

9. OTHER IMPORTANT INFORMATION FOR STUDENTS:

- (a) **Misconduct:** Academic misconduct (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under [Section K. Student Misconduct](#) to inform yourself of definitions, processes and penalties.
- (b) **Assembly Points:** In case of emergency during class time, be sure to FAMILIARIZE YOURSELF with the information on [assembly points](#).
- (c) **Student Accommodations:** Students needing an Accommodation because of a Disability or medical condition should contact Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities available at http://www.ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities_0.pdf.
- Students needing an Accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to the Associate Head of Biological Sciences, Dr. H. Addy by email addy@ucalgary.ca or phone 403 220-3140.
- (d) **Safewalk:** Campus Security will escort individuals day or night (<http://www.ucalgary.ca/security/safewalk/>). Call 220-5333 for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.
- (e) **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). As one consequence, students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information see also <http://www.ucalgary.ca/secretariat/privacy>.
- (f) **Student Union Information:** VP Academic Phone: 403 220-3911 Email: suvpaca@ucalgary.ca
SU Faculty Rep. Phone: 403 220-3913 Email: science1@su.ucalgary.ca, science2@su.ucalgary.ca and science3@su.ucalgary.ca;
Student Ombuds Office: 403 220-6420 Email: ombuds@ucalgary.ca; <http://ucalgary.ca/provost/students/ombuds>
- (g) **Internet and Electronic Device Information:** You can assume that in all classes that you attend, your cell phone should be turned off unless instructed otherwise. Also, communication with other individuals, via laptop computers, Blackberries or other devices connectable to the Internet is not allowed in class time unless specifically permitted by the instructor. If you violate this policy you may be asked to leave the classroom. Repeated abuse may result in a charge of misconduct.
- (h) **U.S.R.I.:** At the University of Calgary, feedback provided by students through the Universal Student Ratings of Instruction (USRI) survey provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses (www.ucalgary.ca/usri). Your responses make a difference - please participate in USRI Surveys.

Department Approval _____ ORIGINAL SIGNED _____ Date _____

M567 co W16; 12/7/2015 9:40 AM

PROPOSED COURSE OUTLINE - INTRODUCTION TO IMMUNOLOGY

1. COURSE: CMMB 567 – Advanced Topics in Immunology

Winter 2015

Lecture Sections: T, R (2 x 1h 15 min)

Location: Main Campus

Class Size: min 6

Course Coordinator: Dr. Derek McKay

E-mail: dmckay@ucalgary.ca;

Tel: 403 220 7362

2. **COURSE DESCRIPTION:** This is an advanced course catering to students with a clear interest in immunology, and those with research interests. The material presented builds on the foundation of basic immunological principles that students will have obtained in CMMB 527, MDSC 321 or an equivalent course. The course is modular and can change/rotate annually. This year instruction is provided by six experts in immunology under the main topics of: (1) innate immunity and immune cell trafficking; (2) structure and function of the lymphatic system; (3) Inflammation and therapeutics in the airways; and (4) mucosal immunity, inflammation and disease.
3. **RATIONALE:** This course is designed for motivated students who can work well independently and in groups, with the central goal of illuminating current immunological concepts as they relate to homeostasis, infection and disease. Students are introduced to a variety of teaching styles (lectures, small group discussions and problem-based learning) and, similarly, a variety of evaluation tools are employed (in class tests, in class participation, form presentations, critique of the scientific literature, composition of a critical essay). The student will gain a much fuller understanding of the complexity of immunology – signals, cell-cell communication, coordinated responses, immunopathological mechanism, interaction of the immune system with other systems in the body – and how this advances our knowledge of the organism and health and disease.
4. **PREREQUISITES:** CMMB 527, MDSC 321 or instructor permission
5. **GRADING:** The University policy on grading and related matters is described in “Academic Regulations, sections F.1 and F.2” of the online University Calendar (<http://www.ucalgary.ca/pubs/calendar/current/f-1.html> and <http://www.ucalgary.ca/pubs/calendar/current/f-2.html>). For determining the overall grade in the course the following weights will be used:

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|-----------------------|--|
| Drs. Kubes and Patel: | 40% (test = 25%, in class participation = 15%) |
| Dr. von der Weid: | 17% (presentation of a research article) |
| Dr. Newton: | 17% (7% = 8 min presentation of a research paper; 10% = short answer test) |
| Dr. McKay: | 26% (16% = 4 page critical essay; 10% in class participation) |

Grade cut-offs are in %:

| | | |
|----------|---------|---------|
| A+ = 95; | A = 94; | A- = 87 |
| B+ = 82; | B = 78; | B- = 73 |
| C+ = 69; | C = 64 | C- = 59 |
| D+ = 55 | D = 52 | F = <49 |

2016

CMMB 567: Advanced Topics In Immunology

Tuesday and Thursday 15:30-16:45

Room : Science Theatres (ST) 027A

| Date | Session | Presentation | Lecturer | Evaluation |
|---|---------|--------------|--|-------------------|
| 12-Jan | Tues | 1 | Course introduction and overview | D. McKay |
| <i>INNATE IMMUNE AND IMMUNE CELL TRAFFICING</i> | | | | |
| 14-Jan | Thurs | 2 | Hallmark Features of Inflammation | P. Kubes |
| 19-Jan | Tues | 3 | Recruitment of Leukocytes | P. Kubes |
| 21-Jan | Thurs | 4 | Ischemia/reperfusion injury - a model of inflammation | P. Kubes |
| 26-Jan | Tues | 5 | Chemokines and Cytokines | K. Patel |
| 28-Jan | Thurs | 6 | Lipids mediators of inflammation | K. Patel |
| 2-Feb | Tues | 7 | Discussion and debate - How to decide if a drug does more harm than good? The story of celebrex. | K. Patel |
| 4-Feb | Thurs | | In Class test | Kubes/Patel |
| <i>LYMPH NODE STRUCTURE, MUSCOA ASSOCIATED IMMUNE CELLS AND LYMPHATICS</i> | | | | |
| 9-Feb | Tues | 8 | The Lymphatic System, Lymphoid Tissues and Lymphatics | P-Y. von der Weid |
| 1-Feb | Thurs | 9 | Mucosal Immunity and Immune Cell Trafficking | P-Y. von der Weid |
| 16-Feb | Tues | | reading week - no class | |
| 18-Feb | Thurs | | reading week - no class | |
| 23-Feb | Tues | 10 | lecture TBA | P-Y. von der Weid |
| 25-Feb | Thurs | 11 | Journal Club - Student presentations | P-Y. von der Weid |
| 1-Mar | Tues | 12 | Journal Club - Student presentations | P-Y. von der Weid |
| <i>AIRWAYS INFLAMMATION</i> | | | | |
| 3-Mar | Thurs | 13 | Introduction. Basic airways physiology and asthma | R. Newton |
| 8-Mar | Tues | 14 | Immunology in asthma, COPD and therapeutics | R. Newton |
| 10-Mar | Thurs | 15 | Mechanisms of anti-inflammatory action by glucocorticoids | R. Newton |
| 15-Mar | Tue | 16 | Student presentations | R. Newton |
| 17-Mar | Thurs | 17 | Section Q&A (45 min); Assessment: written test (~30 mins) | R. Newton |

MUCOSAL IMMUNITY INFLAMMATION & INTESTINAL DISEASE

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|----------|-------|----|---|----------|
| 22-Mar | Tues | 18 | Gut form & function. Case report objectives | D. McKay |
| 24-Mar | Thurs | 19 | Mucosal immunity - players in hypersensitivity, allergy | D. McKay |
| 29-Mar | Tues | 20 | Inflammatory bowel disease - immune dysregulation (1) | D. McKay |
| 31-March | Thurs | 21 | Inflammatory bowel disease - immune dysregulation (2) | D. McKay |
| 5-Apr | Tues | 22 | Enteric microflora in gut homeostasis and disease | D. McKay |
| 7-Apr | Thurs | 23 | Enteric parasitic disease - lessons from the worm | D. McKay |
| 12-April | Tues | 24 | An integrated response to immunity | D. McKay |

4 page report on role of a defined
immune cell in IBD (16%)
In class participation (10%)