



TO THE MAGNIFICENT RECTOR  
OF THE UNIVERSITY OF MILAN CODE ID: 6951

The undersigned requests to be admitted to participate in the public selection, based on qualifications and exams, for the awarding of a research grant at the Department of

\_\_\_ Dipartimento di Oncologia ed Emato-Oncologia dell'Università degli Studi di Milano

Scientific Director: **Prof.** Minucci Saverio

[Name and Surname] Amna Rashid Tariq

## CURRICULUM VITAE

### PERSONAL INFORMATION

Surname	Tariq
Name	Amna Rashid

### CURRENT EMPLOYMENT

Assignment	Structure
Post doc fellow	Seoul National University Hospital, Biomedical Research Institute, Seoul, Korea.

### EDUCATION AND TRAINING

Title	Course of study	University	year of obtaining the title
Master's Degree or equivalent	Zoology	Govt. College University Lahore, Punjab, Pakistan.	2004
Specialization			
PhD	Animal Sciences: endocrinology	Quaid-i-Azam University, Islamabad, Islamabad, Pakistan.	2014
Master			
Medical Specialization Diploma			
European Specialization Diploma			
Other	Some of the PhD research project	Monash University Australia	2010



	carried out in Australia		
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## REGISTRATION TO PROFESSIONAL ORDERS

Registration date	Order	City

## FOREIGN LANGUAGES KNOWN

languages	level of knowledge
English	Proficient reading, writing, spoken and understanding

## AWARDS, RECOGNITIONS AND SCHOLARSHIPS

year	Award Description
(20-08-2007) to (20-08-2012)	<ul style="list-style-type: none"><li>Indigenous Ph.D. Fellowship awarded by Higher Education Commission (HEC) of Pakistan:fellowship for M.Phil leading to PhD studies.</li></ul>
(5-12-2009 to 30-05-2010)	Award of scholarship under International Research Support Initiative Program by Higher Education Commission of Pakistan for Monash University Australia for 6 months
11-15 July, 2010	Young Investigator Travel Award to attend 7 <sup>th</sup> International Congress of Neuroendocrinology, held at University of Rouen, France.

## TRAINING OR RESEARCH ACTIVITIES

<b>Description of the activity</b> <ul style="list-style-type: none"><li>During my postdoc (stem cell culture), I worked on the therapeutic effect of a drug on stem cells i.e., <b>endothelial progenitor cells</b> (EPCs) isolated from blood samples of <b>diabetic</b> patients (I participated in project designation). I <b>cultured</b> the EPCs (I developed and optimized cell culture protocol and I will be able to develop and optimize iPSC culture). I characterized morphological markers of EPC cells (CD34, CD44, CD31, KDR) by using <b>multiple fluorescence immunocytochemistry</b> (I developed and optimized protocol immunocytochemistry), <b>western blot</b> and <b>Flow cytometric analysis</b> (I developed and</li></ul>
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optimized flow cytometric protocol). **I checked the phenotypic characteristics of EPCs by Dil-AcLDL and ulexlectin uptake** (I developed and optimized protocol for Dil-AcLDL and ulexlectin uptake staining). The cell viability assays were also carried out. The effect of drug doses on EPC cells was monitored by using molecular techniques ELISA and western blot. During cell culture I worked regularly with cell counting, cryopreservation and recovery of cells in liquid nitrogen. I have 2 first author articles from postdoc. I am confidently capable of developing and optimizing protocols of any new techniques if required for my lab work.

- During my PhD research (Animal Sciences: endocrinology), I localized a neuropeptide receptor (G protein coupled receptor (GPCR54) expression in the reproductive tissue of rhesus monkey using **multiple fluorescence Immunohistochemistry and RTPCR. I used primary and secondary antibodies for GPCR54** to observe its **co-localization with biomarkers of sperm cells in testis tissue**. I have a great experience of learning and working of different immunohistochemistry techniques, **histology, tissue embedding in paraffin, section cutting, and fluorescence confocal microscopy and image analysis** in the lab of Prof. Iain Clarke, Monash University Australia during my PhD.
- I am enthusiastic to work on the project 'Targeting the transcription factor Runx1 to devise new therapies against cardiac fibrosis and atherosclerosis.
- **Writing of scientific articles and journals:** I have two first authored articles from PhD, I have five first authored articles and a total of 8 articles in peer reviewed journals.
- **Technical realization of the project:** In my PhD project, I developed and optimized my research project independently, and designed technique protocols through an extensive literature review. I am dedicated to learn new techniques for my career and lab project development.
- **Ability to design experiments independently:** I inculcated new lab techniques into projects through regular extensive literature review. I learned the statistics software to analyze results of various experiments. I maintained lab equipment, discussed the research results with my supervisor and lab team regularly. For my project experiments during my PhD, I managed chemical stocks, I ordered chemicals to companies, kept track of my orders regularly.
- **Supervision of junior students: Strong collaborative nature.** I trained the undergraduate student and helped other lab fellows during my PhD and postdoc in various lab techniques. The names of my lab fellows can be find in my publications both from PhD and postdoc which shows that I worked as a team in my projects. I have research experiences in two



international labs which represents that I am capable to extend the research results to team fellows.

- **Presentation of results at meetings and seminars: Experience using statistics software:** I have good experience of graphpad and image J which I used during my PhD and postdoc research work. I also have experience of presenting results in conferences.
- **Ability to work flexible hours.** I believe in working with intense motivation coupled with dedication, where time and pay are far behind than my passion. I performed my PhD and postdoc projects with utmost dedication to research. My research journey uptill now represents that I am moving forward in my research passion.

## PROJECT ACTIVITY

Year	Project
2007-2013	<p>PhD Project:</p> <ul style="list-style-type: none"><li>• During my PhD research (Animal Sciences: endocrinology), I localized a neuropeptide receptor (G protein coupled receptor (GPCR54) expression in the reproductive tissue of rhesus monkey using <b>multiple fluorescence Immunohistochemistry and RTPCR. I used primary and secondary antibodies for GPCR54</b> to observe its <b>co-localization with biomarkers of sperm cells in testis tissue</b>. I have a great experience of learning and working of different immunohistochemistry techniques, <b>histology, tissue embedding in paraffin, section cutting, and fluorescence confocal microscopy and image analysis</b> in the lab of Prof. Iain Clarke, Monash University Australia during my PhD. I have two first authored articles from PhD, I have five first authored articles and a total of 8 articles in peer reviewed journals.</li></ul>
2022-2024	<p>Postdoc project:</p> <p>During my postdoc (stem cell culture), I worked on the therapeutic effect of a drug on stem cells i.e., <b>endothelial progenitor cells (EPCs)</b> isolated from peripheral blood samples of <b>diabetic</b> patients (I participated in project designation). I <b>cultured</b> the EPCs (I developed and optimized cell culture protocol and I will be able to develop and optimize iPSC culture). I characterized morphological markers of EPC cells (CD34, CD44, CD31, KDR) by using <b>multiple fluorescence immunocytochemistry</b> (I developed and optimized protocol immunocytochemistry), <b>western blot</b> and <b>Flow</b></p>



	<b>cytometric analysis</b> (I developed and optimized flow cytometric protocol). <b>I checked the phenotypic characteristics of EPCs by Dil-AcLDL and ulexlectin uptake</b> (I developed and optimized protocol for Dil-AcLDL and ulexlectin uptake staining). The cell viability assays were also carried out. The effect of drug doses on EPC cells was monitored by using molecular techniques ELISA and western blot. During cell culture I worked regularly with cell counting, cryopreservation and recovery of cells in liquid nitrogen. I have 2 first author articles from postdoc. I am confidently capable of developing and optimizing protocols of any new techniques if required for my lab work.
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## PATENT OWNERSHIP

<b>Patent</b>
no

## CONGRESSES, CONFERENCES AND SEMINARS

Date	Title	Site
11-15 July, 2010	Expression of kisspeptin and its receptor in rhesus monkey testis, 7th Neuroendocrinology Congress, Poster presentation.	University of Rouen, Rouen, France.
13-15 December 2018	Conference SAAP and PPS 16 biennial conference	University College of Medicine and Dentistry, University of Lahore
4 August, 2016	National Symposium on 'Potential impact of genetic testing and counseling.	Department of Molecular Biology, Virtual University of Pakistan, Lahore.

## PUBLICATIONS

<b>Books</b>
[title, city, publisher, year...]
[title, city, publisher, year...]
[title, city, publisher, year...]



Journal Articles
[article title, magazine, city, publisher, year...] Gemigliptin, a potent selective dipeptidyl peptidase 4 inhibitor, protects endothelial progenitor cells by oxidative stress via caspase-3 dependent pathway, Biochemistry and Biophysics Reports, Seoul, Elsevier B.V., 2024.
[article title, magazine, city, publisher, year...] Endothelial Progenitor Cells: A Brief Update, International Journal of Stem Cells, Seoul, Korean Society for Stem Cell Research, 2023.
[article title, magazine, city, publisher, year...] Indian ginseng (N.Hexane and Chloroform extracts) offers ameliorating effects on muscle functions restoration in a mouse model of peripheral nerve injury, International Journal of Biosciences, online, The International Network for Natural Sciences (INNSpub), 2021.
Link between Autoimmune Hypothyroidism and Polycystic Ovary Syndrome, The Professional Medical Journal, Faisalabad, independent medical college, Faisalabad, Pakistan, 2020.
Comparative study of acylated ghrelin levels in obese diabetes mellitus type 2 and lean diabetes mellitus type 2 female aged 30-45, The Professional Medical Journal, Faisalabad, independent medical college, Faisalabad, Pakistan 2020.
Neuropeptidergic regulation of pancreatic hormones, a therapeutic approach for type 2 diabetes mellitus, Science Letters, Lahore, The Science Publishers, 2018.
Effect of kisspeptin challenge on testosterone and inhibin secretion from in vitro testicular tissue of adult male rhesus monkey (Macaca mulatta), Andrologia, Islamabad, Blackwell Verlag GmbH, 2017.
Kiss1 and Kiss1 receptor expression in the rhesus monkey testis: a possible local regulator of testicular function, Central European Journal of Biology, Springer, Islamabad, 2013.

Conference Proceedings
• [title, structure, city, year] Expression of kisspeptin and its receptor in rhesus monkey testis, 7th Neuroendocrinology Congress, Poster presentation, University of Rouen, Rouen, France. 11-15 July, 2010.
[title, structure, city, year]



Conference SAAP and PPS 16 biennial conference, University College of Medicine and Dentistry, University of Lahore, 13-15 December 2018.

[title, structure, city, year]

National Symposium on 'Potential impact of genetic testing and counseling', Department of Molecular Biology, Virtual University of Pakistan, Lahore. 4 August, 2016.

#### MORE INFORMATION

##### **Research Supervision and training**

- I trained research techniques to my junior lab fellow during my post doc at Seoul National University Hospital, Korea.

##### **Technical Skills**

- Multiple Fluorescence immunocytochemistry, Ni-DAB immunohistochemistry, Fluorescence Imaging, Microscopic techniques (confocal microscopy, inverted microscopy), histology, tissue embedding in paraffin, section cutting, Western blot, Reverse Transcriptase PCR (RT-PCR), Immuno-assays (ELISA). Stem Cell Culture, tissue culture. Cell counting, cryopreservation of cells in liquid nitrogen and recovery,
- Gram positive bacteria cell culture
- Computer skills: Microsoft Office (word, PowerPoint, excel)
- Graphics: Adobe Photoshop
- Statistical elaboration: GraphPad, Image J

The declarations made in this curriculum vitae are to be considered as having been released pursuant to articles 46 and 47 of Presidential Decree no. 445/2000.

This curriculum does not contain sensitive data and judicial data as per art. 4, paragraph 1, letters d) and e) of Legislative Decree 30.6.2003 n. 196.

WE REMEMBER that the curricula WILL BE MADE PUBLIC on the University website and therefore please do not enter sensitive and personal data. This model is already pre-built to meet the need for publication without sensitive data.

Please **DO NOT SIGN** this form.

Place and date: Lahore, Pakistan, 10.25.2024