# **BIOGRAPHICAL SKETCH**

NAME	POSITION TITLE
Khosrow Rezvani	Assistant Professor of Molecular Biology

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
University of Kashan, Kashan, Iran University of Nottingham, Nottingham, UK Baylor College of Medicine, Houston, TX, USA.	MD PhD Postdoctoral	1987-1993 1998-2002 2002-2010	Medicine Molecular Biology Neuroscience department

## A. Personal Statement

The objective of the proposed research is to study the role of a novel ubiquitin-like protein, UBXN2A in colon cancer and to develop our understanding of UBXN2A's enhancers on stability and localization of p53 in mouse xenograft models. As an early stage investigator, I am highly motivated to pursue an academic research career and I am submitting this current application to start establishing this career. The base of expertise required to conduct this proposed project began to develop when I was completing my PhD in Molecular and Cell Biology in Professor John. R. Mayer's group at the University of Nottingham in United Kingdom. Dr. John Mayer is one of the pioneers in the field of ubiquitin research with more than 100 peer-reviewed articles and several chapters in textbooks. My training in ubiquitin-proteasome research continued under the guidance of Dr. Mariella De Biasi at Baylor College of Medicine in Houston, TX where I was working as an independent molecular biologist to complete the behavioral projects developed in Dr De Biasi's group. Because of this background and experience, I am fully confident that I am capable to carry out the research proposed in this application, which is a continuation of my discovery (Rezvani et al., 2009) that I made during my postdoctoral training. Due to the role of the UBXD family in several cancers, I attended the seminars and journal clubs related to the cancer field during the last two years of my postdoctoral training. Attending these events gave me a satisfactory background both in theoretical and technical areas that are directly related to the subject of this application. I also attended the fifth International Conference on SUMO, Ubiquitin, UBL Proteins at MD Anderson Cancer Center in Houston, TX in 2010 which was an ideal place for gaining the latest updates developed in the cancer field as well as establishing the necessary networking with other scientists working in a similar field. I also chose to audit several courses in cancer biology, ageing, biostatistics, research design as well as the teacher assistant responsibility for the main biology course when I was at Baylor College of Medicine. In summary, since my seminal discovery of the upregulation of UBXN2A in cancer I have become an expert in this area and I am therefore uniquely qualified to carry out the proposed research. Coupled with my clinical knowledge, I am confident in my ability to lead this project and look forward to having the opportunity to do so.

## B. Positions, Other Experience and Honors

## **Positions and Employment:**

1992-1994	Internship, University of Kashan, Iran
1994-1996	General practitioner, Department of Ophthalmology and ENT, Fallahi Hospital, Iran
1996-1998	General practitioner, Department of Cardiology and emergency unit, Kosar Hospital, Iran
2002-2010	Postdoctoral fellow, Baylor College of Medicine, Houston, TX
2010 - present	Assistant Professor, Sanford School of Medicine, University of South Dakota, SD

## Khosrow Rezvani

# HONORS:

1998 to 2002: I was awarded a full time scholarship for a Ph.D. program funded by the Iranian Ministry of Health and Medical Education after graduation from medical school in the top 10. January 2002: I was awarded a travel grant from Biomedical Society in 2002 to present my work in the first international Conference on Ubiquitin, Ubiquitin-like proteins and cancer, at the MD Anderson Medical Center, in Houston, Texas, USA

### **MEMBERSHIP:**

November 2005 to present: Member of the American Society for Cell Biology. November 2011 to present: Member of the American Association for Cancer Research.

### C. Selected Peer-reviewed Publications

### Most relevant to the current application:

- Dominique A. Boudreau, Brij K. Gupta, Sanam Sane, Rebecca Autenried, Fen Tian, Dong Zhang, Kathleen M. Eyster, Xiaorong Wang, Lan Huang, Subhash C. Chauhan, Khosrow Rezvani (2011). UBXN2A induces nuclear translocation of p53 and apoptosis through interaction with Mortalin-2. (In preparation).
- Teng, Y., Rezvani, K., and Biasi, M. D. (2011). UBXN2A regulates nicotinic receptor degradation by modulating the E3 ligase activity of CHIP. Journal of cell Biology (under revision for resubmission to Journal of Cell Biology).
- Rezvani K, Teng Y, Pan Y, Dani JA, Lindstrom J, García Gras EA, McIntosh JM, De Biasi M (2009). The UBX Containing Protein UBXd4 Regulates Cell Surface Number And Subunit Stability Of Alpha3containing Nicotinic Acetylcholine Receptors. Journal of Neuroscience, 29(21):6883-96.

## Additional recent publications:

- 4) Dong G, Ferguson JM, Duling AJ, Nicholas RG, Zhang D, Rezvani K, Fang S, Monteiro MJ, Li S, Li XJ, Wang H (2011). Modeling pathogenesis of Huntington's disease with inducible neuroprogenitor cells. Cell Mol Neurobiol. 31(5):737-47
- 5) **Khosrow Rezvani**, Yanfen Teng, Mariella De Biasi (2010). The Ubiquitin-Proteasome System Regulates the Stability of Neuronal Nicotinic Acetylcholine Receptors. Journal of Molecular Neuroscience 40(1-2):177-84.
- 6) **Khosrow Rezvani**, Yanfen Teng, David Shim and Mariella De Biasi (2007). Nicotine's inhibition of the proteasome complex affects nicotinic receptor degradation and synaptic architecture. Journal of Neuroscience. 27(39):10508-19.
- Rezvani K, Mee M, Dawson S, McIlhinney J, Fujita J, Mayer RJ (2003) Proteasomal interactors control activities as diverse as the cell cycle and glutaminergic neurotransmission. Biochem. Soc Trans. 31(2):470-3.
- 8) Mayer RJ, **Rezvani K**, Layfield R, Dawson S (2003) The ubiquitin Pathway, Neurodegeneration and Brain Function. Society of Neuropathology, 2(1): 31-33.