



**International Conference**  
**on**  
**Recent Research in Biomedical Engineering, Cancer Biology, Stem**  
**Cells, Bioinformatics and Applied Biotechnology**  
**(BECBAB-2017)**

**Organized by**  
**“Krishi Sanskriti Publications”**

**on**  
**26<sup>th</sup> August, 2017**

**Venue:**  
**Jawaharlal Nehru University,**  
**New Delhi**

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**CALL FOR PAPERS AND CONFERENCE THEMES:**

The Organizer cordially invites abstracts and full length research papers for oral/poster presentation from all over the world to participate in the *International Conference on Recent Research in Biomedical Engineering, Cancer Biology, Stem Cells Bioinformatics and Applied Biotechnology (BECBAB-2017)* is the premier forum for the presentation of new advances and research results in the fields of theoretical, experimental, applied molecular biology, genetics, cell sciences, cancer biology, stem cell research, Biomedical Engineering, Cancer Biology, Bioinformatics and Applied Biotechnology. The conference will bring together leading researchers, Entrepreneurs and Academicians in the domain of interest from around the world. Topics of interest for submission include various subthemes, but are not limited to the conference aims at providing an opportunity for exchange of ideas and dissemination of knowledge among Scholars for Sustainable Development. Contributions are invited from prospective authors from related areas. All contribution should be of high quality, Original and not published elsewhere or submitted for publication. During the review period, Papers will be reviewed by eminent scholars in the respective areas. All Selected papers will be published as chapters in edited book/conference proceeding having ISBN No. and few high-end papers will be published in international Journal having ISSN No. which will be issued to authors after publication.

**Themes:**

**Biomedical Engineering and Systems**

- Communication, networking and monitoring in bio-systems
- Monitoring of vital functions with sensor and ICT systems
- Advanced bio-signal processing
- Distributed BME applications
- Telehealth, telecare, telemonitoring, telediagnosics
- e-healthcare m-healthcare, x-health
- Smart phones in BME applications
- Computer aided diagnostics
- Improved therapeutic and rehabilitation methods
- Intelligent bio-signal interpretation
- Data and visual mining for diagnostics
- Personalized medical devices and approaches
- Biofluid Mechanics
- Biomedical Devices
- Cardiovascular Biomechanics
- Functional Imaging
- Neuroimaging
- Pattern Analysis For Biomedical Applications
- Sensors and Instrumentation
- Biological Data Mining And Visualization
- Biological Systems And Models

- Biomaterials And Biomedical Optics
- Biomedical Composite Materials
- Biomedical Intelligence & Clinical Data Analysis
- Biomedical Inorganic Non-Metallic Materials
- Biometric And Bio-Measurement
- Biomimetics Engineering
- Bioscience Engineering
- Comparative Genomics
- Computational Modeling & Data Integration
- Data Acquisition, Normalization, Analysis And Visualization
- DNA And RNA Structure, Function And Sequence Analysis
- Engineering Models In Bio-Medicine
- Health Monitoring Systems And Wearable System
- Massively Parallel Sequencing & Applications
- Neuro-Engineering
- Signaling And Computation
- Structural, Functional And Comparative Genomics
- Translational Genomics In Engineering
- Biometric and bio-measurement
- Bio-nanotechnology
- Bio-signal processing and analysis
- Clinical engineering
- Computer-assisted surgery
- Methods and biology effects of NMR/CT/ECG technology
- Rehabilitation engineering and clinical engineering
- Biomedical Intelligence & Clinical Data Analysis
- Biomedicine in industry and society
- Comparative Genomics
- Computational Modeling & Data Integration
- Electrotherapy and radiotherapy
- Translational Genomics in Engineering
- Biomarker identification
- Computational immunology
- Biomedical imaging, image processing & visualization
- Biomechanics and bio-transport
- Biomedical devices, sensors, and artificial organs

**Bio-Medical Signal Processing and Health Informatics**

- Analysis and Processing
- Wearable Sensors and Systems
- Biometrics
- Pattern Recognition
- Fuzzy Systems
- Speech Recognition
- Acoustic Signal Processing

- Time and Frequency Analysis
- Bio-signal Modeling
- Non-linear Dynamics
- Telemedicine Wearable Health Informatics
- Cognitive Informatics
- Health Monitoring Devices
- Embedded Signal Processing
- Electrical Bio-Impedance
- Biotelemetry
- Biomaterials
- Biomechanical Devices
- Computer-aided Detection and Diagnosis

### **Biomedicine Engineering**

- Bioinformatics of Diseases
- Biomedical Intelligence & Clinical Data Analysis
- Comparative Genomics
- Computational Systems Biology
- Protein Structure, function, and interactions
- Sequence Analysis, Evolution and Phylogeny
- Translational Genomics in Engineering
- Bioenvironmental Engineering
- Modeling and simulation
- Molecular Medicine
- Molecular Microbiology and its applications
- Nonthermal processing for improving food safety
- Plant Biotechnology
- Produce disinfection and antimicrobials
- Proteins and peptides: Bioinformatics, Structure and Function
- Storage, processing and packaging
- Toxicology and safety evaluation
- Biomedical Computing
- Personalized medicine
- Collaborative medicine
- Electrotherapy and radiotherapy

### **Devices, Materials and Instrumentation**

- Bioinstrumentation
- Biomedical Electronics
- Biosensors and Transducers
- Data and Signal Acquisition
- Dental Engineering
- Intelligent Instrumentation
- Lasers and Optical Systems
- Microelectrical Mechanical Systems (MEMS)
- Noninvasive Measurement
- Robotics and Medicine

### **Medical Imaging, Image and Signal Processing**

- Biomedical Signal Processing
- Computed Tomography
- Medical Data Storage and Compression
- Medical Imaging (non MRI/S)
- Nanoparticles and Cell Imaging
- Nuclear Medicine
- Optical Imaging
- Ultrasound Imaging

### **Modelling, Simulation, Systems and Control**

- Bio-Aquatic System Design and Protection
- Bio-Environmental Engineering
- Electromagnetic Field Simulation

- Hemodynamics
- Surgery Simulation and Simulators

### **Stem Cells and Cancer Research & Treatment**

- Cancer diagnostics and biomarkers
- Embryonic Stem Cells
- Mesenchymal and Cardiac Stem Cells
- Molecular Biology of stem cells
- Breast cancer
- Cancer genomics and proteomics
- Cancer therapeutics
- Cervical cancer
- Clinical research and trials in stem cells and cancer
- Hematopoietic and chord blood stem cells
- Immune systems in stem cells and cancer
- Lung cancer
- Lymphoid leukemias
- Mathematical modeling and bioinformatics in stem cells and Cancer
- Nanotechnology applications in stem cells and cancer
- Neural stem cells
- Oral, head and neck cancer
- Proliferation, differentiation and apoptosis of stem cells

### **Cell Science and Stem Cell Research**

- Cell replacement therapies
- Stem cell propagation techniques and novel reagents
- Stem cell therapy: Malignancies and Neurological disorders

### **Stem Cell Transplantation**

- Autonomic complications of multiple sclerosis
- Chemotherapy with autologous stem cell transplantation
- Transplantation immunology: Solid organ and bone marrow

### **Tumour Science**

- Cancer Cell Biology, Diagnostic and Prognostic Cancer
- Carcinogenesis & Mutagenesis and OMICS in cancer \research
- Tumorigenesis and tumor growth

### **Diseases and Stem Cell Treatment**

- Diabetes and pancreatic cancer
- Leukemia's: Antileukemic Drugs
- Parkinson

### **Cell Signaling Technology**

- Cancer cell development and signaling pathway
- Cell Signaling, Disease and Stem Cells
- Cytokines and Signal transduction

### **Apoptosis and Disease**

- Apoptosis pathway in cancer stem cells
- Epigenetic & Transcriptional Controls of Stem Cells
- Future perspectives of apoptosis in medicine

### **Cell Science & Development**

- Advances in Gene therapy
- Cell Line Development for Novel Molecules
- The role of genetic and epigenetic factors in development

### **Stem Cell Medicine: Social and Political Challenges**

- Bioethics & IPR
- Biosafety and rDNA Guidelines

### **Genome analysis:**

- Genome assembly
- Genome and chromosome annotation

### **Sequence analysis:**

- Multiple sequence alignment

### **Phylogenetics:**

- Phylogeny estimation
- Models of evolution
- Comparative biological methods

### **Analysis of high-throughput biological data:**

- EST, SAGE and MPSS
- Linkage analysis
- Association analysis
- Marker discovery

### **Next generation sequencing and sequence analysis:**

- De novo sequencing, re-sequencing and assembly
- Expression estimation
- Metagenomics

### **Healthcare and diseases**

- Computational support for clinical decisions
- Disease control and diagnosis

### **E-Health**

- E-Health technology and devices
- E-Health information processing
- Video techniques for medical images
- Integration of classical medicine and E-Health

### **Bioscience Engineering**

- Biological Systems and Models
- Computer Assisted Intervention Systems
- Biomedical & Biological Sensors
- Cell Engineering
- Molecular and Cellular Systems
- Body's and Cell's Bio-signatures
- Microarray Technologies
- Biomedical Data Engineering

### **Biomechanics**

- Bone and Joint Engineering
- Gait Analysis
- Musculoskeletal Modelling
- Physiotherapy and Sports Biomechanics
- Prosthetics and Orthotics
- Rehabilitation Engineering

### **Health Care Technology**

- Clinical Engineering
- Computer-Aided Surgery
- Computers in Medical Education
- Electrotherapy
- Functional Electrical Stimulation (FES)
- Haptics
- Implant Technology
- Interactive 3-D Models
- Lasers in Medicine
- Neural, Sensory Systems and Rehabilitation

- Patient Diagnosis

### **Bioinformatics and Computational Biology**

- Analysis and Visualization of Large Biological Data Sets
- Bioelectronics and diagnostics
- Bioinformatics analysis of stem cells
- Biomedical Model Parameterisation
- Biorobotics and Biosensors
- Brain Computer Interface
- Emergent Properties in Complex Biological Systems
- Evolutionary Computing
- Genes and their Regulation
- Immuno-Computing
- Medical Imaging and Pattern Recognition
- Metabolic Pathway Analysis
- RNA and Protein Folding and Structure Prediction
- Stem Cell Sequencing/Epigenomics analysis
- Structural, functional and comparative genomics
- Systems and Synthetic Biology
- Inference of biological networks
- Simulation and visualization of biological systems
- Bio-molecular & Phylogenetic Databases
- Data Visualization
- Signaling and Computation
- Analysis of protein functionality
- Quantitative proteomics and PTMs

### **Structural Bioinformatics:**

- Structure matching
- Prediction
- Analysis and comparison
- Protein design
- Protein structure, function and sequence analysis
- Protein interactions, docking and function
- Drug design and computer aided diagnosis
- Algorithms, models, software, and tools in Bioinformatics
- Analysis and Visualization of Large Biological Data Sets
- Brain Computer Interface

### **Advances in Biotechnology**

- Microbial & Biochemical Technology
- Bioremediation & Biodegradation
- Clinical and Cellular Immunology
- Medical Biotechnology and Biomedical Engineering
- Stem Cell Research & Tissue Science Engineering
- Pharmaceutical Biotechnology
- Agricultural Biotechnology
- Bioeconomy
- Bio-based products: materials
- Biocatalysis and biotransformation
- Bioengineering at the  $\mu$ -Scale
- Biomaterials engineering and nanomedicine
- Bio-nanoparticles
- Biopharmaceuticals production
- Membrane technology
- Renewables, biofuels and bioenergy

### **Applied Biotechnology**

- Algae and photobiotechnology
- Bio-based products: materials
- Biocatalysis and biotransformation
- Bioeconomy

- Bioengineering at the  $\mu$ -Scale
- Bioenvironmental Engineering and Risk Assessment
- Bio-nanoparticles
- Biorefineries
- Bioremediation & Biodegradation
- Biosecurity
- Biosensors, Bioelectronics & Biochips, Tissue chips
- Biotechnology and its Applications
- Disease Outbreak Assessment
- Membrane technology
- Product Engineering in the Bio Industries
- Biological natural resource engineering
- Bio-machine systems
- Biotechnology for Livestock, Pests and Aquaculture
- Food safety and Bio-process engineering
- Biocatalysis, organocatalysis and nanobiotechnology
- Biological and biomedical imaging
- Biomimetic and self-assembled materials
- Bioremediation of polluted sites
- Enzyme biotechnology
- Nanoparticle sequestration in biomolecules

#### **Abstract Submission:**

Abstracts not exceeding 300 words on any of the aforesaid themes should be sent to the Organizing Secretary through email at [conferencenewdelhi2@gmail.com](mailto:conferencenewdelhi2@gmail.com) on or before **19<sup>th</sup> August, 2017**.

#### **Submission of Full Length Research Paper**

Full length research paper, maximum in 6 pages should be submitted by **21<sup>st</sup> August, 2017** through email at - [conferencenewdelhi2@gmail.com](mailto:conferencenewdelhi2@gmail.com)

#### **Submission of Registration fees** latest by **23<sup>rd</sup> August, 2017**.

Registration process can be initiated after receiving acceptance letter of full paper.

#### **Accommodation**

Free one day Accommodation will be available to the limited no. of out station non N.C.R. Delegates at JNU guest house and nearby other guest houses/hotels around conference venue. The Tariff rate for next day and subsequent day accommodation is as follows: Double-bed Room @ Rs.800/- per person (Indian non N.C.R. delegates) and 35 USD for Foreign delegates on sharing basis per day (check out time noon to noon). To and fro transportation facility from guest house to the conference Venue will be provided by the organizer.

#### **Mandatory steps to be followed:-**

1. In case of multi authored research paper, at least one Registration is mandatory.
2. In case other author/co-author wish to physically attend the conference they need to pay full Registration fees individually, separate Journal & Certificate along with the conference kit will be issued to them. Co- Authors are requested to fill & submit separate Registration forms in case they are physically attending the conference.
3. Charges for extra copy of Journal/ Certificate for other Co-author (if required) should be paid along with preliminary Registration by the corresponding author.
4. Co-Authors will not be considered as accompanying person. Listeners are not entitled for free accommodation (it will be on paid basis). However they will be issued conference kit and participation certificate.
5. All Selected papers will be available online after 15 to 20

days of conference date over, in order to download the papers the authors need to go in the publication section of Krishi Sanskriti website.

#### **Registration**

The participants are requested to register by sending the duly filled Registration form through e-mail along with their research paper and registration fees (**through RTGS/ Wired Transfer or Online Transfer**)

Bank Details mention below for **RTGS/ Wired Transfer or Online Transfer:**

**Beneficiary Name : Krishi Sanskriti Publications**  
**Bank Name : Canara Bank**  
**Bank Address : Jit Singh Marg, New Delhi**  
**Account No. : 1484201003088**  
**Account Type : Current**  
**IFSC Code : CNRB0001484**  
**Swift Code- : CNRBINBBID**

#### **Registration Charges:**

| Categories  | Indian Delegates | SAARC/ African Country Delegates | Rest of the countries |
|---|------------------|----------------------------------|-----------------------|
| Academic culty/Industrial Delegates                                     | 4000 INR         | 125 USD                          | 250 USD               |
| Research Scholars(Ph.D) / NGO Representative                            | 3500 INR         | 100 USD                          | 200 USD               |
| Students(B.Tech./M.Tech /M.Sc etc)                                      | 2500 INR         | 75USD                            | 150 USD               |
| Printing of Additional Page in Books /Journals                          | 300 INR          | 15 USD                           | 20 USD                |
| Listener / Accompanying Member( <b>only Indian Delegates</b> )          | 1500 INR         | **                               | **                    |
| Book/Journal & Certificate (additional copy) for Co-Authors in absentia | 700 INR          | 20 USD                           | 30 USD                |
| Only Books/Journal (additional copy) for Co-Authors in absentia         | 500 INR          | 15 USD                           | 25 USD                |
| Only Certificates (Co-Authors in absentia)                              | 300 INR          | 10 USD                           | 20 USD                |
| Additional Research paper for same authors                              | 1500 INR         | 25 USD                           | 35 USD                |

**\*\*Foreign Participants as listener are not allowed, only authors from foreign country/countries will be allowed in this conference.**

**NOTE:** In case Research article is accepted by the editorial committee it will be published and released on the day of conference in case the delegates are not able to physically present their paper due to some or other reason his/her research paper will be published (in absentia) and published copy along with certificate will be dispatched to his/her correspondence address by post just after the conference at no extra cost. **All communication should be by e-mail/online only (no hard copy is required to be posted).**

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**For further information and Latest Updates, Write us at**  
[conferencenewdelhi2@gmail.com](mailto:conferencenewdelhi2@gmail.com)

**Or**  
**visit our Website**  
<http://www.krishisanskriti.org/becbab17.html>

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