Curriculum Vitae

Shrikanth Gadad, Ph.D.

CPRIT Scholar in Cancer Research
Associate Professor
Department of Medicine and Oncology
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Contact Information

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Education & Training

Ph.D. (Molecular Biology and Genetics), Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, India, 2010

Work Experience

Assistant Professor; Texas Tech University Health Sciences Center, El Paso, Texas; 2018 – 2025

Adjunct Assistant Professor; UT Southwestern Medical Center, Dallas, Texas; 2018-2020

Assistant Instructor; University of Texas Southwestern Medical Center, Dallas, Texas; 2016 - 2017

Postdoctoral researcher, University of Texas Southwestern Medical Center and Cornell University, 2010 – 2015; Mentor: W. Lee Kraus, Ph.D.

Graduate student, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, India, 2004 – 2010, Mentor: Tapas K. Kundu, Ph.D.

Professional Memberships

- Endocrine Society
- American Association for Cancer Research
- American Chemical Society
- Society of Biological Chemists (India)

Honors & Awards

2022 Chair (SY051) Digging Deeper: Use of Omics to Improve Therapy, Endocrine Society Annual Meeting; San Francisco; Atlanta; June 11-14, 2022
2022 Mentor, Mentoring, and Poster Reception, Endocrine Society Annual Meeting; Atlanta; June 11-14, 2022
2022 Judge, Mentoring, and Poster Reception, Endocrine Society Annual Meeting; Atlanta; June 11-14, 2022
2021- Topic Editor: *Cancers* (MDPI)
2020- Associate Editor, *BMC Cancer*, (Springer Nature)
2020- Academic Editor, *PLOS One*
2020- Associate Editor, *BMC Molecular and Cell Biology*, (Springer Nature)
2020- Member of reviewer board, *Cells* (MDPI)
2020 Chair (OR12. Steroid and Nuclear Receptors), Endocrine Society Annual Meeting; San Francisco; March 28-31, 2020
2019 Judge, Presidential Poster Competition (Steroid Hormones and Receptors), Endocrine Society Annual Meeting; New Orleans; March 23-26, 2019
2019 Moderator, Guided Poster Session (Steroid Hormones and Receptors), Endocrine Society Annual Meeting; New Orleans; March 23-26, 2019
2019 Judge, Mentoring and Poster Reception, Endocrine Society Annual Meeting; New Orleans; March 23-26, 2019
2019 Chair (OR09. Steroid Hormone Biology in Physiology and Disease), Endocrine Society Annual Meeting; New Orleans; March 23-26, 2019
2019 Oral presentation, Endocrine Society Annual Meeting; New Orleans; March 23-26, 2019
2019 Eugenia Rosemberg Outstanding Abstract Award, Endocrine Society Annual Meeting; New Orleans; March 23-26, 2019
2018 Oral Presentation; Cold Spring Harbor Laboratory; Regulatory and Noncoding RNAs; Cold Spring Harbor Laboratories, NY; May 15-19
2017 Travel Award for the 2017 FASEB Conference on Rapid Signaling and Genomic Steroid Hormone Actions in Health and Disease.
2017 Recruitment of First-Time, Tenure-Track Faculty Member Award from CPRIT
2016 Oral Presentation; Cold Spring Harbor Laboratory; Regulatory and Noncoding RNAs; Cold Spring Harbor Laboratories, NY; August 23-27
2016 Jon Shevell Young Scientist Travel Scholarship from Komen Foundation; Keystone Symposia: Nuclear Receptors, Full Throttle in Snowbird, UT, January 10-14
2015 Keystone Symposia Oral presentation; Long Noncoding RNAs: From Evolution to Function; Keystone, Colorado USA; March 15-20, 2015
2015 ENDO presidential poster competition winner; Endocrine Society Annual Meeting; San Diego, California; March 5-8, 2015
2015 ENDO featured poster; Endocrine Society Annual Meeting; San Diego, California; March 5-8, 2015
2015 ENDO Outstanding Abstract Award; Endocrine Society Annual Meeting; San Diego, California; March 5-8, 2015
2012 Susan G Komen postdoctoral fellowship; 2013-2016
2012 Keystone Symposia Scholarship; Nuclear Receptor Matrix: Reloaded; Vancouver, Canada; April 15-20, 2012

2011 Teaching Assistant, Summer Short Course on Eukaryotic Gene Expression; Cold Spring Harbor Laboratories, New York; July 26 - August 15, 2011
2008 IUBMB Travel award; 33rd FEBS Congress and 11th IUBMB Conference, Biochemistry of Cell Regulation; Athens, Greece; June 28 – July 3, 2008
2006 FAOBMB Travel award: 20th IUBMB International Congress of Biochemistry and Molecular Biology and 11th FAOBMB Congress, 79th Ann Meeting of Japanese Biochemical Society, 29th Ann Meeting of Mol Biol Society of Japan, Kyoto, Japan
2003 Junior and Senior Research Fellowship; Council of Scientific & Industrial Research, Govt. of India

Research Focus

Dr. Gadad's lab is intrigued by the fact that over 70 percent of the genome is transcribed. The entire mammalian genome encodes the information necessary for the efficient, proper, and faithful regulation of biological processes in a timely manner. Aberrant changes in this encoded information can lead to diseases. Dr. Gadad's lab has a long-standing research interest in understanding the genetic, epigenetic, and environmental factors responsible for abnormal biological processes. Recent advances in next-generation sequencing technologies have revealed novel genes that are transcribed with limited coding capability and have recently evolved. His lab utilizes state-of-the-art molecular, genetic, biochemical, and genomic approaches to investigate the role of these genes, uncover their mechanisms of action, and discover their potential for therapeutic intervention in diseases.

Selected publications

1. Nhim V, Bencomo-Alvarez AE, Alvarado L, Kilcoyne M, Gonzalez M, Olivas IM, Gaur S, Mulla Z, Dwivedi AK, **Gadad SS[a]** and Eiring AM[a]. (2024) Racial/Ethnic Differences in the Clinical Presentation and Survival of Breast Cancer by Subtype. *Frontiers in Oncology*. 14:1443399. **[a]Corresponding authors**
2. Reid VA, Ramos EI, Veerapandian R, Carmona A, **Gadad SS[a]**, Dhandayuthapani S[a]. (2024) Differential Expression of lncRNAs in HIV Patients with TB and HIV-TB with Anti-Retroviral Treatment. *Noncoding RNA*. 10(4):40. **[a]Corresponding authors**
3. Hidalgo A, Singh V, Mangadu T, Guha D, Ramos E, Das C, **Gadad S**. (2024) Characterization and expression of the microtubule associated protein tau gene isoforms and their impact on clinical outcomes in glioma patients. *Computational and Structural Biotechnology Reports*. 2024/12; 1:100002.
4. Soiffer J, Fife A, **Gadad S**, Laurini J, Elvin J, Isani S, Lin K. (2024) Durable partial response to pembrolizumab, lenvatinib, and letrozole in a case of recurrent uterine carcinosarcoma with ESR1 gene amplification. *Gynecologic Oncology Reports*. 2024/08; 54:101426.
5. Veerapandian R, **Gadad SS**, Jagannath C, Dhandayuthapani S. (2024) Live Attenuated Vaccines against Tuberculosis: Targeting the Disruption of Genes Encoding the Secretory Proteins of Mycobacteria. *Vaccines (Basel)*. 2May 12;12(5). doi: 10.3390/vaccines12050530.
6. Guha D, Singh V, Nandi S, Ramos EI, **Gadad SS**, Das C. (2024) ZMYND8 Is a Regulator of Sonic Hedgehog Signaling in ATRA-Mediated Differentiation of Neuroblastoma Cells. *Biochemistry*. doi: 10.1021/acs.biochem.4c00145.

7. Gaytan SL, Beaven E, **Gadad SS** and Nurunnabi M (2023) Progress and prospect of nanotechnology for cardiac fibrosis treatment. *Interdisciplinary Medicine*, 1(4):e20230018.
8. Reid V, Sedano MJ and **Gadad SS** (2023) Long Non-Coding RNA-Regulated Alternative Splicing Modulates Key Cancer Pathway in Lung Adenocarcinoma. *Clinical and Translational Discovery*, 3:e184.
9. Ramos EI, Veerapandian R, Das K, Chacon JA, **Gadad SS**[a] and Dhandayuthapani S[a] (2023) Pathogenic mycoplasmas of humans regulate the long noncoding RNAs in epithelial cells. *Noncoding RNA Research*, 8(3):282-293. **[a]Corresponding authors**
10. Veerapandian R, Ramos EI, Vijayaraghavan M, Sedano MJ, Carmona A, Chacon JA, **Gadad SS**[a] and Dhandayuthapani S[a] (2023) *Mycobacterium smegmatis* secreting Methionine Sulfoxide Reductase A (MsrA) Modulates Cellular processes in Mouse macrophages. *Biochimie*, 211:1-15. **[a]Corresponding authors**
11. Yang B, Sedano MJ and **Gadad SS[a]** (2022) Single-Cell Nucleic Acid Sequencing Reinforces to Reveal Signal-Dependent Pathways Contributing to Cellular Heterogeneity. *Clinical and Translational Discovery*, 2:e120. doi: doi.org/10.1002/ctd2.120. **[a]Corresponding author**
12. Kye Y, Nagineni L, **Gadad S**, Ramirez F, Riva H, Fernandez L, Samaniego M, Holland N, Yeh R, Takigawa K, Dhandayuthapani S and Chacon J (2022) The Identification and Clinical Applications of Mutated Antigens in the Era of Immunotherapy. *Cancers (Basel)*, 14(17):4255.
13. Adhikary S, Singh V, Choudhari R, Yang B, Adhikari S, Ramos EI, Chaudhuri S, Roy S, **Gadad SS[a]** and Das C[a] (2022) ZMYND8 suppresses MAPT213 LncRNA transcription to promote neuronal differentiation. *Cell Death and Disease*, 13(9):766. **[a]Corresponding authors**
14. Kim DS, Camacho CV, Setlem R, Kim K, Malladi S, Hou TY, Nandu T, **Gadad SS[a]** and Kraus WL[a] (2022) Functional Characterization of lncRNA152 as an Angiogenesis-Inhibiting Tumor Suppressor in Triple-Negative Breast Cancers. *Molecular Cancer Research*, MCR-22-0123. doi: 10.1158/1541-7786.MCR-22-0123. **[a]Corresponding authors**
15. Le I, Dhandayuthapani S, Chacon J, Eiring AM[a] and Gadad **SS[a]** (2022) Harnessing the Immune System with Cancer Vaccines: From Prevention to Therapeutics. *Vaccines (Basel)*, 21;10(5):816. **[a]Corresponding authors**
16. Adhikari S, Bhattacharya A, Adhikary S, Singh V, **Gadad SS**, Roy S and Das C (2022) The paradigm of drug resistance in cancer: an epigenetic perspective. *Biosci. Rep*. 42(4):BSR20211812.
17. Ramos EI, Yang B, Vasquez YM, Lin KY, Choudhari R and **Gadad SS** (2021) Characterization of testis-specific LINC01016 gene reveals isoform specific roles in controlling biological processes. *Journal of the Endocrine Society* 27;5(11):bvab153.
18. Ramos EI, Kishore D, Harrison AL, Garcia A, **Gadad SS[a]** and Dhandayuthapani S[a] (2021) Mycoplasma genitalium and M. pneumoniae regulate a distinct set of protein-coding genes in epithelial cells. *Frontiers in immunology*, 11;12:738431. **[a]Corresponding authors**
19. Mondal P*, **Gadad SS***, Adhikari S, Ramos EI, Sen S, Prasad P and Das C (2021) TCF19 and p53 regulate transcription of TIGAR and SCO2 in HCC for

mitochondrial energy metabolism and stress adaptation. *FASEB J*. Sep;35(9):e21814. ***Contributed equally**.

20. Adhikary S, Roy S, Chacon J and **Gadad SS[a]** and Das C[a] (2021) Implication of enhancer transcription and eRNAs in cancer. *Cancer Research*, 81(16):4174-4182. **[a]Corresponding authors**
21. **Gadad SS[a]**, Camacho CV, Malladi VS, and Kraus WL[a] (2021) Poly(ADP-ribose) Polymerase-1 Regulates Estrogen-Dependent Gene Expression in Estrogen Receptor α-Positive Breast Cancer Cells. *Molecular Cancer Research*, 19(10):1688-1698. **[a]Corresponding authors**
22. Mukherjee S*, Adhikary S*, **Gadad SS***, Mondal P, Sen S, Choudhari R, Singh V, Adhikari S, Mandal P, Chaudhuri S, Sengupta A, Lakshmanaswamy R, Chakrabarti P, Roy S and Das C (2020) Suppression of poised oncogenes by ZMYND8 promotes chemo-sensitization. *Cell Death and Disease*, 11(12):1073. ***Contributed equally**.
23. Sedano MJ, Ramos EI, Choudhari R, Harrison AL, Reddy R, Lakshmanaswamy R, Zilaie M and **Gadad SS** (2020) Hypoxanthine phosphoribosyl transferase 1 is upregulated, predicts clinical outcome and controls gene expression in breast cancer. *Cancers (Basel).* 10;12(6): E1522.
24. Sedano MJ, Harrison AL, Zilaie M, Das C, Choudhari R, Ramos EI and **Gadad SS** (2020) Emerging Roles of Estrogen-Regulated Enhancer and Long Non-Coding RNAs. *Int. J. Mol. Sci.,* 21(10): E3711.
25. Choudhari R, Yang B, Rotwein P and **Gadad SS** (2020) Structure and expression of the long noncoding RNA gene MIR503 in humans and non-human primates. *Mol. Cell. Endocrinol*., 510:110819.