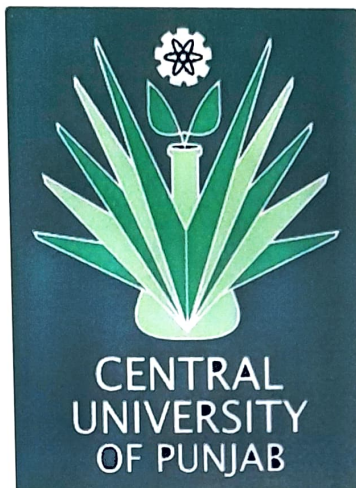


***Screening of GABA-producing lactic acid bacteria from
some naturally fermented milk (NFM) products of
Himachal Pradesh***

A Dissertation Submitted

To

Central University of Punjab



**For the Partial Fulfilment of the Requirement for the Degree of
Master of Sciences in Microbiology**

Submitted

by

Isingoma Mugisha Christopher

Reg. No. 22mslms01

**Supervisor: Dr. H. Nakibapher Jones Shangpliang
(Assistant Professor)**

Approved

सोमेश्वर बरनवाल

24/6/24

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**Department of Microbiology
School of Basic Sciences
Central University of Punjab
Ghudda, Bathinda 151401, India
JUNE 2024**

**GREEN SYNTHESIS OF GENISTEIN LOADED
CHITOSAN NANOPARTICLES AND ITS
ANTIMICROBIAL ACTIVITY AGAINST
FOODBORNE BACTERIA.**

**Dissertation submitted for
The partial fulfilment**

**Master of Sciences
in**

MICROBIOLOGY

by

Niyuhire Lionel

Regd.No.22mslms02

Approved

Under the Supervision of

प्रमोद कुमार कुशावाहा Dr. Pramod Kumar Kushawaha

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DEPARTMENT OF MICROBIOLOGY

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CENTRAL UNIVERSITY OF PUNJAB, BATHINDA

JUNE-2024

**Laboratory Diagnosis of Clinically Suspected Cases
of Measles and Rubella by Detection of IgM
Antibodies using ELISA Technique in Rajasthan**

Dissertation Submitted for
the Partial Fulfilment
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by

PREETI JORWAL

Regd. No. 22mslms03

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Associate Professor



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**DEPARTMENT OF MICROBIOLOGY
SCHOOL OF BASIC SCIENCE
CENTRAL UNIVERSITY OF PUNJAB
BATHINDA
JUNE-2024**

Investigating the Differential gene expression in *Streptococcus pneumoniae* biofilms

Dissertation submitted to the School of Basic Sciences, Department of
Microbiology, Central University of Punjab, Bathinda, India for The partial
fulfilment of the requirement for the degree of Master of Sciences in
Microbiology

Submitted By

HARSH VARDHAN

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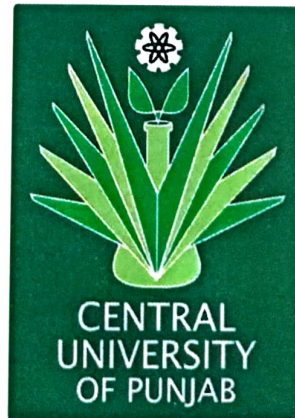
Under the Supervision of

Dr. Mukesh Kumar Yadav

Approved

सोमेश बरनवाल

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Associate Professor

Department of Microbiology, School of Basic Sciences, Central University of
Punjab, Bathinda

June, 2024

Isolation and characterizaton of *Enterococcus* phage
from poultry samples in India.

Dissertation Submitted for the Partial Fulfilment

for the Award of

Master of Science

in

Microbiology

by

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DEPARTMENT OF MICROBIOLOGY

SCHOOL OF BASIC SCIENCES CENTRAL

UNIVERSITY OF PUNJAB, BATHINDA

JUNE - 2024

**A comparative analysis of soil bacteria in Punjab,
Himachal Pradesh, and Andhra Pradesh soil.**

Summary of dissertation

Submitted for the

Partial fulfillment for the award of

Master of Science

in

Microbiology

by

Mehak Sundriyal

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Under the supervision of

Dr. Mukesh Kumar Yadav



DEPARTMENT OF MICROBIOLOGY SCHOOL OF BASIC SCIENCES

CENTRAL UNIVERSITY OF PUNJAB, BATHINDA

JUNE 2024

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पंजाब, भारत / Punjab, India-151401

**EFFECT OF URBAN PARTICLE ON IN-VITRO
BIOFILM FORMATION OF *STAPHYLOCOCCUS
AUREUS* BACTERIA**

**Dissertation submitted for
the Partial Fulfilment
For the award of
Master of Science
in
Microbiology
by
Sejal Dua**

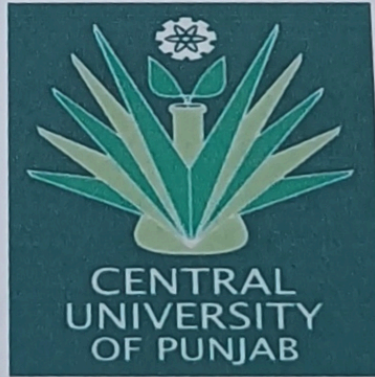
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**Under the supervision of
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DEPARTMENT OF MICROBIOLOGY

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CENTRAL UNIVERSITY OF PUNJAB, BATHINDA

JUNE – 2024

**Resistome, virulome, anti-defense mechanisms, and prophages in
Helicobacter pylori strains in Asia, Africa & Oceania.**

Project thesis submitted for the award of

Master of Science

in

Microbiology

By

Navoneel Giri

under the Supervision of

Dr. Somesh Baranwal



अनुमोदित

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Department for Microbiology

School of Basic Sciences

Central University of Punjab, Bathinda

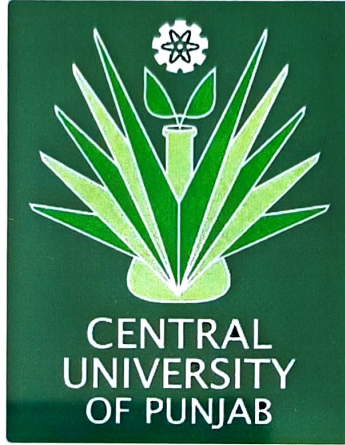
June, 2024

Screening of potential probiotic yeasts from some naturally fermented milk (NFM) products of Himachal Pradesh, India.

A Dissertation Submitted

To

Central University of Punjab



**For the Partial Fulfilment of the Requirement for the Degree of
Master of Sciences in Microbiology**

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**Department of Microbiology
School of Basic Sciences
Central University of Punjab
Ghudda, Bathinda 151401, India
JUNE 2024**

**Antimicrobial and Antibiofilm effect of carvacrol on
*Acinetobacter baumannii***

Dissertation submitted to the Central University of
Punjab for the partial fulfilment

For the award of
Master of Science

In
Microbiology

Submitted By

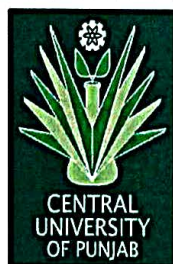
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Department of Microbiology

School of Basic Sciences

Central University of Punjab, Bathinda

VPO-Ghudda-151401

June, 2024

Evaluating Synergistic Antimicrobials of Tailored Synbiotics: *L. rhamnosus* GR-1, *L. reuteri* RC-14, Raffinose & Pectin vs. Gut Dysbiosis Pathogens

Dissertation submitted for the Partial Fulfilment

For the award of

Master of Science

In

Microbiology

BY

CHERISH RANJAN MISTRY

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DR. PRAMOD KUMAR KUSHAWAHA



Approved

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पंजाब, भारत / Punjab, India-151401

DEPARTMENT OF MICROBIOLOGY

SCHOOL OF BASIC SCIENCES

CENTRAL UNIVERSITY OF PUNJAB, BATHINDA,

JUNE-2024

**Isolation and Characterization of Bacteriophages
from water with lytic activity against *Escherichia
coli.***

Dissertation submitted to the Central University of Punjab

For the award of

Master of Science

In

Microbiology

By

Amjuri Sinduja

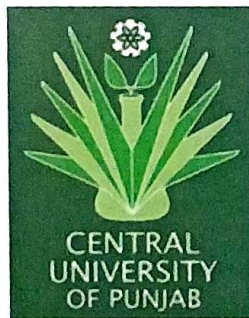
Supervisor

Dr Amit Singh

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सोमेश बरनवाल
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पंजाब, भारत / Punjab, India-151401



Department of Microbiology

School of Basic Sciences

Central University of Punjab, Bathinda

June, 2024

Isolation and Characterisation of *Priestia megaterium* from Soil Samples of Punjab

Dissertation Submitted to the
School of Basics Science, Department of Microbiology,
Central University of Punjab, Bathinda, India
for
The Partial Fulfilment of the Requirement for the Degree of
Master of Sciences in Microbiology

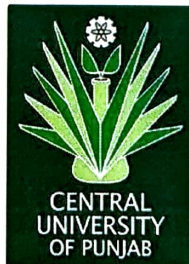
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पंजाब, भारत / Punjab, India-151401

24/6/24

**ISOLATION AND CHARACTERIZATION OF
LYTIC BACTERIOPHAGES INFECTING
NON- TYPHOIDAL SALMONELLA FROM
POULTRY SAMPLES**

Dissertation Submitted for

the Partial Fulfilment

for the Award of

Master of Science

in

Microbiology

by

Abhishek Sharma and Udita sarkar

Regd. No. 22mslms16 and 22mslms29

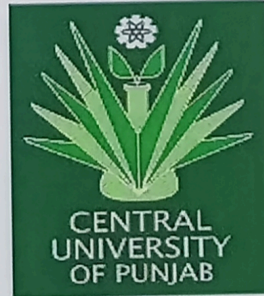
Under the Supervision of

Dr. Somesh Baranwal

Approved

*सोमेश बरनवाल
26/1/24*

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**DEPARTMENT OF MICROBIOLOGY
SCHOOL OF BASIC SCIENCES
CENTRAL UNIVERSITY OF PUNJAB, BATHINDA
JUNE - 2024**

**Isolation and Characterization of Bacteria from Wastewater
Showing Resistance to Silver Nanoparticles Synthesized from *Calotropis
gigantea***

Dissertation submitted for the Partial Fulfillment

For the award of

Master of Science

In

Microbiology

By

ASHOK CHOUDHARY

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Under the Supervision of

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Department of Microbiology

School of Basic Science

Central University of Punjab, Bathinda

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27.06.2024

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पंजाब, भारत / Punjab, India-151401

ISOLATION, IDENTIFICATION, & CHARACTERIZATION OF MICROPLASTIC-DEGRADING BACTERIA FROM LANDFILL SITE

Dissertation Submitted to the Central University of Punjab

For the award of

Master of Science

In

Microbiology

BY

Kajal Singh (22mslms20)

Under the Supervision of

Prof. (Dr.) Monisha Dhiman



DEPARTMENT OF MICROBIOLOGY

SCHOOL OF BASIC SCIENCES

CENTRAL UNIVERSITY OF PUNJAB, BATHINDA

Approved

June, 2024

सोमेश बरनवाल

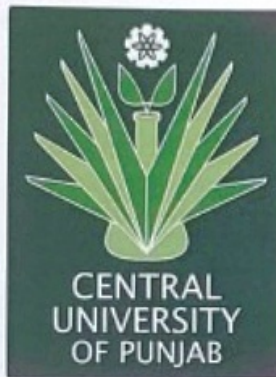
डा० सोमेश बरनवाल / Dr. Somesh Baranwal
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पंजाब, भारत / Punjab, India-151401

**Isolation and Characterisation of Lytic Bacteriophages
Infecting *Shigella* Strains from Poultry Faecal Samples**

Dissertation Submitted

To

Central University of Punjab



**For the Partial Fulfilment of the Requirement for the Degree of
Master of Sciences in Microbiology**

Submitted

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**Supervisor: Dr. Somesh Baranwal
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JUNE 2024**

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पंजाब, भारत / Punjab, India-151401**

**DEVELOPMENT AND *IN-VITRO* ASSESSMENT OF
A SYNBIOTIC FORMULATION (*L. reuteri* RC-14, *L.
rhamnosus* GR-1, TREHALOSE & RAFFINOSE)
FOR GUT DYSBIOSIS MANAGEMENT**

Dissertation submitted for the Partial Fulfilment

For the award of

Master of Science

In

Microbiology

BY

ATHULYA K

Regd.NO:22mslms23

Under the supervision of

Approved

DR. PRAMOD KUMAR KUSHAWAHA

Somesh Baranwal

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पंजाब, भारत / Punjab, India-151401



**DEPARTMENT OF MICROBIOLOGY
SCHOOL OF BASIC SCIENCES
CENTRAL UNIVERSITY OF PUNJAB, BATHINDA,**

JUNE-2024

**Role of Neutrophil Activating Protein (NAP)
of *Helicobacter pylori* in inducing apoptosis in A549
cancer cell line**

Dissertation submitted for

The Partial Fulfillment

For the award of

Master of Science

In

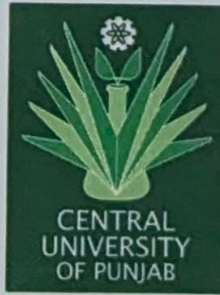
Microbiology

By

Urvi Kotwal (22mslsm24)

Under the Supervision of

Prof. Monisha Dhiman



Department of Microbiology

School of Basic Sciences

Approved Central University of Punjab, Bathinda

सोमेश बरनवाल
28/6/24

June, 2024

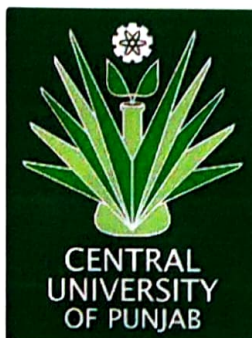
डा० सोमेश बरनवाल / Dr. Somesh Baranwal
अध्यक्ष व सह प्रोफेसर / Head & Associate Professor
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Central University of Punjab
ग्राम व डाकघर घुडा (बठिंडा) / VPO Ghudda (Bathinda)
पंजाब, भारत / Punjab, India-151401

**Protein expression and purification of Mycobacterial
wag31 recombinant proteins in *E. coli***

**Dissertation Submitted to the
School of Basics Science, Department of Microbiology,
Central University of Punjab, Bathinda, India**

For

**The Partial Fulfilment of the Requirement for the Degree of
Master of Sciences in Microbiology**



Submitted by

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June, 2024

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Comparative in-vitro effectiveness of various commercially available brands of meropenem against *A. baumannii*, *E. coli*, and *S. aureus*

Dissertation Submitted to the
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for

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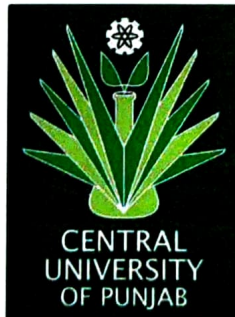
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Department Of Microbiology,
School Of Basic Sciences
Central University Of Punjab, Bathinda

JUNE-2024

**'Isolation and Characterization of Heavy Metal
Resistant Bacteria from Industrial Effluent'**

Project submitted to Central University of Punjab

For the award of

Master of Science

In

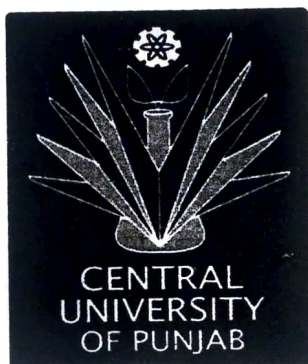
Microbiology

By

Shireen Debbarma (22mslms27)

Under the supervision of:

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June 2024

Synthesis, Characterization, and Evaluation of Antimicrobial Activity of Genistein Capped Silver Nanoparticles against Nosocomial Pathogens

Dissertation submitted to the Central University of Punjab

For the award of

Master of Science

In

Microbiology

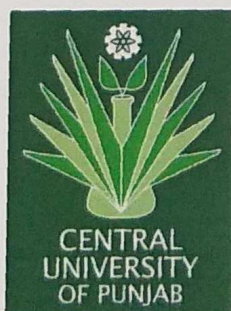
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Rashid Khalid Shaikh

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Department for Microbiology

School of Basic Sciences

Central University of Punjab, Bathinda

June 2024

**Efficacy of Silver Nanoparticle Synthesized from
Calotropis gigantea Leaves on Human cell line.**

Dissertation Submitted for

The Partial Fulfillment

For the Award of

Master of Science

In

Microbiology

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Registration No: 22mslsms35

Under the Supervision of

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DEPARTMENT OF MICROBIOLOGY

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CENTRAL UNIVERSITY OF PUNJAB, BATHINDA

June, 2024

***In-vitro* evaluation of the antimicrobial and antibiofilm effect of eucalyptol – a Phytocompound against *Staphylococcus aureus*.**

Dissertation submitted for the Partial Fulfillment

For the award of
Master of Science

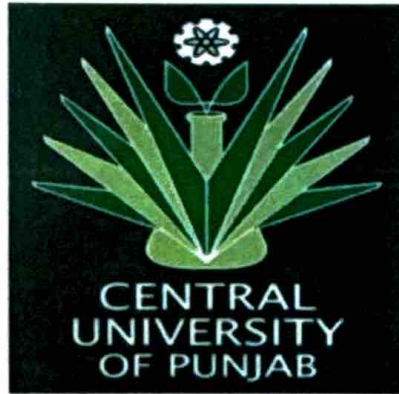
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Microbiology

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MANVEER KAUR

Under the Supervision of

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Department of Microbiology

School of Basic Science

Central University of Punjab, Bathinda

June, 2024

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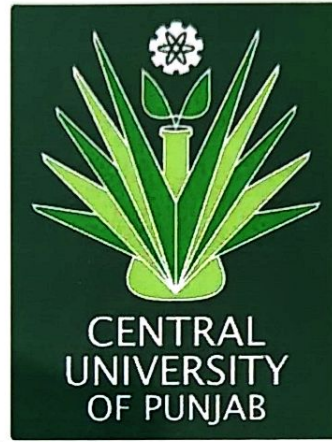
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पंजाब, भारत / Punjab, India-151401

Screening and Identification of potential probiotic lactic acid bacterial strains from some naturally fermented milk (NFM) products of Himachal Pradesh

A Dissertation Submitted

**To
Central University of Punjab**



**For the Partial Fulfilment of the Requirement for the Degree of
Master of Sciences in Microbiology**

**Submitted
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29/6/24

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पंजाब, भारत / Punjab, India-151401

**Investigating the Potential of a Multifaceted
Synbiotic Approach with *L. rhamnosus* GR-1, *L.
reuteri* RC-14, Trehalose, and Pectin to Target Gut
Dysbiosis.**

Dissertation submitted for the Partial Fulfilment

For the award of

Master of Science

In

Microbiology

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DEPARTMENT OF MICROBIOLOGY

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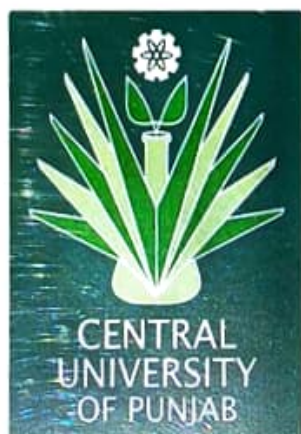
JUNE-2024

***GC-MS Based metabolomics of kallu, a traditional
fermented beverage of Kerala, India***

A Dissertation Submitted

To

Central University of Punjab



**For the Partial Fulfilment of the Requirement for the Degree of
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पंजाब, भारत / Punjab, India-151401

**Antimicrobial and Antibiofilm effect of
carvacrol on *Mycobacterium smegmatis*
mc²155**

**Dissertation Submitted to the
School of Basic Sciences, Department of Microbiology,
Central University of Punjab, Bathinda, India
for
The Partial Fulfilment of the Requirement for the Degree of
Master of Sciences in Microbiology**

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28/6/24*

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**Assistant Professor
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June, 2024

Comparative genome analysis of various Enterococcus faecalis strains- An in-silico analysis

A Dissertation Submitted

To

Central University of Punjab



For the Partial Fulfilment of the Requirement for the Degree of
Master of Sciences in Microbiology

Submitted

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JUNE 2024

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पंजाब, भारत / Punjab, India-151401

**DESIGNING OF A NOVEL MULTI-EPITOPE-BASED
VACCINE USING DENV NS5 PROTEIN TARGETING
ALL DENGUE SEROTYPES FROM INDIA: AN
IMMUNOINFORMATIC APPROACH**

Dissertation Submitted

for the Partial Fulfilment

for the Award of

Master of Science

In

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Ruchi Jaiswal

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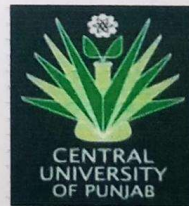
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**DEPARTMENT OF MICROBIOLOGY
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JUNE-2024**