# Training Programme On

# Genomic and Proteomic Analysis for Developing Biosimilars (GPP-2019)

# 11<sup>th</sup> – 15<sup>th</sup> Feb 2019



#### Department of Biotechnology, Government of India

## **Organised By**



Department of Biotechnology & Medical Engineering, National Institute of Technology Rourkela



# **About BIF at NIT Rourkela**

The Bioinformatics Infrastructure Facility (BIF) was established in the Department of Biotechnology and Medical Engineering at NIT Rourkela in the year 2006 with funding from the DBT, Govt. of India. The BIF has been providing computational facilities and services to users in terms of hardware and software. Major activities includes human resource development, training and workshops, database creation and bioinformatic tool development. Research in the area of Big Data analysis, network analysis, database creation, computer-aided drug designing, protein modelling and comparative genomics are carried out at this facility.

## **About the Training Program**

The training program aims to provide both *in silico* and Wet-lab training on experiments for developing biosimilars with enhance bioactivity. The course content includes computational approaches for genomic and proteomic analysis for designing biosimilars and developing strategies for improving their bioactivity. In addition, hands-on-training on experimental validation of *in silico* data through wet-lab experiments are inbuilt within training program. Thus, the program is useful for both experimentalist and computational biologists.

# **Target Participants**

People working in the fields of bioinformatics, biosimilars, biopharmaceuticals and Pharma industry or those who wish to have new venture in biotechnologyled entrepreneurship can participate. Students, research scholars and start-ups are also allowed.



### **Brief Outline of Course Contents**

- Determining and identifying target leads
- Data mining and knowledge discovery in databases
- Pattern matching and identifying targets for improving bioactivity
- Big data analysis for NGS
- Drug discovery, Protein Modeling and virtual screening.
- Isolation of DNA and RNA, cDNA synthesis
- Designing of primers and probes
- Validation through PCR, RT-PCR, Colony PCR and nucleic acid hybridization
- Expression of biosimilars in prokaryotic system

The course will be delivered through few lectures on basic fundamentals, hands-on-training on computational tools, wet-lab experiments and equipments such as thermocyclers, blotters, spectrophotometer, electrophoresis, high-speed centrifuge, microscopes etc.

# How to Apply?

Applications in the prescribed format along with the registration fee in the form of a Demand Draft, drawn in favour of "Continuing Education, NIT Rourkela" Payable at Rourkela must reach the co-ordinator on or before 31 January 2019. Since the training involves, hands-on-training with individual monitoring, the number of seats are limited to 15 and will be chosen on the merit of application and First come, First served basis. Thus, a copy of the application form and DD through be send E-mail to may gppnitrkl2018@gmail.com for early confirmation.

#### **Registration and Course Fees**

Young Entrepreneurs/Start-Up	: Rs. 1000/-
Other Corporate	: Rs. 5000/-
Faculties* (Private)	: Rs. 4000/-
Research Scholars	: Rs. 1500/-
Students	: Rs. 1000/-

- Faculties of AICTE/UGC-approved government colleges and, members of other BIF centers are exempted to pay the registration and course fees.
- Relevant certificates of start-up, studentship, government organization etc. are to be submitted along with the application form, as applicable.
- Registration and course fee does not include accommodation and food.

#### Accommodation

Accommodation may be provided in Institute Guest Houses and Hostels on payment-basis, subject to availability. A number of hotels are available within 6-8 km range. Details of hotels can be seen at the following URL: http://www.nitrkl.ac.in/ContactUs/Hotels.aspx. Please note that, there are number of other hotels near the NIT Rourkela and participants should choose any of them based on their own judgment.

#### **Dates and Venue**

**Date** 11<sup>th</sup> – 15<sup>th</sup> February, 2019.

Venue Bioinformatics Infrastructure Facility, Department of Biotechnology & Medical Engineering, National Institute of Technology Rourkela Odisha 769008

## How to Reach?

Rourkela is situated on the Howrah-Mumbai rail-line as well as on Ranchi-Bhubaneswar rail-line. Rourkela railway station is situated ~7 km away from the NIT campus. Autos/Ola/Uber are available round the clock there and the fare is ~Rs. 120-150. Rourkela is also connected to State Highway No 10 and National Highway No. 23 and several buses ply between Rourkela and the major cities of the state. Details can be seen the to URL:

http://www.nitrkl.ac.in/ContactUs/HowtoReach.aspx

# **Queries?**

For any queries, contact: Dr. Rakesh Bhaskar: 8005086051 Shri. Praveen Kumar Guttula: 94405-69528 E-mail: gppnitrkl2018@gmail.com

### **Address of Correspondence**

#### Dr. Mukesh K. Gupta,

Associate Professor, Department of Biotechnology & Medical Engineering, National Institute of Technology Rourkela, Odisha 769008 Tel: 0661-2462294 E-mail: guptam@nitrkl.ac.in

#### REGISTRATION FORM (GPP-2019)

Name :

00

**Designation:** 

**Organization\*:** 

(\*Enclose a copy of NOC/recommendation letter)

Accommodation required: Yes / No

Address for Correspondence:

E-mail\*:

(\*Accepted applicants will be informed to this e-mail) Mobile:

Payment Details: DD No.: Bank: Date: Amount:

> Copies of this form and details of the training program can be downloaded from our website http://www.nitrkl.ac.in

