Curriculum Vitae

Dr. V. RAVIKUMAR, Ph.D.
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Experience:

INSTITUTION AND LOCATION	DEGREE/ PROFESSION	YEAR	FIELD OF STUDY
University of Madras, Chennai, India	B.Sc.	1996-1999	Biochemistry
University of Madras, Chennai, India	M.Sc.	1999-2001	Biochemistry
University of Madras, Chennai, India	Ph.D.	2001-2006	Biochemistry
Kyung Hee University, Seoul, Korea	Post-doctoral Fellow	2006-2008	Biochemistry
Biosewoom Inc., Institute of Bioscience and Biotechnology, Seoul, Korea	Scientist	Apr 2008- Sep 2008	HPV diagnostic kit preparation and development
Bharathidasan University, Tiruchirappalli, India	Assistant Professor	2008-2019	Biochemistry
Bharathidasan University, Tiruchirappalli, India	Associate Professor	2019-2021 Sept	Biochemistry
Bharathidasan University, Tiruchirappalli, India	Professor	Oct 2021- Present	Biochemistry

Membership of academic/professional bodies:

- Life Member, Society of Biological Chemists, India.
- Life Member, Indian Society of Cell Biology.

Publications:

Google Scholar h-index: 29; **i10 index**: 45; **Total Citations:** 3244 (as on 13 Sept 2023)

1) DM Deena, S Prabhu, **R Vilwanathan**, A Philominal. "Anticancer activity of manganese dioxide/reduced graphene oxide nanocomposites against A549 human lung adenocarcinoma cell line". *Nano-Structures & Nano-Objects* 35, 101032. (2023)

2) SA Anushya, S Prabhu, **V Ravikumar**, A Philominal. "Screening of Anti-cancer Activity of rGO–Bi2O3 Nanocomposite on Apoptosis in A549 and NCI-H460 Lung Cancer Cell Lines". *Journal of Inorganic and Organometallic Polymers and Materials* 33 (5), 1369-1380 (2023)

3) P Subramani, N Nagarajan, S Mariaraj, **R Vilwanathan**. Knockdown of sirtuin6 positively regulates acetylation of DNMT1 to inhibit NOTCH signaling pathway in non-small cell lung cancer cell lines". *Cellular Signalling* 105, 110629. (2023)

4) Saravanan Kandasamy, Manikandan Selvaraj, Karthikeyan Muthusamy, Naveena Varadaraju, Srinivasan Kannupal, Ashok Kumar Sekar, **Ravikumar Vilwanathan**. "Structural exploration of common pharmacophore based berberine derivatives as novel histone deacetylase inhibitor targeting HDACs enzymes". *Journal of Biomolecular Structure and Dynamics*, 41 (5), 1690-1703 (2023)

5) Kanitha Selvarathinam, Prabhu Subramani, Malarvili Thekkumalai, **Ravikumar Vilwanathan**, Ramganesh Selvarajan, Akebe Luther King Abia."Wnt Signaling Pathway Collapse upon β-Catenin Destruction by a Novel Antimicrobial Peptide SKACP003: Unveiling the Molecular Mechanism and Genetic Activities Using Breast Cancer Cell Lines". *Molecules* 28 (3), 930 (2023)

6) V Ramalingam, K Varunkumar, **V Ravikumar**, R Rajaram. "N-(2-hydroxyphenyl)-2-phenazinamine from Nocardiopsis exhalans induces p53-mediated intrinsic apoptosis signaling in lung cancer cell lines". *Chemico-Biological Interactions* 369, 110282 (2023)

7) Palaniappan Pitchai, Prabhu Subramani, Ramganesh Selvarajan, Renu Sankar, **Ravikumar Vilwanathan**, Timothy Sibanda. "Green synthesis of gold nanoparticles (AuNPs) using Caulerpa racemosa and evaluation of its antibacterial and cytotoxic activity against human lung cancer cell line". *Arab Journal of Basic and Applied Sciences* 29 (1), 351-362. (2022)

8) DRA Preethi, S Prabhu, **V Ravikumar**, A Philominal."Anticancer activity of pure and silver doped copper oxide nanoparticles against A549 Cell line". *Materials Today Communications* 33, 104462. (2022)

9) K Lakshmanamoorthy, S Prabhu, **V Ravikumar**, S Manivannan."Effect of Ionic Liquid Anions in Tunning the Morphology and Size of Ag in rGO-Ag Nanocomposites: Anticancer Activity of the Composites Against A549 Lung Cancer Cells". *Journal of Inorganic and Organometallic Polymers and Materials* 32 (9), 3417-3428. (2022)

10) Shiyam Sundar Ramachandran, Rubhadevi Balu, **Ravikumar Vilwanathan**, Jeyakanthan Jeyaraman, Sudhakar Gandhi Paramasivam ."A mouse testis serine protease, TESP1, as the potential SPINK3 receptor protein on mouse sperm acrosome". *Molecular Human Reproduction* 27 (10), gaab059. (2021)

11) K Selvarathinam, M Thekkumalai, B Perumalsamy, **R Vilwanathan** ."Design and Synthesis of a Novel Antimicrobial Peptide Targeting β-catenin in Human Breast Cancer Cell lines" *International Journal of Peptide Research and Therapeutics* 27, 1849-1860. (2021)

12) Nandhine Rajasekar, Ayyanar Sivanantham, **Vilwanathan Ravikumar**, Subbiah Rajasekaran. "An overview on the role of plant-derived tannins for the treatment of lung cancer." *Phytochemistry* 2021 Aug;188:112799. (2021)

13) Krishna Murthy P, Karthikeyan Sivashanmugam, Mahesh Kandasamy, Rajasekaran Subbiah, and **Vilwanathan Ravikumar**. "Repurposing of histone deacetylase inhibitors: A promising strategy to combat pulmonary fibrosis promoted by TGF-β signalling in COVID-19 survivors." *Life Sciences* 266 (2021): 118883.

14) Krishnamoorthy Varunkumar, and **Ravikumar Vilwanathan**. "Silencing Sirtuin 6 induces cell cycle arrest and apoptosis in non-small cell lung cancer cell lines." *Genomics* 112(5) (2020): 3703-3712.

15) Varunkumar Krishnamoorthy, Chidambaram Anusha, Thavamani Saranya, Vaikundamoorthy Ramalingam, Sakthivel Raja, and **Vilwanathan Ravikumar**. "Avicennia marina engineered nanoparticles induce apoptosis in adenocarcinoma lung cancer cell line through p53 mediated signaling pathways." *Process Biochemistry* 94 (2020): 349-358.

16) Meenakshisundaram Shanmugapriya, Varunkumar Krishnamoorthy, Yogeswaran Jagadeesan, **Ravikumar Vilwanathan**, and Anandaraj Balaiah. "Annona muricata assisted biogenic synthesis of silver nanoparticles regulates cell cycle arrest in NSCLC cell lines." *Bioorganic Chemistry* 95 (2020): 103451.

17) Kandasamy Saravanan, Prabhu Subramani, Selvi Subramani, John marshal Jayaraj, Gunasekaran Prasanth, Kannupal Srinivasan, Karthikeyan Muthusamy, Venkatachalam Rajakannan, and **Ravikumar Vilwanathan**. "Design and synthesis of imidazole based zinc binding groups as novel small molecule inhibitors targeting Histone deacetylase enzymes in lung cancer." *Journal of Molecular Structure* 1214 (2020): 128177.

18) Rajeswaran Srinath, Somasundaram Somasundaram Thirugnanasambandan, Naresh Kumar Dewangan, Rajesh Kannan Moorthy, Saravanan Kandasamy, and **Ravikumar Vilwanathan**. "Multifarious Pharmacological Applications of Green Routed Eco-Friendly Iron Nanoparticles Synthesized by Streptomyces Sp.(SRT12)." *Biological Trace Element Research* 194(1) (2020): 273-283.

19) Ramalingam V, Varunkumar V, **Ravikumar V** and Rajaram R. “Production and structure elucidation of anticancer potential surfactin from marine actinomycete micromonospora marina.” *Process Biochemistry* 78 (2019) 169-177.

20) Renu S, Shivashangari K S and **Ravikumar V**. “Incorporated plant extract fabricated silver/poly-D, L-lactide-co-glycolide nanocomposites for antimicrobial based wound healing: A review.” *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 228(2020) 117673

21) Rajeswaran Srinath, Somasundaram Somasundaram Thirugnanasambandan, Sathishkumar Rengasamy Subramaniyan, Saravanan Kandasamy, and **Ravikumar Vilwanathan**. "Synthesis of eco-friendly facile nano-sized zinc oxide particles using aqueous extract of Cymodocea serrulata and its potential biological applications." *Applied Physics A* 125(2) (2019): 105.

22) Rajivgandhi Govindan, Thillaichidambaram Muneeswaran, Muthuchamy Maruthupandy, Chockalingam Muthiah Ramakritinan, Kandasamy Saravanan, **Vilwanathan Ravikumar**, and Natesan Manoharan. "Antibacterial and anticancer potential of marine endophytic actinomycetes Streptomyces coeruleorubidus GRG 4 (KY457708) compound against colistin resistant uropathogens and A549 lung cancer cells." *Microbial pathogenesis* 125 (2018): 325-335.

23) Pattarayan Dhamotharan, Rajesh K. Thimmulappa, **Vilwanathan Ravikumar**, and Subbiah Rajasekaran. "Diagnostic potential of extracellular microRNA in respiratory diseases." *Clinical reviews in allergy & immunology* 54(3) (2018): 480-492.

24) Ramalingam Vaikundamoorthy, Krishnamoorthy Varunkumar, **Vilwanathan Ravikumar**, and Rajendran Rajaram. "p53 mediated transcriptional regulation of long non-coding RNA by 1-hydroxy-1-norresistomycin triggers intrinsic apoptosis in adenocarcinoma lung cancer." *Chemico-biological interactions* 287 (2018): 1-12.

25) Vaikundamoorthy Ramalingam, Varunkumar Krishnamoorthy, **Ravikumar Vilwanathan**, and Rajaram Rajendran. "Structural characterization and anticancer activity (MCF7 and MDA-MB-231) of polysaccharides fractionated from brown seaweed Sargassum wightii." *International journal of biological macromolecules* 111 (2018): 1229-1237.

26) Ramalingam Vaikundamoorthy, Krishnamoorthy Varunkumar, **Vilwanathan Ravikumar**, and Rajendran Rajaram. "Target delivery of doxorubicin tethered with PVP stabilized gold nanoparticles for effective treatment of lung cancer." *Scientific reports* 8(1) (2018): 1-12.

27) Kalaiarasi Arunachalam, Renu Sankar, Chidambaram Anusha, Kandasamy Saravanan, Kalyanasundaram Aarthy, Selvaraj Karthic, Theodore lemuel Mathuram, and **Vilwanathan Ravikumar**. "Copper oxide nanoparticles induce anticancer activity in A549 lung cancer cells by inhibition of histone deacetylase." *Biotechnology letters* 40(2) (2018): 249-256.

28) Gnanasekar Sathishkumar, Jeyaraj Murugaraj, Balakrishnan Dhivyabharathi, Varunkumar Krishnamoorthy, Pradeep K. Jha, Prabukumar Seetharaman, **Ravikumar Vilwanathan**, and Sivaramakrishnan Sivaperumal. "Antibacterial and cytotoxicity effects of biogenic palladium nanoparticles synthesized using fruit extract of Couroupita guianensis Aubl." *Journal of Applied Biomedicine* 16(1) (2018): 59-65

29) Chidambaram Anusha, Kavya Sundararaju, Ramesh K. Chidambaram, Rajasekaran Subbiah, John M. Jayaraj, Karthikeyan Muthusamy, and **Ravikumar Vilwanathan**. "Design, synthesis, and characterization of α, β unsaturated carboxylic acid, and its urea based derivatives that explores novel epigenetic modulators in human non small cell lung cancer A549 cell line." *Journal of cellular physiology* 233(7) (2018): 5293-5309.

30) Anusha Chidambaram, Renu Sankar, Krishnamoorthy Varunkumar, Gnanasambantham Sivasindhuja, and **Vilwanathan Ravikumar**. "Fourier transform-infrared spectroscopy as a diagnostic tool for mosquito coil smoke inhalation toxicity in Swiss Albino mice." *Journal of Molecular Structure* 1149 (2017): 128-135.

31) Kavinkumar Thangavel, Krishnamoorthy Varunkumar, **Vilwanathan Ravikumar**, and Sellaperumal Manivannan. "Anticancer activity of graphene oxide-reduced graphene oxide-silver nanoparticle composites." *Journal of colloid and interface science* 505 (2017): 1125-1133.

32) Sankar Renu, Pattanathu KSM Rahman, Krishnamoorthy Varunkumar, Chidambaram Anusha, Arunachalam Kalaiarasi, Kanchi Subramanian Shivashangari, and **Vilwanathan Ravikumar**. "Facile synthesis of Curcuma longa tuber powder engineered metal nanoparticles for bioimaging applications." *Journal of Molecular Structure* 1129 (2017): 8-16.

33) Mathuram Theodore Lemuel, **Vilwanathan Ravikumar**, Lisa M. Reece, Changam Sheela Sasikumar, and Kotturathu Mammen Cherian. "Correlative studies unravelling the possible mechanism of cell death in tideglusib-treated human ovarian teratocarcinoma-derived PA-1 cells." *Journal of Environmental Pathology, Toxicology and Oncology* 36(4) (2017).

34) Chidambaram Anusha, Arunachalam Sekar, S. H. Kavya, Ramesh Kumar Chidambaram, Kalaiarasi Arunachalam, G. P. Senthilkumar, and **Ravikumar Vilwanathan**. "Synthesis, characterization, and evaluation of Cd [L-proline] 2, a novel histone deacetylase inhibitor that induces epigenetic modification of histone deacetylase isoforms in A549 cells." *Investigational New Drugs* 35(6) (2017): 691-705.

35) Kalaiarasi Arunachalam, Chidambaram Anusha, Renu Sankar, Subbiah Rajasekaran, Jayaraj John Marshal, Karthikeyan Muthusamy, and **Vilwanathan Ravikumar**. "Plant isoquinoline alkaloid berberine exhibits chromatin remodeling by modulation of histone deacetylase to induce growth arrest and apoptosis in the A549 cell line." *Journal of agricultural and food chemistry* 64(50) (2016): 9542-9550.

36) Mathuram Theodore Lemuel, **Vilwanathan Ravikumar**, Lisa M. Reece, Selvaraju Karthik, Changam Sheela Sasikumar, and Kotturathu Mammen Cherian. "Tideglusib induces apoptosis in human neuroblastoma IMR32 cells, provoking sub-G0/G1 accumulation and ROS generation." *Environmental toxicology and pharmacology* 46 (2016): 194-205.

37) Ramalingam V, K. Varunkumar, **V. Ravikumar**, and R. Rajaram. "Development of glycolipid biosurfactant for inducing apoptosis in HeLa cells." *RSC advances* 6(68) (2016): 64087-64096.

38) Gunasekaran Vinoth Prasanna, Kumari Nishi, **Vilwanathan Ravikumar**, and Ganeshan Mathan. "Nuclear shuttling of Y Box binding protein-1, its clinical relevance in cancer and as a therapeutic target." *Bangladesh Journal of Pharmacology* 11(2) (2016): 501-524.

39) Vaikundamoorthy Ramalingam, Revathidevi Sundaramoorthy, Varunkumar Krishnamoorthy, **Ravikumar Vilwanathan**, and Rajaram Rajendran. "Marine steroid derived from Acropora formosa enhances mitochondrial-mediated apoptosis in non-small cell lung cancer cells." *Tumor Biology* 37(8) (2016): 10517-10531.

40) Sankar Renu, Kanchi Subramanian Shivashangari, and **Vilwanathan Ravikumar**. "Integrated poly-d, l-lactide-co-glycolide/silver nanocomposite: synthesis, characterization and wound healing potential in Wistar Albino rats." *RSC advances* 6(27) (2016): 22728-22736.

41) Raj Kathamuthu Gokul, Ranganathan Chidambaram, Krishnamoorthy Varunkumar, **Vilwanathan Ravikumar**, and Mohan Pandi. "Chemopreventive potential of fungal taxol against 7, 12-dimethylbenz [a] anthracene induced mammary gland carcinogenesis in Sprague Dawley rats." *European journal of pharmacology* 767 (2015): 108-118.

42) Sankar Renu, Kadarmohideen Rizwana, Kanchi Subramanian Shivashangari, and **Vilwanathan Ravikumar**. "Ultra-rapid photocatalytic activity of Azadirachtaindica engineered colloidal titanium dioxide nanoparticles." *Applied Nanoscience* 5(6) (2015): 731-736.

43) Sankar Renu, Athmanathan Baskaran, Kanchi Subramanian Shivashangari, and **Vilwanathan Ravikumar**. "Inhibition of pathogenic bacterial growth on excision wound by green synthesized copper oxide nanoparticles leads to accelerated wound healing activity in Wistar Albino rats." *Journal of Materials Science: Materials in Medicine* 26(7) (2015): 214.

44) Sankar Renu, Selvaraju Karthik, Natesan Subramanian, Venkateshwaran Krishnaswami, Juergen Sonnemann, and **Vilwanathan Ravikumar**. "Nanostructured delivery system for Suberoylanilide hydroxamic acid against lung cancer cells." *Materials Science and Engineering: C* 51 (2015): 362-368.

45) Karthik Selvaraju, Renu Sankar, Krishnamoorthy Varunkumar, Chidambaram Anusha, and **Vilwanathan Ravikumar**. "Blocking NF-κB sensitizes non-small cell lung cancer cells to histone deacetylase inhibitor induced extrinsic apoptosis through generation of reactive oxygen species." *Biomedicine & Pharmacotherapy* 69 (2015): 337-344.

46) Veeralakshmi Selvakumar, Selvan Nehru, Gopal Sabapathi, Sankaralingam Arunachalam, Ponnambalam Venuvanalingam, Ponnuchamy Kumar, Chidambaram Anusha, and **Vilwanathan Ravikumar**. "Single and double chain surfactant–cobalt (III) complexes: the impact of hydrophobicity on the interaction with calf thymus DNA, and their biological activities." *RSC advances* 5(40) (2015): 31746-31758.

47) Sankar Renu, Barathan Balaji Prasath, Ravichandran Nandakumar, Perumal Santhanam, Kanchi Subramanian Shivashangari, and **Vilwanathan Ravikumar**. "Growth inhibition of bloom forming cyanobacterium Microcystis aeruginosa by green route fabricated copper oxide nanoparticles." *Environmental Science and Pollution Research* 21(24) (2014): 14232-14240.

48) Sankar Renu, Ramasamy Maheswari, Selvaraju Karthik, Kanchi Subramanian Shivashangari, and **Vilwanathan Ravikumar**. "Anticancer activity of Ficus religiosa engineered copper oxide nanoparticles." *Materials Science and Engineering: C* 44 (2014): 234-239.

49) Sankar Renu, and **Vilwanathan Ravikumar**. "Biocompatibility and biodistribution of suberoylanilide hydroxamic acid loaded poly (DL-lactide-co-glycolide) nanoparticles for targeted drug delivery in cancer." *Biomedicine & Pharmacotherapy* 68(7) (2014): 865-871.

50) Sankar Renu, Ravishankar Dhivya, Kanchi Subramanian Shivashangari, and **Vilwanathan Ravikumar**. "Wound healing activity of Origanum vulgare engineered titanium dioxide nanoparticles in Wistar Albino rats." *Journal of Materials Science: Materials in Medicine* 25(7) (2014): 1701-1708.

51) Karthik Selvaraju, Renu Sankar, Krishnamoorthy Varunkumar, and **Vilwanathan Ravikumar**. "Romidepsin induces cell cycle arrest, apoptosis, histone hyperacetylation and reduces matrix metalloproteinases 2 and 9 expression in bortezomib sensitized non-small cell lung cancer cells." *Biomedicine & Pharmacotherapy* 68(3) (2014): 327-334.

52) Sankar Renu, Perumal Manikandan, Viswanathan Malarvizhi, Tajudeennasrin Fathima, Kanchi Subramanian Shivashangari, and **Vilwanathan Ravikumar**. "Green synthesis of colloidal copper oxide nanoparticles using Carica papaya and its application in photocatalytic dye degradation." *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 121 (2014): 746-750.

53) Sankar Renu, Arunachalam Karthik, Annamalai Prabu, Selvaraju Karthik, Kanchi Subramanian Shivashangari, and **Vilwanathan Ravikumar**. "Origanum vulgare mediated biosynthesis of silver nanoparticles for its antibacterial and anticancer activity." *Colloids and Surfaces B: Biointerfaces* 108 (2013): 80-84.

54) Vinodhkumar Radhakrishnan, Young-Sun Song, **Vilwanathan Ravikumar**, Gopalakrishnan Ramakrishnan, and Thiruvengadem Devaki. "Depsipeptide a histone deacetlyase inhibitor down regulates levels of matrix metalloproteinases 2 and 9 mRNA and protein expressions in lung cancer cells (A549)." *Chemico-biological interactions* 165(3) (2007): 220-229.

55) Kumar Radhakrishnan Vinodh, Park Chung Mu, **Vilwanathan Ravikumar**, and Thiruvengadam Devaki. "Inhibitory effects of histone deacetylase inhibitor depsipeptide on benzo (a) pyrene-and cyclophosphamide-induced genotoxicity in Swiss albino mice." *International journal of toxicology* 26(1) (2007): 47-50.

56) Radkakrishnan Vinodh Kumar, **Vilwanathan Ravikumar**, Shivashangari Kanchi Subramanian, Sattu Kamaraj, and Thiruvengadan Devaki. "Chemopreventive Role of Lycopene and D-arginine in Benzo (a) Pyrene Induced Lung Cancer with Reference to Lipid Peroxidation, antioxidant system and tumor marker enzymes." *International Journal of Cancer Research* 2(3) (2006): 224-233.

57) Shivashangari Kanchi Subramanian, **Vilwanathan Ravikumar**, Radhakrishnan Vinodhkumar, Sheik Abdul Azeez Sheriff and Thiruvengadam Devaki. "Hepatoprotective potential of lycopene on D-galactosamine/lipopolysaccharide induced hepatitis in rats." *Pharmocologyonline* 2 (2006): 151-170.

58) **Ravikumar Vilwanathan**, Kanchi Subramanian Shivashangari, and Thiruvengadam Devaki. "Hepatoprotective activity of Tridax procumbens against D-galactosamine/lipopolysaccharide-induced hepatitis in rats." *Journal of Ethnopharmacology* 101(1-3) (2005): 55-60.

59) Devaki T., K. S. Shivashangari, **V. Ravikumar**, and P. Govindaraju. "Effect of Boerhaavia diffusa on tissue antioxidant defense system during ethanol-induced hepatotoxicity in rats." *Journal of Natural Remedies* 5(2) (2005): 102-107.

60) **Ravikumar Vilwanathan**, Kanchi Subramanian Shivashangari, and Thiruvengadam Devaki. "Effect of Tridax procumbens on liver antioxidant defense system during lipopolysaccharide-induced hepatitis in D-galactosamine sensitised rats." *Molecular and cellular biochemistry* 269(1-2) (2005): 131-136.

61) Shivashangari K. S., **V. Ravikumar**, and T. Devaki. "Evaluation of the protective efficacy of Asteracantha longifolia on acetaminophen-induced liver damage in rats." *Journal of medicinal food* 7(2) (2004): 245-251.

62) Devaki T., K. S. Shivashangari, **V. Ravikumar**, and P. Govindaraju. "Hepatoprotective activity of Boerhaavia diffusa on ethanol-induced liver damage in rats." *Journal of Natural Remedies* 4(2) (2004): 109-115.

63) Shivashangari, Kanchi Subramanian, **Vilwanathan Ravikumar**, Thiruvengadam Devaki, and Perumal Govindaraju. "Effect of Asteracantha longifolia on liver antioxidant defense system during acetaminophen-induced hepatic damage in rats." *Journal of Clinical Biochemistry and Nutrition* 34(3) (2004): 89-94.

Book Chapters:

- Pharmacoepigenetics: Novel mechanistic insights in drug discovery and development targeting chromatin modifying enzymes. Pharmacoepigenetics in Elsevier. **R Vilwanathan**, A Chidambaram and R Kumar Chidambaram. 2018.
- Preparation of Histone deacetylase inhibitor Vorinostat loaded Poly d, l-lactide-co-glycolide polymeric nanoparticles by nanoprecipitation method. Methods and Protocols in Springer. **V. Ravikumar** and R. Sankar. 2016.

Positions in Academia and Research:

1. Head, Department of Biochemsitry, Bharathidasan University, Tiruchirappalli 620 024 (Nov 2019 – March 2023)
2. Convener, Society of Biological Chemists, India – Tiruchirappalli Chapter (Oct 2022 – Present)
3. Convener, Receptor – Virtual Talk Series, Department of Biochemistry, Bharathidasan University, Tiruchirappalli 620 024 (2021-2022)
4. Convener, Antibiotic Resistance Awarness Programme 2022, in collaboration with Department of Microbiology, Bharathidasan University, Tiruchirappalli 620 024(22 Dec 2022)
5. Coordinator, Refresher Courses in Biochemistry and Biotechnology, UGC sponsored online refresher courses in Biochemistry & Biotechnology, UGC-HRD Centre, Bharathidasan University, Tiruchirappalli 620 024 (7-20 Oct 2022)
6. Training Coordinator, Workhsop on Molecular Modeling, RUSA 2.0 sponsored Molecular Modeling Facility, University Instrumentation Centre, Bharthidasan University, Tiruchirappalli 620 024 (2-3 Aug 2022)
7. Workshop Director, Workshop on " Hands-on training in RNAi Technology for functional studies in mammalian cell lines" sponsored by RUSA 2.0 and DST-PURSE, Department of Biochemistry, Bharathidasan University, Tiruchirappalli 620 024 (14-16 March 2022)
8. Coordinator, Refresher Courses in Bio-Sciences, UGC sponsored online refresher courses in Bio-Sciences and Business Studies, UGC-HRD Centre, Bharathidasan University, Tiruchirappalli 620 024 (11-24 Dec 2020)

Linkages:

- Kim HY and Ravikumar V (2007). Cloning and expression of polyphosphate kinase 2 from Mycobacterium tuberculosis H37Rv. Gene bank Accession no: EF555554.
- Kim HY, Hwang MR and Ravikumar V (2007). Cloning and expression of polyphosphate kinase 1 from Mycobacterium leprae. Gene bank Accession no: EF555555.

PhD Supervision:

Completed:

S.No.	Name	Title of Thesis	Thesis Submitted
1	Selvaraju Karthik, Ph.D.	Evaluation of the synergistic interaction of Proteasome inhibitor with histone deacetylase Inhibitor in A549 lung cancer cell lines.	Mar 2014
2	Renu Sankar, Ph.D.	Formulation and Evaluation of polymer based nanostructure delivery system for enhanced antineoplastic activity of Suberoylanilide hydroxamic acid in non-small cell lung cancer cell line	Dec 2014
3	Chidambaram Anusha Ph.D.	Design, synthesis, characterization and investigation of α, β-unsaturated carboxylic acid and its urea-based derivatives for novel epigenetic modulation in human non-small cell lung cancer cell line	Dec 2017
4	Annamalai Kalairasi, Ph.D	Effect of berberine on epigenetic regulation mediated by histone deacetylases targeted Chromatin remodeling in A549 human non-small cell lung cancer cell line	Apr 2017
5	Varunkumar K, Ph.D	Evaluation of the expression of Sirtuin a class 3 histone deacetylases and its effect on cancer proliferation and progression in non-small cell lung cancer	Jun 2020
6	Saravanan K, Ph.D	Evaluation of 2-(1H-IMIDAZOL-1-YL)-N-(PYRIDIN-2-YL) An acetamide derivative synthesized by Ligand and structure based pharmacophore modelling of aminopyridine and imidazole as a novel epigenetic modulator in Human Non-small cell lung cancer cell line	Jun 2022

Short term Courses/Training:

- Attended ***DST-PURSE Sponsored Workshop*** of "Hands on Training in Cell and Molecular Biology Techniques" held on 14 - 27 March 2018 at Department of Biochemistry, Bharathidasan University, Tiruchirappalli.
- Attended ***ICAR Sponsored Winter School*** on "Advanced molecular techniques in gene regulation and functional genomics" National Dairy Research Institute, Karnal, India.
- Attended ***UGC Sponsored Refresher Course*** conducted by Academic Staff College, Bharathiar University, Coimbatore, from 08. 03. 2012 to 28. 03. 2012.
- Attended ***UGC Sponsored Orientation Programme*** conducted by Academic Staff College, Bharathidasan University, Tiruchirappalli, from 27. 01. 2011 to 23. 02. 2011.

Invited Lectures/Talks:

- Ravikumar V. Plenary Lecture in the CSIR & TNSCST sponsored 1st National Conference on Biomaterials in Healthcare-2023 on the topic "***Nanostructured delivery system for epigenetic drugs in cancer therapy***" organised by Sree Balaji Medical College and Hospital, Chennai, Tamil Nadu, India. (18-19 Aug 2023)
- Ravikumar V. An online lecture at UGC-sponsored Online Refresher Course in Life Science (Interdisciplinary) for the University and College Teachers on the topic "***Epigenetics in Cancer***" organised by UGC-HRD Centre, Bharathidasan University, Tiruchirappalli 620 023, Tamil Nadu, India. (7 Aug 2023)
- Ravikumar V. A lecture at the National Conference on 'Integrated approaches in drug discovery and development (IADD) Phytodrugs -2023' on the topic "***Epigenetic drug discovery and development***" at Department of Biotechnology, University College of Engineering, BIT Campus, Anna University, Tiruchirappalli 620024, India. (16-17 Feb 2023)
- Ravikumar V. A lecture at International Conference on Recent Advancements in Therapeutics (ICRAT-2022) on the topic "***Epigenetic therapeutics in cancer***" at Department of Biochemistry, Shrimati Indira Gandhi College, Tiruchirappalli 620 002, India. (17 Aug 2022)
- Ravikumar V. An online lecture at Skill Based Internship Programme (NSQF-8) on the topic "***Egigenetic regulation of histone proteins in cancer***" organised by RUSA 2.0, Entrepreneurship & Career Hub, University of Madras, Chennai, Tamil Nadu, India. (15 Dec 2020)
- Ravikumar V. An online lecture at Skill Based Internship Programme (NSQF-8) on the topic "***Protein expression and purification techniques***" organised by RUSA 2.0, Entrepreneurship & Career Hub, University of Madras, Chennai, Tamil Nadu, India. (12 Dec 2020)
- Ravikumar V. A Lecture in National conference on "Recent trends and innovations in Drug development, discovery and targeted therapy for cancer-2019"on the topic "***Epigenetic Modulators as therapeutic targets in Cancer***" Department of Biochemistry, J.J. College of Arts and Science, Sivapuram, Pudukkottai, Tamil Nadu, India. (26-27 Sep 2019)
- Ravikumar V. A Lecture in BUDS Think on the topic "***Epigenetics and Cancer***" Department of Biomedical Science, Bharathidasan University, Tiruchirappalli, Tamil Nadu, India. (Feb 2019)
- Ravikumar V. A Lecture through Video Conference on the topic "***Clinical Immunology***" in Department of Biochemistry, Theivanai Ammal college for Women, Villupuram, Tamil Nadu, India. (Oct 2018)
- Ravikumar V. A Lecture in National conference on "Impact of climate change on public health" on the topic "***Impact of climate change on human biochemistry***" Department of Environmental Biotechnology, School of Environment Sciences, Bharathidasan University, Tiruchirappalli, Tamil Nadu, India. (Mar 2018)
- Ravikumar V. A Lecture on the topic "***Genetics to Epigenetics: It is not all in genes***" Department of Biotechnology, VIT, Vellore, Tamil Nadu, India. (Nov 2016)

- Ravikumar V. Guest lecture in "***Developing Employability Skills in Biochemistry***", Department of Biochemistry, J.J. College of Arts and Science, Sivapuram, Pudukkottai, Tamil Nadu, India. (Aug 2015)
- Ravikumar V. Clinical Immunology. Guest lecture in National workshop on "***Rapid techniques in clinical diagnosis for biotechnology graduates***", Department of Biotechnology, K.S. Rangasamy College of Technology, Thiruchengode. Tamil Nadu, India. (Feb 2014)
- Ravikumar V.A lecture on the topic "***Unraveling the action of sodium butyrate, a bioactive food component in activation of IGFBP3 and NFkB having contradictory signaling in cancer***" in DBT sponsored Brain Storming sessions on Nutriepigenomics at CFTRI, Mysore, India. (7 June 2013)
- Ravikumar V. Cell culture technology. Special lecture in National conference on "***Hands on training in basic molecular biological techniques***", Department of Marine Biotechnology, Bharathidasan University, Tiruchirappalli, Tamil Nadu, India. (Oct 2013)
- Ravikumar V. ***PCR techniques in DNA barcoding***. Special lecture in "National cum Workshop on DNA barcoding of fish and marine life-molecular analysis and bioinformatics approaches", Department of Marine Science, Bharathidasan University, Tiruchirappalli, Tamil Nadu, India. (Sept 2012)
- Ravikumar V. ***Enzymes as molecular targets in cancer***. Plenary lecture in "National seminar in Enzymes and Biocatalysis, the versatile actors: Current trends and future perspectives", Department of Biochemistry, Periyar University, Salem, Tamil Nadu, India. (Jan 2012)
- Ravikumar V. ***Recombinant DNA technology – A powerful molecular tool***. Plenary lecture in "National seminar on challenges and opportunities in biological sciences", Muthayammal college of arts and science, Rasipuram, Tamil Nadu, India. (Feb 2010)
- Ravikumar V. ***Polyphosphate kinase as a target gene for the new concepts of antibiotics for Mycobacterium tuberculosis***. Department of Biochemistry, Adhiparasakthi College of Arts and Science, Kalavai, Vellore, Tamil Nadu, India. (Aug 2009)
- Ravikumar V. ***Novel target of the genes related to antibacterial mechanism(s) in terms of inorganic polyphoshphate on Mycobacterium tuberculosis***. Korean Institute of Tuberculosis. Seoul, Korea. (Feb 2007)

Details of Research projects being implemented/ completed:

Principal Investigator:

S.No.	Sponsoring Agency	Title of the Major Research Project	Total Grant (Rs.)	Duration	Status
1.	UGC	Nano encapsulation of Suberoylanilide hydroxamic acid (SAHA): an attempt to improve anticancer activity in non-small cell lung cancer cell lines	11.14 Lakhs	2011-2014	Completed
2.	DST	Synergistic Interaction Of The Histone Deacetylase Inhibitor With The Proteasome Inhibitor In Lung Cancer	22.75 Lakhs	2012-2015	Completed
3.	DST(SERB)	Investigation on acetylation dependent activation of Notch signaling pathway by HDAC inhibitors - A possible mechanism for drug resistance and survival upon HDAC inhibition therapy in NSCLC cell lines.	53.93 Lakhs	2016-2019	Completed
4	RUSA	Effect of natural alkaloid on regulation of epithelial-mesenchymal transition through … in non-small cell lung cancer cell lines	12.82 Lakhs	2021-2023	Ongoing
5	ICMR	Delineating the Association of … and its Modulatory Effect in Tumorigenesis of Lung Cancer.	31.085 Lakhs	2022-2024	Ongoing
6	ICMR	"Evaluation of … in modulation of pulmonary fibrosis mediated by SARS-CoV-2 infection".	50.49 Lakhs	2022-2025	Ongoing

Co-Investigator:

S.No	Sponsoring Agency	Title of the Major Research Project	Total Grant (Rs.)	Duration	Status
1.	NMPB (Ayush)	Characerization Of Active Principles From *Cassia Auriculata* As A Potential Drug For Hyperlilpidemia And Cardiovascular Diseases	23.52 Lakhs	2012-2015	Completed
2.	CSIR	Endoplasmic reticulum stress induced autophagy in *Saccharomyces cerevisiae* and the implications in phospholipids	22.92 Lakhs	2012-2015	Completed
3.	DBT	Studies on Potential Oncogenic Role of the Transcription Factor Nsep1 Association with the Overexpressed Rps27a in Human Hepatocellular Carcinoma (HCC)	27.07 Lakhs	2012-2015	Completed
4.	CSIR	Novel MASP-2 inhibitor from Indian medicinal plants for protection against myocardial infraction	16 Lakhs	2012-2015	Completed
5.	DBT	Structural Exploration of Recombinant Mouse Seminal Vesicle Spink-3 Receptor on Sperm	29.87 Lakhs	2012-2016	Completed