

Appendix A

JOINT DOCTORAL PROGRAM (JDP) AGREEMENT

BETWEEN

DALHOUSIE UNIVERSITY (Halifax, Canada)

AND

TAIPEI MEDICAL UNIVERSITY (Taipei, Taiwan)

as *Partner institutions*

1. Preamble: In accordance with Dalhousie University's JDP Policy and Taipei Medical University's Dual Diploma Program Implementation Measures and Students Overseas Training Guidelines, the present agreement is made between:

Dalhousie University, Halifax, Nova Scotia B3H 4R2, Canada, represented by the Dean of the Faculty of Graduate Studies (FGS), **Dr. Marty Leonard**,

And

Taipei Medical University, No. 250 Wuxing St., Xinyi Dist., 11031 Taipei, Taiwan, represented by the Dean of the College of Medicine, **Dr. Chao-Ching Huang**, in order to put in place a doctoral co-supervision and co-enrolment program under the following terms and conditions for

Ms. Ching-Hsuan Liu, date of birth: June 25, 1995 (Hsinchu, Taiwan), nationality: Taiwan

whereby both institutions recognize the validity of the JDP established and that of the resulting Ph.D. degree defended.

2. Administrative Details

Article 1 – Registration, Fees and Duration

At **Dalhousie University** the student is registered in the Doctor of Philosophy in **Microbiology & Immunology** starting in **September/2017**.

At **Taipei Medical University** the student is registered in the doctorate program in **Medical Sciences** starting in **September/2017**.

Student tuition and other fees are paid in accordance with Appendix B.

Expected duration of the program is **4** years, with possible extension to **5** years without modification of this agreement.

Article 2 – Thesis Topic and Placement Periods

Thesis topic:

“The use of oncolytic measles-based vectors for targeted treatment of HCV-induced liver cancer”

Placement Periods

(N.B. 1. **Dalhousie University:** **Fall term** = September - December; **Winter term** = January - April; **Summer term** = May - August. **Taipei Medical University:** **Fall term** = September - January; **Spring term** = February - June; **Summer term** = July - August. 2. Minimum residency in each institution is four terms (16 months) accumulated by the residency periods over the course of the JDP.)

	Dalhousie University	Taipei Medical University
mth/yr		Oct-Dec/2017
mth/yr		Jan-Feb/2018
mth/yr	Mar/2018	
mth/yr		Apr-Dec/2018
mth/yr		Jan-Feb/2019
mth/yr	Mar/2019	
mth/yr		Apr-Aug/2019
mth/yr	Sep-Dec/2019	
mth/yr	Jan-Dec/2020	
mth/yr		Jan-Feb/2021
mth/yr	Mar-Aug/2021	
Total	24 months	23 months

Article 3 – Health Coverage and Legal Liability

Adequate coverage is ensured at each institution as follows:

- At **Dalhousie University** the student is covered by **Blue Cross Canada**.

- At **Taipei Medical University** the student is covered by **National Health Social Security and Student Insurance of TMU**.

3. Pedagogical Details

Article 4 – Thesis Supervisors and Existing Collaboration

- At **Dalhousie University** the student is supervised by **Dr. Christopher D. Richardson (Department of Microbiology & Immunology)**, and

- At **Taipei Medical University** the student is supervised by **Dr. Liang-Tzung Lin (Department of Microbiology and Immunology; Graduate Institute of Medical Sciences)**,

who are committed to fulfilling their role as tutors to the doctoral student. They both exercise the responsibilities assigned to thesis or coursework supervisors in each country.

Article 5 - Doctoral Project

Description of thesis project (maximum 1 page, Appendix C, **attached**)

Article 6 - Academic Plan

Description of activities (courses, seminars, comprehensive exams, thesis research, etc.) at each institution (*This Plan cannot be altered without the consent of both universities.*)

<u>Dalhousie University</u>	<u>Taipei Medical University</u>
Fall 2017:	Fall 2017:
<ul style="list-style-type: none"> • Registration • MCB 6355 Transdisciplinary Studies in Infectious Disease [6 credits]¹ • Doctoral Thesis 	<ul style="list-style-type: none"> • Registration • 31900002 Cell Biology [3 credits] • 3190E054 Seminar [1 credit] • Doctoral Thesis
Spring 2018:	Spring 2018:
<ul style="list-style-type: none"> • Doctoral Thesis 	<ul style="list-style-type: none"> • 31900026 Molecular Biology [3 credits] • 3190E055 Seminar [1 credit] • 31900040 Principles of Biotechnology [2 credits] • Doctoral Thesis
Summer 2018:	Summer 2018:
<ul style="list-style-type: none"> • Doctoral Thesis 	<ul style="list-style-type: none"> • Doctoral Thesis
Fall 2018:	Fall 2018:
<ul style="list-style-type: none"> • Doctoral Thesis 	<ul style="list-style-type: none"> • 3425E008 Special Topics in Immunology [2 credits] • Doctoral Thesis
Spring 2019:	Spring 2019:
<ul style="list-style-type: none"> • Doctoral Thesis 	<ul style="list-style-type: none"> • 3195E070 Special Topics in Molecular & Medical Virology [2 credits] • 31900028 Medical Immunology [2 credits] • Doctoral Thesis
Summer 2019:	Summer 2019:
<ul style="list-style-type: none"> • Doctoral Thesis • Comprehensive Exam 	<ul style="list-style-type: none"> • Doctoral Thesis
Fall 2019:	Fall 2019:
<ul style="list-style-type: none"> • MICI 5400 Host Pathogen Interactions and Human Disease [3 credits] • Doctoral Thesis 	<ul style="list-style-type: none"> • Doctoral Thesis
Spring 2020:	Spring 2020:
<ul style="list-style-type: none"> • MICI 5041 Cancer Biology Seminars [3 credits]² • Doctoral Thesis 	<ul style="list-style-type: none"> • Doctoral Thesis

Summer 2020:	Summer 2020:
• Doctoral Thesis	• Doctoral Thesis
Fall 2020:	Fall 2020:
• MICI 5031 Cancer Biology Seminars [3 credits] ²	• Doctoral Thesis
• Doctoral Thesis	
Spring 2021:	Spring 2021:
• Doctoral Thesis	• Doctoral Thesis
Summer 2021:	Summer 2021:
• Doctoral Thesis	• Doctoral Thesis
• Thesis Defense	
Fall 2021:	Fall 2021:
• Convocation	• Convocation
Total Credits: 15	Total Credits: 16
Total Credits Combined: 31	

¹ Online course required to obtain the CanHepC Fellowship.

² The student will be awarded the full 3 credits for each seminar presentation given at Dalhousie University.

Note: A student may not leave a JDP without the permissions of the deans (or designates) of both signing universities.

The following chart details the Taipei Medical University credit transfer course equivalence for courses taken at Dalhousie University. The 10 credits from the Taipei Medical University compulsory doctoral courses listed below (31950057, 31950081, 31950010, 3195E001, 3195E077, 3195E003, 3195E078) will be waived by the 10 credits from the equivalent courses (listed in the chart) taken at Dalhousie University. The remaining 5 credits from these courses taken at Dalhousie University (equivalent to 3425E004, A0130001;A0130002 at Taipei Medical University) will be counted towards the total credits required for the completion of this JDP.

Dalhousie University	Taipei Medical University
<ul style="list-style-type: none"> • MCB 6355 Transdisciplinary Studies in Infectious Disease [6 credits] 	<ul style="list-style-type: none"> • 31950057 Special Topics in Medical Research [2 credits] • 31950081 Research Designs for Basic Medical Sciences [2 credits] • 31950010 Advanced Paper Writing [2 credits]
<ul style="list-style-type: none"> • MICI 5400 Host Pathogen Interactions and Human Disease [3 credits] • MICI 5041 Cancer Biology Seminars [3 credits] • MICI 5031 Cancer Biology Seminars [3 credits] 	<ul style="list-style-type: none"> • 3425E004 Medical Molecular Imaging [3 credits] • A0130001;A0130002 Moon-Shan Biomedical Research Forum [2 credits] • 3195E001 Seminar [1 credit] • 3195E077 Seminar [1 credit] • 3195E003 Seminar [1 credit] • 3195E078 Seminar [1 credit]

Article 7 – Thesis Manuscript and Oral Defense

The single thesis leads to a single oral defense, recognized by both participating institutions. The examining committee is appointed mutually by both participating institutions. The minimum examining committee will consist of:

- (1) Dr. Liang-Tzung Lin from Taipei Medical University, Co-supervisor
- (2) Dr. Christopher D. Richardson from Dalhousie University, Co-supervisor
- (3) A Reader from Dalhousie University
- (4) A Reader from Taipei Medical University
- (5) An External Examiner (external to both institutions)

The thesis defense will be held at **Halifax, Canada** between **July-August 2021**. The language of the thesis manuscript and the oral defense will be English.

Notes: possible alternate language requirements of thesis summary: **Mandarin**

Article 8 – Issuing of Parchments

Upon a favourable verdict by the oral defense examining committee, **Dalhousie University** agrees to confer the title of “Doctor of Philosophy” to **Ching-Hsuan Liu** and to issue the corresponding degree (doctorate),

And **Taipei Medical University** agrees to confer the title of “Doctor of Philosophy” to **Ching-Hsuan Liu** and to issue the corresponding degree (doctorate).

The wording of the parchment will mention the partner institution and the JDP as the mode of study.

Article 9 – Submission, Description and Reproduction of the Thesis

These will comply with the regulations in effect at each institution.

4. Other Aspects

Details of student funding:

- Dalhousie University: Canadian Network on Hepatitis C (CanHepC) Doctoral Trainee Fellowship (4 years)
- Taipei Medical University: Doctoral Scholarship (3 years)
- Travel and living expenses will be borne by the student

Intellectual property arrangements:

The protection of the thesis subject, and the publication, exploitation and protection of results issued from the research work of the doctoral candidate in both establishments are subject to the existing regulations and ensured in conformity with the specific procedures of each country involved in the thesis co-direction.

Additional matters:

The student in the JDP program should receive all the benefits (Dalhousie University student ID card, access to library and facilities, myDal information technology services [Dal NetID, email, wireless networking, etc.] stipulated to a registered student at Dalhousie University.