

Life Sciences Information Session

- Dr. Louise Winn, Associate Dean, Life Sciences and Biochemistry
Professor, Biomedical and Molecular Sciences & Environmental Studies
- DSC Co-Presidents
 - Meaghan Frank and Isaac Emon
- Academic Co-Chairs
 - Lindsay Jefferson and Leila Tibouti

Thursday October 7, 2021

Office of Life Sciences and Biochemistry

Location

- Rm. 815 Botterell Hall
 - Lifesci@queensu.ca
 - Katherine Rudder - LISC
 - Dr. Louise Winn - Assoc. Dean LISC & BCHM
- Use your Queen's email and leave your student #

SSP:

Recommended (but not necessary) if your career plans include research (i.e., graduate school) as there is a heavy emphasis on hands-on laboratory/research experience.
**Also meets the needs of most professional schools.

MAJ:

Recommended if your career plans are more inclined towards an emphasis on using your biomedical training to pursue a non-research career involving other professional training (medical, dental, business, law or other postgraduate school). The course requirements for the MAJ are designed for the needs of the non-research life sciences or biochemistry student; less core credits and more electives allows for the pursuit of additional electives which can thus be tailored to specific career need. **Also meets the needs of most professional schools.

Information for 3rd year Life Science students going into 4th year

WHAT WILL MY CORE DEGREE PLAN BE?

4th Year Life Sciences Major

- MAJOR students must obtain a minimum cumulative **GPA of 2.5**
- **Core 4th year courses for Major:**
 - No specific core course requirement
 - Need 3U from LISC List A at the 400 level
 - Need 15U from LISC List A at the 300 level or above
 - Need 6U from LISC List A at the 200 level or above
 - Need 6U from LISC List A

WHAT WILL MY CORE DEGREE PLAN BE?

4th Year LISC Specialization

- Specialization students must obtain a minimum cumulative **GPA of 2.5**
- **Core 4th year courses for Specialization EXCEPT FOR BIOMEDICAL SCIENCES!**
 - PHAR 380 (3U) – if not taken yet

WHAT WILL MY CORE DEGREE PLAN BE?

4th Year LISC Specialization

- **SUB-PLANS:**

- **Biomedical Discovery** – recommended if you want laboratory experience
- **Biomedical Sciences** – provides more flexibility, can take more advanced courses
- **CANC** – those wishing to proceed with research in the field of cancer
- **CRSS** - those wishing to proceed with research in the field of cardiovascular and respiratory sciences
- **DDHT** - those wishing to proceed with research in the field of drug discovery and development as well as toxicology
- **NSCI** - those wishing to proceed with research in the field of neurosciences

WHAT WILL MY CORE DEGREE PLAN BE?

4th Year LISC Specialization

- SUB-PLANS:** **Biomedical Discovery** recommended if you want laboratory experience

A. BIOMEDICAL DISCOVERY (BMDS-O) (39.0 units)

i. Core	(24.0 units)		
a.	9.0 units	in	BCHM 310/9.0
b.	3.0 units	in	PHAR 450/3.0 Or PHAR380
c.	12.0 units	from	ANAT 499/12.0; EPID 499/12.0; <i>LISC 499/12.0</i> ; MICR 499/12.0; NSCI 499/12.0; PATH 499/12.0; PHGY 499/12.0; PHAR 499/12.0; REPD 499/12.0

ii. Option	(15.0 units)		
a.	9.0 units	from	LISC_List_C at the 300 level or above
b.	6.0 units	from	LISC_List_C at the 200 level or above

LISC_List_C

Options in the Biomedical Discovery Sub-plan

ANAT	BIOL 205/3.0	BIOM 300/3.0	PSYC 205/3.0
BCHM	BIOL 321/3.0		PSYC 215/3.0
CANC	BIOL 322/3.0		PSYC 271/3.0
CHEM at the 200 level	BIOL 330/3.0	BMED 270/3.0	PSYC 305/3.0
CRSS	BIOL 331/3.0	BMED 370/3.0	PSYC 323/3.0
DDHT	BIOL 334/3.0	<i>BMED 380/3.0</i>	<i>PSYC 326/3.0</i>
EPID	BIOL 339/3.0	BMED 381/3.0	<i>PSYC 360/3.0</i>
LISC	BIOL 350/3.0	BMED 383/3.0	PSYC 370/3.0
MATH at the 200 level	BIOL 369/3.0	BMED 384/3.0	PSYC 371/3.0
MICR	BIOL 401/3.0	BMED 480/3.0	PSYC 470/3.0
NSCI	BIOL 403/3.0	<i>BMED 482/3.0</i>	PSYC 471/3.0
PATH	BIOL 404/3.0	BMED 483/3.0	PSYC 501/9.0
PHAR	BIOL 430/3.0		
PHGY			
REPD	BIOL 441/3.0		
PHYS at the 200 level			
STAT at the 200 level		HLTH 323/3.0	
*Excluding: ANAT 270/3.0; BCHM 270/3.0; MICR 270/3.0; PHAR 270/3.0			

WHAT WILL MY CORE DEGREE PLAN BE?

4th Year LISC Specialization

- SUB-PLANS: Biomedical Sciences** provides more flexibility, can take more advanced courses

B. BIOMEDICAL SCIENCES (BMSS-O) (27.0 units)

i. Core	(6.0 units)		
a.	6.0 units	from	(BCHM 315/3.0 and BCHM 316/3.0) or BCHM 310/9.0

ii. Option	(21.0 units)		
a.	12.0 units	from	LISC_List_D; LISC_Labs_E at the 400 level or above
b.	9.0 units	from	LISC_List_D; LISC_Labs_E

iii. Additional Requirements			
a.	6.0 units must be from LISC_Labs_E		

WHAT WILL MY CORE DEGREE PLAN BE?

4th Year LISC Specialization • SUB-PLANS: Biomedical Sciences

LISC_List_D				
Options in the Biomedical Sciences Sub-plan				
ANAT 416/3.0	BIOL 205/3.0	BMED 270/3.0	LISC 300/3.0	PATH 310/3.0
ANAT 417/3.0	BIOL 321/3.0	BMED 370/3.0	LISC 426/3.0	PATH 410/3.0
	BIOL 322/3.0	BMED 380/3.0		PATH 425/3.0
BCHM 310/9.0	BIOL 330/3.0	BMED 381/3.0	MICR 320/3.0	PATH 430/3.0
BCHM 313/3.0	BIOL 331/3.0	BMED 383/3.0	MICR 360/3.0	
BCHM 315/3.0	BIOL 334/3.0	BMED 384/3.0	MICR 450/3.0	REPD 372/3.0
BCHM 316/3.0	BIOL 339/3.0	BMED 480/3.0	MICR 451/3.0	REPD 416/3.0
BCHM 410/3.0	BIOL 350/3.0	BMED 482/3.0	MICR 452/3.0	REPD 473/3.0
BCHM 411/3.0	BIOL 401/3.0	BMED 483/3.0	MICR 455/6.0	
BCHM 432/3.0	BIOL 403/3.0		MICR 461/3.0	PHAR 340/3.0
	BIOL 404/3.0	CANC 440/3.0		PHAR 450/3.0
BIOM 300/3.0	BIOL 430/3.0		NSCI 322/3.0	PHAR 416/3.0
	BIOL 431/3.0	CRSS 453/3.0	NSCI 323/3.0	
	BIOL 433/3.0	CRSS 454/3.0	NSCI 324/3.0	PHGY 350/3.0
	BIOL 441/3.0	CRSS 456/3.0	NSCI 401/3.0	PHGY 424/3.0
	BIOL 445/3.0	CRSS 498/3.0	NSCI 414/3.0	PHGY 444/3.0
			NSCI 422/3.0	PHGY 494/3.0
		DDHT 459/3.0	NSCI 429/3.0	
		DDHT 460/3.0	NSCI 444/3.0	PSYC 326/3.0
				PSYC 470/3.0
		EPID 301/3.0		PSYC 471/3.0
				PSYC 473/3.0
				PSYC 475/3.0
				STAT 361/3.0
				STAT 460/3.0

LISC_Labs_E				
Laboratory Options in the Biomedical Sciences Sub-plan				
ANAT 309/3.0	BIOL 205/3.0 (if taken in or before 2018-19)	BMED 384/3.0 EPID 401/3.0		ANAT 499/12.0
ANAT 312/3.0	BIOL 212/3.0		PSYC 305/3.0	
ANAT 315/3.0	BIOL 321/3.0		PSYC 323/3.0	EPID 499/12.0
ANAT 316/3.0	BIOL 322/3.0		PSYC 360/3.0	LISC 499/12.0
ANAT 409/3.0	BIOL 330/3.0	LISC 390/3.0	PSYC 371/3.0	MICR 499/12.0
	BIOL 331/3.0	LISC 391/3.0		NSCI 499/12.0
	BIOL 334/3.0			PATH 499/12.0
BCHM 421/3.0	BIOL 401/3.0	MICR 435/3.0		PHAR 499/12.0
BCHM 422/3.0	BIOL 403/3.0	MICR 436/3.0		PHGY 499/12.0
BCHM 442/3.0	BIOL 404/3.0	NSCI 433/3.0		
	BIOL 441/3.0			

WHAT WILL MY CORE DEGREE PLAN BE?

4th Year LISC Specialization

- SUB-PLANS: CANC** those wishing to proceed with research in the field of cancer

C. CANCER RESEARCH (CANC-O) (39.0 units)

i. Core	(27.0 units)		
a.	9.0 units	in	BCHM 310/9.0
b.	3.0 units	in	CANC 440/3.0
c.	3.0 units	in	PHAR 450/3.0 Or PHAR380
d.	12.0 units	in	CANC 499/12.0

ii. Option	(12.0 units)		
a.	6.0 units	from	LISC_List_F at the 400 level
b.	6.0 units	from	LISC_List_F

LISC_List_F

Options in the Cancer Research Sub-plan

BCHM 410/3.0	CANC 380/3.0	MICR 360/3.0	PATH 310/3.0	PHAR 416/3.0
BCHM 411/3.0	CHEM 311/3.0	MICR 436/3.0	PATH 425/3.0	PHGY 350/3.0
BCHM 432/3.0	CISC 333/3.0	MICR 450/3.0		
BIOL 205/3.0	EPID 301/3.0	MICR 451/3.0		PSYC 332/3.0
BIOL 330/3.0		MICR 461/3.0		
BIOL 331/3.0				
BIOL 430/3.0				
BIOL 441/3.0				

WHAT WILL MY CORE DEGREE PLAN BE?

4th Year LISC Specialization

- SUB-PLANS:** CRSS field of cardiovascular and respiratory sciences

D. CARDIORESPIRATORY SCIENCE (CRSS-O) (42.0 units)

i. Core	(33.0 units)		
a.	9.0 units	in	BCHM 310/9.0
b.	3.0 units	in	PHGY 355/3.0
c.	6.0 units	from	CRSS 453/3.0; CRSS 454/3.0; CRSS 456/3.0; CRSS 498/3.0
d.	3.0 units	in	PHAR 450/3.0 Or PHAR380
e.	12.0 units	from	ANAT 499/12.0; PATH 499/12.0; PHAR 499/12.0; PHGY 499/12.0

ii. Option	(9.0 units)		
a.	9.0 units	from	LISC_List_G

LISC_List_G

Options in the Cardiorespiratory Sub-plan

BMED 270/3.0	EPID 301/3.0	
CRSS 453/3.0	HLTH 323/3.0	
CRSS 454/3.0	PHGY 350/3.0	

WHAT WILL MY CORE DEGREE PLAN BE?

4th Year LISC Specialization

- SUB-PLANS: DDHT** research in the field of drug discovery and development as well as toxicology

E. DRUG DEVELOPMENT AND HUMAN TOXICOLOGY (DDHT-O) (4 30 units) 39.0 units			
i. Core (33.0 units) 30.0 units			
a.	9.0 units	in	BCHM 310/9.0
b.	9.0 units	in	DDHT 459/3.0, DDHT 460/3.0, PHAR 416/3.0 Or PHAR480
c.	3.0 units	in	PHAR 450/3.0 Or PHAR380
d.	12.0 units	from	ANAT 499/12.0; EPID 499/12.0; MICR 499/12.0; NSCI 499/12.0; PATH 499/12.0; PHGY 499/12.0; PHAR 499/12.0; REPD 499/12.0
ii. Option (9.0 units)			
a.	3.0 units	from	LISC_List_J
b.	6.0 units	from	LISC_List_K at the 200 level or above

6 units

WHAT WILL MY CORE DEGREE PLAN BE?

4th Year LISC Specialization



SUB-PLANS: DDHT

LISC_List_J			
<i>Options in the Drug Development and Human Toxicology Sub-plan</i>			
Some of these courses may also appear on LISC_List_K. They may only be used to fulfill requirements from one			
CANC 440/3.0	CRSS 454/3.0		NSCI 414/3.0
	CRSS 456/3.0		
CHEM 213/3.0			PATH 430/3.0
CHEM 222/3.0	EPID 301/3.0		

LISC_List_K				
<i>Options in the Drug Development and Human Toxicology Sub-plan</i>				
Some of these courses may also appear on LISC_List_J. They may only be used to fulfill requirements from one list.				
ANAT	BIOL 205/3.0	BIOM 300/3.0	<i>NSCI 322/3.0</i>	PSYC 205/3.0
BCHM	BIOL 321/3.0		NSCI 323/3.0	PSYC 215/3.0
EPID	BIOL 322/3.0	CHEM 213/3.0	NSCI 324/3.0	PSYC 271/3.0
MICR	BIOL 330/3.0	CHEM 221/3.0	NSCI 422/3.0	<i>PSYC 326/3.0</i>
PATH	BIOL 331/3.0	CHEM 222/3.0		PSYC 370/3.0
PHAR	BIOL 334/3.0		PHYS 206/3.0	PSYC 371/3.0
PHGY	BIOL 339/3.0		<i>PHYS 214/3.0</i>	<i>PSYC 375/3.0</i>
*Excluding:	BIOL 350/3.0		PHYS 216/3.0	<i>PSYC 390/3.0</i>
ANAT 270/3.0;	BIOL 401/3.0	MATH 221/3.0	PHYS 242/3.0	<i>PSYC 395/3.0</i>
BCHM 270/3.0;	BIOL 403/3.0	MATH 225/3.0	<i>PHYS 274/3.0</i>	PSYC 470/3.0
MICR 270/3.0;	BIOL 404/3.0	MATH 228/3.0		PSYC 471/3.0
PHAR 270/3.0	BIOL 430/3.0	<i>MATH 232/3.0</i>		<i>PSYC 475/3.0</i>
PHGY 170/3.0	BIOL 441/3.0	MATH 271/3.0		PSYC 501/9.0
		STAT 268/3.0		

WHAT WILL MY CORE DEGREE PLAN BE?

4th Year LISC Specialization

- SUB-PLANS: NSCI** those wishing to proceed with research in the field of neuroscience

F. NEUROSCIENCE (NSCI-O) (42.0 units)

i. Core	(27.0 units)		
a.	9.0 units	in	BCHM 310/9.0
b.	3.0 units	from	NSCI 323/3.0; NSCI 324/3.0; <i>NSCI 322/3.0</i>
c.	3.0 units	in	PHAR 450/3.0 Or PHAR380
d.	12.0 units	in	NSCI 499/12.0

ii. Option	(15.0 units)		
a.	6.0 units	from	LISC_List_L at the 400 level
b.	9.0 units	from	LISC_List_L

LISC_List_L

Options in the Neuroscience Sub-plan

ANAT 312/3.0	<i>NSCI 322/3.0</i> (NSCI 323/3.0 or NSCI 324/3.0)	PHGY 424/3.0 PHGY 494/3.0	PSYC 271/3.0 PSYC 370/3.0 PSYC 371/3.0 PSYC 398/3.0 PSYC 399/3.0 PSYC 470/3.0 PSYC 471/3.0 PSYC 473/3.0
BIOL 445/3.0	NSCI 401/3.0 NSCI 403/3.0 NSCI 414/3.0 NSCI 422/3.0 NSCI 429/3.0 NSCI 433/3.0 NSCI 444/3.0 NSCI 483/3.0 NSCI 491/3.0		
LISC 300/3.0			
LISC 426/3.0			

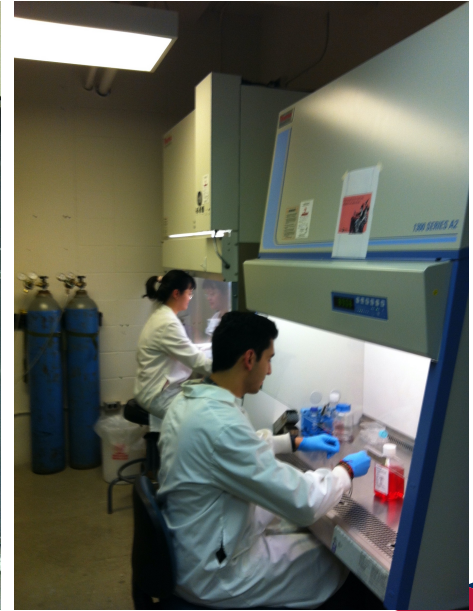
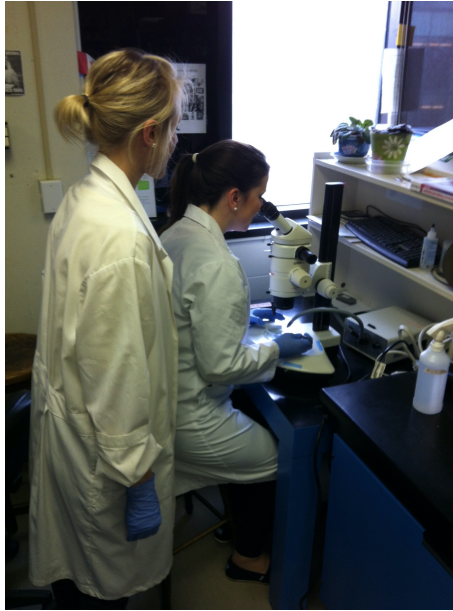
Non-Arts and Sciences courses

- Only 6 units of non-Arts and Sciences courses can be used towards your degree
 - I.e. LAW, Commerce courses
- Exception – can take BMED courses

Combined BSc/MSc

- Life Sciences offers a combined program
- “Accelerated” path to graduate school
- Apply in the 2nd term of 3rd year
- Take up to 6 units of graduate courses during 4th year
- Continue 4th year research project

Research In Action



STUDENTS

- ▶ Looking for a Job?
- ▶ Wondering about Career Options?
- ▶ Thinking about Grad School?
- ▶ Want to Build Experience?
- ▶ Tipsheets & Career Resources
- ▼ Services for Students
 - Graduate and Professional Students
 - ▼ Employment Programs
 - M.Eng. Industrial Internship Program
 - **QUIP**
 - SWEP
 - Work Study Program
 - Drop-in Career Advising
 - Events, Fairs, & Information Sessions
 - Career Advising & Resource Area
 - ▶ Workshops
 - ▶ Appointments
- It All Adds Up
- LinkedIn at Queen's

Queen's Undergraduate Internship Program (QUIP)

The Queen's Undergraduate Internship Program (QUIP) provides students with a 12-16 month work experience. QUIP internships are paid, professionally supervised, career-related positions designed to offer second or third year students the opportunity to learn about current advances, practices and technologies in business and industry. The program is open to students in the Faculty of Engineering and Applied Science (domestic and international), Faculty of Arts and Science (domestic and international), School of Computing (domestic and international) and the School of Business (domestic only; not for credit). Due to the longer work term (compared to a 4-month co-op), employers are highly motivated to maximize their time and investment. This means that Internship students are offered the opportunity to manage more extensive and significant projects.

[Search QUIP job postings](#)

[Contact QUIP coordinator](#)



Got Questions? Come and see the QUIP Coordinator during QUIP Drop-in Advising Hour – no appointment necessary!

QUIP Drop-in Advising: Every Tuesday and Thursday from 11-12 in the [Career Advising and Resources Area](#) (Sept-April)

— Eligibility

The program is open to students in the Faculty of Engineering and Applied Science (domestic and international), Faculty of Arts and Science (domestic and international), School of Computing (domestic and international) and the School of Business (domestic only - please see an academic advisor in the School of Business before registering).

- Queen's students can participate in QUIP after their 2nd or 3rd year of studies and must be returning to complete their final academic term after the internship.
- Students must have a minimum GPA of 1.9 and the permission of your undergraduate chair to register in QUIP.

Exit Strategy

If you get an acceptance to medical school in your 3rd year...

Life Sciences & Biochemistry –
General Bachelor of Science

Honours routes: Major or
Specialization

Health Sciences– General Bachelor
of Health Sciences

Honours route: Major



LSO Networking Night

Please join the LSO members, Board and other Industry individuals for the November Networking Night

LSO's Networking Nights event series provides a forum for LSO members and non-members to build connections with the life sciences community in a social setting.

On average we have 100 -120 confirmed attendees per event, with our most popular event drawing 140 people. One third of attendees represented SME companies, 33% were researchers/students, with the remainder being consultants, lawyers, investors, accelerators, multinationals, and government delegates.

If you are looking to raise your profile within the Life Sciences community, Sponsorship Opportunities are available. For more information, please contact the LSO Office (admin@lifesciencesontario.ca)

Career Opportunities

Medicine

**Biomedical
Research**

Law

**Healthcare Policy and/or
Administration**

Industry

Pharmacy

Veterinary Medicine

Education

**Physiotherapy and
Occupational Therapy**

Dentistry

Contact Us

By email:

Life Sciences – lifesci@queensu.ca (Katherine Rudder)

DSC Representatives

DSC Instagram Office Hours

DSC Events: Check Social Media (@queensulifesci)

Opportunity to provide feedback

