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Promising Young Scientist of NER

Photograph: Dr. Pankaj Chetia during his field visit to Jeypore Rain Forest

Dr. **Pankaj Chetia** is working as an Assistant Professor in the Department of Life Sciences, Dibrugarh University since June 2014. Before joining Dibrugarh University, he was serving as a Research Associate in the Bioinformatics Centre (DBT-BIF), Assam University, Silchar. He did his Master of Science in Life Science (Botany) from Assam University, Silchar and completed his Ph.D. in 2012 under the supervision of Prof. M. Dutta Choudhury of the same university and Dr. Sally Freeman of the University of Manchester, UK on the topic "Therapeutic potential of *Dipteris wallichii* (R.Br.) Moore: An Endemic Plant of North East India".

After joining Dibrugarh University, Dr. Chetia started his research in the field of DNA Barcoding of plants and Computer-Aided Drug Designing using plant-derived compounds. The UGC-BSR Start-up grant was sanctioned to Dr. Chetia in 2016 for DNA Barcoding of traditionally important medicinal plants of the Dibrugarh University campus. In the same year, Dr. Chetia, in collaboration with ICMR-RMRC Bhubaneswar, received a research grant from the Department of Biotechnology, Govt. of India on 'Molecular Dynamics Simulation-based studies on efflux-pump mediated antibiotic resistance in gram negative bacilli and search for herbal remedies'. In the year 2018, Dr. Chetia in collaboration with Assam University, Silchar and the University of Delhi obtained two research grants from the Department of Biotechnology, Govt. of India. One of the projects was on 'DNA Barcoding studies of fern and fern-allies of Assam' and the second was on '*In silico* identification of herbal antitubercular compound(s)'. Very recently in 2022, another research project has been sanctioned to Dr. Chetia by the National Medicinal Plants Board, Govt. of India on 'DNA Barcoding studies of Ayurvedic and traditional medicinal plants of Assam'.

Dr. Chetia has published several research and review papers in peer-reviewed international journals, book chapters and also published a book on Environmental Studies (Oxford University Press) in Assamese. Recognising his research contributions, Dr. Chetia has recently been awarded with the Prof. Arun Pandey Biodiversity Medal 2021 by the East Himalayan Society for Spermatophyte Taxonomy on 21st February 2022. He has also been selected for the SERB International Research Experience (SIRE) Fellowship of the Department of Science & Technology, Govt. of India for three months research experience in the University of Adelaide, Australia under the mentorship of Prof. Andrew Lowe commencing from August 2022. During this period, Dr. Chetia will gain research experience on DNA metabarcoding of plant samples and plant products.

Photograph: Current Research Team of Dr. Pankaj Chetia

Standing (from left): Indrani Gogoi, Shyamalima Saikia, Amos Oloo, Damini Dey
Sitting (from left): Dr. Pankaj Chetia and Dr. Minakshi Puzari

Details of Ph.D. scholars under the supervision of Dr. Pankaj Chetia:

Sl. No.	Name	Topic	Status
1.	Syeda Sabiha Salam	Investigation on Mechanism of Action of few Traditionally Important Plant Derived Antimalarials: An *in silico* Approach	Awarded on 01-11-2021
2.	Anisha Sehgal	A Study on Process Optimization of Fresh Water Microalgae from Upper Brahmaputra Valley for Biomass and Biodiesel Production	Awarded on 03-01-2022
3.	Minakshi Puzari	A study on Efflux Pump Mediated Antibiotic Resistance in *Shigella* spp. and Search for Remedies from Herbal Resources of North East India.	Awarded on 01-06-2022

4.	Mohan Sharma	Study on the Effect of Certain Plant Extracts in combination with carbapenem against multi-drug resistant Enterobacteria from clinical samples of upper Assam	Awarded on 01-08-2022
5.	Nakul Neog	An *in silico* study to identify potent NDM Inhibitors from selected plant derived compounds to combat drug resistant *Klebsiella* spp.	Ongoing
6.	Amos Oloo	Antibiotic resistance profiling of Enterobacteriaceae isolates obtained from Chicken Samples of Dibrugarh, Assam, India.	Ongoing
7.	Shyamalima Saikia	Characterization of Antimicrobial Resistance Mechanism in *Acinetobacter* sp. with special reference to Carbapenem Resistance.	Ongoing
8.	Indrani Gogoi	Study on multi-drug resistance in *Klebsiella* species and identification of possible drug target(s).	Ongoing
9.	Damini Dey	Studies on leaf architecture of dicotyledonous flora of Jokai Reserve Forest, Dibrugarh (Assam), and supplementary DNA Barcoding of selected species.	Ongoing


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