



TO MAGNIFICA RETTRICE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE **7097**

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Bioscienze dell'Università degli Studi di Milano**.

Scientist- in - charge: **Prof. Ricagno Stefano**

[Abdul Malik]

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	MALIK
Name	ABDUL

PRESENT OCCUPATION

Appointment	Structure

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	BSc (Hons.)	Aligarh Muslim University, India	2021
Specialization	Biochemistry		
PhD			
Master	MSc (Molecular Biology)	University of Debrecen, Hungary	2024
Degree of medical specialization			
Degree of European specialization	Master of Science in Molecular Biology	University of Debrecen, Hungary	2024
Other			

REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of registration	Association	City



FOREIGN LANGUAGES

Languages	level of knowledge
English	Fluent (C1-C2)
German	Beginner (A1)

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2022 - 2024	Stipendium Hungaricum Scholarship Holder Full scholarship covering tuition fees, monthly stipend, and accommodation expenses (~€25,000)
2024	Full Member of the Student Research Society, University of Debrecen Recognized for thesis research work and presented at the SRS conference
2024	Poster Presentation, 17th Molecular, Cell, and Immune Biology Winter Symposium Title: IRF4 as a Negative Regulator in the Development of Myeloid Blood Cells from Pluripotent Stem Cells
2021	Qualified Graduate Aptitude Test in Engineering (GATE) - Life Sciences Highly competitive national-level exam in India for doctoral studies
2021	Qualified Joint Admission Test for Masters (JAM) - Biotechnology Competitive entrance exam for master's programs in IITs and NITs in India
2021	Qualified Graduate Aptitude Test - Biotechnology (GAT-B) National-level entrance test for MSc and Integrated PhD in Biotechnology programs

TRAINING OR RESEARCH ACTIVITY

During my master's program at the University of Debrecen, I investigated the role of transcription factor IRF4 in the differentiation of mouse embryonic stem cells (ESCs) into myeloid dendritic cell progenitors. The question driving this research was to understand how IRF4 modulates the differentiation of pluripotent stem cells into myeloid lineages. This question is important because understanding such regulatory mechanisms can illuminate pathways involved in blood cell disorders and immune dysfunction, which can lead to research that bridges fundamental stem cell biology with clinical applications. Through extensive experimentation, we discovered that IRF4 plays a role as a negative regulator in this process. This finding opens the door to potential therapeutic targets for hematopoietic disorders like leukemia, where disruptions in stem cell differentiation are a significant challenge.

My thesis project honed my research skills in stem cell culture and differentiation, RNA isolation, RT-PCR, and flow cytometry, and refined my analytical skills, problem-solving abilities, organizational skills, attention to detail, and ability to manage multiple tasks efficiently. In addition to my thesis work, I gained hands-on experience in various other lab techniques, worked on RNA-seq data analysis, and I recently completed a one-month hands-on workshop on Basic to Advanced Sequencing Data Analysis, which covered topics in bioinformatics, genomics, and NGS data analysis, including biological network analysis, Python, R programming, Linux commands, and single-cell sequencing techniques.



PROJECT ACTIVITY

Year	Project
2023 - 2024	MSc Thesis Researcher Project: Transcription Factor Assisted Embryonic Stem Cell Differentiation Responsibilities: <ul style="list-style-type: none">• Cultured and differentiated ESCs into embryoid bodies and myeloid progenitors• Performed fluorescent flow cytometry to analyze cell surface markers• Conducted RNA isolation and qRT-PCR for gene expression analysis• Investigated doxycycline-induced IRF4 expression in myeloid differentiation
2024	Workshop Trainee - Sequencing Data Analysis Responsibilities: <ul style="list-style-type: none">• Hands-on experience with biological networks and NGS data preprocessing• Analysis of single-cell sequencing and spatial transcriptomics• Practical applications of Python, R, and Linux for sequencing data
2021	BSc Dissertation Researcher Project: A write-up titled "Gene Therapy for treating Hepatocellular Carcinoma"
2021	Intern, Molecular Biology & Biochemistry Techniques Project: Article on the topic of "Treating Heart Failure with the Potential of Gene Therapy"

PATENTS

Patent

CONGRESSES AND SEMINARS

Date	Title	Place
Feb 2024	Poster Presentation: "IRF4 as a Negative Regulator in the Development of Myeloid Blood Cells from Pluripotent Stem Cells"	University of Debrecen, Hungary
Mar 2021	Workshop on "Molecular Biology and Biochemistry Techniques" & "Principles of Genetics"	AIIMS, Bhubaneswar, India
Jan 2020	TNQ Distinguished Lectures in the Life Sciences by Venki Ramakrishnan	AIIMS, New Delhi, India
Mar 2019	National Conference on "Trends in Biochemical and Biomedical Sciences" (Delegate)	Department of Biochemistry, AMU, Aligarh, India
Dec 2018	International Conference on "Future Diagnostics and Therapeutics and Theranostics Modalities" (Delegate)	Interdisciplinary Biotechnology Unit, AMU, Aligarh, India



PUBLICATIONS

Books
[title, place, publishing house, year ...]
[title, place, publishing house, year ...]
[title, place, publishing house, year ...]

Articles in reviews
[title of the article, review, place, publishing house, year ...]
[title of the article, review, place, publishing house, year ...]
[title of the article, review, place, publishing house, year ...]

Congress proceedings
[title, structure, place, year]
[title, structure, place, year]
[title, structure, place, year]

OTHER INFORMATION

Strong background in molecular biology, cell culture, flow cytometry, and bioinformatics
Passion for gene editing, regenerative medicine, and immunology
Experience in Python and R for bioinformatics analysis
Interest in working with mouse models for hematopoiesis and immune cell development
Extracurricular Activities: Erasmus+ Youth Exchange Programs <ul style="list-style-type: none">July 3 - 12, 2023: "THE HAPPINESS IN NATURE", Bolu, TurkeyJuly 28 - August 3, 2023: "ECOLOGY ACT III", Poronin, Poland
Quick Learner Well Organized Time Management Record Keeping Communication Team Work Innovative Detail Oriented
English: IELTS Academic, Overall Band: 8.0 (November 2024) CEFR Level C1



Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Please note that CV WILL BE PUBLISHED on the University website and It is recommended that personal and sensitive data should not be included. This template is realized to satisfy the need of publication without personal and sensitive data.

Please DO NOT SIGN this form.

Place and date: **Aligarh - 11/02/2025**