



## 5<sup>th</sup> National Workshop on “Bioinformatics for Sustainable Development in Agriculture, Health and Environment”

Dates: 18-19 October 2017

Venue: National Institute of Biotechnology (NIB), Savar, Dhaka

### Organized By:

Bangladesh Bioinformatics and Computational Biology Association (BBCBA)  
in collaboration with  
Bioinformatics Research Group of Rajshahi University (BioRGRU) &  
National Institute of Biotechnology (NIB), Ganakbari, Ashulia, Savar, Dhaka

### Supported By:

HEQEP Sub-Project (HEQEP:CP-3603, W2, R3), Dept. of Statistics, Rajshahi  
University (RU) & UGC and National Institute of Biotechnology

### Program

#### Day-1. Wednesday (18 October 2017)

09.00-09.30	Registration
09.30-10.45	<b>Session 1: Inaugural session</b> <ul style="list-style-type: none"><li>• Welcome address: <b>Dr. Md. Jahangir Alam</b>, Convener, Workshop Organizing Committee and Chief Scientific Officer, NIB, Savar, Dhaka</li><li>• Address from BBCBA: <b>Dr. AMAM Zonaed Siddique</b>, General Secretary of BBCBA &amp; Professor, Dept. of Pathology and Parasitology, Chittagong Veterinary and Animal Sciences University (CAVSU), Chittagong.</li><li>• Keynote Presentation: <b>Dr. Md. Nurul Haque Mollah</b>, President of BBCBA &amp; Professor, Bioinformatics Lab., Dept. of Statistics, Rajshahi University.</li><li>• Speech of Special Guest: <b>Dr. Md. Shahjahan Kabir</b>, Director General, Bangladesh Rice Research Institute (BRRI), Gazipur</li><li>• Speech of Special Guest: <b>Dr. Md. Abul Kalam Azad</b>, Director General, Bangladesh Agricultural Research Institute (BARI), Gazipur</li></ul>

	<ul style="list-style-type: none"> <li>• Speech of Special Guest: <b>Dr. Mahmood-uz-jahan</b> Director, Bangladesh Medical Research Council (BMRC), Mohakhali, Dhaka.</li> <li>• Speech of Chief Guest: <b>Mr. Md. Anwar Hossain</b>, Secretary, Ministry of Science and Technology, Govt. of Bangladesh</li> <li>• Speech of Chairperson: <b>Dr. Md Salimullah</b>, Director General, National Institute of Biotechnology (NIB), Ganakbari, Ashulia, Savar, Dhaka</li> <li>• Vote of thanks: <b>Mr. Palash Kumar Sarker</b>, Member Secretary, Workshop Organizing Committee and Senior Scientific Officer, NIB, Savar, Dhaka</li> </ul>
10.45-11:00	Tea Break
<b>11:00 - 13:00</b>	<b>Technical Session 1: Chaired by Dr. Munirul Alam</b> , Fellow Am. Acad. Mic., Senior Scientist, ICDDR, Dhaka
11:00-12:00	<b>Topic-1: <i>Introduction to Bioinformatics and Its Role in Biotechnology</i></b> <b>Resource Person: Dr. Md. Nurul Haque Mollah</b> , Professor, Bioinformatics Lab., Dept. of Statistics, Rajshahi University, Rajshahi
12:00-13:00	<b>Topic-2: <i>Bioinformatics for Understanding Endophytic Microorganisms and their Bioactive Compounds</i></b> <b>Resource Persons: Dr. Haseena Khan</b> , Professor, Dept. of Biochemistry and Molecular Biology, Dhaka University
<b>13:00 - 14:00</b>	<b>Lunch Break</b>
<b>14:00 - 16:00</b>	<b>Technical Session 2: Chaired by Dr. Haseena Khan</b> , Professor, Dept. of Biochemistry and Molecular Biology, Dhaka University
14:00-15:00	<b>Topic-3: <i>Designing Anti-HIV Drug Lead Molecule Using Bioinformatics.</i></b> <b>Resource Person: Dr. Abu Reza</b> , Professor, Dept. of Genetic Engineering & Biotechnology, RU., Rajshahi.
15:00-16:00	<b>Topic-4: <i>Next Generation Sequencing (NGS) Data Analyses Pipeline: An Introduction</i></b> <b>Resource Person: Dr. AMAM Zonayed Siddiki</b> , Professor, Dept. of Pathology and Parasitology, CVASU, Chittagong
16:00-16:15	<u>TEA Break</u>
<b>16:15 - 18:15</b>	<b>Technical Session 3: Chaired by Dr. Md. Abul Kalam Azad</b> , Professor, Dept. of Genetic Engineering and Biotechnology, Shahjalal University of Science and Technology (SUST), Sylhet
16:15-17:15	<b>Topic-5: <i>Metagenomics: The Frontier in Agriculture, Environment and Health.</i></b> <b>Resource Persons: Dr. Munirul Alam</b> , Fellow Am. Acad. Mic., Senior Scientist, ICDDR, Dhaka
17:15-18:15	<b>Topic-6: <i>Bioinformatics for Drug Discovery</i></b> <b>Resource Person: Mohammad Uzzal Hossain</b> , Scientific Officer, NIB, Savar, Dhaka

**Day-2. Thursday (19 October 2017)**

<b>9:00-11.00</b>	<b>Technical Session 4: Chaired by Dr. Md. Abdul Alim</b> , Professor, Dept. of Parasitology, Faculty of Veterinary Science, Bangladesh Agricultural University (BAU), Mymensingh.
9:00-10:00	<b><u>Topic-7: Cap Analysis Gene Expression(CAGE): A tool for mRNA Analysis in Biological Sample</u></b> <b>Resource Persons: Dr. Md. Salimullah</b> , Director General, NIB, Savar, Dhaka
10:00-11:00	<b><u>Topic-8: Protein-Protein Interaction: an Outstretched Field of Embedding Strategy for Developing New Drugs</u></b> <b>Resource Persons: Dr. A. H. M. Nurun Nabi</b> , Professor, Dept. of Biochemistry and Molecular Biology, DU.
11:00-11:15	<u>TEA Break</u>
<b>11:15 - 13:15</b>	<b>Technical Session 5: Chaired by Dr. Md. Salimullah</b> , Director General, NIB
11:15 - 12:15	<b><u>Topic-9: Protein function prediction and analyses, where bioinformatics directs.</u></b> <b>Resource Persons: Dr. Md. Abdul Alim</b> , Professor, Dept. of Parasitology, Faculty of Veterinary Science, Bangladesh Agricultural University (BAU), Mymensingh.
12:15 - 13:15	<b><u>Topic-10: Computational Biology for Understanding of Life Process.</u></b> <b>Resource Person: Dr. Md. Abul Kalam Azad</b> , Professor, Dept. of Genetic Engineering and Biotechnology, Shahjalal University of Science and Technology (SUST), Sylhet
<b>13.15 - 14.15</b>	<b>Lunch Break</b>
<b>14:15 - 16:15</b>	<b>Technical Session 6: Chaired by Dr. Jahangir Alam</b> , Chief Scientific Officer, NIB
14:15 – 15:15	<b><u>Topic-11: Plant Phenomics: An Advanced Technology for plant Growth and Development Research</u></b> <b>Resource Persons: Dr. Md. Matiur Rahman</b> , Bioinformatics Lab., Dept. of Statistics, Rajshahi University, Rajshahi
<b>15:15 – 16:15</b>	<b><u>Topic-12: Integration of OMICS approaches for low-phosphorus tolerance in maize.</u></b> <b>Resource Person: Dr. M. Shalim Uddin</b> , Senior Scientific Officer, Plant Breeding Division Bangladesh Agricultural Research Institute (BARI), Gazipur.
16.15- 17.00	<b>Session 7 (Closing Session): Chaired by Dr. AMAM Zonaed Siddique</b> , General Secretary of BBCBA & Professor, Dept. of Pathology and Parasitology, Chittagong Veterinary and Animal Sciences University (CAVSU), Chittagong.  *Feedback, *BBCBA Membership drive *Certificate awarding ceremony
<b>17:00-18:00</b>	<b>Lab visit for the SPMT members of HEQEP (CP-3603, W2, R3)</b>