

GLOBAL INITIATIVE ON ACADEMIC NETWORK (GIAN)

Ministry of Human Resources Development
Government of India

5 DAYS COURSE ON

Medical Devices and Pharmacotherapeutics: From Research to Patients

14th Dec – 18th Dec 2020

Venue



JNTUH College of Engineering
Hyderabad
Kukatpally, Hyderabad – 500085

About GIAN:

Govt. of India approved a new program titled Global Initiative of Academic Networks (GIAN) in Higher Education aimed at tapping the talent pool of scientists and entrepreneurs, internationally to encourage their engagement with the institutes of Higher Education, viz., all IITs, IIMs, Central Universities, IISc Bangalore, IISERs, NITs and IIITs subsequently cover good State Universities where the spinoff is vast. The GIAN www.gian.iitkgp.ac.in may be visited for detailed information.

Overview

From identification of unmet clinical needs to the development process to post market vigilance, medical devices take a long way and numerous man-hours to be developed, approved and marketed. The medical device market is a multi-billion dollar industry and may be as simple as tongue depressors to complex equipments like MRI machines and heart valves. This course will provide comprehensive information on the whole medical device research. It will delve deep into how unmet medical needs are identified, preclinical and clinical trials, quality issues, standards like ISO13485 and other standards. The lecturer has years of academic (teaching multiple medical device related modules at the National University of Singapore) and industrial (consultant for Johnson and Johnson, one of the largest MNC's in the medical device domain) experience. Numerous real examples will be discussed that will make this course more relevant and applicable to an actual industrial setting.

This course will encompass the following:

- ✓ Need for new medical devices
- ✓ What are me too products
- ✓ Disruption in the medical technology
- ✓ Patenting of new technology
- ✓ Compliance to quality requirements and standards
- ✓ FDA, and CE mark
- ✓ Pro-active and Re-active strategies

- ✓ Product feedback cycle and usage
- ✓ Applications of medical devices in Pharmacotherapeutics
- ✓ Latest Pharmacotherapeutics strategies in different diseases

The Course will have a strong emphasis on the whole process of medical devices from research to patients.

Number of participants for the course will be limited to fifty.

Benefits of Attending the Course:

Persons who have attended the course will gain knowledge on need new and improved medical devices, technological innovations and disruptions, materials for implants and the corresponding rationale there to prototyping, clinical trials and quality assurance of medical devices legal manufacturer and marketing issues

Who should attend?

- Executives, engineers and researchers from manufacturing, service and government organizations including R&D laboratories.
- Student students at all levels (B.Pharm /MSc/M.Pharm/PhD/MBBS) or Faculty from reputed academic institutions and technical institutions.

For participation in the course, registration with GIAN is mandatory. Registration to the portal is one-time affair and will be valid for the lifetime of GIAN. Once registered in the portal, an applicant will be able to apply for any number of GIAN courses as and when necessary. One-time Non-refundable fee of Rs.500/- will be charged for this service. For registration, please visit the website:

www.gian.iitkgp.ac.in/GREGN/index

Course Fee:

The participation fees for taking the course are as follows:

Participants from abroad:	US \$500
Industry/ Research Organizations:	Rs. 5000/-
Academic Institutions:	Rs. 3000/-
Students:	Rs. 1000/-
SC/ST students :	Rs. 500/-

There will be a concession of 50% of the fee for the faculty working in the constituent and affiliated colleges of JNTUH. The above fee include all instructional materials, computer use for tutorials and assignments, laboratory equipment usage charges, 24 hr free internet facility, Tea, Snacks, Lunch. The participants will be provided with accommodation on payment basis.

Important Dates:

Last date for receiving applications: 01-12-2020
Course Dates **14th Dec – 18th Dec 2020**

Evaluation and Grading

There will be evaluation at the end of each module on the understanding of the concepts by the participant made during the course. Based on the evaluations finally a letter grade will be awarded to the participant. A completion certificate shall also be issued.

The Faculty



Dr Mrinal Musib is presently a Senior Lecturer in the department of Biomedical Engineering at the National University of Singapore (NUS). Prior to that, he was a consultant for Johnson and Johnson at their regional office in Singapore looking after Medical Affairs/Information in ASEAN/APAC regions.

Dr. Mrinal received his PhD in Biomedical Engineering from the University of Texas Medical School (HSC),

San Antonio and UTSA and worked as a Senior Research Scientist at the State University of New York, Downstate Medical Centre in Brooklyn, New York before moving to Singapore.

He teaches diverse courses at NUS including advanced courses on 'Medical device design and regulations' and 'Advanced Tissue Engineering' as well as courses on 'Biomaterials for Biomedical applications' and 'Engineering Ethics'. He is also the NUS-coordinator and principal lecturer in the "Medical Device Regulatory Affairs (MDRA)" program, which is the only program of its kind.

He is very well adept and develops novel, technology-enhanced learning (TEL) strategies like, MOOC's, flipped classrooms/blended learning, scenario-based learning (SBL) etc to enhance teaching-learning outcomes. He is the recipient of the University's "Excellence in Teaching" (ATEA) award typically given to only about 1% of the faculty and Engineering "Innovation in Teaching" award.



Dr.M.Sunitha Reddy, Associate Professor, Centre for Pharmaceutical Sciences, Institute of science and technology, JNTU-H. She has 26 years of experience in Industry,

teaching and Research. After completion of M.Pharm she went to USA and passed FPGE, NABP, California board of pharmacy, Nevada board of pharmacy. She worked as Registered pharmacist for 9 years in Retail and Institutional pharmacy like Walgreen co, Walmart retail chains in California. During her stay in California she worked for veteran hospital and Scripps memorial hospital and helped veterans who injured in World War Two. She used to teach Pharma.D students at UOP (University of pacific) Sanfrancisco and Sacramento. She trained several pharmacy technical staff and intern pharmacist at Walgreen co, CA, USA.

She returned to INDIA in year 2000 and joined as vice principal/principal in Shadan women's college of pharmacy and worked for 8 years.

In year 2008 she joined in JNTU-H once they started M.Pharm course in their campus. During her tenure as Board of studies chairperson she conducted several RRM's (research Review meeting), colloquiums, syllabus Revision for B.Pharm & M.Pharm at JNTUH. She conducted several national and international seminars/conferences sponsored by APSCHE, APPCB, AICTE,DST-SERB,TSCHE and Northeastern university, USA . She has 75 international and national publications, 42 poster presentations and guided 106 M.Pharm students and guiding six PhD scholars.

She received AICTE MODROB GRANT of 20 lakhs for her research work. She received conference grant from different funding agencies more than 10 lakhs

About the Institute:

JNTUH College of Engineering Hyderabad, Kukatpally, Hyderabad since its inception in the year 1965 earned great reputation and fame not only in India but also all over the world. In 2008, when JNTU is divided into four universities by the Ordinance of the Govt. of A.P., the college is retained as a constituent college of JNT University Hyderabad and was renamed as JNTUH College of Engineering Hyderabad.

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