



Dr. V. K. LANGESWARAN
Assistant Professor

Contact

Address : Department of Bioinformatics
Alagappa University
Karaikudi – 630 003
Tamil Nadu, INDIA

Employee Number : 54406

Date of Birth : 21-08-1981

Contact Phone (Office) : +91 4565 222247

Contact Phone (Mobile) : +91 9884495511
: +91-7667733773

Contact e-mail(s) : dr.langeswaran@gmail.com

Skype id :

Academic Qualifications: M.Sc., Ph.D.

PhD (Molecular Biology - Pharmacology Environmental Toxicology) (2007 – 2010)	Department of Pharmacology & ET Institute of Basic Medical Sciences, University of Madras
M.Sc. (Molecular Biology) (2003 – 2005)	Department of Genetics, Institute of Basic Medical Sciences, University of Madras
B.Sc. (Microbiology) (1999 – 2002)	Department of Microbiology, Kandaswamy Kandari's College, Periyar University

Teaching Experience: 7 Years

Research Experience: 10 Years

Additional Responsibilities

- Member in Department Purchase Committee
- Member in Examination Board
- Member in Department Purchase Committee
- Member in Department Research Committee
- Co-ordinator for Mentor/Mentee report
- Co-ordinator for Coaching for competitive Exams (NET/SET/GATE)
- Co-ordinator for Vivekananda Cadet Crops
- Member in Department Research Committee (DRC)

Areas of Research

Cancer Genetics, Environmental Toxicology, Reproductive Toxicology

Research Supervision / Guidance

Program of Study		Completed	Ongoing
Research	Ph.D.	Nil	
	M.Phil.	Nil	
Project	PG	3	2
	UG / Others	Nil	

Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Monographs
24	4	Nil	3	5

Cumulative Impact Factor (as per JCR) : 17.230
h-index : 8
i10 index : 7
Total Citations : 185

Funded Research Projects

Completed Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		

1	Nil				
2					

Ongoing Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	UGC	2016	2018	Anti-proliferative and Cytotoxic efficiency of Fucoxanthin on human hepatoma cell line – An <i>In vitro</i> approach	10.00
2	AURF	2017	2019	Evaluation of therapeutic significance of marine macro alga <i>Ulva fasciata</i> Delile in Human Hepatoma cell line (HepG2)	1.00

Consultancy Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	Nil				
2					

Events organized in leading roles

- ✦ International Conference on Recent Trends in Biosciences (7th – 9th April, 2016) Organized by Department of Biosciences, Alagappa University, Karaikudi, Tamil Nadu, India. (Organizing Committee Member).
- ✦ 9th National Symposium cum Workshop on “Recent Trends in Structural Bioinformatics and Computer Aided Drug Design” [SBCADD'2017] with Schrodinger during February 14th- 17th, 2017 (Organizing Committee Member).
- ✦ 10th National Symposium cum Workshop on “Recent Trends in Structural Bioinformatics and Computer Aided Drug Design” [SBCADD'2017] with Schrodinger during February 20th- 23th, 2018 (Organizing Committee Member).

Events Participated

WORKSHOP PARTICIPATE

- ▶ **JAN 2008** Workshop on “Thesis Writing and Scientific Paper Publishing” Conducted by Science City, Tamil Nadu Government, Chennai.
- ▶ **MAY 2008** Training on Chromatography and Molecular Biology Techniques organized by the school of Biotechnology, Chemical and Biomedical Engineering, VIT University, Vellore.
- ▶ **APR 2009** Participated in the workshop on “PATENT AWARENESS” organized by the patent information cell, University of Madras in association with Tamil Nadu state council for science & technology held at Guindy campus of the University of Madras.
- ▶ **MAR 2011** International Symposium & Workshop on “The Current Trends in Clinical Genetics and Genomic Medicine” held at Chettinad University, approved by National Academy of Medical Sciences, India.
- ▶ **MAR 2012** Participated in the one day technical workshop on “Recent Advancements in PCR” organized by the Department of Industrial Biotechnology, Bharath University, Chennai.
- ▶ **FEB 2012** Participated in workshop on Ajax enabled web applications conducted by Bharath University, Chennai.
- ▶ **SEP 2016** International workshop on “Molecular Physiology, Therapeutics and Experimental Medicine” (MPTEM 2016) organized by Department of Animal Health and Management, Alagappa University, Karaikudi.
- ▶ **SEP 2016** International workshop on “Data Science & Analytics” organized by Department of Computer Science, Alagappa University, Karaikudi.
- ▶ **DEC 2016** National Level Workshop on Gas Chromatography (GC- DMB – 2016) organized by Department of Microbiology, Alagappa University, Karaikudi.
- ▶ **MAR 2017** Training Programme on Business Resource of solid waste management through vermicomposting organized by Department of Animal Health and Management, Alagappa University, Karaikudi.
- ▶ **OCT 2017** Short Term Training Programme on Research Publication and Anti-Plagiarism organized by the Department of English and Foreign Languages & Centre for Technical and Academic Writing, Alagappa University, Karaikudi.
- ▶ **JAN 2018** Participated in the four days on “Commercialization Prospects of Microbial Formulates” Jointly organized by Department of Microbiology &

University Business Collaboration (UBCC), Alagappa University during 22-25 January, 2018.

PAPER PRESENTATION

- ➡ **JUL 2008** Oral presentation in Annual conference of southern regional Indian Pharmacological society organized by Department of Pharmacology, JIPMER, Puducherry.
- ➡ **JAN 2009** Presented a poster at the International Conference on Molecular Medicine, held at Indian Institute of Technology Madras, organized by Laila pharma & IIT-M. Chennai.
- ➡ **Dec 2016** Presented a poster in International conference on “Recent Trends in Microbiology (RTM - 2016)” conducted by Department of Microbiology, Science campus, Alagappa University, Karaikudi.
- ➡ **Jan 2018** Presented a poster in International conference on “Recent Trends in Microbiology (RTM - 2018)” conducted by Department of Microbiology, Science campus, Alagappa University, Karaikudi.
- ➡ **Feb 2018** Presented a poster in National symposium cum workshop on “Recent Trends in Structural Bioinformatics and Computer Aided Drug Design” organized by Department of Bioinformatics, Science campus, Alagappa University, Karaikudi.
- ➡ **Feb 2018** Presented a poster in National symposium cum workshop on “Recent Trends in Structural Bioinformatics and Computer Aided Drug Design” organized by Department of Bioinformatics, Science campus, Alagappa University, Karaikudi.
- ➡ **Feb 2018** Presented a poster in National symposium cum workshop on “Recent Trends in Structural Bioinformatics and Computer Aided Drug Design” organized by Department of Bioinformatics, Science campus, Alagappa University, Karaikudi.

CONFERENCE & SYMPOSIUM ATTENDED

- ✚ **FEB 2004** Indo-Australian conference on “Biotechnology in medicine” held at Indian Institute of Science, Bangalore.
- ✚ **JUL 2004** Awareness programme on “Applications of Radioisotopes and radiation technology for societal development” held at Anna University, Chennai.
- ✚ **FEB 2007** National conference on “Genomics: Impact on human health” held at Andhra Pradesh Akademi of sciences, Hyderabad.
- ✚ **MAR 2007** National seminar on “Current trends in Nanotoxicology” held at department of Pharmacology and Environmental Toxicology, University of Madras, Chennai.

- ✦ **AUG 2007** Science seminar “Basic sciences: Scope and hope” organized by University of Madras, Chennai.
- ✦ **NOV 2008** 1ST International stem cell summit India, organized by the Indian Institute of Technology Madras & Lifeline Hospitals, held at IITM, Chennai.
- ✦ **FEB 2009** One day seminar on “Stress Management” held at Dr. ALM Post Graduate Institute of Basic Medical Sciences, University of Madras, Sekkizhar Campus, Chennai.
- ✦ **MAR 2011** National conference on “Recent biotechnological perspectives in human diseases and therapeutics” held at Bharath University.
- ✦ **MAR 2011** International conference on “Emerging trends in Bio-Engineering” held at Bharath University.
- ✦ **AUG 2011** International Seminar on Fermentation Technology conducted by Department of Industrial Biotechnology, Bharath University, Chennai.
- ✦ **SEP 2011** Faculty development programme conducted by Department of Industrial Biotechnology, Bharath University, Chennai.
- ✦ **SEP 2014** International Fertility Colloquium 2014 conducted by Chettiand Hospital and Research Institute, Kelambakkam, Chennai.
- ✦ **MAR 2015** National Symposium on “Genomics and Human Health” conducted by Department of Genetics, Institute of Basic Medical Sciences, Taramani, Chennai-113.
- ✦ **APR 2016** International Conference on “Recent Trends in Biosciences” (ICRTB 2016) organized by the Biosciences Departments, Science Campus, Alagappa University, Karaikudi.
- ✦ **OCT 2016** World Animal Day organized by Department of Animal Health & Management, Science Campus, Alagappa University, Karaikudi.
- ✦ **DEC 2016** Participated in International conference on “Recent Trends in Microbiology (RTM - 2016)” conducted by Department of Microbiology, Science campus, Alagappa University, Karaikudi.
- ✦ **JAN 2017** Participated in the Faculty development (Enrichment) programme “Accreditation Quality Enhancement” held in Alagappa University.
- ✦ **FEB 2017** Attended the National Seminar on Nanomaterials for Specialized Applications (NMSA - 2017) & “World Standards Day” Organized by Department of Nanoscience and Technology, Alagappa University, Karaikudi.
- ✦ **MAR 2017** Participated in the one day conference on Exploring Commercialization of Biosensors in India organized by the Department of Bioelectronics and Biosensors, Alagappa University, Karaikudi.

✦ **SEP 2017** Participated in UGC Sponsored National Conference on Trends in Microbiology (NCTM-2017) organized by Department of Microbiology, Science campus, Alagappa University, Karaikudi.

✦ **OCT 2017** Participated in World Animal Day organized by Department of Animal Health & Management, Science Campus, Alagappa University, Karaikudi.

OTHER TRAINING PROGRAMS

- Participated in 100th Orientation Programme conducted by UGC- Human Resource Development Centre, Bharathidasan University, Tiruchirappalli.

Membership in

Professional Bodies

- ↪ Indian Association of Biomedical Scientists (Life Member)
- ↪ National Academy of Biological Sciences (Life Member)
- ↪ Society of Biological Chemist, India (Life Member)
- ↪ The Indian Science Congress Association (Life Member)
- ↪ Bioinformatics & Drug Discovery Society (Life Member)

Resource persons in various capacities

- ▶ Guest Lecture on “**Molecular Basis of Hepatocellular Carcinoma**” on 27-Feb-2018 organized by Science Culb, Mannar Thirumalai Naicker College, Madurai.
- ▶ CME Scientific Talk on “**Primary Liver Cancer Diagnostics and Therapeutics**” at Department of Medical microbiology, Quest International University Perak, Malaysia on 2nd May 2018

Recent Publications

1. **Langeswaran K**, Jeyakanthan Jeyaraman, Abir Biswas, Gowtham Kumar Subbaraj, Santhoshkumar S. Identification of potential inhibitors for Penicillin binding protein (PBP) from Staphylococcus aureus. *Bioinformation*. 2018; 14(9): 471-476.
2. **Langeswaran VK**, Richard M, Jeyakanthan J, Saravanan S. Insights from the molecular modelling, docking analysis of Illicit drug and bomb compounds with Honey Bee Odorant Binding Proteins (OBPs). **Journal of Bioinformation**. 2018; 14(5): 219-231.

3. Perumal S, **Langeswaran K**, Selvaraj J, Ponnulakshmi R, Shyamaladevi B, Balasubramanian MP. Effect of diosmin on apoptotic signalling molecules in N-nitrosodiethylamine induced hepatocellular carcinoma in experimental rats. **Journal of Molecular and Cellular Biochemistry**. 2018.
4. **Langeswaran VK**, Selvaraj J, Manikannan M, Vijayaprakash S. Nephroprotective effect of Kaempferol on biochemical and histopathological changes in mercuric chloride induced nephrotoxicity in experimental rats. **Journal of Biologically Active Products from Nature**. 2018; 8(2): 125-136.
5. Boomi P, Jeyakanthan J, Poorani G, Anandha Raj J, Samayanan S, Palaniappan SP, Manisankar P, Gurumallesh Prabhu H. **Langeswaran K**. Improved Antibacterial activity effect of poly(2-aminothiophenol)-silver nanocomposite against human pathogens. **Journal of Photochemistry & Photobiology, B: Biology**. 2018; 178: 323-329.
6. Revathy R, **Langeswaran K**, Ponnulakshmi R, Balasubramanian MP, Selvaraj J. *Ipomoea batatas* Tuber Efficiency on Bisphenol A-induced Male Reproductive Toxicity in Sprague Dawley Rats. **Journal of Biologically Active Products from Nature**. 2017; 7(2): 118 – 13.
7. Tamilselvan P, **Langeswaran K**, Vijayaprakash S, Gowtham kumar S, Revathy R, Balasubramanian MP. Efficiency of Lycopene against Reproductive Toxicity of Bisphenol A in male Sprague Dawley rats. **Biomed Prev Nutr**. 2015; 4: 491-498.
8. Perumal S, Haribabu L, **Langeswaran K**, Balasubramanian MP. Pharmacological potential of natural flavonoid diosmin against N-Nitrosodiethylamine induced hepatocellular carcinogenesis in Wistar albino rats. **Int J Res Biosciences**. 2015; 4: 25-36.
9. Tamilselvan P, **Langeswaran K**, Lokeshkumar B, Revathy R, Balasubramanian MP. Lycopene, a carotenoid antioxidant against bisphenol A (BPA) motivated experimental male infertility. **J Biomed Ther Sci**. 2014; 1: 41-47.
10. **Langeswaran K**, Gowthamkumar S, Vijayaprakash S, Revathy R, Balasubramanian MP. Influence of Limonin role on Wnt Signaling molecule in HepG2 cell line. **J Nat Sci Biol Med**. 2013; 4: 126-133.
11. **Langeswaran K**, Gowthamkumar S, Perumal S, Revathy R, Balasubramanian MP. Limonin – A citrus limonoid establish anticancer potential by stabilizing lipid peroxidation and antioxidant status against n-nitrosodiethylamine induced experimental hepatocellular carcinoma. **Biomed Prev Nutr**. 2013; 3: 165-171.
12. Jagadeesan AJ, **Langeswaran K**, Gowthamkumar S, Balasubramanian MP. Diosgenin exhibits beneficial efficiency on human mammary carcinoma cell line MCF-7 and against NMU induced experimental mammary carcinoma. **Biomed Prev Nutr**. 2013; 3: 381-388.

13. Vijayaprakash S, **Langeswaran K**, Gowthamkumar S, Revathy R, Balasubramanian MP. Nephroprotective significance of Kaempferol on mercuric chloride induced nephrotoxicity in Wistar Albino Rats. **Biomed Agi Pathol.** 2013; 3(3): 119-124.
14. Jagadeesan AJ, **Langeswaran K**, Gowthamkumar S, Revathy R, Balasubramanian MP. Chemopreventive potential of Diosgenin on modulating glycoproteins, Krebs cycle enzymes, carbohydrate metabolizing enzymes and biotransformation enzymes against N-Methyl-N-Nitrosourea (NMU) induced mammary carcinogenesis. **Int J Pharm Pharm Sci.** 2013; 5: 575-582.
15. Revathy R, **Langeswaran K**, Gowthamkumar S, Vijayaprakash S, Tamilselvan P, Balasubramanian MP. Anti-Infertility significance of Aqueous Extract of *Ipomoea batatas* (L.) Lam. against exposure of Bisphenol A (BPA) Promoted Testicular Toxicity in Male Sprague Dawley Rats. **Asian Pac J Rep.** 2013; 2: 263-271.
16. Gowthamkumar S, **Langeswaran K**, Revathy R, Ramakrishnan V. Ethanolic extract of *carum carvi* (EECC) prevents N-Nitrosodiethylamine induced phenobarbital promoted hepatocarcinogenesis by modulating antioxidant enzymes. **Int J Pharm Pharm Sci.** 2013; 4: 195-199.
17. **Langeswaran K**, Jagadeesan AJ, Revathy R, Balasubramanian MP. Chemotherapeutic efficacy of limonin against aflatoxin B₁ induced primary hepatocarcinogenesis in wistar albino rats. **Biomed Agi Pathol.** 2012; 2: 198-205.
18. **Langeswaran K**, Revathy R, Gowthamkumar S, Vijayaprakash S, Balasubramanian MP. Kaempferol, a natural bioflavonoid ameliorates aflatoxin B₁ (AFB₁) induced hepatocellular carcinoma through modifying metabolizing enzymes, membrane bound ATPases and mitochondrial TCA cycle enzymes. **Asian Pac J Trop Biomed.** 2012; 2: S1653-S1659.
19. **Langeswaran K**, Perumal S, Vijayaprakash S, Balasubramanian MP. Therapeutic efficacy of kaempferol against AFB₁ induced experimental hepatocarcinogenesis with reference to Lipid peroxidation, Antioxidants and Biotransformation enzymes. **Biomed Prev Nutr.** 2012; 2: 252-259.
20. **Langeswaran K**, Jagadeesan AJ, Balasubramanian MP. Modulation of Membrane Bound ATPases and Metabolizing Enzymes against N-Nitrosodiethylamine (DEN) induced Primary Liver Cancer in Wistar Albino Rats. **Int J Pharm Bio Sci.** 2012; 3: 156-165.
21. **Langeswaran K**, Jagadeesan AJ, Vijayaprakash S, Balasubramanian MP. Hepatoprotective and Antioxidant activity of *Scoparia dulcis* Linn, against N-Nitrosodiethylamine (DEN) induced hepatotoxicity in Experimental Rats. **Int J Drug Dev & Res.** 2012; 4: 115-128.
22. Vijayaprakash S, **Langeswaran K**, Jagadeesan AJ, Revathy R, Balasubramanian MP. (2012) Protective efficacy of *Terminalia catappa* L. leaves against lead induced Nephrotoxicity in experimental rats. **Int J Pharm & Pharm Sci.** 2012; 4: 454-458.

23. **Langeswaran K**, Gowthamkumar S, Revathy R, Balasubramanian MP. Attenuation of aflatoxin B₁ induced primary hepatocarcinogenesis by a citrus bioactive compound – Limonin. **J Pharm Res.** 2011; 5: 177-182.
24. Gowtham Kumar S, Ramakrishnan V, Madhusudhanan N, Thiyagarajan G, **Langeswaran VK**, Balasubramanian MP. Apoptosis induced in Hepatoma cells (HepG2) by Allyl isothiocyanate associated with expression of P53 and activation of caspase-3. **Int J Biol Pharma Res.** 2011; 2: 19-26.

BOOK CHAPTER

1. **Langeswaran VK**. Nutraceuticals Therapeutics against Cancer. “Cancer Versus Nutraceuticals” 2017; pp 1-42. ISBN: 978-1-53612-529-0.

BOOK CHAPTER UNDER COMMUNICATION

1. **Langeswaran Kulanthaivel**, Revathy Rajendran. Male reproductive toxicity and infertility. “Advances in Therapeutics and Diagnostics of Human Diseases”. 2018.
2. Nithya Varatharajan, **Langeswaran Kulanthaivel**. Diabetes – A Lifestyle and Life Threatening Disease. “Advances in Therapeutics and Diagnostics of Human Diseases”. 2018.

MONOGRAPH/BOOK PUBLISHED

1. **Langeswaran Kulanthaivel**, Gowthamkumar Subburaj. 2012. “Limonin against Hepatocellular Carcinoma”. (A natural limonoid from Citrus fruits to treat Aflatoxin B₁ induced Hepatocarcinogenesis and in Human Hepatoma Cell line). LAMBERT Academic Publishing GmbH & Co. KG, Germany. **(ISBN No: 978-3-8484-9905-2)**
2. Jagadeesan Jayaraman, **Langeswaran Kulanthaivel**, Gowthamkumar Subburaj. 2012. “Diosgenin - Diosgenin against Chemical Induced Mammary Carcinogenesis and in MCF-7 Human Breast Cancer Cell Line”. LAMBERT Academic Publishing GmbH & Co. KG, Germany. **(ISBN No: 978-3-659-15661-8)**
3. Revathy Rajendran, Gowtham Kumar Subburaj, **Langeswaran Kulanthaivel**. 2012. Cadmium Toxicity – Impact on reproduction. (Evaluated on edible crab *Scylla serrata*). LAMBERT Academic Publishing GmbH & Co. KG, Germany. **(ISBN No: 978-3-8473-0609-2)**
4. Revathy Rajendran, **Langeswaran Kulanthaivel**, Gowtham Kumar Subburaj. 2013. Role of *Ipomoea batatas* (L) against male infertility. LAMBERT Academic Publishing GmbH & Co. KG, Germany. **(ISBN No: 978-3-659-41875-4)**
5. Perumal Srinivasan, **Langeswaran Kulanthaivel**. Therapeutic strategies of Diosmin – An experimental approach. LAMBERT Academic Publishing GmbH & Co. KG, Germany. **(ISBN No: 978-3-330-03503-4).**