

Abhirami Rajagopal

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Work Address

Bldg 142, Room 2410
Animal & Avian Sciences Bldg
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Home Address

129, Westway
Apt # T3
Greenbelt
MD 20770

Education

PhD

Molecular and Cell Biology Program

University of Maryland, College Park.
Advisor: Dr. Iqbal Hamza
2002-present

MSc

Biological Sciences & B.Pharmacy (hons) Birla Institute of
Technology and Science (BITS), Pilani, India
1996-2001

Experience

2003-present

Study the role of heme responsive genes-1 and -4 in the regulation of heme homeostasis in eukaryote (University of Maryland, College Park)

2000-2001

Characterize the genes involved in the regulation of virulence of *Vibrio cholerae* (Central Drug Research Institute, Lucknow, India)

Feb 1999

Student volunteer at the Indo-US symposium and workshop on "Recombinant DNA Technology and its Applications in Drug discovery and Biotechnology", BITS (Pilani), India.

Spring 1999

Biodegradation of bagasse by soil microbes for the production of automobile fuel (Undergraduate project at BITS, Pilani)

Laboratory skills

Molecular biology techniques like cloning

Immunoblot analysis and immunofluorescence assays

Mammalian tissue culture

RNA isolations, RNA blots, RNA interference assays and Real-time PCR

Maintaining *C. elegans* cultures in liquid medium

Genetic crosses using *C. elegans* strains

Microarray data analysis using GeneSpring software and RMA from bioconductor

Coursework:

Eukaryotic Molecular Genetics
Protein Trafficking (seminar)
Protein Structure and Function
Membrane trafficking

Nucleic Acids
Advanced Cell Biology
Bioethics (seminar)
Comparative Bioinformatics

Teaching Experience

Teaching Assistant for the following courses:

Fall 2002 & spring 2003	Freshman Biology laboratory course (BSCI 105)
Spring 2004 & 2005	Molecular & Quantitative Genetics (ANSC 399)
Spring 2006	Animal Physiology laboratory (ANSC 214)

Awards

Zain Award 2007, Best Student from a developing country in the MOCB program

Best Presentation, MOCB retreat 2007

Best Poster, Bioscience Day 2007 held at University of MD, College Park

Manuscripts

Heme homeostasis is regulated by the conserved and concerted functions of HRG-1 proteins. Abhirami Rajagopal, Anita U. Rao, Julio Amigo, Meng Tian, Sanjeev K. Upadhyay, Caitlin Hall, Suji Uhm, M.K. Mathew, Mark D. Fleming, Barry H. Paw, Michael Krause and Iqbal Hamza. *Nature*, advanced online publication April 16th 2008

Genome-wide analysis of genes involved in regulation of heme homeostasis in *C. elegans*. Abhirami Rajagopal, Anita U. Rao, Gustavo C. Cerqueira, Najib M. El-Sayed and Iqbal Hamza. *Manuscript in preparation*

Conference Posters

Rajagopal A, Krause M and Hamza I. Genome-wide analysis of genes involved in regulation of heme homeostasis in *C.elegans*. 15th International *C. elegans* meeting, University of California, Los Angeles (June 25th-29th, 2005)

Uhm S, Rajagopal A, and Hamza I. Elucidating the function of the human heme responsive gene-1 (hrg-1) in heme homeostasis. 21st National Conference on Undergraduate Research (NCUR 21), Dominican University of California (April 12th-14th, 2007)

Rajagopal A, Rao AU, Krause M, Hamza I. Heme homeostasis is regulated by the conserved and concerted functions of HRG-1 proteins. Gordon Research Conference, Cell biology of metals, Salve Regina University, Rhode Island (July 29th- Aug 3rd, 2007)