



## Hiren Lashkari

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**Born: 13<sup>th</sup> February, 1987**  
**Citizenship: Indian**

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### PROFESSIONAL STATUS

#### **Research fellow (March 2017-Present)**

**Company:** Virupaksha Life science PVT LTD, Hyderabad, India.

**Project:** My work deals with developing therapeutic peptide against diabetes and chronic idiopathic constipation either by recombinant approach using bacterial system or by chemical synthesis.

#### **Project-Senior Research fellow (July 2012 - September 2016)**

**Institute:** Centre for Cellular and Molecular Biology (CCMB), Hyderabad, India

**Projects:** 1. Role of mTOR and Autophagy in HCV Pathogenesis.  
2. Epithelial-Mesenchymal Transition in Hepatocellular Carcinoma (HCC).  
3. Epithelial-Mesenchymal Transition and protein translation.

### RESEARCH INTERESTS

Infectious diseases and Host-Pathogen interactions with particular interest in viral infections and cancer biology.

### ACADEMIC DETAILS

- **Master of Science (Integrated):** Medical Biotechnology (June 2005 – December 2010)
- **College/University:** ARIBAS College, Sardar Patel University, Anand, Gujarat, India.
- **Grade/Percentage Obtained:** 7.6 cGPA / 71.74%

### RESEARCH EXPERIENCE

- **Project 1:** Role of Mammalian Target of Rapamycin (mTOR) during Hepatitis C Virus infection. Supervisor: Dr. Krishnan H Harshan
- **Institute:** Centre for Cellular and Molecular Biology (CCMB) Hyderabad, India

- **Position:** Project-Senior Research Fellow (July 2012 - September 2016)
- **Abstract:** My work focuses on mTOR signalling in acute and chronic phase of HCV infection. Our lab finding suggests that HCV infection results in activation of mTOR pathway, but mechanism are not well characterized. So its high priority to gain further insight into mechanism by which mTOR complex by its relocalization or post translational modification contribute to HCV pathogenesis. My work also focuses on role of Autophagy in HCV infection. Mechanistic insight into how exactly HCV utilize mTOR and Autophagy for its pathogenesis will aid in identifying novel host factor which may prove to be potential antiviral target.
- **Project 2:** Epithelial-Mesenchymal Transition in Hepatocellular Carcinoma (HCC)
- **Abstract:** We have developed an “**Atypical system for studying Epithelial-Mesenchymal Transition in Hepatocellular Carcinoma**”. The system is a unique model to study EMT, MET and biphasic TGF $\beta$  signaling in HCC and offers considerable potential to facilitate more insightful studies on deeper questions in tumor metastasis. To the best of my knowledge, this is the first report categorically demonstrating the non-involvement of canonical EMT-TFs in EMT.
- **Project 3:** Aetiology of Acute encephalitis syndrome (AES) and prepare ICMR AES sample bank. Supervisor: Dr. G Arunkumar
- **Institute:** Manipal Center for Virus Research, Karnataka, India
- **Position:** Research Assistant (October 2011- June 2012)
- **Abstract:** My work focused on validation of diagnostic assay of clinical AES samples in different parts of India and gathering epidemiological and clinical data on these cases. We aimed to standardize different diagnostic assays for detection of encephalitis causing virus and to prepare sample bank of AES cases in Manipal, Dibrugarh and Lucknow.

### MASTER’S RESEARCH PROJECT

- A Microsatellite polymorphism in the promoter region of IGF-1 gene and its relationship with Type-2 Diabetes and Myocardial Infarction” from Best Biotek Research Lab PVT Ltd. Bangalore.(June 2010- September 2010)

### PUBLICATIONS

- Vedagiri D\*, **Lashkari HV\***, Mangani AS, Kumar JM, Jose J, Thatipalli AR, Harshan KH. (2016) “An atypical system for studying Epithelial-Mesenchymal Transition in Hepatocellular Carcinoma”. *Sci Rep.* (\* Equal Contribution).
- mTORC1 Restricts Hepatitis C Virus Replication Through ULK1-mediated Suppression of miR-122 & Balances Viral Replication and Egress. (Manuscript Submitted).
- Role of AKT/mTOR pathway in Epithelial-Mesenchymal Transition (Manuscript under preparation).

## **TECHNICAL EXPERTISE**

- Culturing and maintenance of cell lines ( Huh7.5,Huh7,HepG2,Vero,MDCK and C6/36 cells), HCV Cell Culture Production and primary cell culture.
- Standard Recombinant DNA techniques: Cloning, PCR, Site directed Mutagenesis, Gene silencing, Protein Expression and Purification.
- Electrophoresis: Agarose gels, SDS PAGE, DNA and RNA isolation, Real-Time PCR, In vitro transcription.
- Biochemical techniques like Protein Estimation, SDS-PAGE, Western Blotting, Immunohistochemistry, Immunofluorescence assay and Time-Lapse Microscopy.
- Luciferase assay, wound healing assay, Anchorage Independence Growth Assay and MTT assay.
- Tumorigenesis and Metastasis assay in nude mice.
- Culture and Propagation of viruses (HCV, JEV, WNV, DENV, Herpes simplex virus and Influenza virus) in Biosafety level 2 /3 facility.
- Basic Microbiological techniques and virology techniques: Virus Neutralization assay, Hemagglutination assay, viral plaque assay and Invitro drug testing against virus.
- Proficient in Biosafety Level-2 Laboratory practices.

## **PRESENTATIONS/ MEETINGS**

- 5th Molecular Virology meeting will be held at the NCR Biotech Science Cluster from 11-12 February 2017.
- 4th Molecular Virology Meeting being organized at the Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram on April 16 & 17, 2015.
- 3rd Molecular Virology Meeting at National Institute of Virology, Pune January 10-11, 2013.
- 8<sup>th</sup> RNA Group Meeting at CCMB, Hyderabad on 8<sup>th</sup> to 10<sup>th</sup> January 2016.
- INDO-US Workshop on Epigenetic Regulation and Genome Control (emphasis on RNAi and microRNA) at CCMB, Hyderabad.
- National level Seminar on Humanity's Heritage: Our Genome & Stem Cells organized by M.S. University of Baroda, Vadodara.
- A State Level Seminar on " Intellectual Property Rights" organized by GUJCOST- IPR –cell, Gujarat University Ahmedabad.
- Presented an oral presentation at national level on Cord Blood Banking held at panipat.
- Participated in Sci-XL 2009(state level oral presentation).

## **MENTORING AND TEACHING EXPERIENCE**

I have trained 4 dissertation student in Dr. Krishnan H Harshan, CCMB, Hyderabad, India,

## **REFERENCES**

### **Dr. Krishnan H Harshan**

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