Tharunkumar Vasudevan

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PROFILE

Biomedical Science MSc graduate with hands-on experience in molecular biology, Cell Culture, and laboratory techniques. Proficient in PCR, ELISA, Western-Blot, and aseptic techniques, with a strong understanding of laboratory safety and quality control. Experienced in sample preparation, equipment maintenance, and data analysis. A detail-oriented and adaptable team player, eager to contribute to a fast-paced laboratory environment. Passionate about learning new techniques and supporting research and clinical workflows effectively. Immediately available to join.

SKILLS & ABILITIES

- Mammalian Cell Culture
 Cell Revival
 GMP Lab
 Western-Blot
- Equipment Handling and Calibration
 Media Preparation
 Immunostaining
 ELISA
- · Aseptic Techniques · PCR and AGE · DNA Extraction · Attention to detail

EXPERIENCE

Research Assistant | Manchester Metropolitan University | Jan 2023 – Sep 2023

- Conducted research on extracellular matrix regulation in liver fibrosis, specifically investigating the role of EMILIN-1 in hepatic stellate cells.
- Designed and executed experiments to study **EMILIN-1 protein expression** in **LX-2 cells**, using **A375 and SHSY5Y** cell lines as positive controls.
- · Performed **Western Blot, ELISA, and immunostaining** to detect EMILIN-1 and validate its role in fibrosis progression.
- · Optimized **cell culture protocols**, ensuring high **cell viability and reproducibility** for fibrosis-related assays.
- · Revived and maintained mammalian cell cultures (LX-2, A375, SHSY5Y) with aseptic techniques and regular subculturing.
- · Operated **liquid handling robotic equipment (Cell Washer, Multidrop Dispenser, Centrifuge)** to streamline workflows and increase experimental efficiency.
- Adapted quickly to new techniques, troubleshooting pH meter and refining antibody concentrations for immunostaining to enhance signal clarity.
- · Maintained **meticulous documentation** of all experimental procedures and data analysis, ensuring reproducibility and integrity of research findings.
- · Worked closely with a research team, demonstrating collaboration, adaptability, and attention to detail in a laboratory setting.

Research Assistant | Centre for Bioscience and Nanoscience Research | Jan 2021 - Nov 2021

- · Performed sample preparation and bacterial DNA extraction, achieving a 95% success rate in DNA retrieval.
- · Conducted **antibiotic sensitivity testing** on *E. coli* and *Bacillus subtilis*, identifying effective treatments.
- · Utilised ELISA for antibody detection ensuring 90% accuracy through spectrophotometric analysis.
- Assisted in routine lab maintenance, equipment cleaning, and inventory management to support daily research operations.
- · Followed **strict aseptic techniques** to prevent contamination in microbial cultures.
- · Collaborated with lab members to support ongoing research projects, ensuring smooth workflow and task distribution.

EDUCATION

Master of Science in Biomedical Science | Manchester Metropolitan University | October 2023

Bachelor of Engineering in Biomedical Engineering | Anna University | July 2021

CERTIFICATIONS

U.N.I.Q Technologies- MATLAB Programming- 2022.

U.N.I.Q Technologies- Finger print recognition using image processing (Project) - 2022.