

Dr. Shamprasad Varija Raghu

Ramalingaswami Fellow (DBT)/
Associate Professor
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Neurogenetics Lab
Dept of Applied Zoology
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Neurogenetics Lab:

The lab is supported by Dept of Biotechnology (DBT), Govt of India and well equipped for molecular biology, neurobiology, Animal behaviour and Radiation biology work. The lab is also recognized by the **Indian Academy of Sciences (IAS)** for training summer fellows.

Educational Qualification

- . Ramalingaswami Fellow (DBT), Dept of Applied Zoology, Mangalore University **(2015-Current)**
- . Ramanujan Fellow (DST), Dept of Applied Zoology, Mangalore University **(2015-2020)**
- . Research Scientist at Duke NUS Graduate Medical School, Singapore **(2013-2015)**
- . Research Scientist in Neuroscience Research Partnership (NRP), Singapore **(2011-2013)**
- . Postdoctoral Fellow in Max-Planck Institute of Neurobiology, Germany **(2003-2011)**
- . DAAD (Deutscher Akademischer Austausch Dienst) Fellow in University of Freiburg, Germany **(2002)**
- . Ph.D. in Neurobiology at Mangalore University, India **(1999-2003)**
- . Master of Science (M. Sc.) in Applied Zoology, Mangalore University, India **(1996-1998)**

Area of Research: Neurobiology, Radiation biology and GI tract physiology

Teaching Experience:

1999 - 2003 for MSc in Applied Zoology, Dept of Applied Zoology, Mangalore University

2015 - till the date for MSc in Applied Zoology, Dept of Applied Zoology, Mangalore University

Subjects: Neurobiology, Animal Behaviour, Genetics, Quantitative Biology, Radiation Biology and Molecular Cell Biology

Research Collaborators:

International: 1) Professor Alexander Borst, Director, Max Planck Institute of Neurobiology, Germany

2) Professor Richard Baines, University of Manchester, Manchester, UK

National : 1) Professor Guruprasad Kalthur, Manipal Institute of Higher Education (MAHE), Manipal

2) Dr. Shrinath Baliga, Mangalore Institute of Oncology (MIO), Mangalore

3) Professor Arun Isloor, NITK, Surathkal

4) Professor Kesheva Prasad, Yenepoya Research Centre (YRC), Mangalore

5) Dr. Anurag Sharma, NUCSER, Nitte University, Mangalore

Publications (Total Impact Factors \approx 250):

Neurogenetics Lab, Dept of Applied Zoology, Mangalore University (2016 onwards)

1. Nishal Keshav, Ramyalakshmi Ammankallu, Shashidhar, Jagdish Gopal Paithankar, Rajashekhar K Patil, Avinash Kudva and **Shamprasad Varija Raghu** (2022). Dextran sodium sulfate alters antioxidant status in the gut affecting the survival of *Drosophila melanogaster*. **3Biotech. Corresponding author. IF -3**

News Coverage: The Hindu (<https://www.thehindu.com/news/cities/Mangalore/fruit-fly-can-be-an-alternative-animal-model-for-research-related-to-bowel-diseases-say-mangalore-university-researchers/article65902702.ece>)

2. Arpitha Rao, Guruprasad Nayak, Sneha Guruprasad Kalthur, Srinivas Mutalik, Renu Pasricha, **Shamprasad Varija Raghu**, Satish Kumar Adiga and Guruprasad Kalthur (2022). Anti-tuberculosis drugs used in DOTS strategy reduce the ovarian reserve, quality of oocytes, pre-implantation embryos and post-natal development in Swiss albino mice. **Reproduction, Fertility and Development. IF - 2**

3. Sayali Chandrashekhar Deolankar , Mohd Altaf Najar, Anagha Kanichery, Poornima Ramesh, **Shamprasad Varija Raghu** and T.S. Keshava Prasad (2022). Proteome dataset of *Drosophila melanogaster* fed on Bacopa monnieri (BM) and Centella asiatica (CA) extract. **Neuroscience Research Notes**
4. **Shamprasad Varija Raghu**, Paul Simpson and Shrinath Baliga (2022). Fruits and their phytochemicals in mitigating the ill effects of ionizing radiation: Review on the existing scientific evidence (under final review). **Food & Function**. **IF – 6.3**
5. Sayali Chandrashekhar Deolankar, Mohd Altaf Najar, Avinash Kudva, Poornima R, Anagha K, **Shamprasad Varija Raghu** and T.S. Keshava Prasad (2022). Discovery of molecular networks of neuroprotection conferred by Brahmi extract in A β 42-induced toxicity model of *Drosophila melanogaster* using a quantitative proteomic approach (under final revision). **Molecular Neurobiology**. **Corresponding Author**. **IF – 5.6**
6. Kizhakke P. Anupama, Olakkaran Shilpa Anet Antony, **Shamprasad Varija Raghu** and Hunasanahally P. Gurushankara (2022). Jatamansinol from *Nardostachys jatamansi* protects tau-induced neurotoxicity in Alzheimer's disease *Drosophila* model. <https://doi.org/10.1007/s12035-022-02964-7>. **Molecular Neurobiology**. **IF – 5.6**
7. Pankaj Prabhakar, Giriypura Srikantachar Pavankumar, **Shamprasad Varija Raghu** and Manjeshwar Shrinath Baliga (2022). Utility of Indian fruits in cancer prevention and treatment: Time to undertake translational and bedside studies. **Current Pharmaceutical Design**. <https://doi.org/10.2174/1381612828666220601151931>. **IF – 3.3**
8. Gauthama B U, B Narayana, B K Sarojini, S N Kodlady, Y Sangappa, Avinash K Kudva and **Shamprasad Varija Raghu** (2022). A versatile rhodamine B-derived fluorescent probe for selective copper (II) sensing. **Inorganic Chemistry Communications**, 141:109501. **IF – 3.4.**
9. Kizhakke P. Anupama, Olakkaran Shilpa, Anet Antony, **Shamprasad Varija Raghu** and Hunasanahally P. Gurushankara (2022). Jatamansinol from *Nardostachys jatamansi* (D.Don) DC. protects A β 42-induced Neurotoxicity in Alzheimer's disease *Drosophila* model. **Neurotoxicology**, 90:62-78. **IF – 4.4.**
10. Akhila M Param, Sneha S Rao, Jagdish G Paithankar, **Shamprasad Varija Raghu**, Rajashekhar K Patil (2022). Reduced sensory systems in pit-building antlion larvae (*Myrmeleon bore*) relate to 'sit and wait' predation. **PNAS, India**, 92:385–392. **Corresponding author**. **IF – 1.**
11. Vinay S Bhat, Avinash Kundadka Kudva, Harshitha Venkatesh Naik, Reshmi G, **Shamprasad Varija Raghu**, P. De Padova, Gurumurthy Hegde (2022). Toxicological profiling of onion peel derived mesoporous carbon nanospheres using in vivo *Drosophila melanogaster* model. **Applied Sciences**, 12(3):1528. **Corresponding author IF – 2.8.**
12. Leonard Clinton D'Souza, Shiwangi Dwivedi, Faiza Raihan, Yathisha UG, **Shamprasad Varija Raghu**, Mamatha Bangera and Anurag Sharma (2022). Hsp70 overexpression in *Drosophila* hemocytes attenuates benzene-induced immune and developmental toxicity via regulating ROS/JNK signalling pathway. **Environmental Toxicology**, 1-17. **IF – 4.2.**
13. Sayali Chandrashekhar Deolankar, Mohd Altaf Najar, **Shamprasad Varija Raghu** and T.S. Keshava Prasad (2022). A β 42 expressing *Drosophila melanogaster* model for Alzheimer's disease: Quantitative proteomics identifies altered protein dynamics of relevance to neurodegeneration. **OMICS: A Journal of Integrative Biology**. 26: 51-63. **Corresponding author IF – 4**
14. Shiwangi Dwivedi, Leonard Clinton D'Souza, Nidhi Ganesh Shetty, **Shamprasad Varija Raghu** and Anurag Sharma (2022). Hsp27, a potential EcR target, protects nonylphenol-induced cellular and organismal toxicity in *Drosophila melanogaster*. **Environmental Pollution**. 293:118484. **IF – 10**
15. Sanath Hegde, Suresh Rao, Pratima Rao, **Shamprasad Varija Raghu**, Sharake Meera, Manjeshwar Shrinath (2022). Aqueous extract of Emblica officinalis Linn (Indian gooseberry) in combination with iodine is more efficacious than iodine alone in mitigating mucositis in head and neck cancer patients undergoing curative radiotherapy: retrospective observations. **Indian Journal of Otolaryngology and Head and Neck Surgery**. doi.org/10.1007/s12070-021-03059-w. **IF – 0.45**
16. **Shamprasad Varija Raghu**, Avinash Kundadka Kudva, Aravind Prabhu, Suresh Rao, Krishna Prasad, Jayesh Mudgal and Manjeshwar Shrinath Baliga (2021). Dietary agents in mitigating chemotherapy-related cognitive impairment (Chemobrain or Chemofog): First review addressing the benefits, gaps, challenges and ways forward. **Food & Function**. 12(22):11132-11153. **IF – 6.3**
17. Keerthana Karunakar Poojary, Ashna Vasani, Sandhya Kumari, Reyon Dcunha, Guruprasad Nayak, Jyolsna P Kookal, Rajat Radhakrishna Rao, Srinivas Mutalik, Sneha Guruprasad Kalthur, MS Murari, **Shamprasad Varija Raghu**, Satish Kumar Adiga, Guruprasad Kalthur (2021). Curcumin nanocrystals protect testicular

tissue from cyclophosphamide-induced testicular toxicity. **Toxicology and Applied Pharmacology**. 433:115772. **IF – 4.5**

18. Reshma Sathyanarayana, Boja Poojary, Sukesh Kumar B, Vasantha Kumar, Rajesh P Shastry and **Shamprasad Varija Raghu** (2021). Design, Synthesis and Biological Evaluation of Novel Thiazolidinone Derivatives. **Asian journal of Chemistry**. **IF – 0.54**
19. **Shamprasad Varija Raghu**, Avinash Kundadka Kudva, Suresh Rao, G K Rajanikant and Shrinath Baliga (2021). Medicinal plants in mitigating mobile phone radiation-induced neural damage: a review. **Electromagnetic Biology and Medicine**. 12:1-14. **IF – 2.88**
20. Sreeja Lakshmi, **Shamprasad Varija Raghu**, Preetham Elumalai, Sureshkumar Sivan (2021). AKG enhanced activity of Oxyresveratrol in Alzheimer's disease by rescuing Tau protein. **Neuroscience Letters**. 759:135981. **IF – 3.2**
21. Ramesh S Gani, Avinash K Kudva, Karabasanagouda Timanagouda, Raghuvveer, Salma Begum Hussain Mujawar, Shrinivas D Joshi and **Shamprasad Varija Raghu** (2021). Synthesis of novel 5-(2, 5-bis (2, 2, 2-trifluoroethoxy) phenyl)-1, 3, 4-oxadiazole-2-thiol derivatives as potential glucosidase inhibitors. **Bioorganic Chemistry**. 114:105046. **IF – 5.3**
22. Avinash K Kudva, **Shamprasad Varija Raghu**, Suresh Rao, Sanath Kumar Hegde, Sucharitha Suresh and Manjeshwar Shrinath Baliga (2021). Correlation of serum zinc and copper levels with pathology in Head and Neck cancers: First study implicating association with tumor staging (in press). **Indian Journal of Otolaryngology and Head and Neck Surgery**. <https://doi.org/10.1007/s12070-021-02589-7>. **IF – 0.45**
23. Gauthama BU, Narayana B, Suresh NK, Sarojini BK, Sangappa Y, Avinash Kundadka Kudva, Satyanarayana G and **Shamprasad Varija Raghu** (2021). Rhodamine based hybrid moiety for selective colorimetric/fluorimetric "off-on" in field mapping of highly pollutant Hg (II) and its application for in vivo bioimaging. 166:106233. **Microchemical Journal**. 166:106233. **IF – 5.3**
24. Avinash Kundadka Kudva*, **Shamprasad Varija Raghu***, Suresh Rao, Venkatesh Ponemone, Sanath Kumar Hegde, Rhea Katherine D'souza, Manjeshwar Poonam Baliga Rao, Paul Simon and Manjeshwar Shrinath Baliga (2021). Indian indigenous fruits and their phytochemicals as radioprotective agents: past, present and future. **Anti-Cancer Agents in Medicinal Chemistry**. **IF – 2.6. Equal Contributions.**
25. Faizan Kalekhan, Avinash Kundadka Kudva, **Shamprasad Varija Raghu**, Suresh Rao and Manjeshwar Shrinath Baliga (2021). Traditionally used natural products in preventing ionizing radiation induced dermatitis: First review on the clinical studies. **Anti-Cancer Agents in Medicinal Chemistry**. DOI: [10.2174/1871520621666210405093236](https://doi.org/10.2174/1871520621666210405093236) **IF – 2.6**
26. Sandhya Kumari, Sujith Raj Salian, Arpitha Rao, Shilpa M Somagond, Ravindra R Kamble, Aravind Nesaragi, Jyotirekha Das, Rajanikant G K, Srinivas Mutalik, **Shamprasad Varija Raghu**, Satish Kumar Adiga, Guruprasad Kalthur (2021). Quinoline derivative enhances human sperm motility and improves the functional competence. **Reproductive Sciences**. 28 (5):1316-1332. **IF – 3.06**
27. Madan Kumar S, Vasantha Kumar, Mohammed Al-Ghorbani, Shivaram Holla, Boja Poojary, Praveen P, Chandra Nayak S, Jnani S Mohan, Thamotharan S, **Shamprasad Varija Raghu**, Lokanath N K (2020). Theoretical and experimental solid state studies of Ethyl 1-benzyl-2-(thiophen-3-yl)-1Hbenzo[d]imidazole-5-carboxylate. **Zeitschrift fuer Kristallographie**. 235 (11):569-579. **IF – 3.17**
28. **Shamprasad Varija Raghu** and Ramesh Thamankar (2020). Comparative study of crystallography and defect structure of corneal nipple array in *Daphnis nerii* Moth and *Papilio polytes* Butterfly eye. **ACS Omega**. 5 (37):23662-23671. **IF – 4.1**
29. Jagdish Gopal Paithankar, Avinash Kudva, **Shamprasad Varija Raghu**, Rajashekhar K Patil (2020). Radiation hazard protection by Uric acid: Evidences from studies in fruit fly *Drosophila melanogaster* and Human dermal fibroblasts. **Molecular Biology Reports**. 2020 Feb 15. **Corresponding author. IF – 2.8**
30. **Shamprasad Varija Raghu**, Farhan Mohammad, Jia Yi Chua, Claudia Barros, Joanne Lam, Mavis Loberas, Sadhna Sahani, Adam Claridge-Chang (2018). A zinc-finger fusion protein refines Gal4-defined neural circuits. **Molecular Brain**. 20:11(1):46. **IF – 4.4**
31. Jagdish Gopal Paithankar, **Shamprasad Varija Raghu**, Rajashekhar K Patil (2018). Levels and fluxes in enzymatic antioxidants following gamma irradiation are inadequate to confer radiation resistance in *Drosophila melanogaster*. **Molecular Biology Reports**. 45(5):1175-1186. **Corresponding author. IF – 2.8**

32. Jagdish Gopal Paithankar, **Shamprasad Varija Raghu**, Rajashekhar K Patil (2018). Concomitant changes in radiation resistance and trehalose levels during life stages of *Drosophila melanogaster* suggest radio-protective function of trehalose. **International Journal of Radiation Biology**. 94: 576-589. **IF – 3.6**
33. Madan Kumar Shankar, Fares Hezam Al-Ostoot, Manjunath BC, **Shamprasad Varija Raghu**, Yasser Hussein, Mahesh N, Shaikath A K, Lokanath NK, Byrappa Kullaiah (2017). Crystal structure, Energy-framework analysis and enrichment ratio calculation of 1-(3,4-dimethoxyphenyl)-3-(4-bromophenyl) prop-2-en-1-one exhibiting a putative halogen bond C—Br...O. **J Molecular Structure**. 1156:216-223. **IF – 3.9**

Max Planck Institute of Neurobiology, Germany

34. Hermann Cuntz, Friedrich Forstner, Bettina Schnell, **Shamprasad Varija Raghu**, Alexander Borst (2013). Preservation of dendrite function under extreme scaling. **PLoS ONE**. 8(8):e7154. **IF – 3.8**
35. **Shamprasad Varija Raghu**, Jing Claussen, Alexander Borst (2013). Neurons with GABAergic phenotype in the visual system of *Drosophila*. **J. Comp. Neurol.** 521(1):252-65. **Corresponding author. IF – 3.3**
36. Bettina Schnell, **Shamprasad Varija Raghu**, Aljoscha Nem, Alexander Borst (2012). Columnar cells Necessary for motion responses of wide-field visual interneurons in *Drosophila*. **J Comp. Physiol A**, 198(5):389-395. **IF – 2**
37. Maximilian Joesch, Bettina Schnell, **Shamprasad Varija Raghu**, Dierk F. Reiff, Alexander Borst (2011). On and off pathways in *Drosophila* motion vision. **e-Neuroforum**, 17(1):30-32.
38. **Shamprasad Varija Raghu**, Alexander Borst (2011). Candidate glutamatergic neurons in the visual system of *Drosophila melanogaster*. **PLoS ONE**, 6(5): e1947. **Corresponding author. IF – 3.8**
39. **Shamprasad Varija Raghu**, Dierk F. Reiff, Alexander Borst (2011). Neurons with cholinergic phenotype in the visual system of *Drosophila melanogaster*. **J. Comp. Neurol.**, 519:162–176. **Corresponding author. IF – 3.3**
40. Maximilian Joesch, Bettina Schnell, **Shamprasad Varija Raghu**, Dierk F. Reiff, Alexander Borst (2010). On and off pathways in *Drosophila* motion vision. **Nature**, 468:300-304. **IF – 70**
41. Bettina Schnell, Maximilian Joesch, Friedrich Forstner, **Shamprasad Varija Raghu**, Otsuna H, Ito K, Alexander Borst, Dierk F. Reiff (2010). Processing of horizontal optic flow in three visual interneurons of the *Drosophila* brain **J Neurophysiol.**, 103:1646-1657. **IF – 3**
42. **Shamprasad Varija Raghu**, Maximilian Joesch, Stephan Sigrist, Alexander Borst, Dierk F. Reiff (2009). Synaptic organization of lobula plate tangential cells in *Drosophila*: Da7 cholinergic receptors. **J. Neurogenetics**, 23:200-209. **IF – 1.7**
43. **Shamprasad Varija Raghu**, Maximilian Joesch, Alexander Borst and Dierk F. Reiff (2007). Synaptic organization of lobula plate tangential cells in *Drosophila*: γ -Aminobutyric acid receptors and chemical release sites. **J. Comp. Neurol.** 502:598-610. **Corresponding author. IF – 3.3**

Dept of Applied Zoology, Mangalore University (From PhD)

44. Rajashekhar K Patil and **Shamprasad Varija Raghu** (2004). Golgi analysis of tangential neurons in the lobula plate of *Drosophila melanogaster*. **J. Biosci.**, 29:93-104. **IF – 2.8**
45. Rajashekhar K Patil and **Shamprasad Varija Raghu** (2004). Maxillary palp glomeruli and ipsilateral projections in the antennal lobe of *Drosophila melanogaster*. **J Biosci.**, 29:423-9. **IF – 2.8**

Books/Chapters:

46. **Shamprasad Varija Raghu (2016)**. Neuroanatomical studies on brain of *Drosophila melanogaster*. Statperson Publishing Corporation, India. ISBN: 978-1-365-04232-4. **Corresponding author**
47. **Shamprasad Varija Raghu** and Rajeev Bhat (2022). Neurobiology of Food Addictions. Future Foods, Global Trends, Opportunities, and Sustainability Challenges, 425-431. Elsevier Publishing Company, Netherland. Page No: 425-431. ISBN: 978-03-23910019. **Corresponding author**
48. Rajashekhar K Patil and **Shamprasad Varija Raghu** (2021). Visualizing neurons in *Drosophila* – classical staining I techniques. Indian Academy of Sciences (IAS), India. Page No: 419-423. ISBN: 978-81-950664-2-1. **Corresponding author**

- 49. Shamprasad Varija Raghu** and Rajashekhar K Patil (2021). GAL4-UAS system for genetic labelling and visualization of specific regions of brain. Indian Academy of Sciences (IAS), India. Page No: 233-237. ISBN: 978-81-950664-2-1. **Corresponding author**
- 50. Shamprasad Varija Raghu** and Rajashekhar K Patil (2021). Study of food preference in *Drosophila* to test the palatability and discrimination of food. Indian Academy of Sciences (IAS), India. Page No: 489-491. ISBN: 978-81-950664-2-1.
- 51. Shamprasad Varija Raghu**, Sanmitha Jujare and Rajashekhar K Patil (2021). pH profile of the gastrointestinal tract in *Drosophila melanogaster* larvae. Indian Academy of Sciences (IAS), India. Page No: 111-113. ISBN: 978-81-950664-2-1. **Corresponding author**
- 52.** Rajashekhar K Patil and **Shamprasad Varija Raghu** (2021). Labeling and identification of chemo- and mechano-sensilla on the appendages of *Drosophila melanogaster*. Indian Academy of Sciences (IAS), India. Page No: 429-431. ISBN: 978-81-950664-2-1. **Corresponding author**
- 53. Shamprasad Varija Raghu**, Avinash K. Kudva and Rajashekhar K. Patil (2021). A study of the distribution of campaniform sensilla on the wings of *Drosophila melanogaster*. Indian Academy of Sciences (IAS), India. Page No: 425-427. ISBN: 978-81-950664-2-1. **Corresponding author**
- 54. Shamprasad Varija Raghu** and Avinash Kudva (2022). Deciphering the molecular and genetic basis of Alzheimer's disease. Springer Publications, USA. ISBN: 978-981-16-6703-9. **Corresponding author**
- 55.** Avinash Kudva, Shrinath Baliga and **Shamprasad Varija Raghu** (2022). Pharmacological application of *Phyllanthus emblica* as therapeutics in Alzheimer's Disease. Springer Publications, USA. ISBN: 978-981-16-6703-9. **Corresponding author**
- 56.** Deepa Mugudthi Venugopal, Raifa Abdul Aziz and **Shamprasad Varija Raghu** (2022). Transgenic Brain mapping Techniques in *Drosophila melanogaster*. Springer Publications, USA. ISBN: 978-981-19-1352-5. **Corresponding author**

Invited Talks:

- 1. Shamprasad Varija Raghu** (2010). Guest talk at Centre for Neuroscience, Indian Institute of Science, Bangalore (17 March 2010).
- 2. Shamprasad Varija Raghu** (2011). Guest talk at Dept of Cell Biology, University of Virginia School of Medicine, USA (14 February 2011).
- 3. Shamprasad Varija Raghu** (2013). Neuroscience Retreat. Duke-NUS Graduate Medical School, Singapore.
- 4. Shamprasad Varija Raghu** (2015). Resource person for DST-SERB School in Insect Biology, Central University, Hyderabad (15 December 2015).
- 5. Shamprasad Varija Raghu** (2016). Resource person for National Conference on Genetics and Human Diseases, Central University of Kerala, Kasaragod (3-4 November 2016).
- 6. Shamprasad Varija Raghu** (2016). Resource person for 5th annual Symposium of the Society of Biological Chemists (SBC), Manipal University, Manipal (5th November 2016).
- 7. Shamprasad Varija Raghu** (2016). Guest Lecture at Nitte University Centre for Science Education and Research (NUCSER), Nitte University, Mangalore (7th October 2016).
- 8. Shamprasad Varija Raghu** (2016). Resource person for International Symposium on "Understanding the Molecules of Life in the Era of New Biology", Davangere University, Davangere (20- 22 October 2016).
- 9. Shamprasad Varija Raghu** (2017). Resource person for International Conference on Non-mammalian models in Biomedical Research held at Nitte University, Mangalore (5-6 October 2017).
- 10. Shamprasad Varija Raghu** (2018). Resource person for National Seminar on "Current Trends in Biosciences" at Sri Sai Institute of Higher Learning (SSIHL), Anantapur, Andhrapradesh (22-23rd January 2018).
- 11. Shamprasad Varija Raghu** (2018). Resource person for Manipal Research colloquium-2018 at Manipal University, Manipal. (3-5th April 2018).

12. **Shamprasad Varija Raghu** (2019). Guest talk at Bhandarkar's College, Kundapura. (27th February 2019).
13. **Shamprasad Varija Raghu** (2019). Guest talk at Poornaprajna College, Udupi. (7th March 2019).
14. **Shamprasad Varija Raghu** (2019). Guest talk at Dept of Biotechnology, St. Aloysius College, Mangalore (25th March 2019).
15. **Shamprasad Varija Raghu** (2019). Guest talk at Yenepoya Research Centre (YRC), Deralakatte (25th April 2019).
16. **Shamprasad Varija Raghu** (2019). Guest talk for ANKURAM 360, Narayana Guru College, Mangalore.
17. **Shamprasad Varija Raghu** (2019). Guest talk at Vivekananda Arts and Science College, Puttur (3rd August 2019).
18. **Shamprasad Varija Raghu** (2019). Guest talk at Dept of Biosciences, Mangalore University (6th September 2019).
19. **Shamprasad Varija Raghu** (2019). Resource person for National Conference on Current Trends in Entomology and Insect Plant interactions at St Aloysius College, Mangalore (12th September 2019).
20. **Shamprasad Varija Raghu** (2019). Guest talk at Dept of Biochemistry, Mangalore University (7th November 2019).
21. **Shamprasad Varija Raghu** (2019). Resource person for Faculty Development Program (FDP) at St Aloysius College, Mangalore (13th November 2019).
22. **Shamprasad Varija Raghu** (2021). Special lectures at Dept of Biochemistry, Mangalore University (16th February 2021).
23. **Shamprasad Varija Raghu** (2021). Resource person for UGC-HRDC Refresher Course, Central University of Hyderabad (15th September 2021).
24. **Shamprasad Varija Raghu** (2022). Resource person for 2 week DBT-Karnataka Skill Vigyan Faculty Training Programme on Advanced Techniques in Genetics Engineering and Immunotechnology held at Dept of Biosciences, Mangalore University (16th February 2022).
25. **Shamprasad Varija Raghu** (2022). Resource person for Six Day Workshop on Research and Publication Ethics at Mangalore University (18th February 2022).
26. **Shamprasad Varija Raghu** (2022). Resource person for Six Day Workshop on Research and Publication Ethics at Mangalore University (22nd February 2022).
27. **Shamprasad Varija Raghu** (2022). Resource person for Two Days National Workshop on Animal Diversity and Taxonomy held at Dept of Applied Zoology, Mangalore University (1st March 2022).
28. **Shamprasad Varija Raghu** (2022). Resource person for Six Days National Level Workshop on Sophisticated Instruments Usage organized by DST-PURSE, Mangalore University (7th April 2022).
29. **Shamprasad Varija Raghu** (2022). Resource person for special online lecture organized by Govt First Grade College, KR Nagar, Mysore (22nd July 2022).
30. **Shamprasad Varija Raghu** (2022). Resource person for Skill based Lecture workshop in Dept of Biosciences, Mangalore University (11th July 2022).
31. **Shamprasad Varija Raghu** (2022). Resource person for One Day National Conference on Recent Advances in Science and Technology, at Government Women's First grade college, Ajjarkadu, Udupi (24th August 2022).

Poster presentation in International and National Conferences:

1. **Shamprasad Varija Raghu** (2004). Friday Seminar Series. Max Planck Institute of Neurobiology, Munich, Germany (August 2004).
2. **Shamprasad Varija Raghu** (2006). Friday Seminar Series. Max Planck Institute of Neurobiology, Munich, Germany (September 2006).
3. **Shamprasad Varija Raghu** (2009). Joint Fly Meeting Seminar Series. Max Planck Institute of

Neurobiology and Max Planck Institute of Biochemistry, Munich, Germany (18 May 2009).

4. **Shamprasad Varija Raghu** (2009). Friday Seminar Series. Max Planck Institute of Neurobiology, Munich, Germany (January 2009).
5. **Shamprasad Varija Raghu** (2011). Joint Fly Meeting Seminar Series. Max Planck Institute of Neurobiology and Max Planck Institute of Biochemistry, Munich, Germany (29 November 2011).
6. **Shamprasad Varija Raghu** (2011). Friday Seminar Series. Max Planck Institute of Neurobiology, Munich, Germany (February 2004).
7. **Shamprasad Varija Raghu** and Alexander Borst (2006). 47th Annual *Drosophila* Research Conference. Houston, Texas, USA (29 March to 2 April 2006).
8. **Shamprasad Varija Raghu** and Alexander Borst (2009). 8th Gottingen Meeting of the German Neuroscience Society. Gottingen, Germany (25-29 March 2009).
9. **Shamprasad Varija Raghu** and Alexander Borst (2010). Francis Crick Symposium on Neuroscience. Cold Spring Harbor Asia Conference, Suzhou, China (12-17 April 2010).
10. **Shamprasad Varija Raghu** and Alexander Borst (2010). EMBO/EMBL Symposium: Structure and Function of Neural Circuits. EMBL, Heidelberg, Germany (5-8 September 2010).
11. **Shamprasad Varija Raghu** and Adam Claridge-Chang (2013). 5th DUNES Scientific Symposium. DUKE-NUS Graduate Medical School, Singapore (11 October 2013).
12. **Shamprasad Varija Raghu** and Adam Claridge-Chang (2014). 55th Annual *Drosophila* Research Conference. San Diego, CA, USA (26-30 March 2014).
13. **Shamprasad Varija Raghu** (2016). Young Investigator Meeting. Faridabad, India (28 February to 2 March 2016).
14. **Shamprasad Varija Raghu** (2016). National Conference on Frontiers in Genetics and Genomics. Department of Genomic Science, Central University of Kerala, Kasaragod (7-8 April 2016). **Best Oral Presentation Award**

Refresher and Orientation Courses:

1. **UGC Sponsored Faculty Development Program (FDP)** at Pune University, Pune from 11-17 July 2020
2. **Faculty Development Program (FDP)** at St Joseph Engineering College, Mangalore from 20-24 July 2020
3. **UGC Sponsored Faculty Induction Program (FIP)** at Gujarat University, Ahmadabad from 27th July to 25th August 2020
4. **UGC Sponsored Refresher Course** at Gujarat University, Ahmadabad from 7th to 20th September 2020
5. **Faculty Development Program (FDP)** on IPR, Scientific writing and recent trends in research at REVA University, Bangalore from 7th to 11th June 2021

Student Thesis Guidance:

PhD Students

No	Name of the student	Registration No	Title of the PhD thesis
1	Raifa Aziz	211631310107	Studies on the neurotoxic effects of chemotherapeutic drugs using <i>Drosophila melanogaster</i> as a model system
2	Deepa Venugopal	211631310103	Studies on epileptic-like behaviour in <i>Drosophila melanogaster</i> and therapeutic approaches

Indian Academy of Sciences (IAS) – Summer Fellowships

No	Name of the student	Degree	Title of the project	Year
1	Prajna C S (Mysore University)	MSc	Haemolymph trehalose level regulation in <i>Drosophila</i> by DILP	17-18
2	Sanmitha Jujare	B.E Biotech	<i>Drosophila</i> GI tract as a model for gastrointestinal physiology	17-18
3	Sowbarniga Rajkumar	BSc	Neurobiological and molecular mechanism of epilepsy	20-21

MSc Project students

1	Shashidhar	MSc	<i>Drosophila</i> as a model for DSS induced colitis: Anatomical, Courtship and Enzymatic analysis	17-18
2	Ramyalakshmi A	MSc	DSS induced gastrointestinal colitis in <i>Drosophila</i> : Anatomical, courtship and behavioural analysis	17-18
3	Akshay K Paniker	MSc	Influence of ayurvedic laxative drugs on gastrointestinal tract in <i>Drosophila melanogaster</i> .	17-18
4	Nishal Keshav	MSc	Modeling gastrointestinal colitis in <i>Drosophila</i> : Behavioural, anatomical and enzymatic analysis.	17-18
5	Ranjitha M N	MSc	Influence of ayurvedic digestive metabolic enhancers on gastrointestinal tract (GI) in <i>Drosophila melanogaster</i>	17-18
6	Deekshan Kumar	MSc	Genetic approach to study radiation resistance in <i>Drosophila melanogaster</i>	18-19
7	Donald Preetam Henry	MSc	Effect of Monosodium-L-Glutamate (MSG) on gastrointestinal tract of <i>Drosophila melanogaster</i>	18-19
8	Anjali K	MSc	Assessing the effect of gamma radiation on fertility in female <i>Drosophila melanogaster</i>	18-19
9	Raksha K N	MSc	Assessing the effect of gamma radiation on fertility in male <i>Drosophila melanogaster</i>	18-19
10	Jilu A Jose	MSc	Genetic and pharmacological approach to study radiation resistance in <i>Drosophila melanogaster</i>	18-19
11	Harshitha V N	MSc	Carbon nanoparticles and its toxicity in female <i>Drosophila melanogaster</i>	19-20
12	Raifa Abdul Aziz	MSc	Selenium a micronutrient in controlling DSS induced GI tract inflammation in <i>Drosophila</i>	19-20
13	Reshmi	MSc	Carbon nanoparticles and its toxicity in female <i>Drosophila melanogaster</i>	19-20
14	Sahana	MSc	Radiation resistance in <i>Drosophila melanogaster</i> – a transgenic approach	19-20
15	Sruthi Raveendran	MSc	DSS induced inflammation and treatment using selenium in <i>Drosophila melanogaster</i>	19-20
16	Suvisha T K	MSc	Trehalose in regulating radiation resistance in <i>Drosophila melanogaster</i>	19-20
17	Aswathi B	MSc	Indian indigenous plants in mitigating <i>Diabetes mellitus</i>	20-21
18	Dhanya Naik D	MSc	Deciphering the genetic causes of Alzheimer's disease	20-21
19	Harshitha K	MSc	Insecticidal properties of mushrooms-Past, present, and future	20-21
20	Michelle Sonali Rodrigues	MSc	Pharmacological interventions in mitigating Alzheimer's disease	20-21
21	Poornima B	MSc	Indian mushroom and its bio-insecticidal properties	20-21
22	Dhanashree K	MSc	In search of cure for <i>Diabetes mellitus</i> : A phytochemical approach	20-21
23	Fathimath Shafeeka	MSc	Screening of mushroom extract for its insect repellent properties using <i>Drosophila</i>	21-22
24	Thejaswini H	MSc	Insecticidal properties of wild shrubs and its evaluation in <i>Drosophila</i>	21-22
25	Keith Davin Xavier Netto	MSc	Modelling obesity in <i>Drosophila</i>	21-22
26	Kumara Subrahmanya M	MSc	<i>Drosophila</i> model system to test insecticidal properties of wild shrubs	21-22
27	Manishchandra P G	MSc	Evaluation of mushroom extracts in <i>Drosophila</i> for its insecticidal properties	21-22
28	Vishnu Shreekara Bhat K	MSc	Study on High Fat Diet induced obesity in <i>Drosophila</i>	21-22

Journal Reviewer:

1. Journal of Microscopy
2. Journal of Neurochemistry
3. Insect Science
4. Plos One
5. Experimental Brain Research
6. International Journal of Radiation Biology
7. 3 Biotech
8. Journal of Food Science and Technology
9. Environmental Toxicology and Pharmacology
10. Food and Function

Fellowships and Awards:

1. DAAD (Deutscher Akademischer Austausch Dienst) Fellow in the University of Freiburg, Germany (2002)
2. Max Planck Postdoctoral fellowship (2003-2011), Germany
3. ASTAR Research fellowship (2011-2013), Singapore
4. Duke NUS Graduate Medical School fellowship (2013-2015), Singapore
5. Young Investigator Meeting (YIM) Travel grant (2016), IndiaBioscience, India
6. DBT Ramalingaswami re-entry fellowship (2015-2020), India
7. DST Ramanujan Fellowship (2015-2020), India
8. Visiting Fellow – Newyork University, Abu Dhabi (2016)

Memberships:

1. Indian Science Congress Association (Life Member)
2. Indian Academy of Neurosciences (Life Member)
3. Indian Society of Developmental Biologists (Life Member)

Funding:

Funding Agency	Title of the Project	Amount (in Lakhs)	Duration
DBT	Neurobiology of colour vision	144	2015-22
DST	Colour vision in insects	94	2015-20
BRNS	Radiation tolerance in Insects	33	2017-20
ICMR (Co-PI)	Understanding the clomiphene citrate-induced changes in secretory epithelial cells of human fallopian tube	80	2020-23
	Total	340	

Other Academic Activities:

1. **Chief Editor** for the book released by Mangalore University on "Biodiversity of Mangalore University Campus, Mangalagangothri" (March 2018).
2. One of the brain images was selected as a cover page for the "**Science Signalling**" journal (7 May 2013). (<http://stke.sciencemag.org/content/vol6/issue274/cover.dtl>).
3. **Recognized regular Ph.D. Guide in Dept of Applied Zoology, Mangalore University.**
4. **Member of Organizing Committee** - National workshop on Emerging Targets and Biomarkers in Cancer Therapy (16-18 May 2016).
5. **Member of Board of Studies (BOS)**, St Aloysius College, Mangalore (2019-2022)
6. **Examiner for Ph.D. and MSc exams** at Mangalore University, Manipal University, Yenepoya University, Nitte University and St Aloysius College.
7. EC member of **Mangala Alumni Association (MAA)**, Mangalore University
8. Member of **Internal Quality Assurance Cell (IQAC)**, Mangalore University
9. Member of **National Educational Policy (NEP) Implementation committee**, Mangalore University
8. Member of **Research, Development, Consultancy and Patent Cell (RDCPC)**, Mangalore University
9. Member of Core Committee **Research, Development, Consultancy and Patent Cell (RDCPC)**, Mangalore University