# Varsha Vijayakumar

# <u>varshavijayakumar0700@gmail.com</u> | <u>+358 413290185</u> | <u>LinkedIn</u> | <u>Portfolio</u> Helsinki, Finland

#### **Education**

#### **Master of Science (Medical Genetics and Genomics)**

University of Glasgow, UK

Graduation Date: September 2023 | Classification: With Merit

- **Master's Thesis:** Systematic review on the psychosocial impact of newborn genomic screening on parental decision-making and healthcare utilisation.
- Class Representative: Represented and supported peers and liaised with faculty for student concerns.

#### **Bachelor of Technology (Biotechnology with Genetic Engineering)**

Bharath Institute of Higher Education and Research, India

*Graduation Date:* June 2022 | *GPA*: 3.7/4.0

- Awarded a full 4-year tuition scholarship for academic excellence.
- Served as **Student Body President** for four years, leading initiatives to support student success and engagement.

### **Research Experience**

#### **Project Researcher**

Cancer Institute (WIA), Department of Molecular Oncology | March 2024 – March 2025

- Designed an experiment involving cisplatin-resistant and cisplatin-sensitive cervical cancer cell line samples to identify differentially expressed genes associated with the resistance phenotype.
- Maintained long-term cell cultures of 6 different cervical cancer cell lines, conducting various experiments including but not limited to STR analysis, Live Cell Imaging and RNA expression analysis.
- Supervised and mentored two undergraduate research interns, delegating tasks and providing training in cell culture, DNA extraction, and data analysis techniques.

#### **Research Assistant (Master's Thesis)**

University of Glasgow, School of Medicine, Veterinary, and Life Sciences | April 2023 - August 2023

- Conducted a systematic review to evaluate the psychosocial impact of newborn genomic screening on parents and caregivers.
- Analysed data from multiple studies to provide evidence-based recommendations for improved screening practices.
- Developed expertise in critical literature review and data synthesis methodologies.

#### **Research Assistant**

Bharath Institute of Higher Education and Research | June 2019 – June 2022

- Spearheaded genotyping projects analysing genetic variations in over 100 samples.
- Played a key role in COVID-19 diagnostics, performing over 75 PCR assays with high accuracy.
- Maintained and calibrated laboratory equipment to ensure optimal performance for molecular biology experiments.

#### **Professional Experience**

#### **Associate Medical Writer**

Klarity Health | October 2023 - Present

- Collaborated with cross-functional teams to develop accessible, engaging medical content for diverse audiences.
- Conducted in-depth research to ensure accuracy in healthcare communications.
- Proofread and edited content to adhere to industry standards and guidelines.

# **Medical Content Manager**

Migraine World Summit | January 2021 – July 2022

- Created and optimised multimedia content for websites and social media platforms, enhancing audience engagement.
- Authored scripts and conducted interviews for the 2022 summit, promoting scientific knowledge dissemination.

#### **Genetic Counselling Intern**

Mediscan Systems | September 2021 – February 2022

- Conducted 110 genetic counselling cases, analysing patient histories and genetic test results under senior supervision.
- Organised and maintained over 500 patient files to support clinic operations.

#### **Training and Development Coordinator**

Abuse Refuge Organisation | February 2022 – August 2022

- Assessed the success of training initiatives, presenting recommendations to improve outcomes.
- Organised professional development training for over 500 participants and tracked feedback for future planning.

#### **Research Assistant**

AMI Institute of Bioscience | February 2020 – March 2020

- Supported research staff by gathering data and assisting with ongoing projects.
- Developed problem-solving skills through independent and collaborative work.

#### **Key Skills**

- **Technical Skills:** PCR, genotyping, STR analysis, RNA expression analysis, Cell culture, Live cell imaging.
- **Data Analysis:** Statistical methods, systematic reviews, bioinformatics pipelines.
- Scientific Writing & Communication: Translating complex research into accessible formats.
- Critical Thinking & Problem-Solving: Addressing challenges in research protocols and patient data
- Collaboration & Leadership: Mentoring students and coordinating cross-functional teams.
- **Soft Skills:** Strong organisational, time management, and adaptability skills.

#### **Awards and Achievements**

- University Research Award Winner (2022): Recognised for outstanding undergraduate research on migraine triggers.
- Full Tuition Scholarship: Awarded for academic excellence during undergraduate studies.

## **Selected Projects**

- **Master's Thesis:** Conducted a systematic review into the impact of integrating newborn genomic screening into genetic counselling services, addressing parental decision-making, psychological well-being, and healthcare utilisation.
- Investigating Cisplatin Resistance in Cervical Cancer Cell Lines: Designed experiments and optimised protocols for long-term cell culture stabilisation.
- **Linking Migraine Triggers to Attack Incidence:** Conducted a global comparative study of migraine triggers and their impacts on patients.
- **Genetic Variation Studies:** Spearheaded genotyping projects, analysing and interpreting genetic data in over 100 samples.
- **COVID-19 Diagnostic Efforts:** Performed over 75 PCR assays during the pandemic, ensuring precision and reliability.

# **Volunteering and Extracurricular Activities**

- Active Listening Volunteer (7 Cups of Tea): Level 5 certification in empathetic support.
- **Soul Palliative Care Volunteer:** Contributed 1,480 hours supporting end-of-life care.
- Samaritans Hotline Volunteer: Provided crisis support through active listening and communication.