

Job Description

Job Title:	Research Technician, Scientific & Technical Resources
Department:	School of Pharmacy
Reports To:	Administrative Officer
Jobs Reporting:	None
Salary Grade:	USG 8
Effective Date:	August 1, 2017

Primary Purpose

The Research Technician, Scientific & Technical Resources is responsible for the effective management and operation of the School's Core and teaching facilities and infrastructure (equipment and services), and for ensuring an efficient and safe working environment for all those who work or learn in School of Pharmacy laboratories. While the Research Technician is not responsible for supporting the equipment and services of individual researchers outside the Core (Core facilities encompass research equipment, instrumentation and services that are funded by the School for use by all researchers in the School), there is recognition of significant overlap in these areas. When possible and where it makes sense to do so, the Research Technician will consider individual researcher needs when performing her/his duties. The Research Technician receives academic and technical direction from the School's Associate Director, Graduate Studies & Research.

The Research Technician is responsible for overseeing and for the day-to-day management of the School's Core and teaching facilities and services to ensure that they remain safe, operational and available for use at all times for scientific and technical work. This includes: monitoring the appropriate and safe use of all Core equipment and instrumentation; overseeing the maintenance of all Core and teaching equipment and services either through performing maintenance her/himself or through coordinating maintenance through outside vendors; administering and tracking financial commitments related to Core instrumentation, equipment and services with a view to ensuring best value and equitable distribution between the School of Pharmacy and its researchers; providing technical guidance on the purchase of new laboratory equipment and software, and making recommendations for the replacement of laboratory equipment; maintaining the School's equipment inventory, chemical inventory, certification requirements and service contracts and agreements; developing and delivering training programs and orientation sessions for all laboratory users.

Ensuring a healthy and safe working environment for staff, faculty, students, volunteers and visitors is paramount to this position. As the delegated Health & Safety Coordinator for the School of Pharmacy, the Research Technician, Scientific & Technical Resources is responsible for the day-to-day management of the School's health, safety and environment program and serves as Resource Person on the Health Sciences Campus' Joint Health and Safety Committee. A thorough knowledge and understanding of Policy 34 and the *Occupational Health and Safety Act*, and associated legislation is required. This includes, but is not limited to: ensuring that safety inspections for School of Pharmacy laboratories and other areas are conducted in accordance with UW policies and procedures; the creation and presentation each term of Lab Orientation sessions for all incoming students (undergraduate and graduate), visitors and volunteers; assisting and instructing all students in the use of specialized research equipment; maintaining health & safety and equipment training records.

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The Research Technician liaises and works closely with Safety Officers in UW's Safety Office, Senior Buyers and Purchasing Agents in UW's Procurement & Contract Services, Chem Stores, and outside vendors and service providers.

Key Accountabilities

List the major responsibilities of the job, divided into 3 to 5 broad categories. These should reflect 80 - 90% of "what" the job does not the "how". Insert a category heading and in bullet form below, state specific responsibilities.

Technical and Service Duties include but are not limited to:

- Monitor the overall maintenance and operation of all laboratory equipment housed in the central Core facilities for both research and teaching. The incumbent is expected to perform minor repairs, mechanical troubleshooting and diagnosis, and arrange for technical support when the equipment malfunction is beyond the incumbent's ability to repair, all the while ensuring minimal down time to users.
- Liaise with faculty members, research personnel, staff, graduate and undergraduate students to resolve specific operational problems and improve the technical activities of the Core facility; the incumbent will be aware of the current status of all equipment.
- Create and update instruction manuals, log sheets, purchase and warranty information, service and maintenance reports and other relevant documentation for all equipment.
- Develop and maintain an on-line equipment booking system.
- Coordinate certification and calibration services for Core equipment and research equipment, e.g., microscopes, autoclaves, pipettes, biological safety cabinets, balances, and submit proof of certification as required.
- Develop and maintain SOPs (Standard Operating Procedures) for all Core equipment to ensure proper use and compliance with UW safety policies and practices; work with researchers on research-specific equipment to ensure SOPs are created, available and up to date.
- In conjunction with the IT Manager, provide support and advice for the maintenance and upgrade of research computers for Core equipment.
- Act as the School liaison with Plant Operations, Safety Office, and Procurement & Contract Services, and contractors and service technicians with respect to laboratory repairs and renovations, safety regulations and procedures.
- Order parts and supplies for lab equipment, including sourcing multiple suppliers.
- Monitor and maintain an equipment inventory for Core equipment.
- Monitor and maintain a chemical inventory with appropriate Material Safety Data Sheets (MSDS) for Core and teaching facilities. Ensure that MSDS sheets (binders) for researcher-specific laboratories are available as appropriate to users.
- Work with the Associate Director, Graduate Studies & Research to develop and maintain the Core facility website.

Health, Safety and Environment Responsibilities include but are not limited to:

- Ensure safety standards are met in all laboratories and, with the Administrative Officer, throughout the School of Pharmacy.
- Make recommendations concerning procedures and regulations addressing the University's Health, Safety and Environment Program to the Administrative Officer.
- Serve as the health and safety resource to faculty, staff and students.
- Serve as the Resource Person on the Health Sciences Campus' Joint Health & Safety Committee.
- Liaise with the UW Safety Office
- Oversee the Fire Warden program for the School of Pharmacy
- Oversee the performance of monthly inspections and address any health and safety concerns by taking action or making recommendations to management.
- Assist the Director and Administrative Officer with the annual Health, Safety and Environment Report.
- Additional duties as assigned by the Administrative Officer.
- Oversee the creation of a School of Pharmacy Health, Safety and Environment webpage(s).

The Technician is expected to be familiar with a variety of specialized equipment and intimately familiar with several in order to provide hands on troubleshooting and maintenance. The following equipment is currently under the responsibility of the Technician, Scientific & Technical Resources:

- Steris LV250 Laboratory Steam Sterilizers
- Beckman Coulter Avanti J-E floor centrifuge
- Spectramax M5 microplate reader
- StepOnePlus Real Time PCR
- Dual range Metler Toledo Excellence XS Analytical Balance
- *Class II Biosafety Cabinets:*
 - Labconco, S/N: 130373714A
 - Thermo 1460, S/N: 104747-164
 - Thermo 1385, S/N: 153300-1626
- Freezers:
 - Thermo Forma -86°C ULT freezer
 - Thermo Forma -40°C model 728 freezer
 - Thermo Forma -40°C Lab freeze
- Microscopes – 16-18 items
- Pipettes – 8-10 pipettes
- Labconco 3440009, S/N: 080283526A
- Thermo Forma 1300, S/N: 159835-993
- Labconco cabinet, S/N: 130272233C
- Automatic pipettes (6 PIs) – 55 pipettes
- Dewar Liquid Nitrogen 3 vessels –monthly refilling
- Forma Series II 3110 Water Jacketed CO2 Incubators – monthly replacement of CO2 tank
- Milli-Q Gradient A10 water purification system - monthly checking of flow rate
- Sorvall Legend RT Easy set refrigerated tabletop centrifuge

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- Harvey Sterile Max bench top Autoclave
- Malvern Zetasizer Nano series
- VP-DSC (differential scanning micro calorimeter)
- VP-ITC micro calorimeter
- Alphamager HP system (plate reader-DNA\RNA on membranes, proteins, TLC plates, macro arrays, colony plates)
- Lab Line vacuum oven Model 3618
- BioPlex 200 system (suspension array system) fluorescent microplate reader
- Agilent 2100 Bioanalyzer for molecular assays
- Biotek Synergy H1 -multi mode microplate reader allows FI, FP and TRF filter based fluorescence measurements
- Hoshizaki modular flaker model F 450 MAH(-C)
- Accumet XL 60 pH-metter
- Z2 Coulter's Particle Count and Size Analyzer
- VWR unstirred water bath-monthly cleaning
- Zeiss Axio Imager A1 microscope
- Olympus SZ51 inverted microscope
- Accumet XL60 pH metter

Required Qualifications

If hiring today, what would be the required education, experience, knowledge, skills and abilities?

Education

- Master's degree in a relevant Science discipline.

Experience

- Minimum of 5 years' experience required in the use and maintenance of scientific equipment in a laboratory setting.

Knowledge/Skills/Abilities

- Excellent verbal and written communication skills, with demonstrated experience in training personnel in the use of scientific instrumentation and creating relevant training documentation and safety information. Advanced computer skills are required, as is an aptitude for learning new programs quickly. Proven ability to work under minimal supervision, including independent judgement in areas of time management, task prioritization and decision making. Ability to manage multiple, competing priorities. Demonstrated high level of customer service.

Nature and Scope

- **Contacts:** Extensive and regular contact with faculty, graduate students, staff and undergraduate students in the School of Pharmacy; regular contact with Safety Officers in the UW Safety Office and Senior Buyers and Purchasing Agents in UW's Procurement & Contract Services; Chem Stores and outside vendors and service providers. Works closely with the School of Pharmacy Administrative Officer, Associate Director, Graduate Studies & Research and Financial Officer.
- **Level of Responsibility:** The position functions with minimal supervision and is responsible for day-to day decision making in terms of keeping the laboratories up and running at all times while maintaining all health and safety protocols. Using independent judgement, required to deal with health and safety issues and emergencies as they arise.

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- **Decision-Making Authority:** Independent judgment used in handling day-to-day situations in terms of operation and maintenance of labs and equipment, and health & safety.
- **Physical and Sensory Demands:** Working conditions vary from working in an office environment to moderate demands typical of a technical position in a research/teaching laboratory environment, which may involve some lifting (up to 50 lbs). Sitting and/or standing for extended periods of time may be required. Ability to deal with emergencies (equipment and health and safety).
- **Working Environment:** Safety is a primary requirement in the operation of teaching/research laboratories. Occasional exposure to chemicals and/or fumes. Typical core working hours are required (37.5) and working outside of normal hours may be required to accommodate any potential emergency situations with the laboratories. Occasional travel associated with sourcing out equipment manufacturers and service contracts.