



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

Program Reviewed:	Medical Biophysics, MSc, PhD
Unit Reviewed:	Department of Medical Biophysics
Commissioning Officer:	Professor Trevor Young, Dean, Faculty of Medicine
Reviewers (Name, Affiliation):	<ol style="list-style-type: none">1. Professor Paul DeLuca - Department of Medical Physics, Emeritus Provost and Vice Chancellor for Academic Affairs, University of Wisconsin, Madison2. Professor David Litchfield - Department of Biochemistry; Director, Functional Proteomics Facility, Western University3. Professor Bruce Pike - Department of Radiology, University of Calgary; CIHR Panel Chair for Medical Imaging and Physics
Date of Review Visit:	November 1-2, 2016
Date Reported to AP&P:	March 29, 2017

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

- Flourishing program provides superb research training and career development opportunities for a large number of graduate students
- Revitalized, modernized curriculum reflects the current state of the discipline
- Organized and active Graduate Student Society strengthens the sense of community
- Among the top few such departments in North America and internationally
- Unsurpassed training opportunities with state-of-the-art infrastructure and facilities

- Strong relationships with cognate departments and research institutes allow MBP to translate modest investments from the Faculty of Medicine and U of T into a world-class research enterprise with a flourishing graduate program

3 Opportunities for Program Enhancement

- Aligning courses and other program elements with well-defined learning outcomes and degree-level expectations to ensure that the training of each student does achieve the desired expectations; aligning MBP offerings with complementary graduate programs to take advantage of synergies
- Ensuring appropriate time-to-completion; addressing any gaps in graduate student supervision; and considering ways to better support students in these processes throughout their program
- Enhancing student outreach and recruitment beyond southern Ontario
- Improving mentoring and relationships across the department to ensure onboarding of faculty employed by the hospitals, increased participation in MBP activities, and strengthened collaborations across multiple physical sites
- Revisiting MBP's overall communications strategies both internally and beyond the program to support enhanced outreach and recruitment.

4 Implementation Plan

Medium Term (1-2 years)

- Ensuring appropriate time-to-completion; addressing any gaps in graduate student supervision; and considering ways to better support students
 - The Department has already increased the frequency of supervisory committee meetings for degree progress after PhD year 4. The Department is considering formalizing a 'plan to completion' meeting as a program requirement. Account may have to be made of the increasing technical complexity of biomedical research, the inflating standards for high impact publication and, in many fields, the increasing time required to produce such a publication. The Department is in support of the recommendation for improved mentorship of new faculty which may help address this problem.
- Revisiting MBP's overall communications strategies
 - The Department agrees that a new communication office for MBP needs to be established and that this must come with a new dedicated hire. The Dean's Office will work with the Department to determine appropriate resources.

Longer Term (3-5 years)

- Aligning courses and program offerings
 - The Department will work with the Department of Molecular Genetics and Department of Biochemistry to align the modular structure of the MBP

curriculum, with the goal of eventually implementing a joint entrance curriculum and rotation program. The leadership of all three departments believes that a joint program would present a formidable recruiting force in Canadian biomedicine that would replace the somewhat fragmented options offered to the current prospective graduate student of biomedical research in Toronto.

- Enhancing student outreach and recruitment beyond southern Ontario
 - The Department is committed to reach further afield for highly qualified students, rather than lower the academic bar for admission to its graduate program. Medical Biophysics is widely recognized in the global research community, but still unknown to many undergraduate students, even in Toronto. This defines the remit for a new external communications office, with whom the Department will develop a five-year strategy to build the MBP 'brand' to reach highly qualified Undergraduates across Canada and internationally.
- Improving mentoring and relationships across the department
 - The Department will continue to work closely with faculty to improve mentoring and relationships across the Department.

5 Executive Summary

The reviewers identified the programs' strengths as the superb research training and career development opportunities for a large number of graduate students; revitalized, modernized curriculum that reflects the current state of the discipline; organized and active Graduate Student Society that strengthens the sense of community; among the top few such departments in North America and internationally; unsurpassed training opportunities with state-of-the-art infrastructure and facilities; and strong relationships with cognate departments and research institutes that allow MBP to translate modest investments from the Faculty of Medicine and U of T into a world-class research enterprise with a flourishing graduate program. The reviewers recommended that the following issues be addressed: aligning courses and other program elements with well-defined learning outcomes and degree-level expectations; aligning MBP offerings with complementary graduate programs to take advantage of synergies; ensuring appropriate time-to-completion; addressing any gaps in graduate student supervision; enhancing student outreach and recruitment beyond southern Ontario; improving mentoring and relationships across the department to ensure onboarding of faculty employed by the hospitals, increased participation in MBP activities, and strengthened collaborations across multiple physical sites; and revisiting MBP's overall communications strategies both internally and beyond the program to support enhanced outreach and recruitment. The Department has already increased the frequency of supervisory committee meetings for degree progress after PhD year 4 and is considering formalizing a 'plan to completion' meeting as a program requirement. The Dean's Office will work with the Department to determine appropriate resources for a dedicated communications hire. The Department will work with the Department of Molecular Genetics and Department of Biochemistry to align the modular structure of the MBP curriculum, with the goal of eventually implementing a joint entrance curriculum and rotation program. The Department is committed to reach further afield for highly qualified

students. The Department will continue to work closely with faculty to improve mentoring and relationships across the Department. The Committee on Academic Policy and Programs (AP&P) concluded that the Decanal response adequately addressed the review recommendations.