



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

Program(s):	Biochemistry, M.Sc., Ph.D.
Division/Unit:	Department of Biochemistry, Faculty of Medicine
Commissioning Officer:	Dean, Faculty of Medicine
Reviewers (Name, Affiliation):	<ol style="list-style-type: none">1. Christian Baron, Ph.D., Professor and Chair, Department of Biochemistry, Université de Montréal2. Gregory A. Petsko, Ph.D., Gyula and Katica Tauber Professor of Biochemistry and Chemistry, and Chair, Department of Biochemistry, Brandeis University; Adjunct Professor, Department of Neurology and Center for Neurologic Diseases, Harvard Medical School and Brigham & Women's Hospital3. David Y. Thomas, Ph.D., F.R.S.C., Canada Research Chair in Molecular Genetics, Professor and Chair, Biochemistry Department, McGill University
Date of review visit:	February 14 – 16, 2012
Date reported to AP&P:	April 16, 2013

1 Outcome

The Committee on Academic Policy and Programs (AP&P) concluded that there were no issues to be drawn to the attention of the Agenda Committee but requested a follow-up report in two years on the time-to-completion for the MSc and PhD programs, as well progress towards the development of a strategic plan and establishing a more stable financial footing.

2 Significant Program Strengths

- “World-class” department, comparable to the best in Canada and internationally
- Excellent students and outstanding graduates
- High student satisfaction with quality of instruction; good mentoring of doctoral students

- Very high level of research activity; dynamic and intellectually rich research environment benefits students
- Excellent, state-of-the-art instrumentation in cutting-edge fields prepares students for future endeavours
- Well-balanced interactions between department and hospital research institutes

3 Opportunities for Program Improvement and Enhancement

The reviewers recommended that the following be considered:

- Addressing students' relatively long times-to-completion
- Exposing doctoral students to career possibilities beyond academe
- Bringing students' stipends in line with those available at competitor schools to aid in the recruitment of high quality applicants
- Developing a long-term strategic plan for programs and research, which takes into account trends in the field (infrastructure, bridge-building with clinical departments, pressures towards consolidation, etc.)
- Seeking infrastructure and equipment funding to ensure the Department can continue to support modern biomedical research
- Supporting research and recruitment by fostering collaboration between departmental members and applied & clinical researchers in neurosciences and bioengineering at U of T and affiliated hospitals
- Addressing budget challenges and low morale due to funding challenges

4 Implementation Plan

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

- Immediate Term (6 months)
 - Times to completion
 - The Department intends to hold more frequent and focused program advisory committee meetings and will set clear timelines for students' research progress based on a revised committee report focused on progress towards completion
 - Career and professional development
 - The Department has started to examine career possibilities for its graduates beyond academe through engagement with alumni, tracking alumni's career paths, and a new graduate professional development course and career days
 - Funding for Graduate Students
 - The Department of Biochemistry is in line with all other Faculty of Medicine graduate departments with respect to the support for MSc/PhD students, which is reviewed on an annual basis
 - The Faculty encourages the Department to engage in fundraising for student bursaries and awards
 - Infrastructure and equipment funding
 - The Faculty will seek new resources for infrastructure renewal on campus through CFI and other opportunities linked to new recruitments

- The Faculty encourages the Department to apply for other sources of funding particularly large grants to build teams and support collaborative research
 - Addressing budget challenges and low morale
 - The Faculty of Medicine has invested in central resources in the Office of Research, Office of Advancement, and Discovery Commons to support the Faculty's Departments in improving their revenues
 - An internal review process of grant applications will be used to enhance success rates in funding competitions
- Medium Term (1-2 years)
 - Strategic Planning
 - The Faculty encourages the Department to undertake strategic planning to identify the specific programmatic areas in which it will invest in the next 5 to 10 years. The graduate education programs should align with these directions.
 - Collaboration with other units to support research and recruitment
 - The Department will continue to engage in strategic collaboration with the hospital research institutes and other basic science departments in the Faculty to co-recruit new faculty and to jointly seek new revenues for infrastructure and equipment renewal
 - The Dean will work with the new chair to assist in strategic planning and new revenue generation

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

5 Executive Summary

The reviewers identified the programs' strengths as the excellent students and outstanding graduates; high student satisfaction with quality of instruction; good mentoring of doctoral students; very high level of research activity; excellent, state-of-the-art instrumentation in cutting-edge fields; and well-balanced interactions between department and hospital research institutes. The reviewers recommended that the following issues be addressed: students' relatively long times to completion; doctoral students' exposure to career possibilities beyond academe; the level of students' stipends relative to those at competitor schools; the need for a long-term strategic plan; infrastructure and equipment funding and other budget challenges; and increased collaboration with applied and clinical researchers in neurosciences and bioengineering at U of T and affiliated hospitals. The Department intends to hold more frequent and focused program advisory committee meetings and will set clear timelines for students' research progress. The Department has started to examine career possibilities for its graduates beyond academe. The Faculty will seek new resources for infrastructure renewal on campus through CFI, and the Department will continue to seek other sources of funding and engage in strategic collaboration with other units to co-recruit new faculty and to jointly seek new revenues. The Faculty encourages the Department to undertake strategic planning to identify the specific programmatic areas in which it will invest in the next 5 to 10 years. The Committee on Academic Policy and Programs (AP&P) concluded that there were no issues to be drawn to the attention of the Agenda Committee but requested a follow up report in two years on the time-to-completion for the MSc and PhD programs, as well progress towards the development of a strategic plan and establishing more stable financial footing.