





NATIONAL DATABASE

Biotechnology Research & Personnel





National Institute of Biotechnology

Ganakbari, Ashulia, Savar, Dhaka-1349, Bangladesh Tel: +88 02 7789458, Fax: +88 02 7789636 E-mail: dgnibbd@gmail.com, web: www.nib.gov.bd











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প্রতিমন্ত্রী বিজ্ঞান ও প্রযুক্তি মন্ত্রণালয় গণপ্রজাতন্ত্রী বাংলাদেশ সরকার

বাণী

ন্যাশনাল ইনস্টিটিউট অব বায়োটেকনোলজি (এনআইবি) "ন্যাশনাল ডাটাবেস অন বায়োটেকনোলজি রিসার্চ এন্ড পার্সোনেল ইন বাংলাদেশ" হালনাগাদ করে প্রকাশ করতে যাচ্ছে জেনে আমি অত্যন্ত আনন্দিত। এ উপলক্ষ্যে দেশের সকল জীবপ্রযুক্তিবিদকে আন্তরিক শুভেচ্ছা জানাচ্ছি। ২০১১ সালে প্রথমবারের মত এই ডাটাবেসটি প্রকাশিত হয়। প্রকাশনার পর থেকে এটি দেশের গবেষকসমাজ, নীতি নির্ধারক ও সরকারের বিভিন্ন সংস্থার চাহিদা পরণে সফল ভূমিকা রেখে আসছে।

ভৌগলিক অবস্থানগত কারণে বাংলাদেশ প্রতি বছর ঘূর্ণিঝড়, বন্যা, খরা, লবণাক্ততা ইত্যাদির মত প্রাকৃতিক দুর্যোগের শিকার হয়। এর পাশাপাশি দেশের ক্রমবর্ধমান জনসংখ্যার চাপে আমাদের কৃষি জমির পরিমাণ প্রতিনিয়ত ব্রাস পাচ্ছে। ফলে সীমিত সম্পদ ব্যবহার করে খাদ্যে স্বয়ম্ভরতা অর্জন ও জনগণের মৌলিক চাহিদা পূরণে আধুনিক জীবপ্রযুক্তি উদ্ভাবন ও ব্যবহার এখন সময়ের দাবি। কীট ও রোগ প্রতিরোধী; দুর্যোগ সহনশীল; অধিক উৎপাদনশীল শস্য, মৎস্য ও প্রাণিসম্পদের জাত উদ্ভাবন ও উন্নয়ন; জীবন রক্ষাকারী ঔষধ উৎপাদন; টেকসই পরিবেশ ব্যবস্থাপনা; নতুন কর্মসংস্থানের সুযোগ সৃষ্টি ও সর্বোপরি দেশের আর্থসামাজিক উন্নয়নে আধুনিক জীবপ্রযুক্তি গুরুত্নপূর্ণ অবদান রাখতে সক্ষম।

এই সরকার ২০০৯ সালে ক্ষমতা গ্রহণের পর দেশের আর্থিক অগ্রগতি ও জনগণের ভাগ্যোন্নয়নে "ভিশন ২০২১: ডিজিটাল বাংলাদেশ" -এর মত একাধিক কর্মপরিকল্পনা গ্রহণ করে। এরই ধারবাহিকতায় দেশের অর্থনৈতিক উন্নয়নকল্পে আধুনিক জীবপ্রযুক্তির ব্যবহার ও গবেষণার প্রসারে গৃহীত পদক্ষেপের ধারা অব্যাহত রাখতে সরকার বদ্ধপরিকর।

জীবপ্রযুক্তি বিষয়ে স্থানীয়, আঞ্চলিক ও আন্তর্জাতিক পর্যায়ে সমম্বিত গবেষণা নেটওয়ার্ক সৃষ্টি এবং জাতীয় প্রয়োজনে বিশেষজ্ঞ নির্বাচনের জন্য দেশে জীবপ্রযুক্তি গবেষণা ও গবেষকদের বিবরণ সংবলিত একটি ডাটাবেস এর প্রয়োজন অনস্বীকার্য। এধরনের একটি গুরুত্বপূর্ণ জাতীয় ডাটাবেস প্রণয়ন ও প্রকাশের জন্য আমি এনআইবি-কে আন্তরিক ধন্যবাদ জানাচ্ছি।

স্থপতি ইয়াফেস ওসমান





সচিব বিজ্ঞান ও প্রযুক্তি মন্ত্রণালয় গণপ্রজাতন্ত্রী বাংলাদেশ সরকার

বাংলাদেশের মত একটি উন্নয়নশীল দেশে কৃষি, শিল্প, পরিবেশ ও স্বাস্থ্য খাতে উন্নয়নের জন্য জীবপ্রযুক্তি গবেষণা ও প্রয়োগ অতীব প্রয়োজন। আধুনিক জীবপ্রযুক্তির সফল প্রয়োগের মাধ্যমে কৃষি ক্ষেত্রে ফলন বৃদ্ধি, রোগ-প্রতিরোধী ফসল উৎপাদন, মৎস্য ও প্রাণিসম্পদের নতুন জাত উদ্ভাবন এবং পরিবেশ দুষণের কারণসমূহ হ্রাস করা সম্ভব।

বর্তমান সরকার আধুনিক প্রযুক্তি ব্যবহার করে দেশকে একটি উন্নত ও মধ্যম আয়ের দেশে রূপান্তরের লক্ষ্যে "ভিশন ২০২১" ঘোষণা করেছেন। এ প্রেক্ষাপটে দেশে জীবপ্রযুক্তি ও জীন প্রকৌশলের মত অত্যাধুনিক প্রযুক্তির প্রসার সহজতর হবে। আশা করা যায়, আগামী বছরগুলোতে ভিটামিন-সমৃদ্ধ ধান এবং কীট-প্রতিরোধী ও দুর্যোগ-সহনশীল জাতের ফসলের মত জীবপ্রযুক্তির সুফল সাধারণ মানুষের দোরগোড়ায় পৌঁছে যাবে।

এনআইবি কর্তৃক প্রকাশিত এই ডাটাবেসটিতে দেশে চলমান জীবপ্রযুক্তি বিষয়ক গবেষণা কার্যক্রম ও এর সঙ্গে সংশিষ্ট বিজ্ঞানী-দের মূল্যবান তথ্য সংকলিত হয়েছে। তথ্যকোষটি সংশিষ্ট সকলের প্রয়োজন মেটাবে বলে আশা করি। শ্রমসাধ্য এই প্রয়াসের সঙ্গে জড়িত সকলকে আন্তরিক ধন্যবাদ।

খোন্দকার মোঃ আসাদুজ্জামান





মহাপরিচালক ন্যাশনাল ইনস্টিটিউট অব বায়োটেকনোলজি গণকবাড়ি, আশুলিয়া, সাভার, ঢাক-১৩৪৯



ন্যাশনাল ইনস্টিটিউট অব বায়োটেকনোলজি (এনআইবি) দেশের জীবপ্রযুক্তি ও সংশিষ্ট ক্ষেত্রে চলমান কার্যক্রমের সাথে জড়িত গবেষকদের তথ্য সম্বলিত "ন্যাশনাল ডাটাবেস অন বায়োটেকনোলজি রিসার্চ এন্ড পার্সোনেল ইন বাংলাদেশ" হালনাগাদ করে প্রকাশ করতে পেরে আমি অত্যন্ত আনন্দিত।

সীমিত প্রাকৃতিক সম্পদ, বৈরী পরিবেশের (বন্যা, খরা, লবণাক্ততা ও সাইক্রোন ইত্যাদি) সঙ্গে পাল্লা দিয়ে ক্রমবর্ধমান জনসংখ্যার মৌলিক চাহিদা পূরণ একটি বড় চ্যালেঞ্জ। এই চ্যালেঞ্জ মোকাবেলায় জীবপ্রযুক্তির মত আধুনিক প্রযুক্তির কোন বিকল্প নেই। এই ডাটাবেসটিতে দেশে জীবপ্রযুক্তি বিষয়ে চলমান বিভিন্ন কার্যক্রম, সংশিষ্ট বিশেষজ্ঞ গবেষকগণের নাম, ঠিকানা, দক্ষতার ক্ষেত্রসমূহের তথ্যাদি সন্নিবেশিত করা হয়েছে, যা নিবিড় যোগাযোগের মাধ্যমসহ গবেষণা কার্যক্রম আরও ফলপ্রসূ করার নিমিত্ত তথ্য আদান প্রদানে সহায়ক ভূমিকা পালন করবে।

সরকার জাতীয় পর্যায়ে জীবপ্রযুক্তি বিষয়ক গবেষণা ও উন্নয়ন উৎসাহিত করতে জাতীয় জীবপ্রযুক্তি নীতি ২০১২ গেজেটে প্রকাশ করেছে। এরই আলোকে জীবপ্রযুক্তি বিষয়ে গবেষণার অ্যাধিকার ক্ষেত্রসমূহ চিহ্নিত করা সম্ভব হয়েছে। ফলশ্রুতিতে বর্তমানে দেশের বিভিন্ন অঞ্চলে অবস্থিত একাধিক গবেষণা প্রতিষ্ঠানে জীন প্রকৌশলের মত অত্যাধুনিক সুবিধা সম্বলিত অবকাঠামো গড়ে উঠেছে। এই সকল গবেষণাগারে জীবপ্রযুক্তির বিভিন্ন ক্ষেত্রে অধিক কার্যকর ও যুগোপযোগী প্রযুক্তি উদ্ভাবনের কাজ এগিয়ে চলেছে।

বর্তমান ডাটাবেসটি এনআইবি ২০১১ সালে প্রথম প্রকাশ করে। প্রকাশিত হওয়ার পর থেকে পারষ্পরিক যোগাযোগ বৃদ্ধি ও বিশেষজ্ঞ সহায়তা বিনিময়ে এটি দেশের গবেষণা ও শিক্ষাক্ষেত্রে ব্যাপকভাবে সমাদৃত হয়েছে। এই ধরণের একটি গুরুত্বপূর্ণ ডাটাবেস প্রণয়ন, হালনাগাদকরণ ও প্রকাশের জন্য এনআইবির সংশিষ্ট সবাইকে আন্তরিক ধন্যবাদ জানাচ্ছি।

Surgers

ড. মোঃ সাইদুল ইসলাম





National Database on Biotechnology Research & Personnel

Research Projects

Plant Biotechnology



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RESEARCH PROJECT >>

Relevance of microRNAs with stress tolerance in jute: Identification and Manipulation of MicroRNAs and their target gene(s)

Executing department	Department of Biochemistry and Molecular Biology, University of Dhaka
Areas of biotechnology	Plant Molecular Biology
Team leader (with contact address)	Dr. Haseena Khan, Professor, Department of Biochemistry and Molecular Biology, University of Dhaka
Objectives of the project	Identification and Manipulation of MicroRNAs and their target gene in jute
Outcomes of the project	Identification of conserved and novel miRNA in Jute and their target gene in relation to abiotic stresses.
Project period	July 2013 to June, 2014
Source of funding	Ministry of Science and Technology
Collaboration (national/regional/international)	
Associated manpower with expertise	Capable researchers with in-depth knowledge of basic molecular biology techniques, skilled in performing miRNA specific stem-loop RT-PCR, Real Time PCR, also expert in comprehensive Bioinformatics analyses.
Facility available	Thermal Cyclers, Light cycler -80°C Freezer, Gel Documentation System, Agarose and Polycarylaide Gel Electrophoresis System, Incubated Shaker, Low Temp. Incubator
Specific constraints if any	
Others	

RESEARCH PROJECT \gg	Development of low lignin containing Jute variety (CR-40)
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Executing department	Department of Biochemistry and Molecular Biology, University of Dhaka
Areas of biotechnology	Plant Molecular Biology
Team leader (with contact address)	Dr. Haseena Khan, Professor, Department of Biochemistry and Molecular Biology, University of Dhaka
Objectives of the project	Lignin has negative impact on the agro industrial utilization of plant bio-mass. The comprehensive objective is aimed at getting jute varieties having low lignin content which is of commercial significance.
Outcomes of the project	Development of transgenic jute plants with decreased lignin content by down-regulating selected genes in lignin biosynthetic pathways using RNAi and artificial miRNA based strategies.
Project period	November 2010 to September, 2013
Source of funding	BAS-USDA Agricultural and Life Sciences
Collaboration (national/regional/international)	Bangladesh Jute Research Institute.
Associated manpower with expertise	Talented researchers with high proficiency in conducting cloning and transformation, extensive understanding of RNAi and artificial miRNA strategies, RNAi vector designing, lignin content estimation, quantitative PCR and fundamental molecular biology techniques.
Facility available	Thermal Cyclers, Light cycler, -80°C Freezer, Gel Documentation System, Agarose and Polyacraylamide Gel Electrophoresis System, Incubated Shaker, Low Temp. Incubator
Specific constraints if any	
Others	

RESEARCH PROJECT >>

Development of Stress Tolerant Peanut (Arachis hypogaea L.) Breeding Lines Using Modern Biotechnology

Executing department	Plant Breeding & Biotechnology Laboratory, Department of Botany, University of Dhaka
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Prof. Dr. M. Imdadul Hoque, Department of Botany, University of Dhaka Dhaka - 1000, Bangladesh
Objectives of the project	a) Diversity analysis in peanut germplasm using classical cytogenetics and molecular markersb) Development of fungus resistant peanut through genetic transformation
Outcomes of the project	a) Diversity analysis part is more or less completedb) In vitro plant regeneration has been standardized, protocol for genetic transformation using maker gene has been established
Project period	2009 -2013
Source of funding	United States Department of Agriculture (USDA)
Collaboration (national/regional/international)	 a) National: Bangladesh Agricultural Research Institute, National Institute of Biotechnology, Bangladesh Institute of Nuclear Agriculture b) Regional: International Centre for Genetic Engineering & Biotechnology (ICGEB), India c) International: University of Hannover, Germany, University of California Riverside, USA
Associated manpower with expertise	Two Ph.D. Fellows; One Research Associate; One Laboratory Technician
Facility available	All laboratory facilities needed for plant tissue culture and plant genetic engineering research
Specific constraints if any	Regular funding
Others	N/A

RESEARCH PROJECT >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Executing department	Department of Biochemistry and Molecular and Biology, DU (BMBDU) and Section of Integrative Biology, University of Texas at Austin	
Areas of biotechnology	Plant Biotechnology	
Team leader (with contact address)	Professor Dr. Zeba I. Seraj, Dept. of Biochem and Mol Biol, DU, Dhaka 1000, zebai@univdhaka.edu	
Objectives of the project	QTL mapping of salt tolerant determinants and correlating map loci with RNA expression in tolerant progenies	
Outcomes of the project	Identification and production of rice with both salt tolerance and high yield	
Project period	July 2013-September 2015	
Source of funding	USAID-PEER	
Collaboration (national/regional/international)	BRRI, University of Texas at Austin	
Associated manpower with expertise	Ms. Sabrina Elias, Ms. Taslima Haque, Mr. Samsad Razzaque and Mr. Sudip Biswas	
Facility available	PCR machines, Centrifuge machine, DNA and protein gel electrophoresis, laminar flow hoods, Plant tissue culture facilities, Net house for growing rice plants, Real Time PCR machine, Gel Doc, Nanodrop, spectrophotometer, incubators, Shakers.	
Specific constraints if any	Difficulty in import of perishable biochemicals	
Others	N/A	

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Characterization of alcohol dehydrogenase promoter and its efficacy in transgenic rice

Executing department	Department of Biochemistry and Molecular Biology, University of Dhaka
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Professor Dr. Zeba I. Seraj, Dept. of Biochem and Mol Biol, DU, Dhaka 1000, zebai@univdhaka.edu
Objectives of the project	Isolation of a tissue specific promoter in order to drive tissue-specific gene expression
Outcomes of the project	Production of transgenic rice with expression of transgene only in roots
Project period	Jan 2014-June 2014
Source of funding	Ministry of Science and Technology, Govt. of Bangladesh
Collaboration (national/regional/international)	
Associated manpower with expertise	Mr. Sudip Biswas
Facility available	PCR machines, Centrifuge machine, DNA and protein gel electrophoresis, laminar flow hoods, Plant tissue culture facilities, Net house for growing rice plants, Real Time PCR machine, Gel Doc, Nanodrop, spectrophotometer, incubators, Shakers.
Specific constraints if any	Difficulty in import of perishable biochemicals
Others	N/A

RESEARCH PROJECT >>> Production of Farmer-popular rice tolerant to environmental stresses like salinity and drought		
Executing department	Department of Biochemistry and Molecular Biology, University of Dhaka	
Areas of biotechnology	Plant Biotechnology	
Team leader (with contact address)	Professor Dr. Zeba I. Seraj, Dept. of Biochem and Mol Biol, DU, Dhaka 1000, zebai@univdhaka.edu	
Objectives of the project	Production of abiotic stress tolerant rice	
Outcomes of the project	Production of salt tolerant versions of BR11 and BRRI Dhan28. Several salt tolerant transgenic rice, such as BRRI Dhan 28, 29, 36, 47 with various rice genes	
Project period	November 2010-October 2013	
Source of funding	BAS-USDA	
Collaboration (national/regional/international)	IRRI, Philippines (Dr. Abdelbagi Ismail); BRRI, Gazipur (M. Sazzadur Rahman); ICGEB, India (Dr. Narendra Tuteja and Dr. Sneh Lata Singla Pareek)	
Associated manpower with expertise	Mahzabin Amin, MS; Sabrina M. Elias, MS; Taslima Haque, MS; Shabnam Zaman, BS Hons; Sudip Biswas, MS, Samsad Razzaque, MS.	
Facility available	PCR machines, Centrifuge machine, DNA and protein gel electrophoresis, laminar flow hoods, Plant tissue culture facilities, Net house for growing rice plants, Real Time PCR machine, Gel Doc, Nanodrop, spectrophotometer, incubators, Shakers.	
Specific constraints if any	Difficulty in import of perishable biochemicals	
Others	N/A	

RESEARCH PROJECT >> Rice as a delivery system for recombinant proteins

Executing department	Department of Biochemistry and Molecular Biology, University of Dhaka
Areas of biotechnology	Plant and medical
Team leader (with contact address)	Professor Dr. Zeba I. Seraj, Dept. of Biochem and Mol Biol, DU, Dhaka 1000, zebai@univdhaka.edu
Objectives of the project	Production of edible vaccines against cholera and TB
Outcomes of the project	Production of rice seeds producing cholera toxin and TB toxin
Project period	June 2010-May 2013
Source of funding	Swedish International Development Agency, SIDA
Collaboration (national/regional/international)	Stockholm University (Dr. Carmen Fernandez) and ICDDRB (Dr. Firdausi Qadri)
Associated manpower with expertise	Shabnam Zaman, BS; Kawsar Khan, MS
Facility available	PCR machines, Centrifuge machine, DNA and protein gel electrophoresis, laminar flow hoods, Plant tissue culture facilities, Net house for growing rice plants, Real Time PCR machine, Gel Doc, Nanodrop, spectrophotometer, incubators, Shakers.
Specific constraints if any	Difficulty in import of perishable biochemicals
Others	

RESEARCH PROJECT	Genetic Transformation of Salt and Drought Tolerant Genes in Sugarcane
Executing department	Biotechnology Division, Bangladesh Sugarcane Research Institute, Ishurdi- 6620, Pabna.
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Dr. Md. Amzad Hossain, Chief Scientific Officer and Head, Biotechnology Division, Bangladesh Sugarcane Research Institute, Ishurdi- 6620, Pabna
Objectives of the project	 To collect Agrobacterium strains with salt and drought tolerant genes as well as other traits; To culture and maintain Agrobacterium strains; To develop co-culture protocol with Agrobacterium and sugarcane explants; To optimize the Agrobacterium-mediated genetic transformation system for trans-gene expression in sugarcane and To develop transgenic sugarcane varieties.
Outcomes of the project	 Protocol for Salt and drought genes transformation has been optimized for Sugarcane varieties of Bangladesh. Salt and drought tolerant gene transformed sugarcane variety Isd 34 was able to survive on 150 mM (21.66ds/M) salt and 7.5% PEG under <i>in vitro</i> contained condition and are being multiplied regularly.
Project period	On going
Source of funding	GoB
Collaboration (national/regional/international)	National
Associated manpower with expertise	 Kuasha Mahmud, Principal Scientific Officer, Expertise: Plant Biotechnology; Asish Kumar Ghose, Scientific Officer, Expertise: Plant Biotechnology Md. Abu Sayem Jiku, Scientific Officer, Expertise: Plant Biotechnology; Dr. Khondoker Mohammad Nasiruddin, Professor, Department of Biotechnology, Bangladesh Agricultural University, Expertise: Plant Biotechnology; Dr. Mohammad Nurul Islam, Professor, Department of Botany, University of Dhaka, Expertise: Plant Biotechnology
Facility available	Agrobacterium strains and all other input required.
Specific constraints if any	N/A
Others	N/A

RESEARCH PROJECT	Characterization and Documentation of Sugarcane Using Molecular Markers
Executing department	Biotechnology Division, Bangladesh Sugarcane Research Institute, Ishurdi-6620, Pabna.
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Dr. Md. Amzad Hossain, Chief Scientific Officer and Head, Biotechnology Division, Bangladesh Sugarcane Research Institute, Ishurdi-6620, Pabna.
Objectives of the project	 To determine the variation among the sugarcane varieties and active germplasm collection of BSRI using molecular markers; To establish identification of sugarcane varieties and active germplasm through DNA Fingerprinting; To document sugarcane varieties based on molecular markers and To develop Marker Assisted Selection (MAS) method for sugarcane.
Outcomes of the project	DNA Finger Printing of all released Sugarcane varieties and 12 Sugarcane Germplasm and Five chewing varieties have been completed.
Project period	On going
Source of funding	GoB
Collaboration (national/regional/international)	National
Associated manpower with expertise	Mohammad Raihan Ali, Professor, Department of Genetic Engineering and Biotechnology, Khulna University, Expertise: Plant Biotechnology; Nadira Islam, Senior Scientific Officer, Expertise: Plant Biotechnology; Kuasha Mahmud, Principal Scientific Officer, Expertise: Plant Biotechnology; Asish Kumar Ghose, Scientific Officer, Expertise: Plant Biotechnology; Md. Abu Sayem Jiku, Scientific Officer, Expertise: Plant Biotechnology; K. M. Rezaul Karim, Senior Scientific Officer, Expertise: Plant Biotechnology; K. M. Rezaul Karim, Senior Scientific Officer, Expertise: Plant Breeder; Dr. Mohammad Samsul Alam, Professor, Department of Fisheries Biology and Genetics, Bangladesh Agricultural University, Expertise: Molecular Biology; Dr. Md. Mahboob Hussain, Principal Scientific Officer, Bangladesh Jute Research Institute, Expertise: Plant Biotechnology
Facility available	Centrifuge, Thermo cycler, Gel Documentation System, Gel Electrophoresis Unit, primers and all chemicals.
Specific constraints if any	N/A
Others	N/A

RESEARCH PROJECT	Surveillance of seedling diseases of some important fruit species in Bangladesh with developing a model of eco-friendly management and molecular characterization of their pathogens
Executing department	Department of Plant Pathology, Bangladesh Agricultural University, Mymensingh
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Professor Dr.Ismail Hossain, Department of Plant Pathology, Bangladesh Agricultural University, Mymensuingh, Cell: 01711423009, E-mail: dhossain69@gmail.com
Objectives of the project	 To study biodiversity of seedling diseases of important fruit species in Bangladesh. To develop eco-friendly management practice of diseases. To characterize pathogens at molecular level.
Outcomes of the project	A model of eco-friendly disease management will be developed and pathogens will be characterized at molecular level.
Project period	2010-2013
Source of funding	SPGR, NATP
Collaboration (national/regional/international)	National
Associated manpower with expertise	Professor Dr. M. Delwar Hossain, BAU, Mymensingh and Professor Dr. M.Salahuddin M.Chowdhury, SAU, Dhaka
Facility available	Two Labs. (1) Molecular Plant Pathology Lab., and (2) Eco-friendly plant disease management Lab.
Specific constraints if any	Molecular Plant Pathology Lab at BAU needs to be modernized. More funds are highly essential.
Others	By this time two new diseases viz. Bacterial Leaf blight of Mango and Bacterial leaf blight of Litchi are recorded under this program. This is the first time record in Bangladesh

RESEARCH PROJECT >>

Development of high yielding rice (*Oryza sativa* L.) variety having gene of tolerant to abiotic stresses and study of their molecular and genetic mechanism of abiotic stress adaptation

Executing department	Department of Genetic Engineering and Biotechnology, University of Chittagong
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Professor Dr Mohammad Al-Forkan, Department of Genetic Engineering and Biotechnology, University of Chittagong
Objectives of the project	 To develop high yielding rice variety (HYV) tolerant to environmental abiotic stress like salinity. To analyze molecular and genetic mechanism of abiotic stress adaptation.
Outcomes of the project	Release of salt tolerant high yielding rice variety
Project period	2009-2014
Source of funding	USDA
Collaboration (national/regional/international)	University of California-Davis, USA
Associated manpower with expertise	Laila Khaleda, Assistant Professor, Dept. Of Genetic Engineering and Biotechnology, University of Chittagong
Facility available	Gene Pulser, Southern Blotting, Gel Documentation, High Speed refrigerated centrifuge, NanoDrop, Gel Electrophoresis apparatus, Tissue culture facilities, Micro oven, Water bath, Incubator, Shaker, Rotary Shaker, Western transblotting
Specific constraints if any	Necessary chemicals
Others	N/A

RESEARCH PROJECT	Multiplication and conservation of endangered tree species (<i>Xylocarpus mekongensis, Xylocarpus granatum</i>) of Sundarbans mangrove forest through micropropagation technique and their prospect in restoration programme in the coastal zone of Bangladesh
Executing department	Agro-technology Discipline, Khulna University, Khulna-9208
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Dr. Md. Monirul Islam, Professor, Agrotechnology Discipline, Khulna University, Khulna-9208, Bangladesh, E-mail: moniratku@yahoo.com
Objectives of the project	 (a) To investigate the seed germination and seedling growth of <i>X. mekongensis, X. granatum</i> under different combination and concentrations of plant growth hormones (b) To establish suitable protocol for micropropagation of <i>X. mekongensis, X. granatum</i>
	 (c) To establish macro- and micropropagated plants in the field and their field evaluation (d) To establish gene bank of these species in the adjacent areas of the Sundarbans or in the Khulna University Campus
	Conservation of valuable timber species like Pasur (<i>X. mekongensis</i>) and Dhundal (<i>X. granatum</i>) in the Sundarbans mangrove forest. Enhance the mangrove biodiversity conservation.
	Carbon sequestration can act as alternative tree species of mesophyte species in the coastal region of Bangladesh.
Outcomes of the project	Pasur (<i>X. mekongensis</i>) and Dhundal (<i>X. granatum</i>) timber species may include in restoration program, green- belt and shelter-belt program in the coastal zone of Bangladesh.
	Gene bank of these will be established.
	Enhance cross-sectoral integration of sustainable land management, up scaling of technology transfer system, policies, strategies, marketing and funding mechanisms.
Project period	2009 – 2014
Source of funding	United States Department of Agriculture (USDA).
Collaboration (national/regional/international)	Forestry and Wood Technology Discipline, Khulna University, Khulna-9208.
Associated manpower with expertise	A scientific officer cum PhD fellow and an accountant
Facility available	Well equipped micropropagation lab, green and net houses
Specific constraints if any	Lack of well equipped hardening room and skilled man power.
Others	N/A

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RESEARCH PROJECT	>
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Development of heavy metal tolerant *Brassica napus* L. plants through *Agrobacterium*-mediated genetic transformation method

Executing department	Department of Genetic Engineering and Biotechnology, University of Rajshahi, Rajshahi-6205, Bangladesh
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Professor. Dr. Md. Khalekuzzaman, Email: kzaman63@gmail.com
Objectives of the project	a) To develop transgenic Brassica plants with <i>AtPCR-2, APS1</i> and <i>YCF1</i> genesb) To reduce the environmental pollution as well as to reduce to the heavy metals in the grain tissue.
Outcomes of the project	We already developed few transgenic plants of <i>Brassica napus</i> . Research work is also going on using cadmium tolerant gene in rice.
Project period	2012-2015
Source of funding	Partly from university research project and partly from USAID Project
Collaboration (national/regional/international)	Professor Dr. Youngsook Lee, Pohang University of Science and Technology, South Korea.
Associated manpower with expertise	I have done my post-doctoral research work in South Korea, and successfully developed transgenic Brassica napus plants using heavy metal tolerant genes.
Facility available	More or less necessary facilities are available in the DNA and Chromosome Research Lab of our Department.
Specific constraints if any	not applicable
Others	Prof. Dr. Biswanath Sikdar and Dr. Md. Ashadul Islam, Dept. of Genetic Engineering and Biotechnology, Rajshahi University, both are also associated with this research project.

RESEARCH PROJECT Science Analysis of <i>Momordica</i> L. in Cucurbitaceae using molecular markers.		
Executing department	Department of Genetic Engineering and Biotechnology, University of Rajshahi	
Areas of biotechnology	Plant Biotechnology	
Team leader (with contact address)	Dr. Md. Khalekuzzaman, Professor, Department of Genetic Engineering and Biotechnology, University of Rajshahi	
Objectives of the project	Better genotypes of desired character and new commercial cultivars tolerant to arsenic heavy metal.	
Outcomes of the project	on going	
Project period	2013-2014	
Source of funding	UGC via Rajshahi University.	
Collaboration (national/regional/international)		
Associated manpower with expertise	N/A	
Facility available	Field and Lab (PCR, Microscope)	
Specific constraints if any	HPLC, DNA Sequencer etc.	
Others	N/A	

RESEARCH PROJECT Genetic improvement of Aus rice for salt stress through rapid screening and DNA marker assisted selection to ensure food security of the rural livelihood of coastal belt.		
Executing department	Department of Genetics and Plant Breeding, Patuakhali Science and Technology University, Patuakhali.	
Areas of biotechnology	Plant and Environment	
Team leader (with contact address)	Prof. Dr. Abul Kashem Chowdhury, Dept. in Genetics and Plant Breeding, Patuakhali Science and Technology University, Dumki, Patuakhali-8602	
Objectives of the project	To reduce rural poverty and increase food security by developing and adopting saline tolerant Aus-rice varieties for coastal region of Bangladesh.	
Outcomes of the project	Suitable Aus rice cultivars that can be grown in saline soil of coastal region with reasonably good yield.	
Project period	July, 2012 to June 2015	
Source of funding	Ministry of Science and Technology and Patuakhali Science and Technology University	
Collaboration (national/regional/international)	National	
Associated manpower with expertise	Prof. Md. Abdul Latif, Dept. of Genetics and Plant Breeding, Patuakhali Science and Technology University. One Ph. D. Student of this university.	
Facility available	Still not so Sufficient	
Specific constraints if any	Research Fund is not sufficient	
Others	N/A	

RESEARCH PROJECT	Molecular characterization and genetic diversity of <i>Citrus</i> cultivars with identification of their historically associated viruses in Bangladesh
Executing department	Department of Genetic Engineering and Biotechnology, RU
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Dr. Biswanath Sikdar, Professor and Dr. Md. Asadul Islam, Associate Professor, Department of Genetic Engineering and Biotechnology, RU
Objectives of the project	 Compare the efficiency of molecular markers for determines the effective means of rapid detection and differentiation among the <i>Citrus</i> cultivars. Achieve a better understanding of genetic variation among the collected genotypes. Characterize the phylogenetic relationship of collected and available cultivars. Detect the presence of virus in <i>Citrus</i> cultivars by ELISA and RT-PCR. Characterize the isolated virus stain by molecular markers as well as sequencing. Identify the effective cultivars with the present status of virus diseases.
Outcomes of the project	 Our expected results demonstrate that the ability for coordination of markers assessed observation and significantly, the outcome of this study is to: i) Selection of polymorphic marker (s) as it is polymorphism that is measured for genetic diversity of <i>Citrus</i> cultivars available grown in Bangladesh. ii) Choices of easy access with reproducibility markers i.e., should be easy, fast and cheap to detect characteristics and classifying as well as clustering of <i>Citrus</i> cultivars. iii) Identification of effective/suitable cultivars as selective natural behaviors; DNA sequences are natural to environmental condition or management practices. iv) Differentiation and identification of virus strains and their susceptive <i>Citrus</i> cultivars. Finally, our expectation or goal is to select suitable and more producible cultivars of <i>Citrus</i> at quickly changing environment as Bangladesh.
Project period	July,2013 to June, 2014
Source of funding	Ministry of Science and Technology, Bangladesh
Collaboration (national/regional/international)	Not applicable
Associated manpower with expertise	MS, MPhil. and PhD fellows
Facility available	Well equipped lab named Prof. Joarder DNA and Chromosome Research lab to carry out the work
Specific constraints if any	Insufficient fund to maintain laboratory
Others	N/A

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Development of tomato leaf curl disease resistant tomato lines through antiviral strategy

Executing department	Department of Botany, University of Dhaka
Areas of biotechnology	Plant biotechnology
Team leader (with contact address)	Prof. Dr. Mohammad Nurul Islam, Dept. of Botany, University of Dhaka
Objectives of the project	To develop ToLCV resistant tomato lines
Outcomes of the project	ToLCV genome has been cloned and sequenced
Project period	July 2012 - July 2015
Source of funding	International Centre for Genetic Engineering and Biotechnology (ICGEB), Trieste, Italy
Collaboration (national/regional/international)	ICGEB, New Delhi
Associated manpower with expertise	Two MS thesis completed and one PhD is on going
Facility available	All the equipments related to project
Specific constraints if any	Sorvell centrifuge machine, -80° C
Others	N/A

RESEARCH PROJECT \gg

Development of MYMV resistant mungbean lines through antiviral strategy

Executing department	Department of Botany, University of Dhaka
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Prof. Dr. Mohammad Nurul Islam, Dept. of Botany, University of Dhaka
Objectives of the project	To develop MYMV resistant mungbean lines
Outcomes of the project	An antiviral constract has been developed by cloning of MYMV cp in antisense crientetia and a silencing suppressor gene in similar way
Project period	2012-2013
Source of funding	Ministry of Science and Technology
Collaboration (national/regional/international)	No
Associated manpower with expertise	Two professor of the Dept. of Botany and a PhD student
Facility available	All the facility related to this work
Specific constraints if any	A bench top sorvall centrifuge and a -80° C freezer
Others	N/A

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RESEARCH PROJECT >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
Executing department	Department of Genetics and Plant Breeding, Hajee Mohammad Danesh Science and Technology University, Dinajpur
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Professor Bhabendra Kumar Biswas, Department of Genetics and Plant Breeding, Hajee Mohammad Danesh Science and Technology University, Dinajpur. Cell: no. 01741-461882. E mail- professorbiswas@ gmail.com
Objectives of the project	 Accumulation of different quality characters in the F1 hybrids. II. Protection from degeneration of immature hybrid embryos in the field condition. III. Identification of desirable progenies from segregating generation.
Outcomes of the project	Just beginning phase of the program; the parental lines are in seedbeds now and will be transplanted very soon.
Project period	Three years (2013-2015)
Source of funding	Trying to manage from different sources.
Collaboration (national/regional/international)	None
Associated manpower with expertise	A Ph. D student is working in this program.
Facility available	There is a tissue culture lab under the department but is not well equipped.
Specific constraints if any	Scarcity of fund as well as essential equipments.

N/A

Others

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RESEARCH PROJECT >	Varietal Improvement of crops using induced mutation and biotechnological approaches
Executing department	Biotechnology Division
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Dr. Mirza Mofazzal Islam, Principal Scientific Officer and Head, Biotechnology Division, Bangladesh Institute of Nuclear Agriculture (BINA), Mymensingh-2202, Email: mirza_islam@yahoo.com, Cell: 01716-280720
Objectives of the project	 Development of abiotic stress tolerant (salinity, drought, submergence), biotic stress tolerant/resistant (BLB-gene pyramiding), early maturing varieties and fine quality of rice with aroma. Transfer of abiotic stress tolerant and nutritional enhanced genes and through Agrobacterium mediated transformation DNA fingerprinting and molecular characterization of BINA released varieties, germplasm of different crops
Outcomes of the project	 Introgression of salt and submergence tolerant rice genes into popular rice varieties Gene pyramiding of abiotic stress tolerant rice genes into popular rice and other important crop varieties DNA fingerprinting has been done on Rice, Maize, Mustard, Soybean, Chickpea, Lentil, Mungbean, Groundnut, Eggplant, Chilli and Lablab Bean. Several populations already developed for gene mapping for salt tolerance in rice and regenerated plants were developed.
Project period	On-going
Source of funding	GoB, Foreign Projects (IRRI, IAEA, USA, ICRISAT, ICARDA, China)
Collaboration (national/regional/international)	National: BARC, BARI, BRRI, BRAC, ACI, Bangladesh Agricultural University & University of Dhaka; International: IAEA, IRRI, ICARDA, ICRISAT and CNRRI (China)
Associated manpower with expertise	Dr. Mirza Mofazzal Islam, Molecular Genetics, Marker Technology, and Mutation Breeding; Dr. Shamsun Nahar Begum, Molecular Genetics, Marker Technology and Mutation Breeding; Dr. Nazmul Hoque Shahin, Researcher, Marker Technology, Plant Biotechnology; Md. Ashraful Islam; Mahfuza Pervin; Mst. Sifate Rabbana Khanom Shumi; Md. Mehedi Hasan Sohel
Facility available	Thermal Cycler; Gel Documentation System; -80°C freezer; Refrigerated Centrifuge; Spectrophotometer; DNA Station; Fume Hood; Lyophilizer; Water Purification System etc.
Specific constraints if any	Limited financial support, lack of trained manpower, bureaucratic procurement system of biotech chemicals, reagents and consumables etc.
Others	Intra and inter institutional collaboration is needed.

RESEARCH PROJECT	Molecular characterization of Tomato Yellow Leaf Curl Virus (TYLCV) in Bangladesh and development of TYLCV resistant tomato using recombinant DNA technology
Executing department	Biotechnology division, Bangladesh Agricultural Research Institute (BARI), Gazipur.
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Principal investigator: Md. Abdullah Yousuf Akhond PhD Principal Scientific Officer, Biotechnology Division Bangladesh Agricultural Research Institute, Gazipur-1701, Bangladesh. Tel: 9261509(W), Cell: 01715-000633. Email: a_akhond@hotmail.com
Objectives of the project	 Capacity building in developing transgenic crop varieties in Bangladesh and skill improvement for conducting such high level research in the country Development of PCR based molecular diagnostic protocol for TYLCV disease and engineering TYLCV resistance in tomato
Outcomes of the project	 A PCR-based accurate diagnostic protocol for tomato leaf curl viruses in Bangladesh is now available which will help precise diagnosis of Geminiviruses infecting tomato and other crops in Bangladesh. The sequence information is being used for constructing plasmid vectors to be used for transformation of tomato plants aiming at broad-spectrum resistance against Geminiviruses.
Project period	From April 2010 to March 2013 (According to the date of signing LoA). Applied for extension
Source of funding	SPGR, NATP: Phase-1.
Collaboration (national/regional/international)	Not applicable
Acception to a management	One co-investigator- Scientific officer, Biotechnology division, BARI, Gazipur-1701.
Associated manpower with expertise	One research assistant for lab activities and three labours for field and green house activities.
Facility available	Modern molecular genetics and genetic engineering laboratory, modern green house etc.
Specific constraints if any	N/A
Others	N/A

RESEARCH PROJECT	Improvement of Salt and Submergence Tolerant Rice Through Genetic Engineering Approach to bring Food Security with Environmental Safety in Bangladesh.
Executing department	Department of Genetic engineering and Biotechnology
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Dr. Md. Shamsul Haque Prodhan, Associated Professor, Department of Genetic engineering and Biotechnology, School of Life Sciences, Shahjalal University of Science and Technology, Sylhet. Tel: 88-0821-713491, Ext.: 617, Fax: 88-0821-715257, Email: shamsulhp@yahoo.com
Objectives of the project	The project objective is to reduce poverty through increasing rice production by bringing uncultivable land (saline tracts and submerged areas) under cultivation with the application of Genetic Engineering which can enhance the quality of the overall environment.
Outcomes of the project	<i>Agrobacterium</i> -mediated genetic transformation system and efficient regeneration system have been successfully established in rice.
	Desired stress resistant genes would be transformed to obtain both biotic and abiotic stress resistant rice.
Project period	January 2012 – December 2014
Source of funding	US Department of Agriculture (USDA)
Collaboration (national/regional/international)	BRRI (Bangladesh Rice Research Institute), BSRI (Bangladesh Sugarcane Research Institute) and BINA
Associated manpower with expertise	One Scientific Officer / Research Fellow/ PhD student, Two talented Research / Graduate Students.
	Plant tissue culture and plant genetic engineering/transformation experience with all molecular analysis
Facility available	Facilities available for plant tissue culture, plant genetic transformation and molecular analysis
	Laminar airflow cabinet, Thermal Cyclers, -80° C Freezer, Gel Documentation System, Electrophoresis apparatus etc.
Specific constraints if any	N/A
Others	The project needs financial support for sustaining and to reach our goal.

RESEARCH PROJECT Development of drought and salinity stress tolerance plants through androgenesis and transgenic approaches in climate change perspective of wheat (<i>Triticum aestivum</i> L.)	
Executing department	Institute of Biological Sciences, University of Rajshahi
Areas of biotechnology	Plant Genetic Engineering and Biotechnology
Team leader (with contact address)	Dr. S. M. Shahinul Islam, Plant Genetic Engineering Lab. Institute of Biological Sciences, University of Rajshahi Rajshahi-6205, Bangladesh E-mail: shahin_ibsc@ru.ac.bd / shahinul68@gmail.com
Objectives of the project	Development of abiotic stress tolerance wheat through genetic engineering
Outcomes of the project	Rapid development of drought and salinity stress tolerant doubled haploid transgenic wheat in Bangladesh.
Project period	2012-2013
Source of funding	Ministry of Science and Technology (Special allocation)
Collaboration (national/regional/international)	National
Associated manpower with expertise	Professor Dr. Shahadat Hossain, Dept. of Genetic Engineering and Biotechnology, Md. Touhidul Islam (M. Phil Fellow, Ms. Supriya (MSc student, GE&B)
Facility available	Plant tissue culture, genetic transformation
Specific constraints if any	N/A
Others	N/A

RESEARCH PROJECT	Production of Doubled Haploid Lines Through Androgenesis in Maize (<i>Zea mays</i> L.)
Executing department	Institute of Biological Sciences, University of Rajshahi
Areas of biotechnology	Plant Genetic Engineering and Biotechnology
Team leader (with contact address)	Dr. S. M. Shahinul Islam, Plant Genetic Engineering Lab. Institute of Biological Sciences, University of Rajshahi Rajshahi-6205, Bangladesh E-mail: shahin_ibsc@ru.ac.bd, shahinul68@gmail.com
Objectives of the project	Establishment of suitable protocol for maize anther and microspore culture in Bangladesh. Development of doubled haploids (DHs) by androgenetic techniques.
Outcomes of the project	Suitable protocol establishment for further study in breeding and genetic engineering for maize improvement.
Project period	2010-2011
Source of funding	University Grant Commission (UGC), Bangladesh
Collaboration (national/regional/international)	National
Associated manpower with expertise	Md. Selim Morshed (M. Phil Fellow) Md. Alfaz Hossain (Lab. Attendant/Field Maintenance)
Facility available	Plant tissue culture, genetic transformation
Specific constraints if any	N/A
Others	N/A

RESEARCH PROJECT	Rapid production of transgenic doubled haploid (DHs) plants with p68 and PDH47 genes for drought and/or salinity stress tolerance using Bangladeshi rice cultivars
Executing department	Institute of Biological Sciences, University of Rajshahi
Areas of biotechnology	Plant Genetic Engineering and Biotechnology
Team leader (with contact address)	Dr. S. M. Shahinul Islam, Plant Genetic Engineering Lab. Institute of Biological Sciences, University of Rajshahi Rajshahi-6205, Bangladesh E-mail: shahin_ibsc@ru.ac.bd, shahinul68@gmail.com
Objectives of the project	Development of abiotic stress tolerance rice through genetic engineering
Outcomes of the project	The outcome of this project is rapid development of drought and salinity stress tolerant doubled haploid transgenic plants that are important to mitigate the challenges of climate change for sustainable agriculture in of Bangladesh.
Project period	2011-2013
Source of funding	ICGEB, Trieste, Italy
Collaboration (national/regional/international)	International: ICGEB, New Delhi, India
Associated manpower with expertise	Dr. N. Tuteja, PMB group, ICGEB, New Delhi, India;
	Ms. Israt Ara and Mr. Abu Baker Siddique (M.Phil Fellow)
Facility available	Plant tissue culture, genetic transformation
Specific constraints if any	N/A
Others	N/A

RESEARCH PROJECT Since the contract of the Biochemical and molecular characterization of the tea cultivars of Bangladesh to validate the authentic quality of tea in world market		
Executing department	Department of Genetic Engineering and Biotechnology, University of Rajshahi	
Areas of biotechnology	Food Biotechnology	
Team leader (with contact address)	Md Abu Reza, PhD, Associate Professor, Dept. of Genetic Engineering and Biotechnology, University of Rajshahi	
Objectives of the project	The key objective of the proposed project is to perform a comprehensive biochemical profiling of the tea varieties of Bangladesh to make it as an authenticated product to the world tea market.	
Outcomes of the project	Till now the quality of tea in Bangladesh is judged only on the basis of tea tasting, yield attributes and good appearance of the prepared tea. Therefore, there is an utmost importance of the biochemical characterization of the tea cultivars in Bangladesh. The proposed study will not only enrich our tea resource but also will give authenticity of our tea to the foreign importers. Besides these the molecular/genotypic characterization through marker based method (Random Amplified Polymorphic DNA, RAPD) will help us to in their phylogenic analysis and can thus be utilize the improvement of the tea varieties through selective hybridization.	
Project period	2013-2015	
Source of funding	Ministry of Education, Bangladesh	
Collaboration (national/regional/international)	Dept of Botany, University of Rajshahi and Dept of Biological Sciences, National University of Singapore	
Associated manpower with expertise	Dr. Md Abu Reza (chromatographic techniques and molecular biology), Dr. Monzur Hossain (molecular biology)	
Facility available	HPLC, PCR and other standard laboratory facilities	
Specific constraints if any	Laboratory space and funding is the major constrain in the project.	
Others	N/A	
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RESEARCH PROJECT	Purification of bio-active compounds from plant sources and checking their pharmacological activity with special emphasis to anti-cancer efficacy
Executing department	Department of Genetic Engineering and Biotechnology, University of Rajshahi
Areas of biotechnology	Plant Biotechnology (Molecular Biology/Medical Biotechnology)
Team leader (with contact address)	Dr. Md Abu Reza, Department of Genetic Engineering and Biotechnology, University of Rajshahi
Objectives of the project	To study the anticancer activity of various plant extract and decipher the pathway of inhibition of cancer cell growth using molecular biology technique.
Outcomes of the project	Anticancer drug Lead compound is the direct outcome of the project.
Project period	2013-2016
Source of funding	University of Rajshahi and other sources
Collaboration (national/regional/international)	 Dr. Rashel Kabir, Dept of Biochemistry and Molecular Biology, Rajshahi University Professor Monzur Hossain, Dept of Botany, Rajshahi University Dr. Robin Doley, Department of Molecular Biology and Biotechnology, Tezpur University, Assam, India Professor R.M. Kini, Dept of Biological Sciences, National University of Singapore
Associated manpower with expertise	 Two PhD Fellow (also colleague in the department) Four MSc. Research students Four 4th Year Project students
Facility available	PCR, PCR reagents and primers, Orbital Shaker -30°C freezer, Balance, centrifuge, pH Meter, etc
Specific constraints if any	Funding is the main constrain to carry our projects. For this project also an HPLC and Mass spectrometer is a crucial need in the Department.

Others

N/A

RESEARCH PROJECT	Production of low cost enzymes for use in textile industries in Bangladesh
Executing department	Department of Genetic Engineering and Biotechnology, University of Rajshahi
Areas of biotechnology	Plant Biotechnology: (Molecular Biology/ Protein chemistry)
Team leader (with contact address)	Dr. Md Abu Reza, Department of Genetic Engineering and Biotechnology, University of Rajshahi
Objectives of the project	Scaled down economically production of cellulase enzyme in a pilot project using local industrial byproduct.
Outcomes of the project	As garments, textiles and apparel industries in Bangladesh have a huge demand for cellulase and other enzymes. According to a survey carried out in 1987, more than one billion pairs of denim jeans require worldwide every year and the report published this year by the Global Industry Analysts, Inc forecasted that the worldwide Denim Jeans market will exceed USD \$65 Billion by 2015 most of them are exported from Bangladesh. So, the current project will help us to (i) ensure green environment by utilizing industrial byproducts, (ii) will help in setting up new enzyme industries in Bangladesh, (iii) will help in reduce the utilization of foreign currency for import of textile enzymes.
Project period	2012-2014
Source of funding	Ministry of Science and Technology, University of Rajshahi and other sources
Collaboration (national/regional/international)	N/A
Associated manpower with expertise	 Dr. Rashel Kabir, Dept of Biochemistry and Molecular Biology, Rajshahi University Professor Monzur Hossain, Dept of Botany, Rajshahi University Dr. Robin Doley, Department of Molecular Biology and Biotechnology, Tezpur University, Assam, India Professor R.M. Kini, Dept of Biological Sciences National University of Singapore
Facility available	Two PhD Fellow (also colleague in the department), Four MSc. Research students, Four 4th Year Project students
Specific constraints if any	PCR, PCR reagents and primers, Orbital Shaker -30 freezer, Balance, centrifuge, pH Meter, etc
Others	Funding is the main constrain to carry our projects. We need BSL-2 Bio-safety cabinet. We have a number of Laminar air flow, but to maintain the quality of work as well as to ensure students or the user's hygiene and to maintain risk free research environment we must have a Bio-safety lavel 2 safety cabinet.

RESEARCH PROJECT >>> Isolation of drought resistant gene from wild cultivar of rice variety obtained from the Barind Tract of Bangladesh		
Executing department	Department of Genetic Engineering and Biotechnology	
Areas of biotechnology	Plant molecular genetics	
Team leader (with contact address)	Dr. Nurul Matin, Ass. Prof. Dept. of Genetic Eng. and Biotech. University of Rajshahi, Rajshahi-6205	
Objectives of the project	 Screening the genotype that exist tolerance to draught stress Assessment of the genetic diversity and distance among them Isolation of the candidate gene through map-based gene cloning 	
Outcomes of the project	Development of research materials for the functional analysis of the gene for enhanced tolerance to draught	
Project period	1 year	
Source of funding	University Grant Commission	
Collaboration (national/regional/international)		
Associated manpower with expertise	One research assistant	
Facility available	Necessary maximum facilities	
Specific constraints if any	N/A	
Others	N/A	

RESEARCH PROJECT >>

Standardization of Protocol, *In vitro* Production of BARI Kola-3 and BARI Kola-4 and their Validation in Hilly Areas

Executing department	Biotechnology Division, BARI
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Mst. Dilafroza Khanam Cell: 01931124138 Email: khanammarry@gmail.com
Objectives of the project	 To standardize protocol for <i>in vitro</i> production of BARI Kola-3 and BARI Kola-4 To validate the performance of tissue cultured banana plantlets in hilly areas To improve knowledge and skill of farmers on tissue cultured banana cultivation in hilly areas and private entrepreneurs on tissue cultured banana plantlets production
Outcomes of the project	 A simple and reliable protocol for <i>in vitro</i> production of banana plantlets (BARI Kola-3 and BARI Kola-4) would be available for commercialization Availability of tissue cultured banana plantlets will be increased through commercialization of private entrepreneurs Knowledge and skill of farmers, SAAOs and SAs on tissue cultured banana production technology will be improved Yield, area and production of BARI Kola-3 and BARI Kola-4 will be increased in Chittagong Hill Tracts
Project period	36 months (From May 2011 to April 2014)
Source of funding	KGF-NATP Project
Collaboration (national/regional/international)	Regional
Associated manpower with expertise	 i. Dr. Md. Mosharraf Hossain Molla, SSO, Biotechnology Division, BARI, Gazipur, ii. Dr. Z. A. Firoz, PSO, Horticulture, ARS, Ramgarh, iii. Dr. A.S.M. Harunor Rashid, SSO, Horticulture, ARS, Raikhali, iv. Prodip Kumar Singha, Lab in-charge, Plant Tissue Culture Lab, Oodalea Tea Estate, Nazirhat, Chittagong, v. Mrs. Nafisa Akhter, Lab In-charge, Plant Tissue Culture Lab, SQUARE, Uttara, Dhaka
Facility available	Plant Tissue Culture Lab, Experts, Chemicals, etc.
Specific constraints if any	N/A
Others	N/A

RESEARCH PROJECT >>

Genetic Enhancement of Sugarcane through Development of Stress Tolerant Somaclones and their Field Evaluation

Executing department	Biotechnology Division, Bangladesh Sugarcane Research Institute, Ishurdi-6620, Pabna
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Kuasha Mahmud, Principal Scientific Officer, Biotechnology Division, Bangladesh Sugarcane Research Institute, Ishurdi-6620, Pabna.
Objectives of the project	 To study the effects of NaCl, hydroxy proline and polyethylene glycol concentrations on different <i>in vitro</i> stages for genetic enhancement; To study the effects of salinity and drought on regenerated plants under ex vitro conditions for expression of enhanced genetic base and To develop salt and drought tolerance in sugarcane through genetic enhancement.
Outcomes of the project	 Six thousand (6,000) somaclones have already been developed from salt, drought tolerant as well as from normal callus of sugarcane varieties Isd 16, Isd 20, Isd 28, Isd 33, Isd 34, Isd 35, Isd 36, Isd 37, Isd 38, Isd 39, Isd 40 and Misrimala and planted in the field for evaluation. Selected 50 somaclones based on early maturing short duration, salt tolerant and drought resistant have been planted in field for further evaluation and multiplication.
Project period	On going
Source of funding	GoB
Collaboration (national/regional/international)	Regional
Associated manpower with expertise	Asish Kumar Ghose, Scientific Officer, Expertise: Plant Biotechnology; Md. Abu Sayem Jiku, Scientific Officer, Expertise: Plant Biotechnology; Md. Shamsul Arefin, Senior Scientific Officer, Expertise: Plant Physiology and Sugar Chemistry; Dr. Md. Amzad Hossain, Chief Scientific Officer, Expertise: Plant Biotechnology
Facility available	Mutagen, Laminar Air Flow Cabinet, Autoclave, Culture Room and all chemicals required for media preparation.
Specific constraints if any	N/A
Others	N/A

RESEARCH PROJECT	Development and Screening of Sugarcane Somaclones against Red Rot Disease
Executing department	Biotechnology Division, Bangladesh Sugarcane Research Institute, Ishurdi-6620, Pabna
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Kuasha Mahmud, Principal Scientific Officer, Biotechnology Division, Bangladesh Sugarcane Research Institute, Ishurdi-6620, Pabna.
	 To study the effects of red rot toxin, concentrations on different in vitro stages for genetic enhancement;
Objectives of the project	To study the effects of red rot on regenerated plants under ex vitro conditions for expression of red rot tolerance and
	To develop red rot tolerance in sugarcane varieties or clones.
Outcomes of the project	 Red rot resistant and moderately resistant somaclones have been produced. One Somaclone Isd37SC1 showed Resistant to Red Rot Reaction and Six Somaclones such as Isd35SC2, Isd37SC3, Isd35SC2, Isd35SC4, Isd34SC1, Isd37SC5 showed Moderately Resistant to Red Rot Reaction.
Project period	On going
Source of funding	GoB
Collaboration (national/regional/international)	Regional
Associated manpower with expertise	Asish Kumar Ghose, Scientific Officer, Expertise: Plant Biotechnology; Md. Abu Sayem Jiku, Scientific Officer, Expertise: Plant Biotechnology; Md. Shamsur Rahman, Principal Scientific officer, Expertise: Plant Pathology; Md. Shamsul Arefin, Senior Scientific Officer, Expertise: Plant Physiology and Sugar Chemistry; Dr. Md. Amzad Hossain, Chief Scientific Officer, Expertise: Plant Biotechnology
Facility available	Mutagen, Laminar Air Flow Cabinet, Autoclave, Culture Room and all chemicals required for media preparation
Specific constraints if any	N/A
Others	N/A

Biotechnology Division, Bangladesh Sugarcane Research Institute, Ishurdi-6620, Pabna
Plant Biotechnology
Md. Anisur Rahman, Senior Scientific Officer, Bangladesh Sugarcane Research Institute, Ishurdi-6620, Pabna.
 To identify the suitable sources of explants for micropropagation; To find out suitable media for micropropagation; To develop tissue culture protocols for micropropagation of Sugarbeet and To harden plantlets for transplanting.
Explants of two Sugarbeet varieties Shubra and Cuvery showed initial establishment. Successful shoot and root initiation has been achieved.
On going
GoB
National
Asish Kumar Ghose, Scientific Officer, Expertise: Plant Biotechnology; Kuasha Mahmud, Principal Scientific Officer, Expertise: Plant Biotechnology; Md. Abu Sayem Jiku, Scientific Officer, Expertise: Plant Biotechnology; Dr. Muhammad Khalilur Rahman, Chief Scientific Officer, Expertise: Agronomy and Farming System; Dr. Md. Amzad Hossain, Chief Scientific Officer, Expertise: Plant Biotechnology; Dr. Md, Lutful Hassan, Professor, Department of Genetics and Plant Breeding, Bangladesh Agricultural University
Laminar Air Flow Cabinet, Autoclave, Culture Room and all chemicals required for media preparation.
N/A
N/A

RESEARCH PROJECT	Micropropagation of <i>Aloe vera</i> on a commercial scale: Assessment of economic aspects and feasibility
Executing department	Plant Biotechnology Division
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Abdun Nur Md. Ifteqer Alam, Senior Scientific Officer National Institute of Biotechnology Ganakbari, Savar, Dhaka-1349, Cell: 01738999993
Objectives of the project	General objectives Large-scale micropropagation of <i>Aloe vera</i> on a commercial scale Specific objectives 1. To establish suitable sterilization procedure 2. Acceleration of lateral bud induction through optimization of culture conditions 3. To acclimatize, harden and establishment of plantlets in the soil
Outcomes of the project	Development of <i>in vitro</i> regeneration protocol for large scale micropropagation of <i>Aloe vera</i> on commercial scale
Project period	October 2013-December 2015; 2 years and 3 months
Source of funding	National Institute of Biotechnology
Collaboration (national/regional/international)	N/A
Associated manpower with expertise	 Principal researcher: Mst. Muslima Khatun, SO, Plant Biotechnology Division Associate researcher: Sabina Yesmin SO, Plant Biotechnology Division; Shamima Nasrin, SO, Plant Biotechnology Division, NIB
Facility available	Autoclave, Laminar airflow cabinet, growth house. Microwave oven, Electric balance etc.
Specific constraints if any	R & D fund, manpower, etc.
Others	

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Development of in vitro regeneration protocol of an important medicinal plant *Ephedra* sp. and to test its antimicrobial activity.

Executing department	Department of Botany, Jagannath University, Dhaka-1100
Areas of biotechnology	Plant and Microbial
Team leader (with contact address)	G. M. Al-Amin, Assistant Professor, Department of Botany, Jagannath University, Cell: 01712793210, Email: alamin25@gmail.com
Objectives of the project	To establish a suitable in vitro regeneration protocol to conserve this endangered medicinal plant. Isolation the secondary metabolites and to test its antimicrobial activity.
Outcomes of the project	A reproducible in vitro regeneration system has been established.
Project period	July 2013 to June 2014
Source of funding	Ministry of Science and Technology, Government of the People's Republic of Bangladesh
Collaboration (national/regional/international)	Bangladesh Council of Scientific and Industrial Research (BCSIR)
Associated manpower with expertise	M.S. Thesis students
Facility available	Jagannath University is a new University and Department of Botany is not well equipped at yet to do the biotechnological and molecular research. Well trained researchers are available.
Specific constraints if any	Laboratory facilities, infrastructure and money are the main constraints of the Department of Botany, Jagannath University.
Others	To promote biotechnological and molecular research as well as teaching and learning on this field need financial supports.

RESEARCH PROJECT >>

cDNA library preparation and molecular characterization of C class MADs-box genes of multigrained rice Biram sundary

Executing department	Department of Botany, University of Dhaka
Areas of biotechnology	Plant biotechnology
Team leader (with contact address)	Rita Sarah Borna, Dept. of Botany, University of Dhaka
Objectives of the project	Identification of responsible genes behind the multigrained nature of rice, biram sundari
Outcomes of the project	
Project period	July 2013 - June 2016
Source of funding	Ministry of Science and Technology, Government of the People's Republic of Bangladesh
Collaboration (national/regional/international)	
Associated manpower with expertise	Associate investigation: Prof. Rakha Hari Sarker, Dept. of Botany, University of Dhaka
Facility available	
Specific constraints if any	no
Others	no

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Development of transgenic eggplant (Solanum melongena L.) with enhanced abiotic stress tolerance

Executing department	Plant Biotechnology Division
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Sabina Yesmin, Scientific Officer, Plant Biotechnology Division, NIB, Ganakbari, Ashulia, Savar Dhaka-1349
Objectives of the project	Development of abiotic stress tolerant eggplant (Solanum melongena L.)
Outcomes of the project	Generation of transgenic brinjal with enhanced stress tolerance.
Project period	January, 2014 - December 2015
Source of funding	National Institute of Biotechnology
Collaboration (national/regional/international)	N/A
Associated manpower with expertise	Mst. Muslima Khatun (SO), Shamima Nasrin (SO) and Dr. Iftekhar Alam (SSO)
Facility available	All facilities are available to conduct plant genetic transformation experiments
Specific constraints if any	Fund
Others	

RESEARCH PROJECT	Genotypic and Phenotypic Characterization of Some Selected and Standard Clones of Tea [<i>Camellia sinensis</i> (L.) O. Kuntze]
Executing department	Bangladesh Tea Research Institute (BTRI)
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Md. Abdul Aziz, Senior Scientific Officer, Botany Division, Bangladesh Tea Research Institute, Srimongal-3210, Moulvibazar, Bangladesh. Cell: +8801718280981 Email: aabtri@gmail.com, aabtri@outlook.com
Objectives of the project	 i. Identification and morphological characterization of selected tea cultivars grown in Bangladesh with an aim to establish a broad genetic base tea repository. ii. Biochemical characterization of the cultivars in order to select quality tea genotype. iii. Genotypic characterization of the cultivars to assess the genetic diversity using random amplified polymorphic DNA (RAPD). iv. Calculation of genetic distance using RAPD data. v. Selection of best clones from the genetic distance table for recommendations in tea breeding programme.
Outcomes of the project	We expect the molecular and biochemical characterization of tea which has a tremendous impact in breeding research as well as commercialization of Bangladesh tea in world market.
Project period	2010 to 2015
Source of funding	Bangladesh Tea Board and others
Collaboration (national/regional/international)	Dr. M. Monzur Hossain, Professor, Department of Botany, University of Rajshahi, Rajshahi-6205, Bangladesh.
	Dr. Md. Abu Reza, Associate Professor, Department of Genetic Engineering and Biotechnology, University of Rajshahi, Rajshahi-6205, Bangladesh.
Associated manpower with expertise	Two (02) person
Facility available	Not mentionable
Specific constraints if any	Absence of well-equipped biotechnology laboratory in BTRI
Others	Poor collection of biotechnogical journals/periodicals in the library of the institute. Absence of Internet facilities in BTRI.

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Screening of salt tolerant potentiality and development of in vitro tissue culture system for some local rice varieties (*Oryza sativa* L.)

Executing department	Department of Genetic Engineering and Biotechnology; University of Chittagong
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Laila Khaleda, Assistant Professor Department of Genetic Engineering and Biotechnology; University of Chittagong
Objectives of the project	 To identify potential salt tolerant variety from local varieties by culturing on different concentration of NaCl containing media. Regeneration of salt adopted variety in <i>in vitro</i> condition. Development of ideal high yielding salt tolerant variety.
Outcomes of the project	Identify potential salt tolerant rice varieties
Project period	2012-13
Source of funding	University of Chittagong
Collaboration (national/regional/international)	N/A
Associated manpower with expertise	N/A
Facility available	Tissue culture associated apparatus, Shaker, water bath, Micro oven
Specific constraints if any	Necessary chemicals
Others	N/A

RESEARCH PROJECT >> Enhancement of Research Facilities in Horticulture

Executing department	Department of Horticulture, PSTU
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Prof Dr. Mahbub Robbani E mail: mrobbani@yahoo.com Cell no: 01710401525
Objectives of the project	Establishing facilities with state of the art equipments for conducting biotech research
Outcomes of the project	5MS & 1PhD involved in TC & DNA marker based researches
Project period	January 2011- December 2013
Source of funding	GOB- World Bank.
Collaboration (national/regional/international)	BAU, Mymensingh.
Associated manpower with expertise	Associate Researches, Accountant, Office Secretary Germplasm Collector.
Facility available	TC, DNA analysis, PCR, Gel documentation
Specific constraints if any	Remote location, Lack of technician for biotech research.
Others	N/A

 $\overline{RESEARCH PROJECT}$

Micropropagation of Sugarcane Varieties for Rapid Multiplication and High Quality Seeds (Hqs) Production

Executing department	Biotechnology Division, Bangladesh Sugarcane Research Institute, Ishurdi-6620, Pabna
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Asish Kumar Ghose, Scientific Officer, Biotechnology Division, Bangladesh Sugarcane Research Institute, Ishurdi-6620, Pabna.
Objectives of the project	 To optimize variety specific media for micropropagation; To evaluate field performances of micropropagated plants and To evaluate genetic stability in micropropagated plants using DNA Fingerprinting.
Outcomes of the project	• Twenty thousand (20,000) micropropagated plants have been transplanted in the field for quality seed production of sugarcane varieties Isd 16, Isd 32, Isd 35, Isd 3, Isd 37, Isd 38, Isd 39 and Isd 40.
Project period	On going
Source of funding	GoB
Collaboration (national/regional/international)	Regional
Associated manpower with expertise	Nadira Islam, Senior Scientific Officer, Expertise: Plant Biotechnology; Kuasha Mahmud, Principal Scientific Officer, Expertise: Plant Biotechnology; Md. Abu Sayem Jiku, Scientific Officer, Expertise: Plant Biotechnology; Md. Anisur Rahman, Senior Scientific Officer, Expertise: Plant Biotechnology; Md. Shamsur Rahman, Principal Scientific Officer, Expertise: Plant Pathology, Dr. Md. Amzad Hossain, Chief Scientific Officer, Expertise: Plant Biotechnology
Facility available	Laminar Air Flow Cabinet, Autoclave, Culture Room and all chemicals required for media preparation.
Specific constraints if any	N/A
Others	N/A

RESEARCH PROJECT	Tissue Culture for Multiplication of Arabian Date Palm
Executing department	Biotechnology Division, Bangladesh Sugarcane Research Institute, Ishurdi-6620, Pabna
Areas of biotechnology	Plant Biotechnology
Team leader (with contact address)	Asish Kumar Ghose, Scientific Officer, Bangladesh Sugarcane Research Institute, Ishurdi-6620, Pabna.
Objectives of the project	 To identify the suitable sources of explants for micropropagation; To find out suitable media for micropropagation; To harden plantlets for transplanting and To develop tissue culture protocols for micropropagation of Date palm.
Outcomes of the project	 For Date Palm micropropagation, successful callus and shoot initiation has been achieved.
Project period	On going
Source of funding	National
Collaboration (national/regional/international)	
Associated manpower with expertise	Kuasha Mahmud, Principal Scientific Officer, Expertise: Plant Biotechnology; Md. Abu Sayem Jiku, Scientific Officer, Expertise: Plant Biotechnology; Md. Shamsul Arefin, Senior Scientific Officer, Expertise: Plant Physiology and Sugar Chemistry, Dr. Md. Amzad Hossain, Chief Scientific Officer, Expertise: Plant Biotechnology
Facility available	Laminar Air Flow Cabinet, Autoclave, Culture Room and all chemicals required for media preparation
Specific constraints if any	N/A
Others	N/A



National Database on Biotechnology Research & Personnel

Research Projects

Animal Biotechnology



RESEARCH PROJECT >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
Executing department	Bangladesh Agricultural University, Dept. of Animal Breeding and Genetics; Pakistan Agricultural Research council, Animal science Division; University of Peradeniya, department of Animal Science, Sri Lanka ; National Institute of Animal Husbandry, Vietnam.
Areas of biotechnology	Animal Biotechnology
Team leader (with contact address)	Professor Dr. A. K. Fazlul Haque Bhuiyan National Project Director Dept. of Animal Breeding and Genetics, Email: bhuiyanbau@gmail.com, Tel: + 8809167401-6 Ext. 2614 Cell: 01715047767, Bangladesh Agricultural University, Mymensingh 2202
Objectives of the project	The Present regional Project (under the technical backstopping of ILRL and with the participation of Sri Lanka, Vietnam , Pakistan and Bangladesh) was undertaken with the Development Object of
	Conservation of indigenous livestock for future generations and their increased contribution to livelihoods through enhanced use and with the immediate objective to develop and make available effective tools to support decision making for the enhanced and sustainable use of indigenous FAnGR and their wild relatives in developing countries.
Outcomes of the project	Enhanced Conservation and management of FAnGR Diversity using tools for decision-making
	Increased Capacity and Enhanced Knowledge to use decision support tools for Conservation of livestock diversity at national and global levels.
Project period	November, 2009 - October, 2014
Source of funding	GEF-UNEP
Collaboration (national/regional/international)	National Government of Respective countries, world vision Bangladesh, International Livestock Research institute (ILRI), Collaborating institution & FAO.
Associated manpower with expertise	N/A
Facility available	N/A
Specific constraints if any	N/A
Others	N/A

RESEARCH PROJECT >>>> Production of vis-à-vi indigenous Seed Bulls to Support Smallholder Dairying in Bangladesh	
Executing department	Department of Animal Breeding and Genetics, Bangladesh Agricultural University, Mymensingh- 2202
Areas of biotechnology	Animal Biotechnology
Team leader (with contact address)	Professor Dr. A. K. Fazlul Haque Bhuiyan Dept. of Animal Breeding and Genetics, Bangladesh Agricultural University, Mymensing 2202, Cell: 01715047767, Email: bhuiyanbau@gmail.com
	The main vision of the Project is to "Lead the cattle farmers with genetics and knowledge to create wealth" with the following purposes :
Objectives of the project	í) To develop a science-led farmer participatory System for seed bull production and
	 To ensure supply of meritorious and clean seed bull to the dairy industry of the country.
Outcomes of the project	Two main expected outputs of the project are: (1) A farmer participatory scientific dairy seed bull production systeam developed and (2) The developed system /procedure are ready for adaption by the Government, NGO, private sector cattle breeding service providers in their own breeding bull production mechanism.
Project period	April 2010 - March 2014
Source of funding	N/A
Collaboration (national/regional/international)	N/A
Associated manpower with expertise	N/A
Facility available	
Specific constraints if any	N/A
Others	N/A

 Foot and Mouth Disease in Bangladesh: Genome analysis and vaccine development. Health Care waste: It's impact in environment pollution and resistant bacteria spreading. Salmonellosis in poultry of Bangladesh: It's seroprevalence Drug resistance and zoonoses. 	
Executing department	Department of Microbiology, University of Dhaka (DU)
Areas of biotechnology	Animal, Environment, Medical and Food
Team leader (with contact address)	Professor Md. Anwar Hossain
Objectives of the project	Food safety, Quantification of environmental pollution by resistance bacteria and antibiotics, Vaccine development of FMDV
Outcomes of the project	FMDV circulating types identified, Whole genome of the virus established, Quantitative analysis of gene pool and antibiotic pollution methodology established Pool of poultry Zoonotic salmonella in Bangladesh analyzed and pool established
Project period	3 years
Source of funding	HEQEP, UGC, Ministry of Science and Information and Communication Technology, Third world academy of Science
Collaboration (national/regional/international)	Professor Alimul Islam, BAU, Professor Dr Alam Nur-E-Kamal, NY City University, USA
Associated manpower with expertise	04 PhD students, 3 MS students and 1 lab technician
Facility available	Most of the modern facilities are available and some will be procure soon.
Specific constraints if any	Power failure; low implementation of HEQEP Project and it's bureaucracy
Others	Government procurement systems are very complicated and not friendly with research

RESEARCH PROJECT Molecular and immunodiagonstic investigations on abortion caused by protozoan parasites in ruminants.		
Executing department	Department of Parasitology, Bangladesh Agricultural University, Mymensingh-2202	
Areas of biotechnology	Molecular Diagnostic Biotechnology	
Team leader (with contact address)	Prof. Dr. Md. Hasanuzzaman Talukder, Dept. of Parasitology, Bangladesh Agricultural University, Mymensingh-2202, Tel:+88091-67401 2336, 4336, Cell: 01776624599, Email: talukdermhasan@bau.edu.bd	
Objectives of the project	Determining the prevalence and epidemiology of abortion in farm animals in Bangladesh using molecular and immunologic tools.	
Outcomes of the project		
Project period	July 2013 to June 2014	
Source of funding	Ministry of Science and Technology, Special Allocation, GOB, 2013-2014	
Collaboration (national/regional/international)	National	
Associated manpower with expertise	N/A	
Facility available	Facilities for sample preservation, isolation and Identification are available.	
Specific constraints if any	Facilities lacking for DNA extraction and analysis, ELISA, histochemistry etc. in the Dept of Parasitology.	
Others	N/A	

RESEARCH PROJECT >> Innovative Research on Livestock and Poultry

Executing department	Faculty of Animal Husbandry
Areas of biotechnology	Animal Biotechnology
Team leader (with contact address)	Professor Dr. Mujaffar Hussain, SPM, Professor Dr. Md. Azharul Hoque, ASPM Cell: 01713680426
Objectives of the project	Development of beef breed in Bangladesh
Outcomes of the project	Graded Progeny of Brahman breed are Producing
Project period	January 2011 - December 2013
Source of funding	HEQEP
Collaboration (national/regional/international)	N/A
Associated manpower with expertise	Laborer-5 Technicion-2 Expert Person-5
Facility available	All necessary facilities related to all and systematic breeding of indigenous cows.
Specific constraints if any	N/A
Others	N/A

RESEARCH PROJECT Seroepidemiological Investigation of (<i>Neospora caninum</i>) in Cattle		
Executing department	Department of Parasitology, Bangladesh Agricultural University, Mymensingh-2202	
Areas of biotechnology	Animal Diagnostic Biotechnology	
Team leader (with contact address)	Prof. Dr. Md. Hasanuzzaman Talukder, Dept. of Parasitology, Bangladesh Agricultural University, Mymensingh-2202, Tel:+88091-67401 2336, 4336, Cell: 01776624599, Email: talukdermhasan@bau.edu.bd	
Objectives of the project	Investigation of serum samples from cattle and / or aborted fetuses for the presence of antibodies to <i>Neospora caninum</i>	
Outcomes of the project	On-going	
Project period	July 2013 to June 2015	
Source of funding	Bangladesh Agricultural Univ. Research System (BAURES).	
Collaboration (national/regional/international)	National	
Associated manpower with expertise	DR. AKM Anisur Rahman, Assoc Prof, Dept. of Medicine, BAU	
	Prof. Dr. AHN Ali Khan, Dept. of Pathology, BAU	
Facility available	Facilities for ELISA will be used in the Dept. of Medicine and Histopathology in the Dept. of Pathology, BAU	
Specific constraints if any	Facilities for ELISA and histochemistry are lacking in the Dept of Parasitology	
Others	N/A	

RESEARCH PROJECT Molecular Taxonomy and DNA barcoding of agromyzid leaf miner peasts of agricultural crops and their control by natural enemies in Bangladesh.

Executing department	Department of Zoology, University of Chittagong.
Areas of biotechnology	Animal Biotechnology
Team leader (with contact address)	Dr. Badrul Amin Bhuiya, Professor, Dept. of Zoology, Chittagong University
Objectives of the project	 Survey of agromyzid of leaf miners, Survey of crop damaged by leaf miners Prepare list of leaf miners & its parasitoids
Outcomes of the project	N/A
Project period	September, 2008 to December, 2013
Source of funding	USDA
Collaboration (national/regional/international)	Dept.of Botany, University of Chittagong, Inst. of Biological Sciences, Rajshahi University
Associated manpower with expertise	 Prof. Dr. Md. Ismail Miah, Dept. of Zoology, CU Prof. Dr. Mostafa Kamal Pasha, Dept of Botany, CU Prof. Dr. Md. Wahedul Islam, Rajshahi University
Facility available	i. Molecular taxonomy and DNA barcoding, ii. 3D Imaging of microscopic insects, etc.
Specific constraints if any	10% fund yet not released by ERD, here Molecular lab could not be furnished yet.
Others	Training course on DNA barcoding & Molecular taxonomy postponed.

RESEARCH PROJECT	Optimization of <i>in vitro</i> maturation and fertilization of oocytes in the bovine in Bangladesh
Executing department	Department of Surgery and Obstetrics, Bangladesh Agricultural University, Mymensingh 2202, Bangladesh
Areas of biotechnology	Animal Reproductive Biotechnology
Team leader (with contact address)	Professor Dr. Md. Musharraf Uddin Bhuiyan, Department of Surgery and Obstetrics, Bangladesh Agricultural University, Mymensingh 2202, Cell: 01715-020254, E-mail: mmubhuiyan@gmail. com
Objectives of the project	 a) To optimize the <i>in vitro</i> maturation (IVM) protocol of local zebu oocytes, b) To optimize the <i>in vitro</i> fertilization (IVF) protocol of IVM oocytes using exotic semen, c) To optimize the <i>in vitro</i> culture (IVC) technique for routine production of transferable F1 zebu embryos, and d) To produce F1 offspring derived from IVF after transferring the embryos into the recipient zebu cows for the first time in Bangladesh.
Outcomes of the project	Efficient techniques of IVM, IVF and IVC of bovine oocytes will be established for rapid production of F_1 population of cattle in Bangladesh
Project period	2012-13 to 2014-15
Source of funding	Ministry of Education
Collaboration (national/regional/international)	Not applicable
Associated manpower with expertise	Professor Dr. Md. Musharraf Uddin Bhuiyan (PI) and Mohammad Moshiur Rahman (PhD Student)
Facility available	CO2 Incubator, PH meter, Balance, autoclave, centrifuge machine, stereo microscope, fluorescent microscope, inverted microscope, laminar flow cabinet, ultrasonography machine and cryocan for oocyte IVM, IVF and IVC.
Specific constraints if any	More funds are needed for doing more transfer of embryos in recipient cows.
Others	The present research is needed to continue for routine production of IVP embryos in Bangladesh

RESEARCH PROJECT	Molecular Epidemiology of highly pathogenic avian influenza virus in Bangladesh and <i>in vitro</i> expression of viral proteins
Executing department	National reference laboratory for avian influenza, Bangladesh Livestock Research Institute
Areas of biotechnology	Animal Biotechnology
Team leader (with contact address)	Dr. Md. Giasuddin, Director, National Reference Laboratory for Avian influenza. Bangladesh Livestock Research Institute, Savar, Dhaka.
	1. Molecular characterization and phylogenetic analysis of circulating HPAI viruses from field outbreaks
Objectives of the project	 Virological surveillance for avian influenza viruses in migratory and domestic water fowls
	3. Cloning and in vitro expression of structural proteins of HPAI
Outcomes of the project	Identified circulating avian influenza virus, major causes of maintaining avian influenza in Bangladesh.
Project period	5 years
Source of funding	GOB and World Bank
Collaboration (national/regional/international)	National and international
Associated manpower with expertise	 Dr. Md. Rafiqul Islam, Prof. BAU Dr. E. Haque Chowdhury,Prof. BAU Dr. Jahangir Alam,SSO,BLRI Dr. M. J. F. A. Taimur, PSO, BLRI
Facility available	All facility available
Specific constraints if any	Found is not sufficient and needs more manpower for field study.

Others

N/A

RESEARCH PROJECT	Enhancement of laboratory facilities and capacity build-up for animal DNA barcoding research in Zoology Section of BCSIR Laboratories, Dhaka
Executing department	Zoology Section, BRD, BCSIR, Dhaka-1205, Bangladesh
Areas of biotechnology	Animal including fisheries and industrial use
Team leader (with contact address)	Dr. Khandker Nesar Ahmed, CSO, Zoology Section, BRD, BCSIR, Dhaka-1205, Bangladesh.
Objectives of the project	To procure the equipment/instruments and chemicals. To renovate the laboratory. To install the procured equipments in the laboratory. To improve the laboratory facilities for the initiation and continuation of DNA barcoding research. To develop particular protocol to solve the specific problems. To develop special facilities for DNA level identification of any animal source that will contribute our national economy.
Outcomes of the project	This project will produce a laboratory with the facilities for DNA extraction from fresh tissue, body parts of animals and plants, processed and unprocessed bio-food; DNA isolation and for the amplification of targeted genes in DNA barcoding research. Therefore the outputs which will indicate the success of the project are:
	The instruments/equipment and chemicals procured in the laboratory. The renovated laboratory with installed equipments. Capacity achieved for DNA extraction, isolation and for PCR product.
	Services available (up to PCR) for DNA barcoding research and Project final report.
Project period	June 2012-July 2013
Source of funding	Special Allocation, Ministry of Science & Technology, Government of the People's Republic of Bangladesh.
Collaboration (national/regional/international)	Bangladesh Council of Scientific and Industrial Research (BCSIR).
Associated manpower with expertise	Mahmuda Begum, SO, Md. Rakibul Hasan, SO, Liton Chandra Mohanta, SO, Nahid Sultana, SO, Dr. Parvin Noor, CSO
Facility available	
Specific constraints if any	Lack of adequate fund hindered research work to some extents.
Others	The completion of this project will improve the laboratory facilities of BCSIR to provide services related to DNA barcoding.

RESEARCH PROJECT >>>> Preparation of Milk Replacer by Single cell protein

Executing department	Animal Science and Animal Nutrition
Areas of biotechnology	Animal Biotechnology
Team leader (with contact address)	Dr. Md. Hasanuzzaman Associate Professor (Animal Nutrition) Department of Animal Science and Animal Nutrition Chittagong Veterinary and Animal Sciences University Zakir Hossain Road, Khulshi, Chittagong, Bangladesh Tel: 0088-031-659093 Extn 183; Fax: 0088-031-659620 Cell: +88 0171 1204 970; Web: www.cvasu.ac.bd
Objectives of the project	Preparation of low cost milk replacer
Outcomes of the project	Dairy farmers will be benefited by using milk replacer
Project period	July 2013 to June 2014
Source of funding	UGC and CVASU
Collaboration (national/regional/international)	N/A
Associated manpower with expertise	MS Student
Facility available	Lab and logistic support
Specific constraints if any	Large scale testing
Others	N/A

RESEARCH PROJECT >>>> Identification of molecular markers and their effects on production, reproduction and disease resistance traits of Black Bengal Goats (BBG)		
Executing department/Organization	Animal Biotechnology Division, National Institute of Biotechnology	
Areas of biotechnology	Animal Biotechnology	
Team leader (with contact address)	Dr. Abdul Alim, Senior Scientific officer, Animal Biotechnology Division, National Institute of Biotechnology, Asulia, Savar, Dhaka-1349.	
Objectives of the project	 i. To determine the genetic markers control these traits ii. To assess the genetic variability of Black Bengal Goats 	
Outcomes of the project	Obtained results could be used for Goat breeding program	
Project period	2014 - 2016	
Source of funding	GOB	
Collaboration (national/regional/international)	Dept. of Animal Breeding and Genetics, Bangladesh Agricultural University, Mymensingh	
Associated manpower with expertise	Dr. Jahangir Alam, SSO, NIB, Dr. Anjuman Ara Bhuyian, SO, NIB, and	
	Professor Dr. Md. Omar Faruque, Dept. of Animal Breeding and Genetics, Bangladesh Agricultural University, Mymensingh	
Facility available	Laboratory with facilities for molecular level experiments, PCR, Gel electrophoresis unit, ELISA reader, cell culture etc.	
Specific constraints if any	N/A	
Others	N/A	

RESEARCH PROJECT Study on genetic diversity of native duck in Bangladesh using Microsatellite marker		
Executing department/Organization	Animal Biotechnology Division, National Institute of Biotechnology	
Areas of biotechnology	Animal Biotechnology	
Team leader (with contact address)	Dr. Anjuman Ara Bhuyan, Scientific officer, Animal Biotechnology Division, National Institute of Biotechnology, Asulia, Savar, Dhaka-1349.	
Objectives of the project	 i. To reveal genetic variation among the native duck in Bangladesh. ii. To aid in conservation of native duck germplasm iii. To help to take any breeding program against any production or diseases traits. iv. To identify genes associated with characteristics of high economic values. 	
Outcomes of the project	Obtained results could be used for duck breeding program	
Project period	2014 - 2016	
Source of funding	GOB	
Collaboration (national/regional/international)	N/A	
Associated manpower with expertise	Dr. Jahangir Alam, CSO, NIB and Dr. Abdul Alim, SSO, NIB	
Facility available	Laboratory with facilities for molecular level experiments, PCR, Gel electrophoresis unit, ELISA reader, cell culture etc.	
Specific constraints if any	N/A	
Others	N/A	

RESEARCH PROJECT >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Executing department	Zoology Section, BRD, BCSIR, Dhaka-1205, Bangladesh.	
Areas of biotechnology	Animal including fisheries and industrial use.	
Team leader (with contact address)	Mahmuda Begum, SO, Zoology Section, BRD, BCSIR, Dhaka-1205, Bangladesh.	
Objectives of the project	 With the capacity build-up for DNA Barcoding research the following specific problems will be addressed by the project: To detect the adulteration in food and bio-product. To establish the intellectual property right of our fauna and flora. To identify the invasive alien species for Quarantine regulation. To identify the illegal trade of wild animals. 	
Outcomes of the project	The completion of this project will increase the laboratory facilities of BCSIR to provide services related to DNA barcoding. As DNA barcode will provide the tools for species identification, documentation of genetic diversity of bio-resources, testing the food adulteration (upto molecular level), resisting the invasive species and for stopping the illegal trade of wild life fauna, hence it can play a significant role for the sustainable economy of Bangladesh in various ways. Therefore, this technology will also explore the new arena for molecular identification of animal group.	
Project period	July 2013-July 2015	
Source of funding	BCSIR.	
Collaboration (national/regional/international)	N/A	
Associated manpower with expertise	Nahid Sultana; Md. Rakibul Hasan, Tahmina Hoq, S.O; Dr. Khandker Nesar Ahmed, C.S.O.	
Facility available	1. Lack of facilities for DNA sequencing. 2. Lack of adequate fund hindered research work to some extents.	
Specific constraints if any	N/A	
Others	N/A	



National Database on Biotechnology Research & Personnel

Research Projects

Fisheries Biotechnology



	RESEARCH	PROJECT	\gg
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Cryopreservation of *Labeo boga* (bhangan) fish genetic resources of Bangladesh

Executing department	Fisheries Biotechnology Division of NIB
Areas of Biotechnology	Fisheries Biotechnology
Team leader (with contact address)	Dr. Md. Saidul Islam, DG, NIB.
Objectives of the project/program	Cryopreservation of threatened fish (Labeo boga)
Outcomes of the project/program	Facilities would be developed for cryopreservation.
Project period	2013-2014
Source of funding	Ministry of Science and Technology (Special allocation)
Collaboration (national/regional/international)	Bangladesh Agricultural University, Mymensingh
Associated manpower with expertise	Shirin Sultana, SO, Md. Mahmud Hasan, SO, NIB, and
	Prof. Dr. Md. Rafiqul Islam Sarder, BAU, Mymensingh
Facility available	Fisheries Laboratory have control rate frezer (-196°C), Liquid Nitrogen cylinder, Cryogenic dewer, etc. equipment facilities for cryopreservation of fish sperm
Specific constraints if any	N/A
Others	N/A

RESEARCH PROJECT >>>> Ensuring food safety by application of indigenous probiotic bacteria in shrimp aquaculture of Bangladesh	
Executing department	Department of Microbiology, and Department of Zoology, Faculty of Biological Sciences, University of Dhaka, Dhaka- 1000, Bangladesh
Areas of biotechnology	Fisheries, Environment, Food safety
Team leader (with contact address)	Dr. Muhammad Manjurul Karim, Professor, Department of Microbiology, Dhaka University, Cell: 01715 490535
Objectives of the project	 Isolation of pathogenic bacteria from the different parts of the diseased and/ or dead shrimp, larvae as well as from the shrimp rearing ponds/ ghers Isolation of probiotic bacteria from shrimp ghers capable of killing/ inhibiting of the pathogenic bacteria Characterization and optimization of the maximum probiotic potential Bioremediation of pollution by the probiotic bacteria to clarify/ mineralize debris accumulated in pond sediments
Outcomes of the project	 Development of an alternative strategy to the use of antibiotics in order to combat disasters in shrimp industries caused by microorganisms Production of probiotics and metabolites for immune-boosting of shrimps and fish feed supplementation Raising mass awareness to farmers for green culture of shrimp and production of organic shrimp/ prawn Illegal drug-free shrimp production will boost export earning and prevent banning the product in foreign markets especially EU, USA and Japan
Project period	Three years
Source of funding	Partially funded by Ministry of Science and Technology, and Ministry of Fisheries and Livestock, GoB. Biotechnology Research Centre, University of Dhaka, Dhaka
Collaboration (national/regional/international)	(i) Department of Zoology, DU, Dhaka and (ii) Bangladesh Shrimp and Fish Foundation, Dhaka
Associated manpower with expertise	Two graduate students working for the MS degree are enrolled each year in the Department of Microbiology, DU to work on this project. An Upazilla Fisheries Officer (UFO) of GoB has been on deputation in the Department of Zoology, DU to work on this project for the degree of PhD.
Facility available	Presently I have been working in a new laboratory housed in the Department of Microbiology, DU which is equipped with moderate facilities necessary for carrying out fundamental issues of micro-biology.
Specific constraints if any	 Funding is a major constraint in this project. Use of indigenous probiotics is a recently developed strategy, hence largely ignored in the local shrimp industries. Farmers' attitude to use of probiotics instead of drugs traditionally used could be a factor to address.
Others	N/A
RESEARCH PROJECT >>

Infestation and biodiversity of metazoan parasites and their determinations in Channa punctatus of Mymensingh

Executing department	Department of Aquaculture, BAU, Mymensingh
Areas of biotechnology	Fisheries Biotechnology
Team leader (with contact address)	Dr. Kirtunia Juran Chandra, Professor, Department of Aquaculture, BAU, Mymensingh
Objectives of the project	Parasite fauna of C. Panctatus (Abundance, Diversity) as the reflection of determinant factors
Outcomes of the project	Biodiversity pattern of parasites with climatic changes and other determinants.
Project period	July 2013 - June 2014
Source of funding	AU-GC
Collaboration (national/regional/international)	National
Associated manpower with expertise	None
Facility available	Fish disease laboratory of the department with all available / necessary facilities is well equipped
Specific constraints if any	Minimum research Funding
Others	N/A

DECENDOU	
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Testing of local herbal products for fish/shrimp disease prevention and control

Executing department	Dept. of Aquaculture, BAU, Mymensingh
Areas of biotechnology	Fisheries Biotechnology
Team leader (with contact address)	Dr. Gias Uddin Ahmed, Professor, Dept. of Aquaculture, BAU, Mymensingh
Objectives of the project	To know impact of various herbal products against fish diseases prevention and control
Outcomes of the project	Efficacy/impact of herbal products will be known against fish/shrimp diseases
Project period	2011-2014
Source of funding	Bangladesh Fisheries Research Institute, Mymensingh
Collaboration (national/regional/international)	National
Associated manpower with expertise	Dr. Md. Bazlur Rashid Chowdhury, Fish health and disease expert
Facility available	Wet lab, Fish disease lab and pond complex of the Faculty of Fisheries, BAU, Mymensingh
Specific constraints if any	Timely release of money
Others	N/A

RESEARCH PROJECT Study on impact of aqua drugs on fish health and production

Executing department	Dept. of Aquaculture, BAU, Mymensingh	
Areas of biotechnology	Fisheries Biotechnology	
Team leader (with contact address)	Dr. Gias Uddin Ahmed, Professor, Dept. of Aquaculture, BAU, Mymensingh	
Objectives of the project	To compare production using drugs and control	
	To study impact of chemicals on health and production	
Outcomes of the project	Impact of aqua drugs on fish health and production will be known and necessary steps will be taken to recover	
Project period	2010-2014	
Source of funding	Bangladesh Fisheries Research Institute, Mymensingh	
Collaboration (national/regional/international)	National	
Associated manpower with expertise	Dr. Md. Ali Reza Faruk Fish Health and disease expert	
Facility available	Wet lab, Fish disease lab and pond complex of the Faculty of Fisheries, BAU, Mymensingh	
Specific constraints if any	Timely release of money	
Others	N/A	

RESEARCH PROJECT	Population biology of a freshwater prawn <i>Macrobrachium</i> <i>malcolmsonii</i> and its management policy implications in Bangladesh
Executing department	Department of Fisheries, University of Rajshahi, Rajshahi 6205, Bangladesh
Areas of biotechnology	Fisheries Biotechnology
Team leader (with contact address)	Dr. Md. Yeamin Hossain, Department of Fisheries, University of Rajshahi, Rajshahi 6205, Bangladesh Cell: 01751-566077
	Size at sexual maturity, spawning season and fecundity;
	growth pattern and longevity;
Objectives of the project	Recruitment pattern, length frequency and size variation in respect of season;
	Survival strategies in response to fishing pressure and natural mortality;
	Management measures towards sustained production in natural and man-made waters in Bangladesh.
Outcomes of the project	 By approaching the proposed research, the following aspects of <i>M. malcolmnii</i> can be known: 1. the seasonal variation of sex ration, size at first sexual maturity, and first and mean length at recruitment; 2. the spawning season and peak spawning; 3. the fecundity, i.e., how many eggs an individual female sheds in a particular spawning season; 4. the growth parameters and longevity; 5. to determine the mechanisms of resilience to the fishing pressure and climatic changes.
Project period	July 2013 - June 2014
Source of funding	University Grants Commission Bangladesh Agargaon, Dhaka 1207
Collaboration (national/regional/international)	N/A
Associated manpower with expertise	Research Assistant
Facility available	Since the University of Rajshahi (Department of Fisheries) is a reputed university for fisheries education in Bangladesh, therefore research facilities are available here, but no instruments in the department of fisheries, University of Rajshahi for advanced research
Specific constraints if any	No available instruments for histological studies here. And space is also big problem for me and research assistant.
Others	N/A

Executing department	Aquaculture
Areas of biotechnology	Fisheries Biotechnology
Team leader (with contact address)	Prof. Dr. M. Mamunur Rashid, Department of Aquaculture, BAU, Mymensingh
Objectives of the project	To study the efficacy of commercial drugs
Outcomes of the project	To limit the use of many different drugs in aquaculture to save the water environment from the effect of drugs
Project period	1 year and six months
Source of funding	Departmental fund
Collaboration (national/regional/international)	National
Associated manpower with expertise	National
Facility available	Fund
Specific constraints if any	N/A
Others	N/A

RESEARCH PROJECT To study the efficacy of aqua medicines for water quality improvement

Executing department	Aquaculture
Areas of biotechnology	Fisheries Biotechnology
Team leader (with contact address)	Prof. Dr. M. Mamunur Rashid, Department of Aquaculture, BAU, Mymensingh
Objectives of the project	To identify effective aqua medicine for water quality improvement
Outcomes of the project	To limit the use of many different aqua medicine for water quality improvement
Project period	1 year and six months
Source of funding	Departmental fund
Collaboration (national/regional/international)	N/A
Associated manpower with expertise	N/A
Facility available	Testing pond, organism, experimental cistern
Specific constraints if any	Fund
Others	N/A

RESEARCH PROJECT Xaccination trial agent *Aeromonas* hydrophila

Executing department	Aquaculture
Areas of biotechnology	Fisheries Biotechnology
Team leader (with contact address)	Prof. Dr. M. Mamunur Rashid, Department of Aquaculture, BAU, Mymensingh
Objectives of the project	To establish vaccine against the common MAS (Motile <i>Aeromonas septicemia</i>) disease in Bangladesh Aquaculture
Outcomes of the project	Expecting a consolidated step towards commercial vaccine production against MAS
Project period	1 year and six months
Source of funding	Departmental fund
Collaboration (national/regional/international)	National
Associated manpower with expertise	N/A
Facility available	Antigen production, test organisms, field level test pond
Specific constraints if any	Fund
Others	N/A

RESEARCH PROJECT >>

To study the withdrawal period of antibiotics used for fish disease treatment

Executing department	Aquaculture
Areas of biotechnology	Fisheries Biotechnology
Team leader (with contact address)	Prof. Dr. M. Mamunur Rashid, Department of Aquaculture, BAU, Mymensingh
Objectives of the project	To assess actual withdrawal period of the antibiotics
Outcomes of the project	The fish culture will not use the fish within the withdrawal period
Project period	1 year and six months
Source of funding	Departmental fund
Collaboration (national/regional/international)	National
Associated manpower with expertise	N/A
Facility available	Measurement technique of chemical composition upto milligram
Specific constraints if any	Fund
Others	N/A

RESEARCH PROJECT >> Efficacy of different commercial drugs in Aquaculture

Executing department	Aquaculture
Areas of biotechnology	Fisheries Biotechnology
Team leader (with contact address)	Prof. Dr. Md. Bazlur Rashid Chowdhury
Objectives of the project	To determine performance of selected drugs to be used in Aquaculture
Outcomes of the project	Suitable drugs will be screened out
Project period	1.5 years
Source of funding	Department and CASR, BAU, Mymensingh
Collaboration (national/regional/international)	Not applicable
Associated manpower with expertise	M.S. student- one
Facility available	Necessary facilities are available in fish disease lab
Specific constraints if any	Irregular Financial management
Others	N/A

RESEARCH PROJECT >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Executing department	Department of Aquaculture	
Areas of biotechnology	Fisheries Biotechnology	
Team leader (with contact address)	Dr. S. M. Rahmatullah, Professor, Department of Aquaculture, BAU, Mymensingh	
Objectives of the project	To use aquaculture phosphorous waste for vegetable production	
Outcomes of the project	Developed aquaponics systems	
Project period	2 year 2011-2013	
Source of funding	Ministry of Science and Technology, Bangladesh	
Collaboration (national/regional/international)	University of Sindh, Pakistan	
Associated manpower with expertise	Dr. Mohammad Mahfujul Haque, Department of Aquaculture, BAU, Mymensingh	
Facility available	Recirculatory systems	
Specific constraints if any	Continuous funding support	
Others	N/A	

DECENDAL	
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Effects of Stocking Density on Growth and Production of Monosex Male Tilapia in ponds

Executing department	Department of Aquaculture, BAU, Mymensingh
Areas of biotechnology	Fisheries Biotechnology
Team leader (with contact address)	Dr. Md. Ruhul Amin, Professor, Department of Aquaculture, BAU, Mymensingh
Objectives of the project	To boost production
Outcomes of the project	To Identify modern culture technique
Project period	January - June 2013
Source of funding	Department
Collaboration (national/regional/international)	Тwo
Associated manpower with expertise	N/A
Facility available	Fish laboratory complex
Specific constraints if any	N/A
Others	Completed successfully as MS research program

RESEARCH PROJECT >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Executing department	Department of Aquaculture	
Areas of biotechnology	Fisheries Biotechnology	
Team leader (with contact address)	Dr. Md. Ali Reza Faruk, Professor, Department of Aquaculture, BAU, Mymensingh	
Objectives of the project	To identify and characterize pathogens involved in fish disease	
Outcomes of the project	Better understanding of the cause of fish disease and their control measures	
Project period	July 2011 - June 14	
Source of funding	BARC	
Collaboration (national/regional/international)	N/A	
Associated manpower with expertise	PI having expertise with fish disease and molecular mycology	
Facility available	Basic facilities of pathogen identification	
Specific constraints if any	N/A	
Others	N/A	

RESEARCH PROJECT >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Executing department	Department of Aquaculture, BAU, Mymensingh	
Areas of biotechnology	Fisheries Biotechnology	
Team leader (with contact address)	Dr. Mohammad Mahfujul Haque, Professor, Department of Aquaculture, BAU, Mymensingh	
Objectives of the project	To use aquaculture waste for producing vegetable in an integrated system	
Outcomes of the project	A new technology of integrating fish and vegetable for producing food in a small area	
Project period	April 2013 - March 2014	
Source of funding	WorldFish, Bangladesh	
Collaboration (national/regional/international)	Yes with ANEP, IDE, BFRF and WorldFish	
Associated manpower with expertise	PI having expertise of Integrated Aquaculture	
Facility available	Basic facilities of aquaculture system development	
Specific constraints if any	N/A	
Others	N/A	

RESEARCH PROJECT Witter Standing its Impacts on Pond Productivity		
Executing department	Department of Aquaculture, BAU, Mymensingh	
Areas of biotechnology	Fisheries Biotechnology	
Team leader (with contact address)	Dr. Mohammad Mahfujul Haque, Professor, Department of Aquaculture, BAU, Mymensingh	
Objectives of the project	To increase pond productivity integrating mollusk, plant and fish together for enhancing pond productivity in a sustainable manner	
Outcomes of the project	A system for fish seed production	
Project period	July 2013 - June 2014	
Source of funding	Bangladesh Agricultural University Research System (BAURES), BAU	
Collaboration (national/regional/international)	Yes with farmers	
Associated manpower with expertise	PI having expertise of Aquaculture Systems Development	
Facility available	Basic facilities of aquaculture system development	
Specific constraints if any	N/A	
Others	N/A	

RESEARCH PROJECT Studies on different types of sinking & floating feeds formulations and comparative study on their effect on growth of Mono-sex Tilapia		
Executing department	Department of Fisheries, Faculty of Agriculture, University of Rajshahi, Rajshahi-6205	
Areas of biotechnology	Fisheries Biotechnology	
Team leader (with contact address)	Dr. Md. Istiaque Hossain, Mailing Address: Associate Professor, Department of Fisheries, Faculty of Agriculture, University of Rajshahi, Rajshahi-6205 Cell: 01726514232, E-mail: bitanrubd@yahoo.com, bitanrubd@gmail.com	
Objectives of the project	To establish 6 formulae (Sinking and floating) and manufacture of 3 grades of feeds for Monosex tilapia culture,	
	To perceive the locally available low cost ingredients in our country and to examine the proximate composition (Moisture, Protein, fat, Acid value, Crude fibre &Natural Fuel Energy	
	To recognize feed conversion ratio of floating and sinking feeds, Cost profit analysis of Monosex Tilapia	
Outcomes of the project	 (i) Various ingredients of fish feed will be recognized for Monosex Tilapia. (ii) Nutrient rich but low cost fish feed will be prepared for commercial use. (iii) Fish feed will be graded based on input cost. (iv) Profit of Monosex Tilapia culture by using graded fish feed will be measured. (v) Skill manpower will be developed 	
Project period	1 year	
Source of funding	Ministry of Science and Technology	
Collaboration (national/regional/international)	National	
Associated manpower with expertise	Research Assistant	
Facility available	Research Fund, Equipment's and Monitoring	
Specific constraints if any	Lack of space (Lab. and ponds), expected fund and timely money release from ministry.	
Others	N/A	

RESEARCH PROJECT Floodplain Aquaculture: Impacts on ecology and biodiversity

Executing department	Department of Fisheries, Faculty of Agriculture, University of Rajshahi, Rajshahi-6205
Areas of biotechnology	Fisheries Biotechnology
Team leader (with contact address)	Dr. Md. Istiaque Hossain, Mailing Address: Associate Professor, Department of Fisheries, Faculty of Agriculture, University of Rajshahi, Rajshahi-6205, Cell: 01726514232, E-mail: bitanrubd@yahoo.com, bitanrubd@gmail.com
Objectives of the project	 (i) Identify during the available time, as many fish species as possible that exist in the freshwaters of the Cola beel and Khosal beel catchments. (ii) Describe the distribution and abundance status in these catchments of observed species, and make recommendations for the conservation of rare and threatened species. (iii) Evaluate the trends of biodiversity before and after intervention of aquaculture in the selected floodplains
Outcomes of the project	 (i) This study will be provided some basic positive and negative information of floodplain ecosystem. (ii) It will be estimated the update of fish biodiversity of two floodplain beels. (iii) It will be provided some mitigation measures of fish conservations and alternative environment friendly technologies which may help the farmers to keep floodplains ecology safe and to strengthen of threatened species. (iv) This study will be helpful to the managers to impose adequate regulations for sustainable fishery management in the floodplain.
Project period	6 months
Source of funding	Bangladesh Fisheries Research Forum
Collaboration (national/regional/international)	National
Associated manpower with expertise	Research Assistant
Facility available	Research Fund, Equipment's and Monitoring
Specific constraints if any	Lack of space (Lab. and ponds), expected fund and timely money release from ministry.
Others	N/A

RESEARCH PROJECT	Effect of dietary lipid on growth performance and body composition of Catla <i>(Catla catla)</i>
Executing department	Department of Fisheries, Faculty of Agriculture, University of Rajshahi, Rajshahi-6205
Areas of biotechnology	Fisheries Biotechnology
Team leader (with contact address)	Dr. Md. Istiaque Hossain, Mailing Address: Associate Professor, Department of Fisheries, Faculty of Agriculture, University of Rajshahi, Rajshahi-6205, Cell: 01726514232, E-mail: bitanrubd@yahoo.com, bitanrubd@gmail.com
Objectives of the project	 (i) To monitor the water quality parameters under different treatments (ii) To study the effect of dietary lipid on growth performance of Catla (<i>Catla catla</i>) (iii) To know the effect of dietary lipid on production of Catla (<i>Catla catla</i>) (iv) To study the effect of dietary lipid on body composition of Catla (<i>Catla catla</i>)
Outcomes of the project	 (i) Various doses of ingredients of fish feed will be recognized for Catla (<i>Catla catla</i>) (ii) Able to know the effect of dietary lipid on growth performance of Catla (<i>Catla catla</i>) will be ensured (iii) Able to know the effect of dietary lipid on production of Catla (<i>Catla catla</i>) will be estimated (iv) The effect of dietary lipid on body composition of Catla (<i>Catla catla</i>) will be recognized (v) Skill manpower will be developed
Project period	1 Year
Source of funding	Bangladesh Fisheries Research Forum
Collaboration (national/regional/international)	National
Associated manpower with expertise	Research Assistant
Facility available	Research Fund, Equipment's and Monitoring
Specific constraints if any	Lack of space (Lab. and ponds), expected fund and timely money release from ministry.
Others	N/A

RESEARCH PROJECT Development of microsatellite DNA markers for investigation of population structure of different stocks of <i>Tenualosa ilisha</i> : Implication in better management strategies.		
Executing department	Fisheries Biotechnology Division, National Institute of Biotechnology (NIB)	
Areas of biotechnology	Fisheries Biotechnology	
Team leader (with contact address)	Md. Mahmud Hasan, Scientific Officer, Fisheries Biotechnology Division, National Institute of Biotechnology, Ganakbari, Savar, Dhaka	
Objectives of the project	 To Develop Microsatellite primer for <i>Tenualosa ilisha</i> fish. Stock assessment of <i>T. ilisha</i> fish by Microsatellite DNA analysis. To find out better stock for conservation 	
Outcomes of the project	N/A	
Project period	August 2013 - June 2017	
Source of funding	NIB, GoB	
Collaboration (national/regional/international)	Not done yet	
Associated manpower with expertise	Scientific Officer (1), Scientific Assistant (1)	
Facility available	Fisheries Laboratory has available equipment facilities for DNA isolation, PCR and gel electrophoresis and the institution have the capillary electrophoresis and data analysis facilities.	
Specific constraints if any	N/A	
Others	N/A	



National Database on Biotechnology Research & Personnel

Research Projects

Environment, Microbial, Medical and Molecular Biotechnology



Determination of genotypic and allelic frequencies of reactive **RESEARCH PROJECT** >> oxygen species neutralizing enzyme genes and tumor suppressor gene in heavy metal exposed Bangladeshi population

Executing department/Organization	Department of Biochemistry and Molecular Biology, D.U.
Areas of Biotechnology	Environmental Biotechnology
Team leader (with contact address)	Professor AHM Nurun Nabi, Dept. of Biochem Mol Biol, University of Dhaka, Dhaka-1000, nabi@du.ac.bd
Objectives of the project/program	 The objectives of the present study is to investigate i) the levels of lead, and arsenic in the occupationally and/or environmentally exposed human beings ii) the levels of arsenic in the water samples used for drinking and house hold works iii) the levels of DNA adducts, 8-hydroxy-2-deoxyguanosine (8OhdG) in the plasma and/or urine iv) genetic variation of glutathione-S-transferase omega (GSTO) and glutathione-S-transferase mu (GSTM), a reactive oxygen detoxifying enzyme v) genetic variation of p53 gene, that encodes tumor suppressor and cell cycle controlling protein
Outcomes of the project/program	This study would help to understand the genotypic variation of Bangladeshi people who are occupationally exposed to toxicity, their ability to express the heavy metal detoxifying enzymes (functional genomics), i.e., this study would generate baseline data in the context of heavy metal toxicity at the molecular level.
Project period	One year
Source of funding	Ministry of Science and Technology, Government of Bangladesh
Collaboration (national/regional/international)	N/A
Associated manpower with expertise	N/A
Facility available	Space and instruments
Specific constraints if any	Fund constraint
Others	N/A

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RESEARCH PROJECT	Effects of Ethephon - an artificial fruit ripening chemical on the embryonic development of fish
Executing department	Department of Genetic Engineering and Biotechnology, University of Rajshahi
Areas of biotechnology	Environmental Biotechnology
Team leader (with contact address)	Md Abu Reza, PhD, Associate Professor, Dept. of Genetic Engineering and Biotechnology, University of Rajshahi
Objectives of the project	To determine the effects of ethephon exposure on the embryonic development of 'Rui fish' by microscopic examination of each step of embryo development and correlate the developmental abnormalities with that of human.
Outcomes of the project	In recent times, there is an increasing concern about artificial ripening of fruits in Bangladesh. A number of hazardous chemicals like calcium carbide, Ethephon (ethrel-2-chloroethyl phosphonic acid) acetylene, ethylene, propylene, glycol etc are use for this purpose. Although, health hazards of these chemicals are speculated, the extent of risk is not yet clearly known. We have made a through literature search in pubmed as well as google (though not that authentic) however, we realized that authentic data on the effect of these chemical on embryogenic development is inadequate. Therefore, the current project will provide a lucid picture of the extent of threat of these chemicals on embryonic development of fish.
Project period	2013 - 2014
Source of funding	Ministry of Science and technology, Bangladesh
Collaboration (national/regional/international)	Dept of Botany, University of Rajshahi and Dept of Biological Sciences, National University of Singapore
Associated manpower with expertise	Dr. Md Abu Reza (Molecular and medical biology) Akhter-e-Ekram (Developmental biology); Dr. A.H.M. Khurshid Alam (Medical biotechnology)
Facility available	Aquarium with aeration system and other standard laboratory facilities
Specific constraints if any	Laboratory space and funding is the major constrain in the project
Others	N/A

RESEARCH PROJECT >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
Executing department	Environmental Biotechnology Division, National Institute of Biotechnology
Areas of biotechnology	Environmental Biotechnology
Team leader (with contact address)	Subrata Banik, Senior Scientific Officer, Environmental Biotechnology Division, National Institute of Biotechnology, Ganakbari, Ashulia, Savar, Dhaka-1349
Objectives of the project	To develop the sustainable application technique for biofertilizer use in field-level. To formulate infrastructure, build-up strategies for extension of biofertilizer use. To relocate the technology on the field of farmers and into industry(s) by producing the Biofertilizer in large scale.
Outcomes of the project	Development of Cost-Effective and Eco-friendly Rice Biofertilizer for Sustainable Environment
Project period	October 2013 - October 2016
Source of funding	National Institute of Biotechnology
Collaboration (national/regional/international)	Bangladesh Institute of Nuclear Agriculture (BINA), Mymensingh. Bangabandhu Sheikh Mujibur Rahman Agricultural University (BSMRAU) Salna, Gazipur.
Associated manpower with expertise	Shamsun Naher, Scientific Officer, Environmental Biotechnology Division, National Institute of Biotechnology
Facility available	Nitrogen Determination System, Incubator, Centrifugal Machine, Environmental Control System, UV Spectrophotometer, HPLC, Flame Photometer, Experimental Field
Specific constraints if any	N/A
Others	N/A

RESEARCH PROJECT	Microbial bioremediation of heavy metals present in agricultural soil and irrigation water of Bangladesh
Executing department/Organization	Environmental Biotechnology Division, National Institute of Biotechnology
Areas of Biotechnology	Environmental Biotechnology
Team leader (with contact address)	Subrata Banik, Senior Scientific Officer, Environmental Biotechnology Division, National Institute of Biotechnology, Ganakbari, Ashulia, Savar, Dhaka-1349
Objectives of the project/program	Estimation of presence of heavy metals in industrial sludge, in agricultural field soil premises the industrial area and in irrigated surface water
	Isolation and characterization of microbial population(s) showing tolerance/resistant to heavy metals in various magnitudes
	Assessment of the extent of heavy metal contamination remediation/ amelioration by usable individual strain type in lab condition
	Molecular identification of effective heavy metal remediating/ ameliorating strain(s).
Outcomes of the project/program	Microbial bioremediation of heavy metal present in agricultural soil and irrigation water
Project period	September 2014 to September 2017
Source of funding	National Institute of Biotechnology
Collaboration (national/regional/international)	N/A
Associated manpower with expertise	Shamsun Naher, Scientific Officer, Environmental Biotechnology Division, National Institute of Biotechnology
Facility available	Nitrogen Determination System, Incubator, Centrifugal Machine, Environmental Control System, UV Spectrophotometer, HPLC, Flame Photometer, Experimental Field
Specific constraints if any	Atomic Absorption Spectrophotometer for heavy metal determination
Others	N/A

RESEARCH PROJECT	Isolation of salt-tolerant <i>Azotobacter</i> spp suitable for application as biofertilizer in the coastal agriculture of Bangladesh
Executing department	Department of Microbiology, Faculty of Biological Sciences, University of Dhaka, Dhaka 1000, Bangladesh
Areas of biotechnology	Environmental Microbiology, Agriculture and Food security
Team leader (with contact address)	Dr. Muhammad Manjurul Karim Professor, Department of Microbiology, University of Dhaka, Dhaka, Cell: 01715 490535
Objectives of the project	 Isolation of the Azotobacter spp from the rice fields of different coastal districts and non-saline region of Bangladesh. Determination of their salt tolerance at increasing salt concentrations without compromising the Nitrogen fixing ability Characterization of the isolates in terms of their resistance to drugs and heavy metals
Outcomes of the project	 Isolation of agriculturally-important Nitrogen fixing bacteria from rice fields of coastal areas that can withstand salinity stress Coastal rice fields will be brought under cultivable lands by application of the potential Azotobacter spp as biofertilizers Model building to forecast the fertility of the rice fields applying salt tolerant Azotobacter spp as the salinity increases with time
Project period	Three years
Source of funding	Project partially funded by Ministry of Science and Technology, Government of the People's Republic of Bangladesh In addition, a small grants had already been allocated by University Grants Commission, Bangladesh
Collaboration (national/regional/international)	Department of Aquaculture, Patuakhali Science and Technology University, Dumki, Patuakhali
Associated manpower with expertise	Two graduate students working for the MS degree are enrolled each year in the Department of Microbiology, DU to work on this project.
Facility available	Presently I have been working in a new laboratory housed in the Department of Microbiology, DU which is equipped with moderate facilities necessary for carrying out fundamental issues of micro-biology and molecular biology.
Specific constraints if any	Funding is a major constraint in this project.
Others	N/A

RESEARCH PROJECT	Biodegradation of textile dye effluents
Executing department	Department of Microbiology, University of Chittagong
Areas of biotechnology	Environmental Biotechnology (Bioremediation of Xenobiotics)
Team leader (with contact address)	Dr. Md Towhid Hossain, Chairman and Associate Professor, Department of Microbiology, University of Chittagong, Chittagong 4331, Bangladesh Email: towhid73@yahoo.com, Cell: 01743079914
Objectives of the project	Sustainable textile dye effluents management by indigenous microorganisms, genetic characterization of dye degrading microorganisms, elucidation of biochemistry of dye decolorization process, process control of on-site bioremediation
Outcomes of the project	Detection and characterization of promising industrial dye degrading microorganisms, detailed understanding of genetics and biochemistry of dye degrading microorganisms, preparation of microbial seed for application in contaminated sites
Project period	Ongoing
Source of funding	University (Annual Normal Budget)
Collaboration (national/regional/international)	N/A
Associated manpower with expertise	 Dr. Md Towhid Hossain, Chairman and Associate Professor, Department of Microbiology, University of Chittagong, Chittagong 4331, Bangladesh towhid73@yahoo.com, +88-01743079914 Kartik Dhar, Lecturer, Department of Microbiology, University of Chittagong, Chittagong 4331, Bangladesh, kartikdhar@cu.ac.bd, +88-01191760207
Facility available	
Specific constraints if any	N/A
Others	N/A

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Molecular identification and characterization of nitrogen fixing bacteria compatible to *Arachis hypogaea* and *Lens culinaris* in the soils of Sal forests.

Executing department	Department of Botany, University of Dhaka
Areas of biotechnology	Microbes, plants and Environment
Team leader (with contact address)	Professor Dr. Mohammad Zabed Hossain, Dept. of Botany, University of Dhaka, Dhaka 1000, Bangladesh, Cell: 01727736087, Email: zabed@du.ac.bd
Objectives of the project	Identify and isolate efficient nitrogen fixing bacteria
Outcomes of the project	Obtain efficient nitrogen fixing bacteria compatible to important legume crops to secure protein rich diet
Project period	2012-13
Source of funding	Bangladesh University Grants Commission
Collaboration (national/regional/international)	N/A
Associated manpower with expertise	No associated manpower with expertise
Facility available	Basic Laboratory equipments
Specific constraints if any	Financial budget is not sufficient
Others	N/A

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Epidemiological investigation on *Campylobacter* species in broiler farms of Bangladesh and formulation of their suitable control measures

Executing department	Department of Microbiology and Hygiene, BAU, Mymensingh
Areas of biotechnology	Microbial Biotechnology
Team leader (with contact address)	Dr. S. M. Lutful Kabir, Associate Professor, Department of Microbiology and Hygiene, BAU, Mymensingh
Objectives of the project	To demonstrate the prevalence of <i>Campylobacter</i> species by isolating from the broiler flocks associated with their environments
Outcomes of the project	Prevalence of <i>Campylobacter</i> species from the broiler flocks in Bangladesh will be recorded.
Project period	July 2013 - June 2014
Source of funding	BAURES, BAU, Mymensingh
Collaboration (national/regional/international)	Collaboration with icddr,b and Japan
Associated manpower with expertise	Having PhD in the related filed
Facility available	All sorts of facility available in the department
Specific constraints if any	N/A
Others	N/A

RESEARCH PROJECT A line of the second states and st		
Executing department	Department of Microbiology, University of Chittagong	
Areas of biotechnology	Microbial enzymes and secondary metabolites	
Team leader (with contact address)	Dr. Nural Anwar, Professor, Department of Microbiology, University of Chittagong, Chittagong 4331, Bangladesh	
Objectives of the project	To isolate and develop efficient microbes	
Outcomes of the project	New	
Project period	Ongoing	
Source of funding	University (Annual Normal Budget)	
Collaboration (national/regional/international)	N/A	
Associated manpower with expertise	1) Dr. Md Towhid Hossain, Chairman and Associate Professor, Department of Microbiology, University of Chittagong, Chittagong 4331, Bangladesh towhid73@yahoo.com, +88-01743079914	
	2) Shoma Dutta, Lecturer, Department of Microbiology, University of Chittagong, Chittagong 4331, Bangladesh	
	3) Feedousi Ali, Lecturer, Department of Microbiology, University of Chittagong, Chittagong 4331, Bangladesh	
	4) Kartik Dhar, Lecturer, Department of Microbiology, University of Chittagong, Chittagong 4331, Bangladesh, kartikdhar@cu.ac.bd, +88-01191760207	
Facility available		
Specific constraints if any	N/A	
Others	N/A	

RESEARCH PROJECT >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Executing department	BCSIR	
Areas of biotechnology	Microbial Biotechnology	
Team leader (with contact address)	Habibur Rahman Bhuiyan, Principal Scientific Officer BCSIR Laboratories, Chittagong, Chittagong 4220 Email: habibctglab@gmail.com, Cell: 01711205664, 031-681761/26, 031-681763/26 (Office) 031-684034 (Res.)	
Objectives of the project	The main objective of this project is to determine the presence and seasonal variation of white spot syndrome virus (WSSV), IMNV and different bacterial pathogen in the shrimp farm of Cox's Bazar district of Chittagong, Bangladesh	
Outcomes of the project	 The project will explore present condition of viral and bacterial disease in the shrimp farm of Cox's Bazaar district of Chittagong. Shrimp farmers will be benefited by minimizing loses by taking preventive measure against microbial infection on the basis of research data. Contribute to enhance the production of virus free shrimp in this area. 	
Project period	July 2013 - June 2014	
Source of funding	R & D BCSIR	
Collaboration (national/regional/international)	N/A	
Associated manpower with expertise	Saiful Islam (Microbiology), Abu Sayeed Mahood (Microbiology), Md Rezaul Karim (Engineer)	
Facility available	ELISA Reader, Real Time PCR, Pockit Express System (IO PLUS WSSB & IMNV), Phase Contrast and Florescent Microscope, Biosafety Cabinet (A2), Airocide, Ultra freezer, Shaker Incubator, Centrifuge (≥-30°C), Autoclave, Primer for bacterial and Viral detection, and related glassware, Media and Equipments.	
Specific constraints if any	N/A	
Others	N/A	

RESEARCH PROJECT Solution of Chlorpyrifos by naturally occurring soil borne bacteria.		
Executing department	Department of Genetic Engineering and Biotechnology, University of Rajshahi, Bangladesh.	
Areas of biotechnology	Microbial Biotechnology.	
Team leader (with contact address)	Md. Akhtar-E-Ekram, Assistant Professor, Department of Genetic Engineering and Biotechnology, University of Rajshahi, Bangladesh. Cell: 01718442560	
Objectives of the project	Detoxification of toxic pesticide from environment to minimize environmental hazards through Xenobiotic compounds.	
Outcomes of the project	Biological mineralization of pesticide.	
Project period	One Year.	
Source of funding	Rajshahi University	
Collaboration (national/regional/international)	National	
Associated manpower with expertise	One 4th year project student.	
Facility available	HPLC, Gel electrophoresis, PCR, Temperature controlled shaker, Incubator etc.	
Specific constraints if any	N/A	
Others	N/A	



RESEARCH PROJECT Development of eco-friendly microbial enzymes for textile and leather industries

Executing department	Microbial Biotechnology Division, National Institute of Biotechnology
Areas of biotechnology	Microbial Biotechnology
Team leader (with contact address)	Abu Hashem, Senior Scientific Officer, Microbial Biotechnology Division, National Institute of Biotechnology, Ganakbari, Savar, Dhaka-1349 Phone: 02-7789289, Email: hashemnib04@yahoo.com
Objectives of the project	Selection, screening and identification of microbial strain for enzyme production Development of potential microbial strain for enzyme production at laboratory scale
Outcomes of the project	Production of enzymes at laboratory scale
Project period	January 2012 - December 2016
Source of funding	GoB
Collaboration (national/regional/international)	N/A
Associated manpower with expertise	Palash Kumar Sarker, Scientific Officer, Microbial Biotechnology Division, NIB Cell: 0171870078, email: palashnib@yahoo.com, Expertise: Microbial Biotechnology
Facility available	Isolation, identification and preservation of microorganisms, Fermenter for product development and Enzyme purification
Specific constraints if any	Manpower
Others	N/A

RESEARCH PROJECT Role of streptococcal extracellular protein, SepM, in pathogenesis of <i>Streptococcus pneumoniae</i> .		
Executing department	Department of Genetic Engineering & Biotechnology, University of Dhaka	
Areas of biotechnology	Microbial Biotechnology	
Team leader (with contact address)	Dr. Mohammad Shahnoor Hossain Department of Genetic Engineering & Biotechnology, University of Dhaka, Dhaka-1000	
Objectives of the project	The goal of the project is to uncover the role of SepM in pathogenesis of S. pneumoniae	
Outcomes of the project	This study may provide new bacterial target that can be used for developing novel serotype independent vaccines and drugs	
Project period	12 months	
Source of funding	Biotechnology research center, University of Dhaka	
Collaboration (national/regional/international)	N/A	
Associated manpower with expertise	Morshed Nibir (MS student)	
	Md. Nahidul Islam (MS student)	
Facility available	Working space, bacteriological media, SDS-PAGE and western blotting apparatus, PCR machine, centrifuge machine, Electrophoresis Aparatus, Ice machine, Incubator, Water bath, Gel-doc machine, ELISA plate reader, HPLCetc (Department of Genetic Engineering and Biotechnology, Dhaka University	
Specific constraints if any	MALDI-TOF mass spectrometry	
Others	N/A	

RESEARCH PROJECT Case study for the measuring total Aflatoxin in wheat flour, peanut and peanut products (e.g.- Chanachur) in the hot and humid months of the years

Executing department	BCSIR
Areas of biotechnology	Microbial Biotechnology
Team leader (with contact address)	Saiful Islam, Senior Scientific Officer BCSIR Laboratories, Chittagong, Chittagong 4220 Email: saifbiology80@gmail.com Cell: 01818969416, 031-681761/25, 031-681763/25 (Office)
Objectives of the project	 Determination of level of total Aflatoxin in wheat flour, peanut and peanut products. Observation of variation in total Aflatoxin in wheat flour, peanut and peanut products during hot and humid months of the year.
Outcomes of the project	 The project will explore present condition of total Aflatoxin in 'wheat flour, peanut and peanut products Research finding will be greatly helpful for mass people concern and as well as for government agency.
Project period	July 2013 - June 2014
Source of funding	R & D BCSIR
Collaboration (national/regional/international)	N/A
Associated manpower with expertise	Habibur Rahman Bhuiyan(Biochemistry)Sumon Das(Chemistry)Md Rezaul Karim(Engineer)
Facility available	ELISA Reader, Real Time PCR, Pockit Express System (IO PLUS WSSB & IMNV), Phase Contrast and Florescent Microscope, Biosafety Cabinet (A2), Airocide, Ultra freezer, Shaker Incubator, Centrifuge (≥-30°C), Autoclave, Primer for bacterial and Viral detection, and related glassware, Media and Equipments.
Specific constraints if any	N/A
Others	N/A

RESEARCH PROJECT Production of lactic acid from indigenous agricultural resources.

Executing department	BCSIR
Areas of biotechnology	Microbial Biotechnology
Team leader (with contact address)	Abu Sayeed Mahood, Scientific Officer BCSIR Laboratories, Chittagong, Chittagong 4220, Email: sayedrism@gmail.com, Cell: 01746700196
Objectives of the project	The objective of this study is to relate for the production of Lactic acid from the Agriculture resources such as molasses, barley, wheat, potato and corn etc.
Outcomes of the project	 To utilize the Agricultural resources availability To avoid the import of the Lactic acid based downstream products To export the Lactic acid based downstream products in the global market To achieve breakthrough in the fermentation technology for the Agricultural resources(molasses, barley, wheat, Potato and corn) based products
Project period	July 2012 - June 2014
Source of funding	R & D BCSIR
Collaboration (national/regional/international)	N/A
Associated manpower with expertise	Saiful Islam Habibur Rahman Bhuiyan
Facility available	ELISA Reader, Real Time PCR, Pockit Express System (IO PLUS WSSB & IMNV), Phase Contrast and Florescent Microscope, Biosafety Cabinet (A2), Airocide, Ultra freezer, Shaker Incubator, Centrifuge (≥-30°C), Autoclave, Primer for bacterial and Viral detection, and related glassware, Media and Equipments.
Specific constraints if any	Farmenter
Others	N/A

RESEARCH PROJECT Production of Glutamic acid by microbial fermentation from Molasses.	
Executing department	BCSIR
Areas of biotechnology	Microbial Biotechnology
Team leader (with contact address)	Abu Sayeed Mahood, Scientific Officer BCSIR Laboratories, Chittagong, Chittagong 4220 Email: sayedrism@gmail.com, Cell: 01746700196
Objectives of the project	The objective of this study is to relate for the production of Glutamic acid from the Agriculture resources such as molasses.
Outcomes of the project	 To utilize the Agricultural resources availability To avoid the import of the Glutamic acid based downstream products To export the Glutamic acid based downstream products in the global market To achieve breakthrough in the fermentation technology for the Agricultural resources (molasses, barley, wheat, Potato and corn) based products
Project period	July 2013 - June 2014
Source of funding	R & D BCSIR
Collaboration (national/regional/international)	N/A
Associated manpower with expertise	Saiful Islam(Microbiology)Sumon Das(Chemistry)Habibur Rahman Bhuiyan(Biochemistry)
Facility available	ELISA Reader, Real Time PCR, Pockit Express System (IO PLUS WSSB & IMNV), Phase Contrast and Florescent Microscope, Biosafety Cabinet (A2), Airocide, Ultra freezer, Shaker Incubator, Centrifuge (≥-30°C), Autoclave, Primer for bacterial and Viral detection, and related glassware, Media and Equipments.
Specific constraints if any	A Fermenter, Corynebacterium herculis and Brevibacterium divaricatum
Others	N/A
RESEARCH PROJECT >>> Quantification of different antibiotics residues (e.g. - tetracycline, Chloramphenicol, ciprofloxacin etc.) In milk, powdered milk products, poultry and poultry feeds using UFLC and UFLC-MS.

Executing department	BCSIR			
Areas of biotechnology	Microbial Biotechnology			
Team leader (with contact address)	Suman Das, Scientific Officer BCSIR Laboratories, Chittagong, Chittagong 4220 Email: sumanbcsir@gmail.com, Cell: 01816361131			
Objectives of the project	Assessment of level of different antibiotics residues in milk, powdered milk products, poultry and poultry feeds.			
Outcomes of the project	The project will expose present level of different antibiotics residues in milk, powdered milk products, poultry and poultry feeds which will help to create public awareness about the concern matter.			
Project period	July 2013 - June 2015			
Source of funding	R & D BCSIR			
Collaboration (national/regional/international)	N/A			
Associated manpower with expertise	Habibur Rahman Bhuiyan(Biochemistry)Saiful Islam(Microbiology)Rezaul Karim(Engineer)			
Facility available	UFLC-MS, LCMS-MS, ELISA Reader, Real Time PCR, Ultra freezer, Shaker Incubator, Centrifuge (≥-30°C).			
Specific constraints if any	N/A			
Others	N/A			

RESEARCH PROJECT	National Influenza Surveillance			
Executing department	Institute of Epidemiology, Disease Control & Research (IEDCR)			
Areas of biotechnology	Microbial, Medical			
Team leader (with contact address)	Professor Mahmudur Rahman, Ph.D. Director, IEDCR, Mohakhali, Dhaka-1212			
Objectives of the project	To identify novel strain & circulating strains of Influenza virus			
Outcomes of the project	To help developing annual Influenza vaccine by WHO including the identified strains of the virus			
Project period	Up to 2016			
Source of funding	GoB & CDC, Atlanta, US			
Collaboration (national/regional/international)	International: CDC, Atlanta, USA			
Associated manpower with expertise	Not available			
Facility available	RNA/DNA Extraction, Conventional & real-time PCR, Sequencer, ELISA, BSL 2, BSL 3			
Specific constraints if any	Lack of adequately trained man power			
Others	NA			

RESEARCH PROJECT >>> Antiviral activity of medicinal plant Aloe vera (Aloe indica) available in Bangladesh			
Executing department/Organization	Animal Biotechnology Division, National Institute of Biotechnology		
Areas of Biotechnology	Microbial/Medical		
Team leader (with contact address)	Dr. Jahangir Alam, CSO, NIB, Ganakbari, Savar, Dhaka Cell: 01712819098, Email: alamjahan2003@yahoo.com		
Objectives of the project/program	Assessment of anti-NDV activity of Aloe vera		
Outcomes of the project/program	Antiviral activity of locally available Aloe vera will be known.		
Project period	2013-2015		
Source of funding	Ministry of Science and Technology (Special Allocation)		
Collaboration (national/regional/international)	Bangladesh Livestock Research Institute (BLRI)		
Associated manpower with expertise	Dr. Anjuman Ara Bhuyian, Dr. Md. Abdul Alim, Shohel Mahmud, and Dr. Md. Giasuddin, BLRI		
Facility available	Laboratory with facilities for molecular level experiments, PCR, Gel electrophoresis unit, ELISA reader, cell culture, etc.		
Specific constraints if any	N/A		
Others	N/A		

RESEARCH PROJECT	Prediction of Small molecules against <i>Streptococcus</i> extracellular protease SepM		
Executing department	Department of genetic Engineering and Biotechnology, University of Dhaka		
Areas of biotechnology	Bioinformatics, Medical Biotechnology.		
Team leader (with contact address)	Dr. ABMM Khademul Islam Assistant Professor Phone: +880-2-9661900 ~73 / extn. 7825 (Off) Cell: 01765580953, FAX: +880-2-8615583 Email: khademul@du.ac.bd		
Objectives of the project	A small molecule ligand will be designed against the target extracellular protease SepM of <i>Streptococcus</i> that cleaves the inactive 21-residue competence-stimulating peptide (CSP) to generate active 18-residue peptide CSP that stimulates the production of mutacin. SepM is required for pathogenesis in host cell.		
Outcomes of the project	<i>In-silico</i> drug designing has been the actual motivation behind this study. At the end of the study we will suggest probable drug against the bacteria <i>Streptococcus</i> that can be tested for using as actual drug to control this organism.		
Project period	January 2013 - December 2013		
Source of funding	Department of Genetic Engineering and Biotechnology, University of Dhaka.		
Collaboration (national/regional/international)	 Dr. Md. Shahanoor Hossain, Department of Genetic Engineering and Biotechnology, University of Dhaka. (Regional) Dr. Nuria Lopez Bigas. Barcelona Biomedical Research Park, University Pompeu Fabra, Barcelona, Spain. (International) 		
Associated manpower with expertise	One bachelor student of the department working on this project.		
Facility available	Computer for bioinformatic study. Microbiology laboratory to test the effect of predicted drug against the bacteria.		
Specific constraints if any	Lack of high performance cluster computer to perform high-throughput docking simulation.		
Others	N/A		

RESEARCH PROJECT Role of vitamin D insufficiency in pregnancy complications and neonatal outcomes			
Executing department/Organization	Department of Biochemistry and Molecular Biology, University of Dhaka		
Areas of biotechnology	Medical		
Team leader (with contact address)	Dr. Md. Zakir Hossain Howlader, Professor, Department of Biochemistry and Molecular Biology, University of Dhaka		
Objectives of the project/program	To observe the role of vitamin D and vitamin D binding protein in pregnancy related complications		
Project period	July 2013-June 2014		
Source of funding	Partially funded by Ministry of Science Information and Communication Technology		
Collaboration (national/regional/international)	National		
Associated manpower with expertise	PI and one MS student		
Facility available	HPLC and other basic lab supports		
Specific constraints if any	Constraint of funding and sample availability		
Others	N/A		

RESEARCH PROJECT	 Breast Cancer Biomarker development- MOE Thalassemia Biomarker development- TWAS Population genetics and study of diseased genes- Estonia
Executing department	Center for Advanced Research in Sciences (CARS), University of Dhaka (DU)
Areas of biotechnology	Medical Biotechnology
Team leader (with contact address)	Dr Gazi Nurun Nahar Sultana, Principal Scientist, CARS, DU
Objectives of the project	To understand human genetics and develop diseased based biomarker for rapid diagnosis.
Outcomes of the project	N/A
Project period	Ongoing
Source of funding	Both Foreign and Local (GOB)
Collaboration (national/regional/international)	International- India and Estonia
Associated manpower with expertise	04
Facility available	Core facilities of CARS, DU and also Estonia Bio-center
Specific constraints if any	Budget
Others	Manpower (both technical and academic)

DECENDALI DDA IFAT	

The effect of PTPR δ rs1758499 C/T polymorphism on the rapeutic efficacy of Metformin in Bangladeshi patients with T2DM

Executing department	Center for Advanced Research in Sciences (CARS), University of Dhaka (DU)			
Areas of biotechnology	Medical Biotechnology			
Team leader (with contact address)	Dr Rokeya Begum, Scientist, CARS, DU			
Objectives of the project	Identify the effect of PTPR δ gene associated SNP on the rapeutic efficacy of Metformin in BD T2DM patients			
Outcomes of the project	N/A			
Project period	About 1 year			
Source of funding	Bangabondhu Fellowship on Science and ICT project.			
Collaboration (national/regional/international)	BIRDEM General Hospital			
Associated manpower with expertise	02			
Facility available	Core facilities of CARS, DU			
Specific constraints if any	Budget			
Others	Manpower (both technical and academic)			

RESEARCH PROJECT	 Evaluating the efficacy of the antivenom used in Bangladesh Purification and characterization of the venom components of the venomous snakes of Bangladesh 		
Executing department	Department of Genetic Engineering and Biotechnology University of Rajshahi		
Areas of biotechnology	Pharmaceutical Biotechnology /Protein chemistry/ Bioinformatics		
Team leader (with contact address)	Dr. Md Abu Reza, Department of Genetic Engineering and Biotechnology, University of Rajshahi		
Objectives of the project	The aim of the current project is to evaluate the efficacy of the antivenom used in our country and also to characterize the common snake venom.		
Outcomes of the project	A suitable medical treatment for snake bite depends on the better understanding of the site and mode of action of its venom components. Most importantly, snake venom is a rich source of pharmacologically active proteins and peptides and a number of drug lead compounds have been invented from snake venom.		
Project period	2013-2016		
Source of funding	Bangladesh Medical Research Council, Ministry of Education and other sources		
Collaboration (national/regional/international)	 Dr. Rashel Kabir, Dept of Biochemistry and Molecular Biology, Rajshahi University Professor Monzur Hossain, Dept of Botany, Rajshahi University Dr. Robin Doley, Department of Molecular Biology and Biotechnology, Tezpur University, Assam, India Professor R.M. Kini, Dept of Biological Sciences, National University of Singapore 		
Associated manpower with expertise	Two PhD Fellow (also colleague in the department) Four MSc. Research students, Four 4th Year Project students		
Facility available	PCR, PCR reagents and primers, Orbital Shaker -30°C freezer, Balance, centrifuge, pH Meter, etc		
Specific constraints if any	Funding is the main constrain to carry our projects. An HPLC and Mass spectrometer is a crucial need for the project as well as for the Department.		
Others	N/A		

RESEARCH PROJECT	Oxidative stress related mtDNA deletion and its biological consequences.
Executing department	Department of Genetic Engineering and Biotechnology, University of Dhaka (DU)
Areas of biotechnology	Medical Genetics, Molecular and industrial Biotechnology
Team leader (with contact address)	Md. Miraj Kobad Chowdhury, Lecturer, Department of Genetic Engineering and Biotechnology, University of Dhaka (DU)
Objectives of the project	Energy conservation in extreme stress condition and its effect.
Outcomes of the project	Under investigation
Project period	1-5 years
Source of funding	MOST, DU
Collaboration (national/regional/international)	UFRI, Canada
Associated manpower with expertise	02 research students
Facility available	All required facilities are available now
Specific constraints if any	N/A
Others	N/A

RESEARCH PROJECT \gg

Development of a high throughput solid phase DNA mutation screening system and its application to disease diagnoses

Executing department/Organization	Molecular Biotechnology Division of NIB			
Areas of Biotechnology	Molecular Biotechnology			
Team leader (with contact address)	Dr. Md. Salimullah, CSO, NIB.			
Objectives of the project/program	 I. To develop a general method that distinguishes genetic mutation II. To adopt the method for clinical applications III. To offer genetic diagnostic service IV. To develop diagnostic kit 			
Outcomes of the project/program	Successful detection of point mutation, single nucleotide polymorphism (SNP), insertion, deletion etc. by the developed method Application of the method to clinical diagnosis of genetic diseases			
Project period	2013-2015			
Source of funding	Ministry of Science and Technology (Special allocation)			
Collaboration (national/regional/international)				
Associated manpower with expertise	(a) Keshob Chandra Das, Senior Scientific Officer, Molecular Biotechnology Division, NIB(b) U.S.Mahzabin Amin, Scientific Officer, Molecular Biotechnology Division, NIB			
Facility available	Well designed and spacious modern laboratory, Isolated unit of laboratory for molecular biology experiments, DNA Sequencer, Real-time PCR, Thermal cycler, Gel electrophoresis unit, ELISA reader etc.			
Specific constraints if any	N/A			
Others	N/A			

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Association of type 2 diabetes linked genetic variants to gestational diabetes mellitus in the Bangladeshi women

Executing department/Organization	Molecular Biotechnology Division
Areas of Biotechnology	Molecular Biotechnology
Team leader (with contact address)	Dr. Md. Salimullah, Chief Scientific Officer Molecular Biotechnology Division, National Institute of Biotechnology, Ganakbari, Savar, Dhaka-1349, Cell: 01738-999993
Objectives of the project/program	 To identify the frequency of the genetic polymorphisms in five genes associated with Type-2 Diabetes Mellitus. To observe the association of the tested polymorphisms in GDM women with positive family history of T2DM in 1st degree relatives. To observe the variation of demographic and anthropometric characteristics between GDM and non-GDM mothers
Outcomes of the project/program	The outcome of this project will provide an upper hand to the Bangladeshi women with GDM to combat T2DM who are otherwise neglected in many aspects
Project period	July, 2014 to June, 2015
Source of funding	Ministry of Science & Technology (Applied for fund), National Institute of Biotechnology
Collaboration (national/regional/international)	Department of Endocrinology, Bangabandhu Sheikh Mujib Medical University (BSMMU), Bangladesh.
Associated manpower with expertise	(a)Keshob Chandra Das, Senior Scientific Officer, Molecular Biotechnology Division, National Institute of Biotechnology, Ganakbari, Savar, Dhaka-1349. Cell: 01911115760 (b)U.S.Mahzabin Amin, Scientific Officer, Molecular Biotechnology Division,NIB
Facility available	Well designed and spacious modern laboratory, Isolated unit of laboratory for molecular biology experiments, DNA Sequencer, Real-time PCR, Thermal cycler, Gel electrophoresis unit, ELISA reader etc.
Specific constraints if any	N/A
Others	N/A

RESEARCH PROJECT	Preparing National Database for Snake species of Bangladesh
Executing department	Department of Genetic Engineering and Biotechnology, University of Rajshahi
Areas of biotechnology	Molecular Biology/ Protein chemistry
Team leader (with contact address)	Dr. Md Abu Reza, Department of Genetic Engineering and Biotechnology, University of Rajshahi
Objectives of the project	To construct a comprehensive database on the snakes of Bangladesh. The current study is not field based rather it is based on existing information. As venom protein components are one of the most important factor of the venom, an elaborated composition of the venom along with their sequences and features are included in the database. Three dimensional (3D) structures of the protein components is also being determined using molecular modeling. Each of these predicted 3D structures is also being incorporated in the database. The database is expected to be launched by August, 2013.
Outcomes of the project	1st National database of the snakes and venom components of the venous snakes is the direct outcome of the project.
Project period	2012-2014
Source of funding	University of Rajshahi and other sources
Collaboration (national/regional/international)	 Dr. Rashel Kabir, Dept of Biochemistry and Molecular Biology, Rajshahi University Professor Monjur Hossain, Dept of Botany, Rajshahi University Dr. Robin Doley, Department of Molecular Biology and Biotechnology, Tezpur University, Assam, India Professor R.M. Kini, Dept of Biological Sciences National University of Singapore
Associated manpower with expertise	Two PhD Fellow (also colleague in the department), Four MSc. Research students, Four 4th Year Project students
Facility available	PCR, PCR reagents and primers, Orbital Shaker -30 freezer, Balance, centrifuge, pH Meter, etc
Specific constraints if any	Funding is the main constrain to carry our projects.
Others	N/A

RESEARCH PROJECT	Establishment of human DNA profiling service facilities at National Institute of Biotechnology (NIB)
Executing department/Organization	Molecular Biotechnology Division National Institute of Biotechnology
Areas of Biotechnology	Medical/ Molecular Biotechnology/ Forensic science
Team leader (with contact address)	Keshob Chandra Das, Senior Scientific Officer Molecular Biotechnology Division, National Institute of Biotechnology Cell: +8801712687287
Objectives of the project/program	Establishment of human DNA profiling facilities and to deliver DNA profiling service to common people, judicial system and law enforcement agencies
Outcomes of the project/program	Human DNA profiling facilities development
Project period	July, 2010 - December, 2014
Source of funding	GoB
Collaboration (national/regional/international)	National Forensic and DNA Profiling Laboratory (NFDPL), Dhaka Medical College, Dhaka (proposed)
Associated manpower with expertise	(a) Dr. Md. Salimullah, Chief Scientific Officer, Molecular Biotechnology Division, NIB(b) U.S.Mahzabin Amin, Scientific Officer, Molecular Biotechnology Division, NIB
Facility available	ABI 3130 Genetic Analyzer, Well designed and spacious modern molecular biology laboratory, isolated unit for sample collection and processing, Real-time PCR, Thermal cycler, Gel electrophoresis unit, Incubator etc.
Specific constraints if any	N/A

N/A

Others

RESEARCH PROJECT >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Executing department/Organization	Molecular Biotechnology Division National Institute of Biotechnology			
Areas of Biotechnology	Molecular Biotechnology			
Team leader (with contact address)	U.S. Mahzabin Amin Scientific Officer, Molecular Biotechnology Division, National Institute of Biotechnology, Ganakbari, Savar, Dhaka-1349. Cell: 01720101859			
Objectives of the project/program	Establishment of DNA sequencing facilities and to deliver service to researchers, academicians and thesis students			
Outcomes of the project/program	To provide DNA sequencing service to researchers, academicians and thesis students			
Project period	January, 2014 – December, 2014			
Source of funding	GoB			
Collaboration (national/regional/international)	N/A			
Associated manpower with expertise	 (a) Dr. Md. Salimullah, Chief Scientific Officer, Molecular Biotechnology Division, NIB – Molecular Biotechnology (b) Keshob Chandra Das, Senior Scientific Officer, Molecular Biotechnology Division, NIB – Molecular Biotechnology 			
Facility available	ABI 3130 Genetic Analyzer, Well designed and spacious modern molecular biology laboratory, isolated unit for sample collection and processing, Real-time PCR, Thermal cycler, Gel electrophoresis unit, Incubator etc.			
Specific constraints if any	N/A			
Others	N/A			



National Database on Biotechnology Research & Personnel Biotechnology Personnel



Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Abdullah Al Emran Assistant Professor emrangeb@gmail.com Email: emranbge@mbstu.ac.bd Cell: 01553212237	Human, Clinical & Population Genetics, Bioinformatics, Systems Biology, Medical Biotechnology, Public Health, Genetic Epidemiology,	Polymorphism study of metabolic disorders; Mutation study of lung cancer; Investigation of risk factors of different disease through statistics and bioinfor- matics.	Dept of Biotechnology and Genetic Engineering, Mawlana Bhashani Science and Technology University, Tangail
Abhijit Chowdhury Scientific Officer Email: abhibcsir@gmail.com Cell: 01818 568 936, 8614884	Biochemistry & Molecular Biology, Food Microbiology and Food safety, Industrial Microbiology and Biotechnology	Production of cellulase enzyme by Trichoderma, Detection of Mycotoxin producing fungi from animal feed	Industrial Microbiology Laboratory, Institute of Food Science and Technology, Bangladesh Council of Scientific and Industrial Research, Dhanmondi, Dhaka
Ahlan sabah Ferdous Research Associate Email: ahlan.sabah.ferdous@gmail.com Cell: 01974363555	Plant Biotechnology	Jute research at molecular level	Molecular Biology Lab, Department of Biochemistry and Molecular Biology, Dhaka University
A.H.M. Nurun Nabi Professor Email: nabi@du.ac.bd Cell: 01914737989	Plant Biotechnology	Jute research at molecular level	Molecular Biology Lab, Department of Biochemistry and Molecular Biology, Dhaka University
Ahsan Habib Assistant Professor Email: ahsan.genetics@yahoo.com Cell: 01713-383923	Molecular Biology, Plant Biotechnology	Teaching and Research	BGE Discipline, Khulna University
Ahsan Habib Polash Research Associate Email: paulahsan@gmail.com paulahsan@iub.edu.bd Cell: 01719087437	Plant and Microbial Biotechnology	Teaching at Independent University, Bangladesh	Molecular Biology Lab, Department of Biochemistry and Molecular Biology, University of Dhaka.
A. K. M. Fahmidul Haque Lecturer Email: fahmidulhaque@yahoo.com Cell: 01717234002	Medical Biotechnology, Plant Biotechnology	Teaching and research (on parasitic disease, cancer and infertility management)	Bangladesh Institute of Medical Science (BIMS), N/23, Nurjahan Road, Mohammadpur Dhaka-1207, Bangladesh
A. K. M. Mostafa Anower Assistant Professor Email: mostafaanower@yahoo.com Cell: 01711069468	Animal Biotechnology, Veterinary Microbiology and Public Health	Teaching and Research. Molecular Immunology, Animal Model	Department of Microbiology, Faculty of Animal Science and Veterinary Medicine, Patuakhali Science and Technology University, Babugonj, Barisal

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
A.K.M. Nazmul Huda Assistant Professor Email: akmnhuda@btge.iu.ac.bd nazimrajbd@yahoo.com Cell: 01728637047	Molecular Biology	Teaching	Department of Biotechnology and Genetic Engineering, Islamic University, Kushtia-7003
A. K. M. Sahadat Hossain Senior Scientific Officer Email: shahadatbiotech@yahoo.com Tel: 08022-56125 (Off) Cell : 01552409846	Plant Biotechnology	Farm Management (on deputation)	Jute Research Regional Station, Chandina, Comilla
A.S. M. Kamruzzaman Scientific Officer Email: jony_anny@yahoo.com Cell: 01711043282	Plant Biotechnology	Farm Management	Jute Research Sub-Station, Tarabo, Rupganj, Narayanganj
Abu Hashem Senior Scientific Officer Email: hashemnib04@yahoo.com Cell: 017603889999	Microbial biotechnol- ogy and enzyme technology	Research: Enzyme Technology	Microbial Biotechnology Division, National Institute of Biotechnology, Ganakbari, Savar, Dhaka
Abu Reza Md. Mahfuzur Rahman Assistant Director (Horti- culture) Email: abureza111@yahoo.com Cell: 01718-438161	Plant Biotechnology	Development of sustainable in vitro propagation techniques for commercial production of Orchids in Bangladesh	Horticulture Development Center, Bangladesh Agricultural Development Corporation (BADC), Nowdapara, Rajshahi
Abu Sayed Mohammad Mahmood Scientific Officer Email: sayedrism@gmail.com Cell: 01746700196	Microbiology	Microbial Fermentation, Diseases in the shrimp farm, antibiotic sensitivity, and mycotoxin and antibiotic residues detection.	BCSIR Laboratories, Chittagong
Abul Faiz Md. Jamal Uddin Assistant Professor Email: jamal4@yahoo.com Cell: 01731840979	Plant Biotechnology	rDNA analysis	Department of Horticulture Sher-e-Bangla Agricultural University, Dhaka-1207
Abul Hasnat M Solaiman Professor Email: solaimansau@gmail.com	Medicinal plants, ultraviolet radiation effect on Plants, Rooftop Gardening.	Teaching and Research UV radiation on pigmentation and insect control of horticultural crops	Department of Horticulture Sher-e-Bangla Agricultural University, Dhaka-1207

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Ahmad Ferdous Scientific Officer Email: ferahm77@yahoo.com Cell: 01552365764, 9131711	Medical Biotechnology	Creating Human mtDNA Database by sequence analysis	National Forensic DNA Profiling Laboratory, Dhaka Medical College, Dhaka
Alamgeer Hossain Graduate Student Email: alamgeerbmbdu@yahoo.com Cell: +8801191387283	Plant Biotechnology	Graduate thesis Student, Department of Biochemistry and Molecular Biology	Plant Biotechnology Lab, Department of Biochemistry and Molecular Biology, University of Dhaka, Dhaka
Aleya Ferdousi Research Fellow Email: ferdousi.aleya@yahoo.com Cell: 01720127523	Plant tissue culture	Research on identification, characterization and micro propagation of plant	Plant Tissue Culture Section, Biological Research Division, BCSIR Laboratories, Dhaka-1205
Aliya Ferdousi Research Associate Email: aliya_supti@yahoo.com Cell: +8801913019666	Plant Biotechnology	Cloning & transforma- tion for providing salt tolerance	Plant Biotechnology Lab, Department of Biochemistry & Molecular Biology, University of Dhaka, Dhaka
A.M.A.M. Zonaed Siddiki Associate Professor Email: zsiddiki@gmail.com Tel. 88031659093 (ext 113) Cell: 8801717718884 Fax. 88 031 659620 (lab)	Animal Biotechnology	Teaching and Research	Department of Pathology and Parasitology, Chittagong Veterinary and Animal Sciences University, Khulshi, Chittagong-4202
Amit Kumar Dutta Assistant Professor Email: amit_geb@ru.ac.bd, amitdutta_81@yahoo.com Cell: 01711573211	Plant	UGC project	Dept. of Genetic Engineering and Biotechnology, University of Rajshahi
Anika Tabassum Lecturer Email: anikat742@gmail.com Cell: 01822893388	Microbiology	Research and Teaching	Department of Botany, Jagannath University, Dhaka-1100
Arif Mohammad Tanmoy Research Associate Email: arif_tanmoy@yahoo.com Cell: 01675693842	Plant Biotechnology, Bioinformatics, Industrial Biotechnology	Research Associate	Molecular Biology Lab, Department of Biochemistry and Molecular Biology, University of Dhaka, Dhaka
Arju Miah Scientific Officer Email: arju_120@yahoo.com Tel: 0651-62138 (Off) Cell: 01720296611	Plant Biotechnology	Farm Management	Jute Agriculture Experimental Station, Jagir, Manikganj

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Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Aruna Biswas Scientific Officer Tel: 07326-63414 Cell: 01712072756	Plant Biotechnology	Research on Plant Tissue Culture	Biotechnology Division, Bangladesh Sugarcane Research Institute, Ishurdi-6620, Pabna
Asif Ahmed Assistant Professor Email: asif@bge.ku.ac.bd Cell: 01741-140712	Molecular Biology, Molecular Modeling	Teaching and Research	BGE Discipline, Khulna University
Asish Kumar Ghose Scientific Officer Email: asishbt@yahoo.com Tel: 07326-63414 Cell: 01712158406	Plant Biotechnology	Tissue Culture, Molecular Biology and Genetic Transformation	Biotechnology Division, Bangladesh Sugarcane Research Institute, Ishurdi-6620, Pabna
Asma Ahmed Warasy Ph.d Student Email: aawarasy@yahoo.com Cell: 01911913428	Molecular cytogenetics	Cytogenetical analysis of wild <i>clotaria spp.</i>	Molecular cytogenetics Lab. , Dept. of Botany, University of Dhaka
Auvijit Saha Apu Assistant professor Email: auvijit_bau@yahoo.com Cell: 01716325383	Animal Biotechnology	Reproductive Biotechnology	Department of Animal Breeding and Genetics, Bangladesh Agriculture University, Mymens- ingh-2202
Barna Goswami Research associate Email: Barnagdu@gmail.com	Plant breeding and biotechnology	Plant breeding and biotechnology	Plant breeding and biotechnology lab., Dept. of Botany, University of Dhaka
Bhabendra Kumar Biswas Professor Email: professorbiswas@gmail.com Cell: 01741461882	Aromatic rice breeder	Teaching & research Genetics and Plant Breeding	-
Bivas Kumar Sarkar Lecturer Email: bs25us@yahoo.com Tel: 7176172 (off) Cell: 01912718821	Plant Biotechnology, Plant Tissue Culture, Plant Breeding	Teaching & Research	Department of Botany, Jagannath University, Dhaka-1100
Borhan Ahmed Scientific Officer Email: bahmed989@yahoo.com Cell : 01713376573	Plant Biotechnology	Biotechnological Research	Basic and Applied Research on Jute Project, BJRI, Dhaka
Dr. A. Faiz Md. Jamal Uddin Email: Jamal4@yahoo.com	Molecular Biology (DNA sequencing)	Phylogenetic relationships of Phytophthora based on rDNA	Department of Horticulture, Sher-E-Bangla Agricultural University, Dhaka-1207

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. A. K. Fazlul Haque Bhuiyan Professor Email: bhuiyanbau@gmail.com Cell: 01715047767	Livestock Breeding	Community based Native Chicken and Goat development	Department of Animal Breeding and Genetics, Bangladesh Agricultural University, Mymensingh-2202
Dr. A. K. M. Shamsuddin Professor Email: shams_gpb@yahoo.com Cell: 01716-918544	Plant Biotechnology	Genetics Plant Breeding	Department of Genetics and Plant Breeding, Bangladesh Agricultural University, Mymensingh-2202
Dr. A. K. M. Zakir Hossain Professor Email: zakirh14@yahoo.com Cell: 01713-113559	Plant Biotechnology	Teaching and Research	Department of Crop Botany, Bangladesh Agricultural University, Mymensingh-2202
Dr. A. N. K Mamun Principal Scientific Officer Email: ankmamun@yahoo.com Tel: 02-7790029 Fax: 02-7789620	Plant Biotechnology	Research on Plant Biotechnology	Plant Biotechnology and Genetic Engineering Division, Institute of Food and Radiation Biology, Atomic Energy Research Establishment (AERE), Savar, Dhaka-1000
Dr. Anjuman Ara Bhuyian Scientific Officer Email: aab_bau@yahoo.com Cell: 01834206936	Animal Biotechnology	Bacteriology Virology	National Institute of Biotechnology, Ashulia, Savar, Dhaka-1349
Dr. A. S. Mahfuzul Bari Professor and Vice-chancellor, CVASU Email: bari.bau.bd@gmail.com Cell: 01717-838915	Animal Biotechnology (Molecular Pathology)	Hybridoma Technology	Department of Pathology, Bangladesh Agricultural University, Mymensingh-2202
Dr. Abdul Gaffar Miah Assistant Professor Email: amia@itw.uni-bonn.de Tel: +49-228-733385 (Office) +49-15774590295 and Email: agmiah2007@yahoo.com Tel: +88-0531-61347 (Office)	Animal Biotechnology	Working in Bonn University, Germany as a Humboldt Post Doc Research Fellow	Department of Genetics and Animal Breeding, Hajee Moha. Danesh Science and Technology University, Dinajpur-5200.
Dr. Abdullah Mohammad Shohael Associate Professor Email: amshohaelju@gmail.com Tel: 880-2-7791045-51, Ext: 1701	Plant Biotechnology	Teaching and Research	Department of Biotechnology & Genetic Engineering, Jahangirnagar University, Savar, Dhaka 1342
Dr. Abdus Satter Miah Senior Scientific Officer Email: mabdussatter@yahoo.com Cell: 01552363449	Food Biotechnology	Cereal Based Weaning Food	BCSIR Laboratories, Chittagong-4220

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Abu Nasar Md. Aminoor Rahman Professor and Head Email: aminoor69@yahoo.com aminoor69@gmail.com Cell: 01733769800	Animal Biotechnology	Production of animal embryos through in vitro fertilization (IVF) and intracytoplasmic sperm injection (ICSI) technique	Department of Gynecology, Obstetrics & Reproductive Health, Faculty of Veterinary Medicine & Animal Science, Bangabandhu Sheikh Mujibur Rahman, Agricultural University, Gazipur-1706
Dr. Abul Kalam Azad Chief Scientific Officer Email: drakazad61@yahoo.com Tel: 02-9126664 Cell: 01727 210995 Fax: 88-02-8110924, 8113032	Biotechnology, Bio-safety	Policy development related to Biotechnology & bio-safety, Biotech project implementation and monitoring Biotechnology related research project of SPGR under NATP	Crops Division, Bangladesh Agricultural Research Council (BARC), Farmgate, Dhaka-1215
Dr. Ahmad Faisal Karim Email: afk_bmb@yahoo.com	Plant iotechnology, Medical Biotechnolo- gy, Microbial Biotechnology, Bioinformatics	Post Doc. Research Fellow	Molecular Biology Lab, Department of Biochemistry and Molecular Biology, University of Dhaka, Dhaka
Dr. Md. Al-Amin Chief Scientific Officer Email: alamin09@yahoo.com Cell: 01556310024	Plant Biotechnology	Plant tissue culture, molecular genetics	Biotechnology Division, Bangladesh Agricultural Research Institute, Gazipur-1701
Dr. Aminuzzaman Md. Saleh Reza Professor Email: salehbgd@yahoo.com Tel: 0721-751471	Animal Biotechnology, Bioinformatics	Teaching Silkworm Molecular Biology, Health Biology and Bioinfromatics	Department of Zoology, University of Rajshahi, Rajshahi-6205
Dr. Ananda Kumar Saha Professor Email: anandroma@yahoo.com Cell: 01712637349	Environmental Biotechnology	Teaching and Research on Environmental Biotechnology	Department of Zoology, University of Rajshahi, Rajshahi-6205
Dr. Anil Chandra Deb Professor Email: anil_deb2001@yahoo.com debac@ru.ac.bd Cell: 01556314401 01914254288	Biometrical Genetics, Tissue culture, and Breeding	Chairman as well as working as research supervisor at graduate, post graduate and doctoral levels	Genetic Engineering and Biotechnology, University of Rajshahi, Rajshahi-6205
Dr. Anowara Begum Professor Email: anowara71@yahoo.com Tel: 9661920-73/Ext. 7747	Environmental and Molecular Microbiology	Environmental and Clinical Microbiology	Department of Microbiology, University of Dhaka, Dhaka-1000
Dr. Arifur Rahman Assistant Professor Email: arifmicro2003@yahoo.com Cell: 01711-390939	Animal Biotechnology	Microbiology & Hygiene	Microbiology & Hygiene Department, Bangladesh Agricultural University, Mymensingh-2202

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Atiqur Rahman Associate Professor Email: atiq.ac@gmail.com Cell: 01675 902070	Industrial Biotechnology, Plant Biotechnology	Teaching and supervi- sion of M. Sc. and Ph. D research student	Department of Applied Chemistry and Chemical Technology, Islamic University, Kushtia-7003.
Dr. Ayesha Ashraf Professor Email: ayesha_ku_bge@yahoo.com Cell: 01711398312	Animal Genetics and Breeding, Animal Biotechnology	Teaching and Research	Biotechnology and Genetic Engineering Discipline, Khulna University, Khulna-9208
Dr. Azaharul Islam Talukder Principal Scientific Officer Email: talukdr@yahoo.com Cell: 01712998099	Animal Biotechnolo- gy	-	Goat and Sheep production Division, Bangladesh Livestock Research Institute, Savar, Dhaka
Dr. Chandan Kumar Saha Chief Scientific Officer Email: chandanbjri@yahoo.com Tel: 9112875 (Off) Cell: 01716510338	Plant Biotechnology	Research Management	Planning, Training and Communication Division, Bangladesh Jute Research Institute, Manik Mia Avenue, Dhaka-1207
Dr. Chowdhury Rafiqul Ahsan Professor Email: crahsan@univdhaka.edu Cell: 01819401185	Medical Biotechnology	Immunodiagnostics	Department of Microbiology, University of Dhaka Dhaka-1000
Dr. Dilara Islam Sharif Associate Professor Email: dilara.sharif@yahoo.com Cell: 01552-346691	Clinical & Environmental Microbiology	Teaching and Research	Biotechnology & Genetic Engineering discipline, School of Life Sciences, Khulna University, Khulna-9208
Dr. Dipak Kumar Paul Professor Email: dipakiu@yahoo.com Cell: 8801712257016 01191753923	Food Biotechnology, Fisheries Biotechnology	Teaching and supervision of M. Sc. and Ph. D research student	Faculty of Applied Science and Technology, Islamic University, Kushtia-7003
Dr. Emdadul Haque Chowdhury Email: emdad001@yahoo.com Cell: 01712-017381	Animal Biotechnology	Avian Influenza	Department of Pathology, Bangladesh Agricultural University, Mymensingh-2202
Dr. Farid A. Talukder Assistant Professor Email: f.a.talukder@gmail.com Tel: (+ 968) 24141209 Fax: (+ 968) 24414115	Insect Biotechnology, Insect Molecular Biology	Insecticide Resistance gene in Insect-pests, Genetic Biotypes in Insect-pests	Department of Crop Sciences, Sultan Qaboos University, PO Box 34, Al-Khod 123, OMAN
Dr. Farida Yasmin Bari Professor Email: fybari61@yahoo.com.au Cell: 01720-450244	Animal Biotechnology	Reproductive Biology	Surgery & Obstetrics Department, Bangladesh Agricultural University, Mymensingh-2202
Dr. Fatema Hoque Shikha Professor Email: shikhafh@hotmail.com Cell: 01710852256	Fisheries Biotechnology (Food processing)	Fish development, quality control	Department of Fisheries Technology, Faculty of Fisheries, Bangladesh Agricultural University, Mymensingh-2202

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Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Fazlul Haque Bhuiyan Professor Email: bhuiyanbau@gmail.com Cell: 01715-047767	Animal Biotechnology	Animal Reproduction	Department of Animal Breeding & Genetics, Bangladesh Agricultural University, Mymensingh-2202
Dr. Ferdousur Rahman Khan Assistant Professor Email: frkhanbau80@yahoo.com Cell: 01928-337883	Animal Biotechnology	Microbiology & Hygiene	Microbiology & Hygiene Department, Bangladesh Agricultural University, Mymensingh-2202
Dr. Gazui Nurun Nahar Sultana Principal Scientist Email: nngazi@gmail.com Cell: 01713066848	Molecular Biology (Human)	Research on Human Genomics	Centre for Advanced Research in Sciences (CARS), University of Dhaka
Dr. Gias Uddin Ahmed Professor Email: giasa50@gmail.com Cell: 01712 564528	Fisheries Biotechnology (Fish Pathology)	Fish Health, Disease and Histopathology	Department of Aquaculture, Faculty of Fisheries, Bangladesh Agricultural University, Mymensingh-2202
Dr. Harunur Rashid Associate Professor Email: rashid.fish.bau@gmail.com Cell: 01924429971 www.fishbasebd.com	Fisheries Biotechnology (Fish Reproductive Biotechnology)	Immuno histochemical localization of GnRHs in fish brain and pituitary	Department of Fisheries Management, Faculty of Fisheries, Bangladesh Agricultural University, Mymensingh-2202
Dr. Haseena Khan <i>Professor</i> Email: hasina@bangla.net hasina@univdhaka.edu Cell: 01711612344	Plant Biotechnology	Genetic improvement of Jute	Department of Biochemistry and Molecular Biology, University of Dhaka, Dhaka
Dr. Ismail Hossain <i>Professor</i> Email: dhossain69@gmail.com ismail.ppath@bau.edu.bd Cell.: 01711423009	Plant Biotechnology	 Nursery diseases of fruit species in Bangladesh and molecular characterization of their pathogens with developing a model of their management Selection of Environmental stress tolerant pulse materials. Eco-friendly management of diseases of crop plants 	Department of Plant Pathology, Bangladesh Agricultural University, Mymensingh-2202
Dr. Jamilur Rahman Associate Professor Email: jamilsau@yahoo.com jamilsau@gmail.com Cell: 01552323928	Plant Biotechnology, Bioinformatics	Molecular Characterization and identification of salt and drought tolerant genes from rice genotypes	Department of Genetics and Plant Breeding, Sher-E-Bangla Agricultural University, Dhaka-1207

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Jesmin Associate Professor Email: jesmin@univdhaka.edu mailjesmin@yahoo.com Tel: 9662222 (Res), Office Ex7819, 7815	Molecular Biology, Disease Mechanism & Drug designing Computitional Genomics & Bioinformatics	Molecular Biology, Disease Mechanism & Drug designing Computational Genomic & Bioinformatics	Dept. of Genetic Engineering & Biotechnology, University of Dhaka, Dhaka-1000
Dr. K.B.M. Saiful Islam Assistant Professor Cell: 01674173844 Email: vetkbm@yahoo.com	Microbial and animal Biotechnology	Development of probiotics for birds and animal. Study on antibiotic resistance of infectious bacteria – development of alternative herbal antibiotics for animals and birds	Dept. of Medicine and Public Health, Faculty of Animal Science & veterinary Medicine, Sher-e-Bangla Agricultural University Dhaka-1207
Dr. Kazi Mohammed Didarul Islam Associate Professor Email: didar950718@yahoo.com Cell: 01726-852004	Molecular Biotechnology	Teaching and Research	BGE Discipline, Khulna University
Dr. Khan Shahidul Huque Director General Email: khanshahidul_huque@yahoo.com dgblri09@yahoo.com Cell: +88-02-01552376788 Fax: 88-02-7791675	Animal Biotechnology (Animal Nutrition)	Milk urea nitrogen and dairy cattle nutrition; Herbal feed additive for ruminants; 100 days nutrition for dairy cows	Bangladesh Livestock Research Institute, Savar, Dhaka-1341
Dr. Khandakar Shariful Islam Cell: 01716370731	Insect Biotechnology, Biopesticide	Teaching and Research	Department of Entomology, Bangladesh Agricultural University, Mymensingh-2202
Dr. Khondoker Moazzem Hossain Professor Email: kmhossainbt@yahoo.com.au Cell: 01711381803	Molecular Biology & Molecular Genetics, Animal Biotechnology & Genetic Engineering, Animal Cell Culture, Food Biotechnology	Teaching and Research	Biotechnology and Genetic Engineering Discipline, Khulna University, Khulna-9208
Dr. Lutful Hassan Professor Email: lutfulhassan@yahoo.co.uk Cell: 01712055899	Plant Biotechnology	Genetics and Plant Breeding	Department of Genetics and Plant Breeding, Bangladesh Agricultural University, Mymensingh
Dr. M. A. Malek Professor Email: malek.1959@yahoo.com Cell: 01552423977	Biotechnological processing	Microbiological aspects of food processing, Microbial Enzymes production, Microbial utilization of waste materials	Department of Microbiology, University of Dhaka Dhaka-1000

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Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. M. A. Bari Miah Professor Email: mabaribd@yahoo.com	Plant Biotechnology	Teaching and Research	Institute of Biological Sciences, Rajshahi University Rajshahi-6205
Dr. Md. Abdul Alim Senior Scientific Officer Email: malimabg@yahoo.com Cell: 01718110582	Animal Biotechnology	Marker assisted selection,	National Institute of Biotechnology, Ashulia, Savar, Dhaka-1349
Dr. M. A. M. Yahia Khandakar Professor Email: yahiakhabg@yahoo.com Cell: 01711-040178	Reproductive Biotechnology	Reproductive Biotechnology	Department of Animal Breeding & Genetics, Bangladesh Agricultural University Mymens- ingh-2202
Dr. M. Abbas Ali Chief Scientific Officer Email: abbasbjri@yahoo.com Tel: 9145933 (Off) Cell: 01673376105	Plant Biotechnology	Biotechnological Research	Genetic Resources and Seed Division, Bangladesh Jute Research Institute, Manik Mia Avenue, Dhaka-1207
Dr. M. Abdul Karim <i>Professor</i> Email: akarim1506@yahoo.com Tel: 8802920510-14/2095 Fax: 88029205333 Cell: 01716752414	Plant Biotechnology	Improvement of salinity stress tolerance in crops	Department of Agronomy, Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur-1706
Dr. M. Abdul Karim Professor Email: profkarim@yahoo.com Cell: 01711575076	Plant Biotechnology	Tissue Culture & Regeneration of Teasle gourd	Department of Crop Botany & Dean, Faculty of Agriculture, Bangladesh Agricultural University, Mymensingh-2202
Dr. M. Bahadur Meah Professor Email: bmeah@yahoo.com Cell: 01711 667234	Plant Biotechnology	Identification of gene(s) for resistance to Phomopsis fruit rot, collar rot and Shoot & Fruit borer in eggplants	IPM Lab, Department of Plant Pathology, Bangladesh Agricultural University, Mymensingh-2202
Dr. M. Imdadul Hoque <i>Professor</i> Email: mimdadul07@yahoo.com imdadul57@yahoo.com Tel: 967-3387 966-1900-60/ Extn. 7545 Fax: +88-02-861-5583 Cell: 01711-224350	Plant Biotechnology	Teaching & Research on plant breeding, plant tissue culture, plant genetic engineering and biosafety related issues	Department of Botany University of Dhaka Dhaka - 1000
Dr. M. Obaidul Islam Professor Email: obaidul7_mo@yahoo.com Cell: 01716334292	Plant Biotechnology	Orchid tissue culture and improvement	Department of Crop Botany, Bangladesh Agricultural University, Mymensingh-2202

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. M. Saiful Islam Professor Email: saifulzoo@yahoo.co.uk Cell: 01721-750541	Animal Biotechnology, Bioinformatics	Teaching and Research	Department of Zoology, University of Rajshahi, Rajshahi-6205
Dr. Mohammad Shamimul Alam Professor Email: shamimul@du.ac.bd Cell: 01839886472	Genetics and Molecular Biology	<i>Drosophila</i> taxonomy using molecular techniques	Department of Zoology, Dhaka University
Dr. M. Tofazzol Hossain Howladar Assistant Professor Email: tofazzolh@gmail.com Cell: 01557017362	Insect Biotechnology, Microbial Biotechnology, Biopesticide	Teaching and Research	Department of Entomology, Bangladesh Agricultural University, Mymensingh-2202
Dr. Mahabubul Pratik Siddique Assistant Professor Email: mpsiddique77@gmail.com Cell: 01719-079957	Animal Biotechnology	Microbiology & Hygiene	Microbiology & Hygiene Department, Bangladesh Agricultural University, Mymensingh-2202
Dr. Mahbuba K Siddiqua Associate Professor Email: siddiqum@uoguelph.ca	Plant Biotechnology	Cold tolerant genes in grapes and bean-gene for disease resistance and industrial product	Department of Horticulture, Bangladesh Agricultural University, Mymensingh 2202. Present Address: Research Associate, Department of Plant Agriculture, University of Guelph, Guelph, Canada
Dr. Mahfuza Khan Principal Scientific Officer Mahfuza79@gmail.com Email: mahfuzakhan@yahoo.co.uk Tel: +880-2-778 9423 (Off.) Cell: 01741129286	Insect Biotechnology	Working as 'Chief Scientific Investigator' of IAEA Co-Ordinated Research Program (CRP)-No. 17011/R0 & R1	Insect Biotechnology Division, Institute of Food and Radiation Biology, Atomic Energy Research Establishment, Savar, Dhaka
Dr. Mahmuda Khatun Senior Scientific Officer Email: mkhatun05@yahoo.com Cell: 01552329091	Plant Biotechnology	Plant Tissue culture and molecular genetics	Biotechnology Division, Bangladesh Agricultural Research Institute (BARI), Joydebpur, Gazipur -1701
Dr. Mamunur Rashid Professor Email: mamunur_hstu@yahoo.com Cell: 01556-307423 Phone: 0531-61121 (Res)	Bioinformatics (Plant Pathology)	Development of natural fungicide, seed health development, plant-microbes interactions, selection of outstanding fine aromatic Katarivog rice	Department of Plant Pathology, Hajee Mohammad Danesh Science and Technology University (HSTU), Dinajpur

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Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Mariam Farhad <i>Lecturer</i> Email: m.farhad@uws.edu.au	Food Biotechnology	Lecturer in Food and Nutrition, The University of Western Sydney, Australia	Lecturer in Nutrition, School of Natural Sciences, College of Health and Science, The University of Western Sydney, Hawkesbury Campus, Richmond, NSW- 2753
Dr. Marufa Zerin Akhter Associate Professor Email: mzakhter@univdhaka.edu Tel: 9661920-73/Ext. 7751	Molecular Biology, Clinical Microbiology	Clinical Microbiology & Environmental Microbiology	Department of Microbiology, University of Dhaka, Dhaka-1000
Dr. Masum Ahmad Professor Email: masum_bau2006@yahoo.com Fax: +880 91 61510 Cell: 01716 665704	Insect Biotechnology, Biopesticide	Teaching and Research	Department of Entomology, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Jahangir Alam Chief Scientific Officer Email: alamjahan2003@yahoo.com jalam@nib Cell: 01712819098	Animal Biotechnology	Molecular virology Gene expression, Monoclonal antibody production	National Institute of Biotechnol- ogy, Ashulia, Savar, Dhaka- 1349
Dr. Md. Shamsher Ali Chief Scientific Officer Email: mds.ali2003@gmail.com Cell: 01715158031	Plant Biotechnology	Identification of QTLs from rice wild relatives for high yield, Identification of QTLs for salinity tolerance both at seedling and reproductive stage in rice, Development of salt tolerant rice varieties through genetic engineering	Bangladesh Rice Research Institute (BRRI), Gazipur-1701
Dr. Md. Abdullah Yousuf Akhond Principal Scientific Officer Email: a_akhond@hotmail.com Cell: 01715000633	Plant Biotechnology	Plant breeding, plant Tissue culture, gene expression, gene silencing, molecular plant virology and genetic engineering	Biotechnology Division, Bangladesh Agricultural Research Institute (BARI), Joydebpur, Gazipur-1701
Dr. Md. Abdullahil Baque Associate Professor Email: bellah_77@yahoo.com Cell: 01747 837095	Plant Biotechnology	Bioreactor technology, secondary metabolism and stress physiology	Department of Agronomy, Sher-e-Bangla Agricultural University, Dhaka-1207
Dr. Md. Abu Hadi Noor Ali Khan Professor Email: hadikhan68@yahoo.com.uk	Animal Biotechnology	Teaching and Research	Department of Pathology, Faculty of Veterinary Science, Bangladesh Agricultural University, Mymensingh-2202

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Md. Abu Reza Associate Professor Email: rezaru@gmail.com Cell: 01717-728189	Environmental Biotechnology	Teaching and Research	Department of Genetic Engineering and Biotechnology, University of Rajshahi, Rajshahi-6205
Dr. Md. Abul Kalam Azad Associate Professor Email: azad322@yahoo.com Cell: 01718679377	Plant tissue culture and DNA fingerprinting	Teaching and supervision of M. Sc. And Ph. D research student	Department of Biotechnology and Genetic Engineering, Islamic University, Kushtia-7003
Dr. Md. Abul Mansur Professor Email: mansurft63@yahoo.com Cell: 01711193460	Fisheries Biotechnology (Post harvest fisheries quality control and quality assurance)	Teaching and Research	Department of Fisheries Technology, Faculty of Fisheries, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Aftab Uddin Professor Email: aftabu@univdhaka.edu Cell: 01715120302	Enzymology, Insect defence mechanism, Plant Biotechnology, Chemistry for Biologists, Biochemistry of Drugs	Enzymology, Insect defence mechanism, Plant Biotechnology, Chemistry for Biologists, Biochemistry of Drugs	Department of Genetic Engineering & Biotechnology, University of Dhaka, Dhaka-1000
Dr. Md. Ahsan Bin Habib Professor Email: ahsanmphd@yahoo.com Cell: 01711373207	Fisheries Biotechnology (Algal Biotechnology)	Algal culture; agro-waste bioremedia- tion; fish food culture and nutrition	Department of Aquaculture, Faculty of Fisheries, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Aktar Hossain Associate Professor Email: aktar_ forestry@hotmail.com aktar.cu@gmail.com Cell: 01711123809	Plant Biotechnology	Teaching and Research	Institute of Forestry and Environmental Sciences, University of Chittagong, Chittagong-4331
Dr. Md. Akter Hossain Professor Email: akhtardso@yahoo.com Cell: 01913-969542	Animal Biotechnology	Reproductive Biology	Surgery & Obstetrics Department, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Ali Reza Faruk Professor Email: hasin96@yahoo.com Cell: 01711456119	Fisheries Biotechnology (Fish Immunology)	Molecular mycology	Department of Aquaculture, Faculty of Fisheries, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Alimul Islam Professor Email: alim_bau@yahoo.co.in Cell: 01714325562	Animal Biotechnology	Teaching and Research (Virology and Immunology)	Department of Microbiology and Hygiene, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Amir Hossain Assistant Professor Email: parpugi@yahoo.com	Plant Biotechnology	Postdoctoral fellow Myongji University, South Korea	Department of Genetics & Plant Breeding, Bangladesh Agricultural University Mymens- ingh-2202

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Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Md. Amzad Hossain Chief Scientific Officer & Head Email: amzadbiotech@yahoo.com Tel: 07326-64123, 07326-63414 Cell: 01718426200	Plant Biotechnology	Tissue Culture: micropropagation and stress tolerant somaclone development of sugarcane, Molecular Biology, Genetic Transformation	Biotechnology Division, Bangladesh Sugarcane Research Institute, Ishurdi-6620, Pabna
Dr. Md. Amzad Hossain m_amzad_hossain@hotmail.com Email: amzad@bsmrau.edu.bd Cell: 01711150059	Fish Biotechnology	Culture and enrichment of live food for fish, minerals and alternative protein in fish feed for increased aquaculture production	Department of Aquaculture, Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur-1706
Dr. Md. Anamul Hoque Associate Professor Email: anamul71@yahoo.com Fax: 091-61510 Cell: 01741-390715	Environmental Biotechnology	Teaching and Research	Department of Soil Science, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Anisur Rahman Khan Professor Email: anis37@yahoo.com Tel: 9661920-73/Ext. 7740, 7731 Cell: 01199156618	Microbial Biotechnology, Environmental Biotechnology	Microbial Biotechnolo- gy, Environmental Biotechnology, Applied Microbiology	Department of Microbiology, University of Dhaka, Dhaka
Dr. Md. Anowar Hossain Assistant Professor Email: mahossain95@hotmail.com mahossain@chemistry.gatech.edu	Molecular Biology and Genetic Engineering	Working as Postdoc fellow in Georgia Institute of Technology, Atlanta, Georgia, USA	Department of Biochemistry and Molecular Biology, University of Rajshahi, Rajshahi or School of Chemistry & Biochemistry, Georgia Institute of Technology, Atlanta, GA 30332
Dr. Md. Anwarul Azim Akhand Professor Email: akhand66@yahoo.com Cell: 01911176126	Cell Signaling, Molecular Biology, Toxicology, Immunology, Enzymology	Cell Signaling, Molecular Biology, Toxicology, Immunology, Enzymology	Department of Genetic Engineering & Biotechnology, University of Dhaka, Dhaka-1000
Dr. Md. Ariful Islam AssociateProfessor Email: arifmicro2003@yahoo.com Cell: 01711390939	Animal Biotechnology	Doing research on epidemiology and Molecular detection of Brucell in ruminants	Department of Microbiology and Hygiene, Bangladesh Agricultur- al University, Mymensingh-2202
Dr. Md. Anwar Hossain Professor Email: hossaina@du.ac.bd anwar5533@yahoo.com Tell: 9611295 Cell: 01715363753	Molecular Biology & Biotechnology	Foot and Mouth Disease virus & vaccine preparation; Antibiotics and Resistant Bacteria pollution, Food safety and microbial contamination	Department of Microbiology, University of Dhaka, Dhaka-1000

BIOTECHNOLOGY PERSONNEL

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Md. Arifuzaman Professor Email: larif67@yahoo.com Tel: 031-659070-71 Ext. 255 (Off) Cell: 01712894317	Proteomics, Bioinformatics	Bioinformatics, Mutagenic analysis of soil bacteria.	Department of Biochemistry and Biotechnology, University of Science and Technology Chittagong (USTC), Foy's Lake, Chittagong-4202
Dr. Md. Asadul Islam Associate Professor Email: asadgen@ru.ac.bd Cell: 01723694067	Plant Biotechnology and Bioinformatics	Teaching and Supervising at Undergraduate, Graduate and Post graduate level (MS, PhD)	Department of Genetic Engineering and Biotechnology, RU
Dr. Md. Ashraful Haque Associate Professor Email: ashraf_gpb2000@yahoo.com Cell: 01716-022526	Plant Biotechnology	Genetics and Plant Breeding	Department of Genetics and Plant Breeding, Bangladesh Agricultural University, Mymensingh-2202.
Dr. Md. Atiqur Rahman Khokon Associate Professor Email: atiqbau@yahoo.com atiqbau@gmail.com	Plant Biotechnology	Completed PhD degree in molecular chemical signaling in plant related to extracellular oxidative burst, performing research in disease resistance	Department of Plant Pathology, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Azharul Hoque Professor Email: azharhoque@yahoo.com Cell: 01713680427	Animal Breeding and Reproduction	Animal Breeding and Reproduction	Department of Animal Breeding and Genetics, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Aziz Zilani Chowd- hury Chief Scientific Officer (cc) Email: ilani71@gmail.com Tel: 02-9126663; 01552 355393 Fax: 88-02-8110924, 8113032	Biotechnology, Bio-safety	Policy development related to biotechnology & bio-safety. Biotech project implementation and monitoring biotech related research project of SPGR under NATP	Crops Division, Bangladesh Agricultural Research Council (BARC), Farmgate Dhaka-1215
Dr. Md. Azizul Haque Professor Cell: 01716408628	Insect Biotechnology, Biopesticide	Teaching and Research	Department of Entomology, Bangladesh Agricultural University, Mymensingh-2202
Dr. Abul Bashar Mir Md. Khademul Islam Assistant Professor Email: khademul.islam@gmail.com khademul.islam@upf.edu Cell: 01765580953	Medical Biotechnology and Bioinformatics	Research on Oncology, drug development and Bioinformatics	Department of Genetic Engineering and Biotechnology, University of Dhaka, Dhaka 1000
Dr. Md. Bahanur Rahman Professor Email: bahanurr@yahoo.com Cell: 01718-218080	Animal Biotechnology	Teaching and Research	Department of Microbiology and Hygiene, Bangladesh Agricultur- al University, Mymensingh-2202

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Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Md. Bazlur Rashid Chowdhury Professor Email: mbrchowdhury@yahoo.com Cell: 01715404811	Fisheries Biotechnology (Fish Immunology)	Fish health management; bacterial fish diseases	Department of Aquaculture, Faculty of Fisheries, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Ekramul Hoque Associate Professor Email: dmehoquebd@yahoo.co.in Tel: +88-02-9144279 Cell: 01712 836595	Plant Biotechnology	Principal Investigator BAS-USDA Project Project title: Molecular diversity analysis and genetic transformation in potato	Department of Biotechnology, Sher-e-Bangla Agricultural University, Sher-e-Bangla Nagar, Dhaka-1207
Dr. Md. Enamul Hoque Principal Scientific Officer Email: hoqueh2003@yahoo.com Tel: +88-02-9257401-5 Ext.423 Cell: +88-0171-6601099	Plant Biotechnology	Rice Tissue Culture, Rice Transformation and Marker Assisted Selection, Gene Pyramiding	Biotechnology Division, Bangladesh Rice Research Institute, Gazipur-1701
Dr. Md. Ershaduzzaman Senior Scientific Officer Email: ershad1988@hotmail.com Cell: 01716 484238	Molecular Biologist (Bacteriology)	Biotechnological work	GSPRD, Bangladesh Livestock Research Institute, Savar, Dhaka
Dr. Md. Firoz Alam Professor Email: falambt@yahoo.com, Tel: 0721761181 (Res) Cell: +8801711576972	Plant Biotechnology	Teaching and Research	Department of Botany, Rajshahi University, Rajshahi-6205
Md. Mafizur Rahman Lecturer Email: shilon_bge@yahoo.com Cell: 01712976913	Microbial Biotechnology	Teaching	Department of Biotechnology and Genetic Engineering, Islamic University, Kushtia-7003
Dr. Gautam Kumar Deb Senior Scientific Officer Email: debgk2003@yahoo.com Cell: 01716523423	Animal Reproduction Biotechnology & Molecular Genetics	Bovine	Biotechnology Division, Bangladesh Livestock Research Institute (BLRI), Savar, Dhaka
Dr. Md. Anwarul Haque Professor Email: haqueanwarul41@yahoo.com Cell: 01726522202	-	Teaching and Research	Department of Biotechnology and Genetic Engineering, Islamic University, Kushtia-7003
Dr. Md. Giasuddin Director (In-charge) Email: mgias04@yahoo.com Cell: 01711055597	Molecular Biotechnology	Monitoring of circulating avian Influenza virus. Research on FMD and PPR in Bangladesh	Animal Health Research Division, Bangladesh Livestock Research Institute, Savar, Dhaka 1341
Dr. Md. Giush Uddin Ahmed Assistant Professor Email: ahmedmgu@hotmail.com Cell: +88-01751475256 Tel: +88-0721-750041 ext. 4116 Fax: +88-0721-750064	Plant Biotechnology, Bioinformatics	Teaching and Research supervisor of Agronomy	Department of Agronomy & Agricultural Extension, University of Rajshahi, Rajshahi-6205

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Md. Golam Mortuza Professor Email: gmortuza2003@yahoo.com Cell: 01731060639	Plant Biotechnology	Teaching and research	Dept. of Biochemistry, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Golam Rabbani Professor Email: drmgrabbani@yahoo.com drmgrabbani@gmail.com Tel: 091-61896 Cell: 01711885790 Fax: 091-61510	Plant Biotechnology	DNA Finger Printing, Genetic Transformation and Plant Tissue Culture	Department of Horticulture, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Golam Shahi Alam Professor Email: mgsalam52@yahoo.com Cell: 01199-288630	Animal Biotechnology	Reproductive Biology	Surgery & Obstetrics Department, Bangladesh Agricultural University, Mymensingh-2202
Dr. Harun-Or-Rashid Scientific Officer Email: harun_bina@hotmail.com Cell: 0171662614	Microbial Biotechnology	Soil Microbial Biotechnology	Soil Science Division, BINA, Mymensingh-2202, Bangladesh
Dr. Md. Hasanuzzaman Talukder Associate Professor and Head Email: mhtalukder03@yahoo.com	Animal Biotechnology	Teaching and Research	Department of Parasitology, Faculty of Veterinary Science, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Hasibur Rahman Professor Email: hasibburku@yahoo.com Cell: 01711048107	Microbial Biotechnology	Teaching and Research	Department of Microbiology, Jahangirnagar University, Savar, Dhaka
Dr. Md. Imtiaz Uddin Senior Scientific Officer Tel: +88-091-67834, 67835 Fax: +88-091-67842 Cell: 01716-280721	Plant Biotechnology, Mutation Breeding	Gene Transformation	Plant Breeding Division Bangladesh Institute of Nuclear Agriculture (BINA), BAU Campus, Mymensingh-2202
Dr. Md. Ibrahim Khalil Scientific Officer Email: ibrahim_bina@yahoo.com Cell: 01913872525	Plant Biotechnology	Marker-Assisted Selection	Plant Pathology Division, BINA, Mymensingh-2202 Bangladesh
Dr. Md. Munan Shaik Assistant Professor Email: munanbt2004@yahoo.com	Structural Biology	Structural & Functional characterization of pathogenesis protein from Helicobacter pylori	Department of Biotechnology and Genetic Engineering, Islamic University, Kushtia-7003
Dr. Mohammad Zabed Hossain Professor Email: zabed@du.ac.bd Cell: 01727736087	Molecular ecology	Molecular characterization of Rhizobium in environmental sampls	Dept. of Botany, University of Dhaka

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Md. Oliur Rahman Professor Email: prof.oliurrahman@gmail.com Cell: 01717751718	Molecular systemetics, DNA fingerprinting	Genetic variation and interspecific relationships of Crotalaria using RAPD markers	Dept. of Botany, University of Dhaka
Dr. Kajla Seheli Senior Scientific Officer Email: kseheli@gmail.com Cell: 01849666749	Molecular Biology	-	Insect Biotechnology Division, IFRB, Bangladesh Atomic Energy Commission
Dr. Md. Khalequzzaman A. Chowdhury Member-Director Email: md-crops@barc.gov.bd kzamancho55@yahoo.com Tel: 02-8118275 Cell: 01552 338790 Fax: 88-02-8110924, 8113032	Biotechnology, Bio-safety, Food safety	Policy development related to biotechnology & bio-safety. Biotech project implementation and coordinating SPGR projects under NATP	Crops Division, Bangladesh Agricultural Research Council (BARC), Farmgate, Dhaka-1215
Dr. Md. Khalekuzzaman Professor Email: kzaman63@gmail.com Cell: 01716-244083	Plant Biotechnology, Genetic Engineering	Teaching and research, supervising the 4th year project students, MS students, M.Phil. and Ph.D students.	Genetic Engineering and Biotechnology, University of Rajshahi
Dr. Khandker Nesar Ahmed Chief Scientific Officer Email: knahmed2010@yahoo.com Cell: 01711574856, 8613022	Applied Entomology, Insect Taxonomy, Insect Ecology, Insect Pest Management through judicious use of bio-control agents including bio-pesti- cides	Research	Zoology Section, BRD, BCSIR, Dhaka-1205, Bangladesh.
Dr. Iftekhar Alam Senior Scientific Officer Email: Ifte.alam@gmail.com Cell: 01779198035	Proteomics, Stress physiology, Molecular biology, Plant tissue culture and Plant genetic transformation	Genetic transformation of Eggplant and Rice, Micropropagation of Aloe vera	Plant Biotechnology Division, National Institute of Biotechnology, Ganakbari, Savar, Dhaka
Dr. Md. Mahfuzar Rahman Principal Scientific Officer Email: mahfuzr56@yahoo.com Cell: 01716498585	Poultry Biotechnology	Native Hilly Chicken	Biotechnology Division, Bangladesh Livestock Research Institute (BLRI), Savar, Dhaka
Dr. Md. Mahboob Hussain Principal Scientific Officer Email: mhussainbjri@yahoo.com Tel: 9139996 (Off) Cell: 01713603089	Plant Biotechnology	Biotechnological Research	Genetic Resources and Seed Division, Bangladesh Jute Research Institute, Manik Mia Avenue, Dhaka-1207

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Md. Mahfuzul Hoque Professor Email: drmdhoque2004@yahoo.com Cell: 01712028655	Bioresources & Biotechnology; Food Microbiology	Enzymes production, Food quality control & safety	Department of Microbiology, University of Dhaka, Dhaka-1000
Dr. Md. Mainul Houque Professor Email: mhauque@ru.ac.bd Cell: 01712441284	Environmental Biotechnology	Teaching Environmental Health, Environmental Hazards and Biocontrol	Department of Zoology, University of Rajshahi, Rajshahi-6205
Dr. Md. Manjurul Haque Assistant Professor Email: haque59@hotmail.com Cell Phone: 01716513602	Microbial Biotechnology (Molecular Plant-Mi- crobe Interaction)	Teaching and Research	Department of Bioenvironmental Science, Faculty of Agriculture, Bangabandhu Sheikh Mujibur Rahman Agricultural University (BSMRAU), Gazipur-1706
Dr. Md. Mansurul Amin Professor Email: maminbau@gmail.com Cell: 01711 964350	Animal Biotechnology (Avian diseases and Immunology)	Aworion pestalla, Salmonella, Newcastle disease virus	Department of Microbiology and Hygiene, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Mizanur Rahman Associate Professor Email: mizanbs@yahoo.com Tel: 031659093	Acute Phase Proteins	Alexander von Humboldt Fellow, University of Bonn	Department of Medicine and Surgery, Chittagong Veterinary and Animal Sciences University, Zakir Hossain Road Khulshi-4202
Dr. Md. Mizanur Rahman Associate Professor	Microbial Biotechnology	Teaching and Research	Department of Biotechnology and Genetic Engineering, Islamic University, Kushtia-7003
Dr. Md. Mokbul Hossain Professor Email: mmhossain04@yahoo.com.au	Animal Biotechnology	Teaching and Research	Department of pathology, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Monowar Karim Khan Chief Scientific Officer Email: monowarkk@yahoo.com Cell: 01717-100616	Microbial Biotechnology	Molecular Soil Microbiology	Soil Science Division, Bangladesh Institute of Nuclear Agriculture (BINA), BAU Campus, Mymensingh-2202
Dr. Md. Morsaline Billah Professor Email: morsaline@yahoo.com Cell: 01712-008393	Interfacial Science, Surface functionalisation, Bionanotechnology	Teaching and Research	Biotechnology and Genetic Engineering Discipline, Khulna University, Khulna
Dr. Md. Mosharraf Hossain Molla Senior Scientific Officer Email: mhmolla@hotmail.com Cell: 01552403728	Plant Biotechnology	Plant Tissue culture and genetic engineering	Biotechnology Division, Bangladesh Agricultural Research Institute (BARI), Joydebpur, Gazipur 1701

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Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Md. Musharraf Uddin Bhuiyan Professor Email: mmubhuiyan@gmail.com Cell: 01715020254	Animal Reproductive Biotechnology	Teaching and research, and working as Chair, Community-based Dairy Veterinary Foundation	Department of Surgery and Obstetrics, Bangladesh Agricultural University, Mymensingh
Dr. Md. Mosharrof Hossain Associate Professor Email: mshzool@yahoo.com, mshzool@ru.ac.bd Tel.: 88-0721-750041/4119 Fax. 88-0721-750064 Cell: 88-01712-151498	Genetics and Molecular Biology (virology), Insect Biotechnology	Microbiology, entomology and fish virology	Department of Zoology, University of Rajshahi Rajshahi-6205
Dr. Md. Mostafizur Rahman Professor Email: mostabau@yahoo.com Cell: 01711 229168	Animal Biotechnology	Microbiology & Hygiene	Department of Microbiology and Hygiene, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Mozammel Hoq Professor Email: mhoq@univdhaka.edu mmhoq@gmail.com Cell: 01717083673	Enzyme, Fermentation & Industrial Biotechnology	Enzymes production, Biopesticide production	Department of Microbiology, University of Dhaka Dhaka-1000
Dr. Md. Mufizur Rahman Professor Email: micro_rahman@yahoo.com Cell: 01716 446296	Food safety and Food borne disease	Teaching and Research	Dept. of Microbiology and Hygiene, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Munir Hossain Associate Professor Email: mmhabgbau@gmail.com Cell: 01716540609	Molecular genetics, Developmental Biology and Reproductive Biotechnology	Molecular genetics, Developmental Biology and Reproductive Biotechnology	Department of Animal Breeding and Genetics, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Naim Uddin Professor Email: uddinmn62@yahoo.com Cell: 01821622029	Fisheries Biotechnology (Fisheries Microbiology)	Fish Bacteriology	Department of Fisheries Technology, Faculty of Fisheries, Bangladesh Agricultural University, Mymensingh-2202
Dr. Mohammad Minnatul Karim Lecturer Email: mkmicro.du@gmail.com Cell: 01620191993	Quorum Sensing, Enzyme and fermentation technology, Biofertilizer, Biopesticide	Teaching and Research	Department of Biotechnology and Genetic Engineering, Islamic University, Kushtia-7003
Dr. Nathu Ram Sarker Senior Scientific Officer Email: sarkernr62@yahoo.com Cell: 01711733119	Forage & Feed Biotechnology	Feeds & Forage development	Animal Production Research Division, Bangladesh Livestock Research Institute, Savar, Dhaka
Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
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Dr. Md. Nazrul Islam Professor Email: kewatkhali2201@yahoo.com Cell: 01715003589	Fisheries Biotechnology (Food microbiology and food safety)	Fish fermentation	Department of Fisheries Technology, Faculty of Fisheries, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Nurul Absar Khan Professor Cell: 01675000357	Fisheries Biotechnology (Algal biotechnology)	Production of biofuel and biodiesel from algae and macrophytes	Department of Fisheries Technology, Faculty of Fisheries, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Nurul Matin Associate Professor Email: nmatin2@yahoo.com Cell: 01752-003909	Plant molecular genetics and functional genomics	UGC project	Genetic Engineering and Biotechnology, RU
Dr. Md. Nuruzzaman Munsi Scientific Officer Email: nzaman_blri@yahoo.com Cell: 01717255443	Animal Biotechnology	Biotechnology and food safety, Ruminant Medicine	Bangladesh Livestock Research Institute, Savar, Dhaka
Dr. Md. Omar Faruque Professor Email: faruque_mdomar@yahoo.com Cell: 01714075435	Animal Biotechnology (Molecular Genetics)	Molecular Genetics	Department of Animal Breeding and Genetics, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Rafiqul Islam Associate Professor Email: rafiarib@yahoo.com Tel: 88 02 920510-14/2056 Fax: 88 02 9205333 Cell: 01552495641	Plant Biotechnology	Improvement of flooding stress tolerance in crops	Department of Agronomy, Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur 1706
Dr. Md. Rafiqul Islam Professor Email: mrislam_bau@yahoo.com Cell: 01712-849565	Animal Biotechnology	Pathology	Department of Pathology, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Rafiqul Islam Professor Email: mrislam69@yahoo.com Fax: 091-61510 Cell: 01711-118761	Plant Biotechnology	Teaching and Research	Department of Soil Science, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Rafiqul Islam Senior Scientific Officer Email: mrislam210@homail.com 01716350628	Animal Biotechnology	Molecular Virology Immunology	Bangladesh Livestock Research Institute, Savar, Dhaka
Dr. Md. Rafiqul Islam Sarder Professor Email: rafiqulsarder@yahoo.com Cell: 01712015908	Fisheries Biotechnology (Molecular Genetics and Biotechnology)	Gene banking of Indian major carps, broodstock development of prawn using markers, cryopreservation of fish sperm	Department of Fisheries Biology and Genetics, Bangladesh Agricultural University, Mymensingh-2202

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Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Md. Rashidul Islam Associate Professor Email: rasha740177@yahoo.com Cell: 0171112529	Plant Biotechnology	Teaching and Research	Department of Plant Pathology, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Rezuanul Islam Professor Email: rezwangbt@yahoo.com wafirezwan@hotmail.com Cell: 01712110010 01191830182	Agriculture Microbiology & Fermentation Engineering	Teaching and supervi- sion of M. Sc. and Ph. D research student	Department of Biotechnology and Genetic Engineering, Islamic University, Kushtia-7003
Dr. Mohammad Riazul Islam Associate Professor Email: mriazulislam@du.ac.bd Cell: 01741487725	Microbial Biotechnology, Peptide Engineering	Collaborative project on bacteriocin with Kyushu University, Japan PI of a UGC project on bacteriocin efficacy against M. tuberculosis	Department of Biochemistry and Molecular and Biology, DU
Dr. Md. Ruhul Amin Professor	Animal Breeding and Reproduction	-	Department of Animal Breeding and Genetics, Bangladesh Agricultural University (BAU), Mymensing-2202
Dr. M.A. Samad Principal Scientific Officer and Head Email: samad_binapbd@yahoo.com Cell: 01731210826	Plant Tissue Culture	Plant Tissue Culture	Plant Breeding Division, BINA, Mymensingh-2202 Bangladesh
Dr. Md. Sadiqul Islam Associate Professor Email: sadiqul1973@yahoo.com Cell: 01726559543	Fisheries Biotechnology (Reproductive Biotechnology)	Hormonal regulation on fish reproduction	Department of Fisheries Biology and Genetics, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Saidul Islam Director General Email: saiduli956@yahoo.com Tel: +8802-7789458 Fax: +8802-7701636	Insect Biotechnology	Director General, NIB	National Institute of Biotechnology, Ganakbari Savar, Dhaka-1349
Dr. Md. Salim Khan Senior Scientific Officer Email: k2salim@yahoo.com Cell: 01712-201504	Plant and Molecular Biotechnology	Research on Plant Tissue Culture and Detection of Plant viruses	Tissue Culture and Biotechnology Section, BCSIR Lab, Dhaka, Dhaka-1205
Dr. Md. Samsul Alam Professor Email: samsul_bau@yahoo.com Cell: 01727163054	Fisheries Biotechnology (Transgenic technology; molecular marker)	Molecular characterization of fish, animal and crop	Department of Fisheries Biology and Genetics, Bangladesh Agricultural University, Mymensingh-2202
Dr. Sarder N. Uddin Associate Professor Email: biotechnology@live.com Cell: 01716-123444	Bioinformatics, Pharmaceutical Biotechnology, Plant Biotechnology	Teaching and Research	BGE Discipline, Khulna University

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Md. Sazedul Karim Sarker Senior Scientific Officer Email: sazdulkarim@yahoo.com Cell: 01712223635	Animal Biotechnology (poultry nutrition and feed)	Development of Feed Additives and Protein Concentrate	Poultry Production Research Division, Bangladesh Livestock Research Institute(BLRI), Savar, Dhaka
Dr. Md. Shaheed Reza Assistant Professor Email: rezams@gmail.com Cell: 01913719233	Fisheries Biotechnology (Fish Molecular Biology; Population Genetics)	Antibiotic resistance in microorganisms, Quality assurance of fishery products using molecular techniques	Department of Fisheries, Technology, Faculty of Fisheries, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Shahjahan Associate Professor Email: mshahjahan75@gmail.com Cell: 01718590903	Fisheries Biotechnology (Molecular neuro endocrinology; Reproductive Physiology)	Neuro endocrine regulation of reproduction in fish	Department of Fisheries Management, Faculty of Fisheries, Bangladesh Agriculture University, Mymens- ingh-2202
Dr. Md. Shahidur Rahman Khan Professor Email: msrkhan001@yahoo.com Cell: 01717 171329	Animal Biotechnology	Senior Vaccine Consultant, LRI Mohakhali, Dhaka	Department of Microbiology and Hygiene, BAU, at present LRI, Mohakhali, Dhaka-1212
Dr. Md. Shamiul Haque Principal Scientific Officer Email: shmiulbjri@gmail.com Tel: 9103147 (O) Cell: 01743233957	Plant Biotechnology	Functional genomic of jute	Basic and Applied Research on Jute Project, Bangladesh Jute Research Institute, Manik Mia Avenue, Dhaka
Dr. Md. Shamsuddin Professor Email: m.shamsuddin@gmail.com Cell: 01711-156308	Animal Biotechnology	Reproductive Biology	Surgery & Obstetrics Department, Bangladesh Agriculture University, Mymens- ingh-2202
Dr. Sheikh Julfikar Hossain Professor Email: sjhossain_ku@yahoo.com Cell: 01732-718009	Microbial Biotechnology Food Biotechnology Environmental Biotechnology	Teaching and Research	BGE Discipline, Khulna University
Dr. Md. Siddiqur Rahman Professor and Head Email: prithul02@yahoo.co.uk Tel: 8809152184 Cell: 88 01918181550 Fax: 8809161510	Brucellosis, zoonotic bacterial disease	Diagnosis of Brucellosis in man and animals	Department of Medicine, Bangladesh Agricultural University, Mymensingh-2202
Dr. Md. Tanvir Rahman Associate Professor Email: tanvirahman@gmail.com Cell: 019133233007	Environmental Microbiology, Molecular Biology	-	Department of Microbiology and Hygiene, Bangladesh Agricultural University, Mymensingh-2202

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Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Md. Taohidul Islam Associate Professor Email: islammtuq@yahoo.com Cell: 01912 910338	Animal Biotechnology	Teaching and Research	Department of Medicine, Faculty of Veterinary Science, Bangladesh Agricultural University, Mymensingh
Dr. Md. Tofazzal Islam <i>Professor</i> Email: tofazzalislam@yahoo.com Cell: 01714001414	Environmental Biotechnology	Teaching and Research	School of Agriculture and Rural Development, Bangladesh Open University, Gazipur-1705
Dr. Mihir Lal Saha Professor Email: sahaml@yahoo.com Tel: 966-1900-60/Extn. 7550 Cell: 01711-667104 Fax: +88-02-861-5583	Microbiology and Microbial biotechnology	Teaching and Research Environmental biotechnology	Department of Botany University of Dhaka Dhaka - 1000
Dr. Mirza Mofazzal Islam Principal Scientific Officer Email: mirza_mislam@yahoo.com Tel: +88-091-67834, 67835 Cell: 01716-280720 Fax: +88-091-67842	Plant Biotechnology, Molecular Genetics, Molecular Plant Breeding, Marker-As- sisted Selection and Mutation Breeding.	Program Leader and Management of Biotechnology Division of the Institute; Marker Technology, Marker-As- sisted Selection, QTL mapping, DNA Fingerprinting	Biotechnology Division, Bangladesh Institute of Nuclear Agriculture (BINA), BAU Campus, Mymensingh-2202
Dr. Mohammad Al-Forkan Professor Email: alforkancu@ hotmail.com Cell: 01819383213	Plant Biotechnology and Genomics	Conducting research development of abiotic stress tolerant rice	Department of Genetic Engineering and Biotechnology, Chittagong University Chittagong
Dr. Mohammad Mainul Ahasan Email: mainulbt@yahoo.com Cell: 01681248804	Medical Biotechnology (Molecular Virology, Molecular Endocrinology)	Cancer Research UK and Institute for Biomedical Research, University of Birmingham, UK	16 Sheikh Shaheb Bazar, 3r floor, Azimpur, Dhaka-1205
Dr. Mohammad Moniruzzaman Email: smonir74@yahoo.com	Reproductive Biotechnology	Teaching and research in Animal Science	Department of Animal Science, Bangladesh Agricultural University, Mymensingh-2202
Dr. Mohammad Shahedur Rahman Associate Professor Email: rahmanms@gmail.com Tell: +8801911500115	Microbial, Industrial, Plant and Environ- mental Biotechnology	Teaching, Research and Consultancy	Department of Biotechnology and Genetic Engineering, Faculty of Biological Sciences, Jahangirnagar University, Savar, Dhaka
Dr. Mohammad Shamsul Alam Bhuiyan Associate Professor Email: bhuiyansa@yahoo.com Cell: 01745748849	Molecular Biotechnology	Molecular Biotechnology	Department of Animal Breeding and Genetics, Bangladesh Agricultural University, Mymensingh-2202

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Mohammaed Habibur Rahman Professor Email: rahmanmdhabib@yahoo.com	Animal Biotechnology	Teaching and Research	Department of pathology, Faculty of Veterinary Science, Bangladesh Agricultural University, Mymensingh-2202
Dr. Mostafa Ali Reza Hossain Professor Email: marhossain@yahoo.com Cell: 01711045364	Fisheries Biotechnology (Fish cryobiology)	Fish biodiversity conservation using biotechnology	Department of Fisheries Biology and Genetics, Bangladesh Agricultural University, Mymensingh-2202
Dr. Mst. Aleya Nasreen Principal Scientific Officer Email: aleyanasreen@yahoo.com dr.nasreenbjri@gmail.com Tel: 88029126380 Cell: 8801720206663	Industrial Biotechnology	Enzyme Technology	Biochemistry Department, Bangladesh Jute Research Institute, Manik Mia Avenue Dhaka-1207
Dr. Mst. Minara Khatun Associate Professor Email: minaramicro2003@yahoo.com Cell: 01717 479814	Food poisoning bacteria, Food Safety, Brucellosis	Investigation prevalence of food poisoning bacteria in poultry	Department of Microbiology and Hygiene, Bangladesh Agricultural University, Mymensingh-2202
Dr. Muhammad Kamruzzaman Associate Scientist Email: kamruzzaman@icddrb.org kamruzzaman75@gmail.com Office: 8860523-32, extn. 2410 Cell: 01732346167	Microbial biotechnology, Medical biotechnology	Conducting research in Molecular Genetics Laboratory of ICDDR.B and Principal investigator of two ongoing research projects	Molecular Genetics Laboratory, Laboratory Sciences Division, ICDDR,B, Mohakhali Dhaka-1212
Dr. Muhammad Manjurul Karim Professor Email: manjur@univdhaka.edu Cell: 01715 490535	Microbial Biotechnology	Teaching and Research	Department of Microbiology, University of Dhaka, Dhaka-1000
Dr. Muhammed Nurul Islam Professor Tel: 966-1900-60/Extn. 7557 Cell: 01711-667104	Plant Molecular Biology	Teaching and Research	Department of Botany, University of Dhaka, Dhaka - 1000
Dr. Md. Salimullah Chief Scientific Officer Email: salim2969@gmail.com Cell: 01738999993	Molecular Biotechnology	Development of a high throughput solid phase DNA mutation screening system and its application to disease diagnoses	Molecular Biotechnology Division, National Institute of Biotechnology, Ganakbari, Savar, Dhaka-1349
Dr. Md. Shahin Alam Scientific Officer Email: shahin_vet@yahoo.com Cell: 01712144224	Animal Biotechnology	Molecular Microbiology	Bangladesh Livestock Research Institute, Savar, Dhaka

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Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Nazmul Ahsan Professor Email: shishir_ahsan@yahoo.co.in Cell: 01718340750, Office Ex 7822	Microbiology, Molecular Biology, Cancer Biology, Virology, Biotechnology	Microbiology, Molecular Biology, Cancer Biology, Virology, Biotechnology	Department of Genetic Engineering & Biotechnology, University of Dhaka, Dhaka-1000.
Dr. Nazmul Hoque Principal Scientific Officer Email: snhoque28@yahoo.com Cell: 01921655953	Plant Biotechnology, Bioinformatics	Semi dwarf gene introgression, Marker Assisted Selection, Gene Pyramiding	Biotechnology Division Bangladesh Rice Research Institute (BRRI), Gazipur-1701
Dr. Nazneen Nahar Islam Assistant Professor Email: nazneendr.islam@yahoo.com Cell: 0173-1894671	Food and Industrial Biotechnology	Food & Industrial Biotechnology	Department of Genetic Engineering and Biotechnology, Chittagong University, Chittagong
Dr. Nilufar Yasmin Shaikh Senior Scientific Officer Email: avenue71@hotmail.com Cell: 01715792838	Plant Biotechnology	Identification of yield enhancing QTLs in rice	Biotechnology Division, Bangladesh Rice Research Institute (BRRI), Gazipur-1701
Dr. Nurul Absar Professor & Head Email: nurul_ustc@yahoo.com Tel: 31-659070-71 Ext. 255 (Off) Cell: 01717796123	Protein Engineering	Phytochemistry, Nutritional Biochemistry, Protein Engineering	Department of Biochemistry and Biotechnology, University of Science and Technology Chittagong (USTC), Foy's Lake, Chittagong-4202
Dr. Priya Mohon Das Professor Email: pmdasbau@yahoo.com Cell: 01711627798	Animal Biotechnology	Pathology	Pathology Department, Bangladesh Agricultural University, Mymensingh-2202
Dr. Reza Mommad Emon Scientific Officer Email: emonbina@yahoo.com Cell: 01558303056	Plant Biotechnology, Mutation Breeding	Marker Technology, Marker-Assisted Selection	Plant Breeding Division, BINA, Mymensingh-2202 Bangladesh
Dr. Rafiqur Rahman Supernumerary Professor Email: rrahman629@yahoo.com Cell: 01715315064, Office Ex 7817	Chemistry of Natural Products, Mode of Action of Hormones, Metabolism	Chemistry of Natural Products, Mode of Action of Hormones, Metabolism	Department of Genetic Engineering & Biotechnology, University of Dhaka, Dhaka-1000
Dr. Rakha Hari Sarker <i>Professor</i> Email: rhsarker2000@yahoo.co.uk Tel: 967-3387 966-1900-60/Extn. 7538 Cell: 01711-547429	Plant Breeding & Biotechnology	Teaching and Research	Department of Botany, University of Dhaka, Dhaka - 1000
Dr. Ratan Chandra Dey Upazilla Agricultural Officer Email: ratanbtech@yahoo.co.uk Cell: 01716604601	Genetic Engineering and Molecular Biology	Upazilla Agricultural Officer	Department of Agricultural Extension, Ministry of Agriculturte, Govt. of Bangladesh

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Reza Md. Shahjahan Professor Email: reza.shahjahan@univdhaka.edu Cell: 01715044948	Insects, fish and environments	Molecular taxonomy of fish and insects	Genetics and Molecular Biology group, Department of Zoology, Dhaka University
Dr. Rokeya Begum Scientist Email: rokeya2014@yahoo.com Cell: 01716635249	Molecular Genetics	Research on Human Genomics	Centre for Advanced Research in Sciences (CARS), University of Dhaka
Dr. Rowshan Ara Begum Professor Email: rowshanbegumdu@yahoo.com Cell: 01675865005	Animal and Fisheries	Molecular phylogeny based on mitochondrial DNA	Genetics and Molecular Biology group, Department of Zoology, Dhaka University
Dr. Sayda Rehana Assistant Professor Email: srehana2001@yahoo.co.in Cell: 01556-303798	Plant breeding, Plant biotechnology and Transformation, Plant Molecular analysis	Teaching and Research	BGE Discipline, Khulna University
Dr. S. M. Lutful Kabir Associate professor Email: Ikabir79@yahoo.com Cell: 01754987218	Microbiology & Biotechnology	Teaching and Research	Department of Microbiology and Hygiene, Bangladesh Agricultural University, Mymensingh-2202
Dr. S. M. Shahinul Islam Assistant Professor Email: shahin_ibsc@yahoo.com or shahin_ibsc@ru.ac.bd Cell: 01715209907	Plant Biotechnology	Research & Teaching in the field of Plant Biotechnology and Molecular Biology	Institute of Biological Sciences, 435, 3rd Science Building, University of Rajshahi Rajshahi-6205
Dr. Sabina Yeasmin Associate Professor Email: y_sabina01@yahoo.com ysabina@univdhaka.edu Tel: 9666573, Office Ex 7820	Molecular Biology Genetics, Metabolism, Immunology, Biochemistry	Molecular Biology Genetics, Metabolism, Immunology, Biochemistry	Department of Genetic Engineering & Biotechnology, University of Dhaka, Dhaka-1000
Dr. Sabita Rezwana Rahman Professor Email: sabita_rahman@hotmail.com Tel: 9661920-73/Ext. 7746	Medical Biotechnology	Medical Microbiology, Immunodiagnostic	Department of Microbiology, University of Dhaka, Dhaka-1000
Dr. Sakina Khanum <i>Scientific Officer</i> Cell: 01731556232	Plant Biotechnology	Crop Physiology	Crop Physiology Division, BINA, Mymensingh-2202 Bangladesh
Dr. Shahina Islam Principal Scientific Officer Email: shahina_islam2004@yahoo.com Cell: 01199064279	Plant Biotechnology	Plant Tissue Culture and genetic Engineering	Plant Tissue Culture Section, Biological Research Division, BCSIR, Dhanmondi, Dhaka-1205

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Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Shahanaz Sultana Senior Scientific Officer Email: shahanaz107@yahoo.com Cell: 01748218332	Plant Biotechnology, Bioinformatics	Anther Culture for the development of high yielding and stress tolerant rice varieties,	Biotechnology Division, Bangladesh Rice Research Institute (BRRI), Gazipur-1701
Dr. S. M. Abu Sayem Assistant Professor Email: asayem08@yahoo.com	Microbial Biotechnology	Molecular approaches to induce or inhibit biofilm development	Department of Genetic Engineering & Biotechnology, Shahjalal University of Science & Technology (SUST), Sylhet-3114
Dr. Shakil Ahmed Khan Chief Scientific Officer Email: shakil_shafat@yahoo.com Tel: 7789172 (off), 8833571 (Res) Cell: 01818143464	Microbial Biotechnology	 a) Cloning and expression of cry gene of <i>Bacillus thuringiensis</i> israelensis into <i>Bacillus</i> <i>sphaericus</i> b) Management of fruit fly, Bactrocera cucurbitae using Sterile Insect Technique 	Insect Biotechnology Division, Institute of Food and Radiation Biology, Bangladesh Atomic Energy Commission, Savar, Dhaka
Dr. Shamsun Nahar Begum Senior Scientific Officer Email: sbluna98@yahoo.com Tel: +88-091-67834, 67835 Fax: +88-091-67842 Cell: 01716-280721	Plant Biotechnology	Gene Pyramiding, QTL Mapping, DNA Fingerprinting, Gene Transformation and Tissue Culture	Biotechnology Lab, Plant Breeding Division, Bangladesh Institute of Nuclear Agriculture (BINA), BAU Campus, Mymensingh -2202
Dr. Shaikh Mizanur Rahman Professor & Head Cell: 01671-737676	Microbial. Biotechnology	Teaching and Research	Dept. of Biochemistry, Anwer Khan Modern Medical College, Road-8, Dhanmondi, Dhaka 1205
Dr. Sheikh Md. Enayetul Babar Professor Email: babarku@yahoo.com Cell: 01726-888444	Bioreactor Design, Downstream Processing, Systems biology, Food Biotechnology, Environmental Biotechnology	Teaching and Research	BGE Discipline, Khulna University
Dr. Shuvra Debnath Lecturer Email: to.shuvra@gmail.com Cell: 01719088739	Animal Breeding and genetics	Animal Breeding and genetics	Department of Animal Breeding and Genetics, Bangladesh Agricultural University (BAU), Mymensing-2202
Dr. Shyamal K. Roy Professor Email: shkmroy@yahoo.com Tel: 02-7791064 Cell: 01725652097	Plant Biotechnology	High frequency regeneration of non-wood forest plants	Department of Botany, Jahangirnagar University Savar, Dhaka-1342

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Shahnoor Hossain Assistant Professor Email: mshahnoor@du.ac.bd Cell: 01554593702	Microbial Genetics, Microbial Biotechnology	Working to develop novel antimicrobial agent against multi-drug resistant pathogens; to develop serotype independent vaccine against S. pneumoniae	Genetic Engineering & Biotechnology, University of Dhaka
Dr. Sirajul Islam Khan Professor Email: sikhan@univdhaka.edu Cell: 01713015234	Environmental Microbiology, Pollution control	Environmental Microbiology, water & waste water control/treatment	Department of Microbiology, University of Dhaka, Dhaka-1000
Dr. Sk. Shamimul Alam Professor Email: ssalam81@yahoo.com ssalam@yahoo.com Tel: 966-1900-60/Extn. 7549 Cell: 01716-818594	Molecular Cytogenetics	Teaching and Research Molecular characterization of different crop plants	Department of Botany, University of Dhaka, Dhaka - 1000
Dr. S. M. Mahbubur Rahman Professor Email: manmr2003@yahoo.com Cell: 01711-131573	Marker assisted Breeding, Plant Tissue Culture	Teaching and Research	BGE Discipline, Khulna University
Dr. Subodh Kumar Sarkar Assistant Professor Email: sksarkar11bio@yahoo.com Tel: 031-659070-71 Ext. 255 Cell: 01731411755	Plant Biotechnology, Protein Engineering, Lipid Chemistry, Food Technology	Isolation of genomic DNA from various sources and their RFLP analysis, Lectin Biology, Phytochemical screening of medicinal plants and their biological study	Department of Biochemistry and Biotechnology, University of Science and Technology Chittagong (USTC), Foy's Lake, Chittagong-4202
Dr. Sukumar Saha Associate Professor Email: kumar07@hotmail.com Cell: 01740 847339	Animal Biotechnology	Immunology and Vaccinology	Department of Microbiology and Hygiene, Bangladesh Agricultural University, Mymensingh-2202
Dr. Syed sakhawat Husain Professor Email: sshusainbau@yahoo.com Cell: 01711074042	Animal Breeding and Reproduction	Animal Breeding and Reproduction	Department of Animal Breeding and Genetics, Bangladesh Agricultural University (BAU), Mymensing-2202
Dr. Tabassum Mumtaz Senior Scientific Officer Email: tabmumtaz22@yahoo.com Cell: +8801747403494	Microbial and Industrial Biotechnology	Senior Scientific Officer at Microbiology and Industrial Irradiation Division	Microbiology and Industrial Irradiation Division, Bangladesh Atomic Energy Commission, Savar, Dhaka-1000
Dr. Tanvir Rahman Associate Professor Email: tanvirahman@gmail.com Cell: 01913-323307	Animal Biotechnology	Microbiology & Hygiene	Microbiology & Hygiene Department, Bangladesh Agricultural University, Mymensingh-2202

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Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Dr. Ujjal Kumar Nath Associate Professor Email: ujjalnath@gmail.com Cell: 01925-103927	Plant Biotechnology	Genetics and Plant Breeding	Department of Genetics and Plant Breeding, BAU, Mymens- ingh
Dr. Ummay Salma Assistant Professor Email: usal@itw.uni-bonn.de usalma2007@yahoo.com Cell: +49-15774590295 and Tel: +49-228-733385 (Office) +88-0531-61347 (Office)	Animal Biotechnology	Working in Bonn University, Germany as a Humboldt Post Doc Research Fellow	Department of Genetics and Animal Breeding, Hajee Mohammad Danesh Science and Technology University, Dinajpur–5200
Dr. Umme Salma Zohora Managing Director Email: zohoraus@proximo.com.bd Cell: +8801972343345	Plant, Industrial, Environmental and Microbial Biotechnology	Research Consultant, Biotech business entrepreneurship	Proximo Biotech, 1-50 Dinajpur, Bangladesh, http://www.proxi- mo.com.bd/
Dr. Wahhida Shumi Associate Professor Email: wshumi@gmail.com Tel: +312606080 (Res) Cell: 01912150786	Environmental Biotechnology	Teaching and research	Department of Microbiology, University of Chittagong, Chittagong-4331
Dr. Zakir Hossain Professor Email: zakirh2000@yahoo.com Cell: 01725209545	Fisheries Biotechnology (Molecular biology)	Effects of marine biofunctional compounds on reproduction of fish	Department of Fisheries Biology and Genetics, Bangladesh Agricultural University, Mymensingh-2202
Dr. Zeba Islam Seraj Professor, BMB, DU Principal Investigator, Plant Biotechnology Lab Email: zebai@univdhaka.edu Cell: +8801711595576	Plant Biotechnology	Validation of salt tolerant determinants in rice landrace Horkuch and its segregating population by 2b-RAD and RNA seq analysis under stress	Department of Biochemistry and Molecular and Biology, University of Dhaka
Farhana Islam Khan Lecturer Email: farhana@bot.jnu.ac.bd Cell: 01717077086	Microbiology	Research and Teaching	Department of Botany, Jagannath University, Dhaka-1100
Farah Sabrin Lecturer Email: farahsabrin@yahoo.com Cell: 01712265957	Neuroscience, Nanotechnology, Natural Product Chemistry	Teaching and Research	Carleton University, Ottawa, Canada. Department of Biotechnology and Genetic Engineering, Mawlana Bhashani University of Science & Technology, Santosh, Tangail

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Farhana Shafrin Email: shafrin.farhana@gmail.com Cell: 01732-099116	Plant, Microbial and Environmental Biotechnology, Bioinformatics	Research Associate	Molecular Biology Lab, Department of Biochemistry and Molecular Biology, University of Dhaka, Dhaka
Firoz Ahmed Biotechnologist Email: firoz_biotech@yahoo.com Cell: 01670610131	Medical Biotechnology (Pharmaceutical Biotechnology)	Implementing and marketing biotechnological machineries & products	Mars Syndicate Ltd., 53- Purana Paltan, Suite-406, Dhaka-1000
G. M. Al-Amin Assistant Professor Email: alamin25@gmail.com Tel: 7176172 (off) Cell: 01712793210	Plant Biotechnology, Molecular Biology, Plant Tissue Culture, Plant Breeding	Teaching & Research	Department of Botany, Jagannath University Dhaka-1100
Gautom Kumar Dev Scientific Officer Fax: 88-02-7791675	Animal Biotechnology	In vitro fertilization and embryo transfer, PhD Fellow, South Korea	Animal Production Research Division, Bangladesh Livestock Research Institute, Savar Dhaka 1341
Gokul Chandra Biswas Lecturer Email: gcbiswas1985@gmail.com gcbiswas-geb@sust.edu Cell: +8801911620112	Horticultural Research, Breeding, Gene Transfer	Teaching and research	Department of Genetic Engineering & Biotechnology, School of Life Science, Shahjalal University of Science & Technology (SUST) Sylhet-3114
Golam Ahmed Principal Scientific Officer Email: golam_ahmed@live.com bsd@baec.org.bd Tel: 8130516 (Off), 9346108 9 (Res) Cell: 01716276725	Plant Biotechnology	Improvement of banana (Musa spp.) through in vitro mutagenesis.	Bio-Science Division, Bangladesh Atomic Energy Commission, E-12/A Agargaon, Sher-e-Bangla Nagar Dhaka-1207
Habibur Rahman Bhuiyan Principal Scientific Officer Email: habibctglab@gmail.com Cell: +8801711205664	Biochemistry & Microbiology	Prevalence of Viral and Bacterial diseases in the shrimp farm, Antibiotic Sensitivity profile, Detection of Mycotoxin, Detection of Antibiotic residues, Microbial Fermentation	BCSIR Laboratories Chittagong, Chittagong-4220
Halima Khatun Scientific Officer Email: hkr.7519@gmail.com Cell: 01715-810750	Duck breeding Poultry feed analysis	Duck management, Poultry feed analysis Laboratory	Poultry Production Research Division, BLRI, Savar, Dhaka.

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Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Hemayet Ullah Assistant Professor Email: hullah@howard.edu Tel: (202) 806-6958 Fax (202) 806-4564	Plant Biotechnology	Elucidating the cellular signal transduction pathways mediated by Receptor for Activated Kinase C (RACK1)- a structural homolog of G-protein beta subunit	Howard University, Department of Biology, 415 College Street NW, Washington, DC 20059
Himel Nahreen Khaleque Scientific Officer Email: himel.nk@gmail.com Cell: 01717116263	Food biotechnology, Environmental biotechnology, Molecular biology, Industrial Microbiology, Pharmaceutical Biotechnology	Evaluation of Antimicro- bial Drugs to Design Effective Therapeutic Intervention for Control of Food-Borne Bacterial Diseases in Bangladesh,	Industrial Microbiology Laboratory , Institute of Food Science and Technology, Bangladesh Council of Scientific and Industrial Research, Dhanmondi, Dhaka
Hosneara Hossain Senior Scientific Officer Email: simulbrri@yahoo.com	Plant Biotechnology	Identification of QTLs from rice wild relatives for high yield, Identification of QTLs for salinity tolerance both at seedling and reproductive stage in rice	Biotechnology Division, Bangladesh Rice Research Institute (BRRI), Gazipur-1701
Homayra Huq Lecturer Email: muna_sau@yahoo.com Tel: +88-02-9144279 Cell: 01911305025, 01733532148	Plant Tissue Culture	Teaching and research	Department of Biotechnology, Sher-e-Bangla Agricultural University, Sher-e-Bangla Nagar, Dhaka-1207
Hossain Md. Faruquee Lecturer Email: faruquee_mscbt@yahoo.com faruquee@btge.iu.ac.bd Cell: 01719766095	Plant Biotechnology	Teaching and Research	Department of Biotechnology and Genetic Engineering, Islamic University, Kushtia-7003
Hossain Uddin Shekhar Professor Email: shekhardu@hotmail.com Cell: 01715059252	Functional Food, Molecular Biology	Oxidative stress	Department of Biochemistry and Molecular Biology, Dhaka University
Humayra Akter Senior Scientific Officer Email: humayra1@gmail.com Cell: 01914889363	Phytosanitation	Phytosanitation, Sterile Insect Technique (SIT) and Insect plant Interaction	Insect Biotechnology Division, IFRB, Bangladesh Atomic Energy Commission, Dhaka

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Israt Jahan Mukti Email: mukti_bge@yahoo.com Cell: 01717627171	Medical and Plant Biotechnology	Taking lecturers and doing some researches on parasitic disease, cancer and infertility management	Bangladesh Institute of Medical Science (BIMS), N/23, Nurjahan Road, Mohammadpur Dhaka-1207
Imran Parvez Assistant Professor Email: imran_bau2007@yanoo.com Cell: +8801914503031	Fisheries Biotechnology	 a) Mapping the current riverine fish biodiversity of Dinajpur (BFRI funded Project) b) Community based sanctuary management in fish biodiversity conservation at Atrai river basin of Dinajpur (NSICT funded project) 	Department of Fisheries Biology and Genetics, Hajee Mohammad Danesh Science and Technology University (HSTU), Dinajpur-5200 & PhD Fellow, Center of Genomics and Bioinformatics, Faculty of Science, Pirnce of Songkla University, Thailand
K. A. M. Mostafizar Rahman Scientific Officer Email: raselnipa02@yahoo.com Cell: 01712074638	Plant Biotechnology	Molecular Genetics, Marker Assisted Breeding	Biotechnology Division, Bangladesh Agricultural Research Institute (BARI), Joydebpur, Gazipur 1701
K. H. M. Nazmul Hossain Nazir Associate Professor nazirbau@gmail.com Cell: 01717 785674	Mycology, Industrial Microbiology	Teaching and Research	Department of Microbiology and Hygiene, Bangladesh Agricultural University, Mymensingh-2202
Kazi Asraful Alam Email: asrafgp@yahoo.com	Structural Biology Protein Chemistry	PhD student	Institute of Structural Biology and Biophysics, Julich, Germany
Kazi Nahida Begum <i>Lecturer</i> Email: kazinahida@yahoo.com Cell: 01740943622	Molecular Cytogenetics	Research and Teaching	Department of Botany, Jagannath University, Dhaka-1100
Keshob Chandra Das Senior Scientific officer Email: keshobcd@yahoo.com Cell: 01712687287	Molecular Biotechnology	Establishment of DNA Profiling facilities at NIB for the common people and Legal system of Bangladesh	Molecular Biotechnology Division, National Institute of Biotechnology, Gonakbari Savar, Dhaka-1349
Khandker Khaldun Islam Associate Professor Email: ikhandker@gmail.com Cell: 01712-503408	Molecular Biology	Teaching and Research	BGE Discipline, Khulna University

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Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Khandaker Rayhan Mahbub Scientific Officer Email: krmjissan@gmail.com Cell: 01719005441	Food Microbiology, Environmental Microbiology, Industrial Microbiology and Biotechnology	Risk assessment of Salmonella, Production of cellulase enzyme by Trichoderma, Bioremediation of Textile effluents, Detection of Mycotoxin producing fungi from animal feed	Industrial Microbiology Laboratory , Institute of Food Science and Technology, Bangladesh Council of Scientific and Industrial Research, Dhanmondi, Dhaka
Kishwar Jahan Shethi Research associate Email: Kishwar.shethi@gmail.com Cell: 01725577063	Molecular plant biology and biotechnology	Improvement of legume plants	Plant breeding and biotechnology lab., Dept. of Botany, University of Dhaka
Kuasha Mahmud Principal Scientific Officer Email: kmahmud31@yahoo.com Cell: 07326-63414 01715123656	Plant Biotechnology	Tissue Culture, molecular markers, fingerprinting, RAPD	Biotechnology Division, Bangladesh Sugarcane Research Institute, Ishurdi-6620, Pabna
Lalila Khaleda Assistant Professor Email: lkhaledcu@yahoo.com Cell: 01720478294	Tissue Culture and Plant Biotechnology	Identification of salt tolerant gene from different rice verities	Department of Genetic Engineering and Biotechnology, Chittagong University, Chittagong
M. A. Jalil Senior Scientific Officer Email: jalilgene@gmail.com Fax: 88-02-7791675	Animal Biotechnology	Farm Animal Genetic Engineering trainee in China	Goat & Sheep Production Research Division, Bangladesh Livestock Research Institute, Savar, Dhaka 1341
Mahbubur Rahman Scientific Officer Email: Mahbub123@yahoo.com Cell: 01912880052	Industrial Biotechnology	Enzyme Technology	Biochemistry Department, Bangladesh Jute Research Institute, Manik Mia Avenue, Dhaka-1207
Mahbub-E-Sobhani Associate Professor Email: mahbubsobhani@yahoo.com.sg Cell: 01552-484100	Psychoneuroimmunology	Teaching and Research	BGE Discipline, Khulna University
Mahdi Mohammad Moosa Email: mahdi.moosa@gmail.com Cell: 01717483843	Plant and Medical Biotechnology, Bioinformatics	Research Associate	Molecular Biology Lab, Department of Biochemistry and Molecular Biology, University of Dhaka, Dhaka
Mahin Afroz Ph.d Student Email: Mahin.afroj@yahoo.com Cell: 01710813722	Molecular cytogenetics	Characterization of wild cotton germplasm through molecular cytogenetics	Molecular cytogenetics Lab. , Dept. of Botany, University of Dhaka

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Mahmuda Begum Scientific Officer Email: panna_mahmuda@yahoo.com Cell: 01721313869	Animal Biotechnology (DNA Bar-coding), Ornamental fish culture and fish feed (live & artificial)	Research	Zoology Section, BRD, BCSIR, Dhaka-1205, Bangladesh.
Mahmudul Hasan Researcher Email: mhasan_fish@yahoo.com	Animal Biotechnology	Evolution and Phylogeny of animals	Institute for Amphibian Biology, Graduate School of Science, Hiroshima University, 1-3-1 Kagamiyama, Higashi-Hiroshima, Hiroshima 739-8526, Japan
Mahmud Hossain Assistant Professor Email: Mahmudbio1480@yahoo.com Cell: 01712659151	Neurobiology	Heavy metal toxic effect on brain development	Department of Biochemistry and Molecular Biology, Dhaka University
Mahfuza Momen Scientific Officer Email: mahfuza37@gmail.com Cell: 01811132752	Insect Biotechnology	Sterile Insect Technique (SIT)	Insect Biotechnology Division, IFRB, Bangladesh Atomic Energy Commission
U. S. Mahzabin Amin Scientific Officer Email: mahzabin.amin@gmail.com Cell: +880-1720101859	Molecular Biotechnology	Cloning and Transformation of transgenic rice	National Institute of Biotechnology, Ashulia, Savar, Dhaka-1349
Md. Abdul Bari Senior Scientific Officer Email: mabari.baec@gmail.com Cell: 01716232320	Phytosanitation and Insect Pest Management	Phytosanitation and Insect Pest Management using Irradiation	Insect Biotechnology Division, IFRB, Bangladesh Atomic Energy Commission
Md. Abdul Halim Scientific Officer Email: abdulhalim@gmail.com Cell: 01715914227	Plant Biotechnology	Biotechnological Research	Basic and Applied Research on Jute Project, BJRI, Dhaka
Md. Abdul Quddus Professor Email: gpbbau74@yahoo.com Cell: 01715-867078	Plant Biotechnology	Genetics Plant Breeding (Breeding Brassica Oilseeds)	Department of Genetics Plant Breeding, Bangladesh Agricultural University Mymensingh-2202
Md. Adnan Al Bachchu Assistant Professor Email: adnan@hstu.ac.bd, adnan_hstu@yahoo.com Cell: +88 01713163342	Plant Biotechnology	Teaching and Research	Department of Entomology, Faculty of Agriculture, Hajee Mohammad Danesh Science and Technology University, Dinajpur-5200

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Md. Aftab Hossain Senior Scientific Officer Email: mdaftabh@yahoo.com Cell: 01916280436	Insect biotechnology	Doing research on insect Biotechnology and supervising post graduate research students	Bangladesh Atomic Energy Commission, Institute of Food and Radiation Biology, Insect Biotechnology Division, Ganakbari, Savar, Dhaka-1349
Md. Ahsan Habib PhD fellow Email: Ahasan73@yahoo.com Cell: 01711206709	Molecular cytogenetics	Molecular characteriza- tion of peanut germplasm in Bangladesh	Molecular cytogenetics Lab., Dept. of Botany, University of Dhaka
Md. Akhtar-E-Ekram Assistant Professor Email: ekram_2012@ru.ac.bd Cell: 01718442560	Microbiology	Principal Investigator, Project from Faculty of Life and Earth Sciences, University of Rajshahi.	Department of Genetic Engineering and Biotechnology, University of Rajshahi.
Md. Ali Akbar Bhuiyan Scientific Officer Email: aab76_blri@yahoo.com Cell: 01711981092	Animal Nutrition/- Feed Biotechnology	Feeds & forage development	Animal Production Research Division, Bangladesh Livestock Research Institute, Savar, Dhaka
Md. Ali Asgar Assistant professor Email: ali_asgar308@yahoo.com	Biochemistry and Cancer Biology (Animal tissue culture)	PhD fellow, Khon Kaen University, Thailand	Patuakhali Science and Technology University
Md. Altaf Hossain Senior Scientific Officer Cell: 01819448221	Plant Biotechnology	-	TCRC, Bangladesh Agricultural Research Institute, Gazipur-1701
Md. Anwar Hossain Assistant Professor Email: hossainma2003@yahoo.com	Plant Biotechnology (Molecular Breeding of Brassica)	Genetics and Plant Breeding	Department of Genetics Plant Breeding, Bangladesh Agricultural University, Mymensingh-2202
MD. Ashrafuzzaman Assistant Professor Email: azamanbt@yahoo.com, mazsust@yahoo.com Cell: 01716081004 01673990355	Plant Biotechnology, Molecular Breeding	Teaching and Research Abiotic stress tolerance breeding, Doing MSc in Plant Biotechnology, Wageningen University, Netherlands	Department of Genetic Engineering & Biotechnology, Shahjalal University of Science & Technology (SUST) Sylhet-3114
Md. Ehsanul Haque Scientific Officer Email: ehsanul.h@bari.gov.bd ehsanul777@gmail.com Cell: 01816194996	Plant Biotechnology	Plant breeding, Marker Assisted Breeding	Biotechnology Division, Bangladesh Agricultural Research Institute (BARI), Joydebpur, Gazipur 1701
Md. Emdadul Islam Associate Professor Email: emdad950711@yahoo.com Cell: 01712-773266	Biochemistry and Molecular Biology	Teaching and Research	BGE Discipline, Khulna University

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Md. Fakruddin Scientific Officer Email: fakruddinmurad@gmail.com Cell: 01717684750	Food and Industrial Microbiology, Molecular Biology, Bioinformatics, Environmental Microbiology	Multiplex PCR detection of pathogenic bacteria from shrimp value chain, Alcohol production by yeast, Isolation, characterization and toxin production of Bacillus thuringensis, Production of cellulase enzyme by Trichoderma, Detection of Mycotoxin producing fungi from animal feed	Industrial Microbiology Laboratory, Institute of Food Science and Technology, Bangladesh Council of Scientific and Industrial Research (BCSIR), Dhanmondi, Dhaka
Md. Faruque Miah Assistant Professor Email: faruquebtc@yahoo.com Tel: +88-0821-714479 Ext. 411 Cell: +8801712865321	Fish Biotechnology (Fish/Crustacea Genetics)	Marker Techniques in Fish and Crustacea, Gene Transfer in Fish, Genetic Breeding in Fish	Department of Genetic Engineering and Biotechnology, Shahjalal University of Science and Technology, Sylhet
Md. Golam Sharoar <i>Lecturer</i> Email: sharoar_ru@yahoo.com	Microbial and Animal Biotechnology	PhD research student	 i) Department of Biomaterials Engineering, Chosun University, Gwangju, Republic of Korea ii) Department of Genetic Engineering & Biotechnology, Rajshahi University, Rajshahi 6205, Bangladesh
Md. Habibur Rahaman Graduate Student Email: mailhabibur@yahoo.com Cell: +8801195101890	Plant and Medical Biotechnology	Graduate Research student, Department of Genetic Engineering and Biotechnology, University of Dhaka	Plant Biotechnology Laboratory, Department of Biochemistry & Molecular Biology, University of Dhaka, Dhaka-1000
Md. Hazrat Ali PhD. fellow and research associate	Plant biotechnology	Development of chick pea	Plant breeding and biotechnology lab., Dept. of Botany, University of Dhaka
Md. Khairul Basher <i>Scientific Officer</i> Email: kbashar20@yahoo.com Cell: 01937244292	Animal Nutrition/- Feed Biotechnology	Feeds & forage development	Animal Production Research Division, Bangladesh Livestock Research Institute, Savar, Dhaka
Md. Latiful Bari Principal Scientist Email: latiful@univdhaka.edu Cell: 01971560560	Food Microbiology	Research	Centre for Advanced Research in Sciences (CARS), University of Dhaka

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Md. Mahbubul Hassan Lecturer Email: mmhassan46@yahoo.com Cell: +8801717100639	Fisheries Biotechnology	 a) Climate change impacts assessment on fisheries b) Mapping the current riverine fishes biodiversity as a co-researcher c) Fish sperm cryo preservation 	Department of Fisheries Biology and Genetics, Hajee Mohammad Danesh Science and Technology University (HSTU) Dinajpur-5200
Md. Mahbubur Rahman Senior Research Officer Email: mahbub_bfri90@yahoo.com Tel: 88-031-681572 (Office) Cell: 01711482876	Plant Biotechnology	Micro propagation on Rubber	Silviculture Genetics Division, Bangladesh Forest Research Institute, P.O - Amin Jute Mills, P.SPanchlish Chittagong-4211
Md. Mahmud Hasan Scientific Officer Email: mahmud25us@yahoo.com mahmud@nib.gov.bd Cell: +88-01718555545, 01672082614	Molecular Genetics, Environmental Microbiology, Cytogenetics and Fisheries biotechnology	Molecular characterization of Hilsha fish using microsatellite marker and mtDNA, fish karyotype, cryopreservation of endangered fish	Fisheries Biotechnology Division, National Institute of Biotechnology Ganakbari, Savar, Dhaka-1349
Md. Miraj Kobad Chowdhury Assistant Professor Email: miraj@univdhaka.edu Cell: 01673612899	Medical Genetics Molecular and Industrial Biotechnology	Research and Teaching	Department of Genetic Engineering and Biotechnology, University of Dhaka
Md. Mizanur Rahman Assist. Professor Email: mizanfish@yahoo.com Cell: 01914991223	Molecular ecology and DNA barcoding	Involved in two projects funded by MoE and UGC	Dept. of Zoology, University of Dhaka
Md. Khasrul Alam Lecturer Email: manik.bge@gmail.com Cell: 01717610919	Microbial Biotechnology	Teaching	Department of Biotechnology and Genetic Engineering, Islamic University, Kushtia-7003
Md. Mominul Islam Sheikh Email: mominbgeiu@yahoo.com Cell: 0082-1086959990	Environmental Biotechnology	Ph.D Student Research work: Biofuel production by using agricultural waste materials through isolating novel microorganisms	Md. Mominul Islam Sheikh, C/O: Professor Kim Chul-Hwan, Building No: 110/451, Division of Environmental Forest Sciences, College of Agriculture and Life Sciences, Gyeongsang National University, Jinju, Republic of Korea
Md. Monirul Islam Senior Scientific Officer Email: mislambrri73@gmail.com Cell: 01716733568	Plant Biotechnology	Marker Assisted Selection, Development of drought tolerance rice lines through in-vitro culture, Gene pyramiding	Biotechnology Division, Bangladesh Rice Research Institute (BRRI), Gazipur-1701

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Md. Nazmul Hasan Assistant Professor Email: nazmul_bt19@yahoo.com Cell: 01911034367 01716821750	Animal, Medical, Environmental and Fisheries Biotechnology	Teaching and Research (Medical Biotechnology and Fisheries Biotechnology)	Dept. of Genetic Engineering and Biotechnology, Jessore Science and Technology University, Jessore-7408
Md. Nur Hossain Scientific Officer Email: mnhossain84@gmail.com Cell: 01670836591	Food Engineering, Food Processing and Preservation, Food Technology, Food Microbiology, Food Safety and Sanitation	Food Safety and Bioprocessing, Isolation, characterization and bacteriocin production of Lactobacillus sp., Bioremediation of Textile effluents, Production of cellulase enzyme by Trichoderma	Industrial Microbiology Laboratory , Institute of Food Science and Technology, Bangladesh Council of Scientific and Industrial Research (BCSIR), Dhanmondi, Dhaka
Md. Raihan Ali Professor Email: raihan.bge@gmail.com Cell: 01711-953126	Plant Biotechnology, Molecular Breeding & Genetic Engineering Mushroom Biotechnology, Probiotics, Biocontrol of pathogens.	Teaching and Research	Biotechnology and Genetic Engineering Discipline, Khulna University, Khulna-9208
Md. Riajul Hossain Lecturer Email: riajul.hossain@du.ac.bd, riaj1111@gmail.com Cell: 01675338778	Environmental Biotechnology and Diseases	Research and Teaching	Department of Genetic Engineering and Biotechnology, University of Dhaka
Md. Rashed Hossain Lecturer Email: rashedagbau@gmail.com	Plant Biotechnology, Molecular Genetics	Genetics and Plant Breeding	Department of Genetics and Plant Breeding, Bangladesh Agricultural University, Mymensingh-2202
Md. Rashedul Islam Lecturer Email: mrislambiotech@gmail.com	Animal Biotechnology	Teaching and research	Department of Genetics and Animal Breeding, Faculty of Veterinary and Animal Science, Hajee Mohammad Danesh Science & Technology University, Dinajpur-5200
Md. Saiful Islam Scientific Officer Email: islam.saiful007@yahoo.com Cell: 01726746988	Plant Biotechnology	Plant Tissue culture, molecular genetics	Biotechnology Division, Bangladesh Agricultural Research Institute (BARI), Joydebpur, Gazipur-1701

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Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Md. Sarafat Ali Assistant Manager (Biotech) Email: sarafatbiotech@yahoo.com Tel: 02-8619521-2 Cell: 8801713648442	Plant Biotechnology	Plant Tissue Culture & Molecular Biology	Biotech Division, Lal Teer Seed Limited, Anchor Tower, 108, Bir Uttam C. R. Datta Road Dhaka-1205
Md. Sarwar Morshed Research Associate Email: sarwar1160@yahoo.com Cell: +8801911102623	Molecular Cloning, Tissue Culture, GUS Assay	Characterization of OsNHX1 promoter from Pokkali and IR64	Plant Biotechnology Lab, Department of Biochemistry & Molecular Biology, University of Dhaka, Dhaka
Md. Sazzadur Rahman <i>PhD student</i> [Senior Scientific Officer as Office designation] Email: sazzad_brri@yahoo.com Cell: +8801722210429	Plant Biotechnology	Marker assisted backcrossing for introgression of Saltol QTL into two Bangla- deshi mega rice variety	Plant Biotechnology Laboratory, Department of Biochemistry and Molecular Biology, University of Dhaka, [Office: Plant Physiology Division, BRRI, Gazipur
Md. Shafikur Rahman Lecturer Email: ronijss@gmail.com or roni_jss@yahoo.com Cell: +88-01717-469112 0r +88-0172907788 0r +88 01920064566 Fax: +88-04427-56112	Genetic fingerprinting (Molecular markers) and Plant tissue culture	Co-research Investigator of Breeding for Saline Resistant Jute Varieties through rapid screening and DNA Marker Assisted Selection	Department of Biotechnology, Faculty of Agriculture, Patuakh- ali Science and Technology University, Dumki Patuakhali-8602
Md. Shafiquzzaman Scientific Officer Email: shafiqbt84@gmail.com Cell: 01717008862	Madical Biotechnology	Madical Environmental Biotechnology	Environmental Biotechnology Division, National Institute of Biotechnology, Ganakbari Savar, Dhaka
Md. Shahadat Hossain Scientific Officer Email: khanbjri@gmail.com Cell: 01716575568	Plant Biotechnology	Biotechnological Research	Basic and Applied Research on Jute Project, BJRI, Dhaka
Md. Shahidul Islam Senior Biotechnologist Email: nshahidul@gmail.com Cell: 01552-490820	Molecular Biology and Biotechnology	Analysis and validation of jute genome sequence, Functional genomics of Jute	Basic and Applied Research on Jute Project, Bangladesh Jute Research Institute, Manik Mia Avenue, Dhaka-1207
Md. Shahidul Islam Assistant Professor Email: shahidj1@yahoo.com Tel: +4407975684696	Fisheries and Microbial Biotechnology	Research: Gene expression regulation in a pathogenic bacterium	Department of Biotechnology, Bangladesh Agricultural University, Mymensingh-2202
Md. Shamim Ahasan Lecturer Email: shamim.bau10@yahoo.com Tel: +88053161347 Cell: +8801722 002061	Animal and Microbial Biotechnology	Lecturer, Department of Medicine, Surgery & Obstetrics	Department of Medicine, Surgery & Obstetrics, Faculty of Veterinary and Animal Science, Hajee Mohammad Danesh Science and Technology University, Dinajpur-5200

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Md. Shamim Akhter Assistant Professor Email: shamim11_akhter@yahoo.com Cell: 01718482468	Plant Biotechnology	Teaching & Research	Biotechnology & Genetic Engineering Discipline, Khulna University, Khulna
Md. Shamsul Alam Bhyuian Associate Professor Email: bhuiyansa@yahoo.com Cell: 01745-748849	Animal Biotechnology	Teaching and Research	Department of Animal Breeding & Genetics, Bangladesh Agricultural University, Mymensingh-2202
Md. Tariqul Islam Research Associate Email: t.tareq07@gmail.com Cell: 01671414147	Plant Biotechnology	Jute research at molecular level	Molecular Biology Lab, Department of Biochemistry and Molecular Biology, Dhaka University
Md. Zakir Hossain Scientific Officer Email: zakirbjri@yahoo.com Cell : 01715823915	Plant Biotechnology	Biotechnological Research	Basic and Applied Research on Jute Project, BJRI, Dhaka
Md. Zakir Hossain Howlader Professor Email: hhzakir@yahoo.com Cell: 01716409601	Clinical Biochemistry	Vit D in Pregnancy	Molecular Biology Lab, Department of Biochemistry and Molecular Biology, Dhaka University
Mohammad Ashiqul Islam Assistant professor Email: m.a.islam@bau.edu.bd	Food and Nutrition	PhD at IKBM, NMBU, Norway	Department of Dairy Science
Mohammad Anwar Hossain Assistant Professor Email: hossainma2003@yahoo.com hossainma@gmail.com	Plant Biotechnology	Doing PhD research on molecular study of glyoxalase pathway and antioxidative pathway in plant abiotic stress response and tolerance	Department of Genetics & Plant Breeding, Bangladesh Agricultural University, Mymensingh-2202
Mohammad Ferdous Mehbub Assistant Professor Email: etuferdous@yahoo.com and mehb0001@flinders.edu.au Tel: 00610416630486	Medical Biotechnology	Ph.D student, Department of Medical Biotechnology, Faculty of Health Science, Flinders University, Sturt Road, Adelaide, South Australia	Department of Fisheries Technology, Faculty of Fisheries, Hajee Mohammad Danesh Science and Technology University, Dinajpur-5200
Mohammad Masud Rana Mufti Scientific Officer (RCC Project) Email: ranaabg@yahoo.com Cell: 01912-690029	Animal Biotechnology	-	Bangladesh Livestock Research Institute, Savar, Dhaka-1341

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Mohammad Moinul Islam Scientific Officer Email: moinulbjri@yahoo.com Cell : 01819132575	Plant Biotechnology	Biotechnological Research	Basic and Applied Research on Jute Project, BJRI, Dhaka
Mohammad Musarraf Hussain Assistant Professor Email: moshopharma@yahoo.com Cell: 01914584722	Natural products	Phytochemistry	Department of Pharmacy, Noakhali Science and Technology University, Sonapur, Noakhali-3802
Mohammad Nazir Hossain Visiting Professor and Executive Director Email: dr.hossain@ichibanlifetech.com Cell: +8801713068205	Plant Biotechnology, Molecular Cell Biology	Molecular Cell Biology, Medical Biotechnology	Ichiban lifetech Solutions Ltd., Sarder Garden House, P.O. Ashulia, Savar Dhaka
Mohammad Nazrul Islam Assistant Professor Email: nazrul_bd5@yahoo.co.uk Cell: 01715-326325 Tel: +88-02-9144279	Plant and Fish Biotechnology	Molecular Characteri- zation of Plant and Fish Biotechnology	Department of Biotechnology, Sher-e-Bangla Agricultural University, Dhaka-1207
Mohammad Shahadat Hossain Khan Scientific Officer Email: shahadatbjri@yahoo.com Tel: 9139996 (Off) Cell: 01716575568	Plant Biotechnology	Biotechnological Research (on lien)	Genetic Resources and Seed Division, BJRI, Manik Mia Avenue, Dhaka-1207
Md. Azizul Islam Lecturer Email: azizbge.iu@gmail.com Cell: 01724789795	Microbial Biotechnology	Teaching	Department of Biotechnology and Genetic Engineering, Islamic University, Kushtia-7003
Md. Yousuf Ali Khan Scientific Officer Email: myak.blri@gmail.com Cell: 01717744075	Animal Reproduction Biotechnology & Molecular Genetics	Bovine	Biotechnology Division, Bangladesh Livestock Research Institute, Savar, Dhaka
Mohibur Rahman M. S. research student Email: ummon_bge@yahoo.com Cell: 01717426915	Medical Biotechnology (Pharmaceutical Biotechnology)	Doing research on cytotoxic effects of different plants Searching for ethnomedicine in different area of Bangladesh	Department of Biotechnology & Genetic Engineering, University of Development Alternative (UODA), House-47/A, Road- 16/A (new), 27(old), Dhanmondi, Dhaka-1207

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Momena Khatun Researcher Email: monarahman24@yahoo.com momena.khatun@post.au.dk Cell: +4552950869	Animal Reproduction and Immunogenetics	Doing Masters' in Immunogenetics, Aarhus University, Denmark	C/O-Professor MGS Alam, Department of Surgery and Obstetrics, Bangladesh Agricultural University, Mymensingh-2202
Monzur Morshed Ahmed Senior Scientific Officer Email: monzur_29@yahoo.com Cell: 01552636715	Food and Bio-safety, Food and Industrial Microbiology	Food Safety and Biosafety, Risk Assessment of GMOs, Yeast fermentation, Pungent growth and Mycotoxins	Industrial Microbiology Laboratory, Institute of Food Science and Technology, Bangladesh Council of Scientific and Industrial Research, Dhanmondi, Dhaka
Mousona Islam Scientific Officer Email: mousonaislam@yahoo.com Cell: 01711450332	Plant tissue culture and Cytogenetics	Research on micro propagation, molecular and cytogenetical characterization of plants	Plant Tissue Culture Section, Biological Research Division, BCSIR Laboratories, Dhaka-1205
Mr. A. M. Abu Ahmed Assistant Professor Email: abugebcu @ yahoo.com Cell: 01554-313964	Pharmaceutical Biotechnology, DNA Fingerprinting	Conducting research on phytomedicine	Department of Genetic Engineering and Biotechnology, Chittagong University, Chittagong
Mr. Adnan Mannan Assistant Professor Email: adnan_orko@yahoo.com Cell: 01716903485	Medical Biotechnology & Bioinformatics	Genetic disorders, Microbial mutagenesis	Department of Genetic Engineering and Biotechnology, Chittagong University, Chittagong
Mr. AM Masudul Azad Chowdhury Assistant Professor Email: massud14213@yahoo.com Cell: 01819-975723	Microbial Biotechnology, Environmental Biotechnology	Environmental Biotechnology	Department of Genetic Engineering and Biotechnology, Chittagong University, Chittagong
Mr. Ishtiaque Rashed Assistant Professor Email: rashidishtiaque@gmail.com Tel: 880-2-7791045-51, Ext: 1701	Medical Biotechnology (Oncology)	Teaching and Research	Department of Biotechnology & Genetic Engineering, Jahangirnagar University, Savar, Dhaka-1342
Md. Abu Sayem Jiku Scientific Officer Email: jikuly@gmail.com Cell: 01717-562673	Plant Biotechnology	Tissue Culture, Molecular Biology and Genetic Transformation	Biotechnology Division, Bangladesh Sugarcane Research Institute, Ishurdi-6620, Pabna.
Moontaha Mahbub Lecturer Email: moontaha002@gmail.com Cell: 01759512821	Cytogenetics	Research and Teaching	Department of Botany, Jagannath University, Dhaka-1100

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Mrs. Sangita Ahmed Associate Professor Email: sangitaahmed@yahoo.com Tel: 9661920-73/Ext. 7754	Medical Microbiology	Medical Microbiology	Department of Microbiology, University of Dhaka
Mst. Muslima Khatun Scientific Officer Email: ranibtech_1985@yahoo.com Cell: 01716280501	Plant Biotechnology	Plant Tissue Culture, Molecular Biology and Genetic Transformation	Plant Biotechnology Division, National Institute of Biotechnology, Ganakbari, Savar, Dhaka-1349, Bangladesh.
Mst. Dilafroza Khanam Principal Scientific Officer Email: khanammarry@gmail.com Cell: 01673900311, 01931124138	Plant Biotechnology	Plant Tissue Culture, Embryo Culture, Anther Culture	Biotechnology Division, Bangladesh Agricultural Research Institute (BARI), Joydebpur, Gazipur-1701
Mst. Monira Khaton Email: monira_khtun@yahoo.com Tel: 3803443847	Agricultural Biotechnology	ISAAA news translator in Bangladesh, PhD Student, (Maize epigenetics and environmental stress response)	Department of Environmental Agronomy and Crop Production, University of Padova, Italy
Mst. Rokshanara Khatun Scientific officer Email: rokshanara.bt@gmail.com Cell: 01917616129	Animal Biotechnology	Genetic diversity study using microsatellite DNA analysis for large scale farming of Black Bengal goat	Animal Biotechnology Division, National Institute of Biotechnol- ogy, Ganakbari, Savar, Dhaka-1349
Mst. Sultana Razia Scientific Officer Email: munnibau@yahoo.com Cell: 07122707449	Doing MS on Biotechnology	Identification of QTLs for salinity tolerance both at seedling and reproductive stage in rice	Biotechnology Division, Bangladesh Rice Research Institute (BRRI), Gazipur-1701
Mahfuza Pervin Scientific Officer Email: mahfuza.tinni_bau@ymail.com Cell: 01737666874	Plant Biotechnology	Marker Assisted Selection	Biotechnology Division, BINA, BAU Campus, Mymensingh-2202 Bangladesh
Muhammad Abdur Rashid Scientific Officer Email: marashid31@yahoo.com	Poultry production and management technology	Research on Poultry production and management technology (area of interest: microbial biotechnology)	Bangladesh Livestock Research Institute (BLRI), Savar, Dhaka
Muhammad Rezwan Kabir Scientific Officer Email: rezwan.kabir@yahoo.com Cell: 01552411468	Plant Biotechnology	Plant Tissue culture, molecular genetics, genetic engineering	Biotechnology Division, Bangladesh Agricultural Research Institute (BARI), Joydebpur, Gazipur -1701

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Muhammad Shafiul Azam Email: shafaz89@yahoo.com Cell: 01757121419	Plant and Microbial Biotechnology, Bioinformatics	Research Associate	Molecular Biology Lab, Department of Biochemistry and Molecular Biology, University of Dhaka, Dhaka
Muhammad Tanvir Hossain Chowdhury <i>Upazilla Fisheries Officer</i> Email: tanvir_h1998@yahoo.com Tel: 881058181998	Marine Biotechnology	Doctoral Student	Department of Biotechnology, Pukyong National University, Busan, South Korea
Muhammed Ali Hossain Assistant Professor Email: alihossain.bau@gmail.com shimulppath@gmail.com	Molecular Plant Pathology and Biotechnology	Doing PhD research on "Development of molecular marker for Verticillium longisporum resistance in oilseed rape"	Department of Plant Pathology, Bangladesh Agricultural University, Mymensingh-2202
Mustak Ibn Ayub Assistant Professor Email: miayub@univdhaka.edu Cell: 01712246396	Biopharmaceuticals, Molecular Biology, Gene therapy	Biopharmaceuticals, Molecular Biology, Gene therapy	Department of Genetic Engineering & Biotechnology, University of Dhaka, Dhaka-1000
Nadira Islam Senior Scientific Officer Email: nadira_bsri@yahoo.com Cell: 07326-63414 01718241184	Plant Biotechnology	Tissue Culture, Molecular Biology and Genetic Transformatio	Biotechnology Division, Bangladesh Sugarcane Research Institute, Ishurdi-6620, Pabna
Nazmul Haque Senior Scientific Officer Email: tanna_bge@yahoo.com Cell: +88-01816-310499 www.tannabge.yolasite.com	Plant, Medical, Food and Industrial Biotechnology	Production of Food and Medicine	RDDR Department, Modern Herbal Group, Moghbazar, Dhaka-1217
Niaz Mahmood Email: nm_ami@hotmail.com Cell: 01712263635	Plant Biotechnology, Bioinformatics	Research Associate	Molecular Biology Lab, Department of Biochemistry and Molecular Biology, University of Dhaka, Dhaka
Noorjahan Begum (Maliha) Senior Research Officer Email: noorjahan@icddrb.org, noorjahan.maliha@gmail.com Cell: 01816213538	Real time PCR, Conventional PCR, Tissue culture, Sequencing	Molecular Detection and Characterization of Influenza and other respiratory viral panel in BSL-2 Lab.	Virology Laboratory, icddrb.
Nusrat Sultana Senior Research Officer Email: nusrat767@gmail.com Cell: 01724-096080	Plant Biotechnology	Micro propagation on bamboos, forest tree and medicinal plants.	Silviculture Genetics Division, Bangladesh Forest Research Institute, P.O Amin Jute Mills, P.SPanchlish, Dist-Chittagong 4211

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Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Nusrat Sultana Lecturer Email: nusrat@bot.jnu.ac.bd Cell: 01787217708	Cytogenetics	Research and Teaching	Department of Botany, Jagannath University, Dhaka-1100
Palash Kumar Sarker <i>Scientific Officer</i> Email: palashnib@yahoo.com Cell: 01718700078	Industrial, Medical and Microbial Biotechnology	Research (Enzyme Technology)	Microbial Biotechnology Division, National Institute of Biotechnology, Ganakbari, Savar, Dhaka
Proyash Roy Lecturer Email: proyash.roy@gmail.com Cell: 01717091154	Molecular Biotechnology	Molecular Biotechnology	Department of Genetic Engineering and Biotechnology, University of Dhaka Dhaka-1000
Purba Banerjee Assistant Plant Biotechnologist Email: purbabanerjee05@gmail.com Cell: 01912884186	Plant Biotechnology	Plant Tissue culture on Potato, Banana & Orchid and Molecular Characterization of vegetable crops	Biotech Lab, Lal Teer Seed Ltd. Anchor Tower, 108 C.R. Datta Road, Dhaka-1205
Quazi Md. Mosaddeque Hossen Scientific Officer Email: mosaddequebjri@yahoo.com Cell: 01712772221	Plant Biotechnology	Biotechnological Research	Basic and Applied Research on Jute Project, BJRI, Dhaka
Razib Ahmed Email: biorajib@yahoo.com Cell: 01712861398	Plant Biotechnology, Bioinformatics	Research Associate	Molecular Biology Lab, Department of Biochemistry and Molecular Biology, University of Dhaka, Dhaka
Rejbana Alam PhD candidate Email: rejbana@gmail.com	Plant Molecular Biology & genetics, Plant physiology	Molecular and physiological studies of multiple abiotic stress tolerances in rice.	Botany & Plant Sciences, University of California, Riverside
Richard Malo Manager, Molecular Biology Lab Email: Richard.malo@gmail.com Cell: 01617980422	Plant Biotechnology	Marker assisted selection of rice	BRAC Agricultural Research and Development Centre
Rifat Ara Najnin Research Associate Email: najninrifat@gmail.com Cell: 01918337081	Plant Biotechnology	Jute research at molecular level	Molecular Biology Lab, Department of Biochemistry and Molecular Biology, Dhaka University
Reaz Mohammad Mazumdar Scientific Officer Email: reazbio@gmail.com Cell: +8801819623623	Environmental Biotechnology	Chromium toxicity reduction by using microbes	BCSIR Laboratories, Chittagong Chittagong-4220

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Ripa Akter Sharmin Lecturer Email: ripa.sharmin@gmail.com Tel: 7176172 (off) Cell: 01917826629	Plant Biotechnology, Plant Tissue Culture, Plant Breeding	Teaching & Research	Department of Botany, Jagannath University, Dhaka-1100
Ripon Kumar Roy Scientific Officer Email: riponkumar1983@yahoo.com Cell: 01719593302	Plant Biotechnology	Anther culture of rice for development of high yielding and different stress tolerance rice lines	Biotechnology Division, Bangladesh Rice Research Institute (BRRI), Gazipur-1701
Rozalynne Samira <i>PhD student</i> Email: rozalynne13@yahoo.co.in rsamira@ncsu.edu Cell: +88-01716867649	Plant Biotechnology	Elucidation of iron deficiency response mechanism in Arabidopsis thaliana	Department of Plant and Microbial Biology, North Carolina State University, USA.
Rumana Sultana Tammi Assistant Professor, Jahangirnagar University rEmail: umanatammi@yahoo.com Cell: 01816883584	Plant Biotechnology	PhD student, Development of drought and salt tolerant transgenic rice	Plant Biotechnology Laboratory, Department of Biochemistry and Molecular Biology, Dhaka university
Saadlee Shehreen Lecturer Email: saadleeshehreen@gmail.com Cell: 01670-460151	Microbial biotechnology and enzyme technology	Research	Department of Genetic Engineering and Biotechnology, University of Dhaka Dhaka-1000
Sabrina Moriom Elias Research Associate Email: sabrina.elias@gmail.com Cell: +880-1715259887 01512931313	Molecular Biology, Biotechnology, Bioinformatics,	Next generation sequencing based genotyping and expression analysis	Plant Biotechnology Lab, Department of Biochemistry and Molecular Biology, University of Dhaka
Sabina Yesmin Scientific Officer Email: syesmin-06@yahoo.co.in Cell: 01712276776	Plant tissue culture and Plant genetic transformation	Genetic transformation of Eggplant and Rice, Micropropagation of <i>Aloe vera</i>	Plant Biotechnology Division, National Institute of Biotechnology, Ganakbari, Savar, Dhaka
Sabina Yasmin Assistant Professor Email: sabinay_bt@yahoo.com	Plant Biotechnology	Doing PhD on alpha-amylase characterisation in rice genotypes under low oxygen	Department of Biotechnology, Bangladesh Agricultural University, Mymensingh-2202
Saiful Alam Md. Tareq Field Investigator Office : 88-031-681572 Cell : 01816-039516 Email: tareq.bfri@gmail.com	Plant Biotechnology	Micro propagation on bamboos, forest tree and medicinal plants.	Silviculture Genetics Division, Bangladesh Forest Research Institute, P.O Amin Jute Mills, P.SPanchlish, Chittagong-4211

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Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Salim Ahmed Lecturer Email: salimgeb@gmail.com Tel: 9661920 (ext. 7816)	RNA biology, Bacterial group II introns, Transposable elements	In vivo studies of the mobility properties of BhI1 group II introns.	Genetic Engineering and Biotechnology, University of Dhaka
Samsad Razzaque Research Associate Email: Samsad1985@gmail.com Cell: 01712801367	Molecular Biology, Biotechnology, Bioinformatics	Next generation sequencing based genotyping and expression analysis	Plant Biotechnology Laboratory, Department of Biochemistry and Molecular Biology, Dhaka University
Shanaz Parvin Research Associate Email: Shanaz.sweety@gmail.com Cell: 01743210148	Plant Biotechnology	Development of salt tolerant transgenic rice variety	Plant Biotechnology Laboratory, Department of Biochemistry and Molecular Biology, Dhaka University
S.M. Abdul-Awal Assistant Professor Email: sohagbge@yahoo.com	Plant Transformation	Teaching and Research	BGE Discipline, Khulna University
S. M. Amanullah Scientific Officer Cell: 01913-715335	Microbial Biotechnology	-	Animal Production Research Division, Bangladesh Livestock Research Institute, Savar, Dhaka-1341
S. M. Ashiqul Islam Research Associate Email: mishus_mail@yahoo.com Cell: +8801911251527	Handling confocal Microscope, GUS assay, Inplanta transformation	Characterization of OsNHX1 promoter from Pokkali and IR64	Plant Biotechnology Lab, Department of Biochemistry & Molecular Biology, University of Dhaka, Dhaka
S. M. Mahbubur Rashid Assistant Professor Email: mahaburashid@univdhaka.edu Cell: 01818384208, Office	Molecular Biology, Computational biology	Human Endocrinology	Department of Genetic Engineering & Biotechnology, University of Dhaka, Dhaka-1000
S. M. Rafiquzzaman Assistant Professor Email: bokul44@yahoo.com	Fisheries Biotechnology	Teaching and Research	Dept. of Fisheries Biology & Aquatic Environment, Gazipur
S.M. Hisam Al Rabbi Scientific Officer Email: halrabbi@yahoo.com Cell: 01724013356	Plant Biotechnology	Marker assisted backcross breeding	Biotechnology Division, Bangladesh Rice Research Institute (BRRI), Gazipur-1701
S. M. Shahedul Islam Scientific Officer Email: shahedul411@gmail.com Cell: 01816332130	Karyotyping-for congenital anomaly in human. FISH (Fluorescence in Situ Hybridyzation) for cancer genetics.	Detection of BCR-ABL translocation in CML patient using FISH, PCR and High resolution banding karyotyping. Study of her-2/neu gene amplification in breast cancer by FISH in Bangladeshi subject.	Department of Pathology, Bangabandhu Sheikh Mujib Medical University.

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Saima Shahid Research Associate Email: saimashahid.du@gmail.com Cell: +8801827923790	Bioinformatics, small RNAs, Plant biology	Plant Biotechnology Lab	Plant Biotechnology Lab, Department of Biochemistry and Molecular Biology, University of Dhaka
Salim Ahmed Lecturer Email: salimahmed@univdhaka.edu Cell: 01712183789	Advanced Molecular Biology, Microbial Genetics, Recombinant DNA Technology, Human Molecular Genetics	Advanced Molecular Biology, Microbial Genetics, Recombinant DNA Technology and Human Molecular Genetics	Department of Genetic Engineering & Biotechnology, University of Dhaka, Dhaka-1000
Sanjida Rahman Mollika Lecturer Email: sanjida01.rahman@gmail.com Cell: 1716634301	Plant Biotechnology, Plant Tissue Culture, Plant Breeding.	Research and Teaching	Department of Botany, Jagannath University, Dhaka-1100
Shabnam Zaman Research Associate Email: shabnam.zaman87@gmail.com Cell: +8801732603924	Plant Biotechnology	Development of oral vaccine producing transgenic rice	Plant Biotechnology Lab, Biochemistry and Molecular Biology Department, Dhaka University
Shahina Akter Scientific Officer Email: shupty2010@gmail.com Cell: 01724096941	Plant Biotechnology	Plant Tissue Culture and genetic Engineering, edible vaccine development, Molecular Genetics	Plant Tissue Culture Section, Biological Research Division, BCSIR, Dhanmondi, Dhaka-1205
Shakila Faruque Senior Scientific Officer Email: shakila_blri@yahoo.com Cell: 01712205223	Poultry Breeding	Native Chicken and Quail breeding	Bangladesh Livestock Research Institute, Savar, Dhaka
Shamima Nasrin Scientific Officer Email: shamimanib@yahoo.com Cell: 01712638645	Plant tissue culture and Plant genetic transformation	Genetic transformation of Eggplant and Rice, Micropropagation of Aloe vera	Plant Biotechnology Division, National Institute of Biotechnology, Ganakbari, Savar, Dhaka
Shamsun Naher Scientific Officer Email: annie-nahar@gmail.com Cell: 01782043607	Environmental Biotechnology	Development of Cost Effective Rice Biofertilizer for Sustainable Agriculture	Environmental Biotechnology Division, NIB
Shirin Sultana Scientific Officer Email: shirinbau@yahoo.com Cell: 01737372333	Fisheries Biotechnology	Molecular analysis of fish, Cryopreservation	Fisheries Biotechnology Division, NIB, Savar, Dhaka.

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Shohel Mahmud Scientific Officer Email: slm.btge@gmail.com Cell: 01915093082	Human Resource Development and Animal Biotechnology	Antiviral activity of Aloe vera. Myxovirus resistant gene analysis	National Institute of Biotechnology Savar, Dhaka-1349
Sk. Amir Hossain Assistant Professor Email: isti_99@yahoo.com Cell: +880 1720478775	Protein Engineering, Structure Biology	Teaching and Research	BGE Discipline, Khulna University
Subrata Banik Senior Scientific Officer Email: sbanik@nib.gov.bd subrata.brri@gmail.com Cell: 01712099877	Environmental Biotechnology	Development of Cost Effective Rice Biofertilizer for Sustainable Agriculture	Environmental Biotechnology Division, NIB
Sudip Biswas Research Associate Email: sudipbmb@gmail.com Cell: +8801911984598	Plant Biotechnology	Development of salt tolerant transgenic rice variety	Plant Biotechnology Lab, Department of Biochemistry and Molecular Biology, University of Dhaka
Sumaiya Islam Scientific Officer Email: sumaiya_islam_08@yahoo.com Cell: 01715040672	Microbial Biotechnology	Multiplex PCR Detection of Pathogenic Bacteria from Shrimp Value Chain.	Industrial Microbiology Laboratory , Institute of Food Science and Technology, Bangladesh Council of Scientific and Industrial Research, Dhanmondi, Dhaka
Suma Mitra Plant Biotechnologist Email: suma.mitra@multimodebd.com Cell: 01741550061	Plant Biotechnology	Molecular Characteri- zation of vegetable crops, Purity test of Hybrids & Plant Tissue culture	Biotech Lab, Lal Teer Seed Ltd., Anchor Tower, 108 C.R. Datta Road, Dhaka-1205
Suman Das Scientific Officer Email: sumanbcsir@gmail.com Cell: 01816361131	Chemistry	Detection of Antibiotic residues, Antibiotic Sensitivity profile, Detection of Mycotoxin, Microbial Fermentation	BCSIR Laboratories, Chittagong
Sumaiya Farah Khan Assistant Professor, Jagannath University Email: Sumaiyafarah@yahoo.com Cell: 01924614919	Plant Biotechnology	PhD student, Characterization of salt tolerance landrace	Plant Biotechnology Laboratory, Department of Biochemistry and Molecular Biology, Dhaka University
Sujoy kumar Bhajan PhD. fellow and research associate Email: skbhajan@yahoo.com Cell: 01717606765	Molecular bioilogy, plant biotechnology	Development of transgenic mung bean line	Plant breeding and biotechnology lab., Dept. of Botany, University of Dhaka

Name and Designation	Areas of Expertise	Present Involvement	Department / Organization
Syeda Sharmeen Sultana Lecturer Email: rumanabotany@yahoo.com Cell: 01816702020	Molecular cytogenetics	Mol. Characterization of some cotton germplasm	Dept. of Botany, University of Dhaka
Syad Shakawat Hussain Professor and Vice-chancel- lor, PSTU Email: sshussain_bau@yahoo.com Cell: 01711-0740442	Animal Biotechnology	Animal Reproduction	Department of Animal Breeding & Genetics, Bangladesh Agricultural University, Mymensingh-2202
Tanzena Tanny Scientific Officer Email: ttanzena@yahoo.com Cell: 01911142361	Plant tissue culture,plant genetic transformation	Genetic transformation of rice	Plant Biotechnology Division, National Institute of Biotechnology, Ganakbari, Savar, Dhaka-1349
Tania Sultana Lecturer Email: taniasultana2004@yahoo.com Tel: +33605507752	Molecular Biology, Immunology	Evaluation of insertion site preferences by L1 retrotransposons	Retrotransposons and Genome Plasticity Group, Institute for Research on Cancer and Aging, Nice (IRCAN), France
Tapas Kumar Das Lecturer Email: tapasdu@yahoo.com Tel: 7176172 (off) Cell: 01716620453	Plant Biotechnology	Teaching & Research	Department of Botany, Jagannath University Dhaka-1100
Tariqul Islam Research Assistant Email: tariqul_86@yahoo.com Cell: +8801723262529	Plant Biotechnology	Research Assistant, Plant Biotechnology Laboratory	Plant Biotechnology Lab, Department of Biochemistry and Molecular Biology, University of Dhaka, Dhaka
Taslima Haque <i>Research Associate</i> Email: tahiadu@gmail.com Cell: 01199041367	Molecular Biology, Biotechnology, Bioinformatics	Next generation sequencing based genotyping and expression analysis	Plant Biotechnology Laboratory, Department of Biochemistry and Molecular Biology, Dhaka University
Tapas Kumer Barai Assistant Professor Email: tapas_01bge@yahoo.com Cell: 01712-096006	Molecular Biology, Medical Biotechnology, Plant Biotechnology	Teaching and Research	BGE Discipline, Khulna University
Zakir Hossain Research Fellow Email: fidelity_z@yahoo.com Cell: 01714 311576	Microbial Biotechnology	Evaluation of Antimicrobial Drugs to Design Effective Therapeutic Intervention for Control of Food-Borne Bacterial Diseases in Bangladesh	Industrial Microbiology Laboratory, Institute of Food Science and Technology (IFST), BCSIR, Dhanmondi, Dhaka 1205.
Zannatul Ferdous Assistant Professor, Email: ridhongo95@yahoo.com Cell: 01819260081	Genetics	Molecular genetics Mosquito vector	Department of Zoology

At a glance

National Institute of Biotechnology (NIB) is functioning as an autonomous organization under the Ministry of Science & Technology, Govt. of Bangladesh. It is expected that the establishment of this Institute is essential for ensuring socioeconomic development for ever increasing population of the country through the benefits of biotechnology. To accommodate all biotechnological activities under one umbrella, establishment of NIB has been initiated in 1999 at Ganakbari, Ashulia, Savar, Dhaka, which is about 40 Km away from the Dhaka city. Since then laboratories with modern equipment and other physical facilities have been developed to carry out state-of-the-art biotechnological research. NIB conducts research in the areas of agriculture and environmental biotechnology, recombinant DNA technology and biotech product and process development.

VISION

To create an institutional space for research, technology transfer and human resource development for developing ecofriendly biotech products that will ensure welfare of the people.

MISSION

- The institute is committed to create a strong infrastructure both for research and commercialization ensuring a steady flow of bioproducts, bioprocesses and new biotechnologies.
- The institute will serve the country as the coordinating center of biotechnology research and promote awareness on biotechnological innovations and technologies.
- Finally, the institute will engage, excite and trained up young people about biotechnology and its immense potential to heal the sick, feed the hungry, restore the environment, and fuel the economy.

FUNCTIONS OF THE INSTITUTE

- To develop eco-friendly & sustainable technology in Agriculture, Environment, Industry and Human Health using modern biotechnology and to apply the benefits of this technology for the welfare of human beings;
- To develop skilled manpower through biotechnological training program;
- To take necessary action and to facilitate in transferring innovative biotechnological achievements in the field;
- As a national institute, awareness programs on biotechnological issues to be carried out;
- To determine quality and certify Genetically Modified (GM) foods and GeneticallyModified Organisms (GMOs);
- To help National Committee of Biosafety in preparing policy guidelines on Biosafety, Bioethics and Biosurveillance;
- To undertake coordinated activities on biotechnology in collaboration with national and international institutes;
- To assist and coordinate with universities and other institutes carrying biotechnological activities;
- To promote international relationship through similar biotechnological research;
- To assist researchers in getting patent right of their new innovation;
- To carry other relevant duties assigned by the government and
- To take any necessary steps to execute above all activities.

RESEARCH DIVISIONS

- Animal Biotechnology
- Environmental Biotechnology
- Fisheries Biotechnology
- Microbial Biotechnology
- Molecular Biotechnology
- Plant Biotechnology

The institute also performs the following activities as:

Focal Point Coordinator

- National Taskforce on Biotechnology of Bangladesh (NTBB), National Executive Committee on Biotechnology (NECB) and other technical committees on Biotechnology in the country;
- National Gene Bank;
- National Database on Biotechnology Research and Personnel;
- National Biotechnology Policy- 2012 and National Biotechnology Policy Action Plan-2014.

SAARC Biotechnology

Nodal agency in Bangladesh for the Biotechnological issues of the SAARC countries.

Affiliated Center

Affiliated center of International Center for Genetic Engineering and Biotechnology (ICGEB), Trieste, Italy in Bangladesh.

Promotional Activities

Supervision and laboratory facilities are being provided to M.S. students of different universities studying in Biotechnology and relevant fields. Besides, hands on training on biotechnology are being offered to the undergraduate and post-graduate students, academician and researchers.

AVAILABLE FACILITIES

- Genome analysis using PCR, Real-time PCR, DNA sequencing, etc.
- DNA fingerprinting
- Plant Tissue Culture, plant growth house, automated green house, hardening house, experimental plots, etc.
- Animal Cell Culture, Livestock and Poultry disease diagnosis
- Immunological study
- Fermentation Technology
- Fluorescent Microscopy
- 2D gel electrophoresis
- Cryopreservation facilities
- Analytical laboratory for environmental samples analysis
- Experimental animal house and shed
- Experimental and brood ponds



National Institute of Biotechnology

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