Role Description
Professional Managerial Roles

Role Title: Research Officer

Incumbent:

Department: Dean’s Office – Research & Graduate Services
Unit/Department Leader(s): Manager, Research Programs
Date: June 2023
Position Number (if applicable): 00005064

1. UNIT OVERVIEW:
   a) Units’ Mission (2 or 3 sentences about the overall purpose or role of the unit)
   Western Engineering’s Research Office contributes to the identification, development, and realization of the Strategic Research Priorities of the Faculty; setting Faculty research policy and strategic direction; and provides a leadership role in setting academic direction. The Research Office provides regular updates on research successes at quarterly Faculty Council meetings and compiles statistical information and other data that will facilitate the promotion of research at Western Engineering.

   b) Key Goals of the Units
   • Identify, promote and establish research funding opportunities with government agencies, private industry, and other organizations;
   • Provide guidance and support to faculty members in terms of research – e.g., grant application preparation, establishing connections with industry, preparation of research communications for faculty in Engineering;
   • Identify and implement incentives to encourage technology transfer (promotion of research and industrial collaboration);
   • Increase visibility of Western Engineering researchers and promote their successes by identifying candidates for nomination to research awards;
   • Encourage and coordinate Research Chair initiatives and programs; and
   • Ensure participation and success in major grant applications in liaison with Western Research.

2. PURPOSE OF THE ROLE: (2 or 3 sentences about why this role exists and how it contributes to the mission and goals of the unit)

The Research Officer is responsible for enhancing the overall research success and productivity within the Faculty of Engineering, in collaboration with the Manager, Research Programs, Research Officer (Industrial Relationships), Department Chair in Electrical and Computer Engineering (ECE), and the Associate Dean, Research. The role’s primary area of focus (approximately 50%) will be on enhancing research success for faculty in the Department of ECE. This will include working closely with the ECE Department Chair and faculty members to identify opportunities and increase research funding for interdisciplinary research collaborations.
between Faculties and departments at Western University. The role will also provide essential support (approximately 50%) to the other four research-intensive departments including Chemical and Biochemical Engineering (CBE), Civil and Environmental Engineering (CEE), Mechanical and Materials Engineering (MME), the School of Biomedical Engineering (BME)) and affiliated research centres within Western Engineering. The position plays a critical role in maximizing the Research Office’s capacity to support and track ongoing research work within Engineering, therefore increasing institutional capacity for maximum high impact research output. Through this work, the role plays a pivotal role in facilitating the implementation of the research components of Western Engineering’s strategic plan.

The Research Officer will ensure timely communication of relevant information to faculty, and will review, edit, and assist with preparing grant applications and research award nominations. The role will ensure that each grant and nomination conform to the policies, procedures, and criteria of Western, as well as the external agencies. The role will also work to increase research funding with an emphasis on Tri-Council funding and international opportunities. Working directly with faculty members, the role will review and/or improve grant applications and connect them to collaborators to capitalize on Tri-Council funding.

The Research Officer will promote research capabilities to external stakeholders, focusing on identifying and facilitating collaborations between academia and industry/other partners that lead to the successful development of innovative research projects, commercialization of research outcomes, and the enhancement of ECE and Western Engineering’s reputation in the research community. Through these efforts, the role helps to build and maintain mutually beneficial relationships between the Faculty and industry/community partners, ultimately contributing to the advancement of research and the growth of Western Engineering, with a focus on the ECE department.

The Research Officer will oversee the overall administration and coordination of the meetings and activities of the Dean’s Advisory Committee on Major Awards with the ultimate goal for this committee being local, national, and international recognition as a research-intensive Faculty.

3. **KEY ACCOUNTABILITIES:** (a) Summarize, in point-form, the work to be performed. (b) As applicable, indicate with whom the role collaborates to perform the work, and to whom the work is provided. (c) Indicate relevant metrics to indicate the scope of the work e.g. size of budget managed, payroll administered, or research funding administered, number of direct reports, number of students served by role, square footage of facilities managed by role, etc.

- Provides expertise to increase research funding by identifying opportunities for interdisciplinary research collaborations between faculty members, with other departments, and with other institutions, and sharing relevant funding programs to departments (4), schools (1), and affiliated research centres (5 under MAPP 7.9) within the Faculty of Engineering (Approximately 120 faculty members currently in Engineering with planned expansion over the next three years)
- Identifies, develops and maintains relationships with faculties on campus, Western Research units, and government bodies to market and promote Western Engineering’s research, ensuring connections are established with relevant faculty members and research collaborations are emerging
  - Identifies sources of research funding, encouraging and providing support to researchers to apply to these opportunities, and ensures that all submission criteria are met (200-300 grants submitted annually; $20-23M in research funding awarded annually)
  - Collaborates with the Research Officer (Industrial Relationships) & Manager,
Research Programs to leverage established or growing research collaborations to apply to government programs (e.g. NSERC Discovery, NSERC CREATE, NSERC I2I, CIHR Project, CRC, etc.), international, and student funding programs (e.g. Mitacs Accelerate, Elevate)

- Provides strategies to improve success rates in grant programs and tri-council funding, engage collaborators, and enhance research award activities
- With support from the Engineering Research Office, leads the NSERC Discovery internal review process to improve success rates across the Faculty (15-30 Discovery Grant applications each Fall)

- Collaborates with leaders to develop a mentorship program in ECE for new and mid-career faculty to assist them to grow their research groups, and develops tactics and plans for increasing the number of successful grant applications, and for maximizing utilization of research programs (approx. 40 ECE faculty researchers)
- Ensures excellent proposals are prepared by providing edits, guidance and comprehensive reviews of grant proposals, including budgets
- Reviews and provides advice on the EDI (Equity, Diversity and Inclusion) components of grant applications and award nominations
- Identifies areas of possible research collaborations and acts as a liaison to promote and develop the research
  - Collaborates with Western Research and Faculty Research Offices across campus to develop research opportunities for Western Engineering
- In collaboration with the Associate Dean, Research, Manager, Research Programs, and the Research Officer (Industrial Relationships), develops and presents workshops and information sessions to advance the Strategic Plan priorities, and ensure that faculty and researchers are aware of faculty mentorship programming and relevant processes and procedures
- Develops and implements processes and strategies to strengthen faculty research and to ensure that research grant applications and administration flows smoothly
- Supports the coordination, development and submission of grant proposals, including budget projections and preparation of funding agency progress reports as appropriate
- Maintains a current knowledge of relevant funding agency’s policies, procedures and guidelines
- Serves as a contact for funding agencies, peer institutions, and Western Research
- Reviews research budgets of investigators to ensure compliance with granting agency regulations
- Collaborates with Communications staff to develop communications and marketing material to promote the Western Engineering research portfolio (e.g. development of research related stories and faculty profiles, high profile announcements to industry, deadlines for dissemination, updates to websites, etc.)
- Coordinates and attends various events (e.g. Faculty research days, Industry Connect Event, etc.), meetings, and on- and-off site visits and tours with faculty and external collaborators, ensuring that all logistical aspects have been considered and addressed and follows-up to ensure connections occur
- Maintains databases regarding research collaborations and grant acquisitions, monitors research successes and accomplishments, identifies areas for review and ways to improve
- Analyzes data and creates reports and presentations for use by the Associate Dean, Research, Dean, and others as appropriate (e.g. grant funding data, research awards data, publication/citations statistics, etc.)
- Collaborates with the Research Awards and Distinctions staff at Western Research for the overall administration and coordination of the meetings and activities of the Dean's
Advisory Committee on Major Awards (approximately three Committee meetings per year, ~30 awards handled by the Committee per year)
  o Assists the Committee in identifying faculty nominees, provides support for external award nomination processes (e.g. drafts letters of nomination, information gathering, seeking letters of support, submissions, etc.) for selected awards and distinction programs (such as the Canadian Academy of Engineering Fellowships, Engineers Canada, Ontario Professional Engineers, as well as some internal awards), ensuring that each application meets the nomination requirements

• Attend staff meetings to share information and problem solve, volunteer for Western Engineering functions and Committees (attend and participate as able), represent Faculty at external meetings (i.e., Western Research) as delegated by the Manager, Research Programs
• Serves as backup for ROLA approvals and other members of the Engineering Research Office as needed
• Keep up with trends and emerging technologies to identify potential industry (& other) partners and opportunities for collaboration with ECE faculty members
• Promotes the ECE department's research capabilities to external stakeholders
• Helps to build and maintain mutually beneficial relationships between the ECE department and industry (& other) partners, ultimately contributing to the advancement of research and the growth of the ECE department
• Provide regular reports and updates to ECE department on industry partnerships and research collaborations

4. OUTCOMES THE ROLE IS TO ACHIEVE: (5 to 8 key results that will be in place by performing the work described in “Key Accountabilities”) Examples

• Increase the number and diversity of partnerships
• Identify and establish new partnerships with a diverse range of stakeholders, including small and large companies, startups, government, and non-profit organizations for faculty members
• Facilitate the development of research projects with partners for faculty members
• Facilitate and empower faculty members in attracting an average of $400,000 in new research funding each year (involving at least 5 ECE researchers)
• Tri-council funding is increased through a) increased number of funding applications and b) stronger funding proposals
• Workshops are well coordinated for faculty, researchers, students and postdoctoral scholars to improve success rate in tri-council funding and research award nominations
• Faculty receive informed guidance regarding grant application processes and how to write grant proposals
• Research data (e.g. funding levels, research awards, research outputs) is closely monitored to identify areas that require attention
• Research award nominations are well written with strong probability of success
• Researchers are supported to improve their grant funding levels and collaborations across campus
• Prompt, well-researched, and clear communications are delivered to faculty and staff regarding mentorship programming
• Increased number of grant application for international funding programs
• Skillful coordination of multiple, competing deadlines for grant programs with high-volume applications
5. **Problem Solving and Authority for Decisions** *(List a few examples of complex or challenging issues regularly encountered in this role where it requires the incumbent to identify or recommend a solution e.g. issues with respect to service delivery, planning, human resources, students, facilities, or other areas. For each example, indicate who is affected by the solution e.g. clients, colleagues, Department, Faculty, University)*

   a. **Examples of issues** that the incumbent is expected to resolve independently and **Who is affected:**

   - Responding to complex, unusual, and sometimes sensitive enquiries from faculty, staff from within and outside the University
   - Resolving problems related to grant preparation (for faculty) including coordination and data collection
   - Resolving issues with granting agencies on matters relating to errors, omissions, interpretations and deadlines for applications and reports
   - Advising faculty members on mentorship programming and grant application issues and processes, including budgets, data collection, EDI strategies and knowledge mobilization plans
   - Reviewing, editing, and providing feedback to improve award nominations and grant applications, and review proposed budgets
   - Identifying and communicating information on new funding opportunities, cross-departmental linkages, interdisciplinary research and collaborative partnerships
   - Developing templates and other aids to assist faculty with grant applications and award nominations
   - Identifying opportunities to improve current processes and practices and implement changes

   b. **Examples of issues** where incumbent requires approval and/or consultation with supervisor or others to resolve and **Who is affected:**

   - Coordinating, in consultation with Manager, Research Programs and Associate Dean, Research, workshops for faculty, researchers, and students to improve success rate in tri-council funding
   - Collaborating with the ECE Chair and Manager, Research Programs to develop mentorship programming for ECE researchers to increase grant funding coming to ECE
   - Authorizing and/or resolving budget over-expenditures, changes in funding, or faculty members using funding in ways that do not comply with University and funding agency policies and requirements
   - Introducing significant changes in established priorities and processes
   - Managing major research proposals, and collaborative proposals impacting other faculties or institutions
   - Determining priorities for research workshops, initiatives and the mission, goals and research strategy of the Faculty

   c. **Pre-established Guidelines for Decisions** *(e.g. List key University policies, Western collective agreement articles, legislation, professional or other standards that specify the way the role must perform certain tasks or make certain decisions)*

   - Western Engineering policies and Strategic Plan
   - Western University Strategic Plan and Strategic Research Plan
   - Manual of Administrative Policy and Procedures (MAPP)
6. **SUPPORT AND RESOURCES:**

a. **Leadership:** Who provides the incumbent with work expectations, coaching, development support, formal performance feedback and evaluation?

The Research Officer will work with the Manager, Research Programs and ECE Dept Chair, where applicable, to establish priorities and work assignments. The Manager, Research Programs will provide performance feedback and coaching regularly, and oversee the annual review Performance, Dialogue and Goal Setting process to design and establish the professional development plan and goals, collaborating with the ECE department chair, where applicable.

b. **Colleagues & Key Resource People:** With whom does the incumbent regularly collaborate to receive or share information and engage in problem-solving relevant to their role?

- Dean’s Office leaders and staff – Dean; Associate Dean, Research; Associate Dean, School of Graduate and Postdoctoral Studies; Director of Administration; Director of Finance; Director of Development; Director of Experiential Learning and Student Experience; Manager, Research Programs
- Staff in the Engineering Research & Graduate office – Research Officer (Industrial Relationships), Graduate Officer, Administrative Assistant, Part Time Grant Reviewer, Graduate Affairs Assistants
- Department Chair and/or leaders, staff in all departments/units of Western Engineering
- Affiliated research centres (ICFAR, FIP, WindEEE, BLWTL, etc.) within the Faculty of Engineering
- Faculty, staff, researchers in Engineering and across campus
- Staff in Western Research, Western International, Research Finance, research staff in other faculties
- Industry partners and other internal/external stakeholders related to research
- Funding sponsors

c. **Other:** List any specialized training, equipment, resources, or other supports required for success in this role (e.g. Peoplesoft training, lab safety, mobile devices, private space, protective equipment, etc.).

- (Semi-)private office location
- System access to databases and information relevant to the accountabilities of the role, including PeopleSoft HR and Finance, Research On-line Administration
- Research funding submission requirements and reporting guidelines
- Research Ethics Board requirements and reporting guidelines
7. **WORK CONTEXT:**

*ATTACH an organization chart that shows to whom the role reports, key peer relationships and whom the role supervises if applicable.

8. **REQUIREMENTS TO PERFORM SUCCESSFULLY IN THE ROLE**

   **a. Professional Qualifications & Education**

   *Minimum Required:*
   
   - Undergraduate Degree

   *Preferred:*
   
   - Undergraduate or Master's degree in an Engineering or Science related discipline preferred

   **b. Experience**

   *Minimum Required:*
   
   - 4 years
Experience:
- Experience working in an academic research environment with faculty, researchers, and partners
- Experience preparing/writing/reviewing research grants and proposals
- Experience working as part of a research team, preferably in an engineering or science related discipline

Preferred:
- Experience working in a science-related faculty (Engineering, Science, Medicine, etc.) with exposure to grant-funded multi-disciplinary research projects
- Experience working on international grant applications, such as to the EU (European Union) Research and Development Programs
- Experience working on NSERC Discovery, CIHR Project programs
- Experience working on major award programs and distinctions, such as Royal Society of Canada, the Canadian Academy of Engineering Fellowships, Engineers Canada and/or Ontario Professional Engineers Awards
- Experience in reviewing and providing feedback to EDI (Equity, Diversity and Inclusion) statements drafted for grant applications to federal and provincial level funding programs

c. Knowledge, Skills & Abilities: *(Describe the knowledge, skills and abilities needed to perform the role successfully [including the use of specialized equipment]*)

Examples
- In-depth knowledge of the best practices for reviewing and writing grant proposals and of Canadian peer-review granting systems, processes and procedures
- Ability to research new avenues of funding from federal granting agencies, industry and other funding sources
- Comprehensive knowledge of data related to sponsored research, institutional rankings, and research impact
- Knowledge and familiarity with industry challenges, trends, opportunities, and key players and organizations
- Understanding of the role of government agencies, funding bodies, and other stakeholders in supporting industry-academia collaborations
- Ability to leverage industry connections and networks to support research initiatives and projects
- Excellent communication and interpersonal skills to interact effectively with faculty members, industry partners, and other stakeholders
- Strong organizational and project management skills to plan and coordinate research activities and collaborations
- Analytical and problem-solving skills to identify research opportunities and assess risks and benefits of potential partnerships
- Attention to detail to ensure accuracy and completeness of research proposals and other documents
- Ability to work independently and prioritize tasks in a fast-paced environment with excellent time management skills
- Adaptability and flexibility to respond to changing priorities and requirements
• Proficiency in data analysis and report writing to prepare regular reports and updates on research collaborations.
• Proven organizational skills to anticipate, plan and balance multiple priorities with many interruptions with the ability to meet and cope with the stress of deadlines and maintain accuracy.
• Ability to manage multiple projects efficiently and thrive in a highly dynamic environment.
• Familiarity with financial statements preferred with the ability to ensure expenditures and resources are within allotments, and to make appropriate modifications when required.
• Ability to assess clients’ needs, suggest options, overcome objections, and move forward.
• Project management skills to manage multiple projects simultaneously from conception to completion within tightly prescribed timelines.
• Ability to collaborate across internal and external boundaries to meet common objectives, improve outcomes and support work beyond one’s own unit.
• Attention to detail and proofreading abilities with an excellent command of the English language.
• Oral and written communication skills with an emphasis on proposal development and with an ability to complete detailed analytics and reports, translate information into easily understood terms, summarize information and provide a rationale for action.
• Ability to understand researchers needs and expectations and provide excellent customer service to directly and indirectly satisfy expectations.
• A desire to grow and advance skills, which is demonstrated by attending conferences, workshops and other professional developmental opportunities to enhance performance.
• Professional manner, tact, diplomacy and discretion in dealing with associates and colleagues including senior management.
• Ability to work within a flexible schedule to accommodate the Faculty and University’s events and activities.
• Ambitious with the ability to identify opportunities, develop action plans and set challenging goals in order to achieve desired outcomes.
• Advanced computer skills in Microsoft Office Suite (Word, Excel, PowerPoint) to complete spreadsheet design and database management and to develop grants, reports and presentations; Knowledge of Power BI would be an asset.
• Ability to understand, interpret and effectively communicate University guidelines, policies and practices to key stakeholders.
• Ability to evaluate issues, recognize potential problems and take action to proactively resolve issues.
• Ability to respond to competing and sometimes conflicting requests from multiple leaders in a diplomatic, transparent, and professional manner.
• Familiarity with Western Policies and Procedures relating to research preferred.
• Knowledge of university ranking bodies and methods preferred.
• Familiarity with EDI best practices preferred.

d. **Background Checks Required** *(Type a “Y” to the left of any required background checks)* [More Information]

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<th>Education Verification</th>
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Revised March 24, 2014
9. **WORKING CONDITIONS** *(Type a “Y to the left of any applicable conditions where they are a regular part of performing the role. Note: “Regular” is defined as daily or almost daily)*

- **Physical Effort:**
  - [Y] Computer workstation
  - [Y] Extensive walking
  - [Y] Lifting/pushing heavy objects
  - [Y] Squatting/awkward positions
  - [Y] Climbing
  - [Y] High Repetitive movements
  - Other:

- **Physical Environment:**
  - [Y] Normal Administrative Office Environment
  - [Y] Driving on behalf of employer
  - [Y] High noise level
  - [Y] Exposure to welding equipment and fumes
  - [Y] Extremes of temperatures
  - [Y] High dust concentrations
  - [Y] Potential exposure to hazardous substances
  - [Y] Exposure to contagious illnesses
  - [Y] Exposure to chemical or biological agents
  - [Y] Exposure to occupational injuries
  - Other:

- **Sensory Attention:**
  - [Y] Prolonged periods of listening/reading/watching/observing
  - [Y] Smelling, tasting, touching
  - [Y] Monitoring video displays
  - [Y] Auditing
  - [Y] Technical troubleshooting
  - Other: attention to detail

- **Mental Demands:**
  - [Y] On-call responsibilities outside of normal schedule
  - [Y] Odd and irregular schedule of hours
  - [Y] Requirement to travel out of town
  - [Y] Unpredictable workload
  - [Y] Isolation or boredom
  - [Y] Other: frequent interruptions