



## Al Innovations in Life Sciences, Biotech and Pharma Research: A Virtual Workshop

11-15 March, 2024

## Organized by

Department of Biotechnology
Jaypee Institute of Information Technology
Sector 62 Noida

## Convenors

Prof. Pammi Gauba Prof. Rachana and Dr. Nidhi Batra

## **About JIIT**

Jaypee Institute of Information Technology, Noida was established in the year 2001 and has been declared as a "Deemed to be University" under Section 3 of UGC Act 1956 in the year 2004. JIIT is a NAAC accredited, AICTE approved and NIRF ranked Institute and has continued to become a centre of excellence in emerging areas of science and technology.



## **About the Department**

The Department of Biotechnology at JIIT, NOIDA, established in 2002, is committed to provide innovative teaching, learning, and a vibrant research environment. Faculty members with rich research exposure in academia and industry from national & international organizations, contribute to the departmental academic core.

#### Sessions

#### Day 1: 11 March, 2024 (2.00 -5.00 PM)

Session 1: Introduction to AI in Biotech and Pharma: Foundations and Overview

Speaker: Dr. Kalaiarasan Ponnusamy, Assistant Director @ NCDC, MoHFW

Session 2: Current Landscape: Al Success Stories in Biotech and Pharma

Speaker: Dr. Kalaiarasan Ponnusamy, Assistant Director @ NCDC, MoHFW

#### Day 2: 12 March, 2024 (2:30 -5.00 PM)

Session 3: Translating Big Data: The Role of AI in Omics Research

Speakers: Dr. Raghavendran Lakshminarayanan, Bioinformatics Subject Matter Expert, Koita Centre for Digital Health, IIT Bombay

Dr. Kshitij Jadhav, Assistant Professor, Koita Centre for Digital Health, IIT Bombay

#### Day 3: 13 March, 2024 (2:00 -5.00 PM)

Session 4: Al-Driven Drug Discovery: Accelerating Research and Development

Speakers: Prof. Latha Narayanan, Dean, School of Engg. and Applied Sciences, Bennett University Dr. Lipi Thukral, Principal Scientist, CSIR-Institute of Genomics and Integrative Biology, New Delhi

Session 5: Al assisted Scientific Writing and Publishing

Speaker: Dr. K. S. Sowmiya Rani, Editor, Editage Cactus communication, Speaker | Academic Writing Coach, Owner/Founder Sowmis\_AWW

#### Day 4: 14 March, 2024 (2.30 -5.00 PM)

Session 6: AI and Clinical Trials

Speaker: Dr. Aditi Sharan, Associate Professor, School of Computer & Systems Sciences, JNU, New Delhi

Session 7: Ethical Considerations in AI Research and Implementation

Speaker: Dr. Aditi Sharan, Associate Professor, School of Computer & Systems Sciences, JNU, New Delhi

#### Day 5: 15 March, 2024 (2:00-5:00 PM)

Session 8: Hands-on Session (Chat GPT, Bing, Bard for academic writing, literature review, data wrangling, scientific programming)

Speaker: Dr. Raghavendran Lakshminarayanan, Bioinformatics Subject Matter Expert, Koita Centre for Digital Health, IIT Bombay

## Registration

QR Code:

Last date of Registration: 09.03.2024

## Registration fee



Students/Research Scholars/Faculty/Scientists/Participants from industry: Rs. 500/-.

Registration form: https://forms.gle/v1588aNFiYM71dY6A





#### **Contact Details**

Prof. Rachana: +91 9315434437 Dr. Nidhi Batra: +91 9711769395

Email id: bioinfoworkshop01@gmail.com

Note: Please keep your own laptop for hands-on training.

Participation certificate will be awarded to each registered attendee

### **Programme Schedule**

# AI Innovations in Life sciences, Biotech and Pharma Research: A Virtual Workshop 2024 11-15 March, 2024

Days	Topics	Time	Title/Speaker
<b>DAY 1</b> (11-03-2024)	Inauguration Ceremony	2-2:30 PM	Inaugural Address by Honourable Pro-chancellor Prof S. C. Saxena  Keynote address by Honourable Vice Chancellor Prof Bodh Raj Mehta
	Introduction to AI in Biotech and Pharma: Foundations and Overview	2:30 – 3:30 PM	Topic: Introduction to AI and its applications in Bioinformatics and Biomedical Sciences Dr. Kalaiarasan Ponnusamy Assistant Director @ NCDC, MoHFW
	Current Landscape: AI Success Stories in Biotech and Pharma	3:30-4:30 PM	Topic: AI success stories in Biotech and Systems Biology Dr. Kalaiarasan Ponnusamy Assistant Director @ NCDC, MoHFW
<b>DAY 2</b> (12-03-2024)	Translating Big Data: The Role of AI in Omics Research	2:30 – 3:30 PM	Topic: MultiOmics: Understanding the Journey from Sample to Digital Data Dr. Raghavendran Lakshminarayanan Bioinformatics Subject Matter Expert, Koita Centre for Digital Health, IIT Bombay
		3:30-4:30 PM	Topic: Novel Methodology for Multiomics data Integration Dr. Kshitij Jadhav Assistant Professor, Koita Centre for Digital Health, IIT Bombay
DAY 3 (13-03-2024)	AI-Driven Drug Discovery: Accelerating Research and Development	2:00 – 4:00 PM	Topic: Revolutionizing Drug Development using AI/ML Prof. Latha Narayanan Dean, School of Engg. and Applied Sciences, Bennett University  Topic: How Alphafold is revolutionizing structural biology Dr. Lipi Thukral Principal Scientist, CSIR-Institute of Genomics and Integrative Biology, New Delhi

	AI assisted Scientific Writing and Publishing	4:00-5:00 PM	Topic: AI tools in scientific writing and publishing Dr K. S. Sowmiya Rani Editor, Editage Cactus communication, Speaker   Academic Writing Coach Owner/Founder Sowmis_AWW
<b>DAY 4</b> (14-03-2024)	AI and Clinical Trials: Enhancing Efficiency and Accuracy  Ethical Considerations in AI Research and Implementation	2:30 – 3:30 PM 3:30-4:30 PM	Topic: Clinical Text Mining Dr. Aditi Sharan Associate Professor, School of Computer & Systems Sciences, JNU, New Delhi Topic: Ethical issues and challenges for data mining in Clinical/Biomedical Domain Dr. Aditi Sharan Associate Professor, School of Computer & Systems Sciences, JNU, New Delhi
<b>DAY 5</b> (15-03-2024)	Demonstration/Hands on Session (Chat GPT, Bing, Bard for academic writing, literature review, data wrangling, scientific programming.)	2:30 - 4:30 PM	Topic: GPT Models: An Introductory Guide for Researchers Dr. Raghavendran Lakshminarayanan Bioinformatics Subject Matter Expert, Koita Centre for Digital Health, IIT Bombay
	Valedictory Session		4:30-5:00 PM