Casual Position Description

Position Title: Sequencing Specialist
Department: The Donnelly Centre for Cellular and Biomolecular Research
Immediate Supervisor: Principal Investigator

Purpose

Reporting to the Principal Investigator with direction from a Sequencing Coordinator, the Sequencing Specialist will utilize next generation sequencing methods and technology to facilitate genomic research. The incumbent will respond to customer requests, keep highly detailed records of customer consultations, issue quotations, perform standard protocols and analysis, general lab maintenance and organization, and operate next generation sequencing instruments.

Qualifications Required

Education:
BSc, with an emphasis in molecular biology techniques.

Experience:
A minimum of one year of relevant experience is required. The ability to follow complex protocols and maintain detailed records is essential. Preference will be given to candidates with prior experience with library preparation and operation of high-throughput sequencing instruments, ideally in a sequencing core environment. Time management, organization, and the ability to work under tight time constraints are essential qualities.

Skills:
The candidate must have prior working exposure to a variety of molecular biology techniques, with an emphasis on highly sensitive quantitative technologies. The individual must be familiar with Microsoft products, and possess the capability to learn custom software applications. The candidate must be able to adapt to a high volume of work, and maintain ranked task priorities with minimal supervision. Due to the number and complexity of protocols, the incumbent must be highly detail oriented, have good organizational skills, strong communication skills and work well independently and within a team. Must be able to handle pressures of scientific deadlines and work collaboratively with a diverse group of colleagues. The candidate must be able to perform repetitive tasks for long periods of time.

Duties

85% Laboratory Research
Duties include

• Performing routine procedures in the construction and quality assessment/control of next generation sequencing libraries including validation of libraries with RT-qPCR and Agilent Bioanalyzer technology
• Troubleshooting library preparation challenges
• Documenting library preparation process (documenting kits, and reagents)
• Operating Illumina sequencers, monitoring sequencing runs and assessing instrument data quality in real-time. Extensive documentation procedures must be followed and is expected/required
• Serving as a resource to students and researchers for help with analysis of sequencing data
• Presenting results of experiments to other members of the team and outside collaborators
• Preparing drafts of data (i.e. figures or text) for publications or presentations as needed

15% Laboratory Maintenance
Duties include:
• Ordering and unpacking lab supplies, including reagents, chemicals, solutions and disposables and other general lab duties as assigned
• Washing and sterilizing glassware and biological waste
  • Cleaning laboratory equipment as required, and ensuring general lab cleanliness
Documenting work both in laboratory notebooks and cross-referenced electronically