Dr. J. JEYAKANTHAN
Professor and Head

Contact

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Academic Qualifications:

Year of Passing	Degree	University / Institute
2020-21	D.Sc (Submitted)	Alagappa University
2000	Ph.D. (Crystallography and Biophysics)	University of Madras
1999	P.G.D.C. A	MIT, Anna University
1995	M. Phil. Physics	M. K. University
1993	M.Sc. Physics	M. K. University
1991	B.Ed.	University of Madras
1989	B.Sc (Physics)	M. K. University

Teaching Experience: 12 Years

Position	Institute/University	Period
Professor and Head	Department of Bioinformatics	March 2010 – till date

Research Experience: 29 Years

Position	Institute/University	Period
Professor and Head	Department of Bioinformatics	March 2010 – till date
Research Scientist	SPring-8, Japan	May 2007 – March 2010
Researcher	RIKEN Harima Institute, SPring-8, Japan	June 2003 – May 2007
PDF	Indian Institute of Science, Bangalore	January 2000 – May 2003
CSIR SRF-JRF	University of Madras, Chennai	June 1995 – December 1999

Additional Responsibilities

1. 2022 -*: Member, Project Monitoring Unit Academic Core Committee of RUSA 2.0
2. 2022-*: Coordinator, DBT-Bioinformatics and Computational Biology Centre, Department of Bioinformatics
3. 2021-* : Member, Learning Outcome Based Curriculum Frame Work (LOCF)
4. 2021-* : Member, Guru Dakshata – UGC Quality Mandates
5. 2021-* : Member, Paramarsh – UGC Quality Mandates
6. 2021-* : Member, CARE/STRIDE – UGC Quality Mandates
7. 2019-* : Director, Alagappa University Ranking Cell (AURC)
8. 2019-* : Director, Center for Internal Quality Assurance Committee, Directorate of Online Programmes
9. 2018 -* : Member, Internal Quality Assurance Committee, Directorate of Distance Education (DDE)
10. 2018 -* : Member, Sports Advisory Board
11. 2018 -* : Coordinator, Tamil Nadu State University Rating Framework (TANSURF)
12. 2017 - * : Coordinator, DST-PURSE Program (Phase-II) – All Science Departments
13. 2017 - * : Coordinator, DST-FIST Program (Level-I)
14. 2016 - * : Member, Research Advisory Committee (RAC)
15. 2016 - * : Academic staff, Anti-Ragging Committee
16. 2015 - * : Chairperson, School of Biological Sciences
17. 2013 - * : Coordinator, UGC Innovative Program (PG diploma)
18. 2010 - * : Member, Senate of Alagappa University
19. 2010 - * : Member, Website Maintenance Committee
20. 2010 -* : Member, Standing Committee on Academic Affairs, Alagappa University

21. 2010 - * : Chairman, Board of Studies of Bioinformatics

22. 2010 -*: Head of the Department, Department of Bioinformatics

Completed:

23. 2019-19: Head in-charge, Department of Botany

24. 2019-19: Chairman, Board of Studies of Botany

25. 2018-19: Member, Finance Committee

26. 2018-19: Member, Governing Council for DDE

27. 2018-19: Member, Board of Governors, RUSA 2.0 (Representing Syndicate)

28. 2017-19: Coordinator, National Institutional Ranking Framework Cell

29. 2016-19: Member, Purchase Committee

30. 2016-19: Member, Syndicate of Alagappa University (Nominated by Governor of Tamil Nadu)

31. 2015–17: Director, Directorate of Collaborative Programmes

32. 2012 – 16: Director, Centre for International Relations

33. 2012 – 15: Member, Research Advisory Committee

34. 2012 – 13: Coordinator, Career Guidance & Counselling Cell

35. 2010 – 16: Member, Internal Quality Assurance Cell (IQAC)

Areas of Research

Broad subject : Structural Biology and Bio-Computing

Area of Specialization : Small and Macro Molecule X-ray Crystallography

Current Research focus

- **Structural and Functional studies on vital drug targets**
  - Proteins from *Thermus thermophilus* HB8, *Pyrococcus horikoshii* OT3, *Aquifex aelicous* VF5, *Mycobacterium tuberculosis, Brugia malayi, Nocardia sps.* and ESKAPE pathogens.
  - Computational screening of proteins responsible for life-threatening diseases such as TB, Filariasis, Cancer, Diabetes, Chikungunya, Dengue, Malaria and nosocomial infection
- **Development of Tools and databases**
  - Web based search engines for analyzing macromolecular interactions

Research Supervision / Guidance

Program of Study		Completed	Ongoing
Research	PDF	04	03
	Ph.D.	08	10
	M.Phil.	08	-

Project	**PG**	**22**	**03**
	UG / Others	**08**	**02**

Publications

International		National		Others
Journals	**Conferences**	**Journals**	**Conferences**	**Books / Chapters / Monographs / Manuals**
176	**88**	**01**	**146**	**12**

Cumulative Impact Factor (as per JCR) : 639.739
h-index : 25
i10 index : 63
Total Citations : 2232

Funded Research Projects

Completed Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	DBT	2012	2015	Structural and Functional Analysis ....from *Thermus thermophilus* HB8	50.25
2	UGC	2012	2015	Structural and Functional ..... Protein from *Pyrococus horikoshii* OT3	12.90
3	DBT	2012	2015	Structure Determination of ..... and Identification of Potential Inhibitors	32.16
4	DBT	2013	2016	Structural and Functional ..... *Pyrococcus horikoshii* OT3	77.00
5	DST	2013	2016	Structural and Functional Studies ..... from *Pyrococcus horikoshii* OT3	48.98
6	UGC	2016	2018	Structural and Functional ..... Stat2 Protein From *Homo Sapiens*	37.80
7	DBT	2015	2018	Development of Web Based ..... Fatty acids and Buffers	13.81
8	DST-SERB	2016	2019	Identification of Potential Anti-Filiarial drug targeted enzymes Wbm0441, Wbm0042 from Wolbachia endosymbiont *Brugia malayi*	69.38
9	ICMR	2017	2020	Structural insights of SIRT... from *Homo sapiens*...diabetes	33.34
10	DAE-BRNS	2018	2021	Design, Synthesis and *in vitro*.....activated kinase	30.33
11	DBT-Twin	2014	2017	Identification of novel drug..... of the pathogen (TWIN Program)	73.69
12	DBT-Twin	2010	2013	The use of biodiversity as a ..... molecular targets of Tuberculosis	83.49

Ongoing Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	DST INDO-TAIWAN	2020	2023	Structural and functional insights of potential anti-malarial drug targets of G6PD and 6PGD from *Plasmodium falciparum*(3D7)	73.72
2	TANSCHE	2021	2023	Structural and functional characterization of phospeotransacetylase (PTA) and Acetate Kinase (ACKA) from Mycobacterium tuberculosis H3R7Rv using *in silico* and *in vitro* studies	29.81
3	ICMR	2022	2024	Computational and functional characterization of peptide inhibitors disrupting LIMK2-cofilin interaction as a novel therapeutic target towards Glaucoma	29.45

Others

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	ICMR - RA	2022	2024	Three-dimensional structure determination of Bacterial DNA Adenine Methyltransferase from Acinetobacter baumannii to be used as drug targets for designing antibiotics	13.2
2	ICMR - RA	2022	2024	Structural and Functional Insights of Vancomycin Resistant Protein VanR from Enterococcus faecium using In vitro and in silico Approach	13.2
3	ICMR - SRF	2022	2024	Structural studies on polyamine biosynthesis enzymes	08.80
4	UGC Kothari Fellow	2022	2024	Investigation of potential inhibitors for alpha linolenic acid (ALA) metabolism in the human malaria parasite	20.96
5	UGC (MANF)	2014	2019	Structural and functional studies on Transcriptional regulatory proteins from *Thermus thermophilus* HB8 and *Pyrococcus horikoshii* OT3 - *In silico* and *in vitro* studies	18.16
6	UGC (OBC)	2016	2021	Transcriptional Regulation by p21-Activating kinase-1 with an Agonist RUNX3 and Antagonist peptides	19.06

				modulating Pancreatic Cancer: A Structural and Computational approach	
7	ICMR (SRF)	2018	2020	Structural and functional elucidation and inhibitors identification for SMATase from *Serratia marcescens* to overcome antibiotic resistance	08.97
8	ICMR (SRF)	2019	2021	Structural insights mechanism of type II diabetes proteins from *home sapiens* to identify potential inhibitors computational and biochemical studies	08.80
9	ICMR (SRF)	2020	2022	Experimental and Computational studies on Proteins involved in Peptidoglycan biosynthesis pathway from *Wolbachia* Endosymbiont of *Brugia malayi*	09.472

Consultancy Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	Schrödinger, USA	2011	Till date	Computer Aided Drug Design	Collaboration and skill training for Research Scholars and Students
2	University/ Institution	2012	2016	Computer Aided Drug Design	0.60
3	GE Health care	2012	Till date	Protein Purification and Downstream Bioprocessing	Collaboration and skill training for Research Scholars and Students

Others

S. No	Agency	Period		Scheme/Research Support	Budget (Rs. In lakhs)
		From	To		
1	DST	2017	2021	**FIST** (Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions) **Level – I**	62.00

2	UGC	2013	2018	**Innovative Programme – PG Diploma in Structural Pharmacogenomics** (Post M.Sc. – One year Course)	54.00 + 2AP*
3	DST	2017	*	**DST-PURSE Programme (Phase 2)** – All Science Departments	700
4	DBT	2022	2027	**Bioinformatics and Computational Biology Center**	183.8

*** Two Assistant Professors**

Distinctive Achievements / Awards

1. Tamilnadu Scientist Award (TANSA) by Tamilnadu State Council for Science and Technology (2020)
2. UGC Research Award (2016)
3. Fellow of Academy of Sciences, Chennai (2015)
4. Research Scientist (2003-2010) –RIKEN Japan; NSRRC Taiwan; Spring-8 Japan
5. Post Doctoral Fellowship – DST, DBT and IRPHA (2000-2003)
6. IUCr Young Scientist (1999)
7. Young Scientist Travel Award by DST and UNESCO (1999)
8. Research Fellow award by CSIR (1997)
9. Research award by Marquis (2007)
10. MHRD – LEAP award by NIT-Trichy & NTU-Singapore (2019)

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized: 21

1. E-Learning Program on "BIOINFORMATICS AS CARTOGRAPHIC TOOL IN DRUG DISCOVERY", May 19th -30th, 2020, Alagappa University, Karaikudi, Tamil Nadu, India

2. International Conference on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design (ICSBCADD'2019), Dec. 11th -13th, 2019, Alagappa University, Karaikudi, Tamil Nadu, India.

3. International Conference on Innovative and Emerging Trends in Botany (ICIETB-2019), Nov. 6th -7th, 2019, Alagappa University, Karaikudi, Tamil Nadu, India.

4. 11th National Symposium cum Workshop on Recent Trends in Structural Bioinformatics

and Computer Aided Drug Design (SBCADD'2019), Feb. 12th-15th, 2019, Alagappa University, Karaikudi, Tamil Nadu, India.

5. 10th National Symposium cum Workshop on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design (SBCADD'2018), Feb. 20th-23rd, 2018, Alagappa University, Karaikudi, Tamil Nadu, India.
6. 9th National Symposium cum Workshop on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design (SBCADD'2017), Feb. 14th-17th, 2017, Alagappa University, Karaikudi, Tamil Nadu, India.
7. Fire and Safety Awareness Camp for our University Students and Staff members, Oct. 19th, 2016.
8. Eye Camp for Faculty members, Administrative Staffs and Students of our University, Oct. 5th, 2016.
9. World Habitat Day, Oct. 03rd, 2016, Alagappa University, Karaikudi, Tamil Nadu, India.
10. International Conference on Recent Trends in Biosciences-2016 (ICRTB-2016), Apr. 07th - 09th, 2016, Alagappa University, Karaikudi, Tamil Nadu, India.
11. 8th National Symposium cum Workshop on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design (SBCADD'2016), Feb. 16th-19th, 2016, Alagappa University, Karaikudi, Tamil Nadu, India.
12. World Habitat Day, Oct. 15th, 2015, Alagappa University, Karaikudi, Tamil Nadu, India.
13. 7th National Symposium cum Workshop on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design (SBCADD'2015), Feb. 24th-27th, 2015, Alagappa University, Karaikudi, Tamil Nadu, India.
14. World Creativity and Innovation Day, Apr. 21st, 2014, Alagappa University, Karaikudi, Tamil Nadu, India.
15. 6th National Symposium cum Workshop on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design (SBCADD'2014), Feb. 18th-21st, 2014, Alagappa University, Karaikudi, Tamil Nadu, India.

16. 5th National Symposium cum Workshop on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design (SBCADD'2013), Feb. 19th-22nd, 2013, Alagappa University, Karaikudi, Tamil Nadu, India.

17. Career Guidance and Soft Skill training, Oct. 29th, 2012, Alagappa University, Karaikudi, Tamil Nadu, India

18. 4th National Symposium cum Workshop on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design (SBCADD'2012), Feb. 20th-23rd, 2012, Alagappa University, Karaikudi, Tamil Nadu, India.

19. National Youth day, Jan. 12th, 2012, Alagappa University, Karaikudi, Tamil Nadu, India.

20. World water day celebration, Mar22nd, 2011

21. 3rd National Symposium cum Workshop on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design (SBCADD'2010), Dec. 20th-22nd, 2010, Alagappa University, Karaikudi, Tamil Nadu, India.

Events Participated

Conferences / Seminars / Workshops: 234

Overseas Exposure / Visits

- National Synchrotron Radiation Research Centre, Taiwan 05th -09th December, 2017
- Osaka University and RIKEN SPring-8, Japan 22nd -30th June, 2014
- Osaka University and RIKEN SPring-8, Japan 02nd -08th December, 2012
- Osaka University and RIKEN SPring-8, Japan 09th -16th December, 2011
- Osaka University and RIKEN SPring-8, Japan 22nd March- 30th May, 2010

Membership in

Professional Bodies

1. Member in American Crystallographic Association
2. Vice-President & Life Member, Bioinformatics and Drug Discovery Society (BIDDS)
3. Member in British Crystallographic Association
4. Executive Committee Member in Indian Crystallographic Association

5. Life Member, Indian Science Congress Association
6. Life Member, Chemical Research Society of India
7. Life Member, Society of Biological Chemists, India
8. Life Member, Biotech Research Society, India
9. Member in the World Directory of Crystallographers

Advisory Board

Academic Bodies in Other Institutes/ Universities

1.	2022 - *	:	Member, Board of Studies in Department of Bioinformatics, University of Madras, Chennai
2.	2020 - *	:	Member, Board of Studies in Department of Bioinformatics, School of Chemical and Biotechnology, SASTRA Deemed University, Thanjavur
3.	2019 - *	:	Member, Research Advisory Committee, Karpagam Academy of Higher Education, Coimbatore.
4.	2019 - *	:	Member, Local Program Planning & Management Committee (LPPMC), Bharathiar University, Coimbatore
5.	2018 - *	:	Member, Board of Studies in Bioinformatics, Bharathiar University, Coimbatore
6.	2018 - *	:	Board of Studies in Environmental Biotechnology, Bharathidasan University, Trichy
7.	2018 - *	:	Member, Research Committee, Bharathidasan University, Trichy

Academic Bodies Completed

1.	2012 - 15	:	Member, Board of Studies of Bioinformatics, Periyar University, Salem
2.	2012 - 15	:	Member, Board of Studies of Physics, V.H.N.S.N. College, Virudhunagar.
3.	2013 - 16	:	Bharathidasan University Representative, Board of Studies of Bioinformatics, Holy Cross College, Trichy.
4.	2015 - 18	:	Member, Standing Committee on Academic Affairs, Bharathidasan University, Trichy.
5.	2015 - 18	:	Chairman, Board of Studies in Bioinformatics (UG, PG & PG Diploma), Bharathidasan University, Trichy.
6.	2015 - 18	:	Member, Board of Studies in Bioinformatics and Information Technology, Thiruvalluvar University, Vellore.
7.	2015 - 17	:	Member, Board of Studies in Bioinformatics, Bharathiar University, Coimbatore.
8.	2014 - 17	:	Member, Board of Studies in Faculty of Bio and Chemical Engineering, Sathyabama University, Chennai.
9.	2017 -19	:	Member, Academic Council, Thassim Beevi Abdul Kader College for Women, Ramanathapuram
10.	2015 -20	:	UGC Nominee, SAP DSA-I program promotion in Biophysics Department, Punjab University.

Resource persons in various capacities

Number of Invited / Special Lectures delivered: 234

Others

1. No. of PhD Thesis evaluated: 39
2. No. of PhD Public Viva Voce Examination conducted: 17

Recent Publications

1. Ramachandran, B., Jeyarajpandian, C., Jeyaseelan, J. M., Prabhu, D., Rajamanikandan, S., Boomi, P., & Jeyakanthan, J. Quercetin-induced apoptosis in HepG2 cells and identification of quercetin derivatives as potent inhibitors for Caspase-3 through computational methods. *Structural Chemistry,* 2022. **(IF:** 1.494**)**
2. Alexpandi, R., Gendrot, M., Abirami, G., Delandre, O., Fonta, I., Mosnier, J., & Veera Ravi, A. Repurposing of doxycycline to hinder the viral replication of SARS-CoV-2: From in silico to in vitro validation. *Frontiers in Microbiology*, 2022. **(IF:** 5.64**)**
3. Sureshan, M., Rajamanikandan, S., Srimari, S., Prabhu, D., Jeyakanthan, J., &Saraboji, K. Designing specific inhibitors against dihydrofolate reductase of W. bancrofti towards drug discovery for lymphatic filariasis. 1-13. *Structural Chemistry*, 2022. **(IF:** 1.494**)**
4. Ramachandran, S. S., Balu, R., Vilwanathan, R., **Jeyaraman, J**., & Paramasivam, S. G. A mouse testis serine protease, TESP1, as the potential SPINK3 receptor protein on mouse sperm acrosome. *Mol Hum Reprod*, 27(10):gaab059, 2021. **(IF:** 4.025**)**
5. Dwivedy, A., Mariadasse, R., Ahmad, M., Chakraborty, S., Kar, D., Tiwari, S., Bhattacharyya, S., Sonar, S., Mani, S., Tailor, P., Majumdar, T., **Jeyakanthan, J**., & Biswal, B. K. Characterization of the NiRAN domain from RNA-dependent RNA polymerase provides insights into a potential therapeutic target against SARS-CoV-2. *PloS. Comput. Biol*. 17(9), e1009384, 2021. **(IF:** 4.475**)**
6. Rahul Kanumuri, Aruna Kumar Chelluboyina, Jayashree Biswal, Ravichandran Vignesh, Akkanapally Venu, Vaishnavi B, Leena DJ, **Jeyakanthan Jeyaraman**, Ganesan Kumaresan, Gopala Krishna Aradhyam, and Ganesh Venkatraman, Suresh Rayala. Small peptide inhibitor from the sequence of RUNX3 disrupts PAK1-RUNX3 interaction and abrogates its phosphorylation dependent oncogenic function, *Oncogene*, 40(34):5327-5341, 2021. **(IF**: 9.867**)**

7. Richard Mariadasse, Raji Rajmichael, Abhisek Dwivedy, Mathimaran Amala, Mohammed Ahmad, Nachiappan Mutharasappan, Bichitra K. Biswal and **J Jeyakanthan**. Characterization of putative transcriptional regulator (PH0140) and its distal homologue. *Cell Signal.* 2021; 84:110031. (**IF**: 4.315)
8. Arul MN, Kumar S, **Jeyakanthan J** & Srivastav V. Searching for target-specific and multi-targeting organics for Covid-19 in the Drugbank database with a double scoring approach. *Sci Rep.* 2020*;* 10(1):19125. **(IF**: 4.379)
9. Murugan, NA, Muvva C, Jeyarajpandian, C, **Jeyakanthan J**, Subramanian V. Performance of Force-Field- and Machine Learning-Based Scoring Functions in Ranking MAO-B Protein–Inhibitor Complexes in Relevance to Developing Parkinson's Therapeutics. *Int. J. Mol. Sci.,* 21, 7648, 2020 (**IF**: 5.923)
10. Chaudhary SK, Elayappan M, **Jeyakanthan J**, Sekar K. Structural and functional characterization of oligomeric states of proteins in RecFOR pathway. *Int J Biol. Macromol*., 163,943-953, 2020 (**IF**:6.953)
11. Ahmed, M., Dwivedy, A., Mariadasse, R., Tiwari, S., Kar, D., **Jeyakanthan, J**., & Biswal, B. K. Prediction of Small Molecule Inhibitors Targeting the Severe Acute Respiratory Syndrome Coronavirus-2 RNA-dependent RNA Polymerase. *ACS Omega*. 5(29): 18356–18366, 2020 (**IF**: 3.512)
12. Arul Murugan N, Chitra JP & **Jeyakanthan J**. Computational Investigation on Andrographis paniculata Phytochemicals to Evaluate Their Potency Against SARS-CoV-2 in Comparison to Known Antiviral Compounds in Drug Trials. *J Biomol Struct Dyn*., Jun 16;1-12, 2020. (**IF**: 3.310)
13. Prabhu D, Amala M, Saritha P, Rajamanikandan S, Veerapandiyan M, **Jeyakanthan J**. Functional characterization of streptomycin adenylyltransferase from *Serratia marcescens*: An experimental approach to understand the Antibiotic Resistance mechanism. *BMC Infectious Diseases*, 20(Suppl 1):324, ISSHID P-31,20, 2020. (**IF**: 3.090)
14. Rajendran Santhosh, Namrata Bankoti, Padmashri Adgonda Malgonnavar, Daliah Michael, **Jeyaraman Jeyakanthan** and K. Sekar. MRPC: Missing Regions in Polypeptide Chains - A Knowledgebase, *Journal of Applied Crystallography*, Vol 52, 1422-1426, 2019. **(IF:** 3.304**)**
15. Richard Mariadasse, Sanjay Kumar Choubey and **Jeyaraman Jeyakanthan**. Insights into Exogenous Tryptophan-Mediated Allosteric Communication and Helical Transition of TRP Protein for Transcription Regulation. *J Chem Inf Model.* 60(1), 175–191. (2020). **(IF:** 4.956**)**

16. Jayashree Biswal, Jayaprakash Prajisha, Suresh K. Rayala, Ganesh Venkatraman, Poopandi Saritha, Raghu Rangaswamy & **J Jeyakanthan**. Identification of Pak1 inhibitors using water thermodynamic analysis. *J Biomol Struct Dyn.* 38(1), 13–31. (2020) **(IF:** 3.310**)**
17. Amala. M, Rajamanikandan. S, Prabhu. D, Surekha, K & **J Jeyakanthan.** Identification of Anti-filarial leads against Aspartate semialdehyde Dehydrogenase of Wolbachia endosymbiont of Brugia malayi: Combined Molecular Docking and Molecular Dynamics Approaches. *J Biomol Struct Dyn.* 37(2), 394–410. (2019) **(IF:** 3.310**)**
18. Nachiappan M, Jain V, Sharma A, Yogavel M & **Jeyakanthan J**. Structural and functional analysis of Glutaminyl-tRNA synthetase (TtGlnRS) from *Thermus thermophilus* HB8 and its complexes. *Int.J Bio Macromol*,120; 1379-1386, 2018. (**IF**: 6.953)
19. Sanjay K. Choubey & **J Jeyakanthan**. A mechanistic approach to explore novel HDAC1 inhibitor using pharmacophore modeling, 3D- QSAR analysis, molecular docking, density functional and molecular dynamics simulation study. *J Mol Graph Model*., 70, 54-69, 2016. (**IF**: 2.518).
20. S. Jagadeeshan, A. Subramanian, S. Tentu, S. Beesetti, M. Singhal, S. Raghavan, R. P. Surabhi, J. Mavuluri, H. Bhoopalan, **J. Biswal**, R. S. Pitani, S. Chidambaram, S. Sundaram, R. Malathi, J Jeyakanthan, A. S. Nair, G. Venkatraman& S. K. Rayala. p21 activated kinase 1 (Pak1) signaling influences therapeutic outcome in pancreatic cancer. *Annals of Oncology - Advance Access*, 27(8):1546-56, 2016. (**IF**: 32.976)
21. Surekha K, Prabhu D, Richard M, Nachiappan M, Biswal J & Jeyakanthan J. Investigation of vital pathogenic target orotate phosphoribosyltransferases (OPRTase) from *Thermus thermophilus* HB8: Phylogenetic and molecular modeling approach. *Gene*, 583(2). PP: 102-111. 2016. (**IF**: 3.688)
22. Richard M, Biswal J, Prajisha J, Raj Rao G, Choubey SK, Santhosh R & **Jeyakanthan J**. Mechanical insights of Oxythiamine compound as potent inhibitor for Human Transketolase like protein 1. *J Recept Signal Transduct*, 36(3). pp: 233-42. 2016. (**IF**: 1.78)
23. Gowri M, Beaula WS, Biswal J, Prabhu D, Saiharish R, Rohanprasad S, Pitani R, Kandaswamy D, Raghunathan R, **J Jeyakanthan**, Rayala SK& Ganesh V. β-lactam substituted polycyclic fused pyrrolidine/pyrrolizidine derivatives eradicate *C. albicans* in an ex vivo human dentinal tubule model by inhibiting sterol 14-α demethylase and cAMP pathway. *Biochim Biophys Acta*. 1860(4). pp: 636-647. 2016. (**IF**: 5.08)

24. Ravi M, Tentu S, Baskar G, Rohan Prasad S, Raghavan S, Jayaprakash P, **J Jeyakanthan**, Rayala SK& Venkatraman G. Molecular mechanism of anti-cancer activity of phycocyanin in triple-negative breast cancer cells. *BMC Cancer*, 15(1) PP: 768. 2015. (**IF**: 4.430)
25. Anita R.Chacko, Mohammed Arifullah, Narayan P. Sastri, **J Jeyakanthan**, Go Ueno, Kanagaraj Sekar, Randy J. Read, Eleanor J. Dodson, Durga C. Rao & Kaza Suguna.A Novel Pentameric Structure of the Diarrhea-inducing Region of the Rotavirus Enterotoxigenic Protein NSP4. *J Virol.*, 85(23), pp: 12721-12732, 2011. (**IF**: 5.103)
26. Manimekalai MSS, Kumar A, **Jeyakanthan J** & Grüber G. Insights into the chemical mechanism of the transition like state of the biological engine A-ATP synthase. *J.Mol.Biol*.V408, 736-754, 2011. (**IF**: 5.46)
27. Kumar A, Manimekalai MS, Balakrishna AM, Priya R, Biuković G, **J Jeyakanthan** & Grüber G. The Critical Roles of Residues P235 and F236 of Subunit A of the Motor Protein A-ATP Synthase in P-Loop Formation and Nucleotide Binding. *J. Mol. Biol*. Vol 492, PP: 892-905, 2010. (**IF**: 5.46)
28. Grüber A, Manimekalai MSS, Balakrishna AM, Hunke C, **Jeyakanthan J**, Preiser PR & Grüber G. The first structural and mechanistic determination of functional units of the nucleotide binding domain (NDB94) of the reticulocyte binding protein Py235 of *Plasmodium yoelii*. *PLoS*, V5, 2, e9146, 2010. (**IF**: 4.411)
29. Kumar A, Manimekalai MSS, Balakrishna AM, **Jeyakanthan J** & Grüber G. Nucleotide-binding states of subunit A of the A-ATP synthase and the implication of P-loop switch in evolution. *J. Mol.Biol*. Vol 396, PP: 301-320, 2010. (**IF**: 5.46)