

## Siddhesh S. Kamat, Ph.D.

Associate Professor (Biology)  
SwarnaJayanti Fellow

## Indian Institute of Science Education and Research

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### Educational Qualifications

2007-12 Ph.D., Department of Chemistry, Texas A&M University (Advisor: Frank M. Raushel)  
2003-07 B. Tech. (Pharmaceuticals & Fine Chemicals), UDCT Mumbai (Advisor: K. G. Akamanchi)

### Professional Positions

2022 – present SwarnaJayanti Fellow, IISER Pune, India.  
2021 – present Chairperson, National Facility for Gene Function in Health and Disease, IISER Pune, India.  
2020 – present Associate Professor (with tenure), Department of Biology, IISER Pune, India.  
2020 – 2024 EMBO Young Investigator, IISER Pune, India.  
2020 – 2024 Adjunct Faculty, Department of Biological Sciences, TIFR Mumbai, India.  
2016 – 2021 Adjunct Faculty, Department of Chemistry, IISER Pune  
2016 – 2021 Intermediate Fellow, DBT/Wellcome Trust India Alliance, IISER Pune, India.  
2016 – 2019 Assistant Professor, Department of Biology, IISER Pune, India.  
2013 – 2016 9<sup>th</sup> Irving S. Sigal ACS Postdoctoral Fellow, Scripps Research, CA, USA (Advisor: Benjamin F. Cravatt).

### Awards/ Fellowships/ Elected Memberships (since joining IISER Pune)

2024 Infosys Prize in Life Sciences  
2024 Fellow, Royal Society of Chemistry  
2022 Member, Guha Research Conference  
2021 SwarnaJayanti Fellowship (Life Sciences category)  
2021 CDRI Award for Excellence in Drug Research (Life Sciences category)  
2020 EMBO Young Investigator Award  
2019 Merck Young Scientist Award in Biological Sciences  
2019 Indian National Science Academy (INSA) Young Scientist Medal  
2019 UDCT Distinguished Alumni Award – Young Achiever  
2017 Early Career Research Award (SERB)  
2016 DBT/Wellcome Trust India Alliance, Intermediate Fellowship

### Research Grants (since joining IISER Pune)

2024-27 Extramural Centre for Advanced Research grant, ICMR (co-PI, Rs. ~ 9,00,00,000 to IISER Pune)  
2023-25 Infectious Biology Special grant, DBT (co-PI, Rs. 2,64,91,600 to IISER Pune)  
2022-27 SwarnaJayanti Fellowship, DST-SERB (PI, Rs. 4,98,95,600)  
2020-25 Young Investigator Grant, EMBO (PI, ~ Rs. 45,00,000)  
2020-24 Core Research Grant, DST-SERB (PI, Rs. 60,19,400)  
2020-23 STAG on Medical Biotechnology, DBT (Co-PI, Rs. 34,38,360 to IISER Pune)  
2017-20 Early Career Research Award, DST-SERB (PI, Rs. 46,92,671)  
2016-21 Intermediate Fellowship, DBT/Wellcome Trust India Alliance (PI, Rs. 3,51,18,504)

### Professional Activities (since joining IISER Pune)

- Editorial Board Member: British Journal of Pharmacology (December 2022 – present), Journal of Biological Chemistry (July 2023 – present)
- Department of Biotechnology (DBT) (i) Technical Evaluation Committee (TEC) Member on Chronic Disease and Neurobiology (2022 – present); (ii) Selection Committee Member of the MK Bhan Research Fellowship (2022 – present), (iii) Biotech Cluster Management Committee of Pune Biotech Cluster: Model Organisms to Human Disease (2024 – present)
- Member: Research Area Panel - Scientific Advisory Committee (RAP-SAC), NCCS Pune (2023 – present)
- Adhoc Reviewer for Nature, Nature Chemical Biology, Cell Chemical Biology, Nature Communications, JACS, Angewandte Chemie, EMBO J., ACS Chemical Biology, Disease Models and Mechanisms, Biochemistry.

**Research Publications: From IISER Pune (2016 – present)** (\*denotes corresponding author)

1. Chakraborty, A., Punnamraju, P., Sajeevan, T., Kaur, A., Kolthur-Seetharam, U., **Kamat, S. S.\*** (2025) Identification of ABHD6 as a lysophosphatidylserine lipase in the mammalian liver and kidneys, **J. Biological Chemistry** (Accepted, In Press).
2. Kapoor, Y., Khurana, H., Chakraborty, A., Dutta, D., Priya, A., Singh, A., **Kamat, S. S.**, Dhar, N., Pucadyil, T. P., Nandicoori, V. K. (2025) Wag31, a membrane tether, is crucial for lipid homeostasis in mycobacteria, **eLife** (Accepted, In Revision).
3. Sarkar, B., Singh, J., Yadav, M., Sharma, P., Sharma, R. D., Singh, S., Chandramouli, A., Mehdiratta, K., Kumar, A., **Kamat, S. S.**, Ghorpade, D. S., Mohanty, D., Kumar, D., Gokhale, R. S. (2025) PPAR-gamma mediated enhanced lipid biogenesis fuels Mycobacterium tuberculosis growth in drug tolerant hepatocyte environment, **eLife** (Accepted, In Revision).
4. Shambhavi, S., Mondal, S., Chakraborty, A., Panda, B. K., Shukla, N., Kumar, S., Kinatukara, P., Pal, B., **Kamat, S. S.**, Sankarnarayanan (2025) Emergence of Dip2 mediated specific DAG-based PKC signalling axis in eukaryotes, **eLife** (Accepted, In Revision).
5. Jog, E., Jainarayanan, A. K., Ferlita, A. L., Chakraborty, A., Dalwai, A., Yahya, S., Shivshankar, A., Choudhary, B. S., Chandramouli, A., Kazi, M., Jain, D., Khapare, N., Akshaya, B., Khan, B. K., Gera, P., Patil, P., Thorat, R., Verma, N., Sehgal, L., Saklani, A., **Kamat, S. S.**, Dalal, S. N., Chaudhary, N. (2025) Inhibiting de novo lipogenesis identifies a therapeutic vulnerability in therapy-resistant colorectal cancer, **Redox Biology** 79, 103458, 1-16.
6. Sinha, A., Saini, K. K., Chandramouli, A., Tripathi, K., Khan, M. A., Satrusal, S. R., Verma, A., Mandal, B., Rai, P., Meena, S., Nengroo, M. A., Singh, M. P., Bhushan, N. S., Vasudevan, M., Singhai, A., Singh, K., Mishra, A. K., **Kamat, S. S.**, Datta, D. (2024) ACSL4 mediated H3K9 and H3K27 hyperacetylation upregulates SNAIL to drive TNBC metastasis, **PNAS** 121 (52), e2408049121.
7. Kumar, K., Pazare, M., Ratnaparkhi, G. S., **Kamat, S. S.\*** (2024) CG17192 is a phospholipase that regulates signalling lipids in the Drosophila gut upon infection, **Biochemistry** 63 (22), 3000-3010.
8. Chandramouli, A., **Kamat, S. S.\*** (2024) A facile LC-MS method for profiling cholesterol and cholesteryl esters in mammalian cells and tissues, **Biochemistry** 63 (18), 2300-2309. *Featured on the September 2024 issue front cover of Biochemistry*
9. Talwadekar, M., Khatri, S., Balaji, C., Chakraborty, A., Basak, N. P., **Kamat, S. S.\***, Kolthur-Seetharam, U.\* (2024) Metabolic transitions regulate global protein fatty acylation, **J. Biological Chemistry** 300 (1), 105563, 1-14.
10. Vaidya, K., Rodrigues, G., Gupta, S., Devarajan, A., Yeolekar, M., Madhusudhan, M. S., **Kamat, S. S.\*** (2025) Identification of sequence determinants for the ABHD14 enzymes, **Proteins: Structure, Function & Bioinformatics** 93 (1), 255-266.
11. Sen, D., Maniyadath, B., Khatri, S., Chakraborty, A., Mehendale, N., Chowdhury, S., Nadagouda, S., Kaur, A., **Kamat, S. S.**, Kolthur-Seetharam, U. (2023) Interplay between CTCF and feed-fast cycles rewires hepatic transcription and metabolism, **iScience** 26 (7), 107128.
12. Kumari, P., Kaul, G., Kumar, A., Akhil, A., Shukla, M., Sharma, S., **Kamat, S. S.\***, Chopra, S., Chakrapani, H.\* (2023) Heterocyclic diaryliodonium-based inhibitors of Carbapenem-resistant *Acinetobacter baumannii* (CRAB), **Microbiology Spectrum** 11 (2), e04773-22.
13. Mehdiratta, K., Nain, S., Sharma, M., Singh, S., Srivastva, S., Dhamale, B. D., Mohanty, D., **Kamat, S. S.**, Natarajan, V. T., Sharma, R., Gokhale, R. S. (2023) Respiratory quinone switch from menaquinone to polyketide quinone during the development cycle in Streptomycin sp. MNU77, **Microbiology Spectrum** 11 (1), e02597-22.
14. Mondal, S., Kinatukara, P., Singh, S., Shambhavi, S., Patil, G. S., Dubey, N., Singh, S. M., Pal, B., Shekar, P. C., **Kamat, S. S.**, Sankarnarayanan, R. (2022) Dip2 is a unique regulator of diacylglycerol lipid homeostasis in eukaryotes, **eLife** 11, e77665.
15. Rajendran, A., Soory, A., Khandelwal, N., Ratnaparkhi, G. S., **Kamat, S. S.\*** (2022) A multi-omics analysis reveals that the lysine deacetylase ABHD14B influences glucose metabolism in mammals, **J. Biological Chemistry** 298 (7), 102128, 1-14.
16. Kumar, S., Khan, M. Z., Khandelwal, N., Chongtham, C., Singha, B., Dabla, A., Behera, D., Singh, A., Gopal, B., Arimbasseri, G. A., **Kamat, S. S.**, Nandicoori, V. K. (2022) *Mycobacterium tuberculosis* transcription factor, EmbR, regulates the expression of key virulence factors that aid in ex vivo and in vivo survival, **mBio** 13 (3), e03836-21.
17. Mehdiratta, K., Singh, S., Sharma, S., Bhosale, R. S., Choudhary, R., Masal, D. P., Manocha, A., Dhamale, B. D., Khan, N., Vivekanand, A., Sharma, P., Ikeh, M., Brown A. C., Parish, T., Ojha, A., Michael, J. S., Faruq, M., Medigeshi, G. R., Mohanty, D., Reddy, D. S., Natarajan, V. T., **Kamat, S. S.\***, Gokhale, R. S.\* (2022) Kupyaphores are zinc homeostatic metallophores required for colonization of *Mycobacterium tuberculosis*, **PNAS** 119(8), e2110293119.
18. Mehendale, N., Mallik, R. M., **Kamat, S. S.\*** (2021) Mapping sphingolipid metabolism pathways during phagosomal maturation, **ACS Chemical Biology** 16(12), 2757-2765. *Featured on the December 2021 issue front cover of ACS Chemical Biology*
19. Singh, S., **Kamat, S. S.\*** (2021) The loss of enzymatic activity of the PHARC associated lipase ABHD12 results in increased phagocytosis that causes neuroinflammation, **European Journal of Neuroscience** 54(10), 7442-7457.
20. Bora, P., Manna, S., Nair, M., Sathe, R. R., Singh, S., Adury, V. S. S., Gupta, K., Mukherjee, A., Saini, D. K., **Kamat, S. S.**, Hazra, A. B., Chakrapani, H. (2021) Leveraging an enzyme/artificial substrate system to enhance cellular persulfides and mitigate neuroinflammation, **Chemical Science** 12, 12939-12949.
21. Khandelwal, N., Shaikh, M., Mhetre, A., Singh, S., Sajeevan, T., Joshi, A., Balaji, K. N., Chakrapani, H., **Kamat, S. S.\*** (2021) Fatty acid chain length drives lysophosphatidylserine dependent immunological outputs, **Cell Chemical Biology** 28, 1169-1179. *Featured on August 2021 issue front cover of Cell Chemical Biology*
22. Kumar, K., Mhetre, A., Ratnaparkhi, G. S., **Kamat, S. S.\*** (2021) A superfamily-wide activity atlas of serine hydrolases in *Drosophila melanogaster*, **Biochemistry** 60 (16), 1312-1324.

23. Kinatukara, P., Subramaniyan, P. S., Patil, G. S., Shambhavi, S., Singh, S., Mhetre, A., Madduri, M. K., Soundararajan, A., Patel, K. D., Shekar, P. C., **Kamat, S. S.**, Kumar, S., Sankaranarayanan, R. (2020) Peri-natal growth retardation rate and fat mass accumulation in mice lacking Dip2A is dependent on the dietary composition, *Transgenic Research* 29, 553-562.
24. Lote-Oke, R., Pawar, J., Kulkarni, S., Sanas, P., Kajale, N., Gondhalekar, K., Khadiikar, V., **Kamat, S. S.**, Khadiikar, A. (2020) A LC-MS method for 25-hydroxy-vitamin D3 measurements from dried blood spots for an epidemiological survey in India, *Scientific Reports* 10, 19873.
25. Singh, S., Joshi, A., **Kamat, S. S.**\* (2020) Mapping the neuroanatomy of ABHD16A-ABHD12 & lysophosphatidylserines provides new insights into the pathophysiology of the human neurological disorder PHARC, *Biochemistry* 59 (24), 2299-2311.
26. Chattopadhyay, T., Maniyadath, B., Bagul, H. P., Chakraborty, A., Shukla, N., Budnar, S., Rajendran, A., Shukla, A., **Kamat, S. S.**, Kolthur-Seetharam, U. (2020) Spatiotemporal gating of SIRT1 functions by O-GlcNAcylation is essential for liver metabolic switching and prevents hyperglycemia, *PNAS* 117, 6890-6900.
27. Rajendran, A., Vaidya, K., Mendoza, J., Bridwell-Rabb, J., **Kamat, S. S.**\* (2020) Functional annotation of ABHD14B, an orphan serine hydrolase enzyme, *Biochemistry* 59 (2), 183-196. *Featured in Future of Biochemistry – Asia Pacific issue*
28. Kumar, M., Ojha, S., Rai, P., Joshi, A., **Kamat, S. S.**\*, Mallik, R. M.\* (2019) Insulin activates intracellular transport of lipid droplets to release triglycerides from the liver, *J. Cell Biology* 218, 3697-3713.
29. Kulkarni, A., Soni, I., Kelkar D. S., Dharmaraja, A. T., Sankar, R. K., Beniwal, G., Rajendran, A., Tamhankar, S., Chopra, S. \*, **Kamat, S. S.**\*, Chakrapani, H.\* (2019) Chemoproteomics of an indole-based quinone-epoxide identifies druggable vulnerabilities in Vancomycin-resistant *Staphylococcus aureus*, *J. Medicinal Chemistry* 62, 6785-6795.
30. Malik, S. A., Acharya, J., Mehendale, N., **Kamat, S. S.**, Ghaskadbi, S. (2019) Pterostilbene reverses palmitic acid mediated insulin resistance in HepG2 cells by reducing oxidative stress and triglyceride accumulation, *Free Radical Research* 53, 815-827.
31. Kelkar, D. S., Ravikumar, G., Mehendale, N., Singh, S., Joshi, A., Sharma, A. K., Mhetre, A., Rajendan, A., Chakrapani, H., **Kamat, S. S.**\* (2019) A chemical genetic screen identifies ABHD12 as an oxidized phosphatidylserine lipase, *Nature Chemical Biology* 15, 169-178.
32. Chaplot, K., Pimpale, L., Ramalingam, B., Deivasigamani, S., **Kamat, S. S.**, Ratnaparkhi, G. S. (2019) SOD1 activity thresholds and TOR signaling modulate VAP(P58S) aggregation via ROS-induced proteasomal degradation in a *Drosophila* model of Amyotrophic Lateral Sclerosis, *Disease Models & Mechanisms* 12, dmm.033803, 1-15. *Featured on February 2019 issue front cover of Disease Models & Mechanisms*
33. Abhyankar, V., Kaduskar, B., **Kamat, S. S.**, Deobagkar, D., Ratnaparkhi, G. S. (2018) *Drosophila* DNA/RNA methyltransferase contributes to robust host defense in ageing animals by regulating sphingolipid metabolism, *J. Experimental Biology* 221 (22), 1-10.
34. Joshi, A., Shaikh, M., Singh, S., Rajendran, A., Mhetre, A., **Kamat, S. S.**\* (2018) Biochemical characterization of the PHARC associated serine hydrolase ABHD12 reveals its preference for long chain lipids, *J. Biological Chemistry* 293, 16953-16963. *Featured on the November 2018 issue front cover of JBC*
35. Pathak, D., Mehendale, N., Singh, S., Mallik, R. M., **Kamat, S. S.**\* (2018) Lipidomics suggests a new role for ceramide synthase in phagocytosis, *ACS Chemical Biology* 13, 2280-2287. *Featured on the August 2018 issue front cover of ACS Chemical Biology*
36. Rai, P., Kumar, M., Sharma, G., Barak, P., Das, S., **Kamat, S. S.**, Mallik, R. M. (2017) Kinesin-dependent mechanism for controlling triglyceride secretion from the liver, *PNAS* 114, 12958-12963.

**Book Chapters, Reviews, News, Editorials: From IISER Pune (2016 – present)** (\*denotes corresponding author)

1. Thoughts for the future (2025) *Nature Chemical Biology* 21, 6-15. (Question: What do you think are the most exciting frontiers or the most needed developments in your main field of research?)
2. Chakraborty, A., **Kamat, S. S.**\* (2024) Lysophosphatidylserine: a signaling lipid with implications in human diseases, *Chemical Reviews* 124 (9), 5470 – 5504. *Featured on May 2024 issue front cover of Chemical Reviews*
3. Saharan, O., **Kamat, S. S.**\* (2023) Mapping lipid pathways during phagocytosis, *Biochemical Society Transactions* 51 (3), 1279 – 1287. *Featured on June 2023 issue front cover of Biochemical Society Transactions*
4. Shanbhag, K., Sharma, K., **Kamat, S. S.**\* (2023) Photoreactive bioorthogonal lipid probes and their applications in mammalian biology, *RSC Chemical Biology* 4, 37 – 46. *Featured on January 2023 issue front cover of RSC Chemical Biology*
5. Saharan, O., Mehendale, N., **Kamat, S. S.**\* (2022) Phagocytosis: A (Sphingo)Lipid Story, *Current Research in Chemical Biology* 2, article: 10030.
6. Voices of Chemical Biology (2021) *Nature Chemical Biology* 17, 1-4. (Question: What is the most exciting frontier area in chemical biology and what key technology is needed to advance knowledge and applications in this area?)
7. Voices of Chemical Biology (2020) *Nature Chemical Biology* 16, 598-599. (Question: What was the most exciting research achievement or technology innovation in chemical biology in the last five years?)
8. Shanbhag, K., Mhetre, A., Khandelwal, N., **Kamat, S. S.**\* (2020) The Lysophosphatidylserines – an emerging class of signaling lysophospholipid, *J. Membrane Biology* 253, 381-397.

- Kamat, S. S.\***, Singh, S. S., Rajendran, A., Gama, S., Zechel, D. L. (2020) Enzymatic strategies for the catabolism of organophosphates, **Comprehensive Natural Products III: Chemistry & Biology**: Vol 4: Enzymes and Enzyme Mechanisms, Chapter 16, 399-429.
- Kamat, S. S.\*** (2019) Understanding the role of molecular motors in living cells: an odyssey from physics to biology, **Current Science** 116, 14-16.
- Ulrich, E., **Kamat, S. S.\***, Hove-Jensen, B.\* , Zechel, D. L.\* (2018) Methylphosphonic acid biosynthesis and catabolism in pelagic bacteria, **Methods in Enzymology** Vol. 605, 351-426.

### Preprints:

- Shanbhag, K., Mhetre, A., Saharan, O., Devarajan, A., Rai, A., Madhusudhan, M. S., Chakrapani, H.\* , **Kamat, S. S.\*** (2024) Chemical proteomics identifies protein ligands for monoacylglycerol lipids  
[**bioRxiv**: <https://doi.org/10.1101/2024.12.22.629584>]
- Teli, A., Iyer, R., Shanbhag, K., Gawarguru, R., Gayan, S., Shaikh, S., Tamhankar, A., **Kamat, S. S.**, Dey, T. (2024) Breast cancer spheroids prefer activated macrophages as an accomplice: An *in vitro* study  
[**bioRxiv**: <https://doi.org/10.1101/2024.09.24.614655>]
- Tripathi, S., Gupta, E., Naik, R., Khare, S., Mir, R., Yadav, S., Desai, S., Humane, S., Bal., M., Saklani, A., Patil, P., **Kamat, S. S.**, Galande, S. (2024) Statins attenuate Wnt/ $\beta$ -catenin signalling by targeting SATB family proteins in colorectal cancer  
[**bioRxiv**: <https://doi.org/10.1101/2024.08.23.609189>]
- Walvekar, A., Pandey, S., **Kamat, S. S.**, Damodar, S., Ladher, R., Vyas, N. (2023) Morphogenic versus mitogenic roles of Shh are segregated on distinct exosomes regulated by cellular Rab7 levels  
[**bioRxiv**: <https://doi.org/10.1101/2023.06.27.546648>]

### Selected Publications from Postdoc and Ph.D. (2007 – 2016)

- Kamat, S. S.**, Camara, K., Parsons, W. H., Chen, D. H., Dix, M. M., Bird, T. D., Howell, A. R., Cravatt, B. F. (2015) Immunomodulatory lysophosphatidylserines are regulated by ABHD16A and ABHD12 interplay, **Nature Chemical Biology** 11,164-171.
- Kamat, S. S.**, Williams, H. J., Dangott L. J., Chakrabarti, M., Raushel, F. M. (2013) The catalytic mechanism for the aerobic formation of methane by bacteria, **Nature** 497, 132-36.
- Kamat, S. S.**, Williams, H. J., Raushel, F. M. (2011) Intermediates in the transformation of phosphonates to phosphate by bacteria, **Nature** 480, 570-73.
- Kamat, S. S.**, Fan, H., Sauder, J. M., Burley, S. K., Shoichet, B. K., Sali, A., Raushel, F. M. (2011) Enzymatic deamination of the epigenetic base N-6-methyladenine, **JACS** 133, 2080-83.
- Kamat, S. S.**, Bagaria, A., Kumaran, D., Holmes-Hampton, G. P., Fan, H., Sali, A., Sauder, J. M., Burley, S. K., Lindahl, P. A., Swaminathan, S., Raushel, F. M. (2011) Catalytic mechanism and three-dimensional structure of adenine deaminase, **Biochemistry** 50, 1917-27.

### Invited Talks since joining IISER Pune (\*\*denotes virtual talk)

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| 2025 | Infosys Prize Symposium, Edition IV, Taj West End Bangalore, India.                         |
| 2024 | Infosys Award Function for the International Olympiad Medalists, HBCSE Mumbai, India.       |
| 2024 | ChemCareers iRISE, IISER Pune, India.   |
| 2024 | Proteomics Society of India 16 <sup>th</sup> Annual Meeting, NCL Pune, India.               |
| 2024 | EMBO 60 <sup>th</sup> Anniversary Meeting, EMBO Heidelberg, Germany                         |
| 2024 | NIBMG Colloquium Talks, NIBMG Kalyani, Kolkata, India.                                      |
| 2024 | Metabolomics in Drug Discovery Symposium, NIPER-A, Ahmedabad, India.                        |
| 2024 | Nencki Conference for Life Sciences – Focus on Lipid Metabolism, Warsaw, Poland.            |
| 2024 | EMBO Sectoral meeting in Metabolism and Lipid Biology, Warsaw, Poland.                      |
| 2024 | EMBO Global Investigator’s Meeting, NTU Singapore City, Singapore.                          |
| 2024 | Annual YIN PhD Course, EMBO Heidelberg, Germany.  |
| 2024 | ARUMDA Annual Meeting, TIFR Hyderabad, India.   |
| 2024 | EMBO YIP: Global Network, Borderless Science, Impactful Research: IndiaBioscience Webinar** |
| 2024 | Cutting Edge Lecture Series, ACTREC, Navi Mumbai, India.                                    |
| 2024 | Bioconclave, Department of Biology, IISER Pune, India.                                      |
| 2023 | NIUS Chemistry Camp, HBCSE, Mumbai, India.  |
| 2023 | Chemsymphoria, Chemistry IISER Pune, Pune, India.   |
| 2023 | Winter Symposium, BSBE IIT Kanpur, Kanpur, India.   |
| 2023 | Proteomics Society of India 15 <sup>th</sup> Annual Meeting**, NIPGR, New Delhi, India.     |
| 2023 | EMBO Day, Academia Sinica, Taipei, Taiwan.  |
| 2023 | EMBO Day, National Cheng Kung University, Tainan, Taiwan.                                   |

2023	Institute Invited Lecture, InStem Bangalore, India.
2023	EMBO Young Investigator's Annual Meeting, Milan, Italy.
2023	Student Invited Talk, DBS TIFR Mumbai, India.
2023	Redox Biology of Health and Disease, IISER Pune, India.
2023	ARUMDA Annual Meeting**, TIFR-Hyderabad, India.
2023	Mitometab meeting, 42 <sup>nd</sup> Mahabaleshwar seminar series, IISER Pune, Pune, India.
2023	MBU50 meeting, IISC Bangalore, India.
2022	Annual Meeting, Society of Biological Chemists of India, Kolkata, India.
2022	NII Seminar Series, NII, New Delhi, India
2022	FEBS Advanced Course: 360° Lysosome Meeting, Kusadasi-Izmir, Turkey.
2022	Asian Chemical Biology Initiative (ABCI) Annual Meeting, IISER Pune, India
2022	Cell Biology Lecture Series, NCCS Pune, India.
2022	EMBO Young Investigator's Annual Meeting, Heidelberg, Germany.
2022	EMBO-India Investigators Network (IIN)**, India.
2022	Guha Research Conference, Bhimtal-Nainital, Uttarakhand, India.
2022	10 <sup>th</sup> International Singapore Lipid Symposium (ISLS)**, National University of Singapore, Singapore.
2022	Mumbai Chapter Webinar**, Society of Biological Chemists of India, BARC Mumbai, India.
2021	Annual Meeting**, Society of Biological Chemists of India, Amity University, Haryana, India.
2021	OMICS 2021**, Proteomics Society of India Annual Meeting, CCMB Hyderabad, India.
2021	Contemporary Webinar Series**, Regional Centre for Biotechnology (RCB), Faridabad, NCR, India.
2021	Annual Talks**, Department of Biological Sciences, TIFR Mumbai, India.
2021	CDRI Award Ceremony, CDRI, Lucknow, Uttar Pradesh, India.
2021	Young Investigator's Meeting**, EMBO, Heidelberg, Germany.
2021	Annual Talks**, Department of Biological Sciences, TIFR Hyderabad, India.
2020	CCMB Biologue**, CCMB Hyderabad, India.
2020	The Cancer Genome Atlas Conference**, Center of Translational Cancer Research, Pune, India.
2020	International Symposium on Cell Surface Macromolecules, IISER Pune, India.
2019	International Chemical Biology Society, 8 <sup>th</sup> Annual meeting, ICT Hyderabad, India.
2019	Young Investigator's Meeting, EMBO, Heidelberg, Germany.
2019	Advances in Mass Spectrometry Symposium, IISER Tirupati, India.
2019	Indo-UK Chemical Biology Symposium, University of Glasgow, Scotland.
2018	Proteomics Society of India 10 <sup>th</sup> Annual meeting, NCCS, Pune, India.
2018	Indo-US Symposium on Understanding Biology by Proteomics & Metabolomics, NCCS, Pune, India.
2018	Proteomics Day, CSIR-NCL Pune, India.
2017	iCeMS-NCBS India Alliance Symposium, NCBS Bangalore, India.
2016	Omics to Structural Basis of Disease National Symposium, MSU Baroda, India.

### **Conferences/Meetings Organizations: From IISER Pune (2016 – present)**

1. EMBO Sectoral Meeting for Indian EMBO YIP/GIN members, IIT Mandi (April 2025)
2. EMBO Young Investigator Network Ph.D. Course, IISER Pune (February 2025)
3. Lab Leadership Course, EMBO Solutions, IISER Pune (October 2024)
4. 43<sup>rd</sup> Annual conference of The Indian Association for Cancer Research, IISER Pune (January 2024)
5. Macromolecular Assemblies (structure, function and evolution), IISER Pune (August 2023)
6. EMBO India Delegation, various parts of India, including IISER Pune (March 2023)
7. IISER Pune – Weizmann Institute of Science: Conference on Chemical Biology, IISER Pune (December 2018)
8. 10<sup>th</sup> Annual Proteomics Society of India meeting, NCCS Pune (December 2018).

### **Current Lab Members**

1. Dr. Kavita Sharma, Postdoctoral Research Associate, IISER Chemistry
2. Dr. Jyotsna Singh, Postdoctoral Research Associate, IISER Biology
3. Karthik Shanbhag, Int. Ph.D. student, IISER Biology (*PMRF Fellow*)
4. Arnab Chakraborty, Ph.D. student, IISER Biology
5. Sonali Gupta, Int. Ph.D. student, IISER Biology (*PMRF Fellow*)
6. Ojal Saharan, Int. Ph.D. student, IISER Biology (*PMRF Fellow*)
7. Aakash Chandramouli, Ph.D. student, IISER Biology
8. Pooja Thakral, Ph.D. student, IISER Chemistry (joint with Harinath Chakrapani)
9. Abhishek Kumar, Ph.D. student, IISER Chemistry (joint with Harinath Chakrapani)
10. Neeraj Kumar Yadav, Ph.D. student, IISER Biology
11. Adithya Kallathu, Int. Ph.D. student, IISER Biology

12. Shrutika Raje, Ph.D. student, IISER Biology
13. Manish Deshmukh, MS Thesis Student
14. Mahamaya Dhaware, Project Fellow (SRF)

### Alumni

1. Ines Leleu (Raman Charpak Fellow, MS Thesis, August 2018 – October 2018)
2. Sharvari Tamhankar (Project Student, January 2018 – August 2018)
3. Alaamy Joshi (Research Fellow, November 2016 – August 2019)
4. Dhanashree Kelkar, Ph.D. (Postdoc, January 2017 – January 2020)
5. Theja Sajeevan (MS Thesis Student, January 2019 – June 2020)
6. Shubham Singh, Ph.D. (Doctoral Student, August 2016 – July 2021)
7. Neelay Mehendale, Ph.D. (Doctoral Student, August 2016 – October 2021)
8. Minhaj Shaikh, Ph.D. (Doctoral Student, January 2017 – October 2021)
9. Neha Khandelwal, Ph.D. (Postdoc, April 2018 – November 2021)
10. Amol Mhetre, Ph.D. (Postdoc, August 2017 – February 2022)
11. Abinaya Rajendran, Ph.D. (Doctoral Student, August 2016 – June 2022)
12. Anisha Rai (MS Thesis Student, January 2022 – May 2023)
13. Prajwal Punnamraju (MS Thesis Student, May 2022 – May 2023)
14. Rohith C. S. (MS Thesis Student, January 2022 – May 2023)
15. Mihika Yeolekar (Research Intern, June 2022 – May 2023)
16. Kaveri Vaidya, Ph.D. (Doctoral Student & Research Associate, August 2017 – April 2024)
17. Chaitanya Katkar (MS Thesis Student, January 2023 – May 2024)
18. Sreedev H (MS Thesis Student, January 2023 – May 2024)
19. Archit Devarajan (Intern, July 2023 – June 2024)
20. Kundan Kumar, Ph.D. (Doctoral Student, August 2019 – December 2024)

### Teaching Experience (since joining IISER Pune)

- Advanced Biochemistry I (Course coordinator) (August Semester 2017-2024: 4 credit)
- Biology and Disease (Course instructor) (January Semester 2017-19: 3 credit) (January Semester 2020-24: 4 credit)
- 1<sup>st</sup> year Biology Practical Lab (Course Instructor) (August Semester 2020-21: 4 credit; January Semester 2024: 4 credit)

### Science Outreach Activities: From IISER Pune (2016 – present)

1. Mentor, National Initiative for Undergraduate Sciences, Homi Bhabha Center for Science Education, Mumbai
2. Consultant, iGEM Synthetic Biology, iGEM Grand Jamboree
3. Volunteer, SERB Karyashala Workshop for Hands-on training in biological mass spectrometry
4. Coordinator, EMBO Young Investigator Network Ph.D. Course for South East Asia
5. Mentor, India Bioscience Young Investigator Forum