**CHO Cell Biologist: Grade 7**

We are seeking an autonomous and inventive individual to integrate into an established team of research scientists in GSK’s Biopharmaceutical Process Research Department (BPR). Positioned at a pivotal interface between research and development, this department is tasked with accelerating the progression of a portfolio of novel biopharmaceuticals to the clinic. To achieve this, BPR brings together scientists across a number of disciplines to deliver our core project remit whilst positioning ourselves at the forefront of cutting-edge technologies.

Our recent investment in automated cell line development and upstream processes, combined with cutting edge analytical techniques and advanced data analysis is enabling us to better understand our cell lines and platform processes and increase the metabolic and biochemical knowledge of our cell lines. We are now looking to leverage and expand these enhanced datasets by linking cell biology and performance to cell line development data to drive the selection of commercialisable cell lines earlier in the process.

The role will primarily involve investigating the phenotypic characteristics of our CHO-based mammalian expression platform cell lines in scale down models of our production processes and applying these findings to deliver an in-depth understanding of the biological mechanisms dictating cell line behaviours. Using their knowledge of mammalian cell biology and recent advances in ‘omic technologies, preferably coupled with hands-on experience in intracellular biochemistry, signalling, and/or protein trafficking, the successful applicant would be tasked with seeking and applying novel analytical approaches to systematically decipher the key mediators influencing cellular phenotypes.

We expect the outcomes of this work to generate a better understanding of our platform cell lines and the associated residuals (host cell proteins), resulting in more deeply informed cell line selection decisions during project campaigns. We also envisage this will enable us to exert greater control over the performance of our cell lines during process development and may identify targets for host cell engineering.

The successful candidate must be confident in seeking, critically evaluating and where appropriate, embedding, innovative technologies into our cell line selection workflows. Leading from the lab they will link biochemical and ‘omic data to cell line performance criteria by working closely with our Cell Line Development, Data Science and OneStream groups to support our Next Generation Cell Line Development capability.

**The successful applicant will:**

Use advanced data analysis and model building to identify cellular characteristics that may be predictive of cell lines with desirable processing attributes. Investigate and strive to understand the underlying biology related to these characteristics and determine methods to exploit and apply these characteristic differences in our cell line selection workflows.

Actively seek and evaluate novel technologies (which may exist both within GSK and externally) that could advance this area of work or align with other strategies in the departmental business plan.

Use cross-scale metabolic, biochemical and spectral data to build process independent models for cell line selection by working with our CLD and Data groups to enhance our understanding of metabolic and biochemical factors influencing cell line performance.

Deliver our holistic cell line selection vision by proposing and undertaking focused experimental work packages to build and validate molecule/process agnostic models for cell line selection.

Contribute to wider automation, data analysis and bioinformatic work packages within BPR to support our Next Generation Cell Line Development capability.

Be an active and adaptable member of an established and highly effective BPD team, willing to support and priorities wider team deliverables when portfolio demands require.

Possesses excellent planning and communication skills to interact effectively within a multi-disciplinary team and with other internal and external business partners using influencing, communication and relationship building skills.

Demonstrated ability to effectively communicate your work and data to various audiences in the form of presentations and written reports.

Seek all opportunities to develop and maintain a strong IP position.

**Basic Qualifications**

* PhD in Mammalian Cell Biology, Biochemistry or a related field
* Extensive (at least 3-5 years) practical experience of mammalian cell culture/CHO cell biology at bench and/or bioreactor scale
* Track record of design, execution and analysis of work packages to improve CHO cell selection through data driven cross-scale modelling
* Ability to proactively contribute to team performance and process improvement in a climate of scientific rigor across multiple CHO process science groups
* Effective communication skills

**Preferred Qualifications**

* Experience of using multivariate data analysis and ‘omic data outputs to enhance experimental outcomes
* Knowledge of, and ability to apply, experimental design and data analysis principles to derive quality results in a timely fashion
* Proven experience of evaluation and implementation of appropriate new ideas and technologies
* Ability to apply innovative solutions to process development problems
* Understanding of cell line selection in an industrial setting and the ability to proactively contribute to data driven continuous process improvement

**Cell Line Selection Scientist: Grade 8**

We are seeking an autonomous and inventive individual to integrate into an established team of research scientists in GSK’s Biopharmaceutical Process Research Department (BPR). Positioned at a pivotal interface between research and development, this department is tasked with accelerating the progression of a portfolio of novel biopharmaceuticals to the clinic. To achieve this, BPR brings together scientists across a number of disciplines to deliver our core project remit whilst positioning ourselves at the forefront of cutting-edge technologies.

Our recent investment in automated cell line development and upstream processes, combined with cutting edge analytical techniques and advanced data analysis is enabling us to better understand our cell lines and platform processes and increase our metabolic and biochemical knowledge of our cell lines. We are now looking to leverage and increase these enhanced datasets by expanding our cell line selection team to link cell biology and performance to cell line development data to drive commercialisable cell line selection earlier in the process.

The role will involve generating comprehensive data sets to drive final cell line selection using automated microbioreactor systems and their associated analytics. As we identify additional predictive markers of cell line performance the successful applicant will be tasked with establishing these analyses in our ambr15 workflows and generating the appropriate data to augment our cell line selection data package. Key to this success will be an innovative mindset coupled with the ability to drive complex multidisciplinary studies within project campaigns to better inform cell selection decisions.

Leading from the lab the successful candidate will be confident in generating CHO cell performance and biochemical data and linking this to cell line performance criteria by working closely with our Cell Line Development, Data Science and OneStream groups to support our Next Generation Cell Line Development capability.

**The successful applicant will:**

Using our production process models, deliver project critical data packages to inform cell line selection decisions.

Identify and evaluate opportunities to generate enhanced datasets from our current CLD/cell selection processes.

Through focussed experimental work and continuous improvement proactively embed novel analytics into our standard workflows and actively seek opportunities to enhance the quality and depth of our cell screening processes.

Contribute to wider automation, data analysis and bioinformatic work packages within BPR to support our Next Generation Cell Line Development capability.

Be an active and adaptable member of an established and highly effective BPD team, willing to support and priorities wider team deliverables when portfolio demands require.

Possesses excellent planning and communication skills to interact effectively within a multi-disciplinary team and with other internal and external business partners using influencing, communication and relationship building skills.

Demonstrated ability to effectively communicate your work and data to various audiences in the form of presentations and written reports.

**Basic Qualifications**

* PhD in Mammalian Cell Biology, Biochemistry or a related field
* Practical experience of mammalian cell culture/CHO cell biology at bench and/or bioreactor scale
* Track record of design, execution and analysis of work packages to improve CHO cell selection through data driven cross-scale modelling
* Ability to proactively contribute to team performance and process improvement in a climate of scientific rigor across multiple CHO process science groups
* Effective communication skills

**Preferred Qualifications**

* Experience of using multivariate data analysis and ‘omic data outputs to enhance experimental outcomes
* Knowledge of, and ability to apply, experimental design and data analysis principles to derive quality results in a timely fashion
* Proven experience of evaluation and implementation of appropriate new ideas and technologies
* Ability to apply innovative solutions to process development problems
* Understanding of cell line selection in an industrial setting and the ability to proactively contribute to data driven continuous process improvement