



**HOLY CROSS COLLEGE (AUTONOMOUS)**  
**Tiruchirapalli-620002**

**PG & RESEARCH DEPARTMENT OF BIOTECHNOLOGY &  
BIOINFORMATICS**



**PAPER PUBLICATIONS 2022-2023**

1. Ireen C, Aishwarya S, Viji M, **Indu S, Vijayalakshmi P, Rajalakshmi M (2023)**, Molecular docking analysis of triterpenoids from *Cassia fistula* with breast cancer Targets, *Bioinformation*, 19(11):1067-1074.
2. Vijayalakshmi P, Indu S, Ireen C, Manjunathan R, **Rajalakshmi M (2023)**, Octyl Gallate and Gallic Acid Isolated from *Terminalia bellirica* Circumvent Breast Cancer Progression by Enhancing the Intrinsic Apoptotic Signaling Pathway and Elevating the Levels of Anti-oxidant Enzymes, *Appl Biochem Biotechnol*, <https://doi.org/10.1007/s12010-023-04450-9>.
3. Jeane Rebecca Roy, Coimbatore Sadagopan Janaki, Selvaraj Jayaraman, Vishnu Priya Veeraraghavan, **Vijayalakshmi Periyasamy**, Thotakura Balaji, Madhavan Vijayamalathi, Ponnusamy Bhuvaneshwari, Panneerselvam Swetha (2023), Hypoglycemic Potential of *Carica papaya* in Liver Is Mediated through IRS-2/PI3K/SREBP-1c/GLUT2 Signaling in High-Fat-Diet-Induced Type-2 Diabetic Male Rats, *Toxics*, 11(3):240. doi:10.3390/toxics11030240.
4. Roy JR, Janaki CS, Jayaraman S, **Periyasamy V**, Balaji T, Vijayamalathi M, Veeraraghavan VP (2022), *Carica papaya* Reduces Muscle Insulin Resistance via IR/GLUT4 Mediated Signaling Mechanisms in High Fat Diet and Streptozotocin-Induced Type-2 Diabetic Rats, *Antioxidants (Basel)*, 11(10):2081. doi:10.3390/antiox11102081.
5. Roy JR, Janaki CS, Jayaraman S, **Periyasamy V**, Balaji T, Vijayamalathi M, Veeraraghavan VP (2022), Effect of *Carica papaya* on IRS-1/Akt Signaling Mechanisms in High-Fat-Diet-Streptozotocin-Induced Type 2 Diabetic Experimental Rats: A Mechanistic Approach. *Nutrients*, 14(19):4181. doi:10.3390/nu14194181.
6. Prasad M, Gatasheh MK, Alshuniaber MA, Krishnamoorthy R, Rajagopal P, Krishnamoorthy K, **Periyasamy V**, Veeraraghavan VP, Jayaraman S (2022), Impact of Glyphosate on the Development of Insulin Resistance in Experimental Diabetic Rats: Role of NFκB Signalling Pathways, *Antioxidants (Basel)*, 11(12):2436. doi:10.3390/antiox11122436.
7. Rebecca Roy J, Janaki CS, Jayaraman S, **Periyasamy V**, Balaji T, Vijayamalathi M, Veeraraghavan VP, Krishnamoorthy K, Prasad M (2022), *Carica Papaya* Reduces High Fat Diet and Streptozotocin-Induced Development of Inflammation in Adipocyte via IL-1β/IL-6/TNF-α Mediated Signaling Mechanisms in Type-2 Diabetic Rats. *Curr Issues in Mol Bio*, 45(2):852-884. doi: 10.3390/cimb45020056.

### **Book Chapter Publications 2022-2023**

1. Dr. Srinath Balkundhi, Ms. F. Sherin Rebecca, **Dr. R. Pon Nivedha**, Ms. Ruba Jennifer Daniel, Principle of genetic engineering - Alpha international publication- –ISBN-978-93-5762-001-7 (2023)
2. Kumaran Subramanian, **Vijayalakshmi Periyasamy**, Mahmoud Kandeel, Vidhya Rekha Umapathy (2022), Mass Multiplication, Production Cost Analysis and Marketing of Pectinase, Book chapter: Industrial Microbiology Based Entrepreneurship.
3. Selvaraj Jayaraman, Durairaj Sekar, Ponnulakshmi Rajagopal, **Vijayalakshmi Periyasamy**, Mani Panangal, Kumaran Subramanian (2022), Microbiology-Based Entrepreneurship. Industrial Microbiology Based Entrepreneurship, Book chapter: Industrial Microbiology Based Entrepreneurship.
4. **Rajalakshmi Manikkam**, **Vijayalakshmi Periyasamy**, **Indu Sabapathy** (2022), Repurposing of phytochemicals-derived novel bioactive compounds possessing promising anti-cancer and cancer therapeutic efficacy through Molecular docking, MD simulation and drug-likeness/ADMET studies. Book Chapter: Computational Methods in Drug Discovery and Repurposing for Cancer Therapy- Elsevier Publications.