# University of Kashmir DEPARTMENT OF BIOTECHNOLOGY HAZRATBAL, SRINAGAR 190006



### TO WHOM IT MAY CONCERN

This is to certify that Rafia Khazer, M.Sc. Clinical biochemistry, University of Kashmir, Srinagar, has successfully completed her project work on the topic titled "Cloning and expression of Metadherin (MTDH) in HEK-T cells" that constitutes the practical training course and dissertation work carried out in this Department for a period of 6 months w.e.f. January 2019 to June 2019.

Supervisor

Dr. Khalid Majid Fazili
Professor
Department of Biotechnology
University of Kashmir

Professor & Head

Department of Biotechnology
University of Kashmir

# MOLECULAR REPRODUCTION, DEVELOPMENT AND GENETICS





### **CERTIFICATE OF THE EXTERNAL GUIDE**

This is to certify that the dissertation entitled Knockout Of Polycomb Group Protein Embryonic Ectodermal Development In Extra Endodermal Cells submitted by Rayees Ahmad Nanwaie (Enrolment No: 17057119026) to department of clinical Biochemistry, University of Kashmir, Srinagar in partial fulfilment of the requirement for the award of the degree of Master's in Clinical Biochemistry is a record of work carried by him under my supervision (Dr Srimonta Gayen), Associate Professor, MRDG Unit, IISc, Bangalore. The contents of this dissertation, in full or in parts, have not been submitted to any other Institute or University for the award of any Degree or Diploma.

Simonta Cayen

Dr Srimonta Gayen

Assistant Professor

Molecular Reproduction, Development and Genetics

Indian Institute of Science, Bengaluru-560012

# DEPARTMENT OF BIOTECHNOLOGY

Hazratbal, Srinagar

190006



# TO WHOM IT MAY CONCERN

This is to certify that **Sadaf Jan** student of M.Sc. Clinical Biochemistry (4th semester), University of Kashmir, has successfully completed her project work entitled "Understanding the role of Vgl1 in genome stability" in this department under the guidance of Dr. Altaf Bhat ,Assistant Professor,department of biotechnology for a period of six months w.e.f Jan-Jun 2019.

Dr. Altaf Bhat

Assistant professor

Department of Biotechnology

Dr. Khalid Majid Fazili

Head of Department

Department of Biotechnology

University of Kashmir





### CERTIFICATE OF EXTERNAL GUIDE

This is to certify that the dissertation entitled "IDENTIFICATION OF NOVEL NON-HISTONE METHYLATIONS BY EUKARYOTIC HISTONE METHYLTRANSFERASES" is submitted by Mr. SHAIKH ANAITULLAH, En. No: 1705719028 to the Clinical biochemistry department, School of Biological science, Kashmir University, Srinagar in partial fulfilment of the requirements for the Degree of M.Sc. Clinical Biochemistry is a record of work carried out by him under my supervision of Dr. SHRAVANTI RAMPALLI at Institute for Stem Cell Science and Regenerative Medicine (InStem), Bangalore. The contents of this dissertation, in full or in parts, have not been submitted to any other Institute or University for the award of any Degree or Diploma.

R. shiti 14/06/2019.

Signature of the External Guide

Dr. Shravanti Rampalli,

Assistant Investigator,

Institute for Stem Cell Science and Regenerative Medicine (InStem),

Bangalore.



# DEPARTMENT OF CHEMISTRY AND BIOLOGY, INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH PUNE - 411008, INDIA.

#### CERTIFICATE

This is to certify that the dissertation entitled "RNA Recognition Mode of TRBP2 VS TRBP1" comprises of research work carried out by Miss Shaira Ismail under my supervision at the Department of chemistry and biology, Indian Institute of Science Education And Research during the period January 2019 to June 2019 towards the partial fulfillment of Masters of Science in Clinical Biochemistry (University of Kashmir). This work is original and has not been done earlier by anyone else. The results presented in this report, in whole or part has not been submitted elsewhere for any other academic degree.

J. Fender.

Dr Jeetender Chugh

Assistant professor

Department of Chemistry & Biology,

Indian Institute of Science Education & Research PUNE (411008).

# CERTIFICATE OF THE GUIDE

This is to certify that Furqana Fayaz, student of M.Sc. clinical biochemistry, University of Kashmir, has successfully completed her project work entitled "TO STUDY THE EFFECT OF CYTOCHALASIN D ON ALPHA 1 SYNTROPHIN EXPRESSION IN BREAST CANCER CELLS." in this department for a period of 6 months.

MENTOR

Firdous A. Khanday

Dept. of Biotechnology

University of Kashmir

legling men 0
HEAD

Professor Khurshid Andrabi

Dept. of Biochemistry

University of Kashmir



This is to certify that Ms Qurat ul Quadir, M. Sc. student of Department of Clinical Biochemistry, University of Kashmir, Srinagar has carried out the work on the project entitled "Expression and purification of epsilon toxin domain of *Clostridium perfringens*" under my supervision and guidance at the National Institute of Immunology, New Delhi from January, 2019 to June, 2019.

Dr. Lalit C. Garg, FNA

Senior Scientist,

Gene Regulation Laboratory,

National Institute of Immunology,

New Delhi 110067

Molecular Biophysics Unit, Indian Institute of Science, Bangalore- 560012, India



## CERTIFICATE

This is to certify that the dissertation entitled "Efficient mapping of protein-protein contacts in vitro through cysteine labelling" submitted by Mubashir Rasool Bhat, to the University of Kashmir, for the degree masters of science is based on the results of experiments and investigations carried out by her under my supervision and guidance at Indian Institute of Science, Bangalore. This is also to clarify that the above said work has not been previously submitted for an award of any degree, diploma or fellowship in any Indian or foreign university.

Ryn

Professor of Molecular Biophysics Indian Institute of Science Bangalore - 560 012

Prof. Raghavan Varadarajan

Signature of the Principal Investigator

# Molecular Biophysics Unit, Indian Institute of Science, Bangalore- 560012, India



# CERTIFICATE

This is to certify that the dissertation entitled Spectroscopic analysis of RNA polymerase using F17W ω mutant submitted by Nisa Manzoor Shah, to the University of Kashmir, for the degree masters of science is based on the results of experiments and investigations carried out by her under my supervision and guidance at Indian Institute of Science, Bangalore. This is also to clarify that the above said work has not been previously submitted for an award of any degree, diploma or fellowship in any Indian or foreign university.

Prof. Dipankar Chatterig ATOR

Moletulae Permisipalemestigator Indian Institute 560 012.

Bangalore - 560 012.



#### School of Life Sciences

# JAWAHARLAL NEHRU UNIVERSITY

**NEW DELHI 110067, INDIA** 

# CERTIFICATE OF THE GUIDE

Certified that the project work, which is being carried out by Nousheena Gul (M.Sc. Clinical Biochemistry), entitled "To Confirm the Cloning Of Wild Type Rat SNAP-23 in EGFPC2 plasmid by restriction digestion analysis" in partial fulfilment for the degree of Masters of Clinical Biochemistry Submitted to Department of clinical Biochemistry University of Kashmir was carried out under my guidance at School of life sciences, Jawaharlal Nehru University, New Delhi.

Nousheena Gul

(Candidate)

Dr Niti Puri

(Supervisor)

Assistant professor

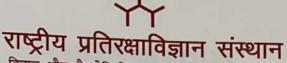
Viti Pron

Department of School of life sciences

Jawaharlal Nehru University,

New Delhi

20-06-2019



जैव प्रौद्योगिकी विभाग, विज्ञान और प्रौद्योगिकी मंत्रालय, भारत सरकार का स्वायत्त अनुसंधान संस्थान

# NATIONAL INSTITUTE OF IMMUNOLOGY

An Autonomous Research Institute of the Department of Biotechnology, Ministry of Science and Technology Government of India

#### CERTIFICATE

This dissertation entitled "Analysis of anti-Salmonella antibody response in humans" submitted by Rabiya Nabi in partial fulfilment of the degree of M.Sc. in Clinical Biochemistry, University of Kashmir, comprises work done by her in the Hybridoma Laboratory at the National Institute of Immunology, New Delhi.

Ayub Qadri

Hybridoma Laboratory

डॉ. अयूब कादरी / Dr. Ayub Qadri स्टाफ वैज्ञानिक / Staff Scientist राष्ट्रीय प्रतिरक्षाविज्ञान संस्थान NATIONAL INSTITUTE OF IMMUNOLOGY अरूगा आसफ अली मार्ग / Aruna Asaf Ali Marg नई दिल्ली—110 067 / New Delhi - 110 067

# DEPARTMENT OF ADVANCED CENTRE FOR HUMAN GENETICS, SHER-I-KASHMIR INSTITUTE OF MEDICAL SCIENCES, SOURA, SRINAGAR



# Certificate

This is to certify that the work in this dissertation entitled "Role of MTHFR Gene 1793 G/A Single Nucleotide Polymorphism in pathogenesis of Graves' disease patients in Kashmir valley" is a bonafide work of Mr. Mohsin Manzoor and has been carried out under my guidance and supervision at the Department of Advanced Centre for Human Genetics, Sher-I-Kashmir Institute of Medical Sciences, Soura, Srinagar.

Dr. Dil Afroze
Professor & Head
Department of Advanced
Centre for Human Genetics
SKIMS

Advanced Centre for Human Genetics
Sher-I-Kashmir Institute of Medical Sciences
Soura, Srinagar

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अखिल भारतीय आयुर्विज्ञान संस्थान अंसारी नगर, नई दिल्ली—110608 All India Institute of Medical Sciences Ansari Nagar, New Delhi-110608



दूरभाष / Tel. No. : (+91-11) 26594832

(UG): 26594365

(PG): 26593230

फैक्स / Fax : 26589766, 26588663

ईमेल / Email : reg@aiims.ac.in

aiims.reg@gmail.com

No.F.10-20/2019.Acad.II

Dated: 27.05.2019

# Certificate

This is to certify that

# Mr. Shouib Mohammad

has completed
Short Term Training

In

the department of

# **Biochemistry**

From

15th January, 2019 to 27th May, 2019

at this Institute

N.B.:

This Certificate will not be used on Letter Heads, Visiting Cards, Name Plates etc. by the trainees.

(DR.SANTEEV LALWANI)
REGISTRAR



### **CERTIFICATE**

This is to certify that Ms. Tabiya Qayoom Wani a bonafide student of University of Kashmir has successfully carried out her project work titled "A freeze-thaw method for solubilization of recombinant human growth hormone expressed as bacterial inclusion bodies" under the supervision of Dr. Amulya K Panda during her stay at National Institute of Immunology (NII), New Delhi from 9th Feb, 2019 to 18th June, 2019.

Dr. Amulya K. Pandasi. अमूल्य कुः पँडा / Dr. Amulya K. Panda

Director and Staff Scientistan National institute of Immunology

New Delhi-110067

# DEPARTMENT OF ADVANCED CENTRE FOR HUMAN GENETICS,

# SHER-I-KASHMIR INSTITUTE OF MEDICAL SCIENCES, SOURA, SRINAGAR, KASHMIR



#### Certificate

This is to certify that the work in this dissertation entitled "Role of MTHFR 677 C/T (rs1801133) single nucleotide polymorphism in etiopathogenesis of Graves' disease in Kashmir valley" is a bonafide work of Ms. Tanzeela Bhat and has been carried out under my guidance and supervision at the Department of Advanced Centre for Human Genetics, Sher-I-Kashmir Institute of Medical Sciences, Soura, Srinagar.

Dr. Dil Afroze
Professor & Head
Department of Advanced
Centre for Human Genetics

HOD

Advanced Centre for Human Genetics

Sher-I-Kashmir Institute of Medical Sciences

Soura, Srinagar



# DEPARTMENT OF IMMUNOLOGY & MOLECULAR MEDICINE SHER-I- KASHMIR INSTITUTE OF MEDICAL SCIENCES SOURA, SRINAGAR

#### CERTIFICATE

This is to verify that the study entitled "Relationship between deleted in colorectal carcinoma (DCC VNTR) polymorphism and gallbladder cancer" is a bonafide work of Ms. TASEENA RASHID and was conducted in the Cancer Diagnostics and Research Centre (CDRC), Department of Immunology and Molecular Medicine, Sher-i-Kashmir Institute of Medical Science, Soura Srinagar, under the supervision and entire satisfaction. This work has not been previously submitted for reward of any degree, diploma, fellowship or any other similar distinction.

It is further certified that no work under this heading has previously submitted to the University of Kashmir for the award of any degree or diploma, to the best of my behalf.

Head & Supervisor

Dr. Zafar Amin Shah lead

SKIMS Straggs

Dept. of Immunology & Molecular

Medicine

SKIMS, Soura, Srinagar.

Supervisor

Dr. Manzoor Ahmad Malik

Assistant Professor

Cancer Diagnostics & Research Centre

Dept. of Immunology & Molecular

Medicine

SKIMS, Soura, Srinagar.

# Molecular Biophysics Unit, Indian Institute of Science, Bangalore- 560012, India



# **CERTIFICATE**

This is to certify that the dissertation entitled "Residue specific contributions to the formation of 6HB in gp41 subunit of HIV-1 envelope inferred from saturation mutagenesis" submitted by Tehleen, to the University of Kashmir, for the degree masters of science is based on the results of experiments and investigations carried out by her under my supervision and guidance at Indian Institute of Science, Bangalore. This is also to clarify that the above said work has not been previously submitted for an award of any degree, diploma or fellowship in any Indian or foreign university.

Ryd ~ ' Professor of Wolecular Brookland Indian Institute of Science Indian Institute of Science Bangalore - 560 012

Prof. Raghavan Varadarajan

Bhagya Di for h

Signature of the Principal Investigator

# DEPARTMENT OF BIOTECHNOLOGY UNIVERSITY OF KASHMIR Srinagar190006



# TO WHOM IT MAY CONCERN

This is to certify that this Dissertation report titled "Studying the role of protein kinase CK2 in chromatin organization" comprises the work done by "GAZALA NAZIR" under my supervision at the Department of Biotechnology, University of Kashmir from January 2018 to June 2019 for the partial fulfillment of Masters of Science in Clinical Biochemistry (4<sup>th</sup> semester).

Dr. Ajaz ul Hamid Wani

**SUPERVISOR** 



# **Department of Biochemistry**

Govt. Medical College Srinagar

Karan-Nagar, Srinagar, Jammu & Kashmir, India-190010

(Research Centre of University of Kashmir)

Tel: Off: 0194-2453114; 2453115; 2452013ext. 595 FAX: 0194-2453115, Mob: 9797873511; 9622220953, Email: zululubaba@gmail.com, sabumajid@yahoo.com, http://www.gmcs.edu.in

### CERTIFICATE

This is to certify that the study entitled "Status of Serum Electrolytes, lipid and thyroid profile in Type II Diabetes Mellitus in Kashmir Valley India" is an original and independent work of Ms. Anjum Nisa submitted to the Department of Clinical Biochemistry, University of Kashmir, Hazratbal, Srinagar for the partial fulfillment of Masters degree in Clinical-Biochemistry. She has done her work under our guidance and supervision in the Department of Biochemistry, Govt. Medical College Srinagar, Karan-Nagar, Srinagar, Jammu & Kashmir, India-190010. The work undertaken by her has not been previously submitted for award of any degree, diploma, fellowship or other similar distinction from this institution.

Prof (Dr.)

Department of Diege, Srinagar (Supervisor)

**Professor & Head** 





### **CERTIFICATE OF EXTERNAL GUIDE**

This is to certify that the dissertation entitled "INSULIN INDUCED LIPODYSTROPHY AMONG TYPE 1 AND TYPE 2 DIABETIC PATIENTS IN KASHMIR", is subtitled by MR ASIF HASSAN En. No 17057119002 to the Clinical Biochemistry Department, School of Biological Science, University of Kashmir Srinagar in partial fulfilment of requirement for the degree of M Sc Clinical Biochemistry is a record of work carried out by him under my supervision of DR SHARIQ RASHID MASOODI, PROFESSOR ENDOCRINOLOGY DEPARTMENT at SHER E KASHMIR INSTITUTE OF MEDICAL SCIENCE, SOURA SKIMS. The contents of this dissertation in full or in parts, has not been submitted by any other institutions for the award of Degree or Diploma.

MD, DM, FACP, FRCP
Professor of Endocrinology, SKIMS
(Principal Investigator, YDR)
Signature of The External Guide,

Dr Shariq Rashid Masoodi,
Investigator,
Sher e Kashmir Institute of Medical Sciences,
Srinagar.



# SPECIAL CENTRE FOR MOLECULAR MEDICINE JAWAHARLAL NEHRU UNIVERSITY

**NEW DELHI 110067, INDIA** 

# CERTIFICATE OF THE GUIDE

Certified that the project work, which is being carried out by AZRA AMIN (Enrolment No: 17057119003) to the department of Clinical Biochemistry, University of Kashmir entitled "Cloning, expression and purification of Prefoldin subunit 6 of Plasmodium falciparum" in partial fulfilment for the degree of Masters of clinical Biochemistry submitted to Department of Clinical Biochemistry, University of Kashmir was carried out under my guidance at Special Centre for Molecular Medicine, Jawaharlal Nehru University, New Delhi. The work presented is original and has not been submitted in part or fulfilment of any degree or diploma to any other university or institute.

Candidate: Azra Amin

Signature: Azva Amir

Associate Professor
Associate Professor
Molecular Medicine
Special Centre for Molecular Description
Jawaharlal Nehru University,
Dr. Shailja Singh

Associate Professor

Special Centre for Molecular Medicine Jawaharlal Nehru University, New Delhi

# MOLECULAR REPRODUCTION, DEVELOPMENT AND GENETICS



INDIAN INSTITUTE OF SCIENCE

#### CERTIFICATE OF THE EXTERNAL GUIDE

This is to certify that the dissertation entitled "Cloning, expression and purification of eIF4B truncations in Saccharomyces cerevisiae" is submitted by Mr. Fayaz Ahmad Lone, En. No: 1705719005 to the Clinical Biochemistry Department, School of Biological science, Kashmir university, Srinagar in partial fulfilment of the requirements for the degree of M.Sc. (Clinical Biochemistry) is a record of work carried by him under my supervision (Dr. Tanweer Hussain, Assistant Professor, MRDG, IISc, Bangalore). The contents of this dissertation, in full or in parts, have not been submitted to any other Institute or University for the award of any Degree or Diploma.

1. Hw 29/5/19

Signature of the Guide

TANWEER HUSSAIN

**Assistant Professor** 

E-mail: hussain@iisc.ac.in

Tel: +91 (0) 80-2293 3262

Dr. TANWEER HUSSAIN

Assistant Professor

Assistant Professor

Assistant Professor

Assistant Professor

Science Indian Institute of Science

Indian Institute of Science

Bangalore - 560 012, India



#### DEPARTMENT OF IMMUNOLOGY & MOLECULAR MEDICINE

#### S. K. INSTITUTE OF MEDICAL SCIENCES, SRINAGAR

#### CERTIFICATE

This is to verify that the study entitled "Relationship between Glutathione-S-Transferase (M1&T1) and Cholelithiasis susceptibility in Kashmir Valley" is a bonafide work of HASSINA AKHTAR and was conducted in the Cancer Diagnostics and Research Centre (CDRC), Department of Immunology and Molecular Medicine, Sher-i-Kashmir Institute of Medical Science, Soura Srinagar, under the supervision and entire satisfaction. This work has not been previously submitted for reward of any degree, diploma, fellowship or any other similar distinction. It is further certified that no work under this heading has previously submitted to the University of Kashmir for the award of any degree or diploma, to the best of my behalf.

Head & Supervisor

Dr. Zafar Amineshin Shah

Deptt. Ofdfn&ilfleidgy & Mol. Med SKIMS Srinagar Dept. of Immunology & Molecular Medicine

SKIMS, Srinagar

Supervisor

Dr. Manzoor Ahmad Malikmedic

Assistant Professor

Cancer Diagnostics and Research Centre

Dept. of Immunology & Molecular Medicine

SKIMS, Srinagar

# **CERTIFICATE OF THE GUIDE**

Certified that the project work, entitled "Subcellular distribution of 78 and 35 kDa variants of SG2NA in NIH3T3 and MCF-7 cells" was carried out by Ifra Jan under my guidance at School of Life Sciences, Jawaharlal Nehru University, New Delhi. This report is being submitted in partial fulfillment for the degree of Masters of Clinical Biochemistry, Department of Clinical Biochemistry, University of Kashmir.

Shyamal K. Goswami
Professor, School of Life Sciences,
Jawahanal Nehru University
New Delhi 110067

Shyamal K. Goswami Ph.D.,
Professor School of Life Sciences
Professor School of Life Sciences
Professor School of Life Sciences
New Delhi - 110067, India
New Delhi - 110067, India

Ifra Jan

Masters of Clinical Biochemistry
Department of Clinical Biochemistry
University of Kashmir

# ADVANCED CENTRE FOR HUMAN GENETICS SHER-I-KASHMIR INSTITUTE OF MEDICAL SCIENCES, SOURA, SRINAGAR, KASHMIR



#### Certificate

This is to certify that the work in this dissertation entitled "Role of FOX p3 2383 C>T SNP in the pathogenesis of Gastric Cancer in Kashmir Valley" is a bonafide work of Ms. Insha Ismail and has been carried out under my guidance and supervision in the Department of Advanced Centre for Human Genetics, Sher-I-Kashmir Institute of Medical Science, Soura, Srinagar.

It is further certified that no work under this heading has previously been submitted to the University of Kashmir for the award of any degree, diploma, fellowship or any other similar distinction to the best of my belief.

Dr. Dil Afroze
Professor & Head
Department of Advanced
Centre for Human Genetics
SKIMS Dr. Dil Afroze

Professor & Head

Advanced Centre for Human Genetics Sher-I-Kashmir Institute of Medical Science Soura, Srinagar





जैव प्रौद्योगिकी विभाग, विज्ञान और प्रौद्योगिकी मंत्रालय, भारत सरकार का स्वायत्त अनुसंधान संस्थान

#### NATIONAL INSTITUTE OF IMMUNOLOGY

An Autonomous Research Institute of the Department of Biotechnology, Ministry of Science and Technology
Government of India

#### **CERTIFICATE**

This is to certify that the thesis work entitled "Investigating the Immunological properties of reprogrammed monocytes" has been carried out by Ms. Ishrat Ashraf during February 2019 - June 2019, to be submitted to the Department of Clinical Biochemistry, University of Kashmir, Srinagar, 190006 J&K, in the partial fulfilment of the requirements for the Degree of MSc, in Clinical Biochemistry. The content of the thesis embodies results of original work and studies carried out by the student herself. The contents of the thesis do not form the basis for the award of any other degree to any other candidate from this or any other university. The contents of the work are original and have been carried out under my supervision in National Institute of Immunology, New Delhi.

Date 17 June 2019

Supervisor

Dr. P.K. Upadhyay

प्रमोद उपाध्याय, पीएव डी. / Pramod Upadhyay, Ph. D. वैज्ञानिक / Scientist राष्ट्रीय प्रतिरक्षा विज्ञान संस्थान NATIONAL INSTITUTE OF IMMUNOLOGY अरूणा आराफ अली मार्ग / Aruna Asaf Ali Marq गई दिल्ली-110067 / New Delhi-11008



# Department of Biochemistry ALL INDIA INSTITUTE OF MEDICAL SCIENCES Ansari Nagar, New Delhi – 110029

### **CERTIFICATE**

This is to certify that the thesis entitled "PGEX2-T Based β Defensin Primer Designing and Isolation, Purification and Characterization of Neutrophil, Macrophage, Bone Marrow and mesenchymal Stem Cells from Swiss Albino Mice" comprises the original work done by Mr. Jehangir Shah Syed Bukhari bearing Roll No. 17057119013 under our supervision and guidance in the Department of Biochemistry, All India Institute of Medical Sciences, New Delhi, India w.e.f. 01-01-2019 to 30-06-2019. He is sincere, hardworking and well-behaved student. I wish him success in the life.

Dr. Pramod Kumar Gautam,

Assistant professor, Department of Biochemistry

AIIMS, New Delhi-110029



# भारतीय समवेत औषध संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंघान परिषद्) केनाल रोड, जम्मू - 180001

# Indian Institute of Integrative Medicine

(Council of Scientific & Industrial Research) Canal Road, Jammu - Tawi - 180 001 (INDIA)

Fayaz A Malik ran

15/07/2019

#### To whom it may Concern

This is to certify that Kinza Ajaz has worked in the division of Cancer Pharmacology of Indian Institute of Integrative Medicine (IIIM) Sanat Nagar Srinagar as a project trainee for six months under the supervision of Dr. Fayaz A Malik. During this period she has worked on the research project entitled "Screening of Small Molecules as Neuroprotective agents against Corticosterone Induced impairment in depression based cell models". The work done by Kinza Ajaz under this project has not been published previously or submitted for the award of degree, diploma. fellowship or any other similar distinction. It is further certified that no work under this heading from CSIR-IIIM has previously submitted to University of Kashmir for the award of any degree or diploma to the best of my belief.

Sincerely

Fayaz Malik Ph.D

Pr. Scientist CSIR-Indian Institute of Integrative Medicine Caras record Jammu-1800001

Jammu, 180001 INDIA.

Email: fmalik@iiim.ac.in

# Department of Advanced Centre for Human Genetics Sher-i-Kashmir Institute of Medical Sciences, Soura, Srinagar, Kashmir



### Certificate

This is to certify that the work in this dissertation entitled "Role of ACE gene insertion/deletion (I/D) polymorphic sequence variations in patients with Deep Vein Thrombosis (DVT) in Kashmir valley" is a bonafide work of Ms. Mehnaz Jan and has been carried out under my guidance and supervision in the Department of Advanced Centre for Human Genetics, Sher-I-Kashmir Institute of Medical Sciences, Soura, Srinagar. It is further certified that no work under this heading has previously been submitted to the University of Kashmir for the award of any degree, diploma, fellowship or any other similar distinction to the best of my belief.

Dr. Dil Afroze
Professor & Head
Department of Advanced
Centre for Numan Genetics
Significant Dil-Afroze

**Professor and Head** 

Advanced Centre for Human Genetics

Sher-i-Kashmir Institute of Medical Science

Soura, Srinagar



### DEPARTMENT OF IMMUNOLOGY & MOLECULAR MEDICINE SHER-I- KASHMIR INSTITUTE OF MEDICAL SCIENCES SOURA, SRINAGAR

#### CERTIFICATE

This is to verify that the study entitled "To study the role of genetic variants of deleted in colorectal carcinoma (DCC rs714 A>G) polymorphisms in gallbladder cancer in Kashmir Valley" is a bonafied work of Mr. Mohammad Amjad Hussain and was conducted in the Cancer Diagnostics and Research Centre (CDRC), Department of Immunology and Molecular Medicine, Sher-i-Kashmir Institute of Medical Science, Soura Srinagar, under the supervision and entire satisfaction. This work has not been previously submitted for reward of any degree, diploma, fellowship or any other similar distinction.

It is further certified that no work under this heading has previously submitted to the University of Kashmir for the award of any degree or diploma, to the best of my behalf.

Head of Department

Dr. Zafar Amin Shahnology & Mol. Med

Prof. & Head As a

Dept. of Immunology & Molecular Medicine SKIMS, Soura, Srinagar.

Assistant Professor & Mol. Medicine
Dept. of Immunology & Molecular Medicine

SKIMS, Soura, Srinagar.

Supervisor

Dr. Manzoor Ahmad Walik Ahmad Malik