



UNIVERSITY OF
WATERLOO



Institute for
Quantum
Computing

Director, Institute for Quantum Computing

University of Waterloo
Waterloo, Ontario, Canada

The Institute for Quantum Computing (IQC) seeks to appoint a new director. This is a unique opportunity to shape the global future of quantum information science and engineering. IQC is well connected internationally and the directorship provides an effective platform for sharing visions of a quantum future. Quantum information is an established strategic priority of both the University of Waterloo and the government of Canada. The Director of IQC plays a critical role in the leadership of the institute by setting its overall strategic direction, cultivating key external relationships, and ensuring that it delivers against its mandate. The Director of IQC reports to the Vice President, University Research at the University of Waterloo.

IQC is a multidisciplinary research center at the University of Waterloo, dedicated to the development and advancement of quantum information science and technology. Established 15 years ago, it spans the Faculties of Mathematics, Science, and Engineering, and today has an annual budget of approximately \$25 million and includes 27 faculty members and 37 postdoctoral fellows. IQC is exceptionally well outfitted for advancing quantum science and as a welcoming meeting place for researchers. It has 58,000 square feet of laboratory space in three facilities, including purpose-built laboratories for nano-fabrication, metrology, and ultralow vibration experiments. IQC's primary location, the Lazaridis Quantum-Nano Centre, was designed to facilitate interactions and includes ample space for discussions and collaborative research. In addition to its internationally recognized research, IQC offers a unique interdisciplinary graduate program in Quantum Information to approximately 105 students. It also runs a variety of outreach programs, including the USEQIP summer school for undergraduates and the Quantum Innovators workshop for aspiring faculty candidates. IQC is supported by a strong administrative staff, including finance and communications personnel, <https://uwaterloo.ca/institute-for-quantum-computing/>.

IQC sits within the Quantum Valley ecosystem, with partners including the Perimeter Institute for Theoretical Physics and Quantum Valley Investments; more than 250 researchers work within 1km of IQC to advance the science, technology and commercial impact of quantum information. Investment in the Quantum Valley (governmental, industrial, philanthropic, and academic) now totals \$1.5 billion CAD. Looking ahead, IQC is poised for a significant expansion through a recent \$76 million CAD award by the Canada First Research Excellence Fund, with a targeted complement of 40 faculty members.

Attractive factors include stable funding, including an endowment of more than \$100 million CAD, the potential for significant faculty hiring (approximately 12 faculty members), and the established, internationally recognized excellence of IQC's comprehensive and

multidisciplinary approach to quantum information. In addition, the Director will have significant start-up funding to establish their research program.

The successful candidate will share the institute's core values for excellence in teaching and research; will have a bold strategic vision for the future of quantum information science and engineering; and will continue to build IQC through shared enthusiasm with faculty, staff, students, government, and industrial partners. The successful candidate will be able to recognize excellence broadly across the disciplines that comprise quantum information, and will lead the institute's academic program, maintain a vision for research, strengthen the institute's research infrastructure, and lead its hiring of exceptional new faculty. In addition, the successful candidate will supervise IQC's administrative and technical staff teams, promote collaborative efforts, support faculty led initiatives, and represent the institute's commitment to faculty, student, and staff member inclusion, openness of processes, and equitable hiring and research practices.

Candidates for the position of Director of IQC are senior scholars in quantum information with leadership experience in an academic setting. They must be a leading authority in quantum information broadly, and have a demonstrated ability to maintain a research program of the highest calibre. The successful candidate will be an effective communicator in and out of a university setting, willing to share their visions at the national and international levels. Researchers in all areas of quantum information science and technology are encouraged to apply.

Term

The term of the appointment is five years, with the potential for one-time renewal. The successful candidate will hold a professorial appointment in an appropriate discipline within the Faculty of Mathematics, Science, or Engineering and will retain that position at the conclusion of their directorship. It is anticipated that the director will also be appointed to a position of Associate Faculty at the Perimeter Institute for Theoretical Physics.

Application procedure

IQC has retained the firm Boyden to assist with this appointment. Please contact Michael Naufal and Jessa Chupik at mnaufal@boyden.com or jchupik@boyden.com for further information.

Closing date

The review of applications will begin on March 15th, 2017 and will continue until the position is filled.

Equal Opportunity Employer

The University of Waterloo respects, appreciates and encourages diversity. We welcome applications from all qualified individuals including women, members of visible minorities, Aboriginal peoples and persons with disabilities. All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority.