

Administrative
(Application No: AGRI/2015/62)

File No. BT/PR16828/NER/95/307/2015
GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF BIOTECHNOLOGY
(NER-BPMC)

Block-2, 7th Floor,
CGO Complex, Lodhi Road
New Delhi-110003

Dated: 18/10 /2016

ORDER

Sanction of the President is hereby accorded under Rule 18 of the Delegation of Financial Power Rules, 1978 for the implementation of the project under 'DBT's Twinning programme for TNE' titled "Designing bioactive peptides from whey liquid waste of the dairy industry. Functionality and health benefit in Obesity, Obesity associated disorders with exploration of molecular mechanism" by Dr. Raj Kumar Duary, Tezpur University, Napaam, Assam and Dr. Krishna Das Saha, Indian Institute of Chemical Biology, West Bengal at a total cost of ₹ 54.55 lakhs (Rupees Fifty Four lakhs and Fifty Five thousand only) for a period of three years on the terms and conditions detailed as under:

2.0 The Project:

2.1 Project Title: Designing bioactive peptides from whey liquid waste of the dairy industry: Functionality and health benefit in Obesity, Obesity associated disorders with exploration of molecular mechanism.

2.2 Project Investigators

2.2.1 Principal Investigator: **Dr. Raj Kumar Duary**
(Parent Institute) Assistant Professor
Department of Food Engineering and Technology
Tezpur University, Napaam,
Sonitpur-784028, Assam

2.2.2 Principal Investigator: **Dr. (Mrs.) Krishna Das Saha**
(Collaboration Institute) Principal Technical Officer
Cancer Biology and Inflammatory Disorder
Division
CSIR-Indian Institute of Chemical Biology,
4, Raja S. C. Mullick Road, Jadavpur, Kolkata-
700032, West Bengal.



2.3 Objectives:

1. To study the design and function of bioactive peptides and protein hydrolysate using computational in silico tools.
2. To produce bioactive peptides from whey liquid waste of dairy industry by enzymatic hydrolysis, and study their functional characteristics.
3. To study the anti-obesity, anti-oxidant, anti-inflammatory and anti-diabetic activity of novel whey bioactive peptides in vitro in pre-adepocyte cell line.
4. To examine anti-obesity, anti-oxidant, anti-inflammatory and anti-diabetic activity of the novel whey bioactive peptides in obese mice model.
5. To explore the mechanistic cross-talk of amelioration of obesity and associated disorders by the novel whey bioactive peptides.

2.4 Time Schedule:

The duration of the project is **three years** from the date of issue of sanction order.

2.5 Equipment Details:

2.5.1 Tezpur University, Napaam, Assam

Sl. No.	Description of equipment	Grant Recommended (₹ in lakhs)
1.	Biosafety cabinet II	3.53
2.	Refrigerated Centrifuge	3.99
3.	Ultrasonic Bath	0.83
4.	Vis-Spectrophotometer	0.90
Total		9.25

2.5.2 Indian Institute of Chemical Biology, West Bengal

Nil.

2.6 Manpower:

Fellowship Conditions:

A year wise detail of manpower as proposed has been furnished below. HRA will be as per the Govt. Norms, an indication as stated below for the JRF and SRF's emoluments will be provided as a part of sanction order. JRF shall be ₹ 25,000/- + HRA for the 1st two years and ₹ 28,000/- + HRA for the 3rd year for SRF and applicable, (JRF - Post graduate Degree in Basic Science with NET qualification or graduate degree in Professional course with NET qualification or post graduate degree in professional course)

JRF without NET qualification shall be ₹ 12,000/- + HRA for the 1st two years and ₹ 14,000/- + HRA for the 3rd year for SRF

- For JRF/SRF/RA salary is as per the revised DST OM SR/S9/Z-09/2012, dated October 21, 2014.
- For Project Assistant salary is as per the revised DST OM C.30011/1/2007-IFD, dated 21st July 2008.



2.6.1 Tezpur University, Napaam, Assam

S. No.	Position (No.)	Emolument	₹ in lakhs)			
			1 st Year	2 nd Year	3 rd Year	Total
1.	JRF/SRF (1)	JRF @ ₹ 25,000/- + 10 % HRA for the 1 st & 2 nd yr SRF @ ₹ 28,000/- + 10 % HRA for 3 rd yr	3.30	3.30	3.69	10.29
Total			3.30	3.30	3.69	10.29

2.6.2 Indian Institute of Chemical Biology, West Bengal

S. No.	Position (No.)	Emolument	₹ in lakhs)			
			1 st Year	2 nd Year	3 rd Year	Total
1.	JRF/SRF (1)	JRF @ ₹ 25,000/- + 30 % HRA for the 1 st & 2 nd yr SRF @ ₹ 28,000/- + 30 % HRA for 3 rd yr	3.90	3.90	4.36	12.16
Total			3.90	3.90	4.36	12.16

2.7 Budget Estimate:

The total cost of the project is ₹ 54.55 lakhs (Rupees Fifty Four lakhs and Fifty Five thousand only) as per budget summary given below:

2.7.1 Tezpur University, Napaam, Assam

Heads	₹ in lakhs)			
	1 st Year	2 nd Year	3 rd Year	Total
I. Non-Recurring (Equipments and accessories)	9.25	0.00	0.00	9.25
Sub Total- I	9.25	0.00	0.00	9.25
II. Recurring				10.29
1. Manpower	3.30	3.30	3.69	10.00
2. Consumables	6.00	3.00	1.00	1.00
3. Travel	0.30	0.35	0.35	0.70
4. Contingency	0.30	0.20	0.20	1.50
5. Overhead charges	0.50	0.50	0.50	23.49
Sub Total- II (1-5)	10.40	7.35	5.74	32.74
GRAND TOTAL (I+II)	19.65	7.35	5.74	

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2.7.2 Indian Institute of Chemical Biology, West Bengal

(₹ in lakhs)

Heads	1 st Year	2 nd Year	3 rd Year	Total
I. Non-Recurring (Equipments and accessories)	0.00	0.00	0.00	0.00
Sub Total- I	0.00	0.00	0.00	0.00
II. Recurring				
1. Manpower	3.90	3.90	4.36	12.16
2. Consumables	3.00	3.00	2.00	8.00
3. Travel	0.20	0.20	0.15	0.55
4. Contingency	0.20	0.20	0.15	0.55
5. Overhead charges	0.20	0.20	0.15	0.55
Sub Total- II (1-5)	7.50	7.50	6.81	21.81
GRAND TOTAL (I+II)	7.50	7.50	6.81	21.81

(i) Grand total for 3 years (32.74+ 21.81) = ₹ 54.55 lakhs

(ii) Total for 1st year release (19.65+7.50) = ₹ 27.15 lakhs

2.8 Other Terms & Conditions:

2.8.1 The other terms and conditions governing this, sanction are attached at **Annexure-I**.

2.8.2 A Memorandum of Agreement (MoA) will be signed between the Department of Biotechnology and the grantee institute on a ₹ 100/- stamp paper in the format given at **Annexure II** and the subsequent releases will be made only after signing of MoA by the grantee institute and its acceptance by DBT. All pages need to be signed by the PI and the forwarding authority and the MoA returned to DBT within 30 days of issue of this letter.

2.8.3 The Non-recurring items must be procured and installed within 6 month period from the date of sanction.

2.8.4 In case the amount of grant-in-aid is refunded, the whole or a part amount of the grant, with an interest at 10% per annum there on shall be recovered.

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

2.8.6 The 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 Utilization Certificate and statement of Expenditure. The interest so earned will be treated as created to the institute / Agency and shall be adjusted towards further installment of the grant and or at the time of Final Settlement of Account.

2.9 Additional Terms & Conditions, specific for Twinning R&D program for NER:

2.9.1 Both NER & Rest of India (RoI), Institutions scientists should work together for the objectives stated in the sanction of the project and any deviation from this would attract closure of the project at any point of time.

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- 2.9.2 In the project review meetings, both the PI's from NER & RoI Institutions should participate & make presentation.
- 2.9.3 The outcomes of the project such as research papers, patents, copy rights etc. should be made jointly.
- 2.9.4 The NER Scientists are to be trained at the collaborating institute appropriately to empower the NER Scientists.
- 2.9.5 The project personal such as Research Associate, JRF/SRF, Research Assistant are also to be trained at least once in the collaborating national institute.
- 2.9.6 The collaborating institute scientist should visit NER institutions more frequently to guide NER scientists in design and conduct of experiments.
- 2.10 This issues under the powers delegated to this Department and with the concurrence of IFD, DBT vide their Dy No. 102/I.F.D/SAN/2122/2016-2017 Dated 22/08/2016.
- 2.10.1 This sanction order has been noted at Serial No. ~~177-178~~ in the Register of Grants.
- 2.10.2 The accounts of grantee institution shall be open to inspection by sanctioning auditory / audit.
- 3.0 M/S Biotech Consortium India Ltd (BCIL), Anuvrat Bhawan, 210, Deen Dayal Upadhyay Marg, New Delhi- 110002, is administrating the North Eastern Region Biotechnology Programme Management Cell (NER-BPMC) of the DBT.



(Dr. T. Madhan Mohan)
Advisor, DBT

To,
The Pay & Accounts Officer,
Department of Biotechnology,
New Delhi - 110003

- Copy to:
- 1. The Principal Director of Audit (Scientific Department), AGCR Building, New Delhi - 110 002.
 - 2. Cash Section, DBT (For information only).
 - 3. Sanction Folder.
 - 4. IFD, DBT.
 - 5. The Registrar, Tezpur University, Napaam, Sonitpur, Tezpur-784028, Assam.
 - 6. The Vice Chancellor, Tezpur University, Napaam, Sonitpur, Tezpur-784028, Assam.
 - 7. The Director, CSIR-Indian Institute of Chemical Biology, 4, Raja S. C. Mullick Road, Jadavpur, Kolkata- 700032.
 - 8. Dr. Raj Kumar Duary, Assistant Professor, Department of Food Engineering and Technology, Tezpur University, Napaam, Sonitpur, Tezpur-784028, Assam.