

# Rotman Institute of Philosophy

## Strategic Plan 2011–2016

### Preamble

The Rotman Institute of Philosophy, created in November 2008, is an emerging hub at the University of Western Ontario for interdisciplinary research and training at the interface of the humanities and the sciences. The first three years of the Institute have witnessed an expansion in faculty and graduate student membership, a move into larger and more centrally located space, and the creation of innovative programs. As we look forward to the next five years, the challenge is to build excellent research and training programs on a foundation of strategic alliances. This plan outlines strategic priorities that will enable us to achieve our goal.

### Goal

*In five years, the Rotman Institute of Philosophy will be an internationally recognized forum in which philosophers and other humanists engage scientists on problems of global relevance.*

### Engaging Science and Scientists

The external review of the Rotman Institute of Philosophy conducted on October 24, 2011 summarized accurately both the state of contemporary philosophy and the opportunity before us.

“The Rotman Institute can play an internationally significant role as a renowned center where philosophers work on genuinely important philosophical issues that arise in the practice of science, and it can engage the public in these issues as it does so. This mission is particularly important today because much of professional philosophy, especially in the most elite departments, has turned into an exceedingly abstract and esoteric enterprise that is...increasingly removed from the pressing philosophical concerns of investigators across the academy. Yet, philosophy...should be relevant to research across all disciplines. The Rotman Institute can be an international center of excellence showing what can be accomplished when philosophers engage science and scientists.”

Our plan for the next five years stems from a recognition of this opportunity and a desire to seize it.

The Institute's vision is to become an internationally recognized center for research and training in the ethics and epistemology of science; to build collaborations that span the humanities and the sciences; and to provide leadership in public debate on science. Identifying, developing, and sustaining productive collaborations with scientists at Western and beyond is the key to achieving all aspects of this vision. We know from experience that interactions between scientists and philosophers produce a special synergy as they give rise to questions that are new, exciting, and relevant. The questions open up research opportunities, and will lead to scholarly work for top-tier academic journals and other venues. The research collaborations will provide outstanding training opportunities for senior undergraduate students, graduate students, and postdoctoral fellows. With sophisticated and effective public outreach, the practical impacts of this work will contribute continuously to public awareness and discussion about the role of science in society.

### Strategic Priorities

#### 1. Effective Governance

In order to achieve its five-year goal, the Rotman Institute of Philosophy requires an effective governance structure that defines precisely its relationship with the Department of Philosophy, reaches

out to and is inclusive of scientists at Western and beyond, and gives clear meaning to membership. The external review identified three areas of concern requiring changes to the Institute's governance. First, the Institute is excessively "tied to and intermixed with [the] philosophy department". As a result, there is a "[l]ack of clarity about [the] relationship between the Institute and the department". Second, there is a "[l]ack of outside voices on the various committees, and few outsiders actively engaged". The lack of scientist members on the Institute's Steering Committee was a particular worry. Third, there must be a clearer definition of the "responsibilities and expectations of members".

In response, the *Addendum to the Donation and Charitable Trust Agreement* (October 24, 2008) between Western and the Rotman Family Foundation will be amended such that:

- membership in the Rotman Institute for faculty in the Department of Philosophy is no longer automatic; philosophy faculty must apply for Institute membership, as is the case currently for faculty outside the Department of Philosophy;
- the Institute's Director is chosen by a selection committee that is broadly representative of the Institute and its various interests at Western; and,
- the membership of the Steering Committee is determined by a process of nomination and election by the Institute's full faculty membership. At least two Steering Committee members must have their primary appointment outside the Department of Philosophy.

Further, the Institute's *Faculty Membership Policy* (June 21, 2010) shall be amended such that:

- faculty member responsibilities are clearly defined; and
- renewal of membership is based on a review of member performance.

## 2. Strategic Alliances with Science Institutes

Developing and sustaining strategic alliances with select scientific institutes of international repute is essential to achieving our five-year goal. The external review observed that the Institute must "make good on the vision of engaging scientists. [It is] not enough just to talk about some aspects of science". It concluded that we must "[b]uild on strengths across [the] university in the sciences, especially when real opportunities present themselves as currently in Cognitive Science". The formation of a strategic alliance is an opportunity to formalize *ad hoc* interactions between Rotman faculty, students, and scientists, and to create a platform for expanded research, training, and outreach activities. We seek to build on our current strengths and develop strategic alliances with Western's Brain and Mind Institute and the Perimeter Institute for Theoretical Physics in Waterloo, Ontario.

### (a) Western's Brain and Mind Institute

We seek to strengthen and solidify ties between the Rotman Institute of Philosophy and Western's Brain and Mind Institute (BMI). Neuroscience/ Brain and Mind is one of Western's 10 Signature Areas of Research Excellence. The BMI brings together a remarkable group of researchers (including Canada Excellence Research Chair in Cognitive Neuroscience and Imaging Dr. Adrian Owen) in one of the leading cognitive neuroscience research centres in the world. The Department of Philosophy has a longstanding strength in philosophy of mind and language, and it attracts some of the best graduate students in Canada. Current faculty connections with the BMI include philosopher of cognitive science Dr. Chris Viger's longstanding interactions with Dr. Mel Goodale and Dr. Stefan Köhler. Trainee interactions center on the annual graduate student conference in philosophy of mind, language, and cognition (PhilMiLCog) that attracts students from all over North America. A strategic alliance with the BMI will create research collaborations with world-class neuroscientists, and produce training opportunities for graduate students.

While the details of the strategic alliance between the Institute and the BMI will be the product of

ongoing discussions, the following elements would foster a productive and sustainable relationship between the two Institutes:

- a Memorandum of Understanding setting out common interests and a plan for moving forward;
- a Faculty Fellowship in cognitive neuroscience (the Faculty Fellow will take the lead on developing ties with the BMI, and will receive a 0.5 course release; the one-year fellowship will be renewable based on performance);
- mutual endorsement of the Endowed Chair in Philosophy of Neuroscience (contained in the academic plans of the Faculty of Arts and Humanities and Department of Philosophy) as a priority (the Institute currently lacks a senior faculty member in philosophy of neuroscience, and this Chair will act as a bridge between the philosophers of mind and language, and neuroscientists in the BMI);
- a postdoctoral fellow in philosophy of cognitive neuroscience position (this position bridging the two Institutes will be especially important in advance of the hiring of the Endowed Chair in Philosophy of Neuroscience);
- application for peer-reviewed funding to support research projects spanning the two Institutes;
- a joint graduate seminar in conceptual issues in cognitive neuroscience (the seminar will provide an interdisciplinary forum for interaction and learning for graduate students and faculty in philosophy and cognitive neuroscience);
- graduate student participation in interdisciplinary research teams in neuroscience and philosophy;
- co-sponsored workshops and speakers on topics of mutual interest; and,
- joint involvement in outreach on the social implications of developments in neuroscience.

#### (b) Perimeter Institute for Theoretical Physics

A strategic alliance with the Perimeter Institute for Theoretical Physics builds on existing strengths in philosophy of physics. The Perimeter Institute is one of the world's leading centres for research in theoretical physics. A number of Rotman Institute faculty, including Dr. Wayne Myrvold and Dr. Chris Smeenk, have productive working relationships with Perimeter Institute faculty, including Dr. Chris Fuchs and Dr. Lee Smolin. Faculty and students from both Institutes attend talks and conferences of interest at both sites, and the first joint Rotman-Perimeter conference on "Emergence and Effective Field Theories" was held in Waterloo on October 26–28, 2011. A strategic alliance with the Perimeter Institute will create research collaborations with world-class physicists, and produce training opportunities for graduate students.

We propose to strengthen ties between the Rotman Institute and the Perimeter Institute in a number of ways. While the details of the strategic alliance will be the product of negotiation, the following elements would foster a productive and sustainable relationship:

- a Memorandum of Understanding setting out common interests and a plan for moving forward;
- a Faculty Fellowship in physics (the Faculty Fellow will take the lead on developing ties with the Perimeter Institute, and will receive a 0.5 course release; the one-year fellowship will be renewable based on performance);
- a Tier II Canada Research Chair in Foundations of Physics (the position, jointly appointed between the Department of Philosophy and the Department of Applied Mathematics at Western, will enhance the Rotman Institute's strength in foundations of physics and will provide a natural line of collaboration with the Perimeter Institute)
- an Associate Faculty position between Western and the Perimeter Institute in foundations of physics (the position will be a joint appointment between the Department of Applied Mathematics and the Department of Philosophy at Western and the Perimeter Institute);

- one or more novel research collaborations involving faculty and students (for instance, a project to develop an account of scientific methodology that reflects the insights of the effective field theory approach, a new way of treating physical theories that has become widespread in physics but has not garnered much attention from philosophers, involving Dr. Robert Batterman, Dr. Leo Kadanoff, Dr. Chris Smeenk, and Dr. Lee Smolin);
- application for peer-reviewed funding to support research projects spanning the two Institutes;
- a joint postdoctoral fellow position (the position would be enormously appealing for an outstanding philosopher of physics, and would be a further bridge between the two Institutes);
- a defined role in the Perimeter Scholars International program; and,
- public outreach events on physics and broader social issues.

### 3. Novel Collaborations with Scientists

Truly innovative research that crosses traditional academic boundaries is a challenge, and requires support during the early stages. But the external review found that the Institute currently has "[n]o funding for innovation". In order to achieve its five-year goal, the Institute must "[e]ncourage well-defined projects and...[provide] sufficient resources to carry them out". Based on our experience with collaborations between philosophers and scientists, two years of support is required for both groups to learn each other's "language", tease out questions for exploration, and identify appropriate methodologies to address them. Only when a clear set of questions and methodologies is developed can the project compete successfully for peer-reviewed funding. In order to allow the Institute to seize upon time sensitive opportunities to work with scientists and support the development of these new projects, we will:

- create a Research Catalyst Fund, which will support regular meetings of collaborators, travel, workshops, and a research assistant.

With this fund, we will develop 5 new projects in the next five years. When projects are sufficiently developed, we will

- apply for peer-reviewed funding to support continuing research.

Successfully developing and sustaining collaborations requires a considerable time commitment from Institute faculty members. In addition to the above Faculty Fellowships in neuroscience and physics, we will:

- create two additional Faculty Fellowships.

Faculty Fellows will take a lead role in a novel research collaboration involving scientists, and they will contribute to graduate training in the area (for instance, by developing and teaching a joint graduate seminar). Faculty Fellows will receive a 0.5 course teaching release and they will submit an annual progress report to the Institute's Steering Committee. The one-year fellowship will be renewable based on performance.

A number of these collaborations will be with outstanding scientists at Western, and may include faculty in the Centre for Environment and Sustainability, the Centre for Human Immunology, the Department of Applied Mathematics, the Department of Biology, the Department of Epidemiology and Biostatistics, the Department of Physics and Astronomy, and the Department of Psychology. Additionally, we anticipate that some of these novel collaborations will be international in scope. Potential partners for international collaborations include the Center for Biology and Society at Arizona State University, the Center for the History and Philosophy of Science at Radboud University Nijmegen, the Center for Philosophy of Science at the University of Pittsburgh, the Minnesota Center for the Philosophy of Science at the University of Minnesota, and the U.S. Centers for Disease Control and Prevention. We will

- explore and develop an international strategic alliance.

#### 4. Interdisciplinary Graduate Training

In order to achieve its five-year goal, the Institute must leverage research collaborations with scientists to provide innovative training experiences for its graduate students, and increase the involvement of graduate students from the sciences. The external review concluded that action is needed to benefit both philosophy and science trainees. The Institute should "[d]evelop real graduate training opportunities for Rotman students, formal and informal". Further, it should "develop more opportunities for science students to work with the Rotman Institute students and community, such as building on the strengths of reading groups to connect with the sciences".

Efforts to date have focused on enhancing the quality of philosophy trainees as well as their training experience. For reasons not fully understood, applications in philosophy of science dropped in 2009 and 2010. To address this, we created and advertized widely two annual entrance scholarships worth \$10,000 for students whose proposed studies are in philosophy and science. As a result, the number of students in philosophy and science entering the doctoral program increased five-fold in 2011, and the quality of students recruited was outstanding. Accordingly, we will:

- continue and expand the highly effective Doctoral Entrance Scholarship program.

Philosophy trainees participate in research projects, reading groups, conferences, and talks organized by the Institute. It is clear that these opportunities are valued by the graduate students. The external review found that graduate "students are passionate about what the space, interactions, and support do for them". It is important that we continue these valued training activities. Strategic alliances with science institutes and novel research collaborations with scientists offer the prospect of augmenting the training experience of philosophy graduate students. We will seek to:

- embed philosophy graduate students within ongoing and novel research projects with scientists.

Further, we will:

- support these innovative training experiences with Graduate Research Assistantships.

The Institute will expand its training activities to increase the involvement of graduate students in the sciences. Strategic alliances with science institutes and research collaborations with scientists will increase the visibility of the Institute among science graduate students. It is important that we capitalize upon this increased visibility with concrete opportunities for exchange among graduate students and involvement in the Institute. Accordingly, we will:

- develop and regularly participate in graduate seminars jointly taught by philosophy and science faculty that bring together philosophy and science graduate students.

Such seminars might involve the Centre for Environment and Sustainability, the Centre for Human Immunology, the Department of Applied Mathematics, the Department of Biology, the Department of Epidemiology and Biostatistics, the Department of Physics and Astronomy, and the Department of Psychology. Also, we will

- support the creation of reading groups on topics that are of interest to philosophy and science graduate students.

Further, we will:

- support the involvement of science graduate students in Institute projects with Graduate Research Assistantships; and,
- make available on a competitive basis research space (including a workstation, computer, and access to printing) within the Institute for science graduate students working on projects relevant to the Vision and Mission of the Institute.

Additionally, we will

- explore the feasibility of a Master's degree program in philosophy of science designed for scientists.

As graduate students and faculty in the sciences are exposed to philosophy in joint research projects, seminars, and reading groups, we expect that some will wish to pursue further training in philosophy to broaden their perspectives and enhance their scientific practice. Finally, we will support interdisciplinary training in philosophy and science by

- creating an Interdisciplinary Graduate Training Fellowship in Philosophy and Science.

The Interdisciplinary Fellowship will provide 1 year of support for students wishing to pursue a Master's degree (or equivalent training) outside of their home discipline and related to their doctoral work. Science graduate students may obtain an MA in philosophy, and philosophy students may seek an MSc in their science of interest. The Fellowship will be awarded competitively.

## 5. Outreach

If the work of the Institute is to have broader impact, we must reach out to philosophers, scientists, policy makers, and the public. Indeed, the vision of the Institute requires that it "provide leadership in informed public discussion of ethical and epistemological issues in contemporary science, and to promote public engagement and philosophical reflection on scientific issues affecting Canada and the world". While the Institute has taken important first steps in realizing this end, an expansion in outreach activities is essential to achieving its five-year goal. The branding exercise undertaken with Scott Thornley + Company allowed us to reflect upon what it is we do, and gave us the tools to clearly and consistently communicate with a variety of audiences. It is important that the Institute:

- maintain the integrity of its brand in all of its outreach activities.

The Institute's website ([www.rotman.uwo.ca](http://www.rotman.uwo.ca)) is the first place that colleagues, students, and members of the public look to find out what the Institute is and what it does; thus, an effective website is key to our public outreach. In August 2011, we expanded the Institute's website to include detailed information on research projects, training opportunities, and multimedia resources. We shall endeavour to:

- maintain and regularly update the Institute's website.

Starting in September 2010, the Institute now live-streams its Speaker Series free of charge on the Internet. This feature extends the reach of our talks globally, and allows scholars and students at remote sites to ask questions and interact with the speaker. Video recordings of the Speaker Series and select Institute conferences are posted on the website and may be freely accessed by anyone. We will:

- continue to live stream our speaker series; and,
- make freely available video recordings of the Speaker Series and select Institute conferences.

The external review recommended that we "[d]raw on grad[uate] student energy for outreach development, as with blogs and website, connecting philosophy and science". We will:

- create and maintain an a Institute Blog and Facebook page.

The Institute's Blog will be administered by a graduate student editor-and-chief and an editorial committee. It will feature short, thoughtful pieces on various aspects of philosophy and science in order to foster debate and discussion. These will include reflections on science in the news and discussion of research projects at the Institute. The Facebook page will allow "friends" of the Institute to track easily new blog and events postings. Further, we will:

- support events designed to promote discussion and debate on the role of science and society.

Outreach events will be planned and executed by our graduate students. The Institute will provide them with the resources to plan and host quality outreach events. Finally, we will:

- work with the Communications Officer in the Faculty of Arts and Humanities to extend the reach of our Speaker's Series and other events to the community.