



Transitioning from Knowledge Consumers to Knowledge Producers: Research & Community Placements as Transition Experiences

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www.science.mcmaster.ca/lifesciences



Outline

- Why are experiential placements (EPs) important?
- Our experiences – Why are EPs important to us?
- How we do help?
- Student perspectives & reflection
- Areas for improvement
- Evaluation plan
- Questions, comments



What EP's do you offer?

Why do you think EP's are important?



Why are experiential placements important?

- Providing opportunities to:
 - Determine career fit
 - Refine learning goals
 - Develop specific competencies related to career objectives
 - Establish a network of post graduation contacts
(Bell and Benes, 2012)



Why are experiential placements important?

- Recognized as “an essential component to building a highly skilled and productive labour force for an innovative, strong and growing economy” (Canadian Chamber of Commerce, 2012: 6)
- An important tool in regional economic development (Garlick, Davies, Polèse and Kitagawa, 2006)
- Recognized as high-impact practice for deep learning (Kuh, 2008)



Some McMaster context

- Located in Hamilton, Ontario (Southwestern Ontario)
- One of the Top 100 universities in the world
(Shanghai Jiao Tong University Academic Ranking of World Universities, 2012)
- 21,000+ undergraduate students
- “Research focused student centred” institution
- Origin of Problem-Based Learning in our School of Medicine (1969)



Why are EP's important to us

- Integrate academic 'book' learning with hands-on experiences
- Create a connection to the community
- Transition to a greater sense of ownership of a student's individual/personal learning
- Offer varied experiences to a range of students not otherwise possible via lecture/lab based courses



Our experiences

- Honours Life Sciences program
 - 1000+ students in program (levels 2-4)
 - Great flexibility, lots of choice
- How do we provide meaningful course experiences for 1000+ students?
- 2011 Undergraduate Program Review



Historical Growth

Level 4

Thesis –
3 units

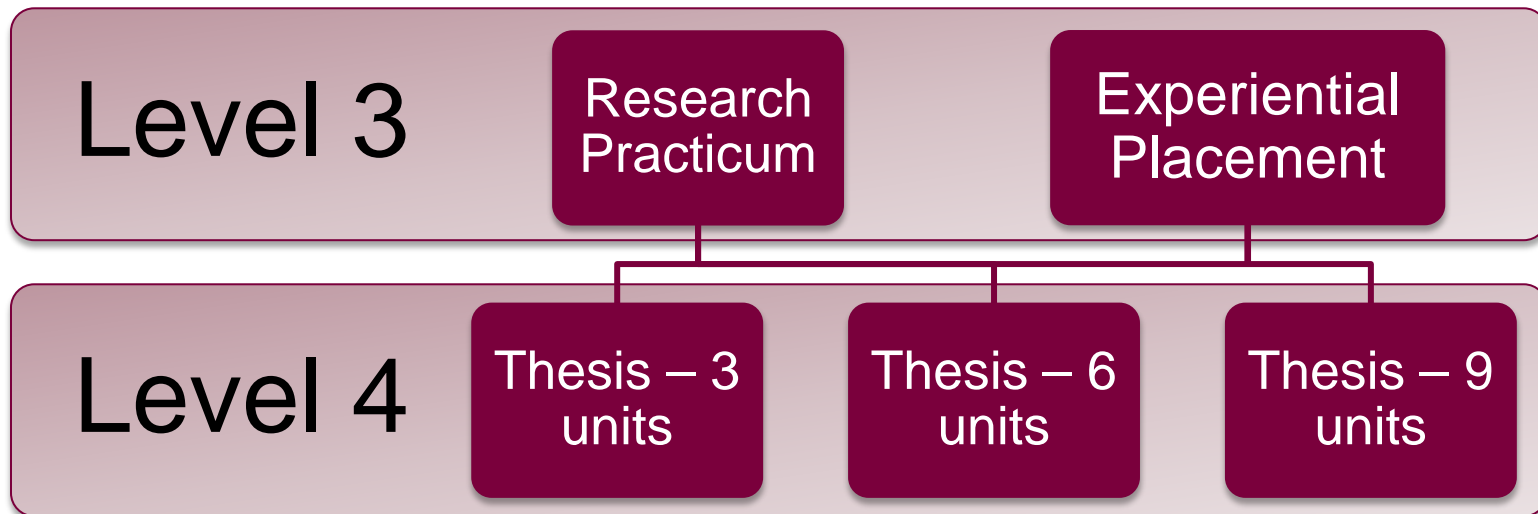
Thesis –
6 units

Thesis –
9 units

Traditional Capstone experiences

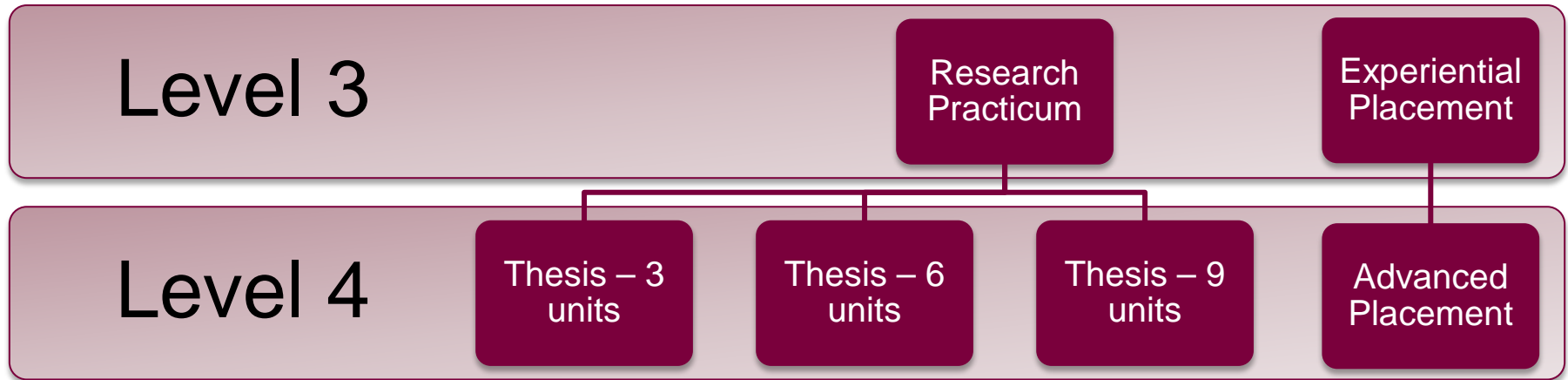


Refining our Offerings





Refining our Offerings



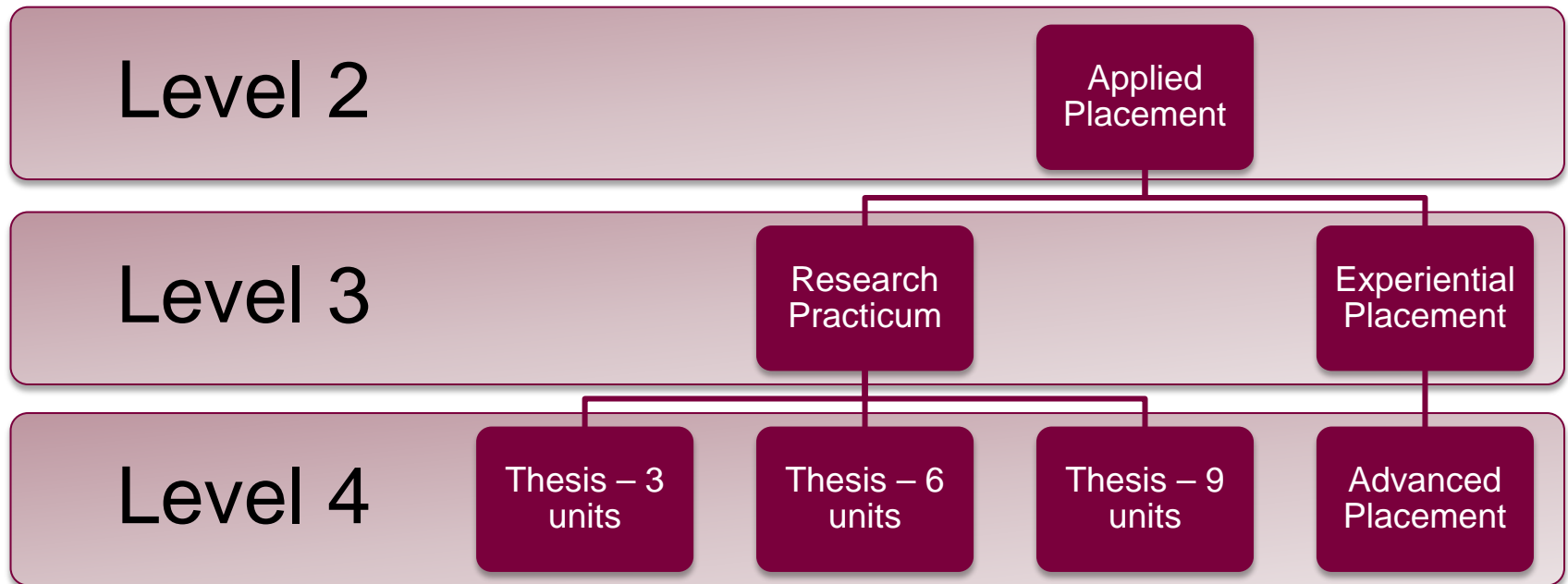


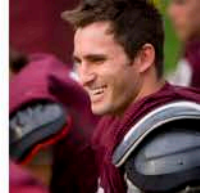
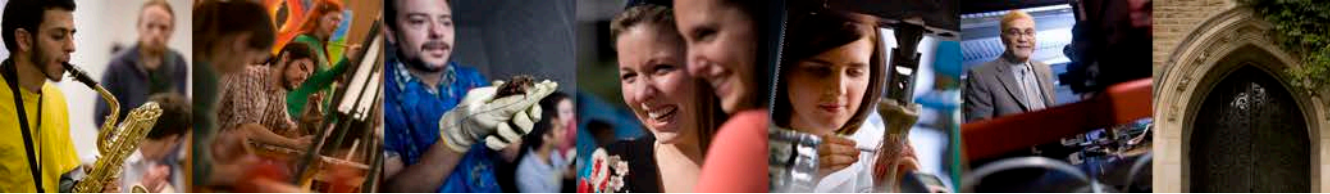
How do we help?

- Multiple experiences available throughout degree
- Scaled support
 - Online resources
 - Electronic, fillable applications
 - Face to face feedback



Multiple experiences





Online resources

Life Sciences Program

- Home
- Undergraduate Programs
- Experiential Opportunities**
- Independent Study
- Career & Post Graduate
- Research Symposium
- Faculty & Staff
- Student Society
- Policies & Forms
- Available Positions
- News & Events
- Contact Us


Experiential Opportunities



General Information

LIFE SCI 2AP3

LIFE SCI 3EP3/4EP6

Deadlines 

Normally students will complete a minimum of 60 or 120 hours of placement work through the duration of the experience. The position can be volunteer or paid, on campus or off campus.

Occasional lecture/tutorial; one term


Prerequisite(s): Credit or registration in SCIENCE 2C00; and registration in Level III or above of a Life Sciences program or B.Sc. Life Science; and permission of the academic supervisor and the Director of Life Science (or delegate).



Not open to students with credit or registration in any department- or program-based applied placement, independent study, research seminar, internship or practicum course within the University.

Students are responsible to arrange a suitable placement and supervision, and are required to submit an application to the Life Sciences office in BSB-110 30 days prior to the start of term.


To Apply:

Application process and tips for finding a Supervisor.

 [LIFE SCI 3EP3 Application](#)

 [Sample Application](#) 

 [LIFE SCI 4EP6 Application](#)

 [Sample application](#)

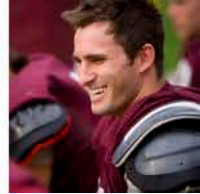
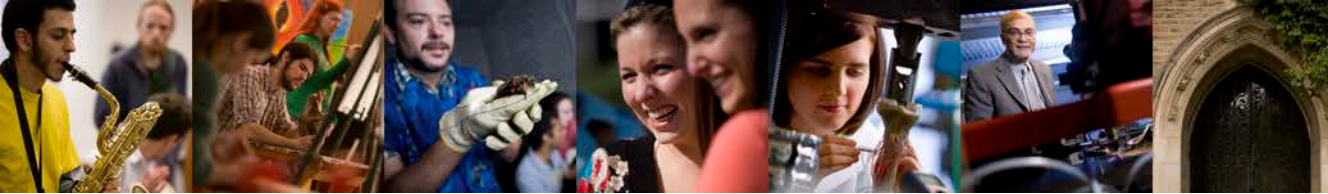
View the recent  [presentation](#) for more information. 

LIFE SCI 3RP3 is considered suitable preparation for LIFE SCI 4A03, 4B06, 4C09. The **LIFE SCI 3RP3 Application Form** can be found under the Independent Study page.




Fillable forms

[http://www.science.mcmaster.ca/
lifesciences/experiential-ed-
opportunities.html](http://www.science.mcmaster.ca/lifesciences/experiential-ed-opportunities.html)




Fillable forms

2. Academic Component (jointly determined by the Student and Supervisors)

Identify one or more learning objectives in **each** of the following categories, with methods of evaluation. Use the table to organize the learning objectives associated with your placement. 

- a. **Theory & Knowledge Development:** related to the ideas, concepts or theories of your field of study (e.g. literature review, reading, quizzes, journal or reflections, written report or final presentation).
- b. **Skill Development:** oral and written communication, data collection, problem-solving, decision-making, teamwork, skills specific to the occupation.
- c. **Personal Development:** career exploration, self-confidence, sensitivity, appreciation of diversity, clarification of values.

	WHAT I HOPE TO GAIN FROM THIS EXPERIENCE <i>Learning Objectives</i>	HOW I WILL ACCOMPLISH MY LEARNING OBJECTIVES <i>Tasks & Strategies to Accomplish Learning Objectives</i>	HOW I WILL DEMONSTRATE THE ACCOMPLISHMENT OF MY LEARNING OBJECTIVES <i>Methods of Evaluation</i>
THEORY AND KNOWLEDGE DEVELOPMENT			
SKILL DEVELOPMENT			
PERSONAL DEVELOPMENT			



LIFE SCI 3EP3 Methods of Evaluation Form– Jointly determined by the Student and Academic Supervisor

Describe in detail all of the components to be evaluated (i.e. monthly logs, mid-term & final site evaluations, literature reviews, journal, research paper, portfolio, webpage or class/public presentation) and what proportion of the final grade is allocated to each component. These components should correspond to the "methods of evaluation" from the table above. Assessments should occur continuously throughout the term.

METHOD OF EVALUATION	DUE DATE	TOTAL VALUE OF FINAL MARK
★		
Other (please specify):		
TOTAL:		0

Methods of evaluation from table 2 pre-populate to the grade breakdown

*Final grade must add up to 100% and should be submitted by the Supervisor to the Course Coordinator at the end of term.



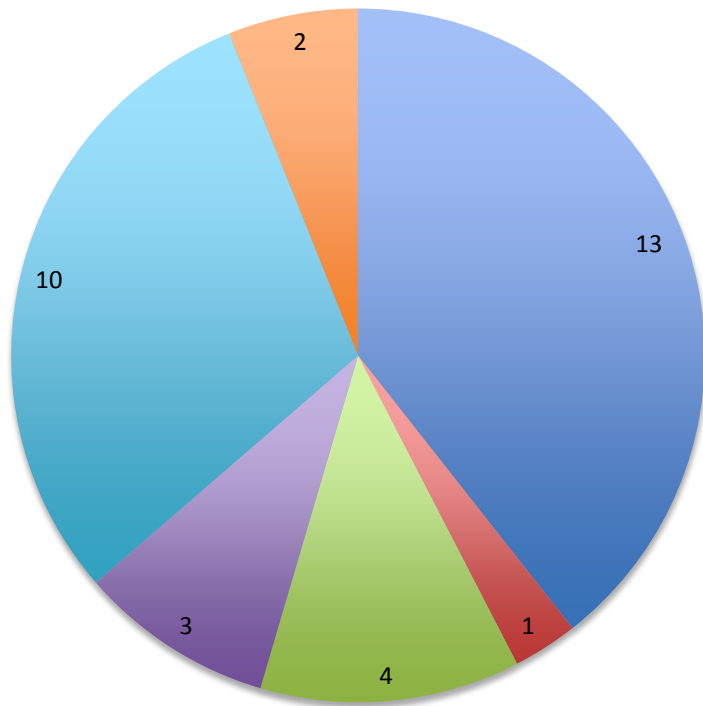
F2F feedback







Skill Development	Patient history Examination of patients	<ul style="list-style-type: none"> Shadowing Training on Assessment and in statistical data 	Presentation Paper	Written and oral report	May 10, 17, 24, 31; June 7, 14 and 21 Jump 2013
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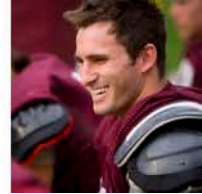
Skill Development	I will be learning to perform statistical evaluations on assessments, and learn how to interact with patients by shadowing Dr. Hapidou. I will also learn how to apply for Ethical Approval as well as developing further my research skills	I will receive training from one of Dr. Hapidou's students on evaluation procedures, and I will be applying for Ethical Approval with the help of Dr. Hapidou. I will also shadow her on Tuesdays, as well as doing research for my own report.	I will develop a completion schedule and present it to Dr. Ullal together with my personal tracking log	All the evaluation methods mentioned above. Weekly presentations in particular	May 10, 17, 24, 31; June 7, 14 and 21
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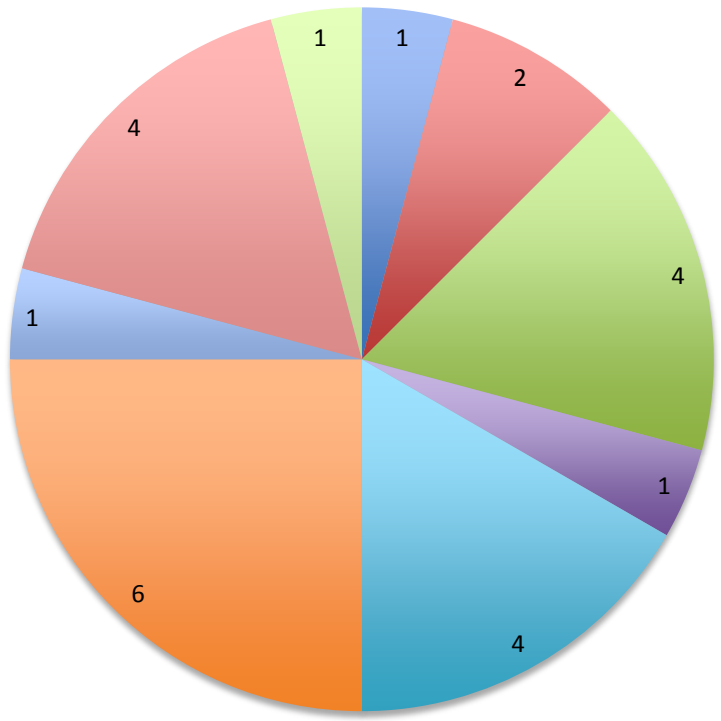
Experiential Placements 2012-14



-  Clinical
-  Community Organization
-  Education
-  Marketing, Design & Media
-  Research
-  University (other than research)



Research Practica 2012-14



- Health Sciences
- Biochemistry & Biomedical Sciences
- Biology
- Health, Aging & Society
- Medical Physics
- Pediatrics
- Physics
- Psychology, Neuroscience & Behaviour
- School of Geography & Earth Sciences



Student Perspectives

- “This past semester I had the opportunity to partake in a clinical placement ...in the Wound Care Department. My main objective in taking this placement course was to learn more about the infrastructure of a hospital. Furthermore, I have always considered a career in health care and this placement afforded me the ability to work with patients on a more meaningful level as I aided in the delivery of care and management of wounds alongside my clinical supervisor. Interestingly, this niche, which was facilitated by both my academic and clinical supervisor, opened up various avenues of learning for me while at my placement.”



Student Perspectives

“I achieved many of my learning objectives through my placement course this term.

This placement allowed me to understand more about autism, which is a topic that has always interested me. **The hands-on experience in my volunteer opportunity further boosted my interest to read multiple peer-reviewed articles** to gain a better understanding for autistic individuals...I was able to **relate some of the knowledge I had gained from previous psychology courses, and link them to the new research that I read.** It was a very eye-opening academic experience for me, and I can see myself pursuing research in studies regarding psychological disorders in children.”



Student Perspectives

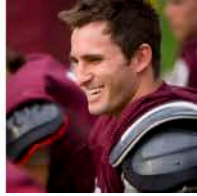
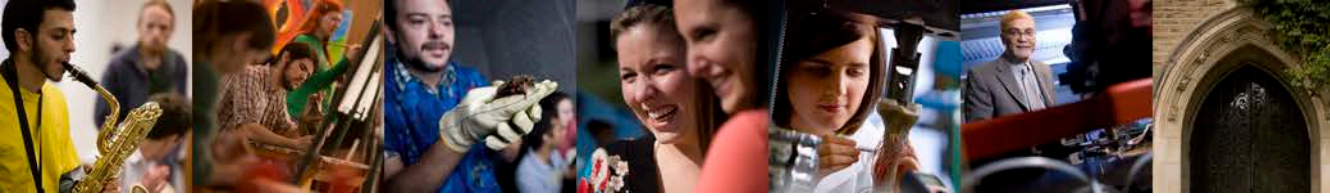
“Having explored the sciences throughout my education and to have witnessed how they are applied to the health care sector within the [Government] has allowed me to find my passion in this line of work...This experience has also allowed me to **network with numerous employees and liaise with stakeholders** that could also prove to be beneficial in my future career search.

Not only has this experience provided me the experience to understand why certain things are taught in certain classes, but it also **allowed me to apply my knowledge to a real world application**. I would highly recommend this experience for any student who is unsure of their future career path...”



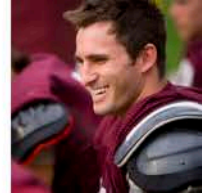
Areas for Improvement

- Form submission – getting it right the first time
 - Use of Adobe Captivate to help guide supervisors & students through the application
 - Online, electronic submission
- Transition opportunities at all degree levels
 - Introduced level II course in 2013
- Low enrollments
- Range of placement experiences



Evaluation Plan

- Working with current students to gain feedback about:
 - Success in finding placements
 - The submission process
 - Feedback process (pre-enrollment)
 - Placement experiences



Questions/Comments



References

- Bell, D., and Benes, K. (2012). *Transitioning graduates to work: Improving the labour market success of poorly integrated new entrants (PINEs) in Canada*. Ottawa: Canadian Career Development Foundation.
- Canadian Chamber of Commerce. (2012). *Skills development discussion paper*. Ottawa: Canadian Chamber of Commerce.
- Garlick, S., Davies, G., Polèse, M., and Kitagawa, F. (2006). *Supporting the Contribution of Higher Education Institutions to Regional Development: Peer Review Report*. Paris: OECD.
- Kuh, G. 2008, *High Impact Educational Practices*, Association of American Colleges & Universities, Washington, viewed 1 Oct. 2013, <www.aacu.org>