
DR. SWATI DAHARIYA

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PROFESSIONAL SUMMARY

Enthusiastic and organized individual with a strong dedication to team success seeks an entry-level position. Eager to assume increased responsibilities and actively pursuing challenging full-time roles that leverage strong interpersonal, time management, and problem-solving skills. PhD-trained biochemist and postdoctoral researcher with extensive experience in cellular and molecular mechanisms of hematopoiesis, immunology, and translational research. Skilled in evaluating complex scientific literature, designing and executing experiments, and synthesizing findings for high-impact research and grant decision-making. Experienced in international collaborative projects and committed to advancing global health through evidence-based R&D. Seeking a Senior Program Associate role to contribute scientific expertise to high-impact philanthropic funding in Science & Global Health R&D.

CURRENT POSITION

Assistant Editor

- Wiley APAC SERVICES LLP, Noida, India | India
- Conduct peer review assessments and provide editorial guidance for high-quality scientific publications.
- Develop clear, concise scientific writing and critical evaluation skills.

WORK EXPERIENCE

MD Anderson Cancer Center Houston, TX, USA

- Postdoctoral Associate 03/24/2025 -continue
- Adviser: Dr. Simona Colla, Professor, Leukemia Dept., MDS Cancer Research Laboratory.
- Project Title: To understand the cellular and molecular mechanisms that drive T cell activation in Myelodysplastic Syndromes (MDS).
- Investigating cellular and molecular mechanisms driving T cell activation in Myelodysplastic Syndromes (MDS).
- Evaluate experimental outcomes, interpret complex datasets, and provide actionable insights for translational research.
- Collaborate with multidisciplinary teams on immune-oncology and hematopoietic research projects.

Baylor College of Medicine Houston, TX, USA

- Postdoctoral Associate 05/20/2024 – 03/21/2025
- Adviser: Dr. Manu Banadakoppa, Assistant Professor, Obstetrics & Gynecology, Perinatal Research Laboratories.
- Project Title: Transcriptome and proteome profiling to evaluate role of placenta specific complement activation in preeclampsia and fetal growth restriction.
- Transcriptome and proteome profiling to study placenta-specific complement activation in preeclampsia and fetal growth restriction.
- Applied bioinformatics and experimental approaches to identify potential therapeutic targets.

WORK HISTORY

Ph.D. Research Scholar, August 2016 – February 2022

University Of Hyderabad, Dr. G. Ravi Kumar – Hyderabad, India

- Thesis Title: Long non-coding RNA Role hiPSCs derived Megakaryocyte Development and Leukemia
- Designed and executed experiments on megakaryocyte differentiation; analyzed transcriptomic datasets; interpreted results for publications.

Visiting scholar, April 2019 – June 2019

Cambridge University, Dr. Anton Enright – Cambridge, UK

- Conducted de novo assembly tests to identify novel lncRNAs in blood cells, particularly in MKs, and validated their presence and varied expressions through genomic laboratory experiments.

Visiting Researcher, December 2017 – May 2018

Instem Center for Stem Cell Research, Dr. R.V. Shaji – Vellore, INDIA

- Generated and Cultivated Megakaryocytes from iPSCs under serum-free conditions to explore molecular aspects of their development.

Intern, April 2014 – November 2014

Biocon Research Ltd. – Bengaluru, India

- Contributed to research projects, sourcing data from diverse channels specially in Durg designing.
- Collaborated in a team-oriented environment to ensure productivity.
- Model development and validation of biomolecules by HPLC.

Graduate Thesis Fellow, January 2013 – May 2013

Central Food Technological Research Institute, Dr. K. A. Anu Appaiah – Mysore, India

- Explored multiple yeast species relevant to winemaking, isolating them in pure culture.

PUBLICATIONS AND BOOK CHAPTERS

- **Dahariya S**, Enright A, Kumar S, Gutti RK (**2024**). Deciphering Transcriptomic Variations in Hematopoietic Lineages: HSCs, EBs, and MKs. **International Journal of Molecular Sciences**, 25(18):10073. <https://doi.org/10.3390/ijms251810073> (SCI; 4.9)
- **Dahariya, S.**, Raghuwanshi, S., Thamodaran, V., Velayudhan, S.R., & Gutti, R. K. (2022). Role of Long non-coding RNAs in Human Induced Pluripotent Stem Cells derived Megakaryocytes: A p53, HOTAIRM1, and miR-125b interaction study. **Journal of Pharmacology and Experimental Therapeutics**,. <https://doi.org/10.1124/jpet.121.001095> (SCI; 4.402)
- **Dahariya, S.**, Raghuwanshi, S., Sangeeth, A., Malleswarapu, M., Kandi, R., & Gutti, R. K. (2021). Megakaryoblastic leukemia: a study on novel role of clinically significant long non-coding RNA signatures in megakaryocyte development during treatment with phorbol ester. **Cancer Immunology, Immunotherapy**, 70(12), 3477-3488. <https://doi.org/10.1007/s00262-021-02937-0> (SCI; 6.630)
- **Dahariya, S.**, Paddibhatla, I., Kumar, S., Raghuwanshi, S., Palapati, A., & Gutti, R. K. (2019). Long non-coding RNA: Classification, biogenesis and functions in blood cells. **Molecular immunology**, 112, 82-92. <https://doi.org/10.1016/j.molimm.2019.04.011> (SCI; 4.174)
- Raghuwanshi, S., **Dahariya, S.**, Musvi, S.S., Gutti, U., Kandi, R., Undi, R.B., Sahu, I., Gautam, D.K., Paddibhatla, I. & Gutti, R.K. (2019). MicroRNA functions in megakaryocytes. **Platelets**, 30(7), 809-816. <https://doi.org/10.1080/09537104.2018.1528343> (SCI; 4.236)
- Raghuwanshi, S., **Dahariya, S.**, Sharma, D. S., Kovuru, N., Sahu, I., & Gutti, R. K. (2020). RUNX1 and TGF- β signaling cross talk regulates Ca²⁺ ion channels expression and activity during megakaryocyte development. **The FEBS Journal**, 287(24), 5411-5438. <https://doi.org/10.1111/febs.15329> (SCI; 5.622)
- Raghuwanshi, S., **Dahariya, S.**, Kandi, R., Gutti, U., Undi, R.B., Sharma, D.S., Sahu, I., Kovuru, N., Yarla, N.S., Saladi, R.G. & Gutti, R.K. (2018). Epigenetic mechanisms: role in hematopoietic stem cell lineage commitment and differentiation. **Current Drug Targets**, 19(14), 1683-1695. <https://doi.org/10.2174/1389450118666171122141821> (SCIE; 2.937)
- Raghuwanshi, S., Sharma, D.S., Kandi, R., Kovuru, N., **Dahariya, S.**, Musvi, S.S., Venkatakrishnan, A.C., Palapati, A. & Gutti, R.K. (2019). Pituitary adenylate cyclase-activating polypeptide (PACAP): Differential effects on neonatal vs adult megakaryocytopoiesis. **Thrombosis Research**, 175, pp.59-60. <https://doi.org/10.1016/j.thromres.2019.01.013> (SCI; 10.407)
- Kovuru, N., Raghuwanshi, S., Sharma, D.S., **Dahariya, S.**, Palapati, A. & Gutti, R.K. (2020). Endoplasmic reticulum stress induced apoptosis and caspase activation is mediated through mitochondria during megakaryocyte differentiation. **Mitochondrion**, 50, 115-120. <https://doi.org/10.1016/j.mito.2019.10.009> (SCIE; 4.534)
- Kovuru, N., Raghuwanshi, S., Sangeeth, A., Malleswarapu, M., Sharma, D.S., **Dahariya, S.**, Palapati, A. & Gutti, R.K. (2021). Co-stimulatory effect of TLR2 and TLR4 stimulation on megakaryocytic development is mediated through PI3K/NF- κ B and XBP-1 loop. **Cellular Signalling**, 80, 109924. <https://doi.org/10.1016/j.cellsig.2021.109924> (SCI; 4.85)
- Sharma, D.S., Raghuwanshi, S., Kovuru, N., **Dahariya, S.**, Gautam, D.K., Paddibhatla, I. & Gutti, R.K. (2021). Virodhamine, an endocannabinoid, induces megakaryocyte differentiation by regulating MAPK activity and function of mitochondria. **Journal of Cellular Physiology**, 236(2), 1445-1453. <https://doi.org/10.1002/jcp.29949> (SCI; 6.513)
- Sharma, D.S., Paddibhatla, I., Raghuwanshi, S., Malleswarapu, M., Sangeeth, A., Kovuru, N., **Dahariya, S.**,

Gautam, D.K., Pallepatti, A. & Gutti, R.K. (2021). Endocannabinoid system: Role in blood cell development, neuroimmune interactions and associated disorders. **Journal of Neuroimmunology**, 353, 577501. <https://doi.org/10.1016/j.jneuroim.2021.577501> (Scopus; 3.221)

- Velidandi, A., **Dahariya, S.**, Pabbathi, N. P. P., Kalivarathan, D., & Baadhe, R. R. (2020). A review on synthesis, applications, toxicity, risk assessment and limitations of plant extracts synthesized silver nanoparticles. **NanoWorld J**, 6(3), 35-60. <https://doi.org/10.17756/nwj.2020-079> (Scopus)
- Velidandi, A., Pabbathi, N. P. P., **Dahariya, S.**, & Baadhe, R. R. (2020). Catalytic and eco-toxicity investigations of bio-fabricated monometallic nanoparticles along with their anti-bacterial, anti-inflammatory, anti-diabetic, anti-oxidative and anti-cancer potentials. **Colloid and Interface Science Communications**, 38, 100302. <https://doi.org/10.1016/j.colcom.2020.100302> (SCIE; 5.633)
- Velidandi, A., Pabbathi, N. P. P., **Dahariya, S.**, Kagithoju, S., & Baadhe, R. R. (2022). Bio-fabrication of silver-silver chloride nanoparticles using *Annona muricata* leaf extract: characterization, biological, dye degradation and eco-toxicity studies. **International Journal of Environmental Science and Technology**, 19(7), 6555-6572. <https://doi.org/10.1007/s13762-021-03461-5> (SCIE; 3.519)
- Velidandi, A., Pabbathi, N. P. P., **Dahariya, S.**, & Baadhe, R. R. (2021). Green synthesis of novel Ag–Cu and Ag–Zn bimetallic nanoparticles and their in vitro biological, eco-toxicity and catalytic studies. **Nano-Structures & Nano-Objects**, 26, 100687. <https://doi.org/10.1016/j.nanoso.2021.100687> (Scopus)
- Chinta, M. L., Velidandi, A., Pabbathi, N. P. P., **Dahariya, S.**, & Parcha, S. R. (2021). Assessment of properties, applications and limitations of scaffolds based on cellulose and its derivatives for cartilage tissue engineering: A review. **International journal of biological macromolecules**, 175, 495-515. <https://doi.org/10.1016/j.ijbiomac.2021.01.196> (SCIE; 8.025)

Book Chapters

- Dahariya, S., & Nagarjuna, V. (2021). Biomaterials in Tissue Engineering and Regenerative Medicine: In Vitro Disease Models and Advances in Gene-Based Therapies. In Biomaterials in Tissue Engineering and Regenerative Medicine (pp. 485-504). Springer, Singapore. https://doi.org/10.1007/978-981-16-0002-9_14
- Swati Dahariya, Sanjeev Raghuwanshi and Ravi Gutti (2023). Systems Biology Approaches Towards Understanding Human Long Non-Coding RNA Hematopoietic Cells. <https://www.appleacademicpress.com/hematopoiesis-biochemical-cellular-molecular-and-genomic-perspectives-/9781774914724>
- Swati Dahariya, Aditya Velidandi, Dusyant Kumar Gautam, Ravi Gutti and Indira Paddibhatla (2023) LncRNAs in Types of Leukemia. <https://www.appleacademicpress.com/hematopoiesis-biochemical-cellular-molecular-and-genomic-perspectives-/9781774914724>

EDUCATION

Ph.D.: Biochemistry, February 2022

Biochemistry University of Hyderabad – Hyderabad, India

Master of Science: Biochemistry, July 2013

Pt. Ravishankar Shukla University – Raipur, India

Bachelor of Science: Food Science and Quality Control, July 2011

Pt. Ravishankar Shukla University – Raipur, India

HONORS

- Awarded “**Overseas Trainee Travel Fellowship** (TTF19)” of SCSS-ISCT Joint Symposium 2019, Singapore “Frontiers in Cell Therapy”. (International)
- Bestowed government funded scholarship program for “**Newton Bhabha Placement Program**” 2018-19 to perform research at the University of Cambridge, UK.
- Senior (Junior) Research Fellowship awarded by **CSIR-UGC-NET** (Council of Scientific and Industrial research) 2016 with rank of 135.
- **GATE** Student scholarship 2016 from Ministry of Human Resource Development with rank of 2876.

ABSTRACTS, POSTERS PRESENTATION

- **Oral Presentation:** Circadian controlled gene nocturnin is a potential link between liver steatosis in fetuses and offspring exposed to the intrauterine environment of preeclampsia. Session at SRI's 72nd Annual Scientific Meeting in Charlotte, NC, United States (Mar 2025)
- **Poster Presentation:** Megakaryoblastic Leukemia: A Study on Novel Role of Clinically Significant Long non-coding RNA Signatures in megakaryocyte development and immune regulation during Treatment with Phorbol Ester” during Keystone meeting on Advances in Cancer Immunotherapy (July 2020)
- **Poster Presentation:** Treatment of Megakaryoblastic Leukemia Dami Cells with Phorbol Ester Regulates the Long

non-coding RNA Signature" at IACRLRD at Seoul from November 2019.

- **Poster Presentation:** The long non-coding RNA landscape of blood cells: hematopoietic stem cells, erythroblast, and megakaryocyte" at SCSS-ISCT Joint Symposium (Nov 2019).
- **Poster Presentation:** Generation of Megakaryocytes from patient derived hiPSCs and studying the role of lncRNAs, (Biological Transactions: Molecules to Organisms 2019) at Indian Institute of Science (IISc), Bangalore (January 2019).

IJMS REVIEWER @ MDPI

"I am serving as a dedicated peer reviewer for the International Journal of Molecular Sciences (IJMS) published by MDPI, demonstrating my commitment to contributing to the advancement of scientific research and ensuring the quality of scholarly publications."

"My role as an IJMS reviewer involved critically evaluating research manuscripts, providing constructive feedback to authors, and upholding the rigorous standards of academic publishing."

ADDITIONAL INFORMATION

"My ability to collaborate seamlessly with multidisciplinary teams, combined with my proven track record of delivering high-quality results under tight deadlines, makes me a valuable asset poised to excel in a dynamic professional environment."

REFERENCES

1. Dr. Ravi Kumar Gutti, PhD, FTAS (Adviser) Professor
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Profile URL: <https://uohyd.irins.org/profile/71257>

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4. Dr. Manu Banadakoppa Ph.D. (Assistant Professor)
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6. Dr. Shaji R Velayudhan Ph.D.
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SKILLS

- Research & Analysis
 - Judgment
 - Inference
 - Evaluation
 - Resilience
 - Quantification
 - Curiosity
- Letter Writing
 - Peer Review
 - Legal Writing
 - Student Support
 - Group Activities
 - Postoperative Care

LANGUAGES

English



Hindi



