

Job Description

Job Title:	Manager, Graduate Studies and Postdoctoral Programs
Department:	Institute for Quantum Computing
Reports To:	Associate Director, Administration
Jobs Reporting:	Program Assistant and/or temporary administrative staff
Salary Grade:	USG 7
Effective Date:	May 2021

Primary Purpose

The Manager, Graduate Studies and Postdoctoral Programs is responsible for providing oversight and management of the Institute for Quantum Computing Graduate Studies Program and the Postdoctoral Fellowship Program. These programs recruit highly qualified, international and domestic candidates and fosters an environment to prepare this new generation of researchers in the specialized field of quantum information research. These programs encourage collaboration and professional development of researchers and enables students and postdoctoral fellows to build relationships with experts in academia, industry and government, focused in science, math and engineering as it relates to quantum research.

The incumbent facilitates the full cycle experience which involves recruitment, hiring, professional development and seek funding opportunities for students and postdocs. The incumbent also works closely with IQC senior management, academic faculties and campus partners. This role is responsible for the data and statistics around these researchers. This data is highly relevant when reporting to government funding agencies and industry partners. The incumbent would supervise administrative staff who also support these two programs.

Key Accountabilities

Graduate Student Program

- Leads initiatives to support the academic graduate programs in Quantum Information through Faculty of Science, Math and Engineering
- Manages international and domestic student recruitment
- Identifies strong applicants; invites and organizes visits for such applicants
- Organizes a welcome event each fall, where new and current students have an opportunity to meet each other, and learn about the areas of research at IQC; includes presentations by faculty members and Program Director
- Work with IQC Communications team to design and maintain website to showcase the program and inform prospective and current students, stakeholders and the general public about the Quantum Information Graduate Program and its activities
- Work with IQC Communications to create promotional materials for recruitment and event purposes
- Advises other IQC staff, GSPA staff, and student volunteers on program's unique features and strengths so they may also represent IQC at events

CryptoWorks21 Training Program for Graduate Students

Job Description



- Leads initiatives to support the academic graduate programs in Quantum Information and the CryptoWorks21 training program. Consults with Program Directors on activities, issues, and developments related to the programs and on matters pertaining to the overall goals of the program
- Support the CryptoWorks21 Management Team in the program development and execution by establishing and overseeing the working groups, coordinating events, developing and initiating a student recruitment strategy, measuring and maintaining performance indicators, securing funding and recruiting industry/government mentors and collaborators

Postdoctoral Fellowship Program

- Leads initiatives and provide support for the Postdoctoral Fellowship Program at IQC
- Create and post job posting advertisement in global publications for IQC postdoctoral fellow positions following University of Waterloo advertisement guidelines
- Manage the postdoc application system and applicant pool and work with IQC Postdoc Hiring Committee with decisions and job offers
- Create a workflow plan for hiring paperwork and liaise with administrative assistants of seven academic home departments to ensure appointment forms and offer letters are timely and records are accurate
- Work with Legal and Immigration Services at the university to ensure proper immigration paperwork has been processed and completed for international candidates
- Welcome new candidates prior to arrival and offer information regarding the university and Waterloo Region
- Onboarding and Orientation: Prior to arrival notify appropriate IQC staff including reception, IT and space planning team to ensure professional welcome
- Maintain all details for contract renewals for all IQC affiliates and associates

Program Enhancement and Promotion

- Organizes regular meetings with graduate students and postdoctoral fellows, to discuss issues and updates to the programs, and to obtain feedback on overall graduate student and postdoctoral experiences; uses feedback to implement changes to the program where appropriate
- Seek opportunities for graduate students and postdoctoral fellows such as exchange programs, industry or collaborative opportunities and potential job opportunities
- Look for opportunities to share successes of graduate students and postdoctoral fellows to a broader audience
- Work with IQC Outreach team for outbound opportunities to promote IQC, such as grad fairs, events and conferences
- Oversee Quatrium (intranet) information for these groups to ensure information is relevant and accurate

Promotion of Equity Diversity and Inclusion Initiatives

- Work with the IQC Equity, Diversity and Inclusion Committee and the Human Rights, Equity and Inclusion Office on opportunities to promote EDI initiatives at IQC by seeking and promoting speakers, hosting events and/or conferences and providing resources
- Work with students and postdocs to create and promote a *Women in Quantum* group

Financial Responsibility

- Graduate Student Scholarships: manage the nomination process and budget of internal IQC scholarships – approximately \$330,000/year
 - Mike and Ophelia Lazaridis Fellowship
 - IQC Entrance Award

Job Description



<ul style="list-style-type: none">○ IQC Achievement Award○ IQC David Johnston Award for Scientific Outreach○ Raymond Laflamme and Janice Gregson Graduate Scholarship for Women in Quantum Information Award○ new scholarships that may arise● CryptoWorks21<ul style="list-style-type: none">○ Manages CryptoWorks21 scholarships and awards, including the RBC Thesis Award and RBC Scholarship○ Advises faculty on student salaries, taking into account: program, internal and external scholarships, previous salary, tuition; must be familiar with all internal and external funding options● Research and Teaching Assistants<ul style="list-style-type: none">○ Oversee payments for IQC funded Research and Teaching Assistant positions● Postdoctoral Fellows<ul style="list-style-type: none">○ Ensure formulas for shared salaries are accurate○ Ensure salaries paid from research grants comply with university and funding agency guidelines○ Notify IQC Finance regarding external billing and the schedule for invoicing for those parties, such as Perimeter Institute and other universities
<p>Data Analysis and Reporting</p> <ul style="list-style-type: none">● Keep detailed records and statistics for quarterly and annual reporting purposes for government and industry partners, including incoming, current and former postdocs and students● Provide overview and summary of statistics of two programs and record of alumni career paths for institute reporting● Provide overview and summary data on IQC financial support of these two programs● Maintain thorough records on institute systems and database regarding members, including postdoctoral fellows, associates/affiliates and graduate students

**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

<p>Education</p> <ul style="list-style-type: none">● University Degree required
<p>Experience</p> <ul style="list-style-type: none">● 3+ years of experience in roles with increasing levels of responsibility, preferably in a university environment● An understanding of academic research environments, in particular the experience for graduate students and postdoctoral fellows● Previous experience with data management and analysis● Experience working independently and also in a collaborative, team-based environment
<p>Knowledge/Skills/Abilities</p> <ul style="list-style-type: none">● Apply an innovative approach as an advocate for graduate students and postdoctoral fellows

Job Description



- Strong organizational, problem solving, decision-making, and critical thinking skills
- Time management skills, ability to manage multiple priorities with accuracy on tight deadlines
- Demonstrated knowledge of policies around graduate studies and postdoctoral affairs including immigration
- Demonstrated ability to handle confidential information with discretion and tact
- Experience with uWaterloo campus application systems and IQC internal application system

Nature and Scope

- **Contacts:** Significant internal and external relationships for this position include: Grad Coordinators, Graduate Program Managers, and administrative staff from Physics, Chemistry, Applied Math, Pure Math, Computer Science, Combinatorics and Optimization, and Electrical and Computer Engineering; IQC Administrative Team, IQC Associate Director of Finance, IQC Outreach Manager, IQC Communications Team, Staff working with TQT program, Perimeter Institute Program Manager and Financial Officer; GSPA office staff for Awards, Records and Scheduling
- **Level of Responsibility:** The incumbent must possess good judgement, initiative and flexibility regarding competing responsibilities, with minimal supervision and working with a high level of autonomy.
- **Decision-Making Authority:** Accountable for establishing priorities, timelines and deadlines as required
- **Physical and Sensory Demands:** Minimal demands, typical of a management staff position operating within an office environment
- **Working Environment:** Minimal exposure to disagreeable conditions, typical of a management staff position exposed to stress and pressure associated with this level of responsibility. Work outside the normal operating hours of the institution can be expected in this role