



DR. M. KARTHIKEYAN
ASSOCIATE PROFESSOR

Contact

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Academic Qualifications: P.G.D.C.A/M.Sc./M. Phil./Ph.D.

Year of Passing	Degree	University/Institute
2006	Ph.D. Biomedical Genetics	University of Madras, Chennai
1999	M.Sc. Biomedical Genetics	University of Madras, Chennai
1996	B.Sc. Zoology	Jamal Mohamed College, Trichy
1999	P.G.D.C.A	Bishop Heber College, Trichy

Teaching Experience: 15 Years

- ✓ **Associate Professor (18.08. 2020 – till date)**
 - ✓ **Assistant Professor (18.08.2008 – 17.08.2020)**
Department of Bioinformatics, Alagappa University, Karaikudi -630003, Tamilnadu, India.
- Key responsibility:**
Teaching: M. Sc. Students
Research supervisor: Ph. D. and M. Sc. students.
Principle Investigator for various Research projects

✓ **Lecturer (July 05 –February 07)**

Department of Biotechnology, Vels College of Science, Pallavaram, Chennai- 600117, Tamilnadu, India.

Key responsibility:

Teaching at PG and UG level and Research

Research Experience: 23 Years

✓ **Scientist in- charge (March 08 – August 08)**

Nichi-In center for regenerative Medicine, Vadapalani, Chennai-600026, Tamil Nadu, India

Key Responsibilities: Coordination of Research and Scientific activities.

✓ **Post-doctoral Research Associate and Instructor (March 07 – August 07)**

College of Pharmacy, Nova South-eastern University, Florida, USA-33328

Key Responsibilities: Various Research activities like, Train the graduate students, writing the grants, manuscripts, *in vitro* validation of cancer drugs and Maintain the various cancer cell lines, etc.

✓ **DRDO/DIPAS Senior research fellow (July 2003- July 2005)**

Department of Genetics, University of Madras, Taramani, Chennai-600113, Tamilnadu, India.

Key Responsibilities: Cloning and expression of Heat Shock Proteins

✓ **Lady TATA Memorial Trust - Junior Research fellow (July 2001- July 2003)**

Department of Genetics, University of Madras, Taramani, Chennai-600113, Tamilnadu, India.

Key Responsibilities: Screening of AGT Gene polymorphisms in Tamil Nadu Hypertensive patients.

Areas of Research

Dr. M. Karthikeyan and his team focused on Pharmacogenomics and Computational Biology. He concentrates on hypertension, diabetes, cardiovascular diseases, renal failure, cancer, snake bite, Neurological Disorders, and so on. 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 Aided Drug Discovery (CADD) to design the various drugs/lead molecules for Human Diseases 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.

Research Supervision / Guidance

Program of Study		Completed	Ongoing
Research	Ph.D.	07	05
	M. Phil.	08	--
Project	M.Sc.	34	04
	PGDSP	05	--
	M. Tech	01	--
	UG / Short-term Training	05	--

Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals
107	40	08	80	08

Cumulative Impact Factor (as per JCR) :	277.561
h-index :	19
i10 index :	37
Total Citations :	1178

Funded Research Projects

Projects Handled as Principal Investigator

S. No	Funding 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.	13.31
2	AURF, Alagappa University, Karaikudi.	2009	2009	Molecular and bioinformatics analysis of Breast cancer gene polymorphisms (BRCA1 and BRAC2) in Tamilnadu population	0.64

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	15.98
4	DBT, Government of India, NewDelhi	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.	30.48
5	RUSA-2.0, Government of India, NewDelhi	2018	2021	Translational Health Research for Human, Animal and plant Systems	35.00
6	RUSA-2.0, Government of India, New Delhi	2023	Ongoing	Translational Health Research for Human, Animal and plant Systems	58.00
7	EIR Hub of RUSA-2.0, Government of India, New Delhi	2023	Ongoing	Nutrigenomics and Computational Prospective studies on Parkinson Disease	8.0
8	DBT, Government of India, New Delhi	2023	Ongoing	National Network Project (NNP)of Alagappa University, Karaikudi	144.56
9	ICMR, Government of India, New Delhi.	2023	Ongoing	Molecular Insight and In Vitro Validation of novel lead molecules against SH3BP2 and KIT Protein	24.5

Projects Handled as Co-Principal Investigator

S. No	Funding Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	University/ Institution	2012		Computer Aided Drug Design	0.30
2	AURF, Alagappa University, Karaikudi	2009	2012	Pharmacophoric analysis and designing of ATP competitive Cyclin dependent Kinase (CDK4) Inhibitors	4.0

3	ICMR, Government of India, New Delhi	2019	2022	Ferrocene conjugated macrocyclic transition metal complexes as photosensitizer for photodynamic therapy	33.97
4	TANSCHE, Government of TamilNadu	2021	2024	Design and Evaluation of oxazole based novel inhibitors for aquaporins and to study their efficacy on testicularleying cell function in diabetes	31.88

Department Projects

S. No	Funding Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	UGC, Government of India, New Delhi.	2012	2017	Innovative Course Supported by UGC, Govt. of India -PG. Diploma in Structural Pharmacogenomics (PGDSP) – Deputy Coordinator	54
2	Department of Science & Technology (DST),	2017		Fund for Improvement of S&T Infrastructure in Higher Educational Institutions (FIST) and Promotion Of University Research And Scientific Excellence – Member, Phase I	64
3	Department of Biotechnology, Bioinformatics and Computational Biology Centre (BIC)	2022	2027	Identification of Potent Drug for Life- Threatening Diseases.	183.8

HONOURS AND AWARDS

1. Lady **TATA Memorial Trust Junior scholarship (JRF)** award 2001- 2003.
2. Defense Research & Development Organization / Defense Institute of Physiology & Allied Sciences **Senior Research Fellow (SRF)** 2004 -2005.
3. **Qualified SLET (State Level Educational Testing)** examination in the year of 1999 conducted by Bharathidasan University, Tiruchirappalli, Tamil Nadu.
4. **Best Paper Award** in Pharmaceutical & Medicinal Synthetic Chemistry by The Indian Pharmaceutical Association's **Prof. M. L. Khorana Memorial Indian Journal of Pharmaceutical Sciences**
5. **Received Best Poster award in** National Conference On Recent Innovations In Biotechnology (18th April, 2016) Organized by Department of Biotechnology, Aarupadai Veedu Institute of Technology (AVIT), Kanchipuram, Tamil Nadu, India for the Poster Entitled "Identification of potential CYP24A1 inhibitors through E-Pharmacophore mapping and Molecular docking and Dynamics study".

6. Recipient of **Outstanding Reviewer award** the year of 2016 from the **Journal Molecular BioSystems** (Royal Society of Chemistry).
7. **Received Best Poster award in National Conference** on “Recent Trends in Plant Sciences” (1-2 March, 2017) Organized by the Department of Botany, ST. Xavier's College, Palayamkottai, Tamil Nadu, India. For the Poster Entitled “Screening of Potent Agonist of VDR and Antagonist of CYP24A1 using *In Silico* Approaches”.
8. Received **Certificate of Excellence in Reviewing** from Journal of Advances in Medicine and Medical Research in the year 2018.
9. Recipient of Alagappa University prestigious research award “**Alagappa Excellence Research Award for the year of 2018**”.
10. 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.
11. Recipient of **Dr. APJ Abdul Kalam Lifetime Achievement National Award** by National Institute for Socio Economic Development, Bangalore on 1st December. 2020.
12. Recipient of Alagappa University prestigious research award “**Promising Researcher Award for the year of 2022**”.
13. Recipient of “**C V Raman Prize for the year of 2022**” from Institute of Researchers, Kerala.
14. Recipient of “**Research Excellence award for the year of 2022**” from Institute of Researchers, Kerala.

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized: 19

1. International Colloquium on “Emerging Biotechnologies in Agriculture, Animal Health and productivity - [ICEB'09]” during February, 22nd – 27th, 2009 (Member).
2. National Seminar on “Recent Trends in Molecular Modeling and Drug Design” - [NaSMoLD'09] during March, 18th -19th, 2009 (Member).
3. National Workshop on Molecular Modelling and Structural Bioinformatics in association with Schrodinger, USA. During January, 27th – 29th, 2010 (Member).
4. 3rd National Symposium cum Workshop on “Recent Trends in Structural Bioinformatics and Computer Aided Drug Design” [SBCADD'2010] with Schrodinger during December 20th- 22nd, 2010 (Member).
5. 4th National Symposium cum Workshop on “Recent Trends in Structural Bioinformatics and Computer Aided Drug Design” [SBCADD'2012] with Schrodinger during February 20th- 23rd, 2012 (Organizing Secretary)
6. 5th National Symposium cum Workshop on “Recent Trends in Structural Bioinformatics and Computer Aided Drug Design” [SBCADD'2013] with Schrodinger. During February 19th- 22nd, 2013 (Member).
7. Hands on Training in Sequence analysis and Molecular modeling at Dept. of Botany, The Standard Fireworks Rajaratnam College for Women, Sivakasi – 626 123 on 15th July, 2013 (Resource Person).
8. 6th National Symposium cum Workshop on “Recent Trends in Structural Bioinformatics and Computer Aided Drug Design” [SBCADD'2014] with Schrodinger during February 18th- 21st, 2014 (Member).
9. 7th National Symposium cum Workshop on “Recent Trends in Structural Bioinformatics and Computer Aided Drug Design” [SBCADD'2015] with Schrodinger during February 24th- 27th, 2015 (Member).

10. Hands on Training in Essential Bioinformatics tools and Database Development at Dept. of Biotechnology, St. Joseph's College (Autonomous), Tiruchirappalli-02 on 13th July, 2015 (Resource Person).
11. 8th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" [SBCADD'2016] with Schrodinger during February 16th- 19th, 2016 (Organizing Secretary).
12. International Conference on Recent Trends in Biosciences (7th – 9th April, 2016) Organized by Department of Biosciences, Alagappa University, Karaikudi, Tamil Nadu, India. (Organizing Secretary).
13. 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 (Member).
14. Special Lecture on "Dementia and Stem Cell therapy" on 16th Wednesday, August 2017 (Organizing Member).
15. 10th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" [SBCADD'2018] with Schrodinger during February 20th- 23rd, 2018 (Member).
16. 11th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" [SBCADD'2019] with Schrodinger during February 12th- 15th, 2019 (Member).
17. International Conference of Structural Bioinformatics and Drug Design-ICSBCADD-2019 on December 11-13, at Department of Bioinformatics, Alagappa University, Karaikudi, Tamil Nadu, India. (Member)
18. 2nd International Conference Cum Workshop on "Recent Trends In Structural Bioinformatics and Computer Aided Drug Design"-ICSBCADD-2022 on November 21-25, at Department of Bioinformatics, Alagappa University, Karaikudi, Tamil Nadu, India. (Member)
19. 4th International Conference on "Recent Trends in Microbiology"-RTM-2023 on January 05th&06th 2023, at Department of Microbiology, Alagappa University, Karaikudi, Tamilnadu, India. (Poster Evaluation Committee)

Events Participated

Conferences / Seminars / Workshops: 22

1. DAE Symposium on "**Recent Advances in genetic Epidemiology and Population monitoring**" organized by Dept. of Genetics, Dr. ALMPGIBMS, University of Madras, Tamil Nadu, India (23rd – 26th, March, 1998).
2. International Symposium on "**Cataract- Molecular Epidemiological Aspects**" organized by Dept. of Genetics, Dr. ALMPGIBMS, University of Madras, Tamil Nadu, India (31st Jan- 1st Feb 2000).
3. Symposium on "**Recent Advances in Molecular Genetics**" organized by Dept. of Genetics, Dr. ALMPGIBMS, University of Madras, Tamil Nadu, India (19th March, 2003).
4. Symposium on "**Genetics: Today and Tomorrow**" organized by Dept. of Genetics, Dr. ALMPGIBMS, and University of Madras, Tamil Nadu, India (15th May, 2004).
5. Seminar on "**Good laboratory practice in life sciences Research**" organized by Dept. of Pharmacology and Environment Toxicology, University of Madras, Tamil Nadu, India (6-7th January 2004).
6. Indo-Australian Conference in "**Biotechnology in Medicine**" organized by Indian

Institute of Sciences, Australian govt., KMC Manipal and CMC Vellore, Tamil Nadu, India (Feb 9-11th, 2004).

7. Indo-UK workshop on **“Ethics in medical research”** organized by university of Madras and SCIEH, Glasgow, UK (11th Oct 2004).
8. Indo-UK workshop on **“Designing of Doctoral Research for Ph.D scholars”** organized by dept. of Microbiology, Dr. ALMPGIBMS, University of Madras, Taramani, Chennai, Tamil Nadu, India (23rd March 2005).
9. 2nd National conference on **“Multifunctional Nanomaterials and Nano composites”** organized by Department of Nano science and Technology, Bharathiar University, Coimbatore , Tamil Nadu, India. (Mar 24th – 25th, 2011)
10. **“Workshop on innovative and creative approaches for sustainable development of India”** Organized by Industry and Consultancy Cell, Alagappa University, Karaikudi-630 003 (30th April, 2013).
11. **“International Seminar on “Recent Trends in Aquatic Animal Biotechnology (RTAAB’ 2013)”** Organized by Department of Animal Health & Management, Alagappa University, Karaikudi-630 004 (Oct 21-22, 2013).
12. **“Workshop on Metrohm Auto lab Electrochemical Instruments for Biosensors, Energy and Corrosion Applications”** Organized by Bioelectronics and Biosensors, Alagappa University, Karaikudi-630 003 (16th February, 2015).
13. One day conference on **“Exploring Commercialization of Biosensors in India”** Organized by Bioelectronics and Biosensors, Alagappa University, Karaikudi-630 003 (14th March, 2017).
14. International Conference on **“Frontier Areas in Chemical Technologies (FACTs)”** organized by Department of Industrial Chemistry, Alagappa University, Karaikudi-630 003 (July 6-8, 2017).
15. **“World Animal Day Celebration”** Organized by Department of Animal Health and Management, Alagappa University, Karaikudi-630 003 (October 4, 2017).
16. 1st Two days National Workshop on **“Indigenous Cow Management and their Value Added Products”** Organized by Department of Animal Health and Management, Alagappa University, Karaikudi-630 003 (18th – 19th December, 2018).
17. **“3rd International Conference on Recent Trends in Microbiology (RTM-2019)”** Organized by Department of Microbiology, Alagappa University, Karaikudi-630 003 (24th – 25th January, 2019).
18. Three days Workshop on **“Research Methods and LaTeX”** Organized by Technical and Academic Writing Centre, Alagappa University, Karaikudi-630 003 (2^{4th} – 2^{6th} June, 2019).
19. A two day National Conference on **“Recent Trends in Drug Discovery, Development and Targeted Delivery System for Cancer - 2019”**. Organized by P.G & Research Department of Biochemistry at J.J College, Pudukkottai (26th -27th September, 2019).
20. **International Conference of Structural Bioinformatics and Drug Design- ICSBCADD-2019** on December 11-13, at Department of Bioinformatics, Alagappa University, Karaikudi, Tamil Nadu, India.

21. 2nd National seminar on "**Next Generation Technology for Sustainable Fisheries**" Organized by the Department of fisheries Science & Department of Animal Health and Management, Alagappa University, Karaikudi-630 003 (29th - 30th March, 2022).
22. 2nd International Conference Cum Workshop on "**Recent Trends In Structural Bioinformatics and Computer Aided Drug Design**"-ICSBCADD-2022 on November 21-25, at Department of Bioinformatics, Alagappa University, Karaikudi.
23. Workshop on "**Genomic techniques in Clinical Diagnostics**" from 17th to 27th April 2023, at Department of Genetics, University of Madras, Chennai, TamilNadu.

Other Training Programs

1. 67th Orientation Program at Academic Staff Colleges (ASC), Bharathidasan University, Tiruchirappalli (09.11.2010- 06.12.2010), Tamil Nadu, India.
2. Refresher Course in Life Sciences at UGC Academic Staff Colleges (ASC), Madurai Kamaraj University, Madurai (16-11-2012 to 06-12-2012), Tamil Nadu, India.
3. Faculty Development Program on Accreditation Quality Enhancement at Alagappa University, Karaikudi (06.01.2017 – 12.01.2017), Tamil Nadu, India.
4. Refresher Course in Material Sciences at UGC Human Resource Development Centre Academic, Bharathidasan University, Tiruchirappalli (02.03.2018- 22.03.2018), Tamil Nadu, India.
5. Participated in the online AICTE recognized faculty development Programme on Nanomaterials and Devices organized by Applied Science Department NITTR, Chandigarh (27.04.2020 – 01.05.2020), India.
6. Participated in the online AICTE recognized faculty development Programme on Quantum and Energy: Potential & Applications organized by Applied Science Department NITTR, Chandigarh (04.05.2020 – 08.05.2020), India.
7. Certification of Appreciation for the successful completion of online quiz on "COVID-19 Awareness Programme" organized by NSS Unit and Basic Engineering Department of Alagappa Government Polytechnic college, Karaikudi (May 2020) , Tamil Nadu, India.
8. Participated in the Two Weeks Online Capacity Building Programme For Faculty Member and Research Scholars organized by Alagappa university, Karaikudi, (12.06.2020 – 23.06.2020), Tamil Nadu, India, under the sponsorship of UGC STRIDE Component -1 scheme.
9. Participated in the online AICTE recognized faculty development Programme on Refresher course on Application of Nanoscience in Modern Day Research and Technology organized by Applied Science Department NITTR, Chandigarh (19.06.2020 – 02.07.2020), India.

Overseas Exposure / Visits

Countries	Duration	Month & Year	Purpose of Visit
Florida, USA	6 Months	March - August 2007	Post-doctoral Research
Singapore	3 Days	February 2011	Annual International Conference on Bioinformatics and Computational Biology (BICB 2011)

Membership in

Professional Bodies

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

Editorial Board Member

1. Journal of Orthopaedics.
2. International Journal of Pharmaceutical Sciences.
3. Genetic Disease Study.
4. Current Chinese Science

Academic Bodies

1. Chairman, Evaluation Board, Department of Bioinformatics, Annamalai University, Chidambaram, Tamil Nadu 608002.
2. Question Paper Setter & Member, UG & PG Examination evaluation board, Alagappa University, Madurai Kamaraj University, Bharathidasan University, Bharathiar University, Annamalai University, Chettinadu University, Thiruvalluvar University, Vellore Institute of Technology, Anna University, Periyar University, Seethalakshmi Ramasamy College and PSG College of Technology.
3. Member, Board of Studies-Bioinformatics, Bishop Heber College, Tiruchirappalli.
4. Assistant Director for Centre for International Relations of Alagappa University, Karaikudi, India.
5. Member, Institute Ethics Committee (Human Studies).
6. Chairperson for the Board of Studies (B.Sc. Microbiology and Clinical Lab Technology) at Alagappa University, Karaikudi.
7. Distinguished Adjunct Faculty at Saveetha Dental College and Hospitals, Chennai.
8. Member of Ph.D. Research Advisory Committee, Vels Institute of Science, Technology and Advanced Studies, Vellore

9. Doctoral Committee Member, M.Phil. and Ph.D. Thesis Examiner in Department of Bioinformatics & Biomedical Sciences, Bharathidasan University; Department of Biotechnology, Srimad Andavan Arts and Science College; Alagappa University, Karaikudi; Madurai Kamaraj University, Madurai; Vellore Institute of Technology, Vellore; Department of Biotechnology, Acharya Nagarjuna University, Andhra Pradesh.
10. Deputy-coordinator, PG. Diploma in Structural Pharmacogenomics (PGDSP) - A UGC Innovative Programme.
11. Deputy Coordinator, Centre for Incubation and Technology Transfer, Alagappa University.

Reviewer to the Journals

Acta Pharmacologica Sinica; PLOS one; Journal of American Chemical Society, Journal of Human Hypertension, FEBS Open Bio; BMC Research Notes; Current Drug Targets, RSC Advance; Current Pharmaceutical Design; Molecular Simulations; Molecular Omics; Cellular Biochemistry; Medicinal Chemistry Research; Physiological review; Archives of Clinical Review; Combinatorial Chemistry & High Throughput Screening; African Journal of Biotechnology; Journal of Biomolecular Structure and Dynamics; Gene Reports; Indian Journal of Human Genetics; Indian Journal of Medical Research, Malaysian Journal of Medicine & Health Sciences, Molecules, Journal of Vascular Diseases, Journal of Clinical Medicine, Medicina, Biomolecules, Molecular Diversity, Journal of Molecular Modeling, Functional & Integrative Genomics, Scientific Reports, BMC Ophthalmology and Journal of Molecular Neuroscience, etc.

Resource persons in various capacities

Number of Invited / Special Lectures delivered: 23

1. **Population genetics and genetics linkage** at Department of Biotechnology, Cauvery College for Women, Tiruchirappalli-620 018, Tamil Nadu, India (14th December, 2006).
2. **Applications of Stem Cells in Animal Health** in National seminar on “Application of genomics and bioinformatics in Animal Health and Management” Organized by Department of Animal health and management, Alagappa University, Karaikudi, Tamil Nadu, India (25-26 March, 2009).
3. **Bioinformatics & Drug Designing in Post Genomic Era** at Dept. of Botany, St. Joseph's College (Autonomous), Tiruchirappalli, Tamil Nadu, India (22nd February, 2011).
4. **Computational Designing and Discovery of Anti-Alzheimer's Drug** in National Conference on “Evolutionary Trends in Biochemistry and Molecular Biology - BIOTRENDZ-2012” & “1st Annual Seminar on Alzheimer's Disease - ALZINFO-2012” Organized by Department of biochemistry, Bharathidasan University, Tiruchirappalli, Tamil Nadu, India (20th & 21st September, 2012).
5. **Computer Aided Drug Discovery And Development** at Dept. of Microbiology, Srimad Andavan Arts and Science College, Tiruchirappalli, Tamil Nadu, India (October 09, 2012).
6. **Sequence analysis and database management tools** at Dept. of Biochemistry, Dhanalakshmi Srinivasan College of Arts and Science for Women, Thuraiyur Road, Perambalur, Tamil Nadu, India (20th December, 2012).
7. **Introduction to Bioinformatics & Tools and Techniques in Bioinformatics** at

- Dept. of Botany, The Standard Fireworks Rajaratnam College for Women, Sivakasi – 626 123, Tamil Nadu, India (15th July, 2013).
8. **Essential bioinformatics tools for biologists** in UGC sponsored one day seminar on “Technical Innovation in Zoology” Organized by Research Department of Zoology, Seethalakshmi Ramaswami College, Tiruchirappalli - 620 002, Tamil Nadu, India (18th October, 2013).
 9. **Computational Designing of dual ETA and AT1 Receptor as antihypertensive lead molecules: a Pharmacogenomics based future prospective for Hypertension treatment** in UGC – SAP sponsored National Seminar on “Molecular Genetics and Human Welfare” in memory of Prof. G. Jayaraman, Organized by Department of Genetics, University of Madras, Tamil Nadu, India (21st Feb, 2014).
 10. **Essentials of Bioinformatics** in the National workshop on “Essentials of Bioinformatics” organized by Dept. of Biotechnology, Dr. Umayal Ramanathan College for Women, Karaikudi, Tamil Nadu, India (4th & 5th Aug, 2014).
 11. **Bioinformatics: a new window for plant drug discovery** in the SOFT SKILLTRAINING PROGRAM sponsored by TANSICHE in the Dept. of Botany, Govt. Arts College, Mellur, Tamil Nadu, India (26th Aug, 2014).
 12. **Computational Models Simplifies the Animal Experiments** in the Zoology Association Valedictory and Farewell Function, organized by Dept. of Zoology, Govt. Arts College, Karaikudi, Tamil Nadu, India (07th April, 2015).
 13. **Essential Bioinformatics tools and Database Development** at Dept. of Biotechnology, St. Joseph's College (Autonomous), Tiruchirappalli-02 (13th July, 2015).
 14. **Small molecule Inhibitors for cancer therapy** at Dept. of Biochemistry, JJ College (Autonomous), Pudukottai, Tamil Nadu, India (07th February, 2017).
 15. **Indian Herb for the Treatment Snakebite: A In Silico Insights** at National Conference on “Recent Trends in Plant Sciences” organized by Department of Botany, Palayamkottai on 1st – 2nd March, 2017.
 16. **Bioinformatics: An overview** at NCoE(MHRD)-Winter Schools, Thiagarajar College, Madurai on 24.11.2017.
 17. **Bioinformatics Applications in Forensic Science** in the “Workshop on Forensic Bioinformatics” organized by NCoE (MHRD), Thiagarajar College, Madurai on 08.09.2018.
 18. **Pharmacoinformatics** in the “Workshop on Pharmacoinformatics” organized by NCoE (MHRD), Thiagarajar College, Madurai on 02.12.2018.
 19. **Computational Investigation on Cross-talking Cancer Signaling of Tankyrase, Ring Finger 146 and Axin Complex** at E-Learning Program on BIOINFORMATICS AS CARTOGRAPHIC TOOL IN DRUG DISCOVERY, Karaikudi on 30.05.2020
 20. **In Silico Prediction of Immunodominant Antigenic Region and Potential Protective Epitopes for Dengue Vaccination and Computational Approaches on Drug Discovery** at Amity Institute of Biotechnology, Amity University Uttar Pradesh, Noida on 27.10.2020
 21. **Computational Cross-talking mechanism decodes future cancer medication and promotes new generation of drug designing** at King Khalid University, Saudi Arabia on 20.06.2021
 22. **Next generation Sequencing is a more accurate and Effective Tool for Genomic Medicine** at school of Life Sciences Department of Bioinformatics, Vels institute of science technology & advanced studies, Chennai (01.12.2021).
 23. **SNPs, Mutations & Genomic Instability associated with Dental Diseases and treatment: a Pharmacogenomics perspective view** at Saveetha Dental College, Saveetha Institute of Medical and Technical Sciences, Chennai (03.12.2022)

Other Contributions

1. Sequences submitted in Genbank : 26
2. Database Developed : 04
3. Number Of Compounds Submitted to PubChem: 05

Research Publications

1. Rose R, **Karthikeyan M**, Anandan B, Jayaraman G. Myocilin mutation among primary open angle glaucoma patients of Kanyakumari district, South India. *Molecular Vision*, 2007 Apr 2; 13:497-503. PMID: 17417611 (**IF: 2.38**).
2. Narasimhan M, Rose R, **Karthikeyan M**, Rathinavelu A. Detection of HDM2 and VEGF co- expression in cancer cell lines: novel effect of HDM2 antisense treatment on VEGF expression. *Life Sciences*, 2007 Oct 13; 81 (17-18):1362-72. PMID: 17931661, (**IF :2.583**).
3. Popish JS, Levein MG, **Karthikeyan M**, Ehret M, Rathinavelu A. Assessment of ethnicity on Butyrylcholinesterase variant in Alzheimer's patients and normal volunteers. *Journal of Pharmacy Practice*, 2008 Feb 01; 21(1), 58-60.
4. **Karthikeyan M**, Rose R, Shridevi V, Anandan B, Shanmugasundaram S, Mohan D, Ramesh A, Jayaraman G. 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*, 2009 Mar; 9(1): 13-19.
5. Singh KhD, **Karthikeyan M***. *In silico* genome analysis and drug efficacy test of influenza A virus (H1N1) 2009. *Indian Journal of Microbiology*, 2009 Dec; 49(4): 358-64. PMID: 23100798, (**IF: 0.938**).
6. Srinivasan P, Sudha A, Shahul Hameed A, Prasanth Kumar S, **Karthikeyan M**. Screening of medicinal plant compounds against NS5B polymerase of hepatitis C virus (HCV) using molecular docking studies. *Journal of Pharmacy Research*, 2011 Jan; 4(1): 136-140. (**IF: 1.09**).
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