

SRI SANKARA ARTS & SCIENCE COLLEGE

ENATHUR, KANCHIPURAM

STAFF PROFILE

DEPARTMENT OF BIOTECHNOLOGY

1.	Name of the Staff	Harishkumar Rajendran
2.	Designation	Assistant Professor
3.	Date of Joining	04/08/2025
4.	Mobile Number	9677209302
5.	E-Mail ID	rharishkmr@gmail.com
6.	Nationality	Indian
7.	Academic Qualification	PhD
8.	Field of Specialization	Biotechnology
9.	Ph.D Thesis Title	<i>In vitro</i> and <i>In vivo</i> assessment of cardioprotective activity using <i>Nelumbo nucifera</i> (Gaertn.) and its alkaloid, Nuciferine
	Awarding University, Year of Award.	Vellore Institute of Technology, 2021

10. Work Experience (in chronological order):

S.No.	Name of the Institution	Designation	Period
1	University of South Florida	Postdoctoral Researcher	2024 to 2025
2.	University College Dublin	Postdoctoral Researcher	2022 to 2023
3.	University of Limerick	Research Assistant	2021 to 2022

11. Other Academic and Administrative Responsibilities:

S.No.	Name of the Institution/Committee	Position	Period
1	Vellore Institute of Technology	Teaching cum Research Assistant	2014 to 2018

12. Publications:

Research Articles:

1. Shane, D. X., Konovalova, D. M., **Rajendran, H.**, Yuan, S. Y., & Ma, Y. (2024). Glucocorticoids Impair T Lymphopoiesis after Myocardial Infarction. *American Journal of Physiology-Heart and Circulatory Physiology*. (IF: 4.1)
2. Hans, S., **Harishkumar, R.**, Shiels, K., Saha, S. K., Toohey, H., Cunneen, L., & Lordan, R. (2024). Bioactive lipids derived from red wine, beers, and their de-alcoholised variants inhibit platelet-activating factor (PAF) induced platelet activation in vitro. *Food Bioscience*, 104053. (IF:5.9)
3. **Harishkumar, R.**, Baranda-Alonso, E. M., Martin, W. P., & Docherty, N. G. (2023). Impact of time-restricted feeding on kidney injury in male rats with experimental metabolic syndrome. *Experimental Physiology* [Registered report protocol]. (IF:2.8)
4. **HarishKumar, R.**, & Selvaraj, C. I. (2022). Nuciferine from *Nelumbo nucifera* Gaertn. attenuates isoproterenol-induced myocardial infarction in Wistar rats. *Biotechnology and Applied Biochemistry*, 69(3), 1176-1189. (IF: 2.7)
5. **Harishkumar, R.**, Christopher, J. G., Ravindran, R., & Selvaraj, C. I. (2021). Nuciferine Attenuates Doxorubicin-Induced Cardiotoxicity: An In Vitro and In Vivo Study. *Cardiovascular Toxicology*, 21(11), 947-963. (IF:3.7)
6. **Harishkumar, R.**, & Selvaraj, C. I. (2020). Lotusine, an alkaloid from *Nelumbo nucifera* (Gaertn.), attenuates doxorubicin-induced toxicity in embryonically derived H9c2 cells. *In Vitro Cellular & Developmental Biology. Animal*, 56(5), 367–77. (IF: 1.7)
7. **Harishkumar, R.**, Manjari, M. S., Rose, C., & Selvaraj, C. I. (2019). Protective effect of *Nelumbo nucifera* (Gaertn.) against H₂O₂-induced oxidative stress on H9c2 cardiomyocytes. *Molecular Biology Reports*, 1-12. (IF:2.8)
8. **Harishkumar, R.**, Reddy, L. P. K., Karadkar, S. H., Al Murad, M., Karthik, S. S., Manigandan, S., & Christopher, J. G. (2019). Toxicity and Selective Biochemical Assessment of Quercetin, Gallic Acid, and Curcumin in Zebrafish. *Biological and Pharmaceutical Bulletin*, 42(12), 1969-76. (IF:1.7)

9. Dinesh, M... **Harishkumar, R.**, Selvaraj, C. I., & Roopan, S. M. (2018). Evaluation of Octyl-β-D-Glucopyranoside (OGP) for cytotoxic, hemolytic, thrombolytic, and antibacterial activity. *Applied Biochemistry and Biotechnology*, 185(2), 450-63.(**IF: 3.3**)
10. Deepika, S., **Harishkumar, R.**, Dinesh, M., Abarna, R., Anbalagan, M., Roopan, S. M., & Selvaraj, C. I. (2017). Photocatalytic degradation of synthetic food dye, sunset yellow FCF (FD&C yellow no. 6) by *Ailanthus excelsa* Roxb., possessing antioxidant and cytotoxic activity. *Journal of Photochemistry and Photobiology B: Biology*, (**IF: 3.7**)

Review Articles:

11. **Harishkumar, R.**, Hans, S., Stanton, J. E., Grabrucker, A. M., Lordan, R., & Zabetakis, I. (2022). Targeting the Platelet-Activating Factor Receptor (PAF-R): Antithrombotic and Anti-Atherosclerotic Nutrients. *Nutrients*, 14(20), 4414. (**IF:5.0**)
12. **Rajendran, H.**, Deepika, S., & Immanuel, S. C. (2017). An Overview of Medicinal Plants for Potential Cardio-Protective Activity. *Research Journal of Biotechnology*, Vol, 12, 4.(**IF:0.2**)

Book Chapters:

- 13.**Harishkumar, R.**, Selvaraj, C. I., & Anand, K. (2021). Nanosomes for drug delivery. *Handbook on Nanobiomaterials for Therapeutics and Diagnostic Applications* (pp. 1-18). Elsevier.
- 14.Selvakumar, S., Parasurama, D. S., **Harishkumar, R.**, & Selvaraj, C. I. (2021). Nanomaterials for bioimaging studies. *Handbook on Nanobiomaterials for Therapeutics and Diagnostic Applications* (pp. 19-34). Elsevier.
- 15.**Harishkumar, R.**, Roopan, S. M., & Selvaraj, C. I. (2021). Microfilaricidal efficacy of silver nanoparticles. *Applications of Nanobiotechnology for Neglected Tropical Diseases*. 427-443. Academic Press.
- 16.**Harishkumar, R.**, Christon, R. A., Janarthanan, V., Roopan, S. M., & Selvaraj, C. I. (2021). Self-assembled nanocarriers as a biotechnology approach to antivenom immunotherapy. *Applications of Nanobiotechnology for Neglected Tropical Diseases*. 445-475. Academic Press.
- 17.**Kumar, Rajendran Harish**, Subramanyam Deepika, and Chinadurai Immanuel Selvaraj (2018). Isolation and Characterisation of Bioorganic Phase from Food Source. *Bioorganic Phase in Natural Food: An Overview*, 59-87. Springer, Cham.
- 18.Deepika, S, **R Harishkumar**, C Immanuel Selvaraj, and Selvaraj Mohana Roopan. (2018). Toxicity of Metal/Metal Oxide Nanoparticles and Their Future Prospects. *Green Metal Nanoparticles: Synthesis, Characterisation and Their Applications*. 141-64.

Conference proceedings:

19. Hans, S., **Rajendran, H.**, Shiels, K., Saha, S.K., Tsoupras, A., Lordan, R., & Zabetakis, I. (2023, October). The Ex Vivo and In Vitro Antithrombotic Properties of Fermented Irish Ovine Yoghurt

13. Awards / Distinction :

S.No.	Name of the Award	Venue	Period
1.	Received Establishing a Best-Practice Network for Translational Nephrology Research – Wellcome Trust/UCD ISSF Mid-Career Stimulus Award <i>funded project</i>	UCD, Ireland	2022 to 2023
2.	Received an Enterprise Ireland grant to work as “RA” in an Industrial collaborative project	UL, Ireland.	2021 to 2022
3.	Received a seed money grant in support of conducting my doctoral research work from Vellore Institute of Technology, India.	Vellore Institute of Technology	2019

4.	Received Research Award in 2017 for contributing to research through publication in peer-reviewed journals and books.	Vellore Institute of Technology	2017
----	---	---------------------------------	------

14. Membership in Professional Bodies: -

15. Seminars Conferences organized /Participation:

- 2016 March 11-12: Proceeding presented on topic entitled “Phytochemical Screening and *in vitro* blood clot lysis of selected medicinal plants” at the “National Conference on New Horizons in Plant Biotechnology: Innovative Products and Applications” at VIT University, Vellore.
- 2016 Jan 29-31: Proceeding presented on topic entitled “Assessment of Cardioprotective Activity of Selected Medicinal Plants” at the “International Symposium of Medicinal Plants and Herbal Drugs in Human and Livestock Wealth- A Global Perspective”, organised by P.G & Research Department of Botany, at Pachaiyappa’s College, Chennai.

16. Participated as Resource Person:Invited Guest Lectures/ Webinar:

- ✓ **Oct 2023:** Presented a guest lecture on "**Novel Functional Food and Health**" at the Department of Biotechnology, **DKM College for Women**, Vellore, India.
- ✓ **Dec 2021:** International webinar on “**Antithrombotic activity of novel yoghurt drink**“ organised by the Dept of Biochemistry, **Saveetha Dental College & Hospital**, Chennai, India

17. Workshop & Training Programmes:

- **2025 May:** **USF IACUC - Rodent Aseptic Surgical Technique** at the University of South Florida
- **2024 Feb:** Hands-on training on **USF IACUC - Rodent Basic Bio-methodology** at the University of South Florida.
- **2022 Nov:** **UCD Training on Experimental Animal Use, Regulations and Procedures (TEARAP)** course (5 ECTS credits) with an elective on Rodents.
- **2020 Nov 7th:** Webinar on “**CRISPR-Cas Based Genome Manipulation: A Revolutionary Tool for Modern Biology**” organised by the Dept of Biosciences, Union Christian College, Aluva.
- **2020 Oct 20th:** Webinar on “**Zebrafish Disease Models for Phenotypic Drug Screens and Personalised Medicine**” organised by Union Christian College, Aluva.
- **2019 March 11-15:** Workshop on “**NGS DATA ANALYSIS**” organised by Centre for Bioinformatics, St Aloysius College, Mangaluru, Karnataka and ICAR, Kerala & Dept of Biotechnology, Ministry of Science & Technology, Govt. of India, New Delhi.
- **2017 Feb 1-3:** Training program on “**Laboratory Animal Management and Handling for Research Scholars**” organised by Laboratory Animal Medicine Unit, TANUVAS, Chennai.
- **2015 Oct 5-9:** Workshop on “*In-silico* Drug Designing & Development” conducted by Bioinformatics Centre and ARIS Cell, Madras Veterinary College, TANUVAS, Chennai.

18. Projects Completed: -

19. Any other Details: -

Scopus ID: 57196078948

Orchid ID :<https://orcid.org/0000-0003-4038-6692>