Shiv Chhatrapati Shikshan Sanstha's

Rajarshi Shahu Mahavidyalaya Latur, (Autonomous)

Department of Biotechnology

A) Summary

1) Title of Programme:		Hands on Training Programme on RT-PCR		
2) Name of Organizing Department/Unit:		Vilasrao Deshmukh Govt. Medical College in collaboration with Rotary Club of Latur Midtown & Dept. Of Microbiology		
3) Name of the Coordinator(s)/ Convener(s)/ Organizer(s) of the Programme:		Principal: Dr. M. H. Gavhane Vice Principal: Prof. S. N. Shinde Head: Dr S. S. Kulkarni		
4) Date(s) of the Programme:		26/03/2024		
5) Venue:		Vilasrao Deshmukh Govt. Medical College, Latur		
6) Target Group:		UG and PG female students (B. Sc. III & M. Sc. II year)		
7) Number of Participants:		Male	Female	Total
A separate list with signatures be maintained in the department/Unit)	Teaching	00	01	01
	Non-Teaching	00	00	00
	Students	00	11	11
8) Name(s) and details of Resource Person(s), if any:		Dr. Namdev Suryawanshi (Dean) & Dr. Anuradha Patil (Department of Microbiology)		
9) Total Expenditure for the Programme:		NIL		
10) Source of Funding:		Not Applicable		

B) Report

I. Title

Hands on Training Programme on RT-PCR

II. Introduction

Vilasrao Deshmukh Government Medical College in Latur is a prominent medical institution in Maharashtra, India. Named after the late Vilasrao Deshmukh, a respected political figure, the college is known for its quality medical education and healthcare services. It plays a vital role in providing medical care to the people of Latur and surrounding areas. The college offers various undergraduate and postgraduate medical courses and is equipped with modern facilities to train future healthcare professionals. The aim of Vilasrao Deshmukh Government Medical College in Latur is to provide high-quality medical education and healthcare services to the community. The college aims to produce competent and compassionate healthcare professionals who can serve the medical needs of the region effectively.

III. Objectives of the programme:

- To provide participants with practical skills and hands-on experience in performing RT-PCR techniques accurately and efficiently.
- To ensure that participants understand the principles of RT-PCR testing, follow standard operating procedures (SOPs) and maintain quality control measures to produce reliable test results.
- To promote lifelong learning among participants by providing them with opportunities to update their knowledge and skills in molecular diagnostics
- To enhance the capacity of healthcare professionals, researchers, and laboratory technicians in conducting RT-PCR tests for various infectious diseases, including COVID-19.

IV. Detail of Participants:

Total 12 participants (00 Male and 12 Female) participated in the training programme.

V. Brief summary of event/session:

The program's inception and execution were overseen by Dr. Namdev Suryawanshi, who provided a concise overview of the event and outlined the practical session schedule. Dr. Patil then commenced the theoretical session, elucidating the complex process of RT-PCR using an animated video. Her presentation's goal was to make sure attendees had a thorough understanding of the core ideas guiding this molecular diagnostic method. Participants gained insight into the amplification of nucleic acids and the detection of specific target sequences. Following the theoretical overview, Dr. Patil transitioned to the practical aspect of the training, guiding attendees through the step-by-step procedure for conducting RT-PCR tests using human samples. Participants received hands-on experience in sample preparation, RNA extraction, reverse transcription, PCR amplification, and result interpretation. Moreover, Dr. Patil provided detailed instructions on the preparation of working solutions and the proper utilization of RT- PCR kits, emphasizing the significance of adhering to standard protocols to ensure accurate and reliable test results. In the final segment of the event, Dr. Patil elucidated the method for

analyzing the graphical representation of the readings obtained from the RT-PCR analysis of provided samples. Participants learned how to interpret the curves generated during amplification, enabling them to identify the presence or absence of the target nucleic acid sequences in the samples.

VI. Conclusion with feedback on the Programme:

The Hands-on Training Programme on RT-PCR at Vilasrao Deshmukh Government Medical College, Latur was highly praised by participants for its effectiveness in imparting practical skills and knowledge in molecular diagnostics. Led by Dr. Anuradha Patil, the programme offered clear explanations, step-by-step demonstrations, and valuable insights into sample preparation, solution preparation, and result analysis. Attendees appreciated the comprehensive learning experience, expressing gratitude for the opportunity to enhance their abilities in RT-PCR testing. Overall, the programme received positive feedback for its organization, content, and delivery, contributing significantly to the professional development of participants.

VII. Appendix: List of participants

Date: 27.03.2024

HoD

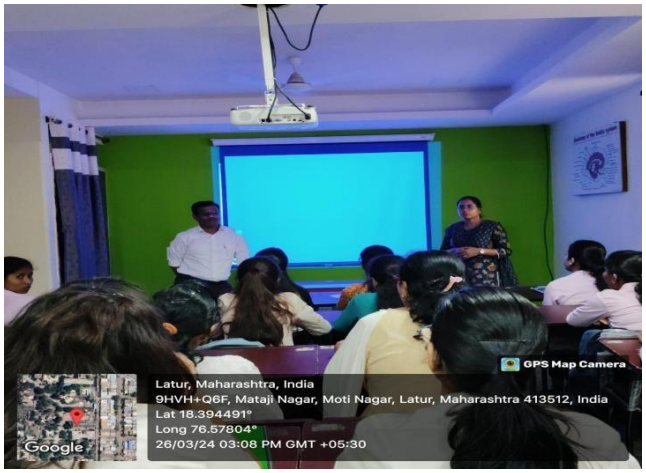
Head
Department of Biotechnology
Rajarshi Shahu Mahavidyalaya
(Autonomous) Latur-413 531

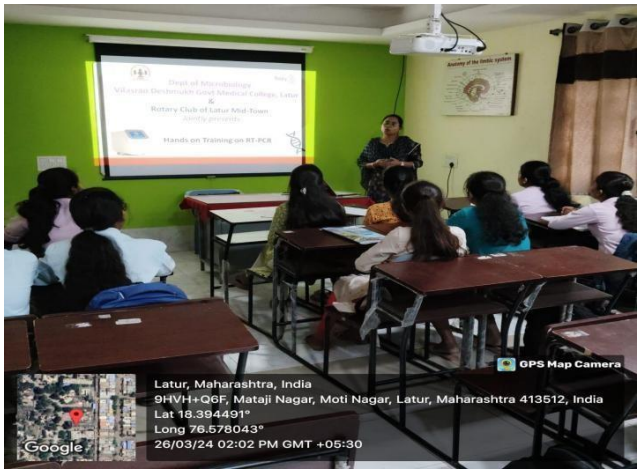
Rajarshi Shahu Mahavidyalaya Latur (Autonomous)

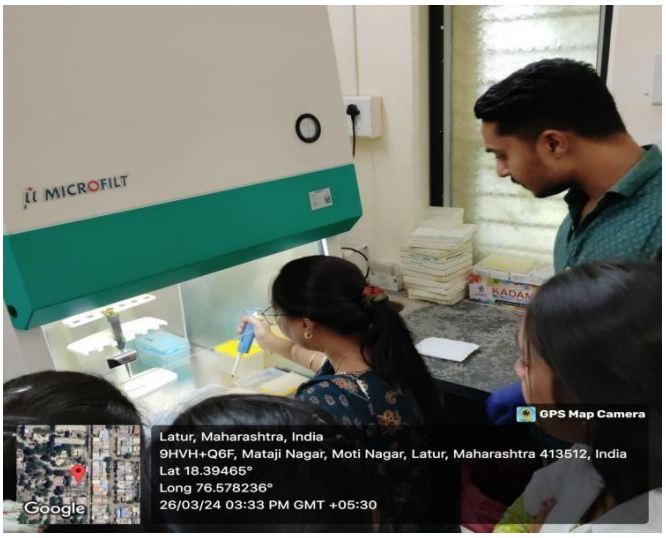
Principal

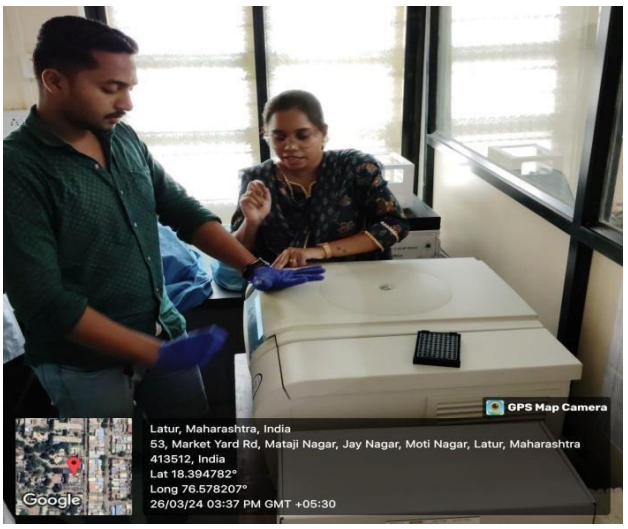
PRINCIPAL
Rajarshi Shahu Mahavidyalaya, Latur
(Autonomous)

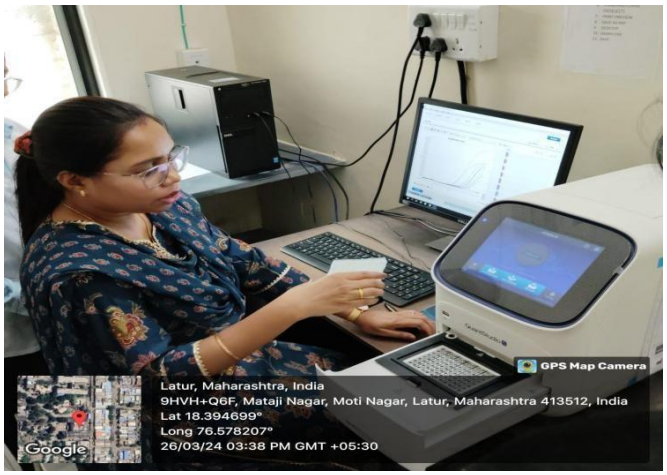
C) Geotagged Photographs/Screenshots:











Dr. Anuradha Patil conducting "Hands on Training Programme on RT-PCR" for the students of Dept. Of Biotechnology, Rajarshi Shahu Mahavidyalaya, Latur (Autonomous)

D) Brochure of the program:

Rajarshi Shahu Mahavidyalaya, Latur (Autonomous)
Department of Biotechnology

Vilasrao Deshmukh Government Medical College
In collaboration with
Rotary Club of Latur Midtown & Dept. of Microbiology
Organizes
"Hands On Training Programme on RT-PCR"

Attendance Sheet

Sr. No.	Name of the Participant	Designation	Signature
1	Ms. Karuna S. Komatwar	Faculty	
2	Tanaya Naikwadi	Student (B.Sc. SY)	
3	Ankita Ravikar	Student (B.Sc. SY)	
4	Akanksha Patil	Student (B.Sc. SY)	
5	Nisha Koushik	Student (B.Sc. SY)	
6	Vaishnavi Gahirwar	Student (B.Sc. SY)	
7	Sancheti Kalyani	Student (B.Sc. SY)	
8	Sanjivani Kawthe	Student (M.Sc. SY)	
9	Sanghmitra Mahalinge	Student (M.Sc. SY)	
10	Yogita Niture	Student (M.Sc. SY)	
11	Swati Gaikwad	Student (M.Sc. SY)	
12	Pranita Kamble	Student (M.Sc. SY)	

Date: 27.03.2024

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