Research Plot Technician

The University of Minnesota Northwest Research and Outreach Center (NWROC) seeks to fill the position of a Research Plot Technician. This is a 12 month position located at NWROC in Crookston, Minnesota. The person in this position will be part of the NWROC Technical Core, a group of technical support personnel that conduct the research originating from resident faculty and researchers, St. Paul campus faculty and researchers, and related partners and collaborators who wish to conduct research projects on NWROC facilities or use NWROC resources for their research projects. The Technical Core receives and reviews research requests, deciding whether they can conduct the research and how to allocate resources. This team approach maximizes the efficiency and effectiveness of NWROC technical personnel toward realizing the center’s research mission. This position reports directly to the NWROC Director of Operations, but the responsibilities and tasks will be guided and coached by senior members of the Technical Core.

The Research Plot Technician assists in field trial site and greenhouse preparation and management under the direction of the research project leader or by following protocols submitted along with a project leader’s research request. This assistance includes participation in field-plot or greenhouse-pot layout, fertility and pest management planning, and other organizational activities. The technician’s specific tasks include soil tillage and seedbed preparation, planting, fertilizer and pesticide applications, measuring and labeling of plots, application of specific plot treatments, data and sample collection and processing, harvesting, and other tasks required for best plot management. Additional responsibilities include:

- general experimental site maintenance including scouting for agronomic performance issues and site appearance upkeep.
- set up, maintenance and repair, calibration, and operation of field-plot and laboratory equipment used for research and data collection.
- catalog inventory and place orders for research supplies, fertilizer, herbicide, and equipment.
- authority to assist in the supervision and training of part-time, temporary employees.
- Facilitate communication with project investigators (PI’s).

This person will maintain accurate and detailed activity and observation records.

A successful candidate will have a strong interest in hands-on field-trial and greenhouse research, interpersonal talents that facilitate easy communication with project leaders, supervises, and core colleagues, and will either possess the diverse skill-set needed, or has an aptitude for developing these
skills quickly. Tasks change seasonally according to the development stages of the crops involved. A percent approximation of the time spent on specific tasks is as follows:

1) 30 % - Planning and preparation of field and greenhouse experiments including those activities unique to conducting research: plot layout, specialized tillage operations and fertilizer and pesticide applications, application of plot treatments, plot maintenance, and plot harvest.
2) 20 % - General plot management and experiment site maintenance activities that include, but are not restricted to tractor operations, mechanical equipment operations, and fertilizer and pesticide handling.
3) 10 % - Record keeping that can include, but is not all inclusive of, observation notes and data collection, activity and inventory logs, pesticide application records (10%)
4) 10 % - Sample collection and processing activities that can include plant and soil selection for sampling, specific collection protocols, weighing, drying, grinding, sub sampling, packaging, and sample shipment (10%)
5) 10 % - Participate in or lead the calibration of equipment necessary for the successful completion of research tasks. Equipment can include planters, sprayers, fertilizer applicators and scales.
6) 10 % - Participate in or lead in equipment and facilities maintenance, repair, and upkeep.
7) 10 % - Maintain important records, monitor and maintain operating inventories of supplies, and place orders for plot supplies, fertilizer, pesticides, and equipment.

**Required Qualifications:** High school graduate and two years related education and/or experience related to the preparation, planting, fertilizing, spraying, and harvesting of agronomic crops as well as operation, maintenance and calibration of equipment. Must have currently or the ability to acquire a commercial driver’s license (CDL) and a pesticide applicators license. Must have general knowledge and experience of general tractor use and related farm equipment operation. Evidence of being observant, detail oriented, and be a willing participant in a team atmosphere. Must be able to perform essential functions under normal working conditions that include working outside with exposure to those weather conditions common to Crookston, Minnesota, and in the presence of potential allergens and irritants including pollen, fungal spores, and chemical pesticides in field and greenhouse environments. Evidence of effective communication, cooperation and collaboration with staff and project investigators. Must be able to lift objects up to 50 lbs.

**Preferred Qualifications:** Knowledge or experience with small plot research equipment, management and operations. Willingness to learn or have basic knowledge of Microsoft Word or Excel.