

Job Description

Job Title:	Director Research and Innovation Partnerships
Department:	Dean of Mathematics
Reports To:	Associate Dean, Innovation and Entrepreneurship (ADIE)
Jobs Reporting:	N/A
Salary Grade:	USG 15
Effective Date:	December 2019

Primary Purpose

The primary objective of the position is to promote mathematical innovation and entrepreneurship growth to meet or exceed Faculty targets by raising the profile of research, initiating and developing industry relationships, and ensuring more research funding, in part by focusing on industry collaborations and partnership grant opportunities. S/he serves a vital end-to-end function in the growth, promotion, advancement and management of mathematical innovation and entrepreneurship activity on and off campus, encompassing five key accountabilities:

1. Planning and undertaking new research initiatives as part of the ADIE's team.
2. Participating directly in imagining, initiating, and developing more successful proposals for research, often involving teams in collaboration with industry and other external stakeholders.
3. Facilitating the establishment and success of research centres and institutes, promoting them to grow research collaborations with industry, and interdisciplinary research.
4. Developing industry relationships and successfully completing agreements for industry funding, in collaboration with the Office of Research, or building on opportunities arising from the efforts of Advancement and Development officers within the Faculty and centrally, as part of large research grant initiatives or to advance the programs of research institutes and centres.
5. Act as the "face of Math" to make Math research a top prospect at organizations that support commercialization and entrepreneurship, both within UW and outside, and facilitate researchers' access to such organizations.

Key Accountabilities

Guiding and supporting research, innovation and entrepreneurship growth and raising the Faculty of Mathematics profile to advance the faculty's strategic research agenda, including but not limited to:

- Providing leadership and direction in strategic planning activities to increase research, with a focus on highlighting its relevance to industry, and to advance innovation and entrepreneurship in the Faculty of Mathematics in the short- and long-term. Working closely with the ADIE and the ADR to define and advance faculty research goals; in this capacity, s/he monitors and evaluates progress against proposed objectives, identifies gaps in performance and capacity, and develops strategies to address Faculty priorities and meet and exceed Faculty targets.
- Developing and overseeing implementation of faculty- and department-level strategic recommendations, including communicating the Faculty's strategies to encourage increased research funding, external research collaborations, and access to the entrepreneurship ecosystem.
- Working closely with the ADIE to identify and develop opportunities to establish new research initiatives and grow existing programs. This includes increasing, strengthening and diversifying research funding sources, developing strategies to improve success rates in major Federal and Provincial award programs, and maintaining a working knowledge of significant developments and

trends related to national and global economics, innovation, and technological development to ensure research programs are strategically positioned to respond to emerging issues. Work with the ADIE to understand and connect the Math Faculty to University and local technology association initiatives to support entrepreneurship, including WatCo, GEDI, Velocity, the Accelerator Centre and Communitech.

- Soliciting and orchestrating direct funding opportunities from government ministries at both the provincial and federal levels.
- Managing relationships within the research community on campus, as well as interactions with external financial partners, industry, academia and alumni.
- Business and financial planning to establish viable strategic, tactical, and operational targets in close collaboration with the ADIE
- Working closely with the Development and Communications teams to develop and maintain a clear and integrated strategic communications plan to increase visibility of Faculty of Mathematics research and influence stakeholders.
- Working with the Development and Communications teams to identify Math research success stories, organize funding announcements and media events, develop and produce materials to promote research programs and activities, and grow the Faculty of Mathematics research 'brand'.
- Communicating potential research opportunities to departments and individual faculty researchers, assessing their viability for possible follow-up.

Providing leadership to individual researchers, supporting development and ongoing success of major research proposals, including but not limited to:

- Identifying opportunities for major research projects, including sources of funding, potential internal team members (taking interdisciplinary collaboration initiatives into account), and external industry partners who might sponsor or use the research, as well as non-industry partners and stakeholders.
- Providing guidance and direction in preparation, coordination, implementation and reporting on major funding proposals. This may involve acting as a de facto member of the research team, to ensure a proposal of the highest quality.
- Providing guidance and coordinating efforts related to financial and technical reporting on major projects, assisting with internal and external audits.
- Establishing and communicating internal deadlines for submission and review of research proposals to department Chairs, faculty, and centres/institutes.
- Developing and distributing reference material to aid proposal development.
- Organizing and chairing in-house workshops, information sessions, and panel discussions on upcoming government/industries funding opportunities. This includes securing relevant agency and industry speakers to instruct faculty researchers on program guidelines and proposal development.
- Final review of applications to ensure compliance with agency evaluation criteria and university guidelines, including budgets. This includes advising the ADIE on proposal quality and likelihood of success.
- Assessing riskiness of Interim Research Account authorization along with Office of Research pre-awards staff and Faculty Financial Officer, and recommending action to the ADIE.
- Coaching and mentorship of faculty researchers in approaching, securing and extending industry partnerships.
- With growth, we expect the incumbent to provide leadership and oversight within the Faculty for high-profile and mission-critical funding programs, including the Ontario Research Fund program, Canada Foundation for Innovation programs, and other key federal and provincial research programs. Also, provide expert counsel to Mathematics faculty members and staff on securing competitive research funding and effectively communicating their research goals and successes to stakeholders.

- Encourage researchers to be aware of, and apply for, awards administered by the ADR and external awards such as Stacie and Killam awards.

Facilitating development and growth of faculty-wide research institutes and centres, including but not limited to:

- Developing industry relationships and bringing new companies to participate in institutes and centres.
- Providing leadership to Managing Directors of existing institutes/centres, directing establishment of appropriate research goals, performance metrics, strategic direction, and communications plans to ensure activities align with Faculty of Mathematics objectives
- Communicating research opportunities to Managing Directors and the broader membership of the Centres/Institutes
- Identifying synergies within and between institutes/centres, promoting communication and collaboration in establishing large multi-disciplinary and inter-disciplinary projects
- Monitoring performance and coordinating year-end reporting activities. This includes collecting, evaluating and summarizing performance against priorities and performance targets, and effecting changes required for improvement
- Identifying and overseeing cross-promotional opportunities, raising the profile of research groups/centres/institutes and the Faculty in general
- Identifying opportunities for and providing leadership in the development of new institutes/centres and institutes in the Faculty of Mathematics, and the participation of mathematics and computing researchers in other institutes University-wide.

Developing and maintaining external partnerships, including but not limited to:

- Initiating and cultivating meaningful and productive interactions with prospective industry, academic, and government partners. This includes delivering the Mathematics research value proposition, helping potential partners identify and articulate a business problem, then connecting them with mathematics and computer science research talent on campus who can provide research support. Cultivating long term relationships to understand the industry partners' business and challenges, to anticipate the partners' needs which our researchers can fill, and can describe those opportunities in larger grants and other supporting documentation.
- Preparing draft agreements tailored to the specifics of a given research collaboration with a company or other partners.
- Liaisoning with the Office of Research to initiate and manage research agreements, including intervening to solve problems when some aspect of the conditions or requirement of a contract are in dispute.
- Stewarding existing relationships, including managing and growing partnerships and tracking outcomes.
- Coordinating and providing direction to UW Industrial Liaison Officers and Department and Faculty liaison staff to build an effective network of industry partnerships.
- Collaborating with Development and Alumni Affairs teams within and outside the Faculty, to ensure relationships with current and potential supporters include research collaboration and sponsorship wherever possible.
- Coordinating and participating in campus visits, events, workshops, and conferences that bring together potential partners and Faculty of Mathematics researchers

Ensuring commercialization and entrepreneurship:

- Guide and facilitate individual faculty, labs and research groups in accessing pathways for commercialization and entrepreneurship.
- Share best practices and experiences of others in protecting their intellectual property and exploiting it through commercialization.

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- Participate in activities in the entrepreneurship ecosystem, including WatCo, Velocity, the Accelerator Centre and Communitech, to keep research in the Faculty of Mathematics “top of mind” at these organizations and to continuously update researchers in Math about the opportunities to benefit through initiatives at these organizations including partnerships, start-ups, and collaborative laboratories.

**All employees of the University are expected to follow University and departmental health and safety policy, procedures and work practices at all times. Employees are also responsible for the completion of all health and safety training, as assigned. Employees with staff supervision and/or management responsibilities will ensure that assigned staff abide by the above, and actively identify, assess and correct health and safety hazards, as required.*

Required Qualifications

Education

- Master’s degree required; doctoral degree and/or Master of Business Administration degree strongly preferred.

Experience

- 5-10 years in research or research administration. Experience in an academic institution is preferred.

Knowledge/Skills/Abilities

- Effective communication skills (both written and oral), including the ability to prepare and deliver presentations to large, diverse audiences.
- Outstanding interpersonal skills, including the ability to manage both internal and external relationships. The incumbent must have the ability to move seamlessly within academic, business, industrial, and governmental communities, being equally comfortable with students, faculty researchers, senior executives from small, medium and large, multinational corporations, and government officials
- Strong managerial skills, including the ability to manage and motivate personnel
- Proven leadership skills, including the ability to define and implement strategic plans for advancement of large programs, and to build collaborative research opportunities with diverse groups
- Excellent analytical skills and business acumen, including the ability to identify and articulate significant trends affecting economic, social and environmental priorities and how they will impact innovation and technologies development
- Effective critical thinking and decision making skills
- Ability to prepare and manage a complex budget
- Ability to balance competing demands on tight deadlines within a results-oriented environment
- Advanced knowledge of SharePoint, Salesforce and the Microsoft Office suite, particularly Word, Excel and PowerPoint. Working knowledge of web-design tools and software.

Nature and Scope

Contacts: Internally, the Director Research and Innovation Partnerships presents, discusses information and problems with:

- Dean of Mathematics

Collaborates, negotiates and “sells” ideas with:

- Associate Dean, Innovation and Entrepreneurship
- Associate Dean, Research

Obtains action, reaches agreement and negotiates with:

- Office of Research staff at all levels

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- Director of Planning
- Director of Development and Communications
- Waterloo International staff
- Communications and public affairs staff
- Office of Development staff
- Office of External Relations staff
- Finance staff and Faculty Financial Officer

Deals with, influences, and motivates:

- Mathematics faculty and staff
- Faculty Industrial Liaison Officers
- Executive Directors and Managing Directors of faculty-wide research centres and institutes

Externally, deals with, influences, and motivates:

- research partners
- Various funding agencies
- Industry partners
- Provincial and federal government
- Canadian and international universities
- **Level of Responsibility:** Manage a faculty-wide function or process that is highly specialized and has direct supervision of others, including staff involved in the support of research in the Dean of Mathematics office, ADIE and ADR offices, and departments in Math, temporary employees and co-op students.
- **Decision-Making Authority:** Informs the ADIE on matters related to risk in research activities, and makes recommendations on the approval of research proposals. Makes decisions on timelines, budget allocation, staffing resources to meet stated objectives.
- **Physical and Sensory Demands:** Minimal demands typical of an administrative position within an office environment.
- **Working Environment:** Occasional travel required. Regular working hours, some evening/weekend work required. No significant physical or psychological risks. Minimal exposure to disagreeable conditions typical of a supervisory position.