I. Procedures for Undertaking Non-Expedited Pedagogical Merit Reviews

The Animal-Based Scientist will:
- submit the completed Pedagogical Merit Review Form (APP1) within the related Animal Use Protocol (AUP) to the Animal Care Committee (ACC).

The ACC Officer will:
- forward the AUP, including the completed Pedagogical Merit Review Form (APP1), to the associated Pedagogical Merit Review Committee Chair, and the associated Department / Research Institute, as applicable, requesting review.

The Pedagogical Merit Review Committee Chair will:
- identify one to two reviewers, and forward the animal-based scientist’s Pedagogical Merit Review Form (APP1) and blank Pedagogical Merit Reviewer Form (APP2) to reviewers requesting form completion and submission within two weeks’ time.

If only one reviewer is identified by the Pedagogical Merit Review Committee Chair, the Department / Research Institute will:
- identify one reviewer, and forward the animal-based scientist’s Pedagogical Merit Review Form (APP1) and blank Pedagogical Merit Reviewer Form (APP2) to the reviewer requesting form completion and submission within two weeks’ time.

The Pedagogical Merit Reviewer(s) will:
- within two weeks of Pedagogical Merit Review Form (APP1) receipt, perform the review using the Pedagogical Merit Reviewer Form (APP2), and
- submit the review(s) to the Pedagogical Merit Review Committee Chair.

The Pedagogical Merit Review Committee Chair will:
- assess reviewer feedback,
- provide the PI with written pedagogical merit reviewer feedback while ensuring reviewer anonymity,
- if outstanding questions / concerns have been identified by a reviewer, act as liaison between the PI and merit reviewer(s), and append related communications, as appropriate, to the Pedagogical Merit Reviewer Form,
- notify the ACC the merit reviewers’ decision using the AUP online system, to include the completed Pedagogical Merit Reviewer Forms, and

The ACC Officer will:
- forward the completed Pedagogical Merit Reviewer Forms along with the AUP for ethics review by the ACC, as per procedure PROC-002-Animal Use Protocols, and
II. Procedures for Undertaking Expedited Pedagogical Merit Reviews

The Animal-Based Scientist will:
• submit the completed Expedited Pedagogical Merit Review Form (APP3) within the related Animal Use Protocol (AUP) to the Animal Care Committee (ACC).

The ACC Officer will:
• forward the AUP, including the completed Expedited Pedagogical Merit Review Form (APP3), to the associated Pedagogical Merit Review Committee Chair.

The Pedagogical Merit Review Committee Chair will:
• identify one reviewer with expertise in replacement alternatives, and forward the animal-based scientist’s Expedited Pedagogical Merit Review Form (APP3) and blank Expedited Pedagogical Merit Reviewer Form (APP4) to the reviewer requesting form completion and submission within two weeks’ time.

The Pedagogical Merit Reviewer(s) will:
• within two weeks of Expedited Pedagogical Merit Review Form (APP3) receipt, perform the review using the Expedited Pedagogical Merit Reviewer Form (APP4),
  a) assess if there are equivalent absolute or relative replacement alternatives, and
• submit the review(s) to the Pedagogical Merit Review Committee Chair.

The Pedagogical Merit Review Committee Chair will:
• assess reviewer feedback,
• provide the PI with written pedagogical merit reviewer feedback while ensuring reviewer anonymity,
• if outstanding questions / concerns have been identified by a reviewer, act as liaison between the PI and merit reviewer(s), and append related communications, as appropriate, to the Expedited Pedagogical Merit Reviewer Form,
• notify the ACC the merit reviewers’ decision using the AUP online system, to include the completed Expedited Pedagogical Merit Reviewer Forms, and

The ACC Officer will:
• forward the completed Expedited Pedagogical Merit Reviewer Forms along with the AUP for ethics review by the ACC, as per procedure PROC-002-Animal Use Protocols, and
• continue to act as the liaison between the ACC and other parties until all outstanding concerns are resolved.
Revision History

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Description of Changes</th>
<th>Author</th>
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<tbody>
<tr>
<td>00</td>
<td>07-12-18</td>
<td>New procedure</td>
<td>LT</td>
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<tr>
<td>01</td>
<td>08-08-19</td>
<td>Reallocate responsibilities for administering merit reviews to the Pedagogical Merit Review Committee, add Roles &amp; Responsibilities section; update terms and titles</td>
<td>LT/LC/EB</td>
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<tr>
<td>02</td>
<td>14-05-20</td>
<td>Include procedures for ‘expedited reviews’ per CCAC</td>
<td>LT</td>
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This Pedagogical Merit Review Form is intended for use by animal-based scientists involved in teaching or training in order to provide pedagogical merit reviewers with details associated with your proposed project or program specific to determining if the live animal model proposed by the instructor is essential in support of intended learning outcomes.

Please forward the completed form to the Animal Care Committee via the online AUP system with sufficient time to permit the external review facilitated by the Pedagogical Merit Review Committee Chair. (Note: AUP review cannot be completed until the project is found to have pedagogical merit, as per POL-014).

1. Principal Investigator Name –
2. Organization/Department Affiliation(s) –
3. Animal Use Protocol associated with this project/program, as available –
4. Course/Program Name & Number –
5. Intended Learning Outcomes –
6. Assessment Methods –
7. Learning Activities –
8. Animal/student ratio and instructor/student ratio –
9. Provide specific feedback from student assessments and/or course evaluations regarding the benefit of animal-based teaching/training –
10. Outline efforts made to identify Teaching/Training Replacement Alternatives (defined below) as per CCAC’s 3Rs Microsite¹, including resources consulted.
11. Provide the rationale for the use of live animals as the best and essential model in support of learning outcomes

¹ CCAC’s 3R’s Microsite  http://3rs.ccac.ca/en/about/

Teaching/Training Alternatives – Replacements, either absolute (non-animal models) or relative (e.g. eggs, cell cultures, tissues, or species with significantly lower potential for pain perception) that may be used to teach or train others while maintaining learning outcomes
This Pedagogical Merit Reviewer Form is intended for Pedagogical Merit Reviewers who have agreed to review a proposed teaching or training project/program as requested by the Pedagogical Merit Review Committee Chair, in accordance with the Pedagogical Merit Review Policy (POL-014). To assist you in the review process, please reference Canadian Council on Animal Care’s “Frequently Asked Questions – pedagogical merit of live animal-based teaching and training”. Pedagogical Merit Review flow chart (Page 12).2

Once completed, please forward within two weeks of receipt to the Pedagogical Merit Review Committee Chair.

1. Pedagogical Merit Reviewer Name –
2. Pedagogical Merit Reviewer Email –
3. Review Date –
4. I confirm that I meet CCAC’s requirement for ‘independence’ from and ‘expertise’ relating to the project outlined below, as defined within the Pedagogical Merit Policy (POL-014)  Yes

5. Principal Investigator Name –
6. Animal Use Protocol Number, if provided –
7. Course/Program Name & Number –

Teaching/Training Program Assessment3

8. Learning Outcomes – Are the learning outcomes:
   a. Specific – Are they clearly described and do they specify the involvement of animals?  Yes  No  If No, explain: Click or tap here to enter text.
   b. Measurable – Do they specify how well the learned behaviour must be performed (accuracy, speed, quality)?  Yes  No  If No, explain:
   c. Attainable and Realistic –
      i. Are they realistically achievable, given the composition, learning level, and needs of the student group(s), and the teaching activities (what, where) proposed?  Yes  No  If No, explain:


Teaching/Training Alternatives – Replacements, either absolute (non-animal models) or relative (e.g. eggs, cell cultures, tissues, or species with significantly lower potential for pain perception) that may be used to teach or train others while maintaining learning outcomes
ii. Are the animal/student ratio and instructor/student ratio appropriate to achieve the learning outcomes? □ Yes □ No If No, explain:

d. Timely –

i. Is the timing of the inclusion of the animals in the teaching/training suitable for the projected timing of the intended learning outcome(s)? □ Yes □ No If No, explain:

e. Are there clear benefits to involving animals in this course, at this point in time in the academic curriculum, to future study or career paths? □ Yes □ No If No, explain:

f. Does this course serve as a prerequisite for further study? □ Yes □ No If No, explain:

9. *Learning Assessment Methods* –

a. Are live animals involved in the assessment □ Yes □ No If No, explain:

b. Are the learning assessment methods clear and relevant □ Yes □ No If No, explain:

10. *Learning Activities* – Are the learning activities clear and relevant? □ Yes □ No If No, explain:

11. Do learning outcomes strongly and logically align with learning assessment methods, and do both align with learning activities in support of the outcomes? □ Yes □ No If No, explain:

12. Has the instructor made reasonable and appropriate efforts to identify replacement alternatives? □ Yes □ No If No, explain:

13. Based on SMART learning outcomes, constructive curriculum alignment, and the necessity for these students to achieve stated learning outcomes at this point in their learning experience, is the live animal proposed in this course/program the best model in support of learning outcomes, or could equivalent absolute or relative replacement alternatives be used?

a. □ I agree that the use of live animals within the proposed teaching/training project/program is essential to achieve the learning outcomes, OR

b. □ I believe that Teaching/Training Alternatives, as outlined below, would be more appropriate (please provide options):

   i. Absolute Alternatives –

   ii. Relative Alternatives –

14. Other Reviewer Comments -

**Teaching/Training Alternatives** – Replacements, either absolute (non-animal models) or relative (e.g. eggs, cell cultures, tissues, or species with significantly lower potential for pain perception) that may be used to teach or train others while maintaining learning outcomes
This Expedited Pedagogical Merit Review Form is intended for use by animal-based scientists involved in teaching or training whose competency-based teaching or training activities where the intended learning outcomes are prescribed or mandated by a third party.

In order to provide the pedagogical merit reviewer will assess if there are equivalent absolute or relative replacement alternatives.

Please forward the completed form to the Animal Care Committee via the online AUP system with sufficient time to permit the external review facilitated by the Pedagogical Merit Review Committee Chair. (Note: AUP review cannot be completed until the project is found to have pedagogical merit, as per POL-014).

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<tr>
<td>1.</td>
<td>Principal Investigator / Instructor Name –</td>
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<td>2.</td>
<td>Organization/Department Affiliation(s) –</td>
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<tr>
<td>3.</td>
<td>Animal Use Protocol associated with this project/program, as available –</td>
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<tr>
<td>4.</td>
<td>Course/Program Name &amp; Number –</td>
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<tr>
<td>5.</td>
<td>Name of prescribing organization mandating skills –</td>
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</tbody>
</table>
| 6. | List the specific intended learning outcome(s) mandated by the prescribing organization or by practical training syllabus in the institution –  
☐ See attachment, or list here: |
| 7. | Learning Activities – Please attach an outline of learning activities, or list them below:  
☐ See attachment, or outline here: |
| 8. | Outline efforts made to identify Teaching/Training Replacement Alternatives (defined below) as per CCAC’s 3Rs Microsite⁴, including resources consulted. |

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⁴ CCAC’s 3R’s Microsite http://3rs.ccac.ca/en/about/

Teaching/Training Alternatives – Replacements, either absolute (non-animal models) or relative (e.g. eggs, cell cultures, tissues, or species with significantly lower potential for pain perception) that may be used to teach or train others while maintaining learning outcomes
This Expedited Pedagogical Merit Reviewer Form is intended for Pedagogical Merit Reviewers who have agreed to assess competency-based teaching or training activities where the intended learning outcomes are prescribed or mandated by a third party (e.g., CCAC-mandated institutional animal user training, ministry of education, an institutional researcher / personnel training program or an accreditation or certification body), and as requested by the Pedagogical Merit Review Committee Chair, in accordance with the Pedagogical Merit Review Policy (POL-014). To assist you in the review process, please reference Canadian Council on Animal Care’s “Frequently Asked Questions – pedagogical merit of live animal-based teaching and training”- Pedagogical Merit Review flow chart (Page 12). Once completed, please forward within two weeks of receipt to the Pedagogical Merit Review Committee Chair.

1. Pedagogical Merit Reviewer Name –
2. Pedagogical Merit Reviewer Email –
3. Review Date –
4. I confirm that I meet CCAC’s requirement for ‘independence’ from and ‘expertise’ relating to the project outlined below, as defined within the Pedagogical Merit Policy (POL-014) ☐ Yes

5. Principal Investigator Name –
6. Animal Use Protocol Number, if provided –
7. Course/Program Name & Number –

Teaching Training Learning Activities Assessment

8. **Learning Activities** – Are the learning activities clear and relevant? ☐ Yes ☐ No If No, explain:
9. **Replacement Alternatives** – Has the instructor made reasonable and appropriate efforts to identify replacement alternatives?
   ☐ Yes ☐ No If No, explain:
   a. Which resources were consulted?

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Teaching/Training Alternatives – Replacements, either absolute (non-animal models) or relative (e.g. eggs, cell cultures, tissues, or species with significantly lower potential for pain perception) that may be used to teach or train others while maintaining learning outcomes
10. **Best Learning Model and Replacement Alternatives** – Based on the availability and suitability of equivalent absolute or relative replacement alternatives, is the live animal proposed in this course the best model in support of learning outcomes?
   a. Explain choice:
   b. If a replacement alternative would be more appropriate, provide options below:
      i. *Absolute* (e.g., computer simulation, model):
      ii. *Relative* (e.g., tissue, eggs, invertebrate):

11. **Conclusion** – With regard to meeting prescribed learning outcomes, the proposed live animal model is:
   a. ☐ Essential (has pedagogical merit), OR
   b. ☐ Not Essential (Does not have pedagogical merit)
   c. Other Reviewer Comments -

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**Teaching/Training Alternatives** – Replacements, either absolute (non-animal models) or relative (e.g. eggs, cell cultures, tissues, or species with significantly lower potential for pain perception) that may be used to teach or train others while maintaining learning outcomes