



KING GEORGE'S MEDICAL UNIVERSITY

LUCKNOW UTTAR PRADESH INDIA

INCUBATION CENTER AT KGMU

FROM IDEAS TO IMPACT : KGMU'S INNOVATION ECOSYSTEM

Innovation Culture



Institutional Innovation Council
Design Thinking workshop
Summer Immersion Programs

Flagship Program



SIB SHInE - DBT sponsored
Biodesign Program
Clinicians + Engineers +
Industry Experts

Entrepreneurial Support



Startup Guidance and
mentorship
Access to DBT, BIRAC, MeiT
Grants

Clinical Validation



KGMU as clinical validation
hub
Faculty Led Validation of early
stage products

Arunima
Registrar
King George Medical University
Lucknow



KING GEORGE'S MEDICAL UNIVERSITY

LUCKNOW UTTAR PRADESH INDIA

Incubation Centre at KGMU

SIB-SHINE

- **SIB SHInE (School of International Biodesign–Synergising Healthcare Innovation and Entrepreneurship)** is a residential fellowship aimed at addressing critical healthcare challenges via user-centric innovation.
- The program's origins lie in the 2019 **Summer Immersion Program**, which immersed students in clinical environments to identify unmet medical needs and develop early prototypes. This initiative evolved into SIB SHInE, now jointly led by **KGMU Lucknow** and **IIT Kanpur**, and supported by the **Department of Biotechnology, Government of India** <https://www.kgmuh.org/sib-shine.php>



Archi
Registrar
King George Medical University
Lucknow



KING GEORGE'S MEDICAL UNIVERSITY
U.P., LUCKNOW
किंग जार्ज चिकित्सा विश्वविद्यालय, 30प्र०
लखनऊ

Dated: December 02, 2022

अपीत कल्याणम् एवं सत्यम् तस्मिन् राजा '१' श्री श्री देव सत्यम् (१९१९-२०)

Aradhana
Registrar
King George Medical University
Lucknow



KING GEORGE'S MEDICAL UNIVERSITY

LUCKNOW UTTAR PRADESH INDIA

LIST OF STARTUPS

S.N.	Program	Fellow	Product	Start-up	Patent	Grants / Awards
1.	Summer Immersion	Adarsh Kumar, Virender Singh	Deescope A replacement to conventional Speculum.	Reimagine Evolve Design Pvt. Ltd.	Indian Patent Granted US Patent under examination	funding of BIRAC's BIG – 50 Lacs
2.	Startup approached directly.	Sumit Kumar Vaish	LifSen A touchless Human Machine Interaction system.	Hindonics Technologies Private Limited	N.A.	NIDHI for COVID 2.0 Grant Rs 25 Lacs, NIDHI PRAYAS Rs 10 Lacs, TIDE 2.0 MVP Grant Rs. 7 Lacs, StartinUP Grant Rs. 5 Lacs, NIC2020 Rs. 5 Lacs, NTT DATA CSR Grant.
3.	Summer Immersion	Siddhant Srivastava	Proctoscope A replacement to conventional proctoscope used to visualize the inside of the rectum and anus.	Siddlabs Pvt. Ltd.	Indian Patent Granted US Patent under examination	Gandhian Young Technological Innovation Award" with 15 Lakhs grant Two International awards in "International COVID Congress 2020" organized by IEEE Bangladesh Section in "Best Idea" and "Best Product"
4.	Cohort 1 (2022-23)	Kushagra Asthana Prithu Prasad	Functional Electrical Stimulator for Spastic Foot Drop	Biostim Innovations Pvt. Ltd.	Patent Filed	follow-up funding under meitY TIDE 2.0 (7 Lacs) established Seed Fund Partnership with Research and Innovation Circle of Hyderabad (RICH) under Startup india seed fund scheme – 30 Lacs BIRAC's BIG 50 Lacs
5.	Cohort 1 (2022-23)	Shreya Nair	Smart Bra Pads for Breast Health Monitoring	Brela Innovations Pvt. Ltd.	Patent Filed	2nd Runner Up at TiE Women Global Pitch Competition, Lucknow Chapter Finale Also received follow up funding from NIDHI-EIR

Archi
Registrar
King George Medical University
Lucknow

No. BT/PR34423/BIO/144/1/2020
GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF BIOTECHNOLOGY

Block 2, 6-8th Floors
CGO Complex, Lodhi Road,
New Delhi- 110 003
Dated:28.09.2021

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 "Establish SCHOOL OF INTERNATIONAL BIODESIGN (SIB)- Synergizing healthcare, innovation and entrepreneurship (SHInE)" for a period of 5 Year 0 Month at a total cost of Rs. 92183812 (Rupees Nine Crores Twenty One Lakhs Eighty Three Thousand Eight Hundred and Twelve Only) on the terms and conditions detailed here under:-

2 The Project :

2.1 Title : Establish SCHOOL OF INTERNATIONAL BIODESIGN (SIB)- Synergizing healthcare, innovation and entrepreneurship (SHInE)

2.2 Details of the Investigators:

Project Coordinator

Prof. Rishi Sethi

Professor

Department of Cardiology, Lari Cardiology Centre,
King George Medical University,
Lucknow, Uttar Pradesh, 226003

Principal Investigators:

Prof. Rishi Sethi

Professor

Department of Cardiology, Lari Cardiology Centre,
King George Medical University,
Lucknow, Uttar Pradesh, 226003

Dr. Amitabha Bandyopadhyay

Professor

BSBE Department
INDIAN INSTITUTE OF TECHNOLOGY, KANPUR
Kanpur UP, Uttar Pradesh, 208016

CO-PI:

Prof. Jonaki Sen

Professor

Biological Science and Bioengineering Department
IIT Kanpur UP - 208016, Uttar Pradesh

Dr. Pooja Ramakant

Additional Professor

Endocrine Surgery

King Gorges Medical University, Lucknow
Lucknow - 226003, Uttar Pradesh

2.3 Objectives:

Overall Objectives:

1. Run 5 cycles of Biodesign fellowship program
2. Conduct training workshops for Faculty Members both ONLINE and OFFLINE on 'training MedTech innovators.
3. Boost MedTech innovations in academic institutes
4. Create the next generation of Medical technology Entrepreneurs for translation of medical device technologies/innovation into sustainable products.
5. Foster innovation of affordable , indigenously developed and global standard medical devices in priority areas.

Institute wise Objectives:

INDIAN INSTITUTE OF TECHNOLOGY, KANPUR

1. Setting up the centre of excellence in Biodesign with appropriate office space, staff and infrastructure
2. Design the fellow selection process and implement it with KGMU
3. Implement the Phase II of the fellowship program (POC and Prototype development) as per the mandate of the program.

King Georges Medical University, Lucknow

1. Setting up the centre of excellence in Biodesign with appropriate office space, staff and infrastructure
2. Design the fellow selection process and implement it jointly with IITK
3. Implement the clinical immersion and validation as per the mandate of the program.

2.4 Time Schedule:

The duration of the project is 5 Year 0 Month from the date of this sanction order.

2.5 Project Cost:

The total cost of the project is Rs. 92183812/-(Rupees Nine Crores Twenty One Lakhs Eighty Three Thousand Eight Hundred and Twelve Only) as per details given below:



Year wise budget detail:						(Rs. In Lakhs)
Institute	1st year	2nd year	3rd year	4th year	5 th year	Total
KGMU Lucknow	173.425	175.5775	187.67295	77.46282	21.50	635.63827
IITK	76.79	58.389	60.5399	49.98095	40.50	286.19985
Total	250.215	233.9665	248.21285	127.44377	62.0	921.83812

Institute wise details are:

KGMU Lucknow component

(Rs. In Lakh)

S.No.	Budget Heads	Year I	Year II	Year III	Year IV	Year	Total
	NR budget:						
1	Renovation/ Office Set up	34.00	34.00	0.00	0.00	0.00	68.00
	Recurring:	-	-	-	-	-	-
2	Manpower	32.025	34.1775	37.07295	12.76282	0	116.03827
3	Fellowship for fellows	86.40	86.40	129.60	43.20	0	345.60
4	Consumables	1.00	1.00	1.00	1.00	1.00	5.00
5	Travel	4.00	4.00	4.00	4.00	4.00	20.00
6	Contingency	2.00	2.00	2.00	2.00	2.00	10.00
7	Expenditure for Seminars/ Symposia/ Workshops	5.00	5.00	5.00	5.00	5.00	25.00
8	Others Expenses*	7.00	7.00	7.00	7.50	7.50	36.00
9	Institutional overhead	2.00	2.00	2.00	2.00	2.00	10.00
	Total	173.425	175.5775	187.67295	77.46282	21.50	635.63827

*Breakup of Other Expenses

Rs. In Lakh

Budget Head	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Improvements of prototypes	2.00	2.00	2.00	2.00	2.00	10.00
Ignition grant	2.00	2.00	2.00	2.00	2.00	10.00
Honorarium for visiting faculty/professionals	3.00	3.00	3.00	3.50	3.50	16.00
Total	7.00	7.00	7.00	7.50	7.50	36.00

IT, Kanpur Component
Rs. In Lakh

S.No.	Budget Heads	Year I	Year II	Year III	Year IV	Year V	Total
	NR budget:						
1	Equipment	10.00	0.00	0.00	0.00	0.00	10.00
2	Renovation/Office set up	10.00	0.00	0.00	0.00	0.00	10.00
	Recurring:	0	0	0	0	0	0
3	Manpower	23.79	25.389	27.5399	9.48095	0	86.19985
4	Consumables	4.00	4.00	4.00	4.00	4.00	20.00
5	Travel	2.00	2.00	2.00	2.00	2.00	10.00
6	Contingency	2.00	2.00	2.00	2.00	2.00	10.00
7	Expenditure for Seminars/ Symposia/ Workshops	4.00	4.00	4.00	4.00	4.00	20.00
8	Other Expenses*	19.00	19.00	19.00	26.50	26.50	110.00
9	Overhead	2.00	2.00	2.00	2.00	2.00	10.00
	Total	76.79	58.389	60.5399	49.98095	40.50	286.19985

***Breakup of Other Expenses**
Rs. In Lakh

Budget Head	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Meetings	1.00	1.00	1.00	1.00	1.00	5.00
Prototype development- 4 lakh per team	8.00	8.00	8.00	12.00	12.00	48.00
Honorarium for visiting faculty/professionals	3.00	3.00	3.00	3.50	3.50	16.00
IP filing	7.00	7.00	7.00	10.00	10.00	41.00
Total	19.00	19.00	19.00	26.50	26.50	110.00

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:

Demand No. 89	Department of Biotechnology
3425	Other Scientific Research 2021-2022
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 expenditure involved is debitable to:

Demand No. 89	Department of Biotechnology
3425	Other Scientific Research 2021-2022
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 The other terms and conditions governing this sanction are attached at Annexure- III.

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 in Annexure-IV

4.3 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 Utilisation Certificate and Statement of Expenditure. The interest earned should be remitted to the Consolidated fund of India through Bharat Kosh portal(www.bharatkosh.gov.in) as per GFR-2017-230(8) after finalization of the account for a given Financial Year.

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

6. The Director, INDIAN INSTITUTE OF TECHNOLOGY, KANPUR, Kanpur, Uttar Pradesh and The Vice Chancellor, King Georges Medical University, Lucknow, Lucknow, Uttar Pradesh 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-05/2019 dated 30 Jan 2019. However, there is no compulsion on PI's to select candidates for JRF in their projects from Category-II of DBT-BET.

8. 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.

9. 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

- 10 (i) "The Pls/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".
- (ii) "After incurring the expenditure on import of such items and at the time of submission of UCs to the department next year, the Pls will also furnish the copy of the approval sought from the competent authority for issue of the GTE for such items of import. The release of next installment of grant will be subject to the fulfillment of the above condition."
11. This issues, under the power delegated to this Department and with the concurrence of IFD vide their SAN **102/IFD/SAN/1264/2021-2022** dated **September, 27 2021**.
12. This sanction order has been noted at serial no. 33 in the Register of Grants.

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 Prof Rishi Sethi(Project Co-ordinator), Department of Cardiology, King Georges Medical University Chowk Lucknow 226003 UP
- 3 The Director, INDIAN INSTITUTE OF TECHNOLOGY, KANPUR, IIT, kanpur - 208016, Uttar Pradesh
- 4 The Vice Chancellor, King Georges Medical University, Lucknow- 226003, Uttar Pradesh
- 5 Dr. Amitabha Bandyopadhyay, Professor, BSBE, INDIAN INSTITUTE OF TECHNOLOGY, KANPUR, BSBE Department, Kanpur UP - 208016, Uttar Pradesh
- 6 Dr. Pooja Ramakant, Additional Professor, Endocrine Surgery, King Georges Medical University, Lucknow, , Lucknow - 226003, Uttar Pradesh
- 7 Prof. Jonaki Sen, Professor, Biological Science and Bioengineering, IIT Kanpur, , Kanpur UP - 208016, Uttar Pradesh
- 8 Prof. Rishi Sethi, Professor, Cardiology, King Georges Medical University, Lucknow, Lucknow - 226003, Uttar Pradesh
- 9 Cash Section, DBT (2 copies).
- 10 Sanction Folder.
- 11 File Copy.


(Dr. Rajesh Ghangal)
Dr. RAJESH GHANGAL
Scientist 'C'
Department of Biotechnology
Govt. of India
C.G.O. Complex, Lodhi Road
New Delhi-110003


(Dr. Rajesh Ghangal)
Scientist 'C'
Dr. RAJESH GHANGAL
Scientist 'C'
Department of Biotechnology
Govt. of India
C.G.O. Complex, Lodhi Road
New Delhi-110003

Annexure -I

Details of the Equipment sanctioned for the implementation of the project entitled "Establish SCHOOL OF INTERNATIONAL BIODESIGN (SIB)- Synergizing healthcare, innovation and entrepreneurship (SHInE)":

INDIAN INSTITUTE OF TECHNOLOGY, KANPUR			
SNo.	Name of Equipment	No.	Cost(Rs.)
1.	PCB Milling Machine	1	223000.00
2.	High end PCs	2	150000.00
3.	Smoothing machine for 3D printed parts	1	627000.00
Total			1000000.00


(Dr. Rajesh Ghangal)
 Dr. RAJESH GHANGAL
 Scientist 'C'
 Department of Biotechnology
 Govt. of India
 C.G.O. Complex, Lodhi Road
 New Delhi-110003

Annexure -II

Details of the manpower sanctioned for the implementation of the project entitled "Establish SCHOOL OF INTERNATIONAL BIODESIGN (SIB)- Synergizing healthcare, innovation and entrepreneurship (SHInE)":

1. King Georges Medical University, Lucknow

(Rs. In Lakhs)

Position	No of posts	Year I	Year II	Year III	Year IV	Year V	Total
Senior program manager @ 80K/ PM with 5% annual increment	One	9.60	10.08	10.584	11.1132	11.66886	53.04606
Program Technical Asst.(Admin) @50k/month with 5% annual increment	One	6.00	6.30	6.615	6.94575	7.29304	33.15379
Accountant @30K/month with 5% annual increment	One	3.60	3.78	3.969	4.16745	4.37582	19.89227
office attendant @15k/month	One	1.80	1.89	1.9845	2.08373	2.18791	9.94614
Fellowship @ 60k/month	8 fellows for first 3 yrs and then 12 fellows for next 2 yrs	57.60	57.60	57.60	86.40	86.40	345.60
Total annual manpower budget		78.60	79.65	80.7525	110.71013	111.92563	461.63826

2. INDIAN INSTITUTE OF TECHNOLOGY, KANPUR

(Rs. In Lakhs)

Position	No of posts	Year I	Year II	Year III	Year IV	Year V	Total
Senior program manager @ 80 K/ PM with 5% annual increment	One	9.60	10.08	10.584	11.1132	11.66886	53.04606
Program Technical Asst (Admin) @50k/month with 5% annual increment	One	6.00	6.30	6.615	6.94575	7.29304	33.15379
Total annual manpower budget		15.60	16.38	17.199	18.05895	18.9619	86.19985

Emoluments detail of research personal(s) mentioned in table(s) of Annexure-II shall be applicable only if candidate(s) met educational qualification and eligibility criteria as per institutes norms

(Dr. Rajesh Ghargal)
Scientist 'C'