**Pranita P. Sarangi, BVSc&AH, PhD**

Associate Professor,

Department of Biological Sciences and Bioengineering (BSBE),

Indian Institute of Technology Roorkee (IIT Roorkee), India

Co-Founder and Director:Viagnosis Technologies Private Limited (An Academic Start up)

*|Email: pranita.sarangi@bt.iitr.ac.in | Mobile: 91-9634244437*

*LinkedIn:* [*https://www.linkedin.com/in/pranita-sarangi-87a3a527/*](https://www.linkedin.com/in/pranita-sarangi-87a3a527/)

**Research Interest**

To understand the role of cell adhesion receptors such as integrins and associated signaling molecules in the functional plasticity of innate immune cells under physiological and pathological conditions.

**Education**

**2008:** Ph.D. Comparative and Experimental Medicine, CVM, University of Tennessee, USA

**2002**: BVSc & AH, College of Veterinary Science and Animal Husbandry, OUAT, India

Professional Experience:

08/20 - Present Associate Professor, Department of BSBE, IIT Roorkee, India

03/14 - 08/20 Assistant Professor, Department of BSBE, IIT Roorkee, India

**03/13 - 09/18** **Special Volunteer**, NIDCR/National Institute of Health, Bethesda, MD, USA

**07/11 - 02/13** **Research Fellow**, NIDCR/National Institute of Health, Bethesda, MD, USA

**04/08 - 07/11** **Post-Doctoral Research Associate**, University of Rochester, Rochester, NY, USA

**08/03 - 03/08** **Research Assistant**, University of Tennessee, Knoxville, TN

**02/03 - 07/03** **Junior Veterinary Officer**, Government of Odisha, India

**06/02 - 01/03** **Veterinary Extension Officer**, Heifer International/ India, Odisha Task Force Office.

Published Peer Reviewed Research Articles:

<https://scholar.google.com/citations?user=g1tv1MYAAAAJ&hl=en>

1. Dalpati, N, Rai S, Sharma P, **\*Sarangi PP**.(2024) Integrins and Integrin-Driven Secretory Pathways as Multi-dimensional Regulators of Tumor-Associated Macrophage Recruitment and Reprogramming in Tumor Microenvironment.  **Matrix Biology-** *Special Issue-Integrin regulation of the cell secretome to modulate the tissue microenvironment*  Advance online 5December 2024
2. Kumar P, Rai SK, \***Sarangi PP**. (2024**)** An *In-silico* study reveals that a C-terminal fragment of the adhesion protein Fibulin7 (Fbln7-C) regulates the activation of integrin α5β1 through dynamics of VWA and the hybrid domain in the β1 subunit.**Journal of Bimolecular Structure and Dynamics.** Nov 23:1-20
3. Dalpati, N, Rai S, Dash S, Kumar P, Singh D, **\*Sarangi PP**. (2024) Integrin α5β1 and αvβ3 differentially participate in the recruitment and reprogramming of Tumor-Associated Macrophages in the In vitro and In vivo models of breast tumor**. Journal of Immunology.** 213(10): 1553-1568
4. Rai SK, Kumar P,\***Sarangi PP** (2024) Integrin Receptors as Essential Players in Macrophage Biology. 2024. *ImmuneCONNECT*. Annual Newsletter of Indian Immunology Society.
5. Kumar P, Sharma P, Singh D, **\*Sarangi PP.** (2024).Unraveling the Molecular Basis for Effective Regulation of Integrin α5β1 for Enhanced Therapeutic Interventions **Biochemical and Biophysical Research Communications** 19 November 2024, 150627
6. Gupta S, Dalpati N, Rai SK,\***Sarangi PP.**(2024)A synthetic bioactive peptide of the C terminal fragment of adhesion protein Fibulin7 attenuates the inflammatory functions of innate immune cells in LPS induces systemmic inflammation. **Inflammation Research**. 5th June. ***(Highlighted in the CURRENT SCIENCE, VOL. 127, NO. 3, 10 AUGUST 2024 Pg. 268-269, Published by Indian Academy of Sciences and Current Science Association)***
7. Dash SP, Gupta S, \***Sarangi PP.** (2024**)**Monocyte and Macrophages: Origin, Homing, Differentiation, and Functionality during Inflammation. **Heliyon-Cell Press**.Apr30; 10 (8): e29686.
8. Dalpati N, Rai SK, Singh D, Dash SP, Sarangi SS, Nayak- M, \***Sarangi PP.**(2023)Homoeopathic medicines modulate inflammatory functions and adhesion receptor expression in human blood cells: An *in vitro* study. **Indian Journal of Research in Homeopathy**. 17 (3), 153-166,
9. Rai S, Singh S, \***Sarangi PP.**Role of RhoG as a Regulator of Cellular Functions: Integrating Insights on Immune Cell Activation, Migration, and Functions.(2023) **Inflammation Research**. Jul;72 (7):1453-1463.
10. Gupta S, \***Sarangi PP.**(2023)Inflammation Driven Metabolic Regulation and Adaptation in Macrophages. **Clinical Immunology**.  Jan :246:109216. Epub 2022 Dec 24.
11. Dalpati N, Jena S, Jain S, \***Sarangi PP. (**2022)Yoga and Meditation, as Essential tool to Alleviate Stress and Enhance Immunity to Emerging Infections: A Perspective on the Effect of COVID-19 Pandemic on Students. **Brain, Behavior, and Immunity-Health**. 2022. Epub 2022 Jan 19
12. Dash SP, Chakraborty P, \***Sarangi PP.** (2021). Inflammatory Monocytes and Subsets of Macrophages with Distinct Surface Phenotype Correlate with Specific Integrin Expression Profile During Murine Sepsis. **Journal of Immunology.**Dec1;207(11):2841-2855 ***Highlighted in Nature-India. https://www.nature.com/articles/d44151-022-00015-7***
13. Dipankar P, Kumar P, \***Sarangi PP***. In silico* identification and characterization of small-molecule inhibitors specific to RhoG/Rac1 signaling pathway **Journal of Bimolecular Structure and Dynamics.**2021 Dec 8
14. Gupta S, Rouse BT, \***Sarangi PP.**Did climate change influence the emergence, transmission, and expression of the COVID-19 Pandemic. **Frontiers in Medicine**. 2021 Dec 8.
15. Dipankar P, Kumar P, Dash SP, \***Sarangi PP.** (2021) Functional and Therapeutic Relevance of Rho GTPases in Innate Immune Cell Migration and Function During Inflammation: An *In-silico* perspective**. Mediators of Inflammation-** Feb 13
16. Dash SP, Dipankar P, Burange, PS, \*Rouse BT, \***Sarangi PP**. (2021) Climate Change: How it Impacts the Emergence, Transmission, Resistance and Consequences of Viral Infections in Animals and Plants**. Critical Reviews in Microbiology**.Feb 11;1-16.
17. Chakraborty P, Dash SP, Dalapati N, Kumar P, Jain D, \***Sarangi PP**. (2020) A C-Terminal Fragment of Adhesion Protein Fibulin-7 Inhibits Growth of Murine Breast Tumor by Regulating Macrophage Reprogramming. 2020 April 16. **The FEBS Journal. *Highlighted in a commentary in the FEBS journal. Selected as one of the nine EDITOR’s Choice Article-2021 articles.***
18. Chakraborty P, Bhan C, Dalpati N, Kumar P, Dash SP, \***Sarangi PP**.(2020**).** C-terminal fragment of adhesion protein Fibulin7 improves survival in endotoxemic mice by regulating neutrophil migration and functions**. CYTOKINE**. 131,1551132.
19. Chakraborty P, Dash SP, \***Sarangi PP**. (2020) Fibulin-7: The adhesion protein with multidimensional functions and implications in therapeutics. **Molecular Medicine**. 26 (47), 1-7
20. Chakraborty P, Dipankar P, Dash, SP, Priya, Srivastava S, Dhyani R, Navani N, Sharma D,\***Sarangi PP. (**2020) Electrostatic Surface Potential of Macrophages Correlates With Their Functional Phenotype. **Inflammation. 43**, 641–650.
21. Bhan C, Dash SP, Dipankar P, Kumar P, Chakraborty P, \***Sarangi PP. (2019) I**nvestigation of extracellular matrix protein expression dynamics using murine models of systemic inflammation. **Inflammation.** ;42(6):2020-2031.
22. \***Sarangi PP**,Chakraborty P, Dash SP, Ambatipudi K, Vega SD, Ikeuchi T, Wahl L, \*Yamada Y.(2018). Cell adhesion protein Fibulin-7 and its C-terminal fragment negatively regulate monocyte and macrophage migration and functions *in vitro* and *in vivo*, 32(9)**FASEBJournal. *Highlighted in Nature-Asia/India****.* \*Co-Corresponding author.
23. Verma A, Ghosh T, Bhushan B, Packirisamy G, Navani N, **Sarangi PP,** Ambatipudi K. (2019).Characterization of difference in structure and function of fresh and mastitic bovine milk fat globules. **PLoS One**, 14, e0221830.
24. **Sarangi PP**, Lee H, Lerman Y, Trzeciak A, Horrower EJ Rezaie AR, Kim M. (2017). Activated protein C attenuates severe inflammation by selectively targeting VLA-3high neutrophil subpopulation in mice **Journal of Immunology.** Oct 15;199(8):2930-2936.
25. Bhan C, Dipankar P, Chakraborty P**, \*Sarangi PP**.(2016). Role of Cellular events in the pathophysiology of sepsis**. Inflammation Research.** 2**,** 65 (11), 853-868.
26. Lerman YV, Lim, KH, Hyun YM, Falkner LK, Yang, H, Sonnenberg A, Pietropaoli A, **\*Sarangi PP**, \*Kim M. (2014). Sepsis lethality via exacerbated tissue infiltration and TLR-induced cytokine production by neutrophils is integrin α3β1-dependent. **Blood**. Dec;124; 3515-3523 **(*Highlighted in a Special Commentary in Blood****). \* Corresponding authors*
27. Hyun, YM, Ronen Sumagin, **Sarangi PP**, Elena Lomakina E, Overstreet MG, Baker C, Fowell DJ, Waugh R, Sarelius IG, Kim M. 2012. Uropod Elongation is a common final step in leukocyte extravasation from inflamed vessels. **Journal of Experimental Medicine**. Jul 2;209(7):1349-62.
28. **\*Sarangi PP**, Hyun YM, Lerman YV Lerman, Pietropaoli A, \*Kim M. 2012. Essential Role of integrin β1 in tissue homing of neutrophils during sepsis. **Shock**. Aug;38(3):281-7. *\*Corresponding authors.*
29. **Sarangi PP**, Lee Hyun-wook and Kim M. 2010. Activated Protein C action in inflammation. **British Journal of Hematology**. 148(6):817-33.
30. #Elphick GF, **#Sarangi PP**, Hyun Y, Hollenbaugh JA, Ayala A, Biffl WL, Chung H, Rezaie AR, McGrath JL, Topham DJ, Reichner JS, Kim M. 2009. Recombinant human activated protein C inhibits integrin-mediated neutrophil migration. **Blood**. 113(17):4078-85. #Co-First Author. ***(Cited in Nature’s Scibx Journal)***
31. **Sarangi PP**, Woo SR, Rouse BT. 2009. Modulation of herpes virus induced ocular immunopathology by anti-CD200R:Fc treatment. **Clinical Immunology.** 131(1):31-40.
32. **Sarangi PP**, Kim B, Rouse BT. 2008. Modulation of herpes virus induced ocular immunopathology by non-mitogenic anti-CD3 monoclonal antibody treatment. **Investigative Ophthalmology & Visual Science**. 49(12):5425-33.
33. **Sarangi PP**, Sehrawat S, Suvas S, Rouse BT. 2008. IL-10 and natural regulatory T cells: Two independent anti-inflammatory mechanisms in HSV induced ocular immunopathology. **Journal of Immunology**. 180(9):6297-306.
34. #Kim B, #**Sarangi PP**, Ahmet Kursat Azkur, Deshpande Kaistha S, Rouse BT. 2008. Enhanced viral immunoinflammatory lesions in mice lacking IL-23 responses. **Microbes and infections**. 10(3):302-312. #Co-First Author.
35. **Sarangi PP**, Kim B., Kurt-Jones E, Rouse BT. 2007. Innate recognition network driving the HSV induced corneal immunopathology: Role of Toll Pathway in the early inflammatory events in Stromal Keratitis. **Journal of Virology**. 81(20):11128-38.
36. Sehrawat S, Suvas S, **Sarangi PP**, Shuryawanshi A, Rouse BT. 2008. In vitro generated antigen specific CD4+CD25+Foxp3+ regulatory T cells control the severity of virus induced immunoinflammatory lesion. **Journal of Virology**. 82(14):6838-51.
37. Kim B, **Sarangi PP**, Y Lee Deshpande Kaistha S, Lee S, Rouse BT. 2006. Depletion of MCP-1 increases development of herpetic stromal keratitis by innate immune modulation. **Journal of Leukocyte Biology**. 80(6):1405-15. ***(Recommended in Faculty1000).***
38. Kim B, Suvas S, **Sarangi PP**, Lee S, Reisfield RA, Rouse BT. 2006. Vascular endothelial growth factor receptor2-based DNA immunization delays development of herpetic stromal keratitis by antiangiogenic effects. **Journal of Immunology**. 177(6):4122-31.
39. Rouse BT, **Sarangi PP**, Suvas S. 2006. Regulatory T cells in virus infections. **Immunological Reviews**. 212:272-86.
40. Suvas S, Kim B, **Sarangi PP**, Tone M, Waldmann, H, Rouse BT. 2005. In vivo kinetics of GITR and GITR ligand expression and their functional significance in regulating viral immunopathology. **Journal of Virology**. 79(18):11935-42.

**Book Chapters**

1. Bhan C, et al, \***Sarangi PP**. Chapter 17: Recent advances in imaging and analysis of cellular dynamics in real time. Book title:**Biotechnological Advances for Microbiology, Molecular Biology, and Nanotechnology**: *An Interdisciplinary Approach to the Life Sciences*. **Apple Academic Press.**
2. **Sarangi PP**, Rouse BT. Herpetic Keratitis. 2009. Levin and Albert Ocular Disease: Mechanisms and Management, **Elsevier,** Chapter 12

**Details of Patents**

* 1. US patent Publication **No. WO2015021165** A1 Publication date: Feb12, 2015

**Sponsored Research Projects/Extramural Competitive Funding**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl No** | **Title of Project** | **Funding Agency/Role** | **Amount In INR-Lakhs** | **Duration** |
| 1 | Role of cell-matrix interaction associated signaling in metabolic reprogramming of macrophages during sepsis | MoE-STARS  **(PI)** | **48+\*1=49** | 2023-2026  **Ongoing** |
| 2 | Role of Integrin and GTPases Associated Signaling Cascades in Innate Immune Cell Activation and Migration During Sepsis | SERB-CRG  **(PI)** | **38.32** | 2021-24  Completed |
| 3 | Internship program from the MoE aims to encourage and motivate youth to take up deeper studies of various topics related to IKS | IKS Division, MoE  **(Co-PI)** | **~13** | June-Nov-2023  Completed |
| 4 | Role of integrin receptors in tumor mediated immunoediting of macrophages | DBT-IYBA-2017 **(PI)** | **58.12+ \*5**  **=63.12** | 2018-21  Completed |
| 5 | Investigating the effects of yoga and meditation in combating anxieties and Possible Stress-Induced Immunosuppression in students post-lockdown | DST-SATYAM-COVID-19  **(PI)** | **6.6** | 2021-22  Completed |
| 6 | Immunmodularory effect of adhesion protein Fibulin7 (Fbln7) on immune cell activation and function | SERB-YSS **(PI)** | **32.5** | 2015-18  Completed |
| 7 | Cell Matrix interaction in Inflammation and sepsis | DBT-BIO-CARe  **(PI)** | **31.2+\*.57**  **=31.77** | 2014-17  Completed |
| 8 | Role of Extra cellular matrix protein Fibulin-7 in T cell activation and function | IIT Roorkee  **(PI)** | **10** | 2014-17  Completed |
| 9 | Climate Smart Buffalo Farming using Digital Smart Systems | **Bill and Melinda Gates Foundation**  **(Co-PI from IIT Roorkee)** | **$406,580**  (IIT Roorkee share)  Total Funding: Three Centres; CIRB, IITR, and Univ. of Adelaide): **$1.75 Million** | 2024-2029  **Ongoing** |
| 10 | Virtual Cow Care Using Cow Infra Red Imaging Analytical (CIRAN) System | SPV Foundation  **(Co-PI)** | **50.61** | 2023-2025  **Ongoing** |
| 11 | **Screening Bee sting for Antimicrobials against Bacterial Meningitis in Children** | DBT  (**Co-PI)** | **64.80** | 2021-2022  Completed |
| 12 | Lipidomics of bovine milk under different season and feed | DBT  **(Co-PI)** | **41.9** | 2015-18  Completed |
| 13 | Immunomodulators in small cell lung cancer: Basis for implementation of cancer immunotherapy | SERB -CRG  **(Co-PI)** | **36.16** | 2019-21  Completed |

\*Additional Funding received from IIT Roorkee

DBT: Department of Biotechnology, Govt of India

DST: Department of Science and Technology, Govt of India

SERB: Science and Engineering Research Board, Govt of India

CRG: Core Research Grant

SATYAM: Science and Technology of Yoga and Meditation, Govt of India

**Selected Invited Guest Lectures, Conference oral presentations, and Panelist:**

# 2024 Guest lecture, Emory University, Winship Cancer Institute, GA, USA.

# 2024 Guest Speaker, International Women’s Day Keynote Speaker-24, MSU-Baroda, Gujarat, India

# 2024 Invited Talk 3rd International Global Cancer Consortium, Tata Memorial Center, Mumbai, India

# 2024 Invited Talk, ICAR-National Institute on Foot and Mouth Disease, Arugul, India

2023 Invited Speaker: Member Society Symposium, FOCIS-23 annual meeting, Boston, USA

2023 Guest speaker, Motivation and leadership development program, GADVASU, Ludhiana.

2023 Invites speaker, Antimicrobial Resistance. It’s ever growing rate and effect health wise.

Nigeria Medical Student Association, Universal Health Coverage, Nigeria.

2022 Invited Speaker: Annual Biotechnological Advancement: Entrepreneurship and employability of Veterinary Graduates College of Veterinary Science and Animal Husbandry, OUAT.

2022 Guest Speaker, Dept. of Pathobiology, Purdue College of Vet. Med., USA

2022 Guest Speaker, Dept. of Pathobiology, College of Vet. Med., Univ. of Tenn., Knoxville, USA

2022 Panelist, “Session on how to choose a graduate school and mentor”, ASM Future leader mentoring Fellowship Symposium, Microbe-2022, American Society for Microbiology

2022 Panelist, Symposium on “Gender Empowerment”, Kings College London, UK

2021-22 Invited Speaker, 14th and15th Annual NIH Career Symposium, NIH, Bethesda, USA

2021 Invited Speaker. “Infection and Immunity” session. Immunocon, Indian Immunology Society.

2021 Invited Speaker, *International Alumni Networking Seminar* Series. *(NIA/NIH), Baltimore USA*.

2019 Guest Speaker, Department of Surgery, Brown University, Providence, RI, USA

2019 Invited Talk: Immunocon-2019. Indian Immunology Society, BARC, Mumbai, India

2015 Invited Speaker: International Conference in Translational Research, KIITS, BBSR, India.

2013 Invited Speaker: International Conference on Hematology & Blood Disorders, Raleigh, US.

2010 Oral Presentation -Thirty-third Annual Conference on Shock, Portland, Oregon, USA

2007 Poster and Oral Presentation - Annual Research Symposium, Univ. of Tenn., USA.

**Awards and honors:**

2024 “**Her Impact in STEM: Driving Sustainability and Environmental Change Award**,” IIT Roorkee.

2024 Selected for the 2nd edition of the **Women leading IITs** (WLI) Program, IIT Madras,

2023 Nominated by the Vice Chancellor, Doon University as an expert for creating new UG courses.

2023 **GP Talwar Mid-Career Scientist Oration Award-2023**, Indian Immunology Society (IIS).

2023 As the nodal officer, from IIT Roorkee, represented Indian delegation in the Gender Advancement for Transforming Institutions (GATI) study visit to UK, organized by DST- India, British Council and AdvanceHE, UK.

2022 Travel for Technique Award, American Association of Immunologists (AAI). USA.

2022 **Featured in the “Women in STEM: Vanguards of India @75"** published by Confederation of Indian Industry (CII) “on the occasion of 75 years of Indian Independence.”

2022-24 **Mentor- Future Leader Mentoring Program,** American Society for Microbiology, USA.

2021Featured in the book “WiSTEM-2021-Nurturing and Celebrating Women in STEM”, **highlighting 51 Successful and inspiring Indian women in STEM**. Published by CII.

2017 **Innovative Young Biotechnologist Award (*IYBA-2017*),** DBT, Govt. of India.

2017 Early Career Faculty Travel Grant, American Association of Immunologists. USA.

2014 Best oral presentation, Immunocon-2014, Indian Immunology Society.

2010 Early investigator Travel Grant Award, 33rd Annual conference on Shock, Oregon, USA.

2007 Travel Award (Second position) for oral presentation, University of Tennessee. USA.

2006 Travel Award, Keystone Symposium, Viral Immunity, Colorado. USA.

1996-2001 University Merit Scholarship, for undergraduate education by Government of India.

**Membership in Professional Societies**

American Society for Microbiologists **(ASM),** American Association of Immunologists **(AAI),** Federation of Clinical Immunology Societies **(FOCIS),** Indian Immunology Society **(IIS),** Shock Society, Odisha Vigyan Academy, Orissa Veterinary Association.

**Details of Completed Doctoral Thesis Supervised: 6**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Name** | **Registration and Graduation Year** | **Current Affiliation** |
| 1 | Chandra Bhan | 2014-2019 | PDF: NIH/NIDCR, Bethesda, MD, USA |
| 2 | Papiya Chakraborty | 2014-2020 | PDF: NIH/NCI Bethesda, MD, USA |
| 3 | Pankaj Dipankar | 2015-2022 | PDF: NIH/NIDCR Bethesda, MD, USA |
| 4 | Shiba Prasad Dash | 2016-2023 | PDF: NIH/NCI Bethesda, MD, USA |
| 5 | Nibedita Dalpati | 2017-2024 |  |
| 6 | Puneet Kumar | 2019-2024 | Project Scientist, IIT Roorkee |

**Ongoing PhD Students: 5**

**Other Project and Dissertation Manpower Trained**

MSc Thesis*:***10,** BTech Project**: 12,** summer interns**: 2**

**Project staff trained in the laboratory: 5**

**Teaching Experience. Courses Taught and Designed**

**Faculty Score: 4.33/5, 19 Courses from 2020-2024**

***BTech (Under Graduate):*** Immunotechnology (Theory+Practical), Vaccine Biotechnology.

***MTech (Graduate)*:** Microbiology and Biochemistry.

***MSc. (Graduate)*:**Immunology (Theory and Practical)

**Pre-PhD *(Graduate)*:** Methods in Animal Biotechnology **(Designed-Theory and Demonstration)**

**Administrative and Leadership Responsibilities:**

* **2024 - Present: Chief Warden,** Vigyan Bhawan-Girls, Houses PG/PhD students at IIT Roorkee.
* **2022 - 2024**: **Mentor, ASM**-Future leader mentoring Fellowship Program, American Society for Microbiology
* **2021 - 2023:** **Nodal Officer, DST-Gender Advancement for Transforming Institutions** (**GATI)** for gender equality in STEM and promoting women leadership in higher educational institutions. In this program, *IIT Roorkee was recognized as top 12 GATI Achievers by DST-India*
* **2020 - Present**: **Nodal Officer,** **DST-Vigyan Jyoti** **Initiative** to promote participation of girls in STEM education.
* **2017 - 2020: Faculty Advisor for NCC and NSS** student proficiencies (for 1400 UG/PG students) for 3 years and conducted three National Social Summits. Launched several social initiatives.
* **2016 - 2023**: **Associate NCC Officer (ANO)**, 3UK CTR, IIT Roorkee at Lieutenant Rank. (*As 1st lady ANO, contributed in initiating enrolment of girl Cadets at IIT Roorkee)*
* **2024 - Present**, External Member, IAEC, AIIMS, Rishikesh, Uttarakhand.
* **2023 - Present**, External Member, IAEC, Patantanjali Research Institute, Haridwar, Uttarakhand.
* **2014 - Present**, Member, Institute Animal Ethics Committee (IAEC), IIT Roorkee.
* **2014 - Present**: In-charge, Animal Facility and Flow Cytometry Core, Dept of BSBE, IIT Roorkee.

**Editorial Board member, Reviewer for scientific journal and funding agencies**

* + - * **2023 - Present: Associate Editor**, Heliyon Immunology, Cell Press.
      * **2022 - 2025: Editorial Board Member:** Journal of Biosciences, Indian Academy of Sciences.
      * **2023 -** Reviewer of Prime minister’s Research Fellowship Program for pursuing PhD degree.
      * **2023 -** Reviewer for grant screening: Indian Council for Medical Research (ICMR)
      * **2022** - Present: Review editor: Frontiers in Immunology: Sections: Microbial Immunity, Cancer Immunology and Immunotherapy.

Professional Training and Workshops Attended

2024 Grandmaster in Traditional Usui Reiki and Durga Reiki Systems of Energy Healing.

2022 Life Coach Certification. Million Dollar Life School, India

2022 Workshop series on Gender sensitization and Diversity. Conducted by Kings College London, Queen Mary University of London and University College London and University College London.

2022 Training on characterization of exosomes: Univ. of Rochester, NY- funded by AAI TfT Award

2019 Systems Immunology: FOCIS Annual Meeting, Boston, USA

2016 Three day Training on Animal Welfare from National Institute of Animal Welfare, INDIA.

2013 Management in Academic Environment workshop & 2day Management Boot camp, NIH, USA.

2012 Scientists Teaching Science 6 month Term Course, NIH, USA.

2011 Workplace Dynamics Certificate Course, NIH, USA.

**Conferences/Workshops Organized:**

* 2023 Two day Personality Development Workshop for 40 visually impaired women from All India Confederation of Blind, under the GATI initiative of IIT Roorkee
* 2022 Organizer: “SHE Lecture series” delivered by women leaders from national and international organizations under the Gender advancement program.
* 2018, 2019 and 2020: Coordinated 3 National Social Summits with themes, Rebuilding nature with innovation, Empowerment with education, Women and child welfare at IIT Roorkee