

Mrs. S. PUJITHAA (Ph.D.)

Research Assistant,

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CAREER OBJECTIVE

To work in an environment where learning is a continuous process, to impart new skills, and get trained with the latest technologies, contributing to the organization's success as well as to my growth and career development.

EDUCATION

Degree	Board/ University	School/ College	Year of Passing	Percentage/ CGPA
Ph.D. (Microbiology)	BIHER	Sree Balaji Medical College and Hospital	Pursuing	
M.Sc., (Microbiology)	Crescent Deemed to be University	B.S Abdur Rahaman Crescent Institute of Science & Technology	2020	8.0
B.Sc., (Microbiology)	University of Madras	Tagore College of Arts and Science	2018	82
H. Sc.	Matriculation	Gurukulam Matriculation Higher Secondary School	2015	64
SSLC	Matriculation	Gurukulam Matriculation Higher Secondary School	2013	79

INTERNATIONAL PUBLICATION

- Kuppusamy KM, Selvaraj S, **Singaravelu P**, John CM, Racheal K, Varghese K, Kaliyamoorthy D, Perumal E, Gunasekaran K. Anti-microbial and anti-cancer efficacy of acetone extract of *Rosa chinensis* against resistant strain and lung cancer cell line. *BMC Complementary Medicine and Therapies*. 2023 Nov'10; 23(1):406. **3.9 IF**
- Pujithaa singaravelu**, Trupthi, Zarina Begum, Mohammed Khaleel, Ede. Naga Priyanka, Vanjari Lavanya 2026. Design and Validation of a Multiplex Probe-Based Real-Time PCR for Rapid Detection of CTX-M, TEM, and SHV ESBL Genes in Clinical Enterobacteriaceae. *International Journal of Drug Delivery Technology*. (Accepted)

PATENTS

1. Hemaiswarya Shanmugam, Rathinam Raja, K.Arunkumar, Babu Sarangam, M.K.Kalaivani and **S. Pujithaa** 2023. A process of sewage water treatment by the seaweed *Grateloupia*. Application No. 202341055669.
2. Rathinam Raja, **S. Pujithaa**, B. Deepalakkshmi, K.R. Jayappriyan and S. Mini Jacob, 2023. A Novel and simple method for *Synechocystis* biomass mediated iron acquisition from sewage sludge. Application No. 202441004622.
3. **Pujithaa Singaravelu**, Karthikeyan Ramalingam, M. K. kalaivani and R. Rajkumar 2024. A Natural and Efficient Hand Sanitizer from Plant Extracts. Application No. 202441028699
4. Rathinam Raja, B. Deepalakkshmi, **S. Pujithaa**, W. Sofi Beaula, C.V. Karthikeyan and Natesan Sudhakar 2024. A Formulation for Inhibiting Bacterial Hyaluronidase and Disrupting Biofilm Formation in Staphylococcus aureus. Application No. 202441060528 A
5. Rathinam Raja, Shanmugam Hemaiswarya, K. Arunkumar, A. Arun, Kothilmozhian Ranishree Jayappriyan, K. Prabhu, J. Arutchelvi, Dillirani Nagarajan, Grasian Immanuel, **Singaravelu Pujithaa** and Sasikumar Pattabi 2024. A bioactive Synergistic formulation for management of microbial dysbiosis and product thereof. Appl. No. 202441060529
6. Rathinam Raja, S. Hemaiswarya, B. Deepalakkshmi, **S. Pujithaa**, K. Arunkumar, Jayappriyan K.R, S. Shyamala, and A. Arun 2025. A process of preparation of microencapsulated seaweed polysaccharides synbiotics for inflammation-induced metabolic syndrome. Appl. No. 202541017689 A
7. Rathinam Raja, Jayappriyan KR, S. Shyamala, **S. Pujithaa**, V. Chalini, K. Sabariswaran, N. Mathiyazhagan, S. Sridhar, and K. Rajathi 2025. Process for extraction of Heparinoids from Red seaweeds *Grateloupia orientalis* and *Grateloupia indica* with superior Anticoagulant activity.

8. Rathinam Raja, **S. Pujithaa**, Jayappriyan KR, A. Arun, K. Arunkumar, N. Mathiyazhagan, K. Sabariswaran, G. Selvamangai, V. Chalini and N. Ashokkumar 2026. A process of preparation of antibacterial pH-Responsive oral hydrogel.
9. Rathinam Raja, **Singaravelu Pujithaa**, Arun Alagarsamy, Jayappriyan KR, Kulandaiyesu Arunkumar, Natesan Sudhakar, Chalini Vijayakumar, Mathiyazhagan Narayanan and Sabariswaran Kandasamy 2026. Seaweed-Derived Anticoagulant Polysaccharide Gel: A Topical formulation for managing superficial thrombophlebitis and varicose-related symptoms.
10. **Singaravelu Pujithaa**, Rathinam Raja, Arun Alagarsamy, Jayappriyan KR, Kulandaiyesu Arunkumar, Sanjeevi Kannan, C. Rajasekaran, N. Sudhakar, Venkat Thiagarajan and Nallathambi Sengottuvelan 2026. Biomaterial Composites with Alginates extracted from Seaweeds for the Treatment of Obesity.

BOOK CHAPTERS

- Golap Chandra Singa, M. Vijayakumar, R. Rajkumar, K. R. Jayappriyan, **S. Pujithaa**, 2023. ‘Algae materials for advanced biofuel production through the cost-effective process and integration of nanocatalysts’ Chapter 2 in the book *Algae Materials: Applications Benefitting Health*. **Elsevier Publications**, ISBN 9780443188169, (<https://www.elsevier.com/books/algae-materials/arunkumar/978-0-443-18816-9>).
- **S. Pujithaa**, M. Rajamiriyam, M. K. Kalaivani, 2023. Lipid, lipidomics and biosurfactants of *Haematococcus*, Chapter 7 in the book *Haematococcus: Biochemistry, Biotechnology and Biomedical Application*. **Springer Publications**, ISBN 9789819929009, Aug’ 2023. (<https://doi.org/10.1007/978-981-99-2901-6>).
- Vasumathi K, Kanmani Shanmugam, W. Sofi Beaula, Rathinam Raja, **S. Pujithaa**, K. R. Jayappriyan and Ouafa Cherifi 2024. Bioreactors for the Production of Specific Algal strains Applied to Food Supplements Formulation. (Eds) Eduardo Jacob-Lopes et al. *Algal*

Bioreactors: Vol. 1: Science, Engineering and Technology of Upstream Processes, (Chapter 49): **Elsevier Publications** (In Press)

- Pujithaa S, V. Chalini, S. Shyamala and S. Mini Jacob 2026. Chapter 19, Clinical Translation Challenges of Algal-Derived Anticancer Compounds, Eds. Raja R, S. Hemaiswarya, Sanjivkumar M, Silambarasan T and G. Immauel, **Algae and Cancer: Natural Compounds and Clinical Potential**. Springer Nature Publishers Pvt. Ltd., Singapore. ISBN (Accepted)

BOOKS PUBLISHED

- Rathinam Raja, **S. Pujithaa** and S. Babu 2023. Hand book of Algae Derived Polysaccharides. Gayathri Publications, Chennai, India ISBN 978-93-6122-946-6.
- Rathinam Raja, **S. Pujithaa** and S. Mini Jacob 2024. Book on Algae and Cancer. Gayathri Publications, Chennai, India, ISBN 978-93-6122-370-9.
- Rathinam Raja, **S. Pujithaa** and B. Deepalakkshmi 2024. Perspectives of Algae against Cancer. Gayathri Publications, Chennai, India, ISBN 978-93-6122-155-2.

GENBANK DEPOSITION

1. Raja R, **Pujithaa S**, Deepalakkshmi B, Jayappriyan KR, Arun A, Sabariswaran K, Mathiyazhagan N, Arutchelvi J and Dillirani N 2024.
 - PQ559790 (*Enterobacter quasihormaechei*)
 - PQ559789 (*Acinetobacter baumannii*)
2. Raja R, Arunkumar K, Deepalakkshmi B, Shyamala S, Hemaiswarya S, Jayappriyan KR, **Pujithaa S**, Mathiyazhagan N, Arun A, Sabariswaran K, and Arutchelvi J 2025.
 - PV172458 *Shigella flexneri*
3. Raja R, Arunkumar K, Deepalakkshmi B, Hemaiswarya S, Jayappriyan KR, **Pujithaa S**, Arun A and N. Sudhakar 2025.
 - PV172451 *Acinetobacter baumannii*

EXPERIENCE

Three and half years experience in the Research and Molecular Diagnostic Labs at Sree Balaji Medical College and Hospital (SBMCH), Chromepet, Chennai.

- Senior Technical Team Coordinator in Molecular Diagnostic Lab and ran more than 2500 COVID - 19 samples.
- Maintained NABL documents in Molecular Diagnostic Lab.
- Technical Coordinator for Students and Consultancy Projects in the Research Lab.
- Proficiency to Train the Students in Molecular Diagnostic Lab.
- Expertise in basic and advanced Molecular techniques and Biotechnology techniques such as DNA and RNA isolation, PCR, Real-time PCR, Electrophoresis, Gel documentation unit, result analysis and reporting and Also expertise in Microbiology techniques.

CONFERENCES ORGANIZED (TREASURER)

- ✓ CSIR Sponsored 1st National Conference on Integrative Medical Sciences, held on 18th – 19th August 2023 at T.R. Raman Hall, Sree Balaji Medical College and Hospital, Chromepet, Chennai, India.
- ✓ TNSCST Sponsored 1st National Conference on Biomaterials in Health Care, held on 19th – 20th December 2024 at T.R. Raman Hall, Sree Balaji Medical College and Hospital, Chromepet, Chennai, India.
- ✓ 1st National Summit on Medicinal Plants and Algal Drug Delivery 2026, to be held on 17th – 18th July 2026 at T.R. Raman Hall, Sree Balaji Medical College and Hospital, Chromepet, Chennai, India.

CONFERENCE PROCEEDINGS

- ✓ Rathinam Raja, M Thangavel, **S. Pujithaa**, S. Mini Jacob et al., 2023. 1st National Conference on Integrative Medical Sciences. Chennai, India. ISBN 978-93-341-5151-0
- ✓ Rathinam Raja, K. Prabhu, **S. Pujithaa**, P. Sasikumar, 2024. 1st National Conference on Biomaterials in Health Care. Chennai, India. ISBN 978-93-5914-935-6.

CONFERENCES

- ✓ Participated in “National Conference on Recent Trends in Microbiome Research” held during, March 2019, organized by the Department of Biotechnology, Pondicherry University, Puducherry.
- ✓ Participated in “Innovation and Research Symposium for Student” held on February 2019 organized by School of Life Science, Crescent Deemed to be University, Vandalur, Chennai.
- ✓ Participated in the virtual “International Conference on Basic and Translation Cancer research: Novel ideas and approaches (ICBTCTCR - 2020)” organized by the School of Life Sciences, B.S. Abdur Rahaman Crescent Institute of Science & Technology, held in between 5th and 7th June 2020.
- ✓ Participated in virtual “International Conference on Molecular Biology (PANBIOCON-2021)” held on 25th & 26th June 2021, organized by Department of Anatomy, Physiology & Biochemistry at Sree Balaji Medical College and Hospital, Chromepet, Chennai.
- ✓ Participated in “National Conference on Research in Various Domains (ResNatCon- 2021)” held in between 19th & 20th November 2021, organized by School of Allied Health Sciences at Sree Balaji Medical College and Hospital, Chromepet, Chennai.

ORAL PRESENTATIONS

- ✓ Presented in “Virtual International Conference on Molecular Biology” on the topic “Prevalence of Extended Spectrum Beta Lactamase gene in Clinical Isolates of *Klebsiella pneumoniae*” held on 25th & 26th June 2021, at Sree Balaji Medical College and Hospital, Chromepet, Chennai.
- ✓ Presented in “National Conference on Recent Trends in Science and Technology (SAASC-NCST`23)” on the topic “Natural compounds as potential inhibitors of *Acinetobacter Baumannii*” held on 7th October 2023 at St. Anne`s Arts and Science College, Madhavaram, Chennai.

POSTER PRESENTATIONS

- ✓ Presented in a National Conference on “Research in Various Domains” on the topic “Prevalence of Extended Spectrum beta Lactamase and carbapenamase Resistant Gene in Clinical Isolates of *pseudomonas aeruginosa*”, held in between 19th & 20th November 2021, organized by Department of Anatomy, Physiology & Biochemistry at Sree Balaji Medical College and Hospital, Chromepet, Chennai.
- ✓ Presented in “National Conference on Sustainable wellness through Noni, Medicinal plants, Microbes and Biomolecules (SWNMPMB- 2023)” on the topic “Nanocapsuling Plant Molecules for Enhanced Biofilm Activity” held from 27th to 28th November 2023, Madurai Kamarajar University, Madurai.

WORKSHOPS PARTICIPATED

1. **GCLP National Virtual Workshop/ Awareness - ISO 15189: 2012** held from 14 to 16th May 2022 at Regional Reference Standard Laboratory, Vatva, Ahmedabad, Gujarat.
2. **GCLP Workshop on International Standards - ISO 15189: 2022** held in between 23-25th March 2023 at Saveetha Dental College & Hospitals, Saveetha Institute of Medical and Technical Sciences (SIMATS), City campus, Chennai- 600 077.

ACADEMIC PROJECTS

- ✓ Minor Project: Antimicrobial efficacy of hibiscus, marigold and jasmine flower in hand wash, under the guidance of Dr. Karthikeyan Ramalingam, Crescent Deemed to be University (Three months).
- ✓ Major Project: Antimicrobial efficacy of natural flowers and leaves based herbal hand sanitizer, under the guidance of Dr. Karthikeyan Ramalingam, Crescent Deemed to be University (One year).

INTERNSHIP

Title: Immunological and Molecular techniques involved in the diagnosis and monitoring of HIV Infected individuals, National Institute for Research in Tuberculosis (NIRT), Chetpet, Chennai
(Duration: 15 days)

ACHIEVEMENTS

- ✓ **Won 2nd Prize** in the drawing event “Wonders of the Small 2.0” a National Conference on “Recent Trends in Microbiome Research” held on 21st March 2019 organized by **Pondicherry University**, Puducherry.
- ✓ **Secured 2nd Prize** in Poster presentation on the topic “Prevalence of Extended spectrum beta Lactamase and carbapenamase resistant gene in clinical isolates of *pseudomonas aeruginosa*” in a National Conference on “Research in Various Domains” held on 19th & 20th November 2021, organized by School of Allied Health Sciences at Sree Balaji Medical College and Hospital, Chromepet, Chennai.

STRENGTH

- ✓ Self-motivating and hardworking
- ✓ Confidence and flexible
- ✓ Quick adoptability to any environment

PERSONAL INFORMATION

Father's Name	: D. Singaravelu
Date of Birth	: 01.07.1998
Address	: # 26, Thomas Street, Kadaperi, Tambaram, Chennai-45
Marital Status	: Married
Languages known	: English, Tamil

References

1. Dr. Saramma Mini Jacob
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Department of Research and Development, SBMCH
Chromepet, Chennai – 600044.
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Ph. No: 9444051057

2. Dr. Karthikeyan Ramalingam
School of Life Sciences
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Vandalur, Chennai-600 048, India.
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(S. PUJITHAA)