

Molecular Microbiologist – Development of microbiome derived therapeutics

Microba Life Sciences is a microbial genomics company that has quickly established itself as a world leader in analysis of the gut microbiome. With a growing body of global research indicating that the gut microbiome plays a central role in health and disease, Microba has positioned itself to be a leading force in the development of new pathology services, diagnostics and therapeutics.

Position overview:

Microba seeks a highly motivated person to join a fast-paced and dynamic group to use molecular methods to isolate and characterise fastidious microorganisms for the discovery and development of microbiome derived therapeutics. Reporting to Dr. Páraic Ó Cuív, the successful candidate will design and apply novel molecular methods to expedite the isolation of target gut microbes and determine their ability to modulate host immunity.

Key Responsibilities:

We are looking to recruit a microbiologist to develop new approaches to expedite the isolation of fastidious gut microbes. Key responsibilities include but are not limited to:

- Lead efforts to isolate target microbes by designing and applying novel molecular approaches to isolate target microbes, produce axenic cultures of target microbes, produce enrichment cultures of target microbes, establish and maintain a curated microbial culture collection.
- Construct large insert gene libraries for target microbes and screen using functional assays, identify genes underpinning discrete activities using forward/reverse genetic approaches.
- Establish high-throughput culture dependent and independent approaches (e.g. in 96- and 384 arrayed formats) to assess the functional capacities of target microbes.
- Use molecular, genomic and/or biochemical approaches to identify and characterise target isolates.
- Prepare microbe derived samples for *in vitro*, *ex vivo* and animal experiments.
- Keep up with advances in molecular microbiology and associated technologies. Analyse data, trouble-shoot experiments, meet timelines, and prepare summary slide presentations.
- Communicate results to supervisor and senior management effectively and in a timely manner. Maintain a detailed and accurate laboratory notebook. Prepare reports for patents and applications to regulatory bodies.

Requirements:

This position requires a minimum of a BSc degree in microbiology or equivalent with at least 3 years' experience in academia/industry. Candidates with senior experience will be prioritised. Experience should include:

Essential:

A demonstrated ability to manage multiple projects simultaneously; an ability to work collaboratively; in-depth knowledge of molecular microbiology approaches; experience with forward and/or reverse genetic approaches and constructing and/or screening gene libraries (e.g. fosmids, BACs); knowledge and experience with DNA transfer methods (e.g. electroporation, conjugation, etc.).

Desirable:

Experience with culturing fastidious anaerobic microbes, analysing genomic sequence data, microscopy, CRISPR-Cas9 genome editing, *in vivo/in vitro* transposomics, mammalian cell-based assays, working in industry.

This is an opportunity to join our select team at Microba and provide new insights into how the microbiome affects health and well-being. To learn more about this position and how we are transforming microbiome research please contact **Dr. Páraic Ó Cuív** at paraic.ocuiv@microba.com

To apply for this position, please contact **Dr. Páraic Ó Cuív** with a cover letter outlining your previous research experience and a detailed CV.

Applicants **must** be eligible to work in Australia. The position will close on the 27th of July and successful applicants should be available to start shortly thereafter.