

Senior Scientist: Molecular Biology / Product Development

ProtonDx is a diagnostic company founded on state-of-the-art diagnostic technologies for infectious diseases developed over the last decade by a multi-disciplinary team at Imperial College London. ProtonDx (<https://protondx.com>) was established in 2020 to make a range of rapid, accurate, portable, and low-cost diagnostic products available worldwide. We are looking for a Senior Scientist in Molecular Biology/Molecular Assay Development to lead the development of clinical diagnostic assays and products for infectious diseases and antimicrobial resistance.

The successful candidate will lead a multidisciplinary team, working on the development of molecular assays and products, within the field of Molecular diagnostics and In-Vitro Diagnostics. This is an excellent opportunity for a talented graduate or a Molecular Biologist / Biochemist who is looking to advance their career and develop their skills in a fast-paced and exciting environment. The successful candidate will perform screening and optimisation duties using ProtonDx's key proprietary tech.

The ideal candidate will have:

- A relevant PhD.
- Prior experience (5+ years) within a lab environment.
- A good understanding of molecular methods (such as PCR and LAMP), including sample preparation processes.
- A can-do attitude and a willingness to step out of your comfort zone.

The role will involve:

- Developing our proprietary point-of-care technology (Lacewing and Dragonfly) by investigating multiple sample extraction methods, lyophilisation processes, amplification chemistries, and molecular assay designs.
- Collection and processing of clinical samples for technology development and validation.
- Performing experiments to drive the improvement of enzymatic and biochemical reactions on a device set up.
- Preparing clearly articulated experimental reports and data presentations whilst maintaining well organised records.
- Spearheading efforts for product development.
- Managing a team of scientists.
- Communicating with internal and external collaborators including senior management; working alongside group within the company to secure intellectual property including patents & trade secrets; supporting recruitment and interviewing processes where necessary; ensuring any work being undertaken, either by themselves or by others they are leading, meets company H&S requirements.
- Any other duties as might be required within the remit and responsibilities of the post.

Key responsibilities:

- Lead technical projects focusing on the development and validation of in vitro molecular assays.

- Contribute to scientific R&D projects through the hands-on design, execution and analysis of laboratory experiments.
- Provide leadership, technical support and direction to members of the Assay Development team.
- Resolve complex technical challenges in line with clinical diagnostic assays requirements.
- Accurately record and present scientific results through the completion of laboratory records, written reports and presentations.
- Undertake additional ad hoc / project work as required.

Skills and experience:

- **Essential:** PhD in a relevant life science discipline (such as Microbiology / Genomics / Molecular Biology / Biochemistry).
- **Essential:** Experience working in a laboratory, doing relevant laboratory techniques including: PCR and LAMP optimization; processing biological samples; DNA extraction using manual extraction kits and/or automated instruments; qPCR manual setup and/or using automated instruments.
 - **Beneficial:** laboratory experience working in a regulated environment; infectious disease and antimicrobial resistance; precision serial dilutions; DNA sequencing; working within a category 2 suite; using automated molecular diagnostic systems; next generation sequencing; advanced multiplex applications; digital PCR.
- **Essential:** Experience working independently, leading projects and delivering against agreed timescales and outputs.
- **Essential:** Experience in line management and/or leading/mentoring small teams.
- **Essential:** An agile mind-set, with the ability to take initiative and work within a fast-moving R&D environment with evolving priorities.
- **Essential:** Excellent communication skills and a personable nature to support relationship building within the team and with key stakeholders.
- **Highly beneficial:** Prior experience delivering assay development projects within an IVD / diagnostics industry environment.
- **Highly beneficial:** Experience working to strict quality standards such as Medical Device Regulations (ISO13485).
- **Highly beneficial:** Experience in translating new technology to a manufacturing pipeline.

Further information

The successful candidate will be working closely with Dr Jesus Rodriguez Manzano at laboratories at Hammersmith Hospital and offices at the Imperial College Translation and Innovation Hub, White City. Salary in the range of £40,000 to £54,000/year depending on experience.

Applications

Please send your CV with a covering letter explaining your interest and why the post suits your skills and experience to info@protondx.com by 5th August 2022.

Further information regarding the post can be obtained from info@protondx.com.