## PATH822 – Experimental Cancer Therapeutics (Fall 2015) COURSE OUTLINE

### **SCHEDULE**

Week	Date (Fri.)	Session Leader(s)	Session Title	Student Presentations
1	Sept. 18	C. Nicol	Overview and Introduction to New Drug Development (no presentations)	None
2	Sept. 25	S. Davey	Molecular basis of oncogenic transformation & signalling pathways (no presentations)	None
3	Oct. 2	S. Cole	Challenges with Current Cancer Therapeutics	TBD
4	Oct. 9	M. Rauh	Molecular Evaluation of Tumours	TBD
5	Oct. 16	C. Nicol	Drug Discovery I - (small molecules)	TBD
6	Oct. 23	N. Renwick	Drug Discovery II - (non-small molecules, ie RNAi, DNA vaccines, gene therapy, viruses, etc)	TBD
7	Oct. 30	C. Nicol	Experimental Drug Delivery (nanoparticles)	TBD
8	Nov. 6	A. Kerr	Novel Imaging (increasing sensitivity for: preclinical testing; selecting responsive patients; molecular imaging agents for ultrasound, PET, CT, fMRI)	TBD
9	Nov. 13	P. Greer	Preclinical (in vitro and animal) Models for Validating Experimental Targets	TBD
10	Nov. 20	W. Parulekar	Cancer Chemotherapy & Clinical Drug Development	TBD
11	Nov. 27	M. Koti	Molecular Basis of Variability in Tumour Responses	TBD
12	Dec. 4	J. Dancey	Clinical Results of Targeted Therapy	TBD
13	Dec. 11	Multiple TBD	Student Oral Grant Defenses	Schedule TBD

**TBD**, To be determined.

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**CO-ORDINATOR:** Dr. Christopher Nicol (Email: nicolc@queensu.ca)

TA: Elizabeth Lightbody (Email: 8edl2@queensu.ca)

DATE AND TIME: FRIDAYS, 9:30 AM - 12:30 PM

**LOCATION**: Cancer Research Institute (CRI) Room 100/101

#### **GENERAL COURSE FORMAT:**

Each session will begin with students separated into two teams. An initial review of the major details of the assigned reading material provided a week in advance will be overseen by the session leader (rapid assessment test ~ 15min), followed by in class team-based learning using cases/problems in the topic area (max time ~ 1.5 hrs). After a 15 min bio-break, individual student presentations of assigned papers will follow. Each student presentation (20 min max) is followed by a question period (10 min) where the presenting student poses two questions to the class. The class responds and discussion goes on from there. Presenters are expected to lead the class discussion. Session leaders add value, corrections, etc. as appropriate. At the end, the session leader and co-ordinator may provide some additional comments or overall appraisal. Students will also select one session topic from which they will write a novel grant proposal designed to overcome a challenge in the field of cancer therapeutics. The course aim is to provide information on ways of overcoming challenges relevant to the session topics, while striving towards approaches that push the forefront of the field.

#### **EVALUATION**

Rapid Assessments	10%
Presentations	30%
<b>Grant Proposal</b>	30%
Team Participation	10%
Peer Assessment	5%
Oral Defenses	15%

Grant Proposal						
Choose One Grant Topic from the Sessions						
<ul> <li>Due Date – 13 Nov 2015 @ 9:30AM</li> </ul>						

# PATH822 – Experimental Cancer Therapeutics (Fall 2015) COURSE OUTLINE STUDENT RESEARCH GRANT PROPOSAL TOPICS

Students choose a session topic for which they will write a novel 10 page grant proposal (with budget) designed to overcome a challenge in the field of cancer therapeutics. Prior to writing, students will prepare a brief summary outline, and arrange a meeting with the Session Leader to confirm the subject is appropriate.

Session	Session Title	Student Grant
Leader(s)		Proposals
S. Cole	Challenges with Current Cancer Therapeutics	TBD
M. Rauh	Molecular Evaluation of Tumours	TBD
C. Nicol	Drug Discovery-I (small molecules)	TBD
N. Renwick	Drug Discovery-II (non small molecules)	TBD
C. Nicol	Experimental Drug Delivery	TBD
A. Kerr	Novel Imaging	TBD
P. Greer	Preclinical (in vitro & animal) Models for Validating	TBD
	Experimental Targets	
W. Parulekar	Cancer Chemotherapy & Clinical Drug Development	TBD
M. Koti	Molecular Basis of Variability in Tumour Responses	TBD
J. Dancey	Clinical Results of Targeted Therapy	TBD

#### SESSION LEADER CONTACT INFORMATION

Name	Email	Queen's Ext.	
Cole, Susan P.C.	spc.cole@queensu.ca	32636	
Dancey, Janet	JDancey@ctg.queensu.ca	36430	
Davey, Scott K.	scott.davey@queensu.ca	36923	
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Kerr, Andrew	Andrew.Kerr@krcc.on.ca	(613) 544-2631 ext.4532	
Koti, Madhuri	kotim@queensu.ca	79055	
Nicol, Christopher J.	nicolc@queensu.ca	36531	
Parulekar, Wendy R.	WParulekar@ctg.queensu.ca	77745	
Rauh, Michael	rauhm@queensu.ca	32818	
Renwick, Neil	neil.renwick@queensu.ca	36411	
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