Job Title: Project Worker

Position Classification: Project Worker

Job Description:

The laboratory in the UBC Life Science Institute is a biochemistry research laboratory that uses advanced electron microscopy imaging, yeast genetics, and other biochemical and molecular biology approaches to study the structure and function of protein complexes relevant to human health.

The laboratory is seeking an undergraduate student to join our dynamic team as a project worker to assist in its day-to-day operation and maintenance. Specific activities for this project worker include updating the chemical inventory, drafting standard operating procedures for equipment, writing protocols for different experimental techniques, preparing stock solutions for molecular biology experiments and protein purification, preparing liquid solid media, and culturing and harvesting yeast and bacterial cells for protein purification and functional studies.

The student will receive extensive training from the principal investigator and his graduate student and postdoctoral fellow to learn these tasks, which are of moderate complexity. If the tasks are completed in a timely manner, the student will also have the opportunity to work on his/her own research project. The student will be mentored and directly supervised by the principal investigator. He/she will meet with the principal investigator once a week to monitor work progress. Finally, the student will attend biweekly team meetings to further enhance his/her exposure to scientific research.

This position offers an excellent opportunity for undergraduate students considering a career in research to obtain work experience in a real research setting, to apply knowledge gained from classes to real life research problems, and to further develop research and communications skills through direct participation in experiment-based biochemistry research and interactions with working scientists. Such valuable experience will contribute tremendously to achieving personal learning goals, development of professional skills, and expansion of the student's professional network. Furthermore, the student will support and/or directly contribute to different research projects that will generate new knowledge and ultimately insights into curing devastating human diseases.

Qualifications:

This position is suitable to an undergraduate student enrolled in a UBC life science program (eg. biochemistry, biology, microbiology). Previous experience in working in a research laboratory would be an asset but not required because on job training will be provided. Other qualities required for the project worker include excellent organization, time management, oral and written communication skills, the ability to multi-task and work in a team environment, genuine interests in research, and attentive to details. A good understanding of safe laboratory practices and completion of the UBC biological safety and chemical safety training courses would be desirable.

Student Learning Components:

On the first day of work, the student worker will be asked to complete the Life Science Institute online orientation followed by a lab orientation conducted by the principal investigator. These orientation sessions serve to familiarize the student with the research laboratory environment, safety practices, and other laboratory policies.

While the project worker will work under direct supervision at all times and will be directly mentored by the principal investigator and his research staff, he/she will have the opportunity to directly interact with other members of the laboratory including graduate students and other fellow undergraduate trainees. Interactions with researchers from broad background will allow the student to significantly expand his/her professional network and to obtain and better understanding of different research career paths.

The project worker will report to the principal investigator once a week to discuss work progress as well as potential challenges and issues that arise in the work setting. During these meetings, he/she will also receive constructive feedback on his/her performance. The laboratory consists of 6 full-time members and all of them strive to build a supportive, collaborative, and intellectually stimulating working environment. All new members of the laboratory, including the prospective project worker will benefit from this support network, and will ensure smooth transition for the student into the new work environment.

When the project worker completed all the tasks at hand, the student worker will also be granted the opportunity to carry out his/her own research project. Through this, the student worker will acquire hands-on training in multiple advance biochemistry and molecular biology techniques, which will compliment the theoretical knowledge on these techniques he/she has learned from class. The skills acquired through the main tasks and independent research project will undoubtedly be beneficial to the student's career development, especially if he/she decide to pursue a career in laboratory-based research and/or graduate studies. We typically ask the project worker to give a short presentation of the project towards the end of the program. This is an excellent opportunity for the student to further improve his/her communication skills through learning how to organize material for a talk and delivering the presentation in a clear and understandable manner.