LifeArc

Industrial Student Placement

LifeArc is a medical research charity with a 25 year legacy of helping scientists and organisations turn their research into treatments and diagnostics for patients.

LifeArc is pioneering new ways to turn great science into greater patient impact. It brings together a network of partners to tackle specific diseases and directly funds academic and early stage research.

LifeArc's Centre for Diagnostic Development (CDD) operates at the interface between academic research and the diagnostic industry. We offer collaborative diagnostic assay development and validation, helping translate early stage diagnostic research through to its commercial exploitation and use in the clinic.

CDD are currently focused on developing molecular diagnostics where there is an unmet clinical need in areas such as infectious disease, oncology, and inflammatory disease. Our current projects include the design of qPCR and digital PCR assays, as well as sequencing projects using Illumina and Oxford Nanopore technologies.

CDD is offering a 10-12 month student placement in technology development, with a particular emphasis on Next Generation Sequencing (NGS), during the 2019/20 academic year. We have two in-house NGS platforms, the Oxford Nanopore MinION and an Illumina MiSeq. The MinION technology is a promising next generation sequencing tool, and a great deal of early-stage efforts in using the technology have been explored by academics in the field of diagnostics.

In addition to gaining valuable experience in the generation and analysis of next-generation sequencing data, the student will develop key skills in nucleic acid extraction, quantification and quality control, working with a range of clinical samples, project management, design and development and new product development. The student will also benefit from working under the ISO13485 framework.

- Requirements of the role:
    - 2 years of degree level study completed
    - A minimum of a 2:1 achieved in the first year of study
    - Molecular Biology/Genetics degree types only
- Key skills and competencies:
    - Solid genetics and molecular biology knowledge
    - Sound understanding of standard molecular laboratory techniques (e.g. DNA/RNA isolation, PCR) is essential (training will be provided)
    - Experience in, or willingness to code on the command line (Linux) and in RStudio is essential (training will be provided)
    - Excellent communication skills are essential
    - Willingness to work with a new and rapidly-changing technological platform
    - Basic statistics, including mathematical modelling would be desirable

LifeArc is committed to the principles and practices of equal opportunities and to encouraging the establishment of a diverse workforce. It is our policy to employ individuals on the basis of their suitability for the work to be performed and their potential for development, regardless of age, sex, race, colour, nationality, ethnic or national origin, disability, marital status, pregnancy or maternity, sexual orientation, gender reassignment, religion or belief. This includes creating a culture that fully reflects our commitment to equal opportunities for all.

To apply please email your CV and covering letter explaining why you want to work for LifeArc to: recruitment@lifearc.org

Closing Date: 29th January 2019