NAME: Dr. M. Karthikeyan

DESIGNATION: Associate Professor

Contact

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Website	:	http://mkarthikeyan.bioinfoau.org

Academic Qualifications

Degree	Institution	Year	Branch	Class
Ph.D	University of Madras, Chennai	2006	Biomedical Genetics	Highly recommended/ Awarded
M.Sc.	University of Madras, Chennai	1999	Biomedical Genetics	Second class
NET / JRF / SLET/Lectureship	Bharathidasan University, Trichy	1999	SLET in Microbiology	Qualified

PG Diploma	Bharathidasan University	1999	Computer Applications	First Class
B.Sc.	Bharathidasan University	1996	Zoology	First Class

Teaching Experience

Total Teaching Experience : 19 Years

Position	Institution	Duration	
		FROM	TO
Associate Professor	Alagappa University, Karaikudi- 630003	18.08.2020	Till date
Assistant Professor (18.08.08-17.08.12) I (18.08.12-17.08.17) II 18.08.20 – 18.08.20) III	Alagappa University, Karaikudi- 630003	18.08.2008	17.08.2020
Lecturer	Vels College of Science, Pallavaram, Chennai-117	01.07.2005	15.02.07

PDF/ Visiting Professor: Abroad

Position	Institution	Duration
Post-Doctoral Research Associate and Instructor	College of Pharmacy, Nova South-eastern University, Florida, USA-33328	5 Months

Research Experience

Total Research Experience : 24 Years

Position	Institution / University	Duration
Ph.D	Dr. ALMPGIBMS, University of Madras	5 Years
Scientist in- charge	Nichi-In center for Regenerative Medicine, Vadapalani, Chennai-600026	5 Months
Post-Doctoral Research Associate and Instructor	College of Pharmacy, Nova South-eastern	5 Months

	University, Florida, USA-33328	
Lecturer	Vels College of Science, Pallavaram, Chennai-117	2 Years
Assistant Professor	Alagappa University, Karaikudi-630003	12 Years
Associate Professor	Alagappa University, Karaikudi-630003	4 Years

Academic and Additional Responsibilities

S.No	Position	University Bodies	Period	
			From	To
1.	Chairman, Evaluation Board, Bioinformatics	Annamalai University, Chidambaram.	2015	2016
2.	Chairperson, Board of Studies	Department of Microbiology and Clinical Lab Technology, Alagappa University, Karaikudi.	2022-23	2024-25
3.	Assistant Director Centre for International relations (CIR)	Alagappa University , Karaikudi	18.02.17	Till date
4.	Deputy Coordinator, PG Diploma in Pharmacogenomics	Alagappa University, Karaikudi	22.07.13	Till date
5.	Deputy Coordinator, Incubation and Technology transfer centre	Alagappa university , Karaikudi	2018	Till date
6.	Deputy Coordinator Higher education Best practices Cell	Alagappa University, Karaikudi	2018	2021
7.	Coordinator at Department level 1.Time table committee,	Department of Bioinformatics, Alagappa university , Karaikudi		
	2. Alumni and Parent teacher Association		2009	Till date
	3. Journal club			
	4. Remedial Coaching		2016	2020

	classes			
8.	University representative for DDE Exams	Various DDE Exam centers of Alagappa University	2008	Till date
9.	Member, Board of Studies	Department of Bioinformatics, Alagappa University, Karaikudi	2009	Till date
		Department of Bioinformatics, Bishop Heber College, Trichy	12.11.19	11.11.23
10.	Convener of the Organizing committee, 30th, 31st and 32nd Convocations of Alagappa University	Alagappa University, Karaikudi	20.12.2017 1.11.2018 1.10.2019	
11.	Member of Academic Council	1. Member, Question Paper setting and evaluation board: UG & PG Examination of following Universities: ✓ Alagappa University ✓ Bharathidasan University ✓ Bharathiar University ✓ Chettinadu University ✓ Annamalai University ✓ Pondicherry University ✓ PSGR Krishnammal College for Women. 2. Member-(Basic Medical Scientist – Internal), Institute Ethics Committee (Human Studies). 3. Member, Institutional BioSafety Committee (IBSC), Alagappa University. 4. Member of Ph.D Research Advisory/ Doctoral Committee: Bharathidasan University, Vels Institute of Science, Technology and Advanced Studies, Vellore.	2008	Till date
12.	Member of Executive Council	Life Member cum Treasurer, Bioinformatics Drug Discovery Society (BIDDS).	2020	Till date
13.	Member of Professional/ Academic Bodies	1. Life Member, Indian Science Congress Association, Kolkata. 2. Life Member, Indian Society of Human Genetics. 3. Life Member, Institute of Researchers, Wayanad, Kerala. 4. External Examiner and Doctoral	2008	Till date

		Committee Member in Department of Bioinformatics, Bharathidasan University, Tiruchirappalli, Department of Biomedical Sciences, Bharathidasan University, Tiruchirappalli, Department of Biotechnology, Srimad Andavan Arts and Science College, Tiruchirappalli and Department of Biotechnology, Acharya Nagarjuna University, Andhra Pradesh, Department of Biological Sciences, AcSIR, CSIR-Human Resource Development Centre, Ghaziabad, India. 5. Selection Committee Member (SRF/JRF/Project Fellow) under DST-PURSE Programme 6. Selection Committee Member of Project fellow In UGC Sponsored Project 7. External and Internal Member in M.Phil., PhD Thesis Examiner in Alagappa University, Karaikudi. 8. External Member in PhD Thesis Examiner in Madurai Kamaraj University, Madurai. 9. External Member in Doctoral Committee Member in Vellore Institute of Technology, Vellore, India.		
14.	Others (Specify)	Stock verification Officer at Alagappa University in following Departments: 1. Department of Physical Education and Health Science 2. Department of Oceanography 3. Department of Economics and Rural Development 4. Department of Biomedical Sciences.	2012	2018

Areas of Research

Dr. M. Karthikeyan and his team is interested in understanding the genetic and molecular basis of variation in drug response for human diseases like hypertension, diabetics, cardiovascular diseases, renal failure, neurological disorder and so on to study therapeutic efficacies and side effects of the drugs through the computational and experimental methods. The focus of the lab is to identify genes and interacting genetic factors that contribute to drug response. This involves study of metabolic pathways and gene-gene, protein-protein interactions by using multiple linear regression analyses for the establishment of significant associations between genetic variants and phenotypes of biomedical importance. Further his research team is conducting research on Database creation and Computer Assisted Drug Discovery (CADD) to design the various drugs/lead molecules for Hypertension, Diabetes, Cancer and Influenza viruses through 3D-QSAR, Molecular Docking, High Throughput Virtual Screening and Molecular dynamics simulation etc. In doing so, we hope to ultimately translate our research activities into clinically useful tools to help us improve clinical outcomes from drug therapy and to facilitate the development of new medications for the future.

- Human Molecular Genetics
- Pharmacogenomics and Computer Aided Drug Discovery
- Cell Signaling
- Database Creation & Management

Patents Filed

- **Title of the Patent - NIL**

Research Supervision / Guidance

Program of Study		Completed	Ongoing
Research	PDF	-	-
	Ph.D	7	4

	M.Phil	8	-
Project	PG	38	8
	UG / Others	3	-

Publications

International		National		Others
Journals	**Conferences**	**Journals**	**Conferences**	**Books / Chapters / Monographs / Manuals**
110	40	10	80	10

Cumulative Impact Factor (as per JCR) :237.217
h-index : 21
i10 index : 50
Total Citations : 1423

Publications

Thesis Evaluated : 10
Viva voce Examiner : 10

Funded Research Projects

Ongoing Projects:

S.No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1.	ICMR, Government of India,	2023	2025	Molecular Insight and In Vitro Validation of novel lead molecules against SH3BP2 and KIT Protein	Rs. 24.5 L

	New Delhi.				
2.	EIR Hub of RUSA-2.0, Government of India, New Delhi	2023	2024	Nutrigenomics and Computational Prospective studies on Parkinson Disease	Rs. 8 L
3.	TANSCHE, Government of TamilNadu, Chennai.	2021	2024	Design and evaluation of oxazole based novel Inhibitors for Aquaporins and to study their efficacy on testicular leying cell function in Diabetes	Rs. 31.88 L

Completed Projects:

S.No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1.	UGC, Government of India, New Delhi.	2009	2012	Genetic polymorphisms of the Essential Hypertension associated genes in random subjects of the South Indian general population	Rs.13.31 L
2.	AURF, Alagappa University, Karaikudi - 630 003.	2009	2012	Molecular and bioinformatics analysis of Breast cancer gene polymorphisms (BRCA1 and BRAC2) in Tamilnadu population	Rs. 0.64 L
3.	CSIR, Government of India, New Delhi.	2011	2014	Investigation of binding of HA protein with sialic acid and ligand base lead identification of neuraminidase inhibitor of H1N1 2009 influenza A virus	Rs. 15.98 L
4.	DBT, Government of India, New Delhi	2016	2019	Computational identification and In vitro validation of small molecular inhibitors for tankyrase protein to inhibit the over expression of wnt/β catenin signaling mechanism using Colorectal cancer.	Rs. 30.48L
5.	RUSA-2.0, Government of India, New Delhi	2018	2021	Translational Health Research for Human, Animal and plant Systems	Rs. 35.0 L
6.	RUSA-2.0, Government of India,	2023	2023	Translational Health Research for Human, Animal and plant Systems	Rs. 58 L

	New Delhi				
7.	AURF, Alagappa University, Karaikudi - 630 003.	2009	2012	Pharmacophoric analysis and designing of ATP competitive Cyclin dependent Kinase (CDK4) Inhibitors	Rs. 4.0 L
8.	ICMR, Government of India, New Delhi.	2019	2012	Ferrocene conjugated macrocylic transition metal complexes as photosensitizer for photodynamic therapy	Rs.33.97 L
9.	UGC, Govt. of India	2012	2017	Innovative Course Supported by UGC, Govt. of India -PG. Diploma in Structural Pharmacogenomics (PGDSP) – Deputy Coordinator	Rs.54 L
10.	Department of Science & Technology (DST)	2017	2017	Fund for Improvement of S&T Infrastructure in Higher Educational Institutions (FIST) and Promotion Of University Research And Scientific Excellence – Member, Phase I	Rs. 64L

Other Fund Received as Research Mentor:

S.No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1.	DBT – Bioinformatics and Computational Biology Center (BIC)	2022	2026	Identification of Potent Drug for Life-Threatening Diseases.	Rs.183.8L
2.	DBT-National Network Project (NNP)	2023	2027	National Network Project of Alagappa University, Karaikudi	Rs. 144.56560 L

Consultancy Projects:

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

Others:

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

Distinctive Achievements / Awards

- Lady **TATA Memorial Trust Junior scholarship (JRF)** award 2001- 2003.
- Defense Research & Development Organization / Defense Institute of Physiology & Allied Sciences **Senior Research Fellow (SRF)** 2004 -2005.
- **Qualified SLET** (**S**tate **L**evel **E**ducational **T**esting) examination in the year of 1999 conducted by Bharathidasan University, Tiruchirappalli, Tamil Nadu.
- **Best Paper Award** in Pharmaceutical & Medicinal Synthetic Chemistry by The Indian Pharmaceutical Association's Prof**.** M. L. Khorana Memorial Indian Journal of Pharmaceutical Science**s** in the year 2013.
- **Received Best Poster award** in National Conference on Recent Innovations in Biotechnology (18^{th} April, 2016) Organized by Department of Biotechnology, Aarupadai Veedu Institute of Technology (AVIT), Kanchipuram, Tamil Nadu.
- Recipient of **Outstanding Reviewer** award for the year of 2016 from the Journal Molecular BioSystems.
- **Best Paper Award** in Pharmaceutical & Medicinal Synthetic Chemistry by The Indian Pharmaceutical Association's Prof**.** M. L. Khorana Memorial Indian Journal of Pharmaceutical Sciences in the year 2017.
- **Received best poster award** in National Conference on "Recent Trends in Plant Sciences" (01-02, March, 2017), organized by Department of Botany, ST. Xavier's College, Palayamkottai, Tamil Nadu, India.
- Received **Certificate of Excellence in Reviewing** from Journal of Advances in Medicine and Medical Research in the year 2018.
- Recipient of Alagappa University prestigious research award "**Alagappa Excellence Research Award for the year of 2018**".

- **Received Special prize for poster** in International Conference on Cancer Inferno and Its Prevention Strategies-ICCIPS-2019 on 22nd February 2019 at Periyar EVR College, Trichy.
- Recipient of "**Dr. APJ Abdul Kalam Lifetime Achievement National Award for the year of 2021**" from National Institute for Socio Economic Development, Bengaluru.
- Recipient of Alagappa University prestigious research award "**Promising Researcher Award for the year of 2022**"
- Recipient of **C V Raman Prize for the year of 2022** from Institute of Researchers, Kerala.
- Recipient of **Research Excellence award for the year of 2022** from Institute of Researchers, Kerala
- Appointed as a **Research Fellow in INTI International University**, Malaysia. (01.09.2023 to 31.12.2025).
- **Reviewer** in Science and Engineering Research Board (**SERB**), Department of Science and Technology (DST), India.

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized:

Position	Programme	Duration	Institution
Convener of the Organizing committee	30th, Convocation	20.12.2017	Alagappa University Karaikudi
Convener of the Organizing committee	31st, Convocation\	1.11.2018	Alagappa University Karaikudi
Convener of the Organizing committee	32nd, Convocation	1.10.2019	Alagappa University Karaikudi
Convener/ Editor	10th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design"	20.02.2018 to 23.02.2018	Alagappa University Karaikudi

	[SBCADD'2018]		
Organizer/ Editor	11th National Symposium cum Workshop on “Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" [SBCADD'2019]	12.03.2019 to 15.03.2019	Alagappa University Karaikudi
Organizer/ Editor	International Conference of Structural Bioinformatics and Drug Design- [ICSBCADD-2019]	11.12.2019 to 13.12.2019	Alagappa University Karaikudi
Organizer/ Editor	International Conference of Structural Bioinformatics and Drug Design- [ICSBCADD-2022]	21.11.2022 to 25.11.2022	Alagappa University Karaikudi

Events Participated

Number of Conferences / Seminars / Workshops: 22

Overseas Exposure / Visits

- Visit1: **NIL**

Membership

Professional Bodies

1. Life Member, Indian Science Congress Association, Kolkata.
2. Life Member, Indian Society of Human Genetics.
3. Life Member cum Treasurer, Bioinformatics Drug Discovery Society (BIDDS).
4. Life Member, Institute of Researchers, Wayanad, Kerala.

Advisory Board

Year / Period	Name of the BoS / AdministrativeCommittee / Academic Committee	Role
2022-2025	Board of Studies, Department of Microbiology and Clinical Lab Technology, Alagappa University, Karaikudi.	Chairperson,
2019 to Till date	Board of studies department of Bioinformatics	Member
2016 to Till date	Institute Ethics Committee (Human Studies).	Member
2019 to Till date	Institutional BioSafety Committee (IBSC)	Member
2008-Till date	Doctoral Research Committee	Member
2017-Till date	Department Library Incharge	Member

Academic Bodies in Other Institutes/ Universities

Year / Period	Name of the BoS / AdministrativeCommittee / Academic Committee	Role
2015 to 2016	Evaluation Board, Bioinformatics, Annamalai University, Chidambaram.	Chairman

Ph.D. Thesis Guided

1. No. of PhD Thesis evaluated : 7

2. No. of PhD Public Viva Voce Examination conducted : 7

S. No	Name of the Scholar	Title of the Thesis	Year of Completion
1	Dr. Kh. Dhanachandra Singh	Pharmacogenomics and computer assisted designing of anti-hypertension lead molecules.	2014
2	Dr. P. Kirubakaran	Computational identification and in vitro validation of novel lead molecules against topk and tankyrase proteins.	2014
3	Dr. Gopinath. K	A study on potential antidiabetic properties of Syzygium densiflorum fruits by in vitro, in vivo and in silico approaches.	2016
4	Dr. S. Nagamani	The Genetic and Molecular Mechanism of Vitamin D Receptor (VDR) in Chronic Kidney Disease (CKD) Pathogenesis.	2016
5	Dr. C. Sathish Kumar	Screening, Isolation and Identification of Potent Anti-Snake venom Molecules from Clematis Gouriana Roxb. Ex Dc.	2016
6	Dr. L. Lakshmanan	Role of RAS and CYP gene polymorphisms in anti-hypertensive treatment: A Pharmacogenomics and Computational study.	2022
7	Dr. J. John Marshal	Pharmacogenomics and Computational studies of VDR, CYP24A1 and Klotho genes among	2023

		Chronic Kideney Disease Patients in Indian Population.	

List of Research Articles / Recent Publications

S. No	Authors/Title of the paper/Journal	Impact Factor
1.	Rose, R., **Karthikeyan, M**., Anandan, B., & Jayaraman, G. (2007). Myocilin mutations among primary open angle glaucoma patients of Kanyakumari district, South India. *Molecular vision*, *13*, 497	IF: 2.38
2.	Narasimhan, M., Rose, R., **Karthikeyan, M**., & Rathinavelu, A. (2007). Detection of HDM2 and VEGF co-expression in cancer cell lines: novel effect of HDM2 antisense treatment on VEGF expression. *Life sciences*, *81*(17-18), 1362-1372.	IF: 2.583
3.	Popish, JS. Levein, MG., **Karthikeyan, M**, Ehret M, & Rathinavelu A. (2008). Assessment of ethnicity on Butyrylcholinesterase variant in Alzheimer's patients and normal volunteers. *Journal of Pharmacy Practice*, Feb 01; 21(1), 58-60.	-
4.	**Karthikeyan, M.,** Rose, R., Shridevi, V., Anandan, B., Shanmugasundaram, S., Mohan, D., Ramesh, A., & Jayaraman, G. (2009). Core promoter variants (A-20C, T-18C and G-6A) of the angiotensinogen (AGT) gene are not significantly associated with hypertension in patients of Tamilnadu, India. *International Journal of Human Genetics*, *9*(1), 13-19.	-
5.	Singh, K. D., & **Muthusamy, K.** (2009). In silico genome analysis and drug efficacy test of influenza A virus (H1N1) 2009. *Indian journal of microbiology*, *49*, 358-364.	IF: 0.938
6.	Srinivasan, P., Sudha, A., Hameed, A. S., Kumar, S. P., & **Karthikeyan, M.** (2011). Screening of medicinal plant compounds against NS5B polymerase of hepatitis C virus (HCV) using molecular docking studies. *Journal of Pharmacy Research*, *4*(1), 136-140.	IF: 1.09
7.	Ramya, S., Gopinath, K., **Karthikeyan, M.,** Sundarpandian, S. M., Periyathambi, N., Sundarajan, G., & Jayakumararaj, R. (2011). Effect of crude methanol leaf extracts of Andrographis paniculata (burmf) Nees on larvae of Helicoverpa armigera (Hübner). *Environ. We Intl. J. Sci. Technol*, *6*, 21-28.	IF: 2.2
8.	**Karthikeyan, M.,** Kirubakaran, P, Singh Kh. D., Nagamani, S, Sindhu, S. (2011). Molecular Docking studies of Bitter melon compounds against BRCA1 Protein. *Journal of Pharmacy Research*, *4* (2): 388-390.	IF: 1.09
9.	Kirubakaran, P., Kothapalli, R., Singh, K. D., Nagamani, S., Arjunan, S., & **Muthusamy, K.** (2011). In silico studies on marine actinomycetes as potential inhibitors for Glioblastoma multiforme. *Bioinformation*, *6*(3), 100.	IF: 1.41
10.	Singh, K. D., **Karthikeyan, M.,** Kirubakaran, P., & Nagamani, S. (2011).	IF: 2.033

	Pharmacophore filtering and 3D-QSAR in the discovery of new JAK2 inhibitors. *Journal of Molecular Graphics and Modelling*, *30*, 186-197.	
11.	Srinivasan, P., Kumar, S. P., **Karthikeyan, M.,** Jeyakanthan, J., Jasrai, Y. T., Pandya, H. A., Rawal, RM., & Patel, S. K. (2011). Epitope-based immunoinformatics and molecular docking studies of nucleocapsid protein and ovarian tumor domain of crimean–congo hemorrhagic Fever virus. *Frontiers in genetics*, *2*, 72.	-
12.	Rose, R., Balakrishnan, A., **Muthusamy, K.,** Arumugam, P., Shanmugam, S., & Gopalswamy, J. (2011). Myocilin mutations among POAG patients from two populations of Tamil Nadu, South India, a comparative analysis. *Molecular vision*, *17*, 3243.	IF: 2.51.
13.	Singh, K. D., Kirubakaran, P., Nagarajan, S., Sakkiah, S., **Muthusamy, K.,** Velmurgan, D., & Jeyakanthan, J. (2012). Homology modeling, molecular dynamics, e-pharmacophore mapping and docking study of Chikungunya virus nsP2 protease. *Journal of molecular modeling*, *18*, 39-51.	IF: 1.871
14.	Dhanachandra Singh, K., Kirubakaran, P., Manikandaprabhu, S., Nagamani, S., Srinivasan, P., & **Karthikeyan, M.** (2012). Docking studies of adenosine analogues with NS5 methyltransferase of yellow fever virus. *Indian journal of microbiology*, *52*, 28-34.	IF:0.46
15.	Kirubakaran, P., **Muthusamy, K.,** Singh, K. H. D., & Nagamani, S. (2012). Ligand-based pharmacophore modeling; atom-based 3D-QSAR analysis and molecular docking studies of phosphoinositide-dependent kinase-1 inhibitors. *Indian Journal of Pharmaceutical Sciences*, *74*(2), 141.	IF: 0.626
16.	Dhanachandra Singh, K., **Karthikeyan, M.,** Kirubakaran, P., Sathya, V., & Nagamani, S. (2012). Structure-based drug discovery of ApoE4 inhibitors from the plant compounds. *Medicinal Chemistry Research*, *21*, 825-833.	IF: 1.271
17.	Kirubakaran, P., **Muthusamy, K.,** Dhanachandra Singh, K., & Nagamani, S. (2012). Homology modeling, molecular dynamics, and molecular docking studies of *Trichomonas vaginalis* carbamate kinase. *Medicinal Chemistry Research*, *21*, 2105-2116.	IF: 1.271
18.	Nagamani, S., Kesavan, C., & **Muthusamy, K.** (2012). E-Pharmacophore mapping and docking studies on Vitamin D receptor (VDR). *Bioinformation*, *8*(15), 705.	IF: 1.0
19.	Nagamani, S., **Muthusamy, K.,** Kirubakaran, P., Singh, K. D., & Krishnasamy, G. (2012). Theoretical studies on benzimidazole derivatives as E. coli biotin carboxylase inhibitors. *Medicinal Chemistry Research*, *21*(9), 2169-2180.	IF: 1.271
20.	Kirubakaran, P., **Karthikeyan, M.,** Singh, K. D., Nagamani, S., & Premkumar, K. (2013). In silico structural and functional analysis of the human TOPK protein by structure modeling and molecular dynamics studies. *Journal of molecular modeling*, *19*, 407-419.	IF: 1.98
21.	Kasinathan, D., Girijakumari, N. R., Marimuthu, P. N., Ramar, M., & **Muthusamy, K.** (2013). Awareness on type II diabetes and its complication among Sivaganga district population in tamilnadu: A cross section survey. *Journal of Advanced Scientific Research*, *4*(01), 38-42.	-
22.	**Muthusamy, K.,** Singh, K. D., Chinnasamy, S., Nagamani, S., Krishnasamy, G., Thiyagarajan, C., Premkumar, P., & Anusuyadevi, M. (2013). High throughput virtual screening and E-pharmacophore filtering in the discovery	IF: 0.662

	of new BACE-1 inhibitors. *Interdisciplinary Sciences: Computational Life Sciences*, *5*, 119-126.	
23.	Kirubakaran, P., **Muthusamy, K.,** Dhanachandra Singh, K., & Nagamani, S. (2013). Pharmacophore modeling, 3D-QSAR, and molecular docking study on naphthyridine derivatives as inhibitors of 3-phosphoinositide-dependent protein kinase-1. *Medicinal Chemistry Research*, *22*(8), 3812-3822.	IF: 1.61
24.	Kirubakaran, P., & **Karthikeyan, M.** (2013). Pharmacophore modeling, 3D-QSAR and DFT studies of IWR small-molecule inhibitors of Wnt response. *Journal of Receptors and Signal Transduction*, *33*(5), 276-285.	IF: 1.63
25.	Singh, K. D., & **Muthusamy, K.** (2013). Molecular modeling, quantum polarized ligand docking and structure-based 3D-QSAR analysis of the imidazole series as dual AT1 and ETA receptor antagonists. *Acta Pharmacologica Sinica*, *34*(12), 1592-1606.	IF: 2.496
26.	**Karthikeyan, M.,** Shridevi, V., Rose, R., Anandan, B., Singh, K. D., Shanmugasundaram, S., Mohan, D., Ramesh, A., & Jayaraman, G. (2013). Angiotensin gene polymorphisms (T174M and M235T) are significantly associated with the hypertensive patients of Tamil Nadu, South India. *International Journal of Human Genetics*, *13*(4), 201-207.	IF:0.382
27.	Kirubakaran, P., Kothandan, G., Cho, S. J., & **Muthusamy, K.** (2014). Molecular insights on TNKS1/TNKS2 and inhibitor-IWR1 interactions. *Molecular BioSystems*, *10*(2), 281-293	. IF: 3.35
28.	Dhanachandra Singh, K., Jajodia, A., Kaur, H., Kukreti, R., & **Karthikeyan, M.** (2014). Gender specific association of RAS gene polymorphism with essential hypertension: a case-control study. *BioMed Research International*, *2014*.	IF: 2.706
29.	Singh, K. D., Naveena, Q., & **Karthikeyan, M.** (2014). Jak2 inhibitor–a jackpot for pharmaceutical industries: a comprehensive computational method in the discovery of new potent Jak2 inhibitors. *Molecular BioSystems*, *10*(8), 2146-2159.	IF:3.35
30.	**Karthikeyan, M.,** Kirubakaran, P., Singh, K. D., Sampath, B., & Krishnasamy, G. (2014). Understanding the evolutionary relationship of hemagglutinin protein from influenza viruses using phylogenetic and molecular modeling studies. *Journal of Biomolecular Structure and Dynamics*, *32*(5), 816-830.	IF: 2.983
31.	Kirubakaran, P., Arunkumar, P., Premkumar, K., & **Muthusamy, K.** (2014). Sighting of tankyrase inhibitors by structure-and ligand-based screening and in vitro approach. *Molecular Biosystems*, *10*(10), 2699-2712.	IF: 3.35
32.	Singh, K. D., & **Karthikeyan, M.** (2014). Combined sequence and sequence-structure-based methods for analyzing RAAS gene SNPs: a computational approach. *Journal of Receptors and Signal Transduction*, *34*(6), 513-526.	IF: 1.611
33.	Dhanachandra Singh, K., Jajodia, A., Kaur, H., Kukreti, R., & **Karthikeyan, M.** (2014). Renin angiotensin system gene polymorphisms in response to antihypertensive drugs and visit-to-visit blood pressure variability in essential hypertensive patients. *Current Pharmacogenomics and Personalized Medicine (Formerly Current Pharmacogenomics)*, *12*(4), 227-235.	-
34.	Nagamani, S., Perumal, M. S., Perumal, R. L. S., Kesavan, C., &	-

	Muthusamy, K. (2015). ACE DD genotype associated with the female Chronic Kidney Disease patients of Tamilnadu population. *Egyptian Journal of Medical Human Genetics*, *16*(1), 29-33.	
35.	Chinnasamy, S., Chinnasamy, S., Nagamani, S., & **Muthusamy, K.** (2015). Identification of potent inhibitors against snake venom metalloproteinase (SVMP) using molecular docking and molecular dynamics studies. *Journal of Biomolecular Structure and Dynamics*, *33*(7), 1516-1527.	IF: 2.919
36.	Singh, K. D., Kirubakaran, P., Nagamani, S., & **Karthikeyan, M.** (2015). Binding mode analysis of anti–influenza drugs in H1N1 (2009) and H5N1 influenza A virus and designing of potential H1N1 inhibitors. *International Journal of Computational Biology and Drug Design*, *8*(1), 1-18.	-
37.	**Muthusamy, K.,** Kirubakaran, P., Krishnasamy, G., & Thanashankar, R. R. (2015). Computational insights into the inhibition of influenza viruses by rupestonic acid derivatives: pharmacophore modeling, 3D-QSAR, CoMFA and COMSIA studies. *Combinatorial Chemistry & High Throughput Screening*, *18*(1), 63-74.	. IF: 1.222
38.	Gopinath, K., Jayakumararaj, R., & **Karthikeyan, M.** (2014). DAPD: a knowledgebase for diabetes associated proteins. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, *12*(3), 604-610.	IF: 1.438
39.	Jajodia, A., Singh, K. D., Singhal, A., Vig, S., Datta, M., Singh, Y., **Muthusamy, K.** & Kukreti, R. (2015). Methylation of a HTR3A promoter variant alters the binding of transcription factor CTCF. *RSC Advances*, *5*(57), 45710-45717.	IF: 3.84
40.	Krishnasamy, G., & **Muthusamy, K.** (2015). In vitro evaluation of antioxidant and antidiabetic activities of Syzygium densiflorum fruits. *Asian Pacific Journal of Tropical Disease*, *5*(11), 912-917.	IF: 1.062
41.	Chinnasamy, S., Chinnasamy, S., & **Muthusamy, K.** (2016). High-affinity selective inhibitor against phospholipase a2 (pla2): A computational study. *Journal of Receptors and Signal Transduction*, *36*(2), 111-118.	IF: 2.277
42.	Nagamani, S., **Muthusamy, K.,** & Marshal, J. J. (2016). E-pharmacophore filtering and molecular dynamics simulation studies in the discovery of potent drug-like molecules for chronic kidney disease. *Journal of Biomolecular Structure and Dynamics*, *34*(10), 2233-2250.	IF: 2.219
43.	**Muthusamy, K.,** & Krishnasamy, G. (2016). A computational study on role of 6-(hydroxymethyl)-3-[3, 4, 5-trihydroxy-6-[(3, 4, 5-trihydroxyoxan-2-yl) oxymethyl] oxan-2-yl] oxyoxane-2, 4, 5-triol in the regulation of blood glucose level. *Journal of Biomolecular Structure and Dynamics*, *34*(12), 2599-2618.	IF: 2.219
44.	Krishnasamy, G., & **Muthusamy, K.** (2015). In vitro evaluation of antioxidant and antidiabetic activities of Syzygium densiflorum fruits. *Asian Pacific Journal of Tropical Disease*, *5*(11), 912-917.	IF: 1.241
45.	Selvaraman, N., Selvam, S. K., & **Muthusamy, K.** (2016). The binding mode prediction and similar ligand potency in the active site of vitamin D receptor with QM/MM interaction, MESP, and MD simulation. *Chemical Biology & Drug Design*, *88*(2), 272-280.	IF: 2.802
46.	Nagamani, S., Singh, K. D., & **Muthusamy, K.** (2016). Combined sequence and sequence-structure based methods for analyzing FGF23, CYP24A1 and VDR genes. *Meta gene*, *9*, 26-36.	-

47.	Chinnasamy, S., **Muthusamy, K.,** & Chinnasamy, S. (2016). Introduction of Stereo Chemical Constraints into β-Amino Acid Residues. *Journal of Vaccines and Immunology*, *2*(1).	-
48.	**Karthikeyan M**., Mohan, S., Nagamani, S., & Kesavan, C. (2016). Identification of novel small molecules that bind to the Loop2 region of sclerostin-an in silico computational analysis. *Physiological Research*, *65*(5), 871.	IF: 1.293
49.	**Muthusamy, K.,** Prasad, S., & Nagamani, S. (2016). Role of hydrophobic patch in LRP6: a promising drug target for Alzheimer's disease. *Indian Journal of Pharmaceutical Sciences*, *78*(2), 240-251.	IF: 0.762
50.	Selvakkumar, C., **Muthusamy, K.,** & Chinnasamy, S. K. (2016). Nanopeptides: non-covalent interactions in chemistry and biological functions. *J App Pharm*, *8*(218), 2.	-
51.	**Muthusamy, K.,** Chinnasamy, S., Nagarajan, S., Sivaraman, T., & Chinnasamy, S. (2017). Isolation and characterization of bioactive compounds of Clematis gouriana Roxb. ex DC against snake venom phospholipase A2 (PLA2) computational and in vitro insights. *Journal of Biomolecular Structure and Dynamics*, *35*(9), 1936-1949.	IF: 2.3
52.	Vijayashree, Priyadharsini., **Karthikeyan, M**.,V.Shridevi., A. Paramasivam., G. Jayaraman., S.T.Santhiya. (2016) Association of CDH13 (rs7200009) gene polymorphism with essential hypertension in south Indian population. *International Journal of Current research*, *8*(08), 35579-35585.	-
53.	Gorai, B., **Karthikeyan, M.,** & Sivaraman, T. (2016). Putative membrane lytic sites of P-type and S-type cardiotoxins from snake venoms as probed by all-atom molecular dynamics simulations. *Journal of molecular modeling*, *22*, 1-11.	IF: 1.43
54.	Kalaiarasi, A., Anusha, C., Sankar, R., Rajasekaran, S., John Marshal, J., **Muthusamy, K.,** & Ravikumar, V. (2016). 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), 9542-9550.	IF: 2.8
55.	**Muthusamy, K.,** Gopinath, K., & Nandhini, D. (2016). Computational prediction of immunodominant antigenic regions & potential protective epitopes for dengue vaccination. *The Indian journal of medical research*, *144*(4), 587.	IF: 1.396
56.	Grewal, G.K., Singh, K.D., Kanojia, N., Rawat, C., Kukal, S., Jajodia, A., Singhal, A., Misra, R., Nagamani, S., **Muthusamy, K.** and Kukreti, R. (2017). Exploring the carbamazepine interaction with human pregnane X receptor and effect on ABCC2 using in vitro and in silico Approach. *Pharmaceutical research*, *34*, 1444-1458.	IF: 3.002
57.	**Karthikeyan, Muthusamy.**, Sathishkumar, Chinnasamy., Pappathi, Palanisamy., Gopinath, Krishnasamy. (2017) *Clematis gourianaroxb.* Ex dc compounds could be potent inhibits for snake venom metalloproteinase (SVMP) a molecular docking and simulation studies. *Asian Journal of Research in Biological and Pharmaceutical Sciences*. *5*(2), 50- 74.	-

58.	Gopinath, K., & **Karthikeyan, M.** (2017). Understanding the evolutionary relationship of M2 channel protein of influenza a virus and its structural variation and drug resistance. *Current Bioinformatics*, *12*(3), 265-274.	IF: 0.921
59.	Pattarayan, D., Sivanantham, A., Krishnaswami, V., Loganathan, L., Palanichamy, R., Natesan, S., **Muthusamy, K.,** and Rajasekaran, S. (2018). Tannic acid attenuates TGF-β1-induced epithelial-to-mesenchymal transition by effectively intervening TGF-β signaling in lung epithelial cells. *Journal of cellular physiology*, *233*(3), 2513-2525.	IF:4.08
60.	**Muthusamy, K.,** Chinnasamy, S., Nagarajan, S., & Sivaraman, T. (2018). Computational and in vitro insights on snake venom phospholipase A2 inhibitor of phytocompound ikshusterol3-O-glucoside of Clematis gouriana Roxb. ex DC. *Journal of Biomolecular Structure and Dynamics*, *36*(16), 4197-4208.	IF: 3.12
61.	Gopinath, K., Subbiah, N., & **Karthikeyan, M.** (2020). Isolation of natural compounds from syzygium densiflorum fruits and exploring its chemical property, therapeutic role in diabetic management. *The Natural Products Journal*, *10*(2), 168-176.	-
62.	Priyadharsini Jayaseelan, V., **Muthusamy, K.,** Venkatramani, S., Arumugam, P., Gopalswamy, J., & Thiagarajan, S. S. (2017). Gender-specific Association of ATP2B1 (rs2681472) Gene Polymorphism with Essential Hypertension in South Indian Population. *International Journal of Human Genetics*, *17*(4), 169-176.	-
63.	**Muthusamy, K.,** & Nagamani, S. (2018). Vitamin D receptor (VDR) non-synonymous single nucleotide polymorphisms (nsSNPs) affect the calcitriol drug response-A theoretical insight. *Journal of Molecular Graphics and Modelling*, *81*, 14-24.	IF: 1.74
64.	Mohan, S., **Muthusamy, K.,** Bajwa, N., & Kesavan, C. (2017). Anabolic Effects of Novel Small Molecular Weight Fibroblast Growth Factor Receptor (FGFR) 3 Agonists in Articular Chondrocytes. *Journal of Bone and Mineral Research*, *32*, S314-S314.**)**	IF: 6.314
65.	Chidambaram, A., Sundararaju, K., Chidambaram, R. K., Subbiah, R., Jayaraj, J. M., **Muthusamy, K.,** & Vilwanathan, R. (2018). 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), 5293-5309.	IF: 4.08
66.	Priyadharsini, J. V., **Karthikeyan, M.,** Shridevi, V., Paramasivam, A., Jayaraman, G., & Sathiyavedu, T. S. (2018). Association of SH2B3 (rs3184504) polymorphism in essential hypertensive patients in south Indian population. *Int. J. of Life Sciences*, *6*(1), 41-48.	-
67.	Jayaraj, J. M., Krishnasamy, G., Lee, J. K., & **Muthusamy, K.** (2019). In silico identification and screening of CYP24A1 inhibitors: 3D QSAR pharmacophore mapping and molecular dynamics analysis. *Journal of Biomolecular Structure and Dynamics*, *37*(7), 1700-1714.	IF: 3.1
68.	Nagamani, S., Kesavan, C., & **Muthusamy, K.** (2018). Atom-based and pharmacophore-based 3D–QSAR studies on vitamin D receptor (VDR). *Combinatorial Chemistry & High Throughput Screening*, *21*(5), 329-343.	IF: 1.205

69.	Loganathan, L., & **Muthusamy, K.** (2019). Investigation of drug interaction potentials and binding modes on direct renin inhibitors: a computational modeling studies. *Letters in Drug Design & Discovery*, *16*(8), 919-938.	IF: 0.924
70.	Hemamalini, V., Velayutham, D. P. M., Lakshmanan, L., **Muthusamy, K.,** Sivaramakrishnan, S., & Premkumar, K. (2020). Inhibitory potential of Hydroxychavicol on Ehrlich ascites carcinoma model and in silico interaction on cancer targets. *Natural product research*, *34*(11), 1591-1596.	IF: 1.928
71.	Loganathan, L., **Muthusamy, K.,** Jayaraj, J. M., Kajamaideen, A., & Balthasar, J. J. (2018). In silico insights on tankyrase protein: A potential target for colorectal cancer. *Journal of Biomolecular Structure and Dynamics*.	IF:3.1
72.	Loganathan, L., & **Muthusamy, K.** (2018). Current scenario in structure and ligand-based drug design on anti-colon cancer drugs. *Current Pharmaceutical Design*, *24*(32), 3829-3841.	IF: 2.757
73.	Nagamani, S., & **Muthusamy, K.** (2018). A theoretical insight to understand the molecular mechanism of dual target ligand CTA-018 in the chronic kidney disease pathogenesis. *PloS one*, *13*(10), e0203194.	IF: 2.766
74.	Kim, T.S., Gao, H., Li, J., Kalia, V.C., **Muthusamy, K.,** Sohng, J.K., Kim, I.W. and Lee, J.K. (2019). Overcoming NADPH product inhibition improves D-sorbitol conversion to L-sorbose. *Scientific Reports*, *9*(1), 815.	IF: 4.122
75.	Carlus, S. J., Almuzaini, I. S., **Karthikeyan, M.,** Loganathan, L., Al-Harbi, G. S., Abdallah, A. M., & Al-Harbi, K. M. (2019). Next-generation sequencing identifies a homozygous mutation in ACADVL associated with pediatric familial dilated cardiomyopathy. *Eur Rev Med Pharmacol Sci*, *23*(4), 1710-1721.	IF: 2.387
76.	Nagamani, S., Shanmuga Perumal, M., Srivastava, A., Dhanachandra Singh, K. H., & Kukreti, R., **Karthikeyan, M.** (2018). Vitamin D Receptor Genetic Variants among CKD Patients of South Indian Population. *J Clin Med Genomics*, *6*(152), 2.	-
77.	Ramanathan, B., Velayutham, K., Kesavan, S., **Muthusamy, K.,** Loganathan, L., & Gomathinayagam, R. (2019). A pilot study on the prevalence and association of GPRC6A single nucleotide polymorphisms in south Indian patients with metabolic syndrome, metabolic syndrome and infertility. *European Journal of Pharmaceutical and Medical Research*, *6*(4), 552-557.	-
78.	Guin, D., Rani, J., Singh, P., Grover, S., Bora, S., Talwar, P., **Muthusamy, K.,** & Kukreti, R. (2019). Global text mining and development of pharmacogenomic knowledge resource for precision medicine. *Frontiers in Pharmacology*, *10*, 839.	IF: 3.845
79.	Sivanantham, A., Pattarayan, D., Rajasekar, N., Kannan, A., Loganathan, L., Bethunaickan, R., Mahapatra, S.K., Palanichamy, R., **Muthusamy, K.** and Rajasekaran, S. (2019). Tannic acid prevents macrophage-induced pro-fibrotic response in lung epithelial cells via suppressing TLR4-mediated macrophage polarization. *Inflammation Research*, *68*, 1011-1024.	IF: 3.061
80.	Loganathan, L., Natarajan, K., & **Muthusamy, K.** (2020). Computational study on cross-talking cancer signalling mechanism of ring finger protein 146, AXIN and Tankyrase protein complex. *Journal of Biomolecular Structure and Dynamics*, *38*(17), 5173-5185.	IF: 3.310

81.	Loganathan, L., Gopinath, K., Sankaranarayanan, V. M., Kukreti, R., Rajendran, K., Lee, J. K., & **Muthusamy, K.** (2020). Computational and pharmacogenomic insights on hypertension treatment: rational drug design and optimization strategies. *Current Drug Targets*, *21*(1), 18-33.	IF: 3.10
82.	Kandasamy, S., Subramani, P., Srinivasan, K., marshal Jayaraj, J., Prasanth, G., **Muthusamy, K.,** Rajakannan, V. and Vilwanathan, R. (2020). 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*, 128177.	IF: 2.120
83.	Jayaraj, J. M., Reteti, E., Kesavan, C., & **Muthusamy, K.** (2021). Structural insights on Vitamin D receptor and screening of new potent agonist molecules: Structure and ligand-based approach. *Journal of Biomolecular Structure and Dynamics*, *39*(11), 4148-4159.	IF: 3.310
84.	Carlus, S.J., Almuzaini, I.S., **Karthikeyan, M.,** Loganathan, L., Al-Harbi, G.S., Carlus, F.H., Al-Mazroea, A.H., Morsy, M.M., Abo-Haded, H.M., Abdallah, A.M. and Al-Harbi, K.M. (2020). A novel homozygous TPM1 mutation in familial pediatric hypertrophic cardiomyopathy and in silico screening of potential targeting drugs. *European Review for Medical and Pharmacological Sciences*, *24*, 7732-7744	. IF: 3.024
85.	Arokiaraj, S. R., Tajuddin, N. B., **Muthusamy, K.,** Jayaraj, J. M., & Alagumuthu, M. (2020). TRAF2 and NCK-interacting kinase inhibitors for colorectal cancer: In vitro and theoretical validations. *ACS Combinatorial Science*, *22*(11), 608-616.	IF: 3.381
86.	Kanitha, S., Malarvili, T., Lakshmanan, L., & **Karthikeyan, M.** (2020). *In silico* docking analysis of a novel antimicrobial peptide against human breast cancer targeting β-catenin. *The International journal of analytical and experimental modal analysis*, *12*(9).	IF:6.3
87.	Jothimani, M., Loganathan, L., Palanisamy, P., & **Muthusamy, K.** (2020). Regulatory pathways of colorectal cancer and their synergistic cross-talk mechanism. *Iranian Journal of Colorectal Research*, *8*(3), 105-119.	
88.	Jothimani, M., Pannipara, M., Al-Sehemi, A., **Muthusamy, K.** (2021). Association of vitamin-D and VDR with ACE2 modulates the severity in COVID-19. *EC Orthopaedics*, *12*, 87-92.	-
89.	Loganathan, L., Carlus, S. J., & **Muthusamy, K.** (2021). In Silico Analysis of Drug Repurposing Strategy for the Identification of Potential NS3 Helicase Inhibitors Against Zika Virus. *Current Chinese Science*, *1*(3), 373-385.	-
90.	Mohan, S., **Muthusamy, K.,** Nagamani, S., & Kesavan, C. (2021). Computational prediction of small molecules with predicted binding to FGFR3 and testing biological effects in bone cells. *Experimental Biology and Medicine*, *246*(14), 1660-1667.	IF: 3.139
91.	Jayaraman, M., Loganathan, L., **Muthusamy, K.,** & Ramadas, K. (2021). Virtual screening assisted discovery of novel natural products to inhibit the catalytic mechanism of Mycobacterium tuberculosis inhA. *Journal of Molecular Liquids*, *335*, 116204.	IF:6.165
92.	Selvaraj, M., Loganathan, L., kumar Thirumalaisamy, P., Kuriakose, B. B., Sampayan, E. L., & **Muthusamy, K.** (2021). In silico drug designing for the identification of promising antagonist hit molecules against bradykinin	IF: 1.926

	receptor. *Computational and Theoretical Chemistry*, *1202*, 113334.	
93.	Loganathan, L., Kuriakose, B. B., Mushfiq, S., & **Muthusamy, K.** (2021). Mechanistic insights on nsSNPs on binding site of renin and cytochrome P450 proteins: A computational perceptual study for pharmacogenomics evaluation. *Journal of Cellular Biochemistry*, *122*(10), 1460-1474.	IF: 4.429
94.	Jayaraj, J. M., Kuriakose, B. B., Alhazmi, A. H., & **Muthusamy, K.** (2021). Structural and functional insights on vitamin D receptor and CYP24A1 deleterious single nucleotide polymorphisms: A computational and pharmacogenomics perpetual approach. *Cell Biochemistry and Function*, *39*(7), 874-885.	IF: 3.685
95.	Gupta, N., Choudhary, S. K., Bhagat, N., **Karthikeyan, M.,** & Chaturvedi, A. (2021). In silico prediction, molecular docking and dynamics studies of steroidal alkaloids of holarrhena pubescens wall. ex G. don to guanylyl cyclase C: Implications in designing of novel antidiarrheal therapeutic strategies. *Molecules*, *26*(14), 4147.	IF: 4.411
96.	Mishra, M.K., Kukal, S., Paul, P.R., Bora, S., Singh, A., Kukreti, S., Saso, L., Muthusamy, K., Hasija, Y. and Kukreti, R. (2021). Insights into structural modifications of valproic acid and their pharmacological profile. *Molecules*, *27*(1), 104.	IF: 4.412
97.	Sethupathi, M., Thulasinathan, B., Sengottuvelan, N., Ponnuchamy, K., Perdih, F., Alagarsamy, A., & **Karthikeyan, M.** (2021). Macrocyclic "tet a"-Derived Cobalt (III) Complex with a N, N′-Disubstituted Hexadentate Ligand: Crystal Structure, Photonuclease Activity, and as a Photosensitizer. *ACS omega*, *7*(1), 669-682.	IF:3.512
98.	Loganathan, L., Kuriakose, B. B., Sampayan, E. L., & **Muthusamy, K.** (2022). Targeting renin receptor for the inhibition of renin angiotensin aldosterone system: An alternative approach through in silico drug discovery. *Computational and Theoretical Chemistry*, *1208*, 113541.	IF:1.926
99.	Chinnasamy, S., Nagamani, S., & **Muthusamy, K.** (2015). Zn 2+ ion of the snake venom metalloproteinase (SVMP) plays a critical role in ligand binding: A molecular dynamics simulation study. *RSC advances*, *5*(86), 70566-70576.	IF: 3.84
100.	Kumar, S. E., Jayaraj, J. M., **Muthusamy, K.,** Samuel, J. R., & Krishnasamy, G. (2022). Evaluating the Potential of Adathoda vasica against Respiratory Infection caused by Klebsiella pneumoniae. *Current Chinese Science*, *2*(5), 372-381.	-
101.	Meenakshi, M., Antojenifer, P., **Karthikeyan, M.,** Prahalathan, C., & Srinivasan, K. (2022). Synthesis and biological evaluation of new 1, 4-benzothiazine derivatives as potential COX-2 inhibitors. *Journal of Heterocyclic Chemistry*, *59*(2), 351-358.	IF: 2.193
102.	Kandasamy, S., Selvaraj, M., **Muthusamy, K.,** Varadaraju, N., Kannupal, S., Sekar, A. K., & Vilwanathan, R. (2023). 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.	IF: 3.392
103.	Selvaraj, M., Loganathan, L., Jayaraj, J.M., Gopinath, K., Rajendran, K., Pannipara, M., Al-Sehemi, A.G. and **Muthusamy, K.** (2022). In silico Investigation of Immunodominant Antigenic Regions, Helper T	-

	Lymphocyte, and Cytotoxic T Lymphocyte Epitopes Credentials for SARS-CoV-2 Vaccination. *Current Chinese Science*, *2*(3), 226-242.	
104.	Kasinathan, D., Matrougui, K., Elango, S., Belmandani, S., Srinivas, B., **Muthusamy, K.,** & Marimuthu, P. N. (2022). Mitochondrial ATP6 and ND3 genes are associated with type 2 diabetic peripheral neuropathy. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, *16*(6), 102501.	IF: 2.462
105.	Selvaraj, M., Sadasivam, K., Jothimani, M., & **Muthusamy, K.** (2023). A Comprehensive Computational Perspective in Drug Discovery for Alzheimer's Disease. *Combinatorial Chemistry & High Throughput Screening*, *26*(12), 2113-2123.	-
106.	Krishnan, S.R., Muthuramalingam, P., Priya, A.M., Prasanth, M.I., Gopinath, K., Mohan, C., **Muthusamy, K.,** Balamurugan, K., Gupta, A.K. and Ramesh, M. (2022). Expressing OsiSAP8, a Zinc-Finger Associated Protein Gene, Mitigates Stress Dynamics in Existing Elite Rice Varieties of the 'Green Revolution'. *Sustainability*, *14*(16), 10174.	IF: 3.889
107.	Loganathan, L., Al-Haidose, A., Kumar, A.G., Sujatha, L.B., Carlus, F.H., Alharbi, A., Alhyassat, S., **Muthusamy, K.,** Carlus, S.J. and Abdallah, A.M. (2022). An in silico analysis of the impact of POLE mutations on cladribine docking. *European Review for Medical & Pharmacological Sciences*, *26*(20).	IF:3.784
108.	John Marshal, J., Kuriakose, B. B., Alhazmi, A. H., & **Muthusamy, K.** (2023). Mechanistic insights into the role of vitamin D and computational identification of potential lead compounds for Parkinson's disease. *Journal of Cellular Biochemistry*, *124*(3), 434-445.	IF: 4.429
109.	Jayaraj, J. M., & **Muthusamy, K.** (2023). Role of deleterious nsSNPs of klotho protein and their drug response: a computational mechanical insights. *Journal of Biomolecular Structure and Dynamics*, 1-11.	IF: 5.235
110.	Loganathan, L., Jeyakanthan, J., & **Muthusamy, K.** (2023). HTNpedia: A Knowledge Base for Hypertension Research. *Combinatorial Chemistry & High Throughput Screening*.	IF: 1.714
111.	Meenakshi, M., Kannan, A., Jothimani, M., Selvi, T., **Karthikeyan, M.,** Prahalathan, C., & Srinivasan, K. (2023). Evaluation of dual potentiality of 2, 4, 5-trisubstituted oxazole derivatives as aquaporin-4 inhibitors and anti-inflammatory agents in lung cells. *RSC advances*, *13*(37), 26111-26120.	IF: 4.036
112.	Bharadwaj MN, Mythreyi R, Dhanu AS, Poojith N., Sivasubramaniyan, V., **Muthusamy, K.,** and Basalingappa, K. In Silico Analysis of Bioactive Compound Gymnemagenin: in Diabetes Mellitus. International Journal of Innovative Science and Research Technology. 8 (9) September – 2023.	-
113.	Subramaniyan, S., Kuriakose, B. B., Mushfiq, S., Prabhu, N. M., & **Muthusamy, K.** (2023). Gene signals and SNPs associated with Parkinson's disease: A nutrigenomics and computational prospective insights. *Neuroscience*. **(IF: 3.3)**	-
114.	Loganathan, L., Sankar, J., Rajendran, K., & **Muthusamy, K.** (2023). Theoretical investigation on known renin inhibitors and generation of ligand-based pharmacophore models for hypertension treatment. *Journal of Biomolecular Structure and Dynamics*, 1-10.	IF:5.235
115.	Preethi, Ramakrishnan., Pandiselvi, Pandi., Muralidharan, Jothimani., Sakthi Sasikala, Sundaravel., **Karthikeyan, Muthusamy**., Unnamalai, Narayanan.,	IF:1.476

	Mehboobali, Pannipara., Abdullah G. Al-Sehemi., and Arunkumar, Jeyaraman. Computational approach on Moringa oleifera as an inhibitor against SARS-CoV-2 structural proteins. *Indian Journal of Biochemistry and Biophysics. 60*, 941-957.	
116.	Carlus, F. H., Sujatha, L. B., Kumar, A. G., Loganathan, L., **Muthusamy, K.,** & Carlus, S. J. (2023). In silico prediction, molecular modeling, and dynamics studies on the targeted next-generation sequencing identified genes underlying congenital heart disease in Down syndrome patients. *Annals of Pediatric Cardiology*, *16*(4), 266-275.	IF:0.296
117.	Basavaraj Gorrjanal, B. M. Monika, R. Mythreyi, **Karthikeyan Muthusamy**, Karthikeyan Murugesan, Anjuna Radhakrishnan, S. Jagannathan, Boojhana Elango, Kanthesh M. Basalingappa, Maghimaa Mathanmohun. (2023). Role of Flavonoids in Combating Hyperuricemia. *International Multidisciplinary Research Journal*, *13*, 25-31.	-
118.	John Marshal Jayaraj and **Karthikeyan Muthusamy**. VDR, CYP24A1 and KL gene variations significantly associated with CKD pathogenesis: a comparative genetic study. *International Journal of Human Genetics*.	IF:0.2
119.	Subramani Selvi, Arun Kannan, John Marshal Jayaraj, Thangavel Selvi, **Karthikeyan Muthusamy**, Chidambaram Prahalathan, Natarajan Sampath and Kannupal Srinivasan. Synthesis and Biological Evaluation of 3-Hydroxypyrazolesas Aquaporin 9 Inhibitors. *Journal of Heterocyclic Chemistry*.	IF:2.035
120.	Sakthi Sasikala Sundaravel, Beena Briget Kuriakose, Sakeena Mushfiq and **Karthikeyan Muthusamy**. Computational Insights on Migraine and Anxiety in Association with BDNF. *Letters in Drug Design & Discovery.*	IF:1.0

Resource persons in various capacities

National Conferences : 22

International Conferences : 3

Invited Lectures : 19

Date : 01.03.2024

Place : Karaikudi.

Dr. M. KARTHIKEYAN

ASSOCIATE PROFESSOR