

SRI SANKARA ARTS & SCIENCE COLLEGE
ENATHUR, KANCHIPURAM
STAFF PROFILE
DEPARTMENT OF BIOCHEMISTRY



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| 1. | Name of the Staff | Dr. S. Sivakumar |
| 2. | Designation | Associate Professor |
| 3. | Date of Joining | 25.09.2000 |
| 4. | Mobile Number | 9865866168 |
| 5. | E-Mail ID | sivabio@gmail.com |
| 6. | Nationality | Indian |
| 7. | Academic Qualification | M.Sc., M.Phil., Ph.D., PGDBI, DAAP., CNST., |
| 8. | Field of Specialization | Cancer Biology and Bioinformatics |
| 9. | Ph.D Thesis Title | Expression of Osteopontin – D in Breast Cancer Patients: Identification of a New Splice Variant |
| | Awarding University, Year of Award. | University of Madras, 2013 |

10. Work Experience (in chronological order):

| S.No. | Name of the Institution | Designation | Period |
|--------------|---------------------------------------------------------|--------------------------------|-----------------------|
| 1. | Sri Sankara Arts and Science College, Enathur – 631 561 | Lecturer (Assistant Professor) | 25/9/2000 - 30/6/2011 |
| 2. | Sri Sankara Arts and Science College, Enathur – 631 561 | Associate Professor | 01/7/2011 – Till date |
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11. Other Academic and Administrative Responsibilities:

| S.No. | Name of the Institution/Committee | Position | Period |
|--------------|--------------------------------------------------------------------------|----------------------------------------------------------------------|------------------|
| 1. | Sri Sankara Arts and Science College, Enathur – 631 561 | NSS Programme Officer | 2002-2005 |
| 2. | Sri Sankara Arts and Science College, Enathur – 631 561 | Coordinator, Advanced Diploma in Bioinformatics, Value added course. | 2009-Till date |
| 3. | Sri Sankara Arts and Science College, Enathur – 631 561 | Head i/c, Department of Microbiology. | 2009-2010 |
| 4. | Sri Sankara Arts and Science College, Enathur – 631 561 | Coordinator, Environmental Studies. | 2009 – Till date |
| 5. | Sri Sankara Arts and Science College, Enathur – 631 561 | Staff Representative, College Management Committee. | 2011 – Till date |
| 6. | State Council of Educational Research and Training, Govt. of Tamil Nadu. | Member, Syllabus and Book Writing Committee for XI and XII standards | 2013 – Till date |
| 7. | Sri Sankara Arts and Science College, Enathur – 631 561 | Academic Council Member | 2015 – Till date |
| 8. | University of Madras | Academic Council Member | 2017 – 2020 |
| 9. | Sri Sankara Arts and Science College, Enathur – 631 561 | Additional Controller of Examinations | 2015 – 2017 |
| 10. | Sri Sankara Arts and Science College, Enathur – 631 561 | Controller of Examinations | 2017 – Till date |

12. Publications:

| S.No. | Title | Journal | Pages |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| 1. | Bitter Gourd (<i>Momordica Charantia</i>) Peroxidase in Decolorization of Dyes from Tannery Effluent | Recent Research in Science and Technology (ISSN: 2076-5061) | 2(2), 49-53, 2010. |
| 2. | Studies on Biochemical changes in Mangoes due to artificial Ripening | Int. J. Agri. Sci. (IJAS) (ISSN: 0976-450X) | 1(4), 347-355, 2010. |
| 3. | Enzymatic and Non-Enzymatic anti-Oxidant status of Breast Cancer patients in Tamilnadu | International Journal of Pharma and Bio Sciences (IJPBS) (ISSN: 0975-6299) | 2(4), B46-B53, 2011. |
| 4. | Histopathology of breast cancer patients in Tamilnadu: Tumor grading and staging through NPI | Journal of Pharmacy Research (JPR)" (ISSN: 0974-6943) | 4(10), 3635-3637, 2011. |
| 5. | Mineral status of female breast cancer patients in Tamilnadu | International Journal of Research in Pharmaceutical Sciences (IJRPS) (ISSN: 0975-7538) (UGC journal no: 23466) | 3(4), 618-621, 2012 |
| 6. | Molecular Mechanism of Interaction between Human Sweet Taste Receptors and Antidiabetic agents of <i>Gymnema Sylvestre</i> through Docking Studies | International Journal of Research in Phytochemistry and Pharmacology (IJRPP) (ISSN: 2231-010X) | 2(4), 164-170, 2012 |
| 7. | In silico identification of novel polynucleotide vaccine target across avian flu viral vaccine strains | International Journal of Current Biotechnology (IJC) (ISSN: 2321-8371) | 1(1), 1-4, 2013 |
| 8. | Biochemical evaluation of urine and serum sample of patients with nephrolithiasis in Pondicherry | International Journal of Applied Biochemistry (IJAB) (ISSN: 2349-5421) | 1(1), 5-10, 2013 |
| 9. | Tertiary structure prediction and identification of druggable pocket in the cancer biomarker - Osteopontin-c | Journal of Diabetes and Metabolic Disorders (J Diabetes Metab Disord.) (ISSN: 2251-6581) (UGC journal no: 7100) | 13(1):13, 2014 |
| 10. | Mitochondrial Reprogramming Regulates Breast Cancer Progression | Clinical Cancer Research (Clin Cancer Res) (Print ISSN: 1078-0432; Online ISSN: 1557-3265) (UGC journal no: 18816). | Feb 17. pii: clincanres.2456.2015, 2016 |
| 11. | Analysis of EWAG-BBD pathway prediction system for the identification of malathion degrading microbes | Bioinformation (Print ISSN: 0973-8894; Online ISSN: 0973-2063) (UGC journal no: 47005) | 13(3):73-77, 2017 |
| 12. | Identification of New Inhibitor against <i>Mycobacterium tuberculosis</i> using Structure Based Drug Designing and Docking Studies | Research Journal of Pharmacognosy and Phytochemistry (Print ISSN: 0975-2331; Online ISSN: 0975-4385) | 9(3):173-176, 2017 |
| 13. | Identification of Microbes Degrading Bifenthrin Using Pathway Prediction System | Bhamathi Microbiology News Letter (Print ISSN: 2231-136X) | 7(1):16-22, 2017 |

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|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 14. | Identification of Potential Drug Target by QSAR for HIV | Bhamathi Microbiology News Letter (Print ISSN: 2231-136X) | 7(1):29-33, 2017 |
| 15. | Identification of new snake venom zinc Metalloproteinase inhibitor using docking studies from <i>Plectanthus amboinicus</i> | Asian Journal of Research in Pharmaceutical Sciences [AJPSci] (Print ISSN: 2231-5640; Online ISSN: 2231-5659) | 7(3):132-134, 2017 |
| 16. | Efficacy of Graviola fruit pulp in Human Health Care Management- A narrative review | "International Journal of Research and Analytical Reviews [IJRAR]" (Print ISSN: 2349-5138 Online ISSN: 2348 -1269) (UGC journal no: 43602) | 5(4):598u-602u, 2018 |
| 17. | Cancer Testis Antigen Promotes Triple Negative Breast Cancer Metastasis and is Traceable in the Circulating Extracellular Vesicles | Sci Rep. (Online ISSN: 2045-2322) (UGC-CARE List Group A: 8334) | 2019 Aug 12;9(1):11632. doi: 10.1038/s41598-019-48064-w |
| 18. | 1,2,4 triazolo[1,5-a] pyrimidin-7-ones as novel SARS-CoV-2 Main protease inhibitors: In silico screening and molecular dynamics simulation of potential COVID-19 drug candidates | Biophysical Chemistry. (ISSN: 0301-4622; E-ISSN: 1873-4200) (UGC-CARE List 2020 Group II Journal). | 2020 September. 267 (2020) 106478. doi:10.1016/j.bpc.2020.106478. |

13. Awards / Distinction :

| S.No. | Name of the Award | Venue | Period |
|-------|------------------------------|---------------------------------------------------------|-------------|
| 1. | Facutly Award | Sri Sankara Arts and Science College, Enathur – 631 561 | 2010 - 2011 |
| 2. | Certificate of Appreciation | Sri Sankara Arts and Science College, Enathur – 631 561 | 2012 - 2013 |
| 3. | Best Teacher Award | Sri Sankara Arts and Science College, Enathur – 631 561 | 2012 – 2013 |
| 4. | Best Performer Award | Sri Sankara Arts and Science College, Enathur – 631 561 | 2017 - 2018 |
| 5. | Best Paper Publication Award | Sri Sankara Arts and Science College, Enathur – 631 561 | 2020-2021 |

14. Membership in Professional Bodies:

| Sl. No. | Name of the Membership | Venue | Period |
|---------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------|
| 1. | Member of Biochemistry subject of XI and XII for the preparation of syllabus for Higher Secondary Classes | State Council of Educational Research and Training, Chennai 600 006 | 2012-2013 |
| 2. | Member of Biochemistry subject of XI and XII for the preparation of Text Book for Higher Secondary Classes | State Council of Educational Research and Training, Chennai 600 006 | 2013-2014 |
| 3. | Doctoral Committee member | Department of Biomedical Science, Bharathidasan University, Trichy – 620 024 | 2015 - 2019 |

15. Seminars Conferences organized /Participation:

| Sl. No. | Program Attended | Place | Organized/ Participated | Period |
|---------|------------------------------------------------|-----------------------------------------------|----------------------------|----------------------------------------------|
| 1. | TAB 2001 | Sri Sankara Arts and Science College, Enathur | Organized | March, 2001 |
| 2. | SANBIOCHEMFEST – 2002 | Sri Sankara Arts and Science College, Enathur | Organized | Jan 2002 |
| 3. | National Symposium on Emerging Facts in Cancer | Sri Sankara Arts and Science College, Enathur | Organized | Oct, 2006 |
| 4. | Bioinformatics Training for Employees (BITE) | Sri Sankara Arts and Science College, Enathur | Organized | October 2006 to Jan 2007 |
| 5. | Science Exhibition | Sri Sankara Arts and Science College, Enathur | Organized | 21 st Jan 2009 |
| 6. | Elixir – 2010 Science Exhibitio | Sri Sankara Arts and Science College, Enathur | Organized | 14 th Oct 2010 |
| 7. | Frontiers in Lifesciences | Sri Sankara Arts and Science College, Enathur | Organized | 11 th Jan 2012 |
| 8. | ASTRA 2011-2012 | Sri Sankara Arts and Science College, Enathur | Organized | 20 th – 25 th Feb 2012 |

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| 9. | Elixir – 2012 | Sri Sankara Arts and Science College, Enathur | Organized | 10 th – 11 th Oct 2012 |
| 10. | Elixir – 2013 | Sri Sankara Arts and Science College, Enathur | Organized | 9 th – 10 th Oct 2013 |
| 11. | Emerging facts in Diabetes Mellitus | Sri Sankara Arts and Science College, Enathur | Organized | 29 th January, 2015 |
| 12. | Biomarkers in Clinical Research (BCR - 2017) | Sri Sankara Arts and Science College, Enathur | Organized | 8 th March, 2017 |
| 13. | Recent Strategies in Regenerative Therapy | Sri Sankara Arts and Science College, Enathur | Organized | 8 th March, 2018 |
| 14. | National workshop on Fundamentals of Medical Coding | Sri Sankara Arts and Science College, Enathur | Organized | 8 th March, 2019 |
| 15. | National Quiz on COVID19 Awareness | Sri Sankara Arts and Science College, Enathur | Organized | 1-6 May, 2020 |
| 16. | National Seminar on “Traditional System of Medicine in Modern Healthcare” | Sri Sankara Arts and Science College, Enathur | Organized | 2 nd January, 2021 |
| 17. | Indian Youth and Communal Harmony | S.K’s Educational Academy | Participated | 18 th September, 2003 |
| 18. | International Conference on Mahabharata | Kanchi Kamakoti Peetam and M.O.P Vaishnav College | Participated | 23 rd -28 th December, 2003 |
| 19. | New Frontiers and Current trends in Biotechnology | Department of Biochemistry, Madras University, Guindy Campus | Participated | 18 th -19 th October, 2008 |
| 20. | Crosslinx’10 | CLRI, Chennai – 600 025 | Participated | 17 th – 19 th February, 2010 |
| 21. | Neophyte – 2010 | Department of Biotechnology, SSASC | Participated | 18 th August, 2010 |
| 22. | National Symposium on Antituberculosis Drug Discovery (NSADD) | Department of Bacteriology, TRC | Participated | 30 th October, 2010 |

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| 23. | International Conference on Gene Therapy and Phytotherapy in Modern Medicine | Adhiparasakthi College of Arts and Science, Kalavai – 632 506 | Participated | 4 th January, 2011 |
| 24. | Agricultural and Environmental Concerns – Role of Education | Knowledge Xchange, Chennai | Participated | 4 th February, 2011 |
| 25. | Cellular and Molecular Neurobiology in Health and Diseases | Department of Biochemistry, Maraimalai Campus, Guindy, University of Madras | Participated | 11 th – 12 th February 2011 |
| 26. | Advanced Molecular Techniques and its Applications | Department of Molecular Oncology, Cancer Institute (WIA), Chennai | Participated | 7 th August 2011 |
| 27. | Recent Advances in Biomedical Research on Infectious and Non-infectious Diseases | Department of Biomedical Science, Bharathidasan University, Trichy-24 | Participated | 13 th – 14 th October 2011 |
| 28. | The Role of Free Radicals in Health and Diseases | Department of Biochemistry, University of Madras, Guindy Campus, Chennai-600 025 | Participated | 27 th – 28 th January, 2012 |
| 29. | Emerging Horizons in Biotechnology – Challenges and Prospects | Department of Biotechnology, Alpha Arts and Science College, Chennai was held at Chennai | Participated | 20 th and 21 st September, 2012 |
| 30. | Entrepreneurship Development for Life sciences ED Bioz'13 | Department of Biochemistry, Adhiparasakthi College of Arts and Science (Autonomous), Kalavai – 632 506 | Participated | 23 rd January, 2013 |
| 31. | Emerging Trends in Microbial Biotechnology | Department of Microbiology, Kanchi Shri Krishna College of Arts and Science, Kilambi – 631 551 | Participated | 20 th and 21 st February 2013 |
| 32. | Recent Trends in Life Science | Auxilium College, Vellore – 632 006 | Participated | 12 th – 13 th December 2013 |
| 33. | International Conference on NanoBio, Biomimetic Materials and Its Applications (BIOSUMMIT-2014) | Hindusthan Institute of Technology and College of Arts and Science, Department of Biosciences, Coimbatore – 641 028 | Participated | 27 th – 28 th February 2014 |
| 34. | National seminar on Innovative Research in Biological Science (NSIRBS) | Govt. Thirumagal Mills College, Gudiyatham – 632 604 | Participated | 19 th December 2014 |

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| 35. | Emerging Trends in Microbial and Environmental Biotechnology | Department of Microbiology, Kanchi Shri Krishna College of Arts and Science, Kilambi – 631 551 | Participated | 6 th March 2015 |
| 36. | Current Advances in Immunology Research | Centre of Advanced Study in Marine Biology, Faculty of Marine Sciences, Annamalai Universtiy, Parangipettai | Participated | 07 th and 08 th August, 2015 |
| 37. | Applications of green technologies for separation bioproducts | Department of Biotechnology, Sree Sasta Institute of Engineering and Technology, Chembarabakam, Chennai – 600 123 | Participated | 02 nd and 03 rd September, 2015 |
| 38. | Frontier Research in Applied Biology and Environmental Sciences | Department of Biochemistry, King Nandhivarman College of Arts and Science, Thellar | Participated | 30 th January, 2016 |
| 39. | Emerging paradigm in cancer therapy | Indo-American College, Cheyyar – 604 407 | Participated | 17 th August, 2016 |
| 40. | Biopharmaceuticals Pharm Bioz'17 | PG and Research Department of Biochemistry, Adhiparasakthi College of Arts and Science (Autonomous), Kalavai – 632 506 | Participated | 31 st January, 2017 |
| 41. | International Conference on Frontiers in Nano Biotechnology (ICFNB'17) | Department of Biotechnology and Bioinformatics, Bishop Heber College (Autonomous), Tiruchirappalli | Participated | 8 th and 9 th September, 2017 |
| 42. | International Symposium on Health Care System in Cancer Biology | Adhiparasakthi College of Arts and Science, Kalavai – 632 506 | Participated | 20 th September, 2017 |
| 43. | One day National Conference on “Unravelling Biometabolites with Bioactivity (NCUBB'19)” | Department of Biotechnology and Bioinformatics, Bishop Heber College (Autonomous), Tiruchirappalli | Participated | 25 th February, 2019 |
| 44. | One day Workshop on “The Art of Writing Winnable Project Proposals” | Department of Biotechnology, Sri Sankara Arts and Science College, Enathur | Participated | 12 th July, 2019 |
| 45. | One day International Conference on “Integrative nature of life science and its challenges in Research” | Department of Biochemistry, Theivanai Ammal College for Women (Autonomous), Villupuram | Participated | 6 th September, 2019 |

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| 46. | Two days National Conference on "Recent Trends in Life Sciences" | PG and Research Department of Biochemistry and Department of Microbiology, Bhaktavatsalam Memorial College for Women, Chennai | Participated | 4 th and 5 th October, 2019. |
| 47. | One day International Conference on Advances in Medical Science and Molecular Biology (AMSMB-20) | PG & Research Department of Microbiology, Idhaya College for Women, Kumbakonam | Participated | 27 th January, 2020 |

16. Participated as Resource Person:

| S.No. | Program | Venue | Period |
|-------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------|
| 1. | Inservice Training Programme for Secondary Grade Teachers | Sri Sankara Arts and Science College, Enathur | 06-10 December 2004 |
| 2. | Inservice Training Programme for Govt. Higher Secondary School Biology Teachers | Sri Sankara Arts and Science College | 27-29 July 2006 |
| 3. | Inservice Training Programme for Secondary Grade Science Teachers | Sri Sankara Arts and Science College | 8-11 October 2007 |
| 4. | Scientific Awareness Programme for School students of Kanchipuram, Thiruvallur and Vellore Districts | Sri Sankara Arts and Science College | 28 th December 2007 |
| 5. | Biotechnology Research Division | Thirumalai Chemicals Ltd, Ranipept, TamilNadu | 5 th April 2008 |
| 6. | Drug Discovery | Biomedical Science Department, Bharathidasan University, Thiruchirappali | 29 th January 2010 |
| 7. | Inservice Training Programme for Secondary Grade Science Teachers | Kanchi Shri Krishna College of Arts and Science, Kilambi | 20-24 December 2010 |
| 8. | Two days state level intensive orientation camp for NSS Volunteers | Sri Sankara Arts and Science College, Enathur | 11-12 January 2011 |
| 9. | Special Lecture delivered in NSS Special Camp for NSS Volunteers | Government High School, Enathur | 23 January 2012 |

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| 10. | Special Lecture delivered in Two days state level intensive orientation camp for NSS Volunteers | Sri Sankara Arts and Science College | 14-15 December 2012 |
| 11. | Special Lecture delivered in Special Camp for NSS Volunteers | Sri Sankara Arts and Science College | 29 January 2014 |
| 12. | Biodiversity | Theivanai Ammal College for Women (Autonomous), Villupuram | 26 th September 2014 |
| 13. | Structure Based Drug Design | Department of Biotechnology, University of Madras, Chennai - 600 025 | 23 rd and 24 th of March 2017 |
| 14. | Recent Trends in Biochemistry | Department of Biochemistry, Annai Therassa Arts and Science College, Thirukazhukundram - 603 109 | 5 th of October 2017 |
| 15. | Department of Biochemistry, Annai Therassa Arts and Science College, Thirukazhukundram - 603 109 | Government High School, Enathur | 05 th February 2018 |
| 16. | Clinical Applications of Biomaterials | Department of Microbiology, Sri Sankara Arts and Science College, Enathur – 631 561 | 22 nd of February 2018 |
| 17. | Biofest – 2018 | Department of Biochemistry, Indo-American College, Cheyyar - 604 407 | 4 th of October 2018 |

17. Workshop & Training Programmes:

| S.No. | Programme | Venue | Period |
|-------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------|
| 1. | Innovative Methodologies in Teaching of Life Science and Biomedical Science Laboratory Courses | Department of Zoology, Cheiyar-604 407 | 8 th March, 2012 |
| 2. | PRABODH | Department of Biotechnology, School of Chemical & Biotechnology, Thanjavur-613 401 | 11 th May to 24 th May 2012 |
| 3. | Summer training | NEERI, CSIR campus, Chennai | May – June 1999 |
| 4. | Orientation course for National Service Scheme | Madras School of Social Work, Chennai. | 16-25, July, 2003 |

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|-----|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| 5. | Bioinformatics training | Gemeiosys (kern Labs), Chennai | 19 – 29, April, 2004 |
| 6. | Environmental Studies Training underwent regarding Teaching Methodology | UGC – Academic Staff College, Chennai. | 19-23, July, 2004 |
| 7. | Short term course on TQM | UGC – Academic Staff College, Chennai. | 13-17, July, 2010 |
| 8. | Refresher Course on Nanoscience | UGC – Academic Staff College, Chennai. | 18 th Nov – 08 th Dec, 2010 |
| 9. | Online course in Power searching | Google Inc. | 24 th September – 10 th October 2012 |
| 10. | Faculty Development Program (FDP) on ICT Tools & Techniques for Teaching, Learning process & Institutes | Sri Sankara Arts and Science College, Enathur – 631 561. | 13-17 Jan 2020 |
| 11. | “Severe Acute Respiratory Infection (SARI) Treatment Facility Design” | Health Emergencies Programme, World Health Organization | 12 th April, 2020 |
| 12. | Faculty Development Program (FDP) and online training program on LaTeX | Sanjay Ghodawat University, Kolhapur with Spoken Tutorial, IIT, Bombay. | 27 th April to 2 nd May 2020 |
| 13. | Faculty Development Program (FDP) and online training program on “Managing Online Classes and Co-Creating MOOCs” | Ramanujan College, University of Delhi with MHRD, Government of India | 20 th April to 6 th May 2020 |
| 14. | Faculty Development Program (FDP) on “Practical Bioinformatics on a Wet Lab Set Up” | Sathyabama Institute of Science and Technology, IAAM and Georgetown University Medical Center, USA. | 11-16 May 2020 |
| 15. | Faculty Development Program (FDP) on “Outcome Based Education and Accreditation” | College of Engineering & Technology, IILM Academy of Higher Learning, India. | 25-29 May 2020 |
| 16. | Faculty Development Program (FDP) and online training program on “Open Source Tools for Research” | Ramanujan College, University of Delhi with MHRD, Government of India. | 8 th to 14 th June 2020 |
| 17. | Faculty Enrichment Program (FEP) on Transcending From Fixed To Growth Mindset In Turbulent Times | Sri Sankara Arts and Science College, Enathur – 631 561. | 4 th July 2020 |

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| 18. | Faculty Development Program (FDP) on "Online Tools for Teaching and Research" | C. Abdul Hakeem College of Engineering and Technology, Hakeem Nagar, Melvisharam-632 509 | 27 th to 31 st July 2020 |
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18. Projects Completed:

| S.No. | Name of the Projects | Period | Grant Received/Status |
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19. Any other Details:

ONLINE SEMINARS AND WORKSHOPS

- Participated on "Stay at Home; Save Lives Pledge" organized by Ministry of Electronics and Information Technology, New Delhi was held on 29th March, 2020.
- One day National Conference on "CONTAGIOUS DISEASE MANAGEMENT: PERSPECTIVE TO COVID-19" organized by Biological Science Forum, A Scientific community of India, India was held on 16th April, 2020.
- One day webinar on "How to Get Published In Scientific Journal : From Research to Publication" organized by MHRD - Institute Innovation Council - Sri Sai Ram Institute of Technology, Chennai- 44, Tamilnadu was held on 27th April, 2020.
- Participated in online quiz "COVID-19 Awareness Quiz" organized by St. Joseph College (Arts and Science), Kovur, Chennai was held on 7th May, 2020.
- Participated in webinar "Assessment and Evaluation in Outcome Based Education" organized by Office of Controller of Examinations, GTN ARTS COLLEGE (Autonomous), Dindigul was held on 11th May, 2020.
- Participated in online quiz "Bioquiz-2020" organized by Soka Ikeda College of Arts and Science for Women, Chennai was held on 28th May, 2020.
- Participated in online quiz "COVID-19 Awareness Quiz" organized by RRC, Adhiparasakthi College of Arts and Science (Autonomous), Kalavai was held on 30th May, 2020.
- Participated in online quiz "Sports Knowledge Quiz 2020" organized by Sir Theagaraya College, Chennai was held on 3rd June, 2020.
- Participated in online quiz "Hematological Techniques" organized by Department of Biochemistry, Soka Ikeda College of Arts and Science for Women, Chennai was held on 7th July, 2020.
- Participated in online quiz "NATIONAL LEVEL COVID-19 AWARENESS QUIZ" organized by Department of Microbiology, Ranveer Rananjay PG College Amethi (UP) was held on 8th July, 2020.
- Participated in National webinar "E-Learning for Professional Development - Swayam& MOOCs" organized by GTN Arts College (Autonomous), Dindigul was held on 16th July, 2020.

- Participated in online quiz “National Level E - Chem Quiz on Cognitive Chemistry” organized by Department of Chemistry, Ramakrishna Mission Vivekananda College, Mylapore, Chennai – 600 004 was held on 26th July, 2020.
- Participated in Inter National webinar “Cell Communication in Disease Course” organized by Government Arts and Science College, Thennangur - 604408 was held on 19th January, 2021.
- Participated in National webinar “Patenting of Biotechnological Inventions in India” organized by the Guru Nanak Centre for Research, Guru Nanak College (Autonomous), Chennai was held on 29th January, 2021.
- Participated in National webinar “NAAC – Revised Accreditation Framework: Pathway to Excellence in HEI” organized by IQAC, Sri Sankara Arts and Science College, Enathur was held on 19th February, 2021.

BOOKS PUBLISHED

- Book titled on “Bioinformatics: Databases and Programming languages” was published by Today Publications, 192, Bells Road, S.R.Complex, Chepauk, Chennai – 600 005 with ISBN no: 978-9380479-19-4.
- Book titled on “Bioinformatics: Sequence Analysis and Drug Designing” was published by Today Publications, 192, Bells Road, S.R.Complex, Chepauk, Chennai – 600 005 with ISBN no: 978-9380479-18-7.
- Book titled on “Childhood Asthma: Antioxidant Diagnosis and Management” was published LAP LAMBERT Academic Publishing GmbH & Co. KG, Dudweiler Landstr – 9966123, Saarbrücken, Germany with ISBN no: 978-3-8454-3096-6.
- Book titled on “Physiology of Cell” was published LAP LAMBERT Academic Publishing GmbH & Co. KG, Dudweiler Landstr – 9966123, Saarbrücken, Germany with ISBN no: 978-3-8454-4057-6.
- Book titled on “Principles of Analytical Chemistry” was published by Today Publications, 192, Bells Road, S.R.Complex, Chepauk, Chennai – 600 005 with ISBN no: 978-9381992-97-5.
- Book titled on “Plant Biochemistry” was published by Archers and Elevators Publishing Houses, Bengaluru, Karnataka, India with ISBN no: 978-93-85640-31-5.
- Book titled on “Biological Databases and Bioinformatics Programming” was published by Mainspringer Publishers, Kanchipuram, Tamilnadu, India with ISBN no: 978-81-928157-4-9.
- Book titled on “Biological Sequence Analyses and Computer Aided Drug Designing” was published by Mainspringer Publishers, Kanchipuram, Tamilnadu, India with ISBN no: 978-81-928157-5-6.
- Book titled on “Computational Aspects of Bioinformatics” was published by Mainspringer Publishers, Kanchipuram, Tamilnadu, India with ISBN no: 978-81-928157-7-0 (2018).
- Book titled on “Principles and Applications of Computer Aided Drug Designing” was published by Mainspringer Publishers, Kanchipuram, Tamilnadu, India with ISBN no: 978-81-928157-8-7 (2018).

BOOK CHAPTERS

- **Sivakumar S**, Dental care and reproductive genetics and Environmental science, Secondary grade Teachers in-service training programme hand book, December 2004.
- **Sivakumar S**, Immunology and Plant Biology, Higher secondary Teachers in-service training programme hand book, July 2006.
- **Sivakumar S**, Immunology and Nanotechnology, Secondary grade Teachers in-service training programme hand book, October 2007.
- **Sivakumar S**, Stem cells and Its Applications, Secondary grade teachers' in-service training programme hand book, 20-24, December 2010.
- **Sivakumar S**, Health and Nutrition, Application of Science and Technology in Rural Areas (ASTRA 2011-2012) training programme hand book, 20-25, February 2012.

EDITORIAL BOARD

- ❖ Editorial Board member as Associate Editor for the journal "Bhamathi – Microbiology News Letter" (ISSN: 2231-136X) Volume -2, Issue-1, January-July 2012.
- ❖ Editorial Board member as Associate Editor for the Proceedings "Proceedings of Elixir-2012" (ISBN:978-93-81992-03-6) published by Research and Seminar Committee, Sri Sankara Arts and Science College, Enathur during 10th and 11th October 2012.
- ❖ Editorial Board member as Associate Editor for the journal "Bhamathi – Microbiology News Letter" (ISSN: 2231-136X) Volume -2, Issue-, August-December 2012.
- ❖ Editorial Board member as Associate Editor for the journal "Bhamathi – Microbiology News Letter" (ISSN: 2231-136X) Volume -3, Issue-1, January-July 2013.
- ❖ Editorial Board member as Executive Editor for the journal "International Journal of Current Biotechnology" (ISSN: 2321-8371) Volume -1, Issue-1, March 2013.
- ❖ Editorial Board member as Section and Layout Editor for the journal "Asian Journal of English and Linguistics (AJEL)" Volume -1, Issue-1, June 2013.
- ❖ Editorial Board member as Associate Editor for the journal "Bhamathi – Microbiology News Letter" (ISSN: 2231-136X) Volume -3, Issue-2, August-December 2013.
- ❖ Editorial Board member as Chief Editor for the journal "International Journal of Applied Biochemistry (IJAB)" (ISSN: 2349-5421) Volume -1, Issue-1, December 2013.
- ❖ Editorial Board member as Executive Editor for the journal "International Journal of Comprehensive Nursing (IJCN)" (ISSN: 2349-5413) Volume -1, Issue-1, June, 2014.
- ❖ Editorial Board member as Associate Editor for the journal "Bhamathi – Microbiology News Letter" (ISSN: 2231-136X) Volume -4, Issue-1, January – July, 2014.
- ❖ Publication team member in a monthly magazine for competitive exams "Commerce Express", volume no: 1, issue no: 2 (Registration No: 717/14).
- ❖ Editorial Board member as Associate Editor for the journal "Bhamathi – Microbiology News Letter" (ISSN: 2231-136X) Volume -5, Issue-1, January – July, 2015.

PAPERS PRESENTED

- Paper on “Bitter Gourd (*Momordica charantia*) Peroxidase in Decolorization of Dyes from Tannery Effluent” was presented in International level technical symposium Crosslinx’10 which was organized by CLRI, Chennai – 600 025 during 17th – 19th February 2010 (Second Prize).
- Paper on “Insilico Drug Designing against Tuberculosis” was presented in National Symposium on Antituberculosis Drug Discovery (NSADD) organized by Department of Bacteriology, TRC was held at Chennai during 30th October 2010.
- Paper on “Drug Designing” was presented in International Conference on Gene Therapy and Phytotherapy in Modern Medicine which was organized by Adhiparasakthi College of Arts and Science, Kalavai – 632 506 during 4th Januaray 2011.
- Paper on “Enzymatic and Non-enzymatic anti-oxidant levels in breast cancer patients” was presented in National Conference on “The Role of Free Radicals in Health and Diseases” which was organized by Department of Biochemistry, University of Madras, Guindy Campus, Chennai-600 025 during 27th – 28th January 2012.
- Paper on “Role of Nanoparticles in Drug Delivery” was presented in “TECH BLAST - 2012” which was organized by Department of Computer Science, Sri Sankara Arts and Science College, Enathur during 15th and 16th February 2012.
- Paper on “DNA vaccine target identification using hepatitis B surface protein gene for hepatitis by using BioLign Tool” was presented in National Conference on “Current Scenario and Emerging Trends in Hepatocellular Disease (NC-HepCD) - 2012” which was organized by Department of Biochemistry and Molecular Biology, Pondicherry University, Pondicherry-605 014 during 5th – 6th October 2012.
- Paper on “Identification of DNA Vaccine Target for Hepatitis B Virus through Multiple Sequence Alignment” was presented in One Day National Conference On “Recent Advances and Current Trends In Bioscience” was organized by Department of Biochemistry, Asan Memorial College of Arts and Science, Chennai – 600 100 was held at chennai on 8th February, 2013 (Third Prize).
- Paper on “Insilico identification of novel polynucleotide vaccine target across avian flu viral vaccine strains” was presented in National Seminar on “Emerging Trends in Microbial Biotechnology” organized by Department of Microbiology, Kanchi Shri Krishna College of Arts and Science, Kilambi – 631 551 was held at Kilambi during 20th and 21st February 2013.
- Paper on “Significance of minerals in breast cancer patients of TamilNadu” was presented in One Day National Conference On “Environmental and Molecular Toxicology” was organized by Department of Biochemistry, Indo-American College, Cheyyar – 604 407 was held at cheyyar on 2nd March, 2013.
- Paper on “Identification of new breast cancer biomarker – Osteopontin-D” was presented in International Conference on “Recent Trends in Life Science” which was organized by Auxilium College, Vellore – 632 006 during 12th – 13th December 2013.
- Paper on “Decolorization of Textile dye by *Momordica charantia* peroxidase (MCP) – Phytoremediation” was presented in National Conference on “Sustainable Innovations In Industrial Waste Management (Greenotech2014)” which was organized by Department of Lifesciences, Hindustan College of Arts and Science, Chennai – 603 103 during 28th January 2014.

- Paper on “DNA Vaccine target identification against HIV viral strains using pairwise and multiple sequence alignment tool” was presented in National seminar on “Recent Advances in Biotechnology and Applied Microbiology” which was organized by Kanchi Shri Krishna College of Science, Kilambi – 631 551 during 3rd – 4th March 2014.
- Paper on “Phytoremediation of Tannery Effluent using *Momordica Charantia* Peroxidase” was presented in National seminar on “Innovative Research in Biological Science (NSIRBS)” which was organized by Govt. Thirumagal Mills College, Gudiyatham – 632 604 during 19th December 2014.
- Paper on “Determination of new splice variant in breast cancer patients – Osteopontin-D” was presented in International seminar on “Scitech-15” which was organized by Nadar Saraswathi college of Arts and Science, Theni – 625 531 during 21st January 2015.
- Paper on “Determination of biopesticide azadirachtin by HPLC in *Azadirachta indica*, *Murraya koenigii* and *Curcuma longa* - Medicinal plants” was presented in National Seminar on “Emerging Trends in Microbial and Environmental Biotechnology” organized by Department of Microbiology, Kanchi Shri Krishna College of Arts and Science, Kilambi – 631 551 was held at Kilambi during 6th March 2015.
- Paper on “Decolorization of tannery effluent through biological conversion process by *Cucumis sativus* fruit extract - Phytoremediation” was presented in National Conference on “Emerging Trends and New Challenges in Biotechnology - Bioenergy” organized by PG and Research Centre in Biotechnology, M.G.R College, Hosur – 635 109 was held at Hosur during 18th and 19th February 2016.
- Paper on “Computational interaction analysis of Pesticide Permethrin with different Metabolic Proteins in Humans – Nanomolecular interaction studies” was presented in International Conference on Frontiers in Nano Biotechnology (ICFNB’17) held on September, 8 and 9th, 2017, Department of Biotechnology and Bioinformatics, Bishop Heber College (Autonomous), Tiruchirappalli, Tamil Nadu, India.
- Paper on “Identification of New Target and Drug against *Salmonella typhi* using Homology and Docking Studies” was presented in National Conference on Interdisciplinary Research and Innovations in Biosciences (NATCON 2018) held on 24th and 25th January, 2018, Department of Biochemistry, Mohamed Sathak College of Arts and Science (Autonomous), Chennai 600 119, Tamil Nadu, India.
- Paper on “Identification of active principle from the leaf extracts of *Melia Azedarach L.*, *Andrographis Paniculata* and *Azadirachta indica* through bioinformatics tools” was presented in International Conference on New Frontiers in Engineering, Science, Law, Management, Humanities and Social Sciences (INFES 2019) held on 23rd and 24th January, 2019, Eudoxia Research Centre, Gauhati University, Gauhati, India.
- Paper on “Determination of Anticancer activity of *Triticum aestivum* grass aqueous extract” was presented in International Conference on Integrative nature of life science and its challenges in Research held on 6th September, 2019, Department of Biochemistry, Theivanai Ammal College for Women (Autonomous), Villupuram.
- Paper on “Identification of Potential Drug against Lung Cancer using Epidermal Growth Factor Receptor Target Through QSAR Studies” was presented in National Conference Biochemical and Molecular Basis of Cancer held on 19th October, 2019, Department of Biochemistry, MMCH and RI of MAHER University, Enathur.

POSTER PRESENTED

- ✚ Poster on “Parkin reduces α -synclin phosphorylation in Parkinson’s disease” was presented in National Seminar on “Cellular and Molecular Neurobiology in Health and Diseases” which was organized by Department of Biochemistry, Maraimalai Campus, Guindy, University of Madras during 11th – 12th February 2011.
- ✚ Poster on “Enzymatic and Non-emzymatic anti-oxidants levels in Breast Cancer Patients of Tamilnadu” was presented in National Seminar on “Recent Advances in Biomedical Research on Infectious and Non-infectious Diseases” which was organized by Department of Biomedical Science, Bharathidasan University, Trichy-24 during 13th – 14th October 2011.
- ✚ Poster on “Drug designing against HIV” was presented in National Seminar on “Recent Advances in Microbial Biotechnology” which was organized by Department of Microbiology and Department of Biotechnology, Sri Sankara Arts and Science College, Enathur during 6th December 2011.
- ✚ Poster on “New therapeutic strategies for diabetes mellitus” was presented in National Conference on “Diabetes and its Implications” which was organized by Department of Biochemistry, Ethiraj College for Women, Chennai on 31st January 2012.
- ✚ Poster on “Inherited disorders of hepatocellular origin – Glycogen storage diseases (GSDs)” was presented in National Conference on “Current Scenario and Emerging Trends in Hepatocellular Disease (NC-HepCD) - 2012” which was organized by Department of Biochemistry and Molecular Biology, Pondicherry University, Puducherry - 605 014 during 5th – 6th October 2012.
- ✚ Poster on “Stem cells and their potential applications in regenerative medicine” was presented in “ELIXIR - 2012” which was organized by Life Science Departments, Sri Sankara Arts and Science College, Enathur during 10th and 11th October 2012.
- ✚ Poster on “Biotreatment of Tannery Industrial Effluent using *Momordica Charantia* - Phytoremediation” was presented in National Symposium on “Entrepreneurship Development for Life sciences ED Bioz’13” which was organized by Department of Biochemistry, Adhiparasakthi College of Arts and Science (Autonomous), Kalavai – 632 506 was held at Kalavai during 23rd January, 2013.
- ✚ Poster on “Overview of occurrence, symptoms and prevention of breast cancer” was presented in two day National Seminar cum Conference on “Applications of green technologies for separation bioproducts” which was organized by Department of Biotechnology, Sree Sasta Institute of Engineering and Technology, Chembarabakam, Chennai – 600 123 was held at Chennai during 02nd and 03rd September, 2015.
- ✚ Poster on “Identification of novel drug against chickengunya virus through in-silico approach” was presented in one day National Conference on “Unravelling Biometabolites with Bioactivity (NCUBB’19)” which was organized by Department of Biotechnology and Bioinformatics, Bishop Heber College (Autonomous), Tiruchirappalli, was held at Trichy on 25th February, 2019.
- ✚ Poster on “Determination of potential target and drug for influenza through molecular docking studies” in two days National Seminar on “Industry Academia Connect and Design Exhibit (IACDE-2020)” which was organized by Department of Bioscience, Rathinam College of Arts and Science (Autonomous), Coimbatore, was held at Coimbatore on 8th and 9th January, 2020.

LECTURE NOTES

1. Cell signaling
2. Physiology of cell
3. Molecular Biology
4. Immunology
5. Nutritional Biochemistry
6. Cell and Molecular Biology
7. Bioinformatics
8. Human Physiology

LAB MANUALS

1. Lab Manual Part I
2. Lab Manual Part II

PARTICIPATION IN ACADEMIC AND ADMINISTRATIVE COMMITTEES AT COLLEGE LEVEL

1. College Committee – Staff representative
2. College Advisory Committee – Member
3. Controller of Examination office - Additional Controller of Examination
4. Controller of Examination office - Controller of Examination
5. Examination Committee - Convenor
6. Attendance Committee - Convenor
7. Environment Committee - Convenor
8. Bioinformatics Committee – Co-ordinator
9. Research Committee – Convenor
10. Sports Committee – Member
11. Stock verification Committee – Convenor
12. Value added course – Convenor
13. IQAC Committee – Member
14. NAAC Steering Committee – Member
15. Autonomous Steering Committee – Member
16. Academic Council - Member of College
17. Academic Council - Member of University of Madras

DATABASE SEQUENCE PUBLISHED

- ◆ Nucleotide sequence of *Cucumis sativus* ascorbate peroxidase-like gene, partial sequence was published on 28th July 2010 in Genbank database with Accession No: HM053977, GI:300217177.
- ◆ Nucleotide sequence of *Momordica charantia* ascorbate peroxidase-like gene, partial sequence was published on 28th July 2010 in Genbank database with Accession No: HM053978 GI:300217178.
- ◆ Nucleotide sequence of *Bacillus subtilis* strain AL2 16S ribosomal RNA gene, partial sequence was published on 12th July 2010 in Genbank database with Accession No: HM053974.1 GI:300217174.
- ◆ Nucleotide sequence of *Bacillus subtilis* strain AL2 alkaline lipase-like gene, complete sequence was published on 12th July 2010 in Genbank database with Accession No: HM053975.1 GI:300217175.
- ◆ Nucleotide sequence of *Homo sapiens* osteopontin-C mRNA, partial cds, alternatively spliced was published on 5th April 2011 in Genbank database with Accession No: HQ874460.1 GI:327323282.
- ◆ Nucleotide sequence of *Homo sapiens* osteopontin-D mRNA, partial cds, alternatively spliced was published on 5th April 2011 in Genbank database with Accession No: HQ874461.1 GI:327323284.
- ◆ Nucleotide sequence of *Homo sapiens* matrix metalloproteinase-9 mRNA, partial cds was published on 5th April 2011 in Genbank database with Accession No: HQ874462.1 GI:327323286.
- ◆ Nucleotide sequence of *Homo sapiens* osteopontin-D mRNA, complete cds, alternatively spliced was published on 5th April 2011 in Genbank database with Accession No: JF412666.1 GI:327323288.
- ◆ Nucleotide sequence of *Homo sapiens* osteopontin-C mRNA, complete cds, alternatively spliced was published on 5th April 2011 in Genbank database with Accession No: JF412667.1 GI:327323290.
- ◆ Nucleotide sequence of *Homo sapiens* TNF receptor-associated protein 1, partial cds, was published on 2nd Oct 2012 in Genbank database with Accession No: JX481354.1 GI:407033516.
- ◆ Nucleotide sequence of *Cucumis sativus* ascorbate peroxidase gene, complete cds, was published on 23rd Apr 2013 in Genbank database with Accession No: KC839995.1 GI: 479280229.
- ◆ Nucleotide sequence of *Momordica charantia* ascorbate peroxidase gene, complete cds, was published on 23rd Apr 2013 in Genbank database with Accession No: KC839996.1 GI: 479280231.
- ◆ Protein sequence of *Homo sapiens* osteopontin-C, 61aa was published on 5th April 2011 in Genpept database with Accession No: AEA49027.1 GI:327323283.
- ◆ Protein sequence of *Homo sapiens* osteopontin-D, 47aa was published on 5th April 2011 in Genpept database with Accession No: AEA49028.1 GI:327323285.
- ◆ Protein sequence of *Homo sapiens* matrix metalloproteinase-9, 13 aa was published on 5th April 2011 in Genpept database with Accession No: AEA49029.1 GI:327323287.
- ◆ Protein sequence of *Homo sapiens* osteopontin-D, 292aa was published on 5th April 2011 in Genpept database with Accession No: AEA49030.1 GI:327323289.
- ◆ Protein sequence of *Homo sapiens* osteopontin-C, 287aa was published on 5th April 2011 in Genpept database with Accession No: AEA49031.1 GI:327323291.
- ◆ Protein sequence of *Homo sapiens* TNF receptor-associated protein 1, 676 aa was published on 2nd Oct 2012 in Genpept database with Accession No: AFS69159.1 GI:407033517.
- ◆ Protein sequence of *Cucumis sativus* ascorbate peroxidase, 249 aa, was published on 23rd Apr 2013 in Genpept database with Accession No: AGJ72850.1 GI: 479280230.

- ◆ Protein sequence of *Momordica charantia* ascorbate peroxidase, 249 aa, was published on 23rd Apr 2013 in Genpept database with Accession No: AGJ72851.1 GI: 479280232.
- ◆ A mi-RNA sequences were submitted at Gene Expression Omnibus (GEO) of NCBI with GEO id GSE124060 was published on 19th Dec 2018.
- ◆ A mi-RNA sequences of normal leukocytes were submitted at Gene Expression Omnibus (GEO) of NCBI with GEO id GSM3519899 was published on 19th Dec 2018.
- ◆ A mi-RNA sequences of fibrotic leukocytes were submitted at Gene Expression Omnibus (GEO) of NCBI with GEO id GSM3519900 was published on 19th Dec 2018.

ROLE OF EXAMINER

- Served as Chief Invigilators for TNPSC Examinations from 2007- 2018.
- Served as Question Paper Setter for Bharathidasan University, Thiruvalluvar University, SRM University, St. Joseph College of Arts and Science (Autonomous) and DKM College for Women.
- Served as Answer Sheet Evaluator for Madras University, Bharathidasan University, Ethiraj College for Women (Autonomous) and St. Joseph College of Arts and Science (Autonomous).
- Served as Practical Examiner for Madras University, Ethiraj College for Women (Autonomous) and Bharathidasan University.
- Served as Additional to Chief Superintendent and Assistant Chief Examiner for Madras University Theory Examinations.

JOURNAL REVIEWER

- Served as Reviewer for the Journal “International Journal of Tropical Disease and Health” during 13th June, 2020.
- Served as Reviewer for the Journal “Asian Plant Research Journal” during 29th September, 2020.
- Served as Reviewer for the Journal “Current Journal of Applied Science and Technology” during 29th September, 2020.
- Served as Reviewer for the Journal “PLOS ONE” during 24th January, 2021.

VIDEO LECTURE REVIEWER

- Served as Reviewer for the Digital Video Lessons of Biochemistry Subject of Tamil Nadu State Board Higher Secondary Text Books during 24th September, 2020 for Home Schooling Program by SCERT, Tamil Nadu.

WEB SITE MAINTAINED

1. Lecture Notes – <http://www.biochem.tk>
2. Job for Lifescience students – <http://joblifescience.blogspot.in/>
3. Scholarship details – <http://lifesciencescholorship.blogspot.in/>
4. Scientific Inventions and News - <http://biosiva.blogspot.in/>

INTERNATIONAL PROJECT COLLABORATION

- Served as the Collaborator of Bioinformatics part of the project on “Characterization of key molecular genetic alterations in Breast Cancer” with the Principal investigator Dr. Dasgupta Santanu, UT Health Northeast, 11937 US Highway 271, Tyler, TX 75708-3154.