

**University of Toronto Quality Assurance Process (UTQAP)  
Cyclical Review: Final Assessment Report & Implementation Plan**

<b>Division/Unit:</b>	Review of program only (program is housed in the Professional Graduate Program Centre (PGPC))
<b>Commissioning Officer:</b>	Vice-Principal & Dean, UTM
<b>Program(s):</b>	Master of Biotechnology, M.Biotech.
<b>Reviewers (Name, Affiliation):</b>	<ol style="list-style-type: none"> <li>1. Dr. Randall Dunham, Chair, Department of Management &amp; Human Resources, Faculty Director, Center for International Business Education and Research (CIBER), and Keenan A. Bennett Chair of Industrial Management, School of Business, University of Wisconsin-Madison, USA</li> <li>2. Dr. Paul Schnetkamp, Professor, Department of Physiology &amp; Pharmacology, Coordinator, Master of Biomedical Technology Graduate Program, Infrastructure Director, Hotchkiss Brain Institute (HBI), Faculty of Medicine, University of Calgary</li> <li>3. Dr. Christopher Yip, Associate Professor, Departments of Biochemistry and Chemical Engineering and Applied Chemistry, Terrence Donnelly Centre for Cellular and Biomolecular Research, University of Toronto</li> </ol>
<b>Date of review visit:</b>	May 23-24, 2012
<b>Date reported to AP&amp;P:</b>	October 29, 2012

**1. Outcome:**

- The Committee on Academic Policy and Programs (AP&P) concluded that the Decanal response adequately addressed the review recommendations.

**2. Significant program strengths:**

- Strong applicants and students
- Excellent, engaged and enthusiastic teaching staff
- Innovative program with strong interdisciplinary focus and training
- High quality internships facilitated by strong extramural industrial relationships and support
- Focus on knowledge translation and problem solving

**3. Opportunities for program improvement and enhancement. The reviewers recommended that the following be considered:**

- Reviewing the curriculum, including establishing clear knowledge and skills objectives that align with methods of assessment
- Identifying prerequisite knowledge and skills in the biological sciences and chemistry to ensure that students can draw on a common body of knowledge
- Coordinating a North America-wide recruitment effort to raise the program's profile and increase the quality of students to an even higher level
- Building relationships between disciplines and with other programs and departments within the University to increase interaction across disciplines, build community for students and drive improvement and sustainability
- Adjusting governance and administrative structures to facilitate discussion of the program's future directions and scope

**4. Implementation Plan**

The Dean undertook in consultation with the Department to support the following changes:

- Immediate Term (6 months)
  - Reviewing the curriculum
    - i. The Program has committed to undertaking an annual review of the curriculum with all partners and staff, to ensure that it continues to be well conceived in terms of concept and design
    - ii. The Dean will encourage the Program Director to post knowledge and learning objectives, which are already clearly articulated in the student handbook and self-study, on the program website
  - Identifying prerequisite knowledge and skills

- i. The Program clarified that it already rigorously assess students on admission, requiring a relevant science degree, comprehensive oral examination and other tests, to ensure that they have the requisite science background to succeed
  - Coordinating a North America-wide recruitment effort
    - i. The Program is trying new methods to increase the number of applications, expanding its recruitment efforts to the Western provinces
  - Adjusting governance and administrative structures
    - i. The Dean will encourage the Program Director to establish annual faculty retreats and regular meetings to discuss program objectives and strategic planning
- Medium Term (1-2 years)
  - Coordinating a North America-wide recruitment effort
    - i. The Program is working with the Vice-Dean Graduate to evaluate its marketing strategy with the goal of heightening the Program's profile and address branding challenges
  - Building relationships
    - i. The Vice-Dean Graduate will work with the Program to improve its relationship with the Department of Management to complement its strong relationships with other departments; the Dean will encourage the Program to continue outreach activities such as jointly offered courses
  - Adjusting governance and administrative structures
    - i. The Division will bring forward a proposal for an Institute that could house the Biotechnology program within a strong and dynamic organizational structure

The Dean's Office will follow up annually with the unit on these plans to assess progress.

## 5. Executive Summary

The reviewers identified the program's strengths as strong applicants and students, excellent teaching staff, innovative and interdisciplinary program, high quality internships, and focus on knowledge translation and problem solving. The reviewers recommended that the following issues be addressed: curriculum review, prerequisites in biological sciences and chemistry, recruitment, relationships among the program's disciplines and with other units within the University, and governance and administrative structures. The Dean will encourage the program to review the curriculum annually with all partners and staff to ensure that its concept and design continue to be sound, and to post knowledge and learning objectives online to complement their current articulation in the student handbook. The program already has rigorous prerequisite requirements in place to ensure students have sufficient background in the relevant sciences. The program is expanding its recruitment efforts to the Western provinces and is working with the Vice-Dean Graduate to evaluate its marketing strategy, raise the program's profile, and address branding challenges. The Dean will encourage the program to continue outreach activities such as jointly offered courses; the Vice-Dean Graduate will work with the program to improve its relationships with the Department of Management at UTM. The Division is bringing forward a proposal for a new Institute with a strong and dynamic organizational structure that could house the program. The Committee on Academic Policy and Programs (AP&P) concluded that the Decanal response adequately addressed the review recommendations.