



ICMR- IIT Kharagpur

Collaboration on Healthcare



Call for Proposal

ICMR- IIT Kharagpur MedTech Internship Award

The challenges faced in ensuring accessible, affordable and appropriate healthcare to all are many as well as complex. Technology based solutions are required to meet the unmet needs and tackle inequity. Success of it will depend on development of viable technological solutions through collaborations between researchers in medical and technology domain.

The ICMR – IIT Kharagpur MedTech Summer Internship Award provides support for a supervised internship experience to individuals undertaking MBBS, clinical postgraduate degree courses (e.g., M.D., DNB) or Ph.D. students in clinical/life sciences subjects or working as Scientist B from listed ICMR institutes and PGIMER, Chandigarh for undertaking laboratory or clinically-based research in biomedical engineering at IIT Kharagpur. Vice a versa, individuals undertaking BE/ BTech, engineering postgraduate degree courses (MTech) , PhD (engineering) from IIT Kharagpur will be provided support for a supervised internships at listed ICMR institutes and PGIMER, Chandigarh.

Guidelines for Internship Award

Application

List of Laboratories

Applicants are required to fill out ICMR - IIT Kharagpur MedTech Internship Award Application Form and submit it along with necessary documents to Dr Meenakshi Sharma at ICMR end (Email: med.tech.icmr@gmail.com) and Dr Goutam Saha at IIT Kharagpur end (Email: gsaha@ece.iitkgp.ernet.in) by **11th April 2016**. A List of laboratories at ICMR, IIT Kharagpur and PGIMER, Chandigarh where Internships are available may be downloaded.

ICMR- IIT Kharagpur MedTech Internship Award

Guidelines for Internship Award

Title ; ICMR- IIT Kharagpur MedTech Internship Award	
Participating Organizations	ICMR institutes, IIT Kharagpur and PGIMER, Chandigarh for the current Call
Participating IIT Kharagpur Laboratories/ ICMR Institutes/ Medical Institutes	List attached
Application Due Date	April 2016
Aim of the Internship Award	The primary aim of ICMR- IIT Kharagpur MedTech Internship Award is to promote individuals for undertaking research in the fields of biomedical engineering and translational research in healthcare.
Duration of Internship Award	8 weeks, extendable up to 12 weeks in special situations
Internship Period and Eligibility	<p>Indian national students with medical/ life sciences background from ICMR Institutes and PGIMER, Chandigarh will be required to stay for 8 weeks, extendable up to 12 weeks in special situations, at IIT Kharagpur. Vice a versa, Indian national engineering students from IIT Kharagpur will be required to stay at one of the identified ICMR institutes or PGIMER, Chandigarh .</p> <p>Only permanent faculty members from both institutes can enroll students for summer internship. The student should have a mentor from his parent institute as well. List of participating institutes and faculty is attached herewith.</p>
Number of Internships	IIT Kharagpur, ICMR Institutes and Medical Institutes will support around 20 students for internship program. However the exact numbers will depend on the appropriateness of the applications.
Award Budget for Internships	<p>A. Graduation students who are not getting any stipend (e.g. MBBS, BTech, etc)</p> <p>A stipend of Rs 40,000/- will be provided for the entire duration of the internship. Accommodation will be provided free by the host institute. No separate travel allowance will be paid.</p> <p>B. Post graduation students who are getting stipends</p> <p>Will be provided support of Rs 20,000/- for entire duration</p>

	<p>for food and travel. Accommodation will be provided free by the host institute.</p> <p>C. Scientist B at ICMR Institute The parent institute will meet all the expenses for travel and food. Accommodation will be provided free by the host institute.</p> <p>D. At the end of the internship, a report will be submitted by the intern.</p>
Award Budget for Prototype Development	Three of the best designs developed during internship period based on top health needs will be selected and provided a budget of Rs 2 lakhs each for development of prototype. This budget can be used for consumables and small equipment (not exceeding Rs 15% of entire budget). The budget will be provided to student/researcher's parent institute.
Selection of Internships	A Committee will review all the applications and results will be placed on ICMR and IIT Kharagpur website.
Date of Commencement of Internship	May 09, 2016 (Monday)

ICMR – IIT Kharagpur MedTech Internship Award
Laboratories at ICMR, Medical Institutes, IIT Kharagpur Offering Internships

S.No.	Faculty Name	Area	No . of interns
IIT KHARAGPUR			
1	Prof. Suman Chakraborty	Microfluidics and Medical Diagnostics	1
2	Prof. Santanu Dhara	Biomaterials, tissue engineering and wound healing	1
3	Prof. Chandan Chakraborty	Clinical interpretation of physiological signals	2
4	Prof. Pralay Mitra	Bioinformatics (Computational and Experimental)	2
5	Prof. Sudip Mishra	Nanobiosensor networks, Physiological sensor networks	2
6	Prof. C S Kumar	Bio signal / neuro controlled robotics	2
7	Prof. Aurobinda Routray	Sleep studies, Nuero-Science, Physiology of Brain	2
8	Prof. Koelm Chaudhuri	Proteomics, metabolomics and different molecular biology techniques for better understanding of the disease pathogenesis and biomarker discovery	1
9	Prof. Goutam Saha	Heart and lung Sound Analysis	2
ICMR INSTITUTES & Medical Institutes			
National Institute for Research in Tribal Health (NIRTH), Jabalpur			
10	Dr. Neeru Singh, Scientist G and Director	Parasitology, Molecular Parasitology, Malaria Epidemiology	1
11	Dr. Jyothi T. Bhat, Scientist E	Bacteriology, Tuberculosis diagnosis	1
12	Dr. S Rajasubramaniam, Scientist E	Genetics, Biotechnology, Haemoglobinopathy	1
13	Dr. Pradip V Barde, Scientist D	Viral Diagnosis, Arbovirology	1
National Institute of Epidemiology (NIE), Chennai			
14	Dr Sanjay Mehendale, Scientist G and Director	Epidemiology , Surveillance	2
National AIDS Research Institute (NARI), Pune			
15	Dr. Madhuri Thakar	Serology & EQAS (Specific Project: Development of web-based program for HIV & CD4 EQAS)	1
16	Radhika Brahme	Epidemiology (Specific project: Developing mobile apps for promotion of HIV test among adolescents; enhancing adherence on ART and QA/QC for facility	1

		based ICTCs (FICTC)	
17	Dr. Swarali Kurle	HIV drug resistance(Specific project: Development of analytic software for HIV drug resistance database similar to Stanford database)	1
18	Dr. Arati Mane	Microbiology (Specific Project: Develop DBS HCV RNA test)	1
National Institute of Nutrition, Hyderabad			
19	Dr. G. Bhanuprakash Reddy	Nutritional Biochemistry, age-related diseases & micronutrients, complications of diabetes & obesity, functional foods	1
20	Dr. Sudip Ghosh	Next Generation Sequencing and qPCR for gene expression analyses	1
National Institute For Research in Environmental Health, Bhopal			
21	Dr Anil Prakash, Scientist G & Director-In-Charge	Environmental Health	1
National Institute for Research in Tuberculosis, Chennai			
22	Dr. Geetha Ramachandran		1
National Institute of Malaria Research, New Delhi			
23	Dr Neena Valecha, Scientist G & Director	Malaria point of care diagnostics and surveillance	1
24	Dr. Vainav Patel	Immunology (Host immune signatures associated with HIV and CMV infections)	1
25	Dr. Taruna Gupta	Immunology (Pattern recognition receptors as innate immunity molecules in male and female fertility)	1
26	Dr. Rahul Gajbhiye	Reproductive Biology (Non-invasive diagnostic markers for endometriosis ; CFTR Gene mutation analysis in male infertility)	1
27	Dr. Deepa Bhartiya	Stem Cell Biology (Analysis of very small embryonic like stem cells (VSELS))	1
Post Graduate of Medical Education and Research			
28	Prof Arunaloke Chakarwarthy	Microbiology	1

29	Dr Joseph Mathews	Pediatrics	1
30	Prof Meenu Singh	Pediatrics	1
31	Prof GD Puri	Anaesthesia and Intensive Care	1

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The proposed internship intends to provide opportunities for creative expressions and foster collaborations from an early stage. We hope to pave way towards entrepreneurship in medical technology sector so as to solve the inherent problems of the health sector.

Application Form
Name
Institute
Position
Qualification
Brief description on skills of the student/ scientist B (75 words)
Brief description of skills which are intended to be gained from ICMR- IIT Kharagpur MedTech Internship Award (75 words)
Name of the proposed Mentor and his/her Address
Please attach: 1. A Brief CV 2. A one page on specific medical need and technological / process solution foreseen by you.