



APPROVAL OF UNIVERSITY EXAMINERS FOR DOCTORAL DISSERTATION

Two approved University Examiners must be present at the Final Doctoral Oral Examination in order to meet the requirement for quorum.

Completion and Submission of this form:

The completed form must be received by the Faculty of Graduate and Postdoctoral Studies a **minimum of 4 weeks** prior to the scheduled final doctoral oral examination. The Faculty of Graduate and Postdoctoral Studies reserves the right to postpone the examination if this form is not received on time.

The consent of the proposed University Examiners to attend the exam should be confirmed by the Research Supervisor or Graduate Program Advisor prior to the submission of this form. The doctoral candidate's graduate program is responsible for recommending well-qualified, objective examiners. A brief rationale of how the proposed examiners' fields of expertise relate to the candidate's area of research must be provided.

Selection of University Examiners

The primary role of a University Examiner is to evaluate the dissertation and the performance of the candidate at the oral examination. It is preferable for University Examiners to have expertise in a field closely related to the dissertation research.

In order to be approved as a University Examiner, a faculty member must hold an **academic** (not clinical, adjunct, etc.) appointment as a **Full, Associate, or Emeritus Professor** at UBC-V and a formal affiliation with a graduate program that offers doctoral degrees in the Faculty of Graduate and Postdoctoral Studies, or have proven experience in the supervision of doctoral students at UBC.

*An **Assistant Professor** may be approved if s/he has passed initial re-appointment or has previous experience with the doctoral examinations process. Please contact the Doctoral Examinations Coordinator (822-3989) for instructions about providing this rationale prior to submitting this form.*

Normally, at least one University Examiner must be from a department/graduate program other than that of the candidate and/or the research supervisor (i.e. cannot have an affiliation with the department/graduate program of either the candidate or supervisor).

Arm's Length Requirements:

University Examiners must not be (or have been) members of the supervisory committee or connected with the dissertation research in any way. They should not have been associated with the candidate, outside of usual contact in courses or other non-thesis activities within the university, nor be related to the candidate or supervisor. Except in special circumstances (fully justified in writing) they should not be close collaborators with the supervisor.

Distributing the Dissertation and Other Required Steps:

The Faculty of Graduate and Postdoctoral Studies will appoint an appropriate faculty member to serve as Chair of the final examination and will send an electronic copy of the dissertation to the Chair upon his/her appointment. *The task of finding a suitable Chair can only be undertaken after the examination date is booked with a minimum of four weeks advance notice and the University Examiners form has been received.*

NEW: The research supervisor is required to deliver a hard copy of the dissertation to the Chair, if requested.

It is the responsibility of the research supervisor to ensure that the University Examiners and members of committee receive a copy of the dissertation, which is *identical to the copies submitted for the external examiner*, at least four weeks before the examination.

It is the research supervisor's responsibility to ensure that the candidate and the members of the examination committee (other than the Chair) are confirmed to attend the final exam.



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Candidate's Name: Tom Brosch Student #: 17362104
Graduate Program: Biomedical Engineering Email: brosch.tom@gmail.com
Title of Dissertation: EFFICIENT DEEP LEARNING OF 3D STRUCTURAL BRAIN MRIS FOR MANIFOLD LEARNING AND LESION SEGMENTATION WITH APPLICATION TO MULTIPLE SCLEROSIS
Supervisor: Roger Tam Phone: 604-822-0797
Supervisor's Program: Biomedical Engineering Email: roger.tam@ubc.ca

Nominees for University Examiners (Associate or Full Professors in departments that offer doctoral degrees)

Name: Jim Little Rank: ☒ Full ☐ Associate Grad Program: Computer Science
Email: little@cs.ubc.ca Phone: 604-822-4830

Justification For This Nomination:

Jim Little has a strong background in artificial intelligence, computer vision, and image understanding, which are key topics of the thesis. This makes him a qualified examiner.

Name: Martin J. McKeown Rank: ☒ Full ☐ Associate Grad Program: Neuroscience
Email: martin.mckeown@ubc.ca Phone: 604-822-7866

Justification For This Nomination:

Martin McKeown holds degrees in engineering physics, medicine, and neurology. The unique combination of medical training and engineering background allows him to provide a unique perspective on both the technical and clinical aspects of the thesis.

Additional Nominees:

I have read the instructions overleaf and certify that the nominees are academically qualified and at arm's length from the thesis, the candidate, and the supervisor(s).

Signature: Roger Tam 12-MAY-2016
(Supervisor) (date)
Signature: Karen Cheung 2016 May 12
(Graduate Advisor/Department Head) (date)
Approved: _____ (date)
(Dean/Associate Dean, Faculty of Graduate and Postdoctoral Studies)