**BIOSKETCH**

**Name: Urmimala Raychaudhuri**

**Position title: Graduate teaching assistant**

**Qualification**

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| Institute | Course | Year OfPassing |
| Kasturba Medical College,Manipal University, Manipal | Master Of Science in Medical Pharmacology |  2009 |
| Mount Carmel College,Bangalore University,Bangalore | Bachelor of Science in Chemistry, Botany, Zoology |  2006 |

**A. Personal Statement**

The purpose of my research is to study the role of crosslinking enzymes of the trabecular meshwork (TM) in regulating intraocular pressure (IOP). Increased IOP is a major risk factor in the eye disease glaucoma. In primary open angle glaucoma (POAG), one of the most prevalent forms of glaucoma, the aqueous humor outflow facility is compromised which contributes to the increased resistance to AH outflow. Our hypothesis that transforming growth factors β2 (TGFβ2) induced increased expression of ECM crosslinking enzymes tissue transglutaminase (TGM2), lysyl oxidase (LOX) and lysyl oxidase like-2 (LOXL2) regulates IOP, is a novel mechanism proposed to contribute to increased IOP.

My knowledge of cell biology, molecular biology and basics of visual sciences during my graduate studies, pharmacology during my masters and biological sciences during my bachelor’s studies provides me the knowledge required to pursue research in this field. My hands-on expertise in basic molecular biology techniques will be useful to perform techniques such as cell culture, western blotting and immunofluorescence. Our institution and laboratory has high-end expertise with ex-vivo studies and in-vivo mice work to assist my proposed study. Overall, my area of research has supportive evidence to justify my proposal and the facilities required to carry out the proposed project. As a fourth year PhD candidate, I feel privileged to be a member of the North Research Eye Research Institute (NTERI) which has helped and continues to help in all-round development as a graduate student.

**B. Positions and Honors**

**Positions and Employment**

April 21, 2010 – August 2, 2012 - Lecturer in the Department of Pharmacology in Dayananda Sagar College of Dental Sciences, Bangalore

September 7, 2009 – April 19, 2010 - Lecturer in the Department of Pharmacology in K.L.E. Society’s Institute of Dental Sciences, Bangalore

**Other Experience and Professional Memberships**

2011 – 2012 - Core member of a team working on ‘De-Addiction Research and Training’ (DART) in association with St. John’s Medical College and Hospital, Bangalore

Participated in the “PHARMACOLOGY POSTGRADUATE LECTURE UPDATE-2009” intercollegiate competition and presented an update on “Notch inhibitors in the therapy of haematological malignancies” at Kasturba Medical College, Mangalore

Effect of 4-hydroxynonenal on migration and invasion enhancer protein 1 (MIEN1) in colorectal cancer at UNT Health Science Center for RAD 2014 held on March 21st, 2014

**Volunteer experience**

Volunteer for HABLE cohort clinical trial and performed visual screenings at UNTHSC April 2015 - Present

Volunteered as vision screener at Fort Worth Hispanic Wellness Fair in August 2015

Volunteered at African American Health expo at Fort Worth on March 28, 2015

**Honors**

Firstplace in a quiz contest for staff at Dayananda Sagar College of Dental Sciences in September 2011

**C. Selected publication**

1. Chanda Kulkarni, Urmimala Raychaudhuri, Annalakshmi Jagathesan (2013). Bilateral Acute Angle-Closure Glaucoma Following Treatment with Topiramate for Headache. Neurology and Therapy, Volume 2, Issue 1-2, 57-62