

Principal Scientist – Job Description

Role Purpose:

To provide high-level technical expertise and leadership in order to deliver large scale / complex projects and develop business-unit level knowledge and practice. The Principal acts as a credible technical expert for the organisation, drawing upon a broad range of technical know-how to provide technical expertise and advice to a range of stakeholders, in order to inform technical strategy and direction.

Knowledge and Expertise specific to role:

To have and continuously develop a broad knowledge/expertise relevant to upstream and/or downstream processing and/or analytical characterisation of biopharmaceuticals such as proteins, viral vectors, and nucleic-acid based products expressed in mammalian, bacterial, insect, yeast cells and/or cell-free systems. Your knowledge/expertise should be both practical and theoretical in areas such as:

- Theoretical and practical knowledge and expertise in Cell Biology, Biologics expression, Bioreactor scale up and relevant analytical techniques (expert knowledge or understanding to support area of expertise).
- Theoretical and practical knowledge and expertise in Biochemistry, Biologics Purification, Biochemical Engineering, and relevant analytical techniques (expert knowledge or understanding to support area of expertise).
- Theoretical and practical knowledge and expertise in the development, utilisation, and verification of analytical methods for characterisation of in process and final product biopharmaceuticals (expert knowledge or understanding to support area of expertise).
- Lead and deliver experimentation around the production and/or analysis of therapeutic biologics focussed on the design, development and scale-down/scale-up of upstream processes or the development and/or adoption of new technologies.
- Knowledge, application, and use of CIP or reusable or single use systems in Biologics.
- Application of techniques for the analysis of proteins and other biologics.
- Application of experimental design and statistical concepts to experimental planning.
- Use and application of computer systems and software for data acquisition and analysis.
- Document writing, data interpretation, presentation, and statistical analysis.
- Knowledge of bioprocessing industry and cGMP concepts.
- Application of your broad scientific knowledge to projects and client programs.
- To assist the development and analytical characterisation of Biologics processes to provide proof of successful process development/optimisation.
- Maintain knowledge of new practices and procedures from relevant literature and other sources.
- To be the primary technical contact with clients, using customer management skills to build excellent working relationships.
- To be the technical leader/manager of collaborative research and development and/or commercial projects, co-ordinating the activities of the assigned team.
- Support/supervision of other scientists and the evaluation of data integrity.

Principal Scientist – Job Description

- To evaluate and develop new processing technologies for use in the upstream processing of biopharmaceutical products.

Key Responsibilities:

- To maintain consistent and documented compliance with all relevant Safety, Health and Environmental (SHE), quality and best practice requirements.
- To identify new technical developments and trends, translate these into building blocks for opportunities across and outside of CPI and initiate the creation of (new) technological innovations/applications.
- To utilise own expert knowledge to inform the technology strategy at business unit level, translating this into practice through the creation of deliverable plans to achieve business unit objectives.
- To build, influence and exploit a network of relevant (inter)national external stakeholders, customers, partners, research organisations and authorities, to represent CPI as the technical expert in networks and discuss and lobby for projects and future developments.
- To actively contribute to a culture of continuous capability development within teams, in alignment with company strategy and project deliverables. This will be achieved by coaching and developing colleagues, (both technically and behaviourally) to help them reach their potential and acting as a mentor to senior colleagues across the organisation, providing a strategic perspective.
- To keep self up to date with developments in technological innovations/applications and/or legislative and SHE related changes, ensuring implementation and application of new best practice and/or knowledge.
- To work collaboratively with Business Development and technical colleagues, providing support relating to proposal / project development and direct customer engagement. Seek out and engage in business development opportunities where appropriate.
- To act as a credible partner to Bid Development teams, actively involved in defining and advising on the technical elements of a bid, in order to develop a programme of works.
- To formulate and present solutions to a range of stakeholders, using deep technical knowledge to provide up to date views, opinions, and advice to managers, and is regularly sought out to do so.
- To actively engage in hazard studies / SRA studies and discussions, as appropriate to role level.
- To set up, plan and execute experimental / pilot scale runs and analyse, interpret, and report the results of these, translating obtained findings and knowledge.
- To be responsible for providing clearly documented records of technical data, decisions, methodologies, calculations, and software use in an agreed format.

Direct reports: No direct reports

Principal Scientist – Job Description

Person specification

Education / Qualifications:

Essential:	Desirable:
<p>Educated to HNC or Foundation Degree level (or equivalent) in a Scientific/Engineering discipline plus significant and in-depth industrial experience at an expert level.</p> <p>Or</p> <p>Educated to Degree level (or equivalent) in a Scientific/Engineering discipline plus significant industrial experience at an expert level.</p> <p>Or</p> <p>Educated to Master Degree level (or equivalent) plus significant industrial experience at a very senior level.</p> <p>Or</p> <p>Educated to PhD level (or equivalent) in a Scientific/Engineering discipline plus significant industrial experience at a senior level.</p>	<p>Chartered status with a relevant professional institution.</p>

Competencies and behaviours	
<p>Leadership (Influencing)</p> <ul style="list-style-type: none"> • Promotes commitment to CPI's strategy, vision, values, and direction. • Motivates, inspires, and build resilience in others by making the vision shareable by everyone. • Rewards and celebrates success with colleagues and teams. • Future proofs work practices. • Trusts others' judgment and demonstrates a willingness to try new things, even at the risk of failure. 	<p>Decision Making (Guiding)</p> <ul style="list-style-type: none"> • Confidently takes decisions that require political/organisational interpretation and that could cause controversy but moves CPI forward. • Reliably and boldly takes decisions involving the charting of a way forward into a new territory where no precedent exists, and analysis of all available data provides no clear single conclusion. • Models drive and resilience in ensuring the solutions are adopted.
<ul style="list-style-type: none"> • Communication (Guiding) • Personally takes the lead in creating an environment that encourages open 	<p>Developing self and others (Influencing)</p> <ul style="list-style-type: none"> • Assesses the skills and competence of others within the organisation and recommends development activities.

Principal Scientist – Job Description

<p>and honest communication at all levels in the organisation.</p> <ul style="list-style-type: none"> • Motivates and influences others via their communications. • Adapts communication style and format recognising individuals' different needs/ motivations. • Communicates corporate message with conviction and enthusiasm and thereby promotes commitment and belief in others. 	<ul style="list-style-type: none"> • Gives performance feedback in a timely manner on an informal basis regularly. • Actively shares expertise and learning across the organisation. • Takes personal accountability for success or failure of direct reports.
Collaboration (Guiding)	Delivery (Guiding)
<ul style="list-style-type: none"> • Displays a collaborative style in day-to-day working whilst motivating others to achieve optimal performance and results. • Develops relationships which facilitate the resolution of complex tasks and can apply different techniques to effectively mitigate any conflict. • Can negotiate skilfully in tough situations with all stakeholders. 	<ul style="list-style-type: none"> • Demonstrates the ability to prepare, gain approval of, refine and update business cases that justify the initiation of a project. • Displays the ability to manage stakeholders, taking account of their levels of influence and particular interests. • Ensures actions and decisions within the team are aligned with CPI's priorities. • Anticipates how team objectives must adapt and stretch to respond to change.

Knowledge and Experience:

Essential:	Desirable:
<p>Experience of leading large cross-function technical development projects.</p> <p>Will possess significant, technical expertise in biologics & bioprocessing as well as compelling evidence of complex technical problem solving.</p> <p>Is a recognised industry expert in their area of expertise, as well as having broader technical knowledge and capability, and ability to apply in a variety of contexts.</p> <p>Will possess significant, technical expertise in upstream and/or downstream processing</p>	<p>Is an active member of a professional body, engaging with peers beyond CPI.</p>

Principal Scientist – Job Description

and/or analytical characterisation as well as compelling evidence of complex technical problem solving.

Significant practical experience of different expression systems and/or purification approaches and/or analytical characterisation for therapeutic biologics. This includes both cell and/or cell-free, stable, and or/ transient systems and associated analytics.

Familiarity with the use of design of experiment methodologies to inform experimental design.

Is comfortable using own judgement and initiative within standard engineering / scientific practices, as well as an understanding of when to seek advice from colleagues.

Will exhibit professional mastery of principles and practices in area of expertise gained through career to date in area of specialism.

Can demonstrate evidence of building knowledge sharing and network building practice across teams.

Actively demonstrates in-depth technical and theoretical knowledge in at least one area and is viewed as a specialist in this area by peers.

Can provide examples of actively building cross-team and business unit collaboration to achieve desired results.