

VACANCY

Job title: Lead PCR Design Specialist Location: Southampton (Primerdesign)

Job Summary

We are seeking an experienced Lead PCR Design Specialist to address our needs for PCR assay design within the R&D department of a fast-growing and friendly biotech business.

Primerdesign are experts in real-time PCR, a molecular biology technique for detecting the presence of DNA and quantifying it. We have customers in many different industries including academia, research, healthcare, food industry and the veterinary industry selling to over 100 countries worldwide.

An exciting new venture for the company lies with developing kits and services in collaboration with some of the industry's largest players. There's a chance to you the chance to make a difference to the future healthcare industry as well as build on your skills and wider network.

The candidate will apply algorithms and bespoke software programs to support PCR assay design and conduct in silico validation of assays. They will also analyse experimental data with the goal of improving and maintaining the design processes required to support Primer design's objectives. They will be required to apply their design knowledge to utilise innovative chemistries across a wide range of applications; e.g. expression profiling, genotyping, multiplexing etc.

Main duties and responsibilities

- Manage a team of design specialists to support the development of assays: the design PCR primers and probes for targeted assays using existing pipelines and tools
- Develop, maintain, and execute bioinformatics pipelines for assay design, data mining and sequence analysis.
- Assess designs and develop/maintain processes and algorithms to improve the assay design pipeline (for the purposes of generating of IP)
- Curate sequence data and mine public databases for sequence content periodically
- Work closely with internal and external collaborators to define the bioinformatics requirements for assays, set timelines and perform design reviews.
- Assist in the execution of development studies, ensuring compliance with all applicable laboratory practices.
- Assist in the data analysis and report writing of development studies, ensuring compliance with all applicable regulatory standards.
- Participate in R&D project team meetings as needed.
- Ensure the completion of research-related documentation (including technical summaries) in line with an ISO13485 quality management system.
- Provide regular progress reports on assigned projects.
- The provision of expert technical support for customers may be required.



Qualifications and experience required

Essential

- BSc in Genomics, Bioinformatics, Computational Biology or related field
- Previous PCR knowledge and hands-on experience is a must.
- 2+ years of relevant work experience is required; industry preferred
- Proficient with bioinformatics analysis tools: multiple sequence alignment, BLAST analysis, open reading frame analysis; secondary, tertiary and quaternary protein structure prediction, phylogenetics
- Expertise in mining public databases for genomic sequences
- Expertise in sequence analysis tools for mapping and comparative genomics
- Understanding of the biology behind genotyping, gene expression profiling, comparative genomics and genetic mapping
- The ability to work well within a team and have strong written and verbal communication skills is critical.
- Excellent communication skills, organizational skills and outstanding attention to detail are required for this role.

Desirable

- MS/PhD in Genomics, Bioinformatics, Computational Biology or related field
- Understanding of assay design, experience working in disease research or with next generation sequencing data and customer facing experience would all be highly advantageous.
- Experience of working within a quality system is highly advantageous, particularly ISO 13485.
- Previous experience in scientific product development or creating complex study designs desired.
- Previous statistical data analysis experience would be beneficial.

Hours of Work	37.5 hours per week
For further information or to apply for this vacancy please e-mail Kay Campbell, HR kay.campbell@novacyt.com	