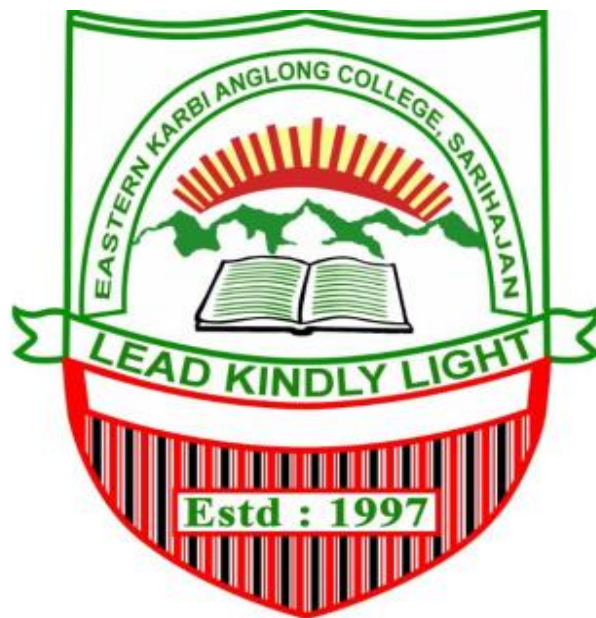


EASTERN KARBI ANGLONG COLLEGE

Sarihajan, Karbi Anglong, Assam



Key Indicator

3.1- Resource Mobilization for Research

Metric No. 3.1.1

Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)

Administrative Order

No. BT/PR44839/NER/95/1942/2022
GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF BIOTECHNOLOGY
(NER Programme)

Block 2, 6-8th Floors
CGO Complex, Lodhi Road,
New Delhi- 110 003
Date: 29/09/2023

ADMINISTRATIVE ORDER

Sanction of the President is hereby accorded, under Rule 18 of the Delegation of Financial Powers Rules, 1978, for the implementation of the project entitled "Role of calcium binding protein parvalbumin extracted from natural sources of Assam on neural plasticity associated with epilepsy" for a period of 3 Year 0 Month at a total cost of Rs. 8991920/- (Rupees Eighty Nine Lakhs Ninety One Thousand Nine Hundred and Twenty Only) on the terms and conditions detailed here under:-

2 The Project :

2.1 Title : Role of calcium binding protein parvalbumin extracted from natural sources of Assam on neural plasticity associated with epilepsy.

2.2 Details of the Investigators:

Project Coordinator

Dr. Manash Barthakur
Principal,
Swahid Smriti Mahavidyalaya
P.S. Belsor, Dist. Nalbari – 781381,
Assam.

Principal Investigators:

Dr. Manash Barthakur
Principal,
Swahid Smriti Mahavidyalaya
P.S. Belsor, Dist. Nalbari – 781381,
Assam.

Co-PI:

Dr. Dipak Konwar
Assistant Professor,
Department of Botany,
Pub Kamrup College
Guwahati - 781381, Assam

Dr. Marami Das

Professor,
Department of Neurology,
Guwahati Medical College & Hospital,
Guwahati – 781032, Assam



Vaishali

डॉ. वैशाली पंजाबी / Dr. VAISHALI PANJABI
वैज्ञानिक 'एफ' / Scientist 'F'
बायोटेक्नोलॉजी विभाग / Dept. of Biotechnology
विज्ञान और प्रौद्योगिकी मंत्रालय / Min Science & Tech.
भारत सरकार, नई दिल्ली / Govt. of India, N Delhi

Dr. Anil Ch. Das, Principal
Eastern Karbi Anglong College
Sarikhajian, Karbi Anglong
Page No. [1 / 9]

Dr. Pankaj Kalita
Assistant Professor,
Department of Zoology,
Eastern Karbi Along College,
Sarihajan – 782480



Mentor:

Dr. Utpal Dutta,
Retd Principal,
Handique Girls College,
Guwahati – 781001, Assam

2.3 Objectives:

1. Extraction, isolation and purification of parvalbumin and parvalbumin like molecules from natural sources and appropriate biomolecule selection to study neuroplastic remodulatory effect.
2. Transformation of nonepileptic tissue to epileptogenic tissue by inducing seizure in animal model.
3. Study on the role of selected biomolecules on brain physiological and biochemical changes and behavioural changes of control and treated animals and comparison with human subjects in normal and epileptic persons.
4. Effect of selected bio-molecules on histopathological and histological changes of brain tissue in control, epileptic and parvalbumin treated epileptic animal.
5. Studies on the adverse effect of the test molecules on the systemic level of animal.

2.4 Time Schedule:

The duration of the project is 3 Year 0 Month from the date of this sanction order.

2.5 Project Cost: The total cost of the project is Rs. 8991920/- (Eighty Nine Lakhs Ninety One Thousand Nine Hundred and Twenty Only) as per details given below:

(Financial figures are shown in Rupees)

Sl. No.	Institute	Year 1	Year 2	Year 3	Total Cost (Rs.)
1.	Swahid Smriti Mahavidyalaya Assam	6656560.00	1341760.00	993600.00	8991920.00
	Total (Rs.)	6656560.00	1341760.00	993600.00	8991920.00

Institute wise budget details are:

(Financial figures are shown in Rupees)

Budget Head	Year 1	Year 2	Year 3	Total (Rs.)
1. Swahid Smriti Mahavidyalaya, Assam.				
Grants for Creation of Capital Assets	5954800.00	0.00	0.00	5954800.00
Grants-in-aid General	701760.00	1341760.00	993600.00	3037120.00
Total	6656560.00	1341760.00	993600.00	8991920.00

2.6 Equipment (Capital Assets): The details of the Capital Assets sanctioned for the implementation of the project is detailed at **Annexure-I**

2.7 Overhead budget is restricted to Rs. 50000/- per year for Swahid Smriti Mahavidyalaya, Assam only.

3. Head of Account:

The Non-Recurring (Capital Assets) expenditure involved is debitable to:

Demand No. 90	Department of Biotechnology
3425	Other Scientific Research 2023-2024
3425.60	Others (Sub Major Head)
3425.60.200	Assistance to other Scientific Bodies (Minor Head)
3425.60.200.29	Biotechnology Research and Development
3425.60.200.29.17	Assistance to Research and Development
3425.60.200.29.17.35	Grants for creation of capital assets

The Recurring (GIA General) expenditure involved is debitable to

Demand No. 90	Department of Biotechnology
3425	Other Scientific Research 2023-2024
3425.60	Others (Sub Major Head)
3425.60.200	Assistance to other Scientific Bodies (Minor Head)
3425.60.200.29	Biotechnology Research and Development
3425.60.200.29.17	Assistance to Research and Development
3425.60.200.29.17.31	Grants -in-Aid General



4. Terms & Conditions:

4.1. In case the whole or a part of the amount of the grant-in-aid is being refunded, an interest rate at the rate of ten percent thereon shall be recovered. The equipment sanctioned under the project should be purchased within 18 months from the date of the release of the grant.

4.2. A Memorandum of Agreement (MoA) will be signed between the Department of Biotechnology and the grantee institution on Non-Judicial stamp paper Rs. 100/- in the enclosed format and the second release/installment will be made only after signing of MoA between the grantee institutions and DBT. In case of NGO's and Private Institution's, execution of MOA is mandatory before first release. A format of the MoA is enclosed with the Sanction Order.

4.3. In accordance with Rule 238(5) & 238(6) of GFR, 2017, the private institutes/ voluntary organizations which are receiving Grant-in-aid of Rs.50.00 lakh and above have to submit their Annual Reports and Annual Audited Accounts to the Department within 09 months of the close of the succeeding financial year.

4.4. No international travel will be undertaken from the sanctioned project grant unless specified otherwise.

4.5. The Principal, Swahid Smriti Mahavidyalaya, Nalbari, Assam would be responsible for submission of Utilization Certificates (UC), Statements of Expenditure (SoE), Capital Assets Acquired Certificates, in prescribed DBT formats to DBT in respect of grants released in this project from time to time. The institute shall also furnish an undertaking that monthly emoluments of engaged human resource in this project have been disbursed in accordance with the duly notified norms/guidelines of the Government Department/Ministry/Autonomous Bodies.

4.6. PI's of DBT sponsored projects can consider appointment of JRF from Category-II merit list of DBT-BET exam so that candidates can be paid fellowships at par with NET/GATE/BET qualified candidates as per DST OM No.SR/S9/Z-08/2018 dated 30.01.2019. However, there is no



compulsion on PI's to select candidates for JRF in their projects from Category-II of DBT/BET.

4.7 As per Rule 236 (1) of GFR 2017, the accounts of all Grantee Institutions or Organizations shall be open to inspection by the sanctioning authority and audit, both by the Comptroller and Auditor General of India under the provision of CAG (DPC) Act 1971 and internal audit by the Principal Accounts Office of the Ministry or Department, whenever the Institution or Organizations is called upon to do so.

4.8. If the Research Project involves biological resources, the obligations under the Biological Diversity Act 2002 as applicable shall be complied with by the Project Investigator, the details of such obligations can be accessed at www.nbaindia.org

4.9. "The PIs/Implementing Agencies shall strictly adhere to the GoI instructions issued vide OM No.F.4.1.2021-PPD dated 30.6.2021 in the matter of issue of Global Tender Enquiry with special reference to instructions contained under para 4 of the said OM for procurement of equipments, spares and consumables for research purposes and shall not issue Global Tenders Enquiries before seeking the approval of the competent authority".

4.10. After incurring the expenditure on import of such items and at the time of submission of UCs to the department next year, the PIs will also furnish the copy of the approval sought from the competent authority for issue of the GTE for such items of import. The releases of next instalment of grant will be subject to the fulfilment of the above condition.

4.11. If any biological data as specified in the guidelines are being generated in the project then PI should submit the data generated in the project to Indian Biological Data Centre – The National Repository being implemented at Regional Centre for Biotechnology, Faridabad in compliance with the Biotech-PRIDE Guidelines 2021.

4.12. The quarterly deliverables in the project, in quantifiable terms have to be provided for each quarter of the project, based on which, inter-alia, monitoring/review of the project will be done and proposal for release of subsequent instalment will be considered. Please see **Annexure-II**.

4.13. While asking for 2nd instalment onwards, the Institute has to certify that the Institute has not utilized more than the amount sanctioned under the 'Overhead' component.

4.14. Expenditure to be made through PFMS EAT module.

5. This issues, under the power delegated to this Department and with the concurrence of IFD vide their SAN No. 102/IFD/SAN/1635/2023-2024 dated 29th September, 2023.

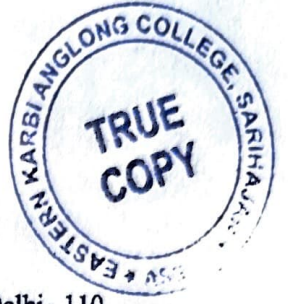
6. This sanction order has been noted at serial no. 76-77 in the Register of Grants.

To,
The Pay & Accounts Officer,
Department of Biotechnology,

(Dr. Vaishali Panjabi)
Scientist 'F'

डॉ. वैशाली पंजाबी / Dr. VAISHALI PANJABI
SCIENTIST 'F' / सैनिकिस्ट 'F'
बायोटिक्नोलॉजी विभाग / Division of Biotechnology
विज्ञान और प्रौद्योगिकी मंत्रालय / Ministry of Science & Tech
नई दिल्ली, भारत / New Delhi - Govt. of India, N. Delhi

New Delhi – 110 003.



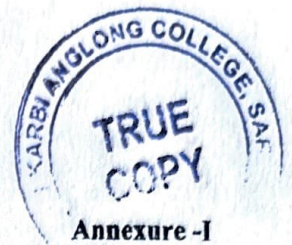
Copy to:

- 1 The Principal Director of Audit (Scientific Departments), DACR Building, New Delhi- 110 002.
- 2 Cash Section, DBT (2 copies).
- 3 Sanction Folder.
- 4 File Copy.
- 5 The Principal, Swahid Smriti Mahavidyalaya, Nalbari - 781304, Assam
- 6 Dr. Manash Barthakur, Principal, Swahid Smriti Mahavidyalaya, P.S. Belsor, Dist. Nalbari – 781381, Assam
- 7 Dr. Dipak Konwar, Assistant Professor, Department of Botany, Pub Kamrup College, Guwahati - 781381, Assam.
- 8 Dr. Marami Das, Professor, Department of Neurology, Guwahati Medical College & Hospital, Guwahati – 781032, Assam
- 9 Dr. Pankaj Kalita, Assistant Professor, Department of Zoology, Eastern Karbi Along College, Sarihajan – 782480
- 10 Dr. Utpal Dutta, Retd Principal, Handique Girls College, Guwahati – 781001, Assam
- 11 CNA, NII, New Delhi.

Vaishali

(Dr. Vaishali Panjabi)

डॉ. वैशाली पंजाबी / Dr. VAISHALI PANJABI Scientist 'F'
वैज्ञानिक 'एफ' / Scientist 'F'
बायोटेक्नोलॉजी विभाग / Deptt. of Biotechnology
विज्ञान और प्रौद्योगिकी मंत्रालय / Min Science & Tech.
भारत सरकार, नई दिल्ली / Govt. of India, N Delhi



Annexure -I

Details of the Equipment sanctioned for the implementation of the project entitled "Role of calcium binding protein parvalbumin extracted from natural sources of Assam on neural plasticity associated with epilepsy":

Swahid Smriti Mahavidyalaya			
SNo.	Name of Equipment	No.	Cost (Rs.)
1.	PL3516/P Sixteen channel electrophysiological data acquisition system for neural recording wirelessly from two animals simultaneously	1	3000000.00
2.	Fluorescence Microscope	1	2954800.00
Total			5954800.00

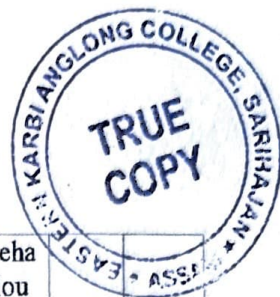
Vaishali

(Dr. Vaishali Panjabi)
Scientist 'F'

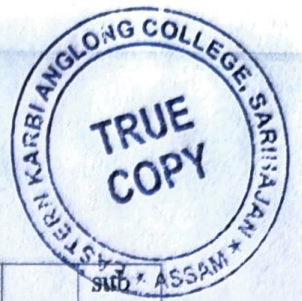
डॉ. वैशाली पंजाबी / Dr. VAISHALI PANJABI
वैज्ञानिक 'F'
बायोटेक्नोलॉजी विभाग / Division of Biotechnology
विज्ञान और प्रौद्योगिकी मंत्रालय / Min Science & Tech
भारत सरकार, नई दिल्ली / Govt of India, N Delhi

Details of the Quarterly Deliverables sanctioned for the implementation of the project entitled "Role of calcium binding protein parvalbumin extracted from natural sources of Assam on neural plasticity associated with epil":

Name of the Activity to be accomplished	First Year				Second Year				Third Year			
	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
1. Lab setup staff requirement	i) Recruitment of project staff (ii) Processing for purchase of chemindcals (iii) Collection of antiepileptic natural products	i) Extraction of the biomolecules (ii) Purification. (iii) Characterization of extracted parvalbumin or parvalbumin like biomolecules. (iv) Molecular docking. (v) Calcium binding study.	i) Purchase of sophisticated equipments (ii) Training	i) Animal purchase and acclimatization.								
2. Animal Experiment			Animal house preparation	Development of drug resistance epile	Treatment of the extracted bio	Treatment of the extracted bio	Treatment of the extracted biomolecules	Study on the efficacy of the drugs Behaviour	Study on the efficacy of the drugs Behaviour study	Study on the efficacy of the drugs		



				ptic ani mal mod el. Beh avio ur stud y	mol ecul es and stud y on the effi cac y of the dru gs	mol ecul es and stud y on the effi cac y of the dru gs		study		Beha viou r stud y		
3. Electro physiol ogical study			Brainw ave study	Brai n wav e stud y	Bra in wav e stud y	Bra in wav e stud y	Brain wave study	Brain wave study	Brain wave study	Brai n wav e stud y		
4. Bioche mical Param eter study				Epil eptic mar ker stud y	Epil eptic mar ker stud y	Epil eptic mar ker stud y	Epile ptic mar ker stud y	Epile ptic mar ker stud y	Epile ptic mar ker stud y	Epil eptic mar ker stud y		
5. Histolo gical param eter study											Hist olog ical stud y of brai n	
6. Study of adverse effect of the biomol ecules					Stu dy of the im mu nol ogi cal resp onse						Hist opat holog ical stud y of live r and kidn ey	
7. Final Report Prepara tion												Rep ort Prep arati on and



sub
mission

Vaishali

(Dr. Vaishali Panjabi)

Scientist 'F'

डॉ. वैशाली पंजाबी / Dr. VAISHALI PANJABI
वैज्ञानिक 'एफ' / Scientist 'F'
बायोटेक्नोलॉजी विभाग / Deptt. of Biotechnology
विज्ञान और प्रौद्योगिकी मंत्रालय / M/s Science & Tech.
भारत सरकार, नई दिल्ली / Govt. of India, N. Delhi

Anil Ch. Das

Dr. Anil Ch. Das, Principal
Eastern Karbi Anglong College
Sarihajan, Karbi Anglong