Dr. S. Shanmugaapriya, M.Sc., Ph.D.,

Associate Professor

Contact

Address	:	Department of Biomedical Science Bharathidasan University Tiruchirappalli – 620 024 Tamil Nadu, INDIA
Employee Number	:	BDU1770883
Date of Birth	:	15-12-1977
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Academic Qualifications: M.Sc./Ph.D.

Ph.D. in Biotechnology (Faculty of Bio-Medical Science), Christian Medical College Hospital, Vellore (Tamil Nadu Dr. M.G.R Medical University, Chennai, India).

M.Sc Biotechnology, Bharathidasan University, Tiruchirapalli, India.

B.Sc Zoology, Holy Cross College, Tiruchirappalli, India (Affiliated to Bharathidasan University Tiruchirappalli).

Teaching and Research Experience: 12 Years

S. No	Designation	Year	Department/ University
1.	*Associate Professor*	Sep 2020 – till date	*Department of Biomedical Science, School of Biomedical Sciences, Bharathidasan University, Tiruchirappalli-62024, Tamilnadu, India.*
2.	*Assistant Professor*	July 2008 – Sep 2020	*Department of Biomedical Science, School of Biomedical Sciences, Bharathidasan University, Tiruchirappalli-62024, Tamilnadu, India.*

Areas of Research

Molecular Biology of Diseases/Clinical research

Research Supervision / Guidance

Program of Study	Completed	Ongoing

Research Project	**Ph.D.**	**04**	**02**
	PG	**17**	**0**

Funded Research Projects

Completed Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs) Approved & Sanctioned
		From	To		
1	University Grants Commission (UGC)	2012	2015	"Screening for genetic markers ---- Osteoarthritis (OA) in Indian population"	15.39
2	DBT (DBT-CREST Award 2011-2012)	2013	2014	"Role of the protein RBPMS (RNA binding protein with multiple splicing) in TGF-beta signalling and its role in development and progression of osteoarthritis".	20.50

Ongoing Project

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs) Approved
		From	To		
1	RUSA 2.0	2021	2025	Exploring the putative anti-cancerous potential and their mechanism of actions of terpenes from the leaf of medicinal herb Tinospora cordifolia	13, 65, 039
2	Chief Minister Research Grant 2023-2024 (CMRG)	2024	2027	Evaluating----- molecular mechanism -------- treatment of Osteoarthritis"	39, 16, 500

Publications

			Since 2021
h-index	**:**	**10**	**8**
i10 index	**:**	**10**	**7**
Total Citations	**:**	**312**	**178**

List of Publications

1. **Shanmugaapriya Sellathamby**, P Balasubramanian, S Sivalingam, RV Shaji, V Mathews, B George, A Viswabandya, A Srivastava and M Chandy.Developing an algorithm of informative markers for evaluation of chimerism after allogeneic bone marrow transplantation. ***Bone Marrow Transplantation*** **(2006) 37, 751–755. (IF: 4.840)**

2. Reena Rajasekar, Vikram Mathews, Kavitha M Lakshmi, **Shanmugaapriya Sellathamby**, Biju George, Auro Viswabandya, Dolly Daniel, Mammen Chandy, Alok Srivastava. Plasmacytoid Dendritic Cell Count on Day 28 in HLA-Matched Related Allogeneic Peripheral Blood Stem Cell Transplant Predicts the Incidence of Acute and Chronic GVHD. ***Biology of Blood and Marrow Transplantation*** **(2008) 14:344-350. (IF: 4.151)**

3. **Sellathamby S**, Lakshmi KM, Busson M, Viswabandya A, George B, Mathews V, Chandy M, Charron D, Krishnamoorthy R, Tamouza R, Srivastava A. Polymorphisms in the Immunoregulatory Genes are Associated with Hematopoietic Recovery and Increased Susceptibility to Bacterial Infections in Patients with Thalassaemia Major Undergoing Matched Related Hematopoietic Stem Cell Transplantation. **Biol Blood Marrow Transplant. 2012 Jan 16. PMID: 22252124. (IF: 4.151)**

4. **Shanmugaapriya Sellathamby**, Caam, Arjan; Kroon, Laurie; Vitters, Elly; Walgreen, Birgitte; Beuningen, Henk; Davidson, Esmeralda; Kraan, PM Expression of TGF-β signaling regulator RBPMS (RNA binding protein with multiple splicing) is regulated by IL-1 and TGF-β superfamily members, and decreased in aged and OA cartilage. **Cartilage Vol 7(4) 333-345, Oct 2016. (IF: 3.857)**

5. Sanchari Bhowmick, Chandrani Chakravarty, **Shanmugaapriya Sellathamby**, Sunil K. Lal. The influenza A virus matrix protein 2 undergoes retrograde transport from the endoplasmic reticulum into the cytoplasm and bypasses cytoplasmic proteasomal degradation. **Arch Virol 162: 919, Dec 2016**. **(IF: 2.7)**

6. Omana Anna Trentz, Subathra R, Vinoth Kumar Parthasarathy And S**hanmugapriya Sellathamby.** Human Adipose Tissue-Derived Stem Cells Differentiate to Neuronal-like Lineage Cells without Specific Induction. **Cell Biology: Research & Therapy. 6:1-5, May 16, 2017. (IF: 1.13)**

7. Periyasamy S, Sathya M, Karthick C, Kandasamy M, **Shanmugaapriya S**, Tamilselvan J, Jayachandran K, Anusuyadevi M. Association Studies of Specific Cholesterol Related Genes (APOE, LPL, and CETP) with Lipid Profile and Memory Function: A Correlative Study Among Rural and Tribal Population of Dharmapuri District, India. J Alzheimers Dis. 2017 Jul 29. doi: 10.3233/JAD-170272. **(IF: 4.0)**

8. Baskaran Subramani, **Sellathamby Shanmugaapriya**. Distribution of IL-1β gene polymorphisms in the South Indian population. International Journal of basic and applied research ISSN 2249-3352 (P) 2278-0505 (E) Dec 2018. (IF: 0.31)

9. PerumalsamyBalaji, AnbazhaganMurugadas, **Sellathamby Shanmugaapriya**, Mohammad Abdulkader Akbarsha. Fabrication and characterization of egg white cryogel scaffold for three-dimensional (3D) cell culture. Biocatalysis and agricultural biotechnology vol 17 441-446.Dec 2018.

10. Kandasamy M, Yesudhas A, Abirami GP, Radhakrishnan RK, Roshan SA, Johnson E, Ravichandran VR, Biswas A, **Shanmugaapriya S**, Anusuyadevi M, Aigner L. Genetic reprogramming of somatic cells into

neuroblasts through a co-induction of the doublecortin gene along the Yamanaka factors: A promising approach to model neuroregenerative disorders. Medical Hypotheses 127 April 2019. **(IF: 1.375)**

11. Radhakrishnan S, Trentz OA, Martin CA, Reddy MS, Rela M, Chinnarasu M, Kalkura N, **Shanmugaapriya S.** Effect of passaging on the stemness of infrapatellar fat pad-derived stem cells and potential role of nucleostemin as a prognostic marker of impaired stemness. Molecular Medicine Reports 20(1). May 2019 813-829. **(IF: 3.4)**

12. Catherine Ann Martin, Subathra Radhakrishnan, Sakthivel Nagarajan, Shanthini Muthukoori, J. M. Meseguer Duenas, Jose Luis Gomez Ribelles, Baddrireddi Subhadra Lakshmi, Nivethaa E. A. K., Jose Antonio Gomez-Tejedor, Mettu Srinivas Reddy, **Shanmugaapriya Sellathamby**, Mohamed Rela and Narayana Kalkura Subbaraya. An innovative bioresorbable gelatin based 3D scaffold that maintains the stemness of adipose tissue derived stem cells and the plasticity of differentiated neurons. RSC Adv., 2019, 9, issn no 14452, May. **(IF: 4.036)**

13. Subathra Radhakrishnan, Omana Anna Trentz, Mettu Srinivas Reddy, Mohamed Rela, Mahesh Kandasamy & **Shanmugaapriya Sellathamby**. In vitro transdifferentiation of human adipose tissue-derived stem cells to neural lineage cells – a stage-specific incidence. May (2019) Adipocyte, 8:1, 164-177. **(IF: 3.553)**

14. Kandasamy M, Radhakrishnan RK, Abirami GP, Roshan SA, Yesudhas A, Balamuthu K, Prahalathan C, **Shanmugaapriya S**, Moorthy A, Essa MM, Anusuyadevi M. Possible Existence of the Hypothalamic-Pituitary-Hippocampal (HPH) Axis: A Reciprocal Relationship Between Hippocampal Specific Neuroestradiol Synthesis and Neuroblastosis in Ageing Brains with Special Reference to Menopause and Neurocognitive Disorders. Neurochemical Research. June 2019. **(IF: 4.4)**

15. Balaji P, Murugadas A, Ramkumar A, Thirumurugan R, **Shanmugaapriya S**, Akbarsha MA. Characterization of Hen's Egg White To Use It as a Novel Platform To Culture Three-Dimensional Multicellular Tumor Spheroids. ACS omega. 2020 Aug; 5(31), 19760-19770. Doi: **https://dx.doi.org/10.1021/acsomega.0c02508**. **(IF: 4.263)**

16. A Yesudhas, SA Roshan, RK Radhakrishnan, GPP Abirami, N Manickam, Kaviya Selvaraj, Gokul Elumalai, **Sellathamby Shanmugaapriya**, Muthuswamy Anusuyadevi, Mahesh Kandasamy. Intramuscular Injection of BOTOX® Boosts Learning and Memory in Adult Mice in Association with Enriched Circulation of Platelets and Enhanced Density of Pyramidal Neurons in the Hippocampus. Neurochemical Research. 24th September 2020; 45 (12), 2856-2867. **(IF: 4.4)**

17. Subathra Radhakrishnan, Catherine Ann Martin, Geethanjali Dhayanithy, Mettu Srinivas Reddy, Mohamed Rela, Nara Kalkura & Shanmugaapriya Sellathamby. Hypoxic Preconditioning Induces Neuronal Differentiation of Infrapatellar Fat Pad Stem Cells through Epigenetic Alteration. ACS Chemical Neuroscience. January 2021; 12(4), 704–718. **(IF: 5.78)**

18. Sowbarnika Ravichandran, Jerly Helan Mary Joseph, Shanmugaapriya Sellathamby, Mahesh Kandasamy. Antihemorrhagic Properties of Therapeutic Botulinum Toxin in Experimental Mice. SSRN Electronic Journal. May 2022**.**

19. Perumalsamy Balaji, Anbazhagan Murugadas, Lauri Paasonen, Sellathamby Shanmugaapriya, Mohammad A. Akbarsha. Efficiency of GrowDex® nanofibrillar cellulosic hydrogel when generating homotypic and heterotypic 3D tumor spheroids. AIMS Biophysics. August 2022, 9 (3): 221-234. **(IF: 1.5)**

20. Sowbarnika Ravichandran, Jerly Helan Mary Joseph, Shanmugaapriya Sellathamby, Mahesh Kandasamy. Intramuscular injection of therapeutic botulinum toxin facilitates blood coagulation in experimental aging mice. World J Biol Chem. 2025 Dec 5;16(4):112376. doi: 10.4331/wjbc.v16.i4.112376

Publications in conferences/symposia:

1. Shanmugaapriya Sellathamby, Ryad Tamouza, Kavitha M L, Vikram Mathews, Auro Viswabandya, Biju George, Mammen Chandy, Rajagopal Krishnamoorthy, Dominique Charron, Alok Srivastava. Polymorphism in the IFNγ gene is associated with severe acute graft versus host disease in children with beta thalassemia major undergoing matched related hematopoietic stem cell transplantation (HSCT). **Supplementary issues Blood 2007, Vol 110: 1105.**

2. **Shanmugaapriya Sellathamby**, Ryad Tamouza2, Kavitha M Lakshmi, Auro Viswabandya, Biju George, Vikram Mathews, Rajagopal Krishnamoorthy, Dominique Charron, Mammen Chandy and Alok Srivastava. Il-10 Polymorphism And TGF-β Haplotypes Are Associated With Rejection Of Graft In Children With Beta Thalassemia Major Undergoing Matched Related Bone Marrow Transplantation (BMT). **Supplementary issues Blood 2006, Vol 108: 3011.**

3. V. Mathews, **S. Sellathamby,** M.L. Kavitha, B. George, S. Ramachandra. V, M. Chandy, A. Srivastava (Vellore, IND). Effect of KIR genotype on outcome of patients with chronic myeloid leukaemia undergoing HLA identical stem cell transplant. **Supplementary issues Bone Marrow Transplantation 2005 Vol 35: 737.**

4. **Shanmugaapriya S,** VikramMathews, KavithaM. L, BijuGeorge, ShajiR. V, MammenChandy and AlokSrivastava. Effect of KIR Genotype on Outcome of Related HLA Identical Stem Cell Transplant in Patients with ß Thalassaemia Major. **Supplementary issues *Blood* 2004, Vol 104: 3337.**

5. **Shanmugaapriya S**, Srivastava VM [1], George B, Mathews V, Srivastava A, Chandy M. Epithelial cells of donor origin post allogeneic stem cell transplant. ***Indian J Hematology & Blood Transfusion*** **2004; 22. Suppl.**

6. **Shanmugaapriya S,** Kavitha S, George B, Chandy M, Srivastava. A. Are HLA alleles associated with GVHD after bone marrow transplantation in India? **Indian Journal of Hematology and Blood transfusion 2003; 21. Suppl.**

7. **Shanmugaapriya S,** Daniel D, Mammen JJ, Srivastava A, Chandy M. Efficacy of serological techniques in resolving splits of broad HLA class I antigens in the Indian population. **Indian Journal of Hematology and Blood transfusion 2002; 20 (1). Suppl.**

Distinctive Recognitions /Achievements / Awards

Recognitions :

1. NET SLET (UGC Accredited) April 2000.

2. Senior Research Fellow (April 2002- March 2008)in DBT sponsored Advanced Center for Molecular Genetics in Hematology, Department of Haematology, Christian Medical College Hospital, Vellore, Tamil Nadu, India.

3. Junior Research Fellow (Dec 2000-April 2002) in DBT sponsored Advanced Center for Molecular Genetics in Hematology, Department of Haematology, Christian Medical College Hospital, Vellore, Tamil Nadu, India.

Awards/Fellowships :

1. Recipient of ICMR - INSERM Mar 2004 visited INSERM UR 396, Laboratoire d' Immunologie et d' HIstocompatibilite, St.Louis Hospital, Paris, France (Mar –May2004).

2. DBT-CREST Award 2011-2012 (Cutting edge Research enhancement and scientific training) Underwent training at Nijmegen centre for Molecular Life Sciences, Department of Rheumatology (NCMLS), UMC Radboud University, Nijmegen, The Netherlands from 21.01.2013 to 15.01.2014, funded through DBT-CREST award.

Seminars/Conferences/Workshops organized:

1. One day National Seminar on "Emerging Trends in Cancer and Stem Cell Biology" 10th September 2012 at Department of Biomedical Science, Bharathidasan University, Tiruchirappalli, Tamilnadu.
2. One day Workshop on " Techniques in Clinical Hematology and Biochemistry" (TCHB-2018) on 3rd April 2018 at Department of Biomedical Science, Bharathidasan University, Tiruchirappalli, Tamilnadu.

Membership in

Professional Societies

1. Society of Biological Chemist of India (SBC) - Life Member
2. International Association for Biomedical Sciences (IABMS) - Life member

Reviewer of Peer Reviewed Journals:

1. Journal of Cellular and Molecular Medicine

Administrative Responsibilities:

1. Served as **"Women's Hostel Coordinator":** October 2014 to June 2015.
2. Served as **"Chief Hostel Administrative Officer":** October 2016 to March 2018.
3. "Training Partner Coordinator for the Health Apex Training Provider for Naan Mudhalvan Skill Development Scheme': January 2023

4. Nodal Officer “Child Rights Club” of Bharathidasan University: since 15th November 2023 to Nov 2024.
5. Nodal Officer “Child Rights Club” of Bharathidasan University: since 23rd December 2025 till date.