**SEMINAR: ADVANCEMENTS OF BIOTECHNOLOGY IN HUMAN WELFARE**

**DATE: 24th FEBRUARY 2020**

**VENUE: CII Suresh Neotia Centre of Excellence for Leadership, Salt Lake
ORGANIZED BY :- Department of Science & technology and Biotechnology, Government of West Bengal
COLLABORATIVE PARTNER :- SHRM Biotechnologies Pvt Ltd**

**Bio-sketch and Seminar Topic of the Speakers**

**1. Dr. Amitava Chattopadhyay
Seminar Topic:** ​**"Plant Kingdom-Cancer Biology-Perfume of Biotechnology**

**Bio-sketch: PhD**​in Biochemistry from Bose Inst (Cal Univ) in 1979. Spent 6-7 years as PostDoc/Faculty in Baylor Col of Medicine, USA and Mass General Hosp, Harvard Med School, USA. Retired from Chittaranjan National Cancer Inst as Sr Asst Director. Research Grants received from DST New Delhi, CSIR, ICMR, NTRF, DST, W.B, Indo-German Collaboration. Went to Barcellona, Spain as Visiting Scientist and very recently (October 2019 to the University of Florida as Visiting Scientist. PhD guide of 10 students. Published approx. 80 articles to International Journals

**2. Dr. Susanta Roychoudhury**

**Seminar Topic:**​​**Applications of Biotechnology in Cancer Management
Bio-sketch:** ​Dr. Susanta Roychoudhury is a cancer biologist. He obtained his PhD(Biochemistry) degree in 1985 from the University of Calcutta, India. From 1985 to 1990 he did postdoctoral research at University of Pennsylvania, USA. Dr. Roychoudhury was former Scientist (1991-2015) at the CSIR-Indian Institute of Chemical Biology, Kolkata, India

and currently Chief, Basic Research, Saroj Gupta Cancer Centre &amp; Research Institute, Kolkata. Dr. Roychoudhury is among the first few who initiated genomic research in India. As a cancer biologist, he contributed significantly on the molecular understanding of the genomic instabilities, and functional consequences of gain-of-function p53 mutations in human cancer. He has also contributed significantly in the area of cancer stem cells using oral cancer model. He has developed a microarray-based gene expression signature that distinguishes the aggressive subset of early-stage oral cancer from non-aggressive one. Currently, he is developing algorithms based on molecular classifications of ovarian, endometrial and rectal cancers for prognostic and therapeutic decision. He published more than 150 research papers and other articles. Dr. Roychoudhury has seven genomic data submission, one patent and one copyright to his credit. He supervised 24 PhD students. Dr. Roychoudhury is the Fellow of all three Science Academies of India. He was elected as President of Indian Association for

Cancer Research (2016-2019). He was awarded the J C Bose National Fellowship by Department of Science and Technology, Govt. of India in 2017.

**3. Dr. Gourisankar Sa**

Seminar Topic: ​**Immunotherapy of Cancer**

**Bio-sketch:** ​Fellow of National Academy of Science, India, Fellow of Nanyang Academy ofScience, Singapore, Fellow of West Bengal Academy of Science and Technology, received his Doctoral degrees in Biochemistry from University of Calcutta, in 1989. Then he joined Virginia Tech, the USA as visiting faculty. Thereafter he moved to Cleveland Clinic, USA to work on cell signalling. In 1994 he joined Bose Institute, India where he is now working as a Professor and Chairman of Molecular Medicine. He is also a visiting professor of The Cleveland Clinic, USA. Prof. Sa is the Editor-in-Chief of International J Immunology, Sectional Editor of Scientific Reports, Future Oncology, PNAS, India, Editor of J Cancer Research &amp; Molecular Medicine,

Austin J. Clinical Immunology, Head &amp; Face Medicine and Editorial board member of no of Scientific Journals like Int. J. Cancer Res., J Pharmacology &amp; Toxicology, Advances in Modern Oncology Research etc. Research work of Prof. Sa is focused in the area of, cancer biology and tumour immunology and understanding its molecular mechanisms. His work basically aimed at the development of safe and non-toxic anti-cancer drug and development of adjuvant immunotherapy. His recent work also aims at understanding the mechanisms of immune evasion of cancer so that immunotherapy can be reinforced into cancer patients. His findings are highly recognized by various National and International Scientific Communities as is evident from his more than 150 publications in high- impact journals, receiving various National/International awards, and granting a number of patents.

**4. Dr. SujoyDasgupta**

**Seminar Topic:** ​**An autobiography of DNA – the beautiful molecule of lifeBio-sketch:**

Prof Das Gupta obtained his PhD degree after working at Bose Institute under the guidance of Late Prof. R.K. Mandal. The objective of his thesis work was to clone and characterize the rRNA genes of catfish (Heteropneustes fossilis). His studies revealed novel aspects of the organization of fish rRNA genes. Prof Das Gupta did his postdoctoral work at the University of Texas Health Centre At Tyler, Texas USA. Here, hisresearch was targeted towards understanding how the growth of certain DNA viruses such as the mouse polyomavirus gets restricted in undifferentiated cells, but not in differentiated ones.

As a post-doctoral fellow at the University of Delhi South Campus, Prof Das Gupta, took up the initiative of studying the mechanism by which mycobacterial promoters functioned, and then used the information obtained to develop vectors that could be used to transform mycobacteria and express foreign genes in them efficiently.

In 1994 January Prof. Das Gupta joined Bose Institute as a faculty member. Currently he is working with phages that infect and kill mycobacteria (mycobacteriophages). His research has given new insight into how mycobacteriophages infect mycobacteria causing their death. The ultimate objective of his research is to use the knowledge

derived to develop novel therapeutics for TB. Apart from his own programs, Prof. Das Gupta has been one of the Prinicipal Investigators of the multi-centric program “New Millennium Indian Technology Leadership Initiative (NMITLI)&quot; project on Latent tuberculosis, New Targets, drug Delivery systems and bioenhancers and Therapeutics (Multi centric project) CSIR

(2001 – 2005). While executing this project Prof. Das Gupta led a team of scientists of Bose Institute to perform research in the area of drug development against TB. Their collective efforts led to the filing of an international patent and several publications.

He ha 38 publications in international peer-reviewed journals.

Patents

“Peptide antagonists for inhibiting Heat Shock Protein (Hsp16.3) of Mycobacterium tuberculosis” SUJOY K. DAS GUPTA, ABHIK SAHA, ARCHANA PATHAK SHARMA, SIDDHARTHA ROY, BHABATARAK BHATTACHARYA, PINAKPANI CHAKRABARTI. Applicaton #: 20070037211 Class: 435007100 (USPTO)

**5. Dr. Sujata Law**

Seminar Topic: ​**Ultraviolet radiation induced Limbal epithelial stem/stromal alteration** **including microenvironment in Eye**

**Bio-sketch:** She is currently an Assistant Professor ( Stem Cell Biology), Department ofBiochemistry & Medical Biotechnology, Calcutta School of Tropical Medicine, C R Avenue, Kolkata-700073. She has a total teaching experience of 12 Years and Research Experience of 27 Years. She has successfully completed 8 Research Projects and supervised 9 PhD scholars. She has prominent publications in 53 International Journals, 9 National Journals and has authored 4 Book Chapters. She was a KEYNOTE Speaker at ENVITOX-2018, 4-5 October 2018, London, UK. Also, she was a Member Secretary of Institutional Animal Ethical Committee, Calcutta School of Tropical Medicine, Kolkata.2017 and IAEC member of IIEST, Shibpur. She was also invited to talk to“International Conference & Exhibition on Cell Science and Stem cell Research", 29 Nov-01 Dec 2011 Philadelphia, USA. ,2011.

**6. Dr. Swarup K. Chakrabarti**

**Seminar Topic:** ​**Living Drugs in the Precision Therapy of Human Diseases**

**Bio-sketch:** ​An experienced cell and molecular biologist with a lot of exposure to biomedicalresearch both at the national level (14 year) (India) and international (USA) (15 year) level, thoroughly trained in transcription biology, epigenetics, diabetes, obesity, inflammation, cardiovascular diseases, and stem cell research in world-class laboratories. Scientific team leadership experience resulted key US patent. A self-driven person, enthusiastic, and passionate about both translational/clinical and fundamental research and loves collaborative ventures. He is currently the Managing Director (MD)/CEO, Biotech Consulting Services, Kolkata, India. He is also the former Chief Scientist, BioBharati LifeScience Private Limited, Kolkata, India and the former Scientific Director, DiponEd BioIntelligence LLP, Bangalore, India.

**7. Dr Deborshi De**

**Seminar Topic:** ​**Role of Interdisciplinary Research in Making Indian Food and Agro Ecosystem Sustainable with a Special Focus on Biotechnology**

**Bio-sketch:** ​Dr Deborshi De is a food-technologist, scientist, an educationist and a socialentrepreneur. Running several startups of his own along with his own research areas in food technology and sustainable agriculture, He’s currently an AVP of SHRM Biotechnologies Pvt Ltd, Dr. Deborshi is a facilitator in United Nations' flagship capacity-building programme, UNCTAD-Empretec (Empretec), which works with governments to promote entrepreneurship as a way out of poverty. Deborshi has been among the facilitators in the Empretec program since over three years now. Apart from Empretec, Deborshi has a profile of having trained over 10,000 professionals in management and technical skills at leading institutes across India and the globe. He’s empanelled as trainer/facilitator with SGS India (P) Ltd, Cotecna Inspection India Pvt Ltd, IRQS, to name a few of his present engagements. Currently, he is also working with First Equals global on Behavioral Psychology and Emotional Intelligence, the culture of entrepreneurship in large organizations including Goodricke, Apex Group, Parle, Brittania, wow momo to name a few along with several hotels and hospitality sectors. Academically, he has completed his PhD in Plant Molecular Medicine from Colorado Technical University, USA after finishing Masters in Biochemistry and Bachelors in Botany from premier colleges of India. He is also the winner of several awards at the national and international level, including “HIEERA- High Impact Entrepreneurs from Emerging Regions for Action”, From EIF-UNCTAD, India and “Youth Icon- For Generation Next” from the prestigious, Royal Thoughts, India.