

# CURRICULUM VITAE

## **PRIYANKA SRINIVASAN**

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## **EDUCATIONAL QUALIFICATION**

- Master of Science (M.Sc) Applied Microbiology, Department of Microbiology, M.G.R College, Hosur, Periyar University, Tamil Nadu, India (2014-2016) **(CGPA – 7.9)**
- Bachelor of Science (B.Sc) Microbiology, Department of Microbiology, M.G.R College, Hosur, Periyar University, Tamil nadu, India (2011-2014) **(CGPA - 8.083)**

## **ACHIEVEMENTS**

- Secured Periyar University **3<sup>rd</sup> rank** in the Under-Graduation Programme (2011-2014).
- Secured Periyar University **4<sup>th</sup> rank** in the Post-Graduation Programme (2014-2016).
- **Qualified in the GATE 2017 with percentile of 82.6.**
- Cleared IELTS with band score of 6.5

## **RESEARCH EXPERIENCE**

- Working as a Junior Research Fellow in the **Department of Microbiology and Cell Biology** at Indian Institute of Science (**IISc**), Bengaluru, Karnataka, India since January 2017.
- Undergone 1 month (June 2015) internship programme in the **Department of Neuromicrobiology** at National Institute of Mental Health and Neuro Sciences (**NIMHANS**), Bengaluru, Karnataka, India.
- Done M.Sc Project for the period of 3 months (Dec 2015 - Feb 2016) in the **Department of Cell Biology and Human Genetics** at Sri Devaraj Urs Academy of Higher Education and Research (**SDUAHER**), Tamaka, Kolar, Karnataka, India.

## PUBLICATION

- Reddy, B.U., Mullick, R., Kumar, A., Sharma, G., Bag, P., Roy, C.L., Sudha, G., Tandon, H., Dave, P., Shukla, A., Srinivasan, P., Nandhitha, M., Srinivasan, N., Das, S., **A natural small molecule inhibitor corilagin blocks HCV replication and modulates oxidative stress to reduce liver damage**, *Antiviral Research* (2018), doi: 10.1016/j.antiviral.2017.12.004.

## MASTERES PROJECT

### **PROJECT TITLE: A preliminary study on Antibacterial activity of *Datura metel* against antibiotic resistant bacteria**

Drug resistant bacteria have become major threat to treat common infectious diseases. Among many of the resistant bacteria ESBLs (Extended Spectrum  $\beta$ -Lactamase producing organisms) and MRSA (Methicillin resistant *Staphylococcus aureus*) predominates in hospital acquired infections. A large number of plants have antibacterial activity. *D. metel* was taken for the study against these organisms as it was already tested for its antibacterial activity against infectious organisms. The hot water extracts and the methanol extracts of this plant shows positive results against antibiotic resistant organisms like ESBLs and MRSA.

## PRESENTATIONS

- Poster presented on “**Preliminary screening of cytotoxic, apoptotic and antimicrobial activity of *Datura metel* L. leaf and flower extracts on ESBLs, MRSA and peripheral blood lymphocytes**” in 2<sup>nd</sup> Andhra Pradesh Science Congress- 2016, Andhra Pradesh academy of Sciences, Amaravathi, Andra Pradesh, India. (Preceding found in page no: 356 of 2<sup>nd</sup> AP Science Congress abstracts book).
- Paper presented on “**Distribution of Extended Spectrum  $\beta$ -Lactamase (ESBL) producing bacteria in various clinical specimens**” in 3<sup>rd</sup> National Conference on Emerging Trends and New Challenges in Biotechnology- 2015, M.G.R College, Hosur, Tamil Nadu, India.
- Paper presented on “**Phytochemical, Antioxidant and Antimicrobial activities of *Loranthus longiflorus* flower extract against Urinary tract Infection isolates**” in 2<sup>nd</sup> National Conference on Emerging Trends and New Challenges in Biotechnology -2014, M.G.R College, Hosur, Tamil Nadu, India.

## **EXPERIMENTAL SKILLS**

### **MICROBIOLOGY**

Isolation and identification of bacteria, fungi from various samples, Phage isolation, Study of resistant pattern of bacteria, Transformation, Conjugation, Identification of Auxotrophic and Mutant bacteria, Competent cell preparation

### **MOLECULAR BIOLOGY**

Isolation of chromosomal DNA, plasmids, RNA and Nucleolus, Endotoxin free DNA preparation, Protein preparation, Silver staining, Bradford assay, Western blotting, Northern blotting, Cloning, Gel elution of DNA, In-vitro transcription, Mutagenesis, PCR (Real Time and Reverse Transcriptase), UV crosslinking, Separation of pure compounds by chromatography

### **IMMUNOLOGY**

Agglutination and Precipitation techniques (including Immunoelectrophoresis), Antibody purification (ammonium sulphate precipitation), ELISA

### **CELL BIOLOGY**

Handling tissue cultures, Transfection and Transduction, Electroporation, Stable cell line preparation, Peripheral blood mononuclear cell and Splenocyte isolation, Fluorescence activated cell sorting, T-cell proliferation assay, Confocal assay, Virus formation techniques, Virus Like Particle preparation (VLPs), Viral neutralization assay

### **OTHERS**

Preparation of plant extracts, Handling of Instruments (Autoclave, Hot Air Oven, Calorimeter, ELISA reader, Various types of Centrifuges, Incubators, Microscopes etc.)

## **REFERENCES**

### **Dr. Saumitra Das**

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Department of Microbiology and Cell Biology,  
Indian Institute of Science,  
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