CURRICULUM VITAE



G. Srividya, M.Sc., Ph.D.

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Profile

Independent researcher with experience in Molecular Biology and Immunology. Presently working as research co-ordinator at SN-SANMAR center of Excellence for Stevens Johnsons syndrome. Completed a DST-sponsored project entitled "Identification of ocular inflammatory mediators in Stevens-Johnson Syndrome" as Principal Investigator. Studied and characterized several genes in *Leishmania donovani* employing a wide variety of biochemical and molecular techniques towards developing a live attenuated vaccine for leishmaniasis.

- Good publication record in peer-reviewed journals.
- Trained in Clinical Research, Clinical Data Management, Medical writing and regulatory affairs
- Productive independent researcher with demonstrated technical expertise.
- Good communication and team skills with interdisciplinary interaction ability.

Academic Preparation

2023	Certificate course in Good Clinical Practice
2022	P. G. Diploma in Epidemiology and Biostatistics from the Institute of Good
	Manufacturing Practices in India
2004-2008	Ph.D., Biological Sciences, BITS-Pilani (Off-Campus) worked at Institute of
	Pathology Now National Institute of Pathology) (ICMR), New Delhi, India.
2001-2003	M.Sc., Biotechnology, Pondicherry Central University, India.
1998-2001	B.Sc., Microbiology (Honours), University of Delhi, South Campus, India.

Honours, Awards, and Fellowships

- Awarded Research Grant and Fellowship to work as Principal Investigator on a project entitled "Ocular Inflammatory Mediators in Steven Johnsons Syndrome" under DST-Women Scientist Scheme A (WOS-A) for women with "break-in-career".
- One of the thirty students selected internationally for the 'Molecular Biology of *Leishmania*' at the International Conference organized by International Center for Genetic Engineering and Biotechnology (ICGEB), Trieste, Italy (October 2006).
- Travel grant by International Center for Genetic Engineering and Biotechnology (October 2006) to attend International Conference at Trieste, Italy.
- Travel grant by the Department of Science and Technology (October 2006).
- Awarded CSIR Senior Research Fellowship conducting graduate studies (2006-2008).
- Awarded **CSIR Junior Research Fellowship** conducting graduate studies (2004-2006).
- Fellowship by Department of Biotechnology, India under Biotechnology Industrial Training Programme (BITP), (November 2003)
- Fellowship by Department of Biotechnology, India, during M.Sc. (2001-2003).

Publications

List of publications as first /corresponding author in indexed journal

- <u>Srividya G</u>, Angayarkanni N, Iyer G, Srinivasan B, Agarwal S. Unique Cytokine Signature Defines Ocular SJS Non-Responders. Manuscript submitted to The Ocular Surface.
- <u>Gurumurthy S</u>, Bhambhani V, Agarwal S, Srinivasan B, Iyer G. Tear cytokines and their relevance as biomarkers in ocular surface inflammatory diseases. J Cornea Ocul Surf **2023**;1:120-129. doi: 10.4103/jcos.jcos_23_23
- <u>Srividya G</u>, Angayarkanni N, Iyer G, Srinivasan B, Agarwal S. Aberrant Retinoid metabolism in chronic Stevens-Johnson Syndrome.Br J Ophthalmol. **2019**; 103(8):1015-1023. doi: 10.1136/bjophthalmol-2018-312849.
- <u>Srividya G</u>, Jain M, Mahalakshmi K, Gayathri S, Raman R, Angayarkanni N. A pilot study of cytokines in vitreal reflux in diabetic retinopathy using multiplexed bead array. Eye **2018**; 32(4): 820-829. doi: 10.1038/eye.2017.285.
- <u>Gurumurthy S</u>, Iyer G, Srinivasan B, Agarwal S, Angayarkanni N. Ocular surface cytokine response in chronic Stevens Johnson Syndrome and its response to mucous membrane grafting for lid margin keratinization. Br J Ophthalmol. **2018**; 102(2):169-176. doi: 10.1136/bjophthalmol-2017-310373 bjophthalmol-2017-310373.
- <u>Srividya G</u>, Duncan R, Sharma P, Raju BVS, Nakhasi HL, Salotra P. Transcriptome analysis during the process of *in vitro* differentiation of *Leishmaniadonovani* using genomic microarrays. Parasitology. **2007**; 134 (Pt11): 1527-1539.
- <u>Srividya G</u>, Kulshrestha A, Singh R and Salotra P. Diagnosis of Visceral Leishmaniasis: Developments over the last decade. Parasitol Res. **2012**; 110 (3): 1065-1078.

List of publication as co-author in indexed journals

- Menta V, Agarwal S, Das US, Moksha L, <u>Srividya G</u>, Anandan AM, Srinivasan B, Iyer G, Velpandian T, Angayarkanni N. Ocular surface sphingolipids associate with the refractory nature of vernal keratoconjunctivitis: newer insights in VKC pathogenesis. Br J Ophthalmol. 2021 bjophthalmol-2021-319324. Advance online publication. doi.org/10.1136/bjophthalmol-2021-319324
- Raju BVS, <u>Gurumurthy S</u>, Kuhls K, Schonian G and Salotra P. Genetic typing reveals monomorphism among the SAG sensitive and resistant *L. donovani* isolates causing Kala-azar or post kala-azar dermal leishmaniasis. Parasitol. Res.**2012**; 111 (4): 1559-1568.
- Sharma P, <u>Gurumurthy S</u>, Duncan R, Nakhasi HL and Salotra P. Comparative *in vivo* expression of amastigotesupregulated *Leishmania* genes in three different forms of leishmaniasis. Parasitol Int.**2010**; 59 (2): 262-264.
- Kumar D, <u>Srividya G</u>, Verma S, Singh R, Negi NS, Fragaki K, Kubar J, Salotra P. Presence of anti-Lepp12 antibody: a marker for diagnostic and prognostic evaluation of visceral leishmaniasis. Trans R Soc Trop Med Hyg. **2008**; 102 (2):167-171.
- Bhandari V, Kumar D, Verma S, <u>Srividya G</u>, Negi NS, Singh R and Salotra P. Increased Parasite surface antigen-2 expression in clinical isolates of *Leishmania donovani* augments antimony resistance. Biochem Biophy Res Comm. **2013**; 440 (4): 646-651.

Presentation in National/International conferences

- **Srividya G,** Geetha K Iyer, Bhaskar Srinivasan, Shweta Aggarwal, N Angayarkanni. Cytokine profiling in Ocular Stevens-Johnson Syndrome. (Poster Presentation) *Indian Eye Research Group* conference held on 30-31 July 2016 at LVPEI, Hyderabad, India
- **Srividya G.** Identification of differentially expressed genes from three life cycle stages of *Leishmania donovani* using genomic microarrays. (Oral presentation) International Conference on Molecular Biology of *Leishmania* held on 26-28 Oct 2006 at ICGEB, Trieste, Italy.
- Salotra, P, Srividya, G., Subba Raju, B.V., Sharma, P., Duncan, R. and Nakhasi H.L. Genomic microarrays for vaccine development against Kala-Azar. (Abstract) *Proceedings of the Annual Association of Clinical Biochemists in India*, Patna, Dec 2005, p35.

Courses conducted

- Conducted Online Course on Polymerase Chain Reaction: The Biological Revolution in association with SAGE University, Bhopal as a part of the National Summer School Program from September 14 to September 16, 2020.
- Conducted Online Course on Bio-analytical Techniques in association with SAGE University, Bhopal as a part of the National Summer School Program from June 29 to 4 July, 2020.

Conferences Attended

- Participated in the ocular surface conference "OSKON-2023" held at Sankara Nethralaya, on August 25-28, Chennai, India.
- Participated in the ocular surface conference "OSKON-2018" held at Sankara Nethralaya, on July 27-29, Chennai, India.
- Participated and presented a poster on Cytokine profiling in Ocular Stevens-Johnson Syndrome. (Poster Presentation) *Indian Eye Research Group* conference held on 30-31 July 2016 at L.V. Prasad Eye Institute (LVPEI), Hyderabad, India.
- Participated in the ocular surface conference "OSKON-2015" held at Sankara Nethralaya, on July 25-26, Chennai, India.
- Participated and gave an oral presentation on "Identification of differentially expressed genes in three life cycle stages of *Leishmania donovani* using genomic microarrays" at the International Conference on "Theoretical and Practical Course on Molecular Biology of *Leishmania*", organized by the International Center for Genetic Engineering and Biotechnology (ICGEB), Trieste, Italy on 26-28 Oct 2006.
- Participated in the 21st Annual Conference of Indian Association of Pathologists and Microbiologists, Delhi Chapter, held at the Institute of Pathology and Safdarjung Hospital on 16th April 2006.
- Participated in the Proceedings of the Science Meet 'BIOMICS' held at the Department of Biological Sciences, Pondicherry University on National Science Day (28 Feb' 2002).
- Participated in the 70th Annual Meeting of the SOCIETY OF BIOLOGICAL CHEMISTS (India), held at the Department of Biochemistry, Osmania University, Hyderabad from Dec 27-29, 2001.

Research experience:

• Presently working as **Research Coordinator** at SN SANMAR Center of Excellence for Steven Johnsons syndrome, C. J. Shah Cornea Services, Medical Research Foundation.

- Worked as **Principal Investigator under** a **DST** sponsored **Women Scientists Scheme** (**WOS-A**).at R.S. Mehta Jain Department of Biochemistry and Cell Biology, Vision Research Foundation, Sankara Nethralaya, Chennai, where I worked on deciphering the mechanism of pathogenesis of Steven Johnsons syndrome.
- Worked as a **Research Associate** at R.S. Mehta Jain Department of Biochemistry and Cell Biology, Vision Research Foundation, Sankara Nethralaya, Chennai, where I worked on the identification of immune mediators in ocular Steven Johnsons syndrome.
- Worked as CSIR-JRF from April 2004 to March 2006 and thereafter as CSIR-SRF till Nov. 2008 towards Ph.D. work on the "Identification of virulence-related genes of *Leishmania donovani* using genomic microarrays" under the supervision of Dr. Poonam Salotra, Deputy Director, National Institute of Pathology (ICMR), New Delhi.
- Underwent 5 months of training (Nov. 2003- March 2004) at GenoMed lab under the Biotech Industrial training program and worked towards deducing the pathway network of genes involved in Type II Diabetes Mellitus.
- As part of the curriculum carried out project on "Cry gene content and larvicidal activity of different Bacillus thuringiensis var. israelensis isolates against mosquitoes, under the supervision of Prof. S. Jeyachandran, Head, Department of Biotechnology, Pondicherry University.
- As part of the curriculum carried out a Mini project titled "Isolation and purification of recombinant calf chymosin from *E.coli* pET21" under the supervision of Dr. Amulya K. Panda, Scientist, National Institute of Immunology, New Delhi.

Technical proficiency

- Molecular biology techniques (PCR, RT-PCR, Cloning, RFLP, Real-time PCR).
- Expertise in Microarray hybridization, Scanning, Analysis, and Data Interpretation
- Protein expression, purification, and raising antisera, ELISA, and Multiplex cytokine analysis.
- Expression studies (Northern, Southern and Western Blots).
- Confocal imaging techniques such as immunofluorescence assays.
- Cell culture techniques with specialization on the generation of axenic amastigotes of *Leishmania donovani*
- Genotyping techniques such as Microsatellite typing in Leishmania

Value additions

- Computer skills
 - o Working experience in windows environments.
 - o Proficient in the use of software like New DNAStar, Vector NTI, Primer express.
 - o Familiar with the use of bioinformatics tools like Predict Protein, WoLFpSORT.
- Languages known- English, Hindi, and Tamil.
- Basic knowledge of conducting clinical trials, ethics dossier preparation, and submissions to regulatory bodies.

- Knowledge of Ethics in Clinical research
- Knowledge of basic statistics and data representation.
- Experience in writing research articles and grant applications.

Personal details

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Vadapalani, Chennai-600026.

References:

1. Dr. Geetha Iyer

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2. Dr. N. Angayarkanni

Professor and Head,

RS Mehta Jain Department of Biochemistry and Cell Biology

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3. Dr. Poonam Salotra

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New Delhi-110029, India.

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