YUMNA **ZAHID**

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Professional Overview

Detail-oriented biologist and experienced researcher with 3+ years of hands on research experience in wide scale wet lab techniques. Accomplished in applying new protocols and technologies with expertise in data collection, study and analytics.

Core Qualifications

- Cell culture
- Protein assays (immunohistochemistry, ELISA)
- Bacterial and *Dictyostelium discoideum* transformation
- PCR
- Histological staining
- Flow Cytometry
- Microscopy
- Microsoft Word/Excel/Power Point
- Bioinformatics
- Python and MATLAB (basic)

Education

Master of Science: **Biology** **2016**
Texas A&M Univesity College Station, TX, USA
Bachelor of Science: **Biology** **2013**
Lahore University of Management Sciences Lahore, Punjab, Pakistan

Experience

Graduate research assistant **08/2014 to Current**
Texas A&M University **College Station, TX**
Conducted experiments to determine the role of epithelial cells in fibrosis, and, to identify factors that regulate tissue size in eukaryotes.
Designed and directed experiments using multiple wet lab molecular techniques and maintained digital records of protocols and data.
Directed molecular cloning projects.
Isolated PBMCs(peripheral blood mononuclear cells) for various experiments in the lab.
Presented weekly status reports to supervisors and peer groups.

Teaching assistant **08/2014 to Current**
Texas A&M University **College Station, TX**
Lectured on and conducted introductory biology labs.
Designed and graded exams and held office hours to support students in mastering material.

Research Assistant **07/2013 to 07/2014**
Lahore University of Management Sciences **College Station, TX**
Helped set up the first stem cell lab in Pakistan.
Optimized cell culture protocols and maintained lab stocks.
Collaborated with hospitals to get biopsy and tissue samples and used them for deriving and establishing primary cell lines for lab stocks.

Dissertation

BS thesis title: "Conditioned medium prepared from immortalized mouse embryonic fibroblasts supports culture of trophoblast stem (TS) cells." Trophoblast stem cells (TS) are the precursors of the differentiated cells of the placenta and are used as a model system to study placental development and function. TS cell cultures require fibroblasts conditioned medium to maintain their phenotype. Generally, primary mouse embryonic fibroblasts (PMEF) are used to prepare conditioned medium. But PMEFs are harder to derive as primary cells have slow growth and require extraction of 10-12 days old embryos from pregnant mice. In this project, I eliminated these problems and tested self-derived immortalized PMEFs to prepare conditioned media for TS cell culture. We tested growth of TS cells on both conditioned media and showed immortalized PMEF conditioned media also supported TS cell growth in cultures.

Memberships/Scholarly Societies

Lums Community Service Society (LCSS):
Trained me in organizing large-scale fund raisers and events like reading days at Children's homes and Special Olympics