

**SUMO and SUMOylation in Plants: Ignored Arsenal to
Combat Abiotic Stress**

Project report submitted to the Central University of Punjab

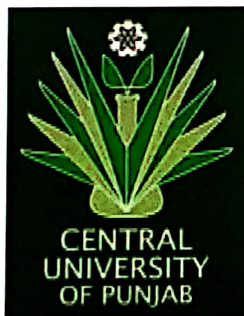
**For the award of
Master of Science in
Biochemistry**

By

**Shivam Chaudhary
(20mslsbc14)**

Supervisor

Prof. Ramakrishna Wusirika



Department for Biochemistry

School of Basic Sciences

Central University of Punjab

June, 2022



**Mosquito Repellent Properties of Plants and their Effects
on Mosquitos and Humans**

Project report submitted to Central University of Punjab

**For the award of
Master of Science**

In

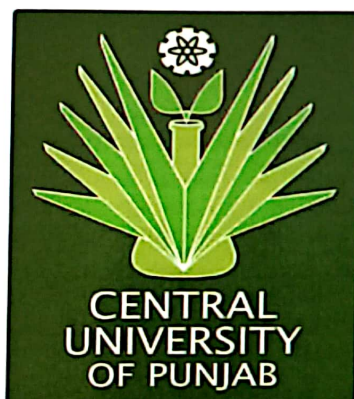
Biochemistry

By

Priyanka

Supervisor

Prof. Ramakrishna Wusirika



Department of Biochemistry

School of Basic Sciences

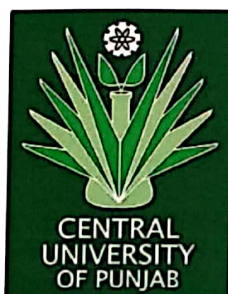
Central University of Punjab

June 2022

Role of Endophytes in Abiotic Stress Tolerance

Project Report submitted to the Department of Biochemistry, Central University of Punjab

For the award of M.Sc. Biochemistry



Submitted by
Himanshi (20mslsbc27)

Under the Supervision of
Prof. Ramakrishna Wusirika

Department of Biochemistry
School of Basic Sciences
Central University of Punjab

**Potential of Natural Compounds from Medicinal Plants for
Treatment of Prioritized Disease Identified by
World Health Organization**

A project report submitted to the Central University of Punjab

For the award of

Master of Science

In

Department of Biochemistry

By

Ghanshyam Yadav

Supervisor

Prof. Ramakrishna Wusirika



Department of Biochemistry

School of Basic Sciences

Central University of Punjab

June 2022

i

Emergence of eco-friendly nano-biofertilizers for next generation agriculture

Project Report submitted to the Central University of Punjab

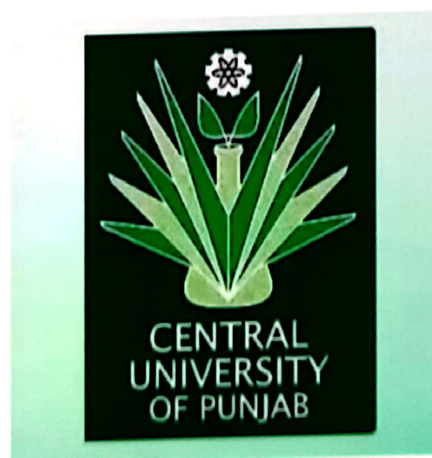
**For the award of
Master of Science**

in

Department of Biochemistry

**By
Chitranshi Patel**

**Supervisor
Prof. Ramakrishna Wusirika**

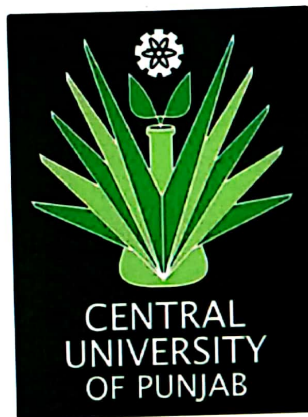


**Department for Biochemistry
School of Basic Sciences
Central University of Punjab
July 2022**

MUTATION-INDUCED DRUG RESISTANCE MECHANISM IN HIV-1 PROTEASE

Project Report submitted to The Department of Biochemistry,
Central University of Punjab

For the Award of M.Sc. Biochemistry



Submitted by
Nilottam Rana (20mslsbc18)

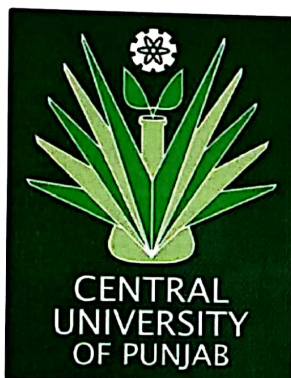
Under the Supervision of
Dr. Shashank Kumar

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

IDENTIFICATION OF DIETARY PHYTOCHEMICAL-MODULATED MICRO-RNAS WITH THE POTENTIAL TO TARGET THE STEAROYL-COA DESATURASE-1

Project report submitted to The Department of Biochemistry
Central University of Punjab

For the Award of
Degree in Master of Science
In
Biochemistry



Submitted
by
Simun Rout (20mslsbc13)

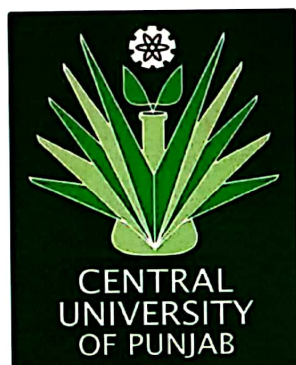
Under the Supervision of
Dr. Shashank Kumar

Department of Biochemistry
School of Basic Sciences
Central University of Punjab, Bathinda
June, 2022

IDENTIFICATION OF DIFFERENTIALLY EXPRESSED MIRNAS AND THEIR TARGET GENES IN TAMOXIFEN AND FULVESTRANT DUAL RESISTANCE BREAST CANCER CELL LINE

Project report submitted to The Department of Biochemistry
Central University of Punjab

For the Award of
Degree in Master of Science
In
Biochemistry



Submitted by
Shivangi Singh (20mslsbc10)

Under the Supervision of
Dr. Shashank Kumar

Department of Biochemistry
School of Basic Sciences
Central University of Punjab, Bathinda
June, 2022

Role of thymidylate synthase gene polymorphism in cancer: Recent developments

Project report submitted to Central University of Punjab

For the Award of
**The Degree in Master of science
in Biochemistry**

Submitted *by*
Sailendra Kumar Mohanty (20mslsbc05)

Under the Supervision of
Dr. Shashank Kumar

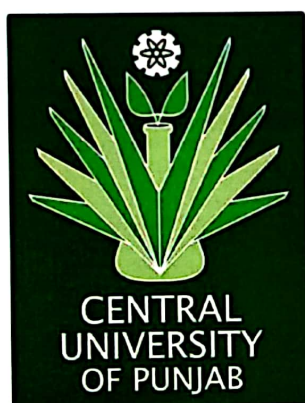


Department of Biochemistry
School of Basic Sciences
Central University of Punjab, Bathinda
June, 2022

IDENTIFICATION OF MICRO-RNA AND RELATED HUB GENES ASSOCIATED WITH BREAST CANCER STEMNESS

Project Report submitted to The Department of Biochemistry
Central University of Punjab

For the Award of
Degree in Master of Science in Biochemistry



Submitted by
Kalamati Sravani (20mslsbc09)

Under the Supervision of
Dr. Shashank Kumar

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

June 2022

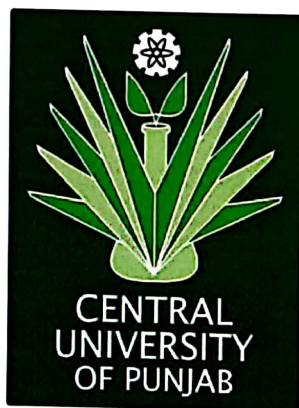
i



COMPUTER BASED IDENTIFICATION OF NOVEL NATURAL ANTI-APOPTOTIC PROTEIN INHIBITORS

Project report submitted to The Department of Biochemistry
Central University of Punjab

For the Award of
Degree in Master of Science
In
Biochemistry



Submitted
By
Sarbajit Dey (20mslsbc07)

Under the Supervision of
Dr. Shashank Kumar

Department of Biochemistry
School of Basic Sciences
Central University of Punjab, Bathinda
June 2022

**T-cell associated lncRNAs as mediators of downstream
microRNA dysregulation in Psoriasis**

Project submitted to Central University of Punjab

For the award of

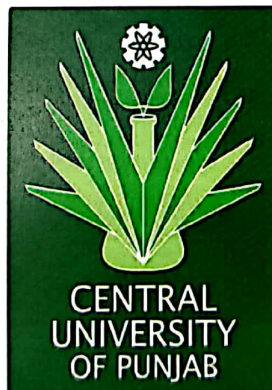
M.Sc. Life Sciences

(Specialization in Biochemistry)

By Neekita

Supervisor

Dr. Manju Jain



Department of Biochemistry

School of Basic Sciences

Central University of Punjab, Bathinda

June 2022



**Altered Thymic Cellular Crosstalk
The Way Infectious Agents Intervene**

Project submitted to Central University of Punjab

For the award of

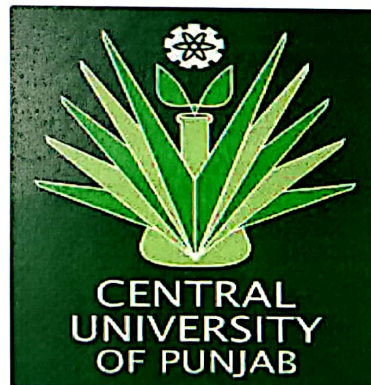
M.Sc. Life Sciences (specialization in Biochemistry)

In

Department of Biochemistry

By

Hassan Rub



Supervisor

Dr. Manju Jain

Department of Biochemistry

School of Basic Sciences

Central University of Punjab, Bathinda

June 2022



Histopathological landscape in Psoriasis

Project submitted to Central University of Punjab

For the award of

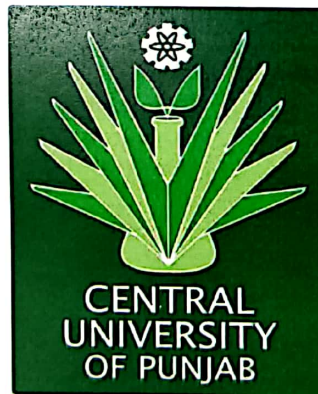
M.Sc. Life Sciences (Specialization in Biochemistry)

By

Vadithe Anji Naik

Supervisor

Dr. Manju Jain



Department of Biochemistry

School of Basic Sciences

Central University of Punjab, Bathinda

June 2022



T-Cell metabolism in Psoriasis: How much we know?

Project submitted to Central University of Punjab

For the award of

M.Sc. Life sciences (Specialization in Biochemistry)

By

HD Rajashekhar

Supervisor

Dr. Manju Jain



Department of Biochemistry

School of Basic Sciences

Central University of Punjab, Bathinda

June 2022

**ADAPTATION OF CRISPR/Cas9 FOR
Leishmania GENOME MANIPULATION**

Project submitted to Central University of Punjab

**For the Award of
Master of Science**

In

Department of Biochemistry

By

Suraj Adhikari

Supervisor

Dr. Manju Jain



**Department of Biochemistry
School of Basic Sciences
Central University of Punjab, Bathinda**

July 2022

**Plant-derived Immune-modulators for reconstitution
of T cell Immunity: What we know and what we do
not?**

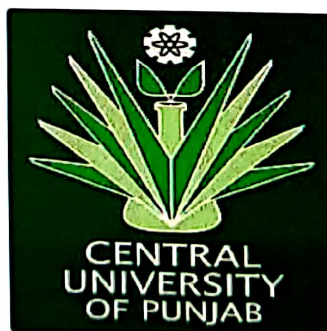
Project submitted to Central University of Punjab

For the award of
M.Sc. Life Sciences (specialization in Biochemistry)

In
Department of Biochemistry

By
Divyadyuti Ukil

Supervisor
Dr. Manju Jain



Department of Biochemistry
School of Basic Sciences
Central University of Punjab, Bathinda
June 2022

Lipid Degradation Pathways in Yeast: Exploring Triacylglycerol Lipases

*Project report submitted to the Central University of Punjab
for the award of*

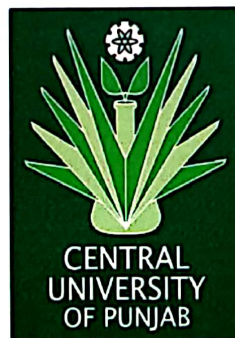
**Master of Science
in
Biochemistry**

by

**Abhijit Nayek
20mslsbc30**

Supervisor

Dr. Vinay Kumar Bari



Department of Biochemistry
School of Basic Sciences
Central University of Punjab
VPO- Ghudda, Bathinda
July, 2022



Blossom End-Rot: A calcium deficiency disorder in tomato fruit

A Project Report Submitted to Central University of Punjab

For The Award of

The Degree of Master of Sciences

In

Biochemistry

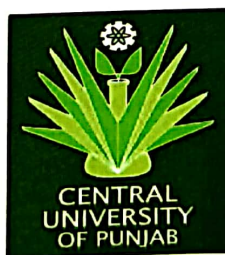
By

Khageswar Sethi

20mslsbc11

Supervisor

Dr. Vinay Kumar Bari



Department of Biochemistry
School of Basic and Applied Sciences
Central University of Punjab
VPO- Ghudda, Bathinda
June, 2022

Salt stress homeostasis in *Saccharomyces cerevisiae*

Project submitted to the Central University of Punjab

For the award of

Master in Science

In

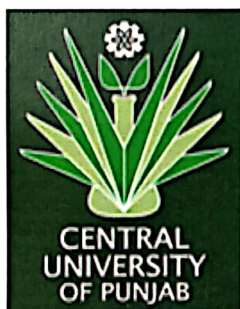
Life Science specialization in Biochemistry

By

Subham Mondal

Supervisor

Dr. Vinay Kumar Bari



Department for Biochemistry

School of Basic Sciences

Central University of Punjab, Bathinda

August, 2022

Protein-Protein Interaction techniques in

Saccharomyces cerevisiae

A Project Report Submitted to Central University of Punjab

For The Award of

The Degree of Master of Sciences

In
Biochemistry

By
Shreya Gandotra

20mslsbc36

Supervisor
Dr. Vinay Kumar Bari



Department of Biochemistry
School of Basic and Applied Sciences
Central University of Punjab
VPO- Ghudda, Bathinda

June 2022



Mechanism of anti-fungal drug Amphotericin B susceptibility

A Project Report Submitted to Central University of Punjab

For The Award of

The Degree of Master of Sciences

In

Life Sciences

(Specialization in Biochemistry)

By

Lailema Ahmady

20mslsbc41

Supervisor

Dr. Vinay Kumar Bari



Department of Biochemistry

School of Basic Sciences

Central University of Punjab

VPO- Ghudda, Bathinda

July, 2022



snoRNAs as Mediators of Cellular Stress

Project report submitted to the Central University of Punjab

For The Award of
Degree of Master of Sciences

In

Biochemistry

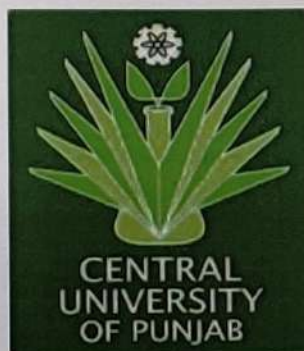
By

Nikhil Verma

(20mslsbc17)

Supervisor

Dr. Ravindresh Chhabra



Department of Biochemistry

School of Basic Sciences

Central University of Punjab, Bathinda

June 2022

डॉ. रवींद्रेश छाबड़ा / Dr. Ravindresh Chhabra
सहायक प्रोफेसर / Assistant Professor
जैवरसायन विज्ञान विभाग / Department of Biochemistry
पंजाब केन्द्रीय विश्वविद्यालय / Central University of Punjab
ग्राम व डाकघर पुरा (बिठिन्दा) / G.O. Chaudhra (Bathinda)
पंजाब, भारत / Punjab, India-151401

LOSS OF IMMUNOSURVEILLANCE IN CARCINOGENESIS AND ITS THERAPEUTIC IMPLICATIONS

Project submitted to the Central University of Punjab

For the award of

Master in Science

In

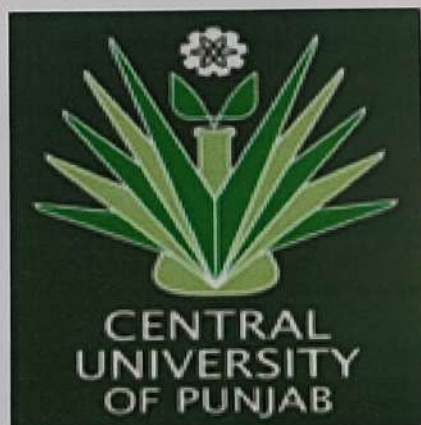
Life Science specialization in Biochemistry

By

Ipsita Kar

Supervisor

Dr. Ravindresh Chhabra



Department for Biochemistry

School of Basic and Applied Sciences

Central University of Punjab, Bathinda

June 2022

डॉ. रवींद्रेश छाबड़ा / Dr. Ravindresh Chhabra
सहायक प्रोफेसर / Assistant Professor
जैवसायन विज्ञान विभाग / Department of Biochemistry
पंजाब केन्द्रीय विश्वविद्यालय / Central University of Punjab
ग्राम व डाकघर घुड़ा (बथिन्दा) / Ghudda (Bathinda)
पंजाब, भारत / Punjab, India-151401

ROLE OF ESTROGEN AND PROGESTERONE ON CERVICAL CANCER

Project submitted to the central university of Punjab

For the award of Master in science in

Life Science specialization in Biochemistry

By

VARSHA KAUSHIK

Supervisor

DR. RAVINDRESH CHHABRA



Department for Biochemistry

School of Basic Sciences

Central University of Punjab, Bathinda

June 2022

डॉ. रवींद्रेश चवहा / Dr. Ravindresh Chhabra
सहायक प्रोफेसर / Assistant Professor
जैवरसायन विज्ञान विभाग / Department of Biochemistry
पंजाब केन्द्रीय विश्वविद्यालय / Central University of Punjab
ग्राम व डाकघर घुदा (बठिंडा) / VPO Ghudda (Bathinda)
पंजाब, भारत / Punjab, India-151401

**Role of YTH Domain Family (YTHDF) Proteins in Human
Physiology and Pathology.**

Project submitted to the Central University of Punjab

For the award of

Master in Science

In

Biochemistry

BY

Aju Kisan

Supervisor

Dr. Ravindresh Chhabra



Department of Biochemistry

School of Basic Sciences

Central University of Punjab, Bathinda

July, 2022

डॉ. रवींद्रेश चहबड़ा / Dr. Ravindresh Chhabra
सहायक प्रोफेसर / Assistant Professor
जैवरसायन विज्ञान विभाग / Department of Biochemistry
पंजाब केन्द्रीय विश्वविद्यालय / Central University of Punjab
ग्राम व डाकघर घुड़ा (बाँडेसी) / VPO Ghudda (Bathinda)
पंजाब, भारत / Punjab, India - 151401

snoRNAs: Novel regulators of blood malignancies

Project submitted to the Central University of Punjab

For The Award of

Degree of Master of Sciences

In

Biochemistry

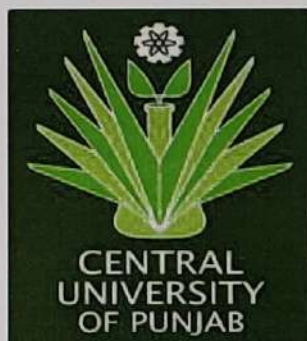
By

Mohamed Fahad C

(20mslsbc02)

Supervisor

Dr. Ravindresh Chhabra



Department of Biochemistry

School of Basic Sciences

Central University of Punjab, Bathinda

June 2022

डॉ. रवींद्रेश चहाबड़ा / Dr. Ravindresh Chhabra
सहायक प्रोफेसर / Assistant Professor
जैवरसायन विज्ञान विभाग / Department of Biochemistry
पंजाब केन्द्रीय विश्वविद्यालय / Central University of Punjab
ग्राम व डाकघर घुड़ा (बठिंडा) / VPO Chudra (Bathinda)
पंजाब, भारत / Punjab, India-151401

EMERGING ROLE OF mRNA METHYLATION IN REGULATING THE HALLMARKS OF CANCER

Project submitted to
Department of Biochemistry
Central University of Punjab

For the award of
Master in Science Biochemistry



Submitted By
Gargi

Under the Supervision of
Dr. Ravindresh Chhabra

Department for Biochemistry
School of Basic and Applied Sciences
Central University of Punjab, Bathinda
Punjab, India- 151401

डॉ. रवींद्रेश छाबड़ा / Dr. Ravindresh Chhabra
सहायक प्रोफेसर / Assistant Professor
जैवरसायन विज्ञान विभाग / Department of Biochemistry
पंजाब केन्द्रीय विश्वविद्यालय, Central University of Punjab
ग्राम ब ड़ाक़घर पुरा (बथिन्दा) / Bathinda (Bathinda)
पंजाब, भारत / Punjab, India-151401

June, 2022