Post-doctoral research description

- Apply protein biochemistry knowledge to develop novel protein purification technologies including chromatography and filtration
- Create novel process control strategies for next generation biomanufacturing platform
- Develop advanced process control and automation for integrating multiple continuous unit operations in upstream and downstream bioprocessing
- Develop data analysis programs that interface with multiple software platforms and bioprocessing technologies
- Create innovative process analytical tools to analyze process data in order to enhance real time process understanding (data analysis, plotting, modeling and simulation)
- Research opportunities to further enhance the process analytical toolbox for continuous bioprocessing and make real time process decision

Qualification

- PhD in Biochemistry, Biology, Chemical Engineering, or related field

Preferred qualification

- Knowledge of theory and background of protein biochemistry and its application to protein purification process
- Scientific programming (to perform data analysis and create plots)
- Process control and automation specialization
- Delta V and equivalent distributed control systems
Description:
The department of Purification Development in Late Stage Process Development is responsible for development, scale-up, transfer and characterization of downstream processes for late stage clinical and commercial manufacturing of therapeutic proteins, hormones and antibodies. In addition, the department develops second generation commercial processes, provides technical expertise and support to improve on-going commercial manufacturing process performance, evaluates new technologies and develops platform technologies suitable for incorporation into commercial processes. We are looking for candidates at the position of Process Engineer I (chemical engineer, biochemist/biologist/other). The incumbent will be part of a teams dedicated to accomplishing the department's objectives. The candidate should be able to use scientific principles and professional practices, solves a range of problems in creative and practical ways. Provides scientific support in the development, scale-up, optimization and operation of methods for the production, purification and testing of new process formulas, technologies and products. Maintains knowledge of state-of-the-art principles and theories in area of responsibility. Designs procedural and experimental approach to meet objectives; Executes experiments and analytical procedures; interprets results; recommends changes or additional experiments to improve quality, productivity, recovery and efficiency of the manufacturing process or robustness, reliability, ruggedness of analytical procedures.

Position Description:

- Execute the development of robust downstream processes that can be scaled to large chromatography unit operations which includes extensive chromatographic and filtration development
- Participate in examination of novel downstream technologies for manufacturing therapeutic proteins.
- Assist in technical transfers of the processes
- Serve as a subject matter expert on protein purification and engineering.
- Keep abreast of new developments and technologies in areas of downstream processing. Attend and present at external technical forums to remain current with technology and regulatory guidelines.

Qualifications:

Basic Qualifications:
MS, Chemical Engineering, Biology, Biochemistry or relevant filed and 0-3 years experience
BS, Chemical Engineering, Biology, Biochemistry or relevant filed and 2-5 years experience

Preferred Qualifications:

Additional requirements include advanced scientific analysis and problem solving work
skills. An understanding of the application of scale down work to large scale processing, and an understanding of the Production environment, would be a plus.

The individual must be highly motivated to work independently, or in a group, and possess excellent interpersonal, verbal and written communication skills.
Contact:

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