

# BIONE

## E-ZINE OF BIOLOGICAL SCIENCES

ISSN: 2456-7264 | Issue - 14 | Published On 05/06/2020

Dr. Sujoy Bose, Assistant Professor,  
Department of Biotechnology  
& Group Leader of  
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Born to Mr. Nilkanta Bose and Lt. Mrs. Swapna Bose, **Dr. Sujoy Bose** completed his schooling from Army school Narangi, Graduation from Pandu College, Post-graduation from Department of Biotechnology, Gauhati University, and Ph.D. from Jamia Millia Islamia, New Delhi under the supervision of Prof. L.A. Khan and Padma Bhushan, Shanti Swarup Bhatnagar and TWAS awardee, Prof. (Dr) S.K. Sarin. He is serving in the capacity of an Assistant Professor in the Department of Biotechnology, Gauhati University since August, 2007. During his teaching and research career, he has acted as an ambassador of enthusiastic learning and development of scientific temperament amongst students and played an important role in the development of new curricula, infrastructure and academic ambience of Gauhati University.





Dr. Sujoy Bose is a recipient of several national and international awards and scholarships including National Children science congress awards, NEC merit scholarship, CSIR-UGC-NET (JRF), GATE 2003 (first student of the Department of Biotechnology, GU), European Association for the Study of the Liver (EASL) Young Investigator bursary awards for presenting scientific works in Amsterdam (Netherlands), Athens (Greece) and Lyon (France), International student Travel and appreciation award in the 41st annual meeting of the Liver Cancer group of Japan, Tokyo (Japan), DST-Fast track scientist award for under 35 years of age, DST-SERB ITS award to present paper in the International Congress of Immunology 2016 held in Melbourne (Australia), Korean digestive disease week 2019 International travel bursary award, Seoul (South Korea) etc. He has undergone scientific training at a number of national and international Institutes and Universities like CDFD, Hyderabad, University of Tokyo Hospital-Tokyo University etc. He has acted as a resource person for delivering scientific talks and conduct trainings in several institutes in the country. Dr. Bose is a Life member of Indian Association of Cancer research and past member of EASL and Asia Pacific association for the study on liver (APASL). He has been actively involved in social extension activities like organizing health camps, awareness programmes, mass Hepatitis B screening and vaccination programmes; and academic programmes like training for students, research scholars and faculties, project cum training support to B.Tech, B.Sc, M.Sc, M.Tech, and PhD students of Gauhati University as well as from different Institutes and Universities of India. He has also been actively involved in organizing scientific conferences and symposia in different capacities.

The Laboratory of Molecular Virology and Cancer Biology under his leadership focuses on different important aspects of Medical Biotechnology and Disease Biology. Altogether, 24 independent PG dissertations have been completed by MSc students in his lab since inception. He is executing or has

completed a number of extramural projects supported by DBT, DST and ICMR either as PI (five) or Co-PI (four). He and his group have published 26 original research articles in reputed scientific journals with a cumulative Thompson Reuters *impact factor* of 67, *citation index* 371 and *h-index* 8; and have authored a book under the banner of Tata-McGraw Hill publications (ISBN-13:978-0-07-70013-0, ISBN-10:0-07-070013-3). Many PhD students are working under his supervision on molecular and immunological aspects of important infectious and non-infectious diseases prevalent in northeast India. The thrust areas of research in his lab are: (i) Molecular Virology and Molecular Immunology (ii) Cancer Biology (iii) Understanding molecular mechanisms of reproductive disorders and other diseases relevant to northeast India.

#### Details of Lab members of Lab for Molecular Virology and Cancer Biology, GU

People	Details of students who have completed Ph.D. under the supervision of Dr. Sujoy Bose
 <p>Dr. Diptika Tiwari</p>	<p><b>Thesis title:</b> Risk factors associated with preterm delivery in North East India: Genetic, immunological and pathological aspects.</p> <p><b>Present position:</b> ICMR-RA under the supervision of Dr. Sujoy Bose.</p> <p><b>Area of research interest:</b> Understanding the molecular pathogenesis of diseases prevalent in women</p> <p><b>Publications:</b> Seven</p> <p><b>Most recent publication:</b> ‘Impact of modulation of telomerase and cancer stem cell marker OCT4 axis in cervical cancer pathogenesis with underlying HPV16 infection. (J of Cellular Biochemistry, 2019).</p> <p><b>Honours and Awards:</b></p> <ul style="list-style-type: none"> <li>• EASL Young Investigator Full bursary award in monothematic conference on Translational research in viral hepatitis, Athens, Greece (2020); Full Congress Package (FCP) Scholarship for top 100 abstract in ISGE 18<sup>th</sup> World Congress Florence Italy (2018), GATE’2015</li> </ul>
 <p>Dr. Rizwana Sultana</p>	<p><b>Thesis title:</b> Mechanism(s) Associated with Triple Negative Breast Cancer Development and Screening the Efficacy of Target Specific Drugs as Therapeutic Interventions.</p> <p><b>Present position:</b> Scientist II, FAA Medical College &amp; Hospital, Barpeta, Assam</p> <p><b>Area of research interest:</b> Cancer Biology</p> <p><b>Publications:</b> Five</p> <p><b>Honours and Awards:</b> UGC Maulana Azad National Fellowship JRF.</p>
 <p>Dr. Dipankar Bujarbaruah</p>	<p><b>Thesis title:</b> Studies on genetic susceptibility to malarial infection to the tribal population of Dimoria block, Khetri, Kamrup, Assam.</p> <p><b>Present position:</b> Associate Professor, Dimoria College, Assam.</p> <p><b>Area of research interest:</b> Molecular parasitology and immunology.</p> <p><b>Publications:</b> Two</p> <p><b>International abstract presentation on PhD topic:</b> One (Melbourne, Australia)</p>

 <p>Dr. Somdatta Das</p>	<p><b>Thesis title:</b> Study of the molecular and immunological factors involved in the development of Rheumatoid arthritis – A northeast Indian population based study.</p> <p><b>Present position:</b> Faculty, NPS school, Guwahati, Assam  <b>Area of research interest:</b> Molecular pathogenesis of Rheumatoid arthritis  <b>Publications:</b> Three  <b>Honours and Awards:</b></p> <ul style="list-style-type: none"> <li>• 2nd prize in the Association of the Physicians of India, Northeast chapter meeting at Guwahati, Assam; SLET</li> </ul>
 <p>Dr. Tarun Kr Basumatary</p>	<p><b>Thesis title:</b> Risk factors associated with preterm delivery in North East India: Genetic, immunological and pathological aspects.</p> <p><b>Present position:</b> Scientific Assistant, Cotton University</p> <p><b>Area of research interest:</b> Non-viral Liver diseases,  <b>Publications:</b> Four  <b>Honours and Awards:</b></p> <ul style="list-style-type: none"> <li>• Liver Care Foundation award, APASL 2017, Shanghai;</li> <li>• KDDW 2019 International Travel bursary award, Seoul, Korea; SLET</li> </ul>
 <p>Dr. Manash Pratim Kalita</p>	<p><b>Thesis title:</b> Role of host immune modulation in the severity of malaria" A patient based study in Assam.</p> <p><b>Present position:</b> Faculty, AIMT, Guwahati, Assam</p> <p><b>Area of research interest:</b> Molecular immunology,  <b>Publications:</b> Three  <b>Honours and Awards:</b></p> <ul style="list-style-type: none"> <li>• Best poster presentation award in the International Conference on Disease Biology and Therapeutics (ICDBT 2014);</li> <li>• Best poster presentation award in the National congress of Parasitology &amp; Global Summit on Malaria Elimination (2019).</li> </ul>
<p><b>People</b></p>	<p><b>Details of students currently pursuing Ph.D. under the guidance of Dr. Sujoy Bose</b></p>
 <p>Raktim Borkotoky</p>	<p><b>Area of research: Cancer Biology</b>  <b>Publications:</b> Three</p> <p><b>Most recent publication:</b> ‘Alterations in XRCC1 gene profile in pathogenesis of oral cavity cancer: A population-based study from Kamrup Urban District of Assam, India (Current Problems in Cancer, 2020)’</p> <p><b>Honours and Awards:</b> SLET</p> <p>Thesis submitted, under evaluation</p>

 <p>Vargab Baruah</p>	<p><b>Area of research: Molecular Virology and Molecular Immunology</b></p> <p><b>Publications:</b> Four</p> <p><b>Most recent publication:</b> ‘Immunoinformatics-aided identification of T cell and B cell epitopes in the surface glycoprotein of 2019-nCoV (JMV, 2020).’</p> <p><b>Honours and Awards:</b></p> <ul style="list-style-type: none"> <li>• CSIR-UGC NET (JRF), DBT-BET, GATE, SLET</li> <li>• Young Clinician Investigator program travel grant award for the 17th Asian Pacific Digestive Week - Hong Kong (2017); Travel grant as well as the best poster award on his PhD relevant work in the 7th Biennial Congress of the Asian-Pacific Hepato-Pancreato-Biliary Association held in Seoul, Korea (2019).</li> </ul>
 <p>Nidhi Singh</p>	<p><b>Area of research : Cancer Biology</b></p> <p><b>Publications:</b> Three</p> <p><b>Most recent publication:</b> ‘Oxidative stress and deregulations in base excision repair pathway as contributors to gallbladder anomalies and carcinoma - a study involving North-East Indian population. (Free Radical Res. 2019)</p> <p><b>Honours and Awards:</b></p> <ul style="list-style-type: none"> <li>• CSIR-UGC NET (JRF, LS), DBT-BET JRF, GATE, SLET</li> <li>• Awarded the top five APDWF posters of distinction award and Selected for Young Clinician Investigator Program and travel grant in the 17th Asian Pacific Digestive Week (APDW) - Hong Kong (2017); travel grant awardee in the 7th Biennial Congress of the Asian-Pacific Hepato-Pancreato-Biliary Association (A-PHPBA) - Seoul, Korea</li> </ul>
 <p>Anjuma Begum</p>	<p><b>Area of research : Reproductive Biology (recurrent pregnancy loss)</b></p> <p><b>Publications:</b> One</p> <p><b>Honours and Awards:</b></p> <p>Full Congress Package (FCP) Scholarship for top 100 abstract in ISGE 18<sup>th</sup> World Congress Florence Italy (2018);</p> <p>SLET</p> <p>UGC Maulana Azad National Fellowship JRF</p>

It will not be wrong to state that in spite of the limited infrastructure and resources, Dr. Sujoy Bose has been able to contribute for development of skilled manpower in the field of Medical Biotechnology in the Northeast India, as well as make a mark in the global platform of Biomedical researchers through his and his students’ scientific contributions during the last decade. His works on virology and immunology of hepatitis viruses and Dengue virus as well as in the field of Cancer Biology pertinent to GI cancers –molecular mechanism including cell signalling, cancer stem cells and epigenetic changes, breast and oral cancers, and in reproductive diseases need special mention.

