CV Information

ACADEMIC PROFILE:

Ph. D.	: August, 2011-February, 2017, Tezpur University,
(Molecular Biology & Biotechnology)	Assam, India
	Thesis: A Study on the Molecular Mechanisms of
	the Antidiabetic Activities of some Plant Derived
	Molecules
M. Sc. (Molecular Biology &Biotechnology)	: 2009-2011, Tezpur University, Assam, India
Bio A (PGDBI)	:2008-2013, NEILIT (Formerly DOEACC), Guwahati Centre, Assam, India
B. Sc. (Biotechnology)	: 2005-2008, Sikkim Manipal University, Sikkim, India

RESEARCH/ TEACHING EXPERIENCES:

Assistant Professor	: 31 st July, 2019 – Till date at Royal Global University, Guwahati, India
Post Doc Fellow (SERB-NPDF)	: 23 rd April, 2018 – 30 th July, 2019 at Dibrugarh University, Dibrugarh, India
Research Associate II	: 1^{st} December, $2017 - 20^{th}$ April, 2018 at Institute of Advanced Study in Science and Technology, India
Research Associate I	: 1 st December, 2016 – 30 th November, 2017 2018 at Institute of Advanced Study in Science and Technology, India
Junior Research Fellow	:4 th May, 2012 – 28 th February, 2014 at Tezpur University, India

<u>SELECTED PUBLICATIONS</u>:

Year: 2021

- Rupesh Kumar, Avdhesh Kumar Rai, MayurMausoomPhukan, AnowarHussain, Debajit Borah, BhaskarjyotiGogoi, PoulomiChakraborty, Alak Kumar Buragohain (2021) Accumulating Impact of Smoking and Co-morbidities on Severity and Mortality of COVID-19 Infection: A Systematic Review and Meta-analysis. *Current Genomics*. (DOI: 10.2174/1389202922666210921101728) (IF: 2.236)
- 2. SaurovMahanta, **BhaskarjyotiGogoi**, PankajChetia, Bhaben Tanti,PratapJyotiHandique (2021) Identification of active phytochemical from traditional herbal knowledgebase

targeting Pantothenate synthetase for anti-tuberculosis therapy", *Letters in Drug Design & Discovery* (doi.org/10.2174/15701808186662104211403311) (IF: 1.15)

- 3. NeelutpalGogoi, **BhaskarjyotiGogoi**, DipakChetia (2021)*In vitro* antimalarial activity evaluation of two ethnomedicinal plants against chloroquine sensitive and resistant strains of *Plasmodium falciparum*. *ClinPhytosci* 7, 42. (doi.org/10.1186/s40816-021-00269-)(IF: Nil)
- 4. BhaskarjyotiGogoi, PurvitaChowdhury, NabajyotiGoswami, NeelutpalGogoi, TufanNaiya, PankajChetia, SaurovMahanta, DipakChetia, Bhaben Tanti, Probodh Borah, PratapJyotiHandique (2021) Identification of potential plant-based inhibitor against viral proteases of SARS-CoV-2 through molecular docking, MM-PBSA binding energy calculations and molecular dynamics simulation.*Molecular Diversity*(doi: 10.1007/s11030-021-10211-9) (IF:2.94)
- BhaskarjyotiGogoi*, DhrubajyotiGogoi, NeelutpalGogoi, SaurovMahanta, Alak K. Buragohain, (2021) Network Pharmacology based High Throughput screening for identification of Multi Targeted Anti-diabetic compound from Traditionally used plants. *Journal of Biomolecular Structure and Dynamics* (doi: 10.1080/07391102.2021.1905554) (IF: 3.31)
- AK Goswami, HK Sharma, N Gogoi, A Kashyap, B. Gogoi (2021)*In vitro* evaluation and molecular dynamics, DFT guided investigation of antimalarial activity of ethnomedicinally used Coptisteeta Wall. *Combinatorial Chemistry & High Throughput Screening*. (DOI: 10.2174/1386207324666210118095503). (IF:1.339)
- NeelutpalGogoi, DipakChetia, BhaskarjyotiGogoi, and Aparoop Das (2021) Multipletargets Directed Screening of Flavonoid Compounds from Citrus Species to find out Antimalarial Lead with Predicted Mode of Action: An *In Silico* and Whole Cell-based *In vitro* Approach. *Current Computer - Aided Drug Design*, 17(1):69-82. (IF: 1.606)
- 8. **B. Gogoi,** N. Gogoi,, P. Chowdhury, D. Chetia (2021) Repurposing of FDA approved antibiotics as antimalarial agents: A network pharmacology based *in silico* approach. *International Journal of Infectious Disease*. 101(S1) (2021) 8–119. (IF: 3.623)

Year: 2020

- NeelutpalGogoi, PurvitaChowdhury, Ashis Kumar Goswami, Aparoop Das, DipakChetia, BhaskarjyotiGogoi* (2020) Computational guided identification of a citrus flavonoid as potential inhibitor of SARS-CoV-2 main protease.*Molecular Diversity*(doi: 10.1007/s11030-020-10150-x). (IF: 2.94)
- BhaskarjyotiGogoi*, Rupesh Kumar, JnanendraUpadhyay, Debajit Borah (2020) Facile biogenic synthesis of silver nanoparticles (AgNPs) by *Citrus grandis* (L.) Osbeck fruit extract with excellent antimicrobial potential against plant pathogens. *SN Applied Sciences* 2:1723. (IF: Nil)
- SaurovMahanta, PurvitaChowdhury, NeelutpalGogoi, NabajyotiGoswami, Debajit Borah, Rupesh Kumar, DipakChetia, Probodh Borah, Alak K. Buragohain, and BhaskarjyotiGogoi* (2020) Potential anti-viral activity of approved repurposed drug against main protease of SARS-CoV-2: an *in silico* based approach.*Journal of Biomolecular Structure and Dynamics*(doi: 10.1080/07391102.2020.1768902). (IF: 3.31)

Year: 2019

12. R. Kumar, **B Gogoi**, D. Borah (2019) Peptide Nucleic Acid (PNA): Can it be the future substitute for antibiotics? *Current Science*, 117(11):1766-1767. (IF: 1.102)

- MunmiMajumder, ShibjyotiDebnath, Rahul Gajbhiye, RimpiSaikia, BhaskarjyotiGogoi, Suman Kumar Samanta, Deepjyoti Das, Kaushik Biswas, Parasuraman Jaisankar, and Rupak Mukhopadhyay, (2019) *Ricinus communis L*. fruit extract inhibits migration/invasion, induces apoptosis in breast cancer cells and arrests tumor progression *in vivo*.*Scientific Reports*, 9, 14493. (IF: 4.13)
- 14. Momita Das, RaghuramKandimalla, BhaskarjyotiGogoi, Krishna N Dutta, ParamitaChoudhury, Rajlakshmi Devi, Partha P Dutta, Narayan C Talukdar, (2019) Mahanine,A dietary phytochemical, represses mammary tumor volume and inhibits subtype regardless breast cancer progression through suppressing self-renewal of breast cancer stem cells. *Pharmacological Research*, 146, 104330. (IF: 7.658)

Year: 2018

- 15. Dipanjan Banerjee, ArchanaSinha, SudeshnaSaikia, BhaskarjyotiGogoi, Arvind K. Rathore, AnindhyaSundar Das, Durba Pal, Alak K. Buragohain, Suman Dasgupta, (2018) Inflammation-induced mTORC2-Akt-mTORC1 signaling promotes macrophage foam cell formation, *Biochimie*, 151, 139e149. (IF: 4.079)
- 16. K. Saikia, K. Bhattacharya, D. Sen, S.D. Kaushik, J. Biswas, S. Lodha, B. Gogoi, A.K. Buragohain, W. Kockenberger, P. Deb, (2019) Solvent evaporation driven entrapment of magnetic nanoparticles in mesoporous frame for designing a highly efficient MRI contrast probe. *Applied Surface Science* 464, 567–576. (IF: 6.707)

Year: 2018

Samanta S K, Kandimalla R, Gogoi B, Dutta K N, Choudhury P, Deb P K, Devi R, Pal B C, Talukdar N C, (2018). Phytochemical portfolio and anticancer activity of *Murrayakoenigii* and its primary active component, mahanine, *Pharmacological Research*, 129, 227-236. (IF: 7.658)

Year: 2016

 S. Das, N. Hussain, B. Gogoi, AK Buragohain, SS Bhattacharya (2016) Vermicompost and farm yard manure improves food quality, anti-oxidant and anti-bacterial potential of *Cajanuscajan* (L, Mill sp.) leaves. *Journal of the science of food and agriculture*, 97(3):956-966. (IF: 3.639)

Year: 2015

- ShaswatBarua, BhaskarjyotiGogoi, LipikaAidew, AlakBuragohain, PronobeshChattopadhyay, Niranjan, Karak, (2015) Sustainable resource based hyperbranched epoxy nanocomposite as an infection resistant, biodegradable, implantable muscle scaffold, ACS Sustainable Chem. Eng., 3 (6), 1136–1144. (IF:8.198)
- 20. J. Upadhyay, A. Kumar, B. Gogoi, A.K. Buragohain, (2015) Antibacterial and hemolysis activity of polypyrrole nanotubes decorated with silver nanoparticles by an *in-situ* reduction process, *Material Science and Engineering C*, 54:8-13. (IF: 7.328)
- 21. Dhaneswar Das, ParagChoudhury, LakhyajyotiBortahkur, BhaskarjyotiGogoi, Alak Kumar Buragohain and Swapan Kumar Dolui, (2015) Synthesis and characterization of SiO2/polyaniline/Ag core-shell particles and studies of their electrical and hemolytic properties: multifunctional core-shell particles, *RSC Adv.*, 5, 2360-2367. (IF: 3.36)

Year: 2014

- 22. BhaskarjyotiGogoi, PriyajitChatterjee, Sandip Mukherjee, Alak K Buragohain, Samir Bhattacharya, Suman Dasgupta, (2014) A polyphenol rescues lipid induced insulin resistance in skeletal muscle cells and adipocytes, *Biochemical and Biophysical Research Communication*, 452(3), 382–388. (IF: 3.575)
- 23. K. Bhattacharya, B. Gogoi, A. K. Buragohain, P Deb (2014) Fe2O3/C nanocomposites having distinctive antioxidant activity and hemolysis prevention activity, *Material Science and Engineering C*, 42, 595-600. (IF: 7.328)
- J. Upadhyay, A. Kumar, B. Gogoi, A.K. Buragohain, (2014) Biocompatibility and antioxidant activity of polypyrrole nanotubes, *Synthetic Metals*, 2014;189:119–125. (IF: 3.266)

Year: 2013

 J. Upadyay, B. Gogoi, A. Kumar, A.K.Buragohain, Diameter dependent antioxidant property of polypyrrole nanotubes for biomedical applications, *Materials Letter*, 2013; 102–103:33–35. (IF: 3.423)

BOOK CHAPTER PUBLISHED/ACCEPTED

Year: 2022

1. BhaskarjyotiGogoi, Rupesh Kumar, Indukalpa Das, Debajit Borah, Microbes and their genes involved in bioremediation of petroleum hydrocarbon. In In: Inamuddin (ed.) *Microbial Bioremediation*, Benthum Publication, UAE (*In Press*).

Year: 2021

- S Debnath, B Gogoi, D Swetha (2021). Peptide-drug conjugates in targeted drug delivery to cancer. In M. Das (ed.) *Multifunctional TheranosticNanomedicines in Cancer*,147-161,Academic Press (ISBN: 9780128217122).
- S. Mahanta, B. Gogoi, B. Tanti (2021) Analytics for In Silico Development of Inhibitors from Neem (AzadirachtaIndica) Against PantothenateSynthetase of Mycobacterium Tuberculosis. In: Sharma N., Chakrabarti A., Balas V.E., Martinovic J. (eds) Data Management, Analytics and Innovation. Advances in Intelligent Systems and Computing, vol 1175, 179-200, Springer, Singapore. (ISBN: 978-981-15-5618-0).
- D. Borah, A. Chaubey, A. Sonowal, B.Gogoi, R. Kumar (2021) Microbial Biosurfactants and Their Potential Applications: An Overview. In: Inamuddin, Ahamed M.I., Prasad R. (eds) *Microbial Biosurfactants. Environmental and Microbial Biotechnology*, 91-116, Springer, Singapore. (ISBN: 978-981-15-6606-6).

Year: 2018

5. BhaskarjyotiGogoi, AnowarHussain, PurvitaChowdhury, RupakMukhopadhyay, Suman Dasgupta, Alak K. Buragohain. (2018). Protective Effect of *Scoparia dulcis* leaf extract against Free Fatty Acid induced Oxidative Stress in skeletal muscle cells. In S.K.

Borthakur, A. Bawri, N Nath (eds.)*Recent Advances in Botanical Research in North East India* Eastern Book House Publication, India.(ISBN: 978 93 86302 52 6).

PATENT FILED

- 1. SimantaBharadwaj, BhaswatiKashyap, Sagar Barge, BarshaDeka, AditiKaushikRaghuramKandimalla, ParthaPratimDutta, **BhaskarjyotiGogoi**, RenuGoel, Ajay Kumar, Yashwant Kumar, Suman Kumar Samanta, JoshodeepBaruwa, Sanjay K. Banerjee, Narayan C. Talukdar. A Herbal Composition from '*Premnaherbacea*', useful for prevention of obesity and type 2 diabetes and a method for its extraction. Patent Application No. 201831046382. Filing date: 07-12-2018.
- Suman Kumar Samanta, RaghuramKandimala, BhaskarjyotiGogoi, Momita Das, Rajlakshmi Devi, Narayan C. Talukdar, Diseases Subtype Irrespective Breast Cancer Regulation Through Dietary Phytochemical Mahanine. Patent Application No. 201831030091. Filing date: 10.08.2018.

CAREER ADVANCEMENT PROGRAMME ATTENDED/CONDUCTED

Year: 2021

- 1. Attended 15 days Online Interdisciplinary Refresher Course on Pedagogical Innovations in Higher Education organized by Teaching Learning Centre, Tezpur University, Assam, 6-21 December, 2021.
- 2. Attended 7 days Short Term Training Programme on Bridging Industrial Opportunities with Academic Challenges Prospective of Pharmaceutical Research organized by Dibrugarh University, 27th September- 2nd October, 2021

Year: 2020

- 3. Attended **Faculty Development Program** on "Essentials for Good Research" organized by Assam down town University, Guwahati during 27th May to 2nd June, 2020.
- 4. **Organized** Virtual **Faculty Development Program** on "Importance of cross-disciplinary research in the post COVID-19 scenario: social perspectives" organized by Assam Royal Global University, Guwahati during 16th to 23rd June, 2020.
- 5. Attended one week **Faculty Development Programme** on "Moodle Learning Management System" organized by Assam Women's University in association with Spoken Tutorial, IIT Bombay from 22nd June to 26th June, 2020.
- 6. Attended one week **Faculty Development Programme** on "Waste to Bioenergy" organized by Sharda University, Noida from 28th June to 4th July, 2020.
- 7. Attended **Faculty Development Program** on "Research Opportunities in Environmental Engineering" organized by S. B. Patil College of Engineering, Indapur, Pune during 20th to 25th July, 2020.
- 8. Attended Faculty Development Program on "Online Teaching- Learning and Research Methodology" organized by Govt. P. G. College, Bilaspur, Rampur Uttar Pradesh, during July 18 July 29, 2020

PAPERS PRESENTED/ ACCEPTED IN CONFERENCE/ SYMPOSIUM:

- S. Das, D. Chottopadhyay, B. Gogoi, S. Mukherjee, S. Bhattacharya, Fetuin-A dampens insulin sensitivity by inhibiting PPARγ through MAPK-ERK pathway, "Golden Jubilee International Conference", held at University of Burdwan, West Bengal, India, 2-3 January, 2019.
- B. Gogoi, T. Borgohain, M. K. Das, A. Ramteke, S. Dasgupta, R. Mukhopadhyay, S. Bhattacharya, A. K. Buragohain, *Scoparia dulcis* Linn. prevents fatty acid induced insulin resistance in L6 muscle cells by improving the antioxidant enzyme activity, *"International conference on Molecular Signaling: Recent trends in Bioscience"* held at NEHU, Shillong, India, 20-22 November, 2015.
- B. Gogoi, P. Chatterjee, S. Mukherjee, A. K. Buragohain, S. Bhattacharya, S. Dasgupta, Ferulic acid, a plant derived polyphenol, prevents lipid induced PKCε activation and insulin resistance in skeletal muscle cells, "National Seminar on Recent Advances in Biotechnological Research in North East India: Challenges and Prospects" held at Tezpur University, Assam, India, 27- 29 November, 2014.
- 4. BhaskarjyotiGogoi, LipikaAidew, Nilakshi Barua and Alak K Buragohain (2013), In silico investigation of new inhibitor(s) of Protein Tyrosine Phosphatase 1B (PTP 1B) and Toll Like Receptor 4 (TLR4): the therapeutic targets of type 2 Diabetes Mellitus, "International Symposium in Molecular Signaling" held at Visva- Bharati University, Shantiniketan, Kolkata, India, 18-21 February, 2013.
- AnowarHussain, ViveeyanSaikia, BhaskarjyotiGogoi and AnandRamteke, Bark Extract of *Alstoniascholaris* modulates Nitric Oxide (NO) levels in Hydrogen Peroxide treated Lymphocytes, "*International Symposium on Recent Advances in Cancer Research: Therapeutics to Chemoprevention*" held at Central University of Gujarat, Gujarat, India, 8-9 February, 2012.
- 6. AnowarHussain, BhaskarjyotiGogoi and AnandRamteke, Oxidative stress and Modulatory Effects of the flower extracts of *Nyctanthesarbortristis* on the activity of Glutathione-S-Transferase, "*International Conference on Recent Advance in Cancer Research: Bench to Beside*"held in School of Life Science, Central University of Gujarat, India, 19- 20 February, 2011.
- AnowarHussain,Gourav Kumar, <u>BhaskarjvotiGogoi</u> and AnandRamteke, Nitric Oxide and Modulatory Effects of the root extracts of *Phlogacanthustubiflorus* against oxidative stress induced by H₂O₂, "30th Annual Convention of Indian Association for cancer research & International Symposium on "Signaling Network and Cancer" held at IICB, Kolkata, India, 6 -9 February, 2011.

DEPOSITION IN PROTEIN MODEL DATABASE (PMDB):

 Theoretical model structure of NOS2 (Nitric Oxide Synthase II) of *Gallus gallus*. PMID: PM0078016; Salam Pradeep Singh, <u>BhaskarjyotiGogoi</u>, B. K. Konwar, A. Ramteke.

SKILLS:

♦ <u>LABORATORY SKILLS:</u>

Cell Culture:	Culture of animal cells (muscle, adipocyte, hepatocyte, beta cell, macrophage, different cancer cell line including breast cancer, lung cancer, colon cancer) (both adherent and non-adherent)
Molecular Biology:	SDS-PAGE, Agarose Gel Electrophoresis, Western Blotting, Genomic DNA Isolation from bacteria, plant and animal, Plasmid DNA Isolation, RNA Extraction, cDNA Synthesis, PCR, RT-PCR, Preparation of Competent cells, Transformation, Transfection, ELISA, Immunoassays (Precipitation, Agglutination), Immunoprecipitation, Co- Immunoprecipitation, Flowcytometry, Confocal Microscopy, Immunofluorescence assay.
Chromatography:	Paper Chromatography, Thin Layer Chromatography (TLC), Column Chromatography, High Performance Liquid Chromatography (HPLC).
Essential laboratory skills:	High Speed cooling Centrifugation, Lyophilization, UV-VIS Spectrophotometry, and different biochemical assays.
Bioinformatics tools:	BioEDIT, Chimera, Rasmol, Cn3D, MDL ISIS, Chem office, Corina, ClustalW, ClustalX, Perl Primer, Primer3, Oligoanalyser, BLAST, Phylip, Autodock (Vina), Pymol, VegaZZ, MolSoft, Molegro Virtual Docker, Molegro Molecular Viewer, ANOLEA, MEGA4, MEGA5, Modeller, PROCHECK, SPDBV, Swissprot Server, Cytoscape, Discovery Studio (Accelrys), Analysis of Molecular Dynamics Simulation.
Animal Study	Development of High Fatty Diet (HFD) mice and rat model, Isolation of adipocyte, peritonial macrophage, hepatocyte, muscle cell, pancreatic beta cells, Isolation of serum protein, Lymphocyte Isolation and Culture.

AWARDS and ACHIEVEMENTS:

- Awarded SERB- National Post Doctoral Fellowship for post doctoral research, Department of Science and Technology, Govt. of India (2017)
- Cleared State Level Eligibility Test (SLET) 2017, North East Region of India in Life Science organized by SLET Commission, NE Region, India
- Cleared GATE 2016 in Biotechnology (All India Rank: 598).
- Awarded1st Prize of "Department of MBBT Poster Award"at National Seminar on "Recent Advances in Biotechnological Research in North East India: Challenges and Prospects"held on 27- 29 November, 2014 at Tezpur University, Assam, India.
- ♦ UGC- BSR Fellowship for meritorious students, University Grant Commission, India (2014).

- Tezpur University Institutional Fellowship for pursuing Ph. D., Tezpur University, Assam, India (2011-2012).
- ◆ DBT fellowship for M. Sc. Biotechnology, Department of Biotechnology, India (2009-2011).

PROFESSIONAL ACHIEVEMENTS:

- Invited as a resource person for the Bioinformatics Workshop organized by Department of Bioscience, Asian Institute of Management & Technology, Guwahati, Assam, India, 2017.
- Invited as the resource person for setting up an Animal Cell Culture laboratory at Centre for Biotechnology and Bioinformatics, Dibrugarh University, Assam, 2016
- Invited as a resource person to deliver a lecture and hands on training on the topic "Basics Techniques on Animal Cell Culture" organized by Centre for Biotechnology and Bioinformatics, Dibrugarh University, Assam on 24th -25th September, 2016.