00 AM	Registration
Session IV: Nutraceuticals and alternate animal models/ microbiome/stress response/ theranostics Chairpersons: Himamoni Deka & Subash C Gupta	
9:00 AM – 9:20 AM	Pradip Sinha (Indian Institute of Technology Kanpur, Kanpur, India) In search of evidence-based nutraceuticals: It is time to explore the utilities of model organisms
9:20 AM – 9:35 AM	S Raisuddin (Jamia Hamdard, New Delhi, India) Stress busters in ayush systems of medicine
9:35 AM – 9:50 AM	Aravind Kumar Rengan (Indian Institute of Technology Hyderabad, Hyderabad, India) Bioactive nano-nutraceuticals for enhanced cancer theranostics
9:50 AM – 10:05 AM	Sanjay Basak (ICMR- National Institute of Nutrition, Hyderabad, India) Curcumin at low concentration induces angiogenesis in the placenta: Possible roles in rescuing the functional deficiency of DHA in Indian pregnant women
10:05 AM – 10:20 AM	Saurabh Datta (Olympus India) Olympus IXplore, solution - based- microscopy and dedicated objectives for advanced microscopy
10:20 AM – 10:35 AM	Avinash Sharma (National Centre for Cell Science, Pune, India) High throughput sequencing reveals probiotic potentials of microorganisms associated to fermented foods
10:35 AM – 10:50 AM	Preetish Gangopadhyay (Merck India) Overview of Merck portfolio and cell culture
10:50 AM-11:00 AM	Tea break
Session VA: Nutraceuticals and cancer treatment Chairpersons: Pradip Sinha & Prabhudas S Patel	
11:00 AM – 11:15 AM	Mehdi Shakibaei (Ludwig-Maximilian-University, Germany) Evidence that TNF- β exhibits tumorigenic effect in colorectal cancer and resveratrol reverses it
11:15 AM – 11:30 AM	Gopal C Kundu (National Centre for Cell Science, Pune, India) Nutraceuticals and phytopharmaceuticals-based therapeutic strategy for management of breast and other cancers
11:30 AM – 11:45 AM	Subash Chandra Gupta (Banaras Hindu University, Varanasi, India) Targeting long non-coding RNAs by phytochemicals for cancer therapy

11:45 AM – 12:00 PM	Piruthivi Sukumar (University of Leeds, UK) Orai1 and Orai2 regulate oral cancer cell migration and colonization by suppressing Akt/ mTOR/ NF- κ B signalling
12:00 PM – 12:15 PM	Gautam Sethi (National University of Singapore, Singapore) Targeting transcription factors by natural agents for cancer therapy
12:15 PM – 12:30 PM	Priya Srinivas (Rajiv Gandhi Centre for Biotechnology, Trivandrum, India) BRCA1 mutant cancer cell metastasis and its impact on tumor stromal fibroblasts
12:30 PM – 12:45 PM	Alok Chandra Bharti (University of Delhi, Delhi, India) Possibilities of repurposing homeopathic formulations based on <i>Berberis vulgaris</i> and <i>Berberis aquifolium</i> in treatment of cervical cancer
12:45 PM – 1:00 PM	Rupjyoti Bharali (Gauhati University, Guwahati, India) A study of cancer chemoprevention by medicinal plants, vegetables and fruits of NE India with <i>in vivo</i> approach
Session VB: Alternative medicine for prevention and therapy Chairpersons: P R Sudhakaran & Satya N Das	
11:00 AM -11:15 AM	Bibhash Chandra Goswami (Gauhati Medical College, Guwahati, India) Nutraceuticals for prostate cancer chemoprevention
11:15 AM – 11:35 AM	Anupam Chatterjee (North-Eastern Hill University, Shillong, India) Methanolic extract of <i>Potentilla fulgens</i> root and its ethyl-acetate fraction delays the process of carcinogenesis in mice
11:35 AM – 11:50 AM	Ramkumar Kunka Mohanram (SRM Institute of Science and Technology, Tamil Nadu, India) Pharmacological activation of Nrf2 attenuates endoplasmic reticulum stress in endothelial cells
11:50 AM – 12:05 PM	Dhirendra Pratap Singh (ICMR-National Institute of Occupational Health, Ahmedabad, India) Isomalto-oligosaccharides potentiates gut butyrate production and promotes the metabolic health benefits of polyphenol-rich cranberry extract
12:05 PM – 12:20 PM	Madhumita Barooah (Assam Agricultural University, Jorhat, India) Nutraceutical and functional properties of indigenous fermented foods of Assam: A perspective on the current trends, concerns and future strategies
12:20 PM – 12:35 PM	T Narender (CSIR-Central Drug Research Institute, Lucknow, India) Exploration of therapeutic potential of Indian spices
12:35 PM – 12:50 PM	Gaurang Joshi (Atharva Multi-Speciality Ayurveda Hospital & Research Centre, Rajkot, India) Nutrition in Ayurveda and herbs as Rasayan (Nutritive) in chronic diseases like cancer and psoriasis
12:50 PM – 1:05 PM	J Rajesha (University of Mysore, Mysore, India) Prevention of the renal dysfunction by the socoisolariciresocinol diglucoside – A lignan nutraceutical of Indian flaxseed
1:05 PM-2:00 PM	Lunch break
Session VIA: Nutraceuticals and diabetes/ respiratory/ cardiovascular diseases Chairpersons: Bernd-Michael Loeffler & Manish Kumar	
2:00 PM – 2:15 PM	Pooja Jain (Drexel University College of Medicine, Philadelphia, USA) Potential role of flavonoids in treating chronic inflammatory diseases with a special focus on the anti-inflammatory activity of apigenin
2:15 PM – 2:30 PM	Asim K Duttaroy (University of Oslo, Norway) Development of the first European Food Standard Agency (EFSA)- approved cardio-protective nutraceuticals
2:30 PM – 2:45 PM	Kalpna Pai (Savitribai Phule Pune University, Pune, India) Nutraceuticals as biological response modifiers with reference to macrophage activation
2:45 PM – 3:00 PM	Ashutosh Kumar (National Institute of Pharmaceutical Education and Research, Hyderabad, India) Pharmacological modulation of bioenergetic deficiency in experimental diabetic neuropathy: Focus on mitochondrial biogenesis and function
3:00 PM – 3:15 PM	Rashmi Singh (Banaras Hindu University, Varanasi, India) Curcumin as potential therapeutic agent for airway inflammation and remodelling
3:15 PM – 3:30 PM	Abha Mishra (Indian Institute of Technology-Banaras Hindu University, Varanasi, India) Mechanism of action of polyphenol from Faba bean (gallic-acid) on α -glucosidase
3:30 PM – 3:45 PM	Sofia Banu (Gauhati University, Guwahati, India) Dietary antioxidants and diabetes
3:45 PM- 4:00 PM	Tea break

Session VIB: Translational diversity of nutraceuticals I
Chairpersons: Bibhash Chandra Goswami & Subhash C Chauhan

2:00 PM – 2:20 PM	Rakesh Kumar (Rajiv Gandhi Centre for Biotechnology, Trivandrum, India) The next generation of oncobiology pathways germane to the p21-activated kinases
2:20 PM – 2:35 PM	Madhumita Roy (Chittaranjan National Cancer Institute, Kolkata, India) Curcumin in management of chronic myeloid leukemia
2:35 PM – 2:50 PM	P Jayamurthy (National Institute for Interdisciplinary Science & Technology, Trivandrum, India) Flavonoids ameliorates glucose uptake via AMPK pathway in skeletal muscle cell line
2:50 PM – 3:05 PM	Sandeep Agarwal (Pure Indian Foods, USA) “Heart-Healthy Ghee” is not an oxymoron
3:05 PM – 3:20 PM	Rajanna Ajumeera (National Institute of Nutrition, Hyderabad, India) Pyridoxal 5’ phosphate induces apoptosis, cell cycle arrest and gene expressions in human breast cancer cells
3:20 PM – 3:35 PM	Kotamballi N Chidambara Murthy (Ramaiah Medical College & Hospital, Bangalore, India) Cancer prevention by dietary phytochemicals: Prospects and challenges
3:35 PM – 3:50 PM	Nikhil Kumar Mahnot (Gauhati University, Guwahati, India) Nutraceuticals from sea weeds against chronic diseases
3:50 PM – 4:05 PM	Sagarika Biswas (CSIR- Institute of Genomics and Integrative Biology, Delhi, India) Anti-inflammatory activity of nutraceuticals as a therapy for inflammatory diseases
4:05 PM- 4:15 PM	Tea break
4:15 PM-6:00 PM	Session VIIA: Award Session Oral presentation by students-I Nutraceuticals and prevention/ treatment of chronic diseases

1. **Mohit Jadli (University of Delhi, Delhi, India)**
Prostate cancer-induced osteoclastogenesis mediated by activators of NF-κB signalling as model for nutraceutical screening against cancer-induced osteoporosis
2. **V Rajesh (Indian Institute of Technology Guwahati, Guwahati, India)**
Preparation and characterization of nanoliposomal formulations of CDHC, a labdane diterpene, and *in vitro* evaluation of their anticancer potential against oral squamous cell carcinoma (OSCC)
3. **Bethsie L Sailo (Indian Institute of Technology Guwahati, Guwahati, India, India)**
Evidence that NGALR induces survival and migration of lung cancer cells and its reversal by nutraceuticals
4. **Manish K Gupta (Indian Institute of Technology Guwahati, Guwahati, India)**
Study Of zinc derivatized 3,5-Dihydroxy-4',7-Dimethoxyflavone against *Leishmania* parasite
5. **Amrita K Devi (Indian Institute of Technology Guwahati, Guwahati, India)**
Vietnamese coriander inhibits cell proliferation, survival and migration via suppression of Akt/mTOR pathway in oral squamous cell carcinoma
6. **Arcadius Puwein (Assam Down Town University, Guwahati, India)**
Antiproliferative activity and apoptosis induction of crude extract of *Paris polyphylla* Smith from Meghalaya against SAS oral cancer cell lines
7. **Pobi Gogoi (Gauhati University, Guwahati, India)**
Effects of short-term *in vivo* exposure to butyl paraben on thyroid gland of Wistar rat
8. **Tanmoy K Dey (National Institute of Cholera & Enteric Diseases, Kolkata, India)**
Effect of omega-3PUFA loaded nanoemulsion on intestinal epithelial barrier dysregulation and plausible resolution of inflammation during invasive infection by *Salmonella typhimurium*
9. **Surya Suresh (University of Kerala, Thiruvananthapuram, India)**
Potential role of cytokines in the pathogenesis of alopecia
10. **Kavya Satheesh (University of Kerala, Thiruvananthapuram, India)**
Assessing the *in vitro* and *in vivo* wound healing properties of ethanolic extract of *Cinnamon cassia*.
11. **Sadiya B Shaikh (Yenepoya University, Karnataka, India)**
Curcumin modulates the inflammatory response and attenuates p53-fibrinolytic system and epithelial mesenchymal transition *in vitro* and *in vivo* models in bleomycin induced acute lung injury and fibrosis
12. **Pratap Kalita (Assam Down Town University, Guwahati, India)**
Indigenous rice starch of Assam: Isolation, characterization, micromeritics and tableting properties

4:15 PM-6:00 PM	<p style="text-align: center;">Session VIIB: Award Session Oral presentation by students-2 Nutraceuticals and prevention/treatment of chronic diseases</p>
	<ol style="list-style-type: none"> 1. Sadhna Aggarwal (All India Institute of Medical Science, New Delhi, India) <i>Cinnamomum zeylanicum</i> inhibits growth of oral cancer cells via MAPkinase-p38 and dihydrofolate reductase (DHFR) inhibition 2. Manu Sudhakar (Sri Ramchandra Medical College & Research Institute, Chennai, India) Effect of chlorogenic acid on angiogenesis and adipogenesis 3. Supriya D Beedkar (CSIR-Indian Institute of Chemical Technology, Hyderabad, India) <i>Annona muricata</i> augments cellular glucose uptake via AMPK activation 4. Davinder Singh (Guru Nanak Dev University, Punjab, India) Isolation of 4-methylthiobutyl isothiocyanate from <i>Eruca sativa</i> Thell.: Appraisal of its toxicity and antioxidant status in Sprague Dawley rats 5. Anuradha Kalita (Gauhati University, Guwahati, India) A study on the role of Aquaporins 1, 2 and 4 in lipopolysaccharide (LPS) induced systemic inflammation and garcinol treated rat model 6. Pritimoni Das (Gauhati University, Guwahati, India) Ameliorative effect of a polyherbal formulation “NKH_PB_MD_002/2018” on high fat diet induced obesity in murine model 7. Aswathy Udayan (CSIR- National Institute for Interdisciplinary Science & Technology, Trivandrum, India)- Enrichment and purification of essential omega-3 fatty acids from edible microalgae as a preventive measure for neurodegenerative disease 8. Kishore Banik (Indian Institute of Technology Guwahati, Guwahati, India) An investigation on the role of novel Akt/mTOR inhibitor against oral squamous cell carcinoma 9. Daiahun Thabah (North-Eastern Hill University, Shillong, India) <i>Potentilla fulgens</i> improves insulin stimulated protein Akt2 and p-Akt in skeletal muscle of alloxan- induced diabetic mice 10. Sharleen E Sunn (North-Eastern Hill University, Shillong, India) <i>Potentilla fulgens</i> and the polyphenols catechin and epicatechin modulate IL-6 expression and the phosphorylation state of AKT in epididymal adipose tissues of alloxan- induced diabetic mice 11. Harsha Choudhary (Indian Institute of Technology Guwahati, Guwahati, India) Identification of natural compounds as inhibitors of a solute carrier transporter: implications for the treatment of oral cancer 12. Shruti Mishra (Banaras Hindu University, Varanasi, India) Prohibitin is an evolutionary conserved pleiotropic molecule 13. Ankith Sherapura (Sahyadri Science College, Shivamogga, India) The anti-proliferative nutraceutical 3-O-acetyloleanolic acid promotes nuclear translocation of DFF-40 via intrinsic death signaling pathway to induce apoptosis in lung adenocarcinoma 14. Alacrity Muksor (Indian Institute of Technology Guwahati, Guwahati, India) Pattern of major morbidity among adult population in India and its determinants: An analysis using IHDS-I and IHDS-II
4:15 PM-6:00 PM	<p style="text-align: center;">Session VIIC: Award Session Oral presentation by students-3 Nutraceuticals and technology/ chemosensitization</p>
	<ol style="list-style-type: none"> 1. G Shivudu (National Institute of Nutrition, Hyderabad, India) A mechanistic study on synergetic effects of domoic acid using cell lines <i>in vitro</i> 2. Anu Anupma (Sikkim University, Gangtok, India) Identification of filamentous moulds isolated from some dry amylolytic starters of North East India 3. MO Bhutia (Sikkim University, Gangtok, India) High-through sequencing of bacterial communities in some traditionally processed meat products of Sikkim 4. Durga S Garud (Maulana Azad Medical College, New Delhi, India) Nutraceuticals: Regulations, availability, and cost in India 5. Sumit Singh Verma (Banaras Hindu University, Varanasi, India) Modulation of gall bladder cancer related pathways by sesquiterpene: Preclinical and clinical studies 6. Pooja Pradhan (Sikkim University, Gangtok, India) Bacterial community in traditionally prepared dry amylolytic starters of the Eastern Himalayas 7. H Nakibapher Jones Shangpliang (Sikkim University, Gangtok, India) Screening of few probiotic lactic acid bacteria from naturally fermented milk products of Arunachal Pradesh 8. Ranjita Rai (Sikkim University, Gangtok, India) Analysis of 16S rRNA gene of lactic acid bacteria and screening of their probiotic characters 9. Komati Anusha (CSIR- Indian Institute of Chemical Technology, Hyderabad, India) <i>Bombax ceiba</i> (L.) calyx alleviates methylglyoxal induced oxidative stress by modulating RAGE expression and augmenting antioxidant armamentarium in HEK 293 cells 10. Ajay Anand (CSIR- Indian Institute of Chemical Technology, Hyderabad, India) <i>Nymphaea nouchali</i> boiled tuber extract augments antioxidant defense and protects against H₂O₂ induced weakening in HEK-293 cells

<p>11. Careen Liza Pakyntein (North-Eastern Hill University, Shillong, India) Evaluation of the free radical scavenging, anti-inflammatory and anti-hyperglycemic activity of <i>Houttuynia cordata</i> extracts</p> <p>12. Mohit Kwatra (National Institute of Pharmaceutical Education and Research, Guwahati, India) 7,8-Dihydroxyflavone natural flavonoid (TrkB agonist) prevented the neuroinflammation and neurodegeneration via acting on sulfiredoxin-peroxiredoxin axis in Parkinson's disease evaluated <i>in vitro</i> and <i>in vivo</i></p> <p>13. Samir Ranjan Panda (National Institute of Pharmaceutical Education and Research, Guwahati, India) Mitochondrial damage potentiates NLRP3 inflammasomes activation in PD brain- neuroprotective effect of perillyl alcohol</p> <p>14. Kalyani Tene (National Institute of Pharmaceutical Education and Research, Guwahati, India) Hydroalcoholic extract of NIP/18/11 ameliorates doxorubicin induced cardiotoxicity in experimental mice</p>	
6:30 PM-7:30 PM	Cultural program
7:30 PM-10:00 PM	Dinner
Wednesday, 25th September, 2019	
8:00 AM – 9:00 AM	Registration
<p>Session VIII: Nutraceuticals and Bone/neurological diseases etc. Chairpersons: Mehdi Shakibaei & Oommen V. Oommen</p>	
9:00 AM – 9:25 AM	Shubhada V Chiplunkar (Tata Memorial Centre Advanced Centre for Treatment, Research and Education in Cancer, Mumbai, India) <i>Turbo brunneus</i> -Marine nutraceutical for treatment of osteoporosis
9:25AM – 9:40 AM	Dheer Singh (National Dairy Research Institute, Karnal, India) Milk exosomes: An innate immune modulator
9:40 AM – 9:55 AM	V B Sameer Kumar (Central University of Kerala, Kasaragod, India) Wound healing properties of nanoparticles generated from <i>Centella asiatica</i> (L.) Urban
9:55 AM – 10:10 AM	Challa Suresh (National Institute of Nutrition, Hyderabad, India) Neurotoxic induction by lead and amyloid peptides in brain cells and protection by a natural bio-active component, epigallocatechin gallate
10:10 AM – 10:25 AM	Abhai Kumar (Banaras Hindu University, Varanasi, India) Role of vitamin D in neurodegeneration and cognitive decline in elderly population
10:25 AM – 10:40 AM	Suhel Parvez (Jamia Hamdard, New Delhi, India) Piperine pre-treatment alleviates mitochondrial dysfunction and promotes motor recovery and neuronal survival in a rodent ischemic stroke model
10:40 AM – 10:55 AM	Saikat Sen (Assam Down Town University, Guwahati, India) Antioxidant molecules in pigmented rice & their role in metabolic disorders – A special focus on rice of North East India
10:55 AM-11:10 AM	Tea break
<p>Session IXA: Nutraceuticals and technology Chairpersons: Alok C Bharti & Sreejith Parameswara Panicker</p>	
11:10 AM – 11:30 AM	Bernd-Michael Loeffler (Institute for Mitochondrial Medicine, Berlin, Germany) Comparative human PK-study under fed conditions with three marketed oral curcuminoid-products and first-time a pure intravenous curcumin (Diferuloylmethane)
11:30 AM – 11:45 AM	Ruby John Anto (Rajiv Gandhi Centre for Biotechnology, Trivandrum, India) Thymidylate synthase: The pivotal molecule regulating curcumin-mediated chemosensitization in 5-FU Chemotherapy for Breast Cancer
11:45 AM – 12:00 PM	Ramesh Sharma (North-Eastern Hill University, Shillong, India) Nutraceuticals in Geroscience
12:00 PM – 12:15 PM	Rajaram Swaminathan (Indian Institute of Technology Guwahati, Guwahati, India) Spectroscopic features of plant flavonoid Karanjin in different solvents and microheterogeneous systems
12:15 PM – 12:30 PM	Arpita Mukhopadhyay (St. John's Academy of Health Sciences, Bengaluru, India) Placental expression of adipose gene peroxisome proliferator-activated receptors gamma (PPAR-γ): Fetal-sex specific relations with maternal vitamin B12 status
12:30 PM – 12:45 PM	Rumpa Banerjee (Eminent College of Pharmaceutical Technology, Kolkata, India) Nutraceutical nano-delivery systems for amelioration of chronic disease: A brief review
12:45 PM – 1:00 PM	Arun Goyal (Indian Institute of Technology Guwahati, Guwahati, India) Chondroitin sulphate disaccharide and its applications as anticancer and prebiotics for functional

	foods
1:00 PM – 1:15 PM	Uma Dutta (Cotton University, Guwahati, India) Xenobiotic stress induces physiological disorder and development of cancer and its mitigation by phyto-nutraceuticals
1:15 PM – 1:30 PM	Anil Mukund Limaye (Indian Institute of Technology Guwahati, Guwahati, India) Alternative perspectives on the potential of the green tea polyphenol, epigallocatechin gallate, in chemoprevention
Session IXB: Translational diversity of nutraceuticals 2 Chairpersons: Rashmi Singh & Kalpana Pai	
11:10 AM – 11:25 AM	Satya N Das (All India Institute of Medical Science, New Delhi, India) 6-Gingerol inhibits growth of oral squamous cell carcinoma by targeting Akt/mTOR signalling pathway
11:25 AM – 11:40 AM	Sudha Warriar (Manipal Academy of Higher Education, Karnataka, India) Activation of Wnt antagonism mediates the antitumor activity and chemosensitizes breast cancer stem-like cells to ursolic acid, a pentacyclic triterpenoid
11:40 AM – 11:55 AM	Satwinderjeet Kaur (Guru Nanak Dev University, Amritsar, India) Cancer chemopreventive and hepatoprotective potential of <i>Onosma bracteatum</i> Wall.
11:55 AM – 12:10 PM	Anju Shrivastava (University of Delhi, New Delhi, India) <i>Tinospora cordifolia</i> : Amrita that restores the tumor macro-environment (impact of <i>Tinospora cordifolia</i> on some of the parameters of growing lymphoma)
12:10 PM – 12:25 PM	Chandan K Jana (Indian Institute of Technology Guwahati, Guwahati, India) Nature-inspired development of unnatural meroterpenoids as the non-toxic anti-colon cancer agents
12:25 PM – 12:40 PM	C Guruvayoorappan (Regional Cancer Centre, Trivandrum, India) Mangrove derived nutraceuticals as immunomodulators for mitigating radiation induced esophagitis during thoracic radiation therapy for cancer
12:40 PM – 12:55 PM	Nivedita Srivastava (Navjeevanam Kaya Kalp & Medical Research Institute, Uttarakhand, India) Medicobotany of medicinal plants of Uttarakhand in panchkarma- ayurvedic therapy
12:55 PM – 1:10 PM	Subhash Medhi (Gauhati University, Guwahati, India) Genetic and different risk factors associated with the development of esophageal cancer – A hospital-based study
1.30 PM-2.25 PM	Lunch
Session X: Nutraceuticals and health benefits/ clinical uses Chairpersons: Sudha Warriar & Satwinderjeet Kaur	
2:25 PM – 2:45 PM	Guru Sharma (Western University of Health Sciences, USA) Role of natural products and nutraceuticals in chronic dry eye disease
2:45 PM – 3:00 PM	Anil Kumar T (Ramaiah Medical College & Hospital, Bengaluru, India) Support of nutrition in management and treatment of chronic diseases: Clinician requirements & perspective
3:00 PM – 3:15 PM	Sarat Chandra Yeniseti (Nagaland University, Lumami, India) Dopaminergic neuroprotection in Parkinson's disease: Understandings from <i>Drosophila</i> model
3:15 PM – 3:30 PM	Muthu Arumugam (National Institute for Interdisciplinary Science & Technology, Trivandrum, India) Nutraceuticals from edible marine microalgae: Enrichment and health benefits
3:30 PM- 3:40 PM	Tea break
3.40 PM-4.20 PM	Valedictory function and announcement for 5th International Conference on Nutraceuticals and Chronic Diseases 2020