### Final Assessment Report
Submitted by SUPR-G to SCAPA

<table>
<thead>
<tr>
<th>Program:</th>
<th>Physiology and Pharmacology Graduate Program</th>
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| Degrees Offered: | MSc (2-year and accelerated)  
PhD |
| Approved Fields: | None |
| External Consultants: | Dr Jane Mitchell, Associate Professor and Associate Chair  
Department of Physiology and Toxicology, University of Toronto  
Dr James Young, Professor and Chair  
Department of Physiology  
University of Alberta |
| Internal Reviewers: | Pam McKenzie, Associate Dean  
Graduate and Postdoctoral, Faculty of Information and Media Studies  
Richard Sove, PhD Student  
Medical Biophysics |
| Date of Site Visit: | 8-9 February 2018 |
| Evaluation: | Good Quality |
| Approved by: | SUPR-G on May 15, 2018  
SCAPA on May 30, 2018 |

### Executive Summary
The review committee met with a broad cross-section of program stakeholders: campus- and hospital/Institute-based graduate students and faculty; administrative staff members; and academic administrators including the Acting Chair and Graduate Chair; representatives of the Schulich School of Medicine and Dentistry and the School of Graduate and Postdoctoral Studies. In addition, the committee was taken on tours and had the opportunity to observe student spaces and research labs. The committee had an opportunity to discuss a broad range of considerations, including the balance between the two disciplines in the curriculum and among the faculty and the use of online modules to bring students up to speed; student participation in collaborative programs (Developmental Biology, Musculoskeletal Health, and Neuroscience); the continued role of the accelerated and two-year MSc programs; low level of faculty supervisions considering the high level of research funding; the high proportion of Western graduates in the program; the reliance on Western undergraduate students and difficulty in attracting Phys/Pharm undergraduates due to their overwhelming preference for medical school.

### Significant Strengths of Program:
- Learning outcomes are clearly defined and measurable, and are consistent with the norms of SGPS and the Schulich School of Medicine and Dentistry.
- Faculty are diverse, committed, and well-funded, and faculty morale is high.
- Graduate trainees are highly productive and enjoy a high level of collegial interaction.
- Course work helps to prepare students for their research program and the amount of course work is appropriate.
- Program timelines are in keeping with comparable programs in other Canadian universities and regular meetings with the student’s committee, which includes a member of the Graduate Research Committee, ensure adequate progress through the program.
- Completion times are excellent given students’ high publication rates and there have been few withdrawals.
- With the exception of animal care facilities, the Program has access to impressive state-of-the-art support facilities.
Suggestions for improvement & Enhancement:

- Physiology continues to be the dominant partner in the combined program, and the Department and Program will need to attend to actively maintaining the strength of Pharmacology.
- Animal care facilities will require (and are scheduled to receive) upgrades.
- Work toward providing all PhD students access to at least one national or international research conference; consider establishing a fund.
- Review the grant-writing component of the graduate course to include more examples of successful grants.
- Renew efforts to recruit students from a wider geographical area.
- Formalize procedure to allow and encourage senior PhD students to give guest lectures in undergraduate courses.
- Consider electronic transmission of seminars to and from off-campus sites for greater two way interaction between campus-based and off-campus based faculty and students.
- Continue harmonization of undergraduate programs to ensure that students entering graduate studies have a more uniform background in both disciplines.
- Consider partnership with other units to provide an integrated course-based master’s program for students preparing for professional programs.

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<tr>
<th>Recommendations required for Program sustainability:</th>
<th>Responsibility</th>
<th>Resources</th>
<th>Timeline</th>
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<tbody>
<tr>
<td>Incorporate at least one Physiology focused and one Pharmacology focused area in all PhD student comprehensives.</td>
<td>Graduate Studies Committee; Department.</td>
<td>Time</td>
<td>January 2019</td>
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<tr>
<td>Upgrade/enhance online modules to provide a higher level of competency in both disciplines.</td>
<td>Program (on agenda at Departmental Retreat)</td>
<td>Time</td>
<td>May 2019</td>
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<tr>
<td>Explore options for the accelerated MSc program</td>
<td>Department, Faculty</td>
<td>time</td>
<td>Ongoing</td>
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