

Sl. No. C31

No. BT/PR26461/MED/12/821/2018  
GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE & TECHNOLOGY  
DEPARTMENT OF BIOTECHNOLOGY

Block 2, 6-8th Floors  
CGO Complex, Lodhi Road,  
New Delhi- 110 003

Dated 27/06/2018

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: "A Genetic Algorithm-Based Targeted Approach for Understanding the Phenotypic Heterogeneity of Thalassemia Syndromes in Northern and Eastern Indian Populations" for a period of 3 Year at a total cost of Rs. 12203721 (Rupees One Crores Twenty Two Lakhs Three Thousand Seven Hundred and Twenty One Only) on the terms and conditions detailed here under -

**2 The Project :**

**2.1 Title :** "A Genetic Algorithm-Based Targeted Approach for Understanding the Phenotypic Heterogeneity of Thalassemia Syndromes in Northern and Eastern Indian Populations"

**2.2 Details of the Investigators:**

**Project Co-Ordinator**

**Dr. Anupam Basu**  
Professor  
Department of Zoology  
The University of Burdwan  
Department of Zoology, Golapbag,  
Bardhaman, West Bengal, 713104

**Principal Investigators:**

**Dr. Anupam Basu**  
Professor  
Department of Zoology  
The University of Burdwan  
Department of Zoology, Golapbag,  
Bardhaman-713104, West Bengal.

**Dr. Prashant Sharma**  
Associate Professor  
Department of Hematology  
Post Graduate Institute of Medical Education & Research  
Chandigarh- 160012

**CO-PI:**

**Dr. Alka Rani Khadwal**  
Associate Professor  
Adult Clinical Hematology and BMT Unit, Department  
Post Graduate Institute of Medical Education &  
Research, Chandigarh - 160012, Chandigarh



Dr. Roena Das  
Professor  
Department of Hematology  
Post Graduate Institute of Medical Education and Research  
Department of Hematology  
PGIMER, Chandigarh-160012, Chandigarh - 160012,  
Chandigarh

Dr. Raghunath Chatterjee  
Assistant Professor  
Human Genetics Unit, Biological Science Division  
Indian Statistical Institute-Kolkata  
Human Genetics Unit  
Indian Statistical Institute  
203 B.T. Road, Kolkata, 700108, INDIA, Kolkata - 700108,  
West Bengal

Dr. Prosanto Kumar Chowdhury  
Consultant  
Thalassaemia and Haemoglobinopathies  
Institute of Child Health, Calcutta  
Kolkata, Kolkata - 7110017, West Bengal

Dr. Kaustav Nayek  
Professor  
Department Of Pediatric Medicine  
Burdwan Medical College and Hospital  
Bardhaman, Bardhaman - 713101, West Bengal

Dr. Gispati Chakraborty  
Sr. Medical Officer  
Burdwan University Health Centre  
The University of Burdwan  
Bardhaman, Bardhaman - 713104, West Bengal

Dr. Sharmistha Chakraborty  
Medical Officer  
Thalassemia Control Unit,  
Burdwan Medical College and Hospital  
Natunpally(East) Nari Colony  
Burdwan-1, West bengal, Bardhaman - 713101, West  
Bengal

### 2.3 Objectives:

1. To establish a genetic diagnostic and prognostic algorithm for patients with Thalassemia syndrome in northern and eastern Indian populations
2. To investigate the role of the locus control region (LCR) of HBB gene in determining phenotypic heterogeneity and modulating HbF levels
3. To elucidate differences in modifier genes between the subjects of transfusion-dependent (i.e. thalassemia major) and non-transfusion dependent (i.e. thalassemia intermedia) phenotypes despite the same or similar Mendelian genotype

### 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. 12203721.00 (Rupees One Crores Twenty Two Lakhs Three Thousand Seven Hundred and Twenty One Only) as per details given below:

Institute	Year I	Year II	Year III	Total Cost(Rs.)
1. Post Graduate Institute of Medical Education & Research	1608200	1608200	1000200	4824600
2. The University of Burdwan	3495521	1941800	1941800	7379121
Total (Rs.)	5103721	3550000	3550000	12203721

Institute wise details are:

Budget Head	Year I	Year II	Year III	Total(Rs.)
<b>1. The University of Burdwan</b>				
Equipment	1553721.00			1553721.00
Manpower	736800.00	736800.00	736800.00	2210400.00
Overhead	100000.00	100000.00	100000.00	300000.00
Contingency	75000.00	75000.00	75000.00	225000.00
Travel	30000.00	30000.00	30000.00	90000.00
Consumables	1000000.00	1000000.00	1000000.00	3000000.00
Total (Rs.)	3495521.00	1941800.00	1941800.00	7379121.00
<b>2. Post Graduate Institute of Medical Education &amp; Research</b>				
Manpower	403200.00	403200.00	403200.00	1209600.00
Overhead	100000.00	100000.00	100000.00	300000.00
Consumables	1000000.00	1000000.00	1000000.00	3000000.00
Contingency	75000.00	75000.00	75000.00	225000.00
Travel	30000.00	30000.00	30000.00	90000.00
Total (Rs.)	1608200.00	1608200.00	1608200.00	4824600.00

#### 2.6 Equipment:

The details of the equipment sanctioned for the implementation of the project at Annexure-I

#### 2.7 Manpower:

The details of the manpower sanctioned for the implementation of the project at Annexure-II

#### 3. Head of Account:

The Non-Recurring expenditure involved is debitable to:



as per Rule 236  
inspection by the  
provision of CAG(D  
whenever the Institut  
9. If the p

Demand No. 85	Department of Biotechnology
3425	Other Scientific Research 2018-2019
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 for Research and Development
3425.60.200.29.17.35	Grants for creation of capital assets

The Recurring expenditure involved is debitale to:

Demand No. 85	Department of Biotechnology
3425	Other Scientific Research 2018-2019
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 for Research and Development
3425.60.200.29.17.31	Grants-in-Aid General

#### 4. Terms & Conditions:

- In case the whole or a part of the amount of the grant-in-aid is being refunded, an interest at the rate of ten percent thereon shall be recovered
- Grantee Institution is a public funded organization.
- The equipment sanctioned under the project should be purchased within 18 months from the date of the release of the grant.
- The expenditure to be made as per the EAT module of the Government of India.

4.1 The other terms and conditions governing this sanction are attached at Annexure- III.

4.2A 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 by the grantee institutions and its acceptance by DBT. In case of NGO or Private Institution, MOA signed is mandatory first release. A format of the MoA is enclosed in Annexure-IV

4.3The Institute/Agency will keep the whole of the grant in a Bank Account earning interest, and the interest so earned should be reported to DBT in the Utilisation Certificate and Statement of Expenditure. The interest so earned will be treated as created to the institute/Agency and shall be adjusted towards further instalment of the grant and or at the time of Final Settlement of Accounts.

5.No International Travel will be undertaken from the sanctioned project grant unless specified otherwise.

6.The Director, Post Graduate Institute of Medical Education & Research, Chandigarh, Chandigarh and The Registrar, The University of Burdwan, Bardhaman, West Bengal would be responsible for submission of Statements of Expenditure (SoE), utilization certificates (UC), Assets Certificates, Manpower staffing & expenditure details in prescribed DBT formats to DBT in respect of grants released in this project from time to time.


7.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. A.SR/S9/Z-09/2012 dated on 21 Oct 2014. However, there is no compulsion on PI's to select candidates for JRF in their projects from Category-II of DBT-BET.

As per Rule 236 (1) of GFR 2017, the accounts of all Grantee Institutions or Organisations 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 Organisation is called upon to do so.

9. If the Research Project involves biological resource, 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](http://www.nbaindia.org)

10. This issues under the power delegated to this Department and with the concurrence of IFD vide their SAN No. 102/IFD/SAN/852/2018-2019 dated June, 27, 2018.

11. This sanction order has been noted at serial no. 26 in the Register of Grants

  
(Dr. Anamika Gambhir)  
Scientist - 'F'

To,  
The Pay & Accounts Officer,  
Department of Biotechnology,  
New Delhi - 110 003.

**Copy to:**

- 1 The Principal Director of Audit (Scientific Departments), DACR Building, New Delhi- 110 002.
- 2 Dr. Anupam Basu (Project Co-Ordinator), Centre for Molecular Biology and Human Genetics, Department of Zoology, The University of Burdwan, Bardhaman-713104.
- 3 The Director, Post Graduate Institute of Medical Education & Research, Sector 12, Chandigarh - 160012, Chandigarh
- 4 The Registrar, The University of Burdwan, Rajbati, Bardhaman - 713104, West Bengal
- 5 Dr. Alka Rani Khadwal, Associate Professor, Adult Clinical Hematology and BMT Unit, Department, Post Graduate Institute of Medical Education & Research, Chandigarh - 160012.
- 6 Dr. Anupam Basu, Professor, Department of Zoology, The University of Burdwan, Department of Zoology, Golapbag, Bardhaman - 713104, West Bengal
- 7 Dr. Gispati Chakraborty, Sr. Medical Officer, Burdwan University Health Centre, The University of Burdwan, Bardhaman - 713104, West Bengal
- 8 Dr. Kaustav Nayek, Professor, Department Of Pediatric Medicine, Burdwan Medical College and Hospital, Bardhaman - 713101, West Bengal
- 9 Dr. Prashant Sharma, Associate Professor, Hematology, Post Graduate Institute of Medical Education & Research, Postgraduate Institute of Medical Education and Research, Chandigarh, Chandigarh - 160012, Chandigarh
- 10 Dr. Prosanto Kumar Chowdhury, Consultant, Thalassaemia and Haemoglobinopathies, Institute of Child Health, Calcutta, Kolkata - 7110017, West Bengal
- 11 Dr. Raghunath Chatterjee, Assistant Professor, Human Genetics Unit, Biological Science Division, Indian Statistical Institute-Kolkata, Human Genetics Unit, Indian Statistical Institute, 203 B.T. Road, Kolkata, 700108, West Bengal
- 12 Dr. Reena Das, Professor, Hematology, Post Graduate Institute of Medical Education and Research, Department of Hematology, Chandigarh - 160012, Chandigarh
- 13 Dr. Sharmistha Chakraborty, Medical Officer, Thalassaemia Control Unit, Burdwan Medical College and Hospital, Natunpally (East), Nari Colony, Burdwan-1, Bardhaman - 713101, West Bengal
- 14 Cash Section, DBT (2 copies).
- 15 Sanction Folder.
- 16 File Copy.

  
(Dr. Anamika Gambhir)  
Scientist - 'F'