

Life Sciences Research Boa

Defence Res. & Dev. Organisation 3rd Floor, DRDO Bhawan, 'B' Block Rajaji Marg, New Delhi – 110011

Tele Fax: 011-23017753
Tele: 011-23007894, 7895
Email: lsrb@hqr.drdo.in

टेली फैक्सः 011-23017753 टेलीफोनः 011-23007894, 7895

राजाजी मार्ग नई दिल्ली – 110011

रक्षा अनुसंधान एवं विकास संगठन

तृतीय तल, डी.आर.डी.ओ भवन, बी ब्लाक

Email: lsrb@hqr.drdo.in

जैव विज्ञान अनुसंघान बोर्ड

No. O/o CC R&D (TM)/81/48222/LSRB-291/LS&BD/2017 Date 28.04.2017

To

The Director, Centre for Technology Transfer & Development (CTDT), Kalanjiyam Building, Anna University Chennai-600025

Sub: GRANTS-IN AID SCHEME OF LIFE SCIENCES RESEARCH BOARD (LSRB)

In exercise of powers vested in the Life Sciences Research Board vide Govt. of India, Ministry of Defence letters No. DBAS/48222/RD-81/784/D(R&D) dt 06 Mar 1998 and subsequent amendment made vide letter No CC R&D (TM)/01/01/Research Boards/247/D (R&D) dated 03 Feb 2014 and DRDO/DBFA/FA/83226/M/01/2031/D (R&D) dated 30 Jul 2010, para 3.1, as amended from time to time, I hereby convey the sanction of the Board for the following project at the cost of Rs 30,55,580/- only including FE NIL (Rupees Thirty lakh fifty five thousand five hundred eighty only including FE NIL).

Project Title and No:

Title : "Design and development of Bio-potential signal analysis system for control of

mobility assistive device"

No : LSRB-291/LS&BD/2017

PI : Dr. M Sasikala,

Associate Professor

Dept. of Electronics and Communication Engineering College of Engineering, Guindy, Anna University,

<u>Chennai-600025</u> Ph: 044-22358871

Fax: 044-22301134, 22350291

Mob: 09840594100

Email: sasikala289@gmail.com

Co-PI: Dr. S Karunakaran,

Director,

Global Spine Institute,

Global Hospital and Health City

No 439, Cheran Nagar, Perumbakkam,

Chennai-600100 Ph: 044-24891551

Email: drkarunasspine@gmail.com

Life Sciences

...... Protecting War fighters and Promoting their Performance

CO-PI (ii):

Dr S Poonguzhali

Associate Professor

Dept. of Electronics and Communication Engineering College of Engineering, Guindy, Anna University,

Chennai-600025 Ph: 044-22358908

Email: poongs@annauniv.edu

PDC

03 Year

Cost

Rs.30,55,580/- only including FE NIL

Break-up of cost:

Grants (in Rs.)	1 st Year		2 nd Year		3 rd Year		Line Total
	IC	FE	IC	FE	IC	FE	
Research Staff:	2,49,600	-	2,49,600	: ! .	2,49,600	-	7,48,800
(JRF-01)		ļ. ģi			10 × 10 10		15,79,000
Non- expandable equipment & stores : (Mini-PROTEAN Tetra Cell-01	12,79,000	- · · ·	√ q=9 (¥); = - .	1	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		15,79,000
Spacer of Plates with 1.0mm integrated spacers, 5 – 03	3,00,000			1			
Short Plates,5 - 02 Mini Trans Blot Module-01		N.				-	
Mini Sub Cell GT Horizontal Electrophoresis System-01 Wide Mini-Sub Cell GT Horizontal					2		
Electrophoresis System-01)	1	d and			9 9	- 63	4.50.000
Expendable stores, consumables, chemicals etc.	50,000	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	50,000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	50,000	-	1,50,000
TA/DA (including TA/DA of specialist/monitors	50,000		50,000	-	50,000	-	1,50,000
(s) for the project)	50,000	-	50,000		50,000	-	1,50,000
Contingency	1,97,860	-	39,960		39,960	_	2,77,780
Overhead charges Total	21,76,460	-	4,39,560		4,39,560		30,55,580

Grand Total = Rs.30,55,580/- including FE NIL (Rupees Thirty lakh Fifty Five Thousand Five Hundred Eighty Only including FE NIL)

- 2. The research staff is only for the duration of the project. DRDO holds no responsibility for further employment/absorption of the staff. The staff will be recruited as per rules & procedure of the grantee institution.
- 3. Statements of account duly certified by the executive financial authority of the institution are also required to be submitted along with the annual reports. Excess expenditure, beyond the yearly sanction, unless authorised by LSRB in writing, shall be the responsibility of the grantee institution.
- 4. The duration of the project is **three year.** The date of issue of this letter would be reckoned as the commencement date of the project.

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- 5. PI to ensure that the laboratory guidelines for genetic engineering, animal experimentation and medical ethics issued by DBT, Animal Welfare Division (CPCSEA) and Ministry of Health & Family Welfare, Govt of India, respectively and any other statutory issues related to the experiments are adhered to.
- 6. A separate saving bank account for the grant would be maintained by The Director, Centre for Technology Transfer & Development (CTDT), Kalanjiyam Building, Anna University, Chennai-600025 and interest earned thereon would accrue to LSRB. In case of interests not accrue under the project the reason for the same may be incorporated in utilization certificate for audit purpose. Unspent balance, on completion of the project should be sent by the grantee institution through a Draft in favour of CDA (R&D), New Delhi to LSRB Secretariat for depositing the amount back in Govt accounts.
- 7. A list of inventory of equipment purchased out of LSRB grant shall be intimated along with annual report/closure report, giving item-wise cost, date of purchase and source of procurement to LSRB Sectt. The equipment should be stamped LSRB Project number and each item should be serially numbered. The photocopy of the stock registers maintained by the institute/university for the non-expendable and expendable stores may be submitted duly audited with a certificate from the audit authorities that "the necessary check has been made and the inventory is found to be in order". For further details, kindly refer the website of DRDO/LSRB i.e. http://www.drdo.gov.in/drdo/English/indexCorpDir.jsp?pg=dir=LRSB
- On completion of the project, the grantee institution would forward the consolidated audited list of equipments and expendable items, if any, with request for retention of equipment for another project or in house R&D, with due recommendations of their executive authority.
- 9. Shri S N Kartik, Sc 'C' DEBEL, Bangalore will be the facilitator. He will be visiting the Institute for periodical monitoring of the project.
- 10. Following **policy on the Intellectual Properties** generated under the scheme will be taken care of :-
 - (a) All Foreground Information and Foreground Intellectual Property, created during the performance of the Project, whether or not legally protected, shall be owned jointly by DRDO and Grantee Institution. DRDO and Grantee Institution shall be deemed to have a royalty-free license to use such joint Foreground Information and Foreground Intellectual Property Rights for their own R&D purposes.
 - (b) Grantee Institution shall not publish any research paper covering Foreground Information generated during the performance of the Project before seeking written consent from DRDO to assure that no proprietary information is released and no legal rights covering Foreground Information are jeopardized. Normally, such decision for publication shall be provided by DRDO within 30 days of receipt of such request from Grantee Institution.
 - (c) Grantee Institute shall promptly report to DRDO about any Intellectual Property generated during the performance of the Project. DRDO and Grantee Institution shall confer and consult each other regarding preparation, filing, prosecution, maintenance of Intellectual Property Rights applications including patent applications covering Foreground Information, generated during the performance of the project. DRDO shall be responsible for filing, prosecution, grant and maintenance of such Intellectual Property Applications including patent applications and Grantee Institute shall render all possible help to DRDO regarding the same. DRDO shall also bear all expenses related to filing, prosecution, grant and maintenance of such Intellectual Property Applications including patent applications.

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- (d) Grantee Institution may commercially exploit any Foreground Information and Foreground Intellectual Property Rights, generated during the performance of the Project, whether or not legally protected, for purposes other than Government Applications upon conclusion of the separate agreements to be negotiated between Grantee Institution and DRDO. Grantee Institution shall maintain an account of its incomes arising out of such commercial use and any royalty income shall be shared equally between DRDO and Grantee Institution.
 - (e) Notwithstanding any provisions mentioned above or any future licensing agreements, DRDO shall be deemed to have all rights including a nonexclusive, irrevocable, royalty-free, worldwide perpetual license for the unlimited commercial development series production, continuing engineering support, product improvement, or have developed, any Foreground Information and Foreground Intellectual Property, generated during the performance of the Project, whether or not legally protected, for the purposes of Government Applications including armed forces and paramilitary forces.
 - (f) Whenever DRDO informs Grantee Institution that the interest of national security requires Grantee Institution to refrain from commercially supplying product/process based upon any Foreground Information and Foreground Intellectual Property, generated during the performance of project, whether or not legally protected, to any particular third parties, or stipulate conditions in such commercial sale, Grantee Institution shall abide by DRDO requirements.
 - (g) DRDO shall not be responsible and shall not accept any liability for infringement, innocent or otherwise, by PI or the Grantee Institute of the Intellectual Property Rights of third parties.
 - (h) The term of the above provisions shall survive the term of the Project.
- 11. If there is any legal issue/dispute, it shall be redressed within the jurisdiction of Delhi.
- 12. PCDA (R&D), DRDO Cell, West Block-V, RK Puram, New Delhi-110066 will make disbursement of money as sanctioned. Payment shall be released through e-payment system and physical cheques will not be issued. A mandate form is enclosed for filling up the required information and forwarding alongwith a blank cancelled cheque bearing account number.
- 13. In case of premature termination/closure of the project, the grantee institute is liable to refund the entire budget released to them alongwith interest.
- 14. Closure report On completion/closure/termination of the project, three copies of the consolidated posure report as per annexure III (refer website) will be submitted within three months with all necessary certificates and financial information. It should give sufficient technical details of project, achievements in relation to the originally stated objectives of the project and utilization of results.
- 15. Ensure about providing of reservation for Scheduled Castes and Scheduled Tribes or OBC in posts and services.
- 16. The expenditure will be debited to Major Head 2080 (Defence Services) R&D Minor Head-004 Research & Development, Code Head 852/05 of the Defence Services Estimates.
- 17. Contingent bill (in triplicate) for the release of grant for first year i.e. Rs.21,76,460/- (Rupees Twenty one lakh seventy six thousand four hundred sixty only) duly completed and signed on revenue stamp with official seal by the competent financial authority of the institute alongwith ECS mandate form may please be forwarded to us immediately for onward submission to PCDA for payment.

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The sanction code is CCTM/TM/LSRB/GIA/17-18/0023 dt 26.04.2017

This issues with the concurrence of IFA (R&D) New Delhi vide their UO No IFA (R&D), New Delhi 19.40/0084 dt 24.04.2017.

Kindly acknowledge the receipt. 20.

> (Dr. Rajio Singh) Member Secretary Life Sciences Research Board

Yours)faithfull

Ink Signed Copy:

- PCDA (R&D), DRDO Cell, West Block-V, RK Puram, New Delhi-110066 (i)
- IFA (R&D), DRDO Bhawan, New Delhi-110011 (ii)
- DGADS, 'L-1' Block, Church Road, New Delhi-110011 (iii)
- DS & DG (TM), DRDO Bhawan, New Delhi-110011 (iv)
- DS & DG (LS), DRDO Bhawan, New Delhi-110011
- (v) Fro information please. Dr M Sasikala (vi)

Associate Professor

Dept. of Electronics and Communication Engineering

College of Engineering, Guindy, Anna University

Chennai-600025

Copy to:-

- Chairman, LSBD & Director DEBEL, PB No 9623, C V Raman Nagar Bangalore-560093
- Member Secretary, ARMREB, DRDO Bhawan, New Delhi-110011 (vii)
- Member Secretary, AR&DB, DRDO Bhawan, New Delhi-110011 (viii)
- (ix) Member Secretary, NRB, DRDO Bhawan, New Delhi-110011
- DER&IPR, DRDO Bhawan, New Delhi-110011 (x) (xi)

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