

# Hands- on Workshop on "Real Time PCR -Gene Expression Analysis"

Workshop Date: Proposed Date 28<sup>th</sup> and 29<sup>th</sup> December2021 Venue: BIOTECH PARK, Lucknow.

## **About the Workshop:**

The workshop designated to give participants a combination of lectures and hands on laboratory experience in quantitative Real Time - Polymerase chain reaction and analysis. The hands on exposure of RT-PCR will add clear concept in mind about working of the instruments and steps involved in RNA isolation and quantification, cDNA synthesis, setting of RT-PCR and analysis of results. Hands on experimental exposure will help the delegates to understand and apply the techniques in their project/Thesis work.

## How to Register?

Send the duly filled registration form (attached) by Email: <a href="mailto:services@biotechpark.org.in">services@biotechpark.org.in</a>. Selected participants will be intimated through mail, only selected participants will pay the workshop registration fee by online mode (g-pay, paytm, upi) (Bank details given) and payment details may be sent along with registration form on or before 27th Dec, 2021.

## **Maximum Number of Seats: 3**0 Participants

- 1) Participants should bring their note book and pen
- 2) Lunch and refreshment will be provided
- 3)Participants should wear lab coat and ID CARD

## Resource Persons: Chief Guest- Dr. A.K. Singh, CEO Biotech Park

- Dr.Samir V Savant, Chief Scientist, Molecular and Genetics Biology NBRI, CSIR (Speaker & Guest of Honour)
- 2. Dr. Jaya Nigam, (RA) KGMU
- 3. Dr. Anuj Pandey, (SRF) IITR Lucknow
- 4. Dr. Kasif Khan, Consultant Scientist, Biotech Park
- 5. Dr. Umashankar, Former Consultant Scientist, Biotech Park, (Coordinator)

### **Important Dates:**

Registration (Starts): 7<sup>th</sup> December, 2021. Last date of Registration: 27<sup>th</sup>

December, 2021

Registration Fee: Rs. 1500/-

**Fee Payment Details:** 

Indian Overseas Bank, CEO Biotech Park Lucknow

Account No. 179202000000068

IFSC Code: IOBA0001792

Kursi Road Branch1792, Jankipuram, Lucknow

Contact: Dr. Kashif Khan, ph: 0522-4012091/2365050, 09918877444

Email: <a href="mailto:nextgen.kashif@gmail.com">nextgen.kashif@gmail.com</a> /services@biotechpark.org.in

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# 28<sup>th</sup> December 2021 Workshop - Day 1

Lectures		
Inauguration	10:00 a.m – 10:30 a.m.	
Introduction, Basics and Principles & Applications – "RT-PCR and its application"  Dr. Samir Sawant, Chief Scientist, Molecular and Genetics Biology, NBRI, Lucknow	10:30 a.m – 11:15 a.m	
Methods, selection guidelines, Precautions and Quantification  "RNA Isolation and Quantification"	11:20 a.m – 11:45 a.m	
Dr. Jaya Nigam, KGMU, Lucknow  Tea Break	11:50 a.m – 12:15 p.m	
Principles, cDNA master mix, preparation, "cDNA synthesis" (Wet Lab)- Dr. Anuj Pandey, IITR, Lucknow Dr. Jaya Nigam, KGMU, Lucknow	12:15 p.m.– 1:00 p.m.	
Lunch	1:00p.m -2:00 p.m	
Primer design and quality check- "Primer Designing"  Dr. Ankit Verma - Israel	2:00p.m -2:30 p.m	
Question Session	2:40p.m -3:00 p.m	

# 29<sup>th</sup> December 2021 Workshop - Day 2

Lecture	Timing
Principles, detection chemistry and selection guidelines –  "RT-PCR Preparation of reaction mixture"  Dr. Jaya Nigam, KGMU, Lucknow	10:00 a.m. – 10:30 a.m.
Lab demonstration –  "RT PCR Preparation of reaction mixture and PCR Run".  Dr. Anuj Pandey, IITR, Lucknow	10:30 a.m. – 12:30 p.m.
Question Session	12:30 p.m. – 12:55 p.m.
Lunch	1:00-2:00 p.m.
Calculation basics – methods, data interpretations –  "PCR Result Analysis"  Dr. Anuj Pandey, IITR, Lucknow	2:10 p.m2:30 p.m.
Certificate distribution & Vote of thanks Dr. Kasif Khan Consultant - Biotech Park	2:40 p.m3:00 p.m.

# Hands-on Workshop on Real Time PCR-Gene Expression Analysis

Date: 28th & 29th December, 2021

## **Registration Form**

Name of the student:	
UG & PG (B.Tech, B.Sc, M.Tech, M.Sc)	
Institute/Department:	
Mobile No:	
Email:	
Date:	
Place:	

Signature of the applicant