

**Job Specification** Product Development Scientist

**Contract Type:** Fixed Term 12m w/ the possibility to become permanent

**FTE:** 1.0

**Working Hours:** Mon – Fri, 35 hours p/w

Salary: £32,000 - £36,000 (subject to relevant experience & qualifications)

**Location:** Glasgow, UK

**Closing Date:** 26 Sep 2025 (11.59 pm)

#### Who We Are

Microplate Dx is an award-winning life sciences SME spun out from the University of Strathclyde. We have developed and are in the process of validating and commercialising a novel an antibiotic susceptibility testing (AST) diagnostic platform - RapidPlate™ - that is designed to rapidly deliver AST results in under 1 hour, which is significantly faster than current gold standard methods. Our technology has the potential to enable faster, more targeted antibiotic prescribing, support improved antibiotic stewardship, and contribute to the global fight against antimicrobial resistance (AMR).

## **The Opportunity**

We are offering an exciting opportunity for a Product Development Scientist to join Microplate Dx, at a pivotal stage of growth. This role is central to advancing our RapidPlate™ electrochemistry-based cartridge assay from a prototype into a scalable, clinically robust diagnostic product in parallel with our reader system.

Working as part of a collaborative, multidisciplinary team, you'll play a key role in refining and validating the RapidPlate™ assay — contributing to everything from assay optimisation and system integration to manufacturability, prototype and final product development. This is a hands-on, lab-based role with broad exposure across the product development lifecycle, offering the chance to make a real impact on the performance and scalability of our diagnostic platform. This is a unique chance to help shape a next-generation diagnostic product within a dynamic and fast-growing company.

#### **Roles & Responsibilities**

- Support the development and optimisation of the RapidPlate™ electrochemistry-based cartridge assay approach.
- Optimise and validate protocols for sample preparation, gel-based culture handling and signal detection compatible with the RapidPlate™ cartridge workflows.
- Work within a team environment to define and evolve assay performance and metrics e.g., sensitivity, specificity and time to result under real world operating conditions.
- Collaborate with electronic engineering and data science teams to ensure effective integration of assay/electrochemistry components into a cohesive RapidPlate™ product.
- Support the adaptation of assay reagents and protocols for scalable manufacturability and assembly.



- Support the development, build and testing of prototype and/or pilot devices including cartridge stability, packaging format and workflow useability.
- Contribute to the generation of design history files (DHFs), risk management documents, and verification and/or validation documentation.
- Assist in identifying critical reagents and components; support technology transfer to manufacturing partners or internal scale-up teams.
- Identify opportunities to improve assay performance, reduce costs, and simplify workflows for end-users.
- Communicate project updates, technical risks, and mitigation strategies to stakeholders in fast-paced development environment.
- Stay up to date with advancements in electrochemical sensing, microbiology, and diagnostic technologies relevant to AST.

### **Qualifications & Skills**

- Bachelor's or Master's degree in in Biochemistry, Microbiology, Bioengineering, Analytical Chemistry, or a related discipline.
- Experience in IVD assay development, with strong foundation in electrochemical sensing, including impedance based, cyclic voltammetry, amperometry methods.
- Proficiency in microbiological techniques (e.g., culturing, AST, handling clinical isolates).
- Experience with reagent formulation, lyophilization, or stabilization of biochemical components.
- Experience in or an understanding of regulated product development with knowledge of design control processes and medical device quality management systems.
- Skilled in data analysis tools (e.g., GraphPad Prism, MATLAB, Python, or R)
- Adaptability and comfort working in a fast-paced, resource-constrained start-up environment.
- Strong analytical, communication, and project coordination skills.
- Self-motivated, hands-on, and proactive with a bias toward action and ownership.



# **Application Procedure**

Interested applicants should email info@microplatedx.com with the following information:

Curriculum Vitae with Covering Letter (max 4 pages) including details of two referees who will be contacted without further permission, unless you indicate that you would prefer otherwise.

Candidates will then be shortlisted for interview, and the final successful candidate will be chosen subject to meeting the above criteria and overall merit at interview.

Other Information For further information Dr Stuart Hannah (CEO), regarding the role, please contact: stuart.hannah@microplatedx.com **Rewards & Benefits:** As a start-up, we offer a flexible and supportive working environment and are receptive to the individual needs of our team. Staff have access to a competitive benefits package, including 35 days of annual leave (inclusive of statutory holidays), with the potential for future participation in a company share options scheme as we grow. Where applicable, the successful applicant will **Probation:** be required to serve a 3-month probationary period. Pension: The successful applicant will be eligible to join Microplate Dx's pension scheme. **Equality & Diversity:** We value diversity and welcome applications from all sections of the community including international applicants. We particularly welcome applications from often underrepresented candidates in this field

employer.

including women, ethnic minorities, and LGBTQ+. We are committed to promoting

gender and racial equality across all aspects of our business and are an equal opportunities