CV & Research Profile of Sonam Dhamija, PhD.

General Information

Name Dr. Sonam Dhamija

Nationality Indian

Affiliation Faculty of Life Sciences & Biotechnology
South Asian University (SAU)
Rajpur Road, Maidan Garhi
New Delhi-110068, India

www.researchgate.net/profile/Sonam_Dhamija

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University Education and scientific career

09/2025 – till date	**Assistant Professor,** South Asian University (SAU), New Delhi, India
11/2023 – till date	**DBT/ Wellcome Trust India Alliance Intermediate Fellow**, CSIR-Institute of Genomics and Integrative Biology (IGIB), New Delhi (In September 2025 moved to SAU)
07/2021 – 09/2025	**Assistant Professor,** Academy of Scientific and Innovative Research (AcSIR), New Delhi
11/2020 – 10/2023	**Ramalingaswami Fellow,** Institute of Genomics and Integrative Biology (IGIB), New Delhi
04/2020 – 07/2020	**Project Consultant,** Kusuma School of Biological Sciences (KSBS), IIT Delhi, New Delhi, India
09/2017 – 08/2019	**Postdoctoral Fellow,** Division of "RNA Biology & Cancer", DKFZ, Heidelberg & Division of Cancer Research, University Clinic Freiburg, Germany
09/2015 – 08/2017	**Cell Networks Postdoctoral Fellow,** Division of "RNA Biology & Cancer", DKFZ, Heidelberg & Division of Cancer Research, University Clinic Freiburg, Germany
06/2011 – 06/2015	**Postdoctoral Fellow (HiLF Project leader from 2013-14)**, Institute of Physiological Chemistry, Medical School Hannover (MHH), Hannover, Germany
05/2007 – 05/2011	**PhD (Dr. rer. nat.)**, Institute of Physiological Chemistry, Medical School Hannover (MHH), Germany. Thesis work entitled-"**Interleukin-1 activated post-transcriptional control affecting mRNA stability & translation**" Supervisor: Prof. Dr. Helmut Holtmann. *Grade:* Very Good (*magna cum laude*)
11/2006 – 03/2007	**Project Assistant**, Molecular Sciences Laboratory, National Institute of Immunology (NII), New Delhi, India
08/2004 – 09/2006	**MSc (Microbial Gene Technology)**, Department of Microbial Technology, Madurai Kamaraj University, Madurai, India. Master's Thesis entitled- "**Nanotherapeutics for Cancer**" carried out at ACTREC (Advanced Centre for Training, Research and Education in Cancer), Mumbai, India Supervisor: Prof. Dr. S. Shanmugasundaram. *Grade:* University Second Rank
10/2001- 06/2004	**BSc Biotechnology (Hons.)**, Amity Institute of Biotechnology, Ch. Charan Singh University, UP, India. *Grade:* First Class

Additional training and qualifications

03/2017	Bioinformatics workshop on Python and Git, University of Freiburg, Germany, March 9-10th, 2017
09/2010	State-approved Course (according to § 15 GenTSV) on **''Gene Technology, Biosafety and Biosecurity''** for project leaders**,** MHH, Hannover, Germany, Sept 14-15th, 2010

Awards & academic achievements

2025	**Invited Speaker** at the India **EMBO** lecture course ''RNA-protein complexes: from molecular assembly to physiological functions & disease'', NCCS, Pune, 24-28th February, 2025.
2023	**DBT/Wellcome Trust India Alliance Intermediate Fellowship 2023**
2023	**Invited Speaker** at the International Conference on Cancer Biology (ICCB), IIT Madras, Chennai, 14-16th September, 2023.
2021	**Review editor** at *Frontiers in Cell and Developmental Biology*
2020-2023	**Ramalingaswami fellowship,** Department of Biotechnology, Government of India
Since 2017	**Reviewer** for: *International Journal of Cancer, International Journal of Molecular Sciences, Science Signaling, Cells, Cancers, Plos One, Separation and Purification Reviews, Frontiers in Cell and Developmental Biology* and *The ncRNA Journal*
2016	**Invited Speaker** at the Montreal International Symposium on Angiogenesis and Metastasis (MISAM-2016), Montreal, Canada
2015-17	**CellNetworks Postdoctoral Fellowship** Cluster of Excellence Cellular Networks, Heidelberg, Germany
2012	Talk Prize, International Meeting of GRK 1591, Halle, Germany "Activation of post-transcriptional control mechanisms by the pro-inflammatory cytokine interleukin-1"
2006	University second rank, M.Sc. Microbial Gene Technology, Madurai Kamaraj University, Madurai, India

Research grants

2023-28	**DBT/Wellcome Trust India Alliance Intermediate Fellowship** (start from November 2023) Funding: ~3.6 crores INR
2023-26	**BRIC-NIBMG/ CSIR-IGIB collaborative grant** **Funding:** ~15 lakhs INR
2022-25	**DST SERB POWER Grant** (approved for funding in 04/2022) Funding: ~55 lakhs INR
2020-23	**Ramalingaswami re-entry fellowship 2019-20,** Department of Biotechnology, India. Funding: ~1 crore INR
2013-14	**Research Grant Award ('HiLF') for Early Career Scientists** from the Hannover Medical School, Germany. Funding**:** 20,000€ for an independent project

Peer-reviewed publications

Total number of published papers: **23**, First author papers: **7**, Last / corresponding author papers: **4**, shared first author contributions are underlined. *h-index*: **16**, i10-index: **17,** Total citations: **1739**, (Source: Google Scholar, September 2026).

1. Bhattacharya S, Manjari M, Ganesh V, Menon MB*, Dhamija S* (2026). 5-Iodotubercidin inhibits Epithelial to Mesenchymal Transition by inhibiting IKK/NFκB-dependent gene expression. ***J Biol Chem***, Article in press. *corresponding Citations: **0** / IF[2026]: **4.1**

2. Sharma K, Sharma H, Insan J, Ansari F, Roy A, Dhamija S, Menon MB * (2026). Septins regulate kinase-inhibitor induced micron-scale vacuolation. ***Exp Cell Res.***, 115103. Citations: **0** / IF[2026]: **3.5**

3. Salim U, Menon MB, **Dhamija S*,** Vivekanandan P*(2025). RNA G-quadruplexes regulate mammalian mirtron biogenesis. ***J Biol Chem***, 301(3): 108276. *corresponding Citations: **8** / IF[2025]: **4.1**

4. Pal J, Riester M, Ganner A, Ghosh A, **Dhamija S**, Mookherjee D, Voss C, Frew IJ, Kotsis F, Neumann-Haefelin E, Spang A, Diederichs S. (2025). Nonstop mutations cause loss of renal tumor suppressor proteins VHL and BAP1 and affect multiple stages of protein translation. ***Science Advances***, 11(7):eadr6375. Citations: **9** / IF[2025]: **13.9**

5. Jose S, Sharma H, Insan J, Sharma K, Arora V, Puranapanda S, **Dhamija S**, Eid N, Menon MB. (2025). Kinase Inhibitor-Induced Cell-Type Specific Vacuole Formation in the Absence of Canonical ATG5-Dependent Autophagy Initiation Pathway. ***Mol Cell Biol*****,** 45(3): 99-115. Citations: **4** / IF[2025]: **2.8**

6. Brahmbhatt HD, Chowdhary M, Gupta R, Priya A, Kundu A, Singh P, **Dhamija S**, Gupta A, Singh A (2024). Stem cell factor-mediated upregulation of SIRT1 protects melanin-deprived keratinocytes against UV-induced DNA damage in individuals with vitiligo. ***The FASEB Journal***,38(22):e70198. Citations: **3** / IF[2024]: **4.2**

7. Ghosh A, Riester M, Pal J, Lainde KA, Tangermann C, Wanninger A, Dueren UK, **Dhamija S**, Diederichs S (2024). Suppressive cancer nonstop extension mutations increase C-terminal hydrophobicity and disrupt evolutionarily conserved amino acid patterns. **Nature Communications**, Oct 25;15(1):9209. Citations: **11** / IF[2024]: **15.7**

8. Singhal K, **Dhamija S**, Mukerji M (2023). Exonized Alu repeats in the 3'UTR of a CYP20A1_Alu-LT transcript act as a miRNA sponge. BMC Research Notes, Mar 9; 16(1):32. Citations: **1 /** IF[2023]**: n.a.**

9. Kumar A, Goyal N, Saranathana N, **Dhamija S**, Saraswat S, Menon MB and Vivekanandan P (2022). The slowing rate of CpG depletion in SARS-CoV-2 genomes is consistent with adaptations to the human host. **Molecular Biology and Evolution**, 39(3):msac029. Citations: **27 /** IF[2020]**: 11.062**

10. Menon MB, Yakovleva T, Ronkina N, Suwandi A, Odak I, **Dhamija S**, Sandrock I, Hansmann F, Baumgärtner W, Forster R, Kotlyarov A, Gaestel M (2022). Lyz2-Cre-mediated genetic deletion of Septin7 reveals a role of septins in macrophage cytokinesis and Kras-driven tumorigenesis. **Frontiers in Cell and Developmental Biology,** 9:795798. https://doi.org/10.3389/fcell.2021.795798 Citations: **16 /** IF[2020]**: 6.684**

11. Pal J, Becker A, **Dhamija S**, Seiler J, Abdelkarim M, Sharma Y, Behr J, Meng C, Ludwig C, Kuster B & Diederichs S (2021). Systematic analysis of migration factors by MigExpress identifies essential cell migration control genes in non-small cell lung cancer. **Molecular Oncology,** 15:1797-1817. Citations: **19 /** IF[2020]**: 6.603**

12. **Dhamija S**, Yang CM, Seiler J, Myacheva K, Caudron-Herger M, Wieland A, Abdelkarim M, Sharma Y, Riester M, Groß M, Maurer J & Diederichs S (2020). A pan-cancer analysis reveals nonstop extension mutations causing SMAD4 tumor suppressor degradation. ***Nat Cell Biol***, 22: 999-1010. Citations: **37 /** IF[2019]**: 20.042**

13. **Dhamija S**, Becker AC, Sharma Y, Myacheva K, Seiler J and Diederichs S (2019). *LINC00261* and the adjacent gene *FOXA2* are epithelial markers and are suppressed during lung cancer tumorigenesis and progression. ***Non-coding RNA,*** 5 (1), 2. Citations: **22 /** IF[2022]**: 4.3**

14. Menon MB & **Dhamija S** (2018). Beclin 1 Phosphorylation - at the Center of Autophagy Regulation. ***Front Cell Dev Biol.*** 6:137. Citations: **436 /** IF[2018]**: 5.206**

15. **Dhamija S*** & Menon MB* (2018). Non-coding transcript variants of protein-coding genes - what are they good for? ***RNA Biol***, 15: 1025-1031. **Corresponding author* Citations:**124 /** IF[2017]**: 5.216**

16. Vučićević D, Gehre M, **Dhamija S**, Friis-Hansen L, Meierhofer D, Sauer S, Ørom UA (2016). The long non-coding RNA PARROT is an upstream regulator of c-Myc and affects proliferation and translation. ***Oncotarget*** (2016), 7: 33934-47. Citations: **9 /** IF[2016]**: 5.168**
17. **Dhamija S** & Diederichs S (2016). From junk to master regulators of invasion: lncRNA functions in migration, EMT and metastasis. ***Int J Cancer***, 139: 269-80. Citations: **313 / IF[2016]: 6.513**

18. Menon MB, **Dhamija S**, Kotlyarov A & Gaestel M (2015). The problem of pyridinyl imidazole class inhibitors of MAPK14/p38α-MAPK11/p38β in autophagy research. ***Autophagy*** 11: 1425-1427. Citations: **35 /** IF[2015]**: 9.108**

19. **Dhamija S**, Winzen R, Doerrie A, Behrens G, Kuehne N, Schauerte C, Neumann E, Dittrich-Breiholz O, Kracht M & Holtmann H (2013). Interleukin-17 (IL-17) and IL-1 activate translation of overlapping sets of mRNAs, including that of the negative regulator of inflammation, MCPIP1. ***J Biol Chem*** 288: 19250-19259. Citations: **37 /** IF[2013]**: 4.6**

20. Tiedje, C, Ronkina, N, Tehrani, M, **Dhamija, S**, Laass K, Holtmann H, Kotlyarov A & Gaestel M (2012). The p38/MK2-driven exchange between tristetraprolin and HuR regulates AU-rich element-dependent translation. ***PLoS Genet*** 8: e1002977 Citations: **287 /** IF[2012]**: 8.517**

21. **Dhamija S**, Kuehne N, Winzen R, Doerrie A, Dittrich-Breiholz O, Thakur BK, Kracht M & Holtmann H (2011). Interleukin-1 activates synthesis of interleukin-6 by interfering with a KSRP-dependent translational silencing mechanism. ***J Biol Chem*** 286: 33279-33288. Citations: **68 /** IF[2010]**: 4.773**

22. **Dhamija S**, Doerrie A, Winzen R, Dittrich-Breiholz O, Taghipour A, Kuehne N, Kracht M & Holtmann H (2010). IL-1-induced post-transcriptional mechanisms target overlapping translational silencing and destabilizing elements in IκBzeta mRNA.***J Biol Chem*** 285: 29165-29178. Citations: **48 /** IF[2010]**: 5.328**

23. Winzen R, Thakur BK, Dittrich-Breiholz O, Shah M, Redich N, **Dhamija S**,Kracht M & Holtmann H (2007). Functional analysis of KSRP interaction with the AU-rich element of interleukin-8 & identification of inflammatory mRNA targets. ***Mol Cell Biol* 27:** 8388-8400. Citations: **189 /** IF[2007]**: 6.420**

Manuscripts submitted or under preparation

1. *Research Article:* C15ORF48 is a TGFβ-induced microprotein-encoding bifunctional RNA with role in Epithelial-Mesenchymal Transition. Muskan Manjari, Sameera Puranapanda, Vaishnavi G, Janki Insan & **Sonam Dhamija*** (*corresponding author). *Under preparation*.

Book chapters

1. *Book Chapter:* **Dhamija S** & Menon MB. Long non-coding RNAs as scaffolds for multiprotein signalling complexes (2020). In "RNA Technologies" Springer Series Vol. 10: *The Chemical Biology of Long Noncoding RNAs,* 10: 131-147.
2. *Book Chapter:* **Dhamija S*** & Menon MB. Measuring lncRNA expression by Real time PCR (2021). Methods in Molecular Biology: Long non-coding RNAs in Cancer, 2348:93-111. *Corresponding author

Patents

1. Kundu B, Mishra A, Gupta P, Pandey AK, Pradhan P, Menon MB, Gomes J, Perumal V, **Dhamija S.** Primer sets, Biomarkers, Kit and Applications thereof (COVID-19). Pub. No: US 2022/0002824 A1- dated 06/01/22. US patent granted 2025.

Other Publications (non-peer reviewed)

1. Published preprint: Jose S, Sharma H, Insan J, Arora V, **Dhamija S**, Eid N, et al. Kinase inhibitor-induced cell-type specific vacuole formation in the absence of canonical ATG5-dependent autophagy. bioRxiv. 2023:2023.08.27.554994.

2. Published preprint: Mishra A, Pandey AK, Gupta P, Pradhan P, **Dhamija S**, Gomes J, Kundu B, Vivekanandan P, and Menon MB (2020). Mutation landscape of SARS-CoV-2 reveals five mutually exclusive clusters of leading and trailing single nucleotide substitutions. bioRxiv, 2020.2005.2007.082768.

3. Published Abstract*:* Moneke I, **Dhamija S**, Becker A, Jung M, Hauser A, Luebbert M, Passlick B & Diederichs S. P3. 13-32. Drug Sensitivity of Lung Adenocarcinoma Towards Inducers of Epigenetic Modifications. Journal of Thoracic Oncology. 2018. 13 (10), S989.

4. Published Abstract*:* Moneke I, **Dhamija S**, Becker AC, Jung M, Hauser AT, Luebbert M, Passlick B & Diederichs S. Sensitivität des Adenokarzinoms der Lunge für epigenetisch aktive Wirkstoffe. Zentralblatt für Chirurgie-Zeitschrift für Allgemeine, Viszeral-, Thorax-und Gefäßchirurgie. 2018. 143: S 01-V209.

5. Published Abstract*:* Behrens G, Winzen R, Dörrie, **Dhamija S**, Holtmann H. Functional characteristics of a translational silencing element in the mrna of Ικbζ. 2015. The FEBS Journal. 281.18.

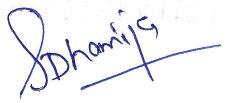
6. Published Abstract*:* **Dhamija S**, Winzen R, Doerrie A, Behrens G, Kuehne N Schauerte C, Neumann E, Dittrich-Breiholz O, Kracht M, Holtmann H. Translational activation of anti-inflammatory RNase MCPIP1 by the pro-inflammatory cytokines IL-1 and IL-17. CSHL meeting on 'Translational Control' - Cold Spring Harbor, New York, U.S.A., 2012.

7. Published Abstract*:* **Dhamija S**, Doerrie A, Winzen R, Dittrich-Breiholz O, Taghipour A, Kuehne N, Kracht M & Holtmann H. IL-1-induced post-transcriptional mechanisms target overlapping translational silencing and destabilizing elements in IκBζ mRNA CSHL meeting on 'Translational Control' - Cold Spring Harbor, New York, U.S.A., 2010. p130.

List of Posters & Talks

- **INVITED TALK: Dhamija S.** When non-coding becomes coding: a facet of translational control. The **India EMBO lecture course** ''RNA-protein complexes: from molecular assembly to physiological functions & disease'', NCCS, Pune, Maharashtra, 24-28th February, 2025.
- TALK: **Mazumder A. and Dhamija S.** Cytosolic enhancer RNAs as potential micropeptide encoders. **BRIC-NIBMG and CSIR-IGIB Conclave 2025**, BRIC- National Institute of Biomedical Genomics, West Bengal, 05-06th May, 2025.
- POSTER: Sayari Bhattacharya, Muskan Manjari, Manoj B. Menon & **Sonam Dhamija**. 5-Iodotubercidin as an inhibitor of Epithelial to Mesenchymal transition. **International Symposium on Mitochondria, Cell Death, and Human Diseases**. JNU, New Delhi, 17th –18th February 2025.
- TALK: **Mazumder A. and Dhamija S.** Understanding the cytoplasmic role of enhancer RNAs in cancer progression. **BRIC-NIBMG and CSIR-IGIB Conclave 2024**, CSIR- Institute of Genomics and Integrative Biology (IGIB), New Delhi, 19th-20th April, 2024.
- POSTER: Himanshi Sharma, Susan Jose, Janki Insan, Khushboo Sharma, Varun Arora, Sameera Puranapanda, **Sonam Dhamija**, Nabil Eid and Manoj B. Menon. SB202190-induced cell-type specific vacuole formation is independent of canonical ATG5-dependent autophagy initiation pathway. **27th Meeting on Signal Transduction**, Leonardo Hotel Weimar, Germany, 4th-6th November 2024.
- **Published interview:** For *Eureka* which is an online scientific newsletter by Sunandan Divatia School of Science, NMIMS, Mumbai, in a special issue **"Empowering Diversity: Perspectives from Indian Women in Science", March 2024 (**https://eurekasdsos.wordpress.com/2024/03/27/special-issue-issue-9/).
- **Invited TALK: Dhamija S.** Coding and non-coding RNAs. **Genomics towards better health**, University of Kashmir, Srinagar, 22-23rd September, 2023.
- **INVITED TALK: Dhamija S.** Breaching protein-coding non-coding boundaries in cancer and beyond. **International Conference on Cancer Biology (ICCB)**, IIT Madras, Chennai, 14-16th September, 2023.
- POSTER: Janki Insan, Sameera Puranapanda, Manoj B. Menon & **Sonam Dhamija**. Mining transcriptomic datasets to uncover EMT-associated long non-coding RNAs in Cancer. **ICCB**, IIT Madras, Chennai, 14-16th September, 2023.
- TALK: **Dhamija S.** Breaching protein-coding non-coding boundaries in cancer & beyond. **NIBMG-IGIB Conclave-2023**, National Institute of Biomedical Genomics, West Bengal, 06th-08th July 2023.
- TALK: **Dhamija S.** Junk or no junk- decoding messages in the human genome. **CSIR-IGIB Open Day**, IGIB, New Delhi, 22nd April 2022.
- TALK: **Dhamija S.** A pan-cancer analysis reveals nonstop extension mutations causing SMAD4 tumor suppressor degradation. **Science@DKFZ series**, DKFZ, Heidelberg, Germany, October, 2020.
- TALK: **Dhamija S.** Non-STOP mutations. **CSIR-Institute of Genomics and Integrative Biology (IGIB)**, Delhi, India, 2020.
- **Invited TALK**: **Dhamija S.** Non-STOP mutations: blurring the lines between coding and non-coding regions in cancer. **Guest Lecture** – **South Asian University**, Delhi, India, 2020.
- POSTER: Yang CM*, **Dhamija S*,** Caudron-Herger M, Wieland A, Myacheva K, Abdelkarim M, Sharma Y, Seiler J, Maurer J & Diederichs S. A pan-cancer analysis reveals Nonstop Mutations causing SMAD4 tumor suppressor degradation. **Deutsches Konsortium für Translationale Krebsforschung (DKTK) Retreat** - DKFZ, Heidelberg, Germany, 2018.

- TALK: **Dhamija S.** A pan-cancer analysis reveals Nonstop Mutations causing SMAD4 tumor suppressor degradation **Seminar Series "Functional and Structural Genomics"** – DKFZ, Heidelberg, Germany, 2018.
- TALK: **Dhamija S.** Long non-coding RNAs in EMT and Metastasis. **Thoracic Surgery Research Meet"** – University clinic Freiburg, Freiburg, Germany, October 2016
- **INVITED TALK: Dhamija S.** LncRNAs in metastasis and epigenetic regulation: MALAT1 story and beyond. **Montreal International Symposium on Angiogenesis and Metastasis (MISAM-2016) - "Treating Disseminated Cancer by Targeting the Epigenome"**, Montreal, Canada June 15 -17, 2016.
- TALK: **Dhamija S.** Long non-coding RNAs in EMT and Metastasis. **SFB 850 Seminar "Cancer and Development"** – Albert-Ludwigs-University, Freiburg, Germany, 2016.
- POSTER: **Dhamija S**, Winzen R, Dittrich-Breiholz O, Menon MB, Schwarzer A, Dork-Bousset T, Kotlyarov A, Gaestel M & Holtmann H. Long non-coding RNAs and their role in epithelial to mesenchymal transition. **Symposium- '50 Years of Scientific Excellence in Medicine at MHH'** - Hannover, Germany, 2015.
- TALK: **Dhamija S.** Translational activation of anti-inflammatory RNase MCPIP1 by the pro-inflammatory cytokines IL-1 and IL-17. "**Translational Control' Cold Spring Harbor Laboratory, Cold Spring Harbor, New York**, USA, September 4-8th, 2012.
- TALK: **Dhamija S.** Activation of post-transcriptional control mechanisms by the pro-inflammatory cytokine interleukin-1. **International meeting GRK1591-** '**Posttranscriptional Control of Gene Expression - Mechanisms and Role in Pathogenesis'** - Halle, Germany, 2012.
- POSTER: **Dhamija S**, Winzen R, Thakur BK, Dittrich-Breiholz O, Kracht M & Holtmann H. Involvement of KSRP and TTP in the Degradation of mRNAs for Interleukin-8 and other Inflammatory Proteins. **Summer school 'Signaling and Immunity'** - Hannover, Germany, 2008.



Date: 31.10.2026 Dr. Sonam Dhamija