PROCEDURES FOR VISITING ELECTIVE STUDENTS ................................................................. 2
ELECTIVES OFFERED BY THE FACULTY OF MEDICINE ............................................................. 4

ANESTHESIA .................................................................................................................................. 4

CHRONIC PAIN ............................................................................................................................... 5

COMMUNITY HEALTH SCIENCES - PUBLIC HEALTH ................................................................. 6
1. Urban public health in Calgary: ............................................................................................... 6
2. Rural Public Health ................................................................................................................. 7
3. Aboriginal Public Health: ....................................................................................................... 8

EMERGENCY MEDICINE ............................................................................................................ 9

FAMILY MEDICINE ...................................................................................................................... 10
1. URBAN Family Medicine ......................................................................................................... 10
2. RURAL and REGIONAL Family Medicine .............................................................................. 10

HOSPITALIST MEDICINE .......................................................................................................... 11

INTERNAL MEDICINE .................................................................................................................. 12
1. CARDIOLOGY ......................................................................................................................... 12
2. CRITICAL CARE MEDICINE ................................................................................................. 13
3. DERMATOLOGY ..................................................................................................................... 14
4. ENDOCRINOLOGY .................................................................................................................. 15
5. GASTROENTEROLOGY .......................................................................................................... 16
6. GENERAL INTERNAL MEDICINE CONSULTATION SERVICE ........................................ 17
7. GERIATRIC MEDICINE ......................................................................................................... 18
8. HEMATOLOGY ....................................................................................................................... 20
9. INFECTIOUS DISEASES ....................................................................................................... 21
10. MEDICAL TEACHING UNIT ............................................................................................... 22
11. NEPHROLOGY ...................................................................................................................... 23
12. NEUROLOGY - ADULT ......................................................................................................... 24
13. PULMONARY MEDICINE ..................................................................................................... 27
14. RHEUMATOLOGY .................................................................................................................. 29

MEDICAL OR RADIATION ONCOLOGY .................................................................................... 30

OBSTETRICS & GYNECOLOGY .................................................................................................. 32
1. OBSTETRICS & GYNECOLOGY ............................................................................................ 32
2. GYNECOLOGIC ONCOLOGY ................................................................................................. 33

PALLIATIVE CARE.......................................................................................................................... 35

PATHOLOGY .................................................................................................................................... 36
1. ANATOMICAL PATHOLOGY IN A HOSPITAL SETTING .......................................................... 36
2. FORENSIC PATHOLOGY – SUDDEN DEATH INVESTIGATION ......................................... 37
3. GENERAL PATHOLOGY IN A HOSPITAL SETTING ............................................................. 38
4. NEUROPATHOLOGY ............................................................................................................... 39
5. RENAL & TRANSPLANTATION PATHOLOGY ........................................................................ 40
6. UROLOGICAL TUMOR PATHOLOGY ..................................................................................... 41

PEDIATRICS .................................................................................................................................... 42
1. CARDIOLOGY ................................................................. 42
2. CRITICAL CARE MEDICINE ........................................... 43
3. EMERGENCY MEDICINE .................................................. 44
4. ENDOCRINOLOGY & METABOLISM ............................... 45
5. GASTROENTEROLOGY & NUTRITION ............................ 46
6. HEMATOLOGY/ONCOLOGY ............................................ 47
7. INFECTIOUS DISEASES .................................................. 48
8. MEDICAL GENETICS ...................................................... 49
9. NEONATOLOGY .............................................................. 50
10. NERPHROLOGY ............................................................. 51
11. NEUROLOGY ............................................................... 52
12. PULMONARY MEDICINE .............................................. 53
13. RHEUMATOLOGY .......................................................... 54
14. RED DEER - COMMUNITY PEDIATRICS ....................... 55

PHYSICAL MEDICINE & REHABILITATION ............................. 56

PSYCHIATRY ............................................................................. 57
1. FAMILY THERAPY .......................................................... 57
2. GENERAL PSYCHIATRY .................................................... 58

RADIOLOGY ............................................................................ 59

DIAGNOSTIC IMAGING .......................................................... 59

SURGERY ................................................................................. 60
1. NEUROSURGERY ............................................................. 61
2. OPHTHALMOLOGY (2 electives offered) .............................. 62
3. TRAUMA SURGERY .......................................................... 63

MEDICINE HAT REGIONAL HOSPITAL - ELECTIVES OFFERED .............................................. 64

If the contact information or elective description in this catalogue requires updating, please send the information to the Visiting Elective Program Coordinator (UME), by email at visiting@ucalgary.ca.
PROCEDURES FOR VISITING ELECTIVE STUDENTS

Electives are open to applicants who are at the clinical clerk level currently registered in a Canadian medical school. The University of Calgary also welcomes applicants from medical school currently registered in an LCME accredited international medical school who are currently in their final year of medical undergraduate training.

If you would like to book electives up to February 16, 2015 please contact the Visiting Electives Office by email.

Currently electives for U of C students can be scheduled anytime during their clerkship year.

THERE WILL BE NO ELECTIVES BOOKED FOR VISITING STUDENTS BETWEEN AND February 16 – April 12, 2015.


To arrange your elective, please e-mail the Visiting Electives Coordinator to get contact information for specific departments. Please see Electives Catalogue below. The Visiting Electives Office does not have a master list of availability with the departments. Once you have arranged your elective with the Program contact, please forward by e-mail the confirmation of your elective, and registration forms will be sent to you by email.

Please do not contact preceptor directly without authorization from the Electives Coordinator or the Program Contact. All accepted electives must be "Program Approved" and “UME Approved”, not individual-physician approved. This is to ensure that all criteria have been met and applications have been properly registered for a valid clinical elective.

Cancellation of a confirmed elective with less than 8 weeks' notice will result in a letter to your Undergraduate office regarding professionalism.

Visiting Electives Coordinator,
University of Calgary
Faculty of Medicine, Undergraduate Medical Education
HSC - G701, 3330 Hospital Drive NW, Calgary, AB T2N 4N1
Email: visiting@ucalgary.ca

REGISTRATION GUIDELINES

Students attending Canadian universities:

- Registration deadline: receipt of registration form 8-weeks prior to start of elective. (Please note: there are NO electives available over the 2-week winter break Dec 22, 2014 – Jan 4, 2015.)
- Fee: $100.00 non-refundable administration fee in the form of a bank draft, certified cheque or money order payable to the University of Calgary per elective requested. Personal cheques will not be accepted.
- University of Calgary Immunization Record must be submitted.
• Police Information Check which includes the Vulnerable Sector search dated within 12 months of the start of the elective.
• There is an 8-week maximum length of elective time per student, NOT per year.

Students attending International universities:

• **MUST** be in final year of training at the time of the elective. **NO EXCEPTIONS**
• There is a very limited number of elective positions available to students registered in a non-Canadian medical school. Priority selection for electives is given to applicants based on the following: 1) medical students from the University of Calgary 2) medical students attending other Canadian medical schools 3) medical students from LCME accredited international medical schools Please go to the LCME website for a list of LCME accredited medical schools - http://www.lcme.org/directory.htm
• Application deadline: recommended initiation of application to the department is 4 months prior to start of elective. Once an elective has been approved by the department, the registration forms must be in the Electives Office no later than 8 weeks prior to the start of the elective.(Please note – there are NO electives available over the 2-week winter break.)
• There is an 8-week maximum length of elective time per international student.
• Fee: $100.00 non-refundable per week of elective time in the form of a bank draft, certified cheque or money order in Canadian funds payable to the University of Calgary per elective requested. Personal cheques will not be accepted.
• You require medical malpractice liability insurance. If you are not covered by your University you will be required to purchase liability insurance prior to leaving your country. You will need to include proof of your insurance coverage with your completed application.
• You must submit a University of Calgary Immunization Record for Visiting Students.
• You must submit a Police Information Check which includes the Vulnerable Sector search dated within 12 months of the start of the elective.
• If you are not a Canadian citizen, you must have a medical examination by a "designated medical practitioner" as identified by your local Canadian consulate or embassy. You may also require a visa, in some cases. Please refer to the Citizenship and Immigration Office website at www.cic.gc.ca/english/information/medical/medexams-temp.asp

**Please do not contact physicians directly without permission from the Undergraduate Medical Education Visiting Electives Coordinator.**

**ALL UNIVERSITY OF CALGARY MEDICAL ELECTIVES MUST GO THROUGH THE ELECTIVES OFFICE AT THE UNIVERSITY OF CALGARY TO ENSURE PROPER REGISTRATION AND COMPLETION OF THE APPLICATION PROCESS. ELECTIVES ARRANGED DIRECTLY WITH PHYSICIANS WILL NOT BE CONSIDERED.**
ELECTIVES OFFERED BY THE FACULTY OF MEDICINE

ANESTHESIA

Each day will be spent with a staff anesthesiologist, which offers an excellent opportunity for one-on-one teaching. The following basic skills will be emphasized: i) managing an airway; ii) intravenous techniques; and iii) application of the principles of respiratory and cardiovascular physiology.

TYPE OF ELECTIVE: Clerkship

DURATION: 2 weeks maximum offered at the following sites: Foothills Medical Centre, Peter Lougheed Centre, Alberta Children's Hospital, Rockyview General Hospital and the South Health Campus.

NUMBER OF STUDENTS ACCEPTED: Varies from 0 - 4 depending on block.

PREREQUISITES: Knowledge of cardiology, respiratory physiology, and basic pharmacology.
CHRONIC PAIN

The Calgary Pain Program’s Chronic Pain Centre is virtually one of a kind, with clinical one-on-one teaching provided on a daily basis by a variety of pain specialty clinicians from a wide-range of primary-care backgrounds. Students will learn a plain-language approach to the physiological, anatomical, socio-economic and psychological complexities of pain management. While gaining awareness of the available resources available to assist pain patients--including the indications for specialist referral and complex interventional strategies--clerks will gain basic interviewing, examination and treatment skills for managing chronic neuromuscular pain, including fibromyalgia, pelvic pain, headache pain both primary and secondary, neuropathic pain including complex regional pain syndromes, and analgesia, including chronic and acute narcotic analgesic management.

TYPE OF ELECTIVE: Clerkship

NUMBER OF STUDENTS ACCEPTED: Varies

PRE-REQUISITES: A reading list will be provided
COMMUNITY HEALTH SCIENCES - PUBLIC HEALTH

1. Urban public health in Calgary:

   The student will be assigned to a Medical Officer of Health to acquire an understanding of both the role of the Medical Officer of Health and an orientation to the public health programs offered in the Calgary area. The orientation may include going on environmental inspections, participating in immunization, well baby, STI, family planning and TB clinics, and the Elbow River Healing Lodge, for urban aboriginal clients. You can also meet with health promotion staff and screening program leads. To some degree, experiences can be customized to suit your interests. The duration of this elective can be two to four weeks. The two-week elective will provide the orientation, while the longer elective will allow you to do a study project in an area of interest.

   TYPE OF ELECTIVE: Clerkship

   DURATION: Minimum 2 weeks

   NUMBER OF STUDENTS ACCEPTED: Maximum of 2 students at any one time.
2. Rural Public Health

Rotations similar to the above, but with an emphasis on rural public health issues, are available in several locations (South Zone, Central Zone, North West Zone, North East Zone).

TYPE OF ELECTIVE: Clerkship or Second Year

DURATION: Minimum 2 weeks

NUMBER OF STUDENTS ACCEPTED: Up to the Preceptor.
3. Aboriginal Public Health:

A. **Health Canada, First Nations and Inuit Health:** This is a 2 week public health focused Aboriginal elective based out of Edmonton. The elective could be based out of Calgary but travel to Edmonton for a few days would be required. The elective provides an introduction to understanding the health status of Alberta First Nations, the health determinants impacting First Nations health and the organization of health care delivery for Alberta First Nations. The student will learn about public health programs targeting key health issues facing Alberta First Nations through travel to First Nation communities with public health inspectors, public health nurses and/or other key public health program staff. To augment their public health experience, students will also have an opportunity to attend clinical practices that target urban Aboriginal populations.

**TYPE OF ELECTIVE:** Clerkship or Second Year

**DURATION:** Minimum 2 weeks

**NUMBER OF STUDENTS ACCEPTED:** Up to the Preceptor.

B. **Siksika First Nations:** Siksika is located approximately 100km east of Calgary. Electives will take place in numerous inter professional settings that may include: Community Health (immunization, well baby clinics, water quality assessments, public health awareness campaigns, Canadian Prenatal Nutrition Program), Primary Care (Nurse Practitioners, Family Physicians), - Paediatrics (Paediatrician), - Mental Health (Counsellors, addiction programs), - Dental Health, - Home Care (home visits, wound care, foot care, Elder’s Lodge), - Diagnostics (Xray, Ultrasound, Lab). Accomodations may be made available at the Elder’s Lodge.

**TYPE OF ELECTIVE:** Clerkship (Second year student electives may be considered)

**DURATION:** Minimum 2 weeks

**NUMBER OF STUDENTS ACCEPTED:** Only 1 student per 2 week elective block.

**CONTACT:**
EMERGENCY MEDICINE

A preceptor-based elective that includes shifts (days/evenings/ nights) at the Foothills Medical Centre, the Peter Lougheed Centre, the Rockyview General Hospital and the South Health Campus. Students will receive an orientation package via email prior to the start of their elective. This will include an orientation manual, attendance sheet, evaluation forms and info regarding accessing the rounds and shift schedules.

Students will be assigned approximately seven to eight shifts per two-week block, including one of two weekends. Students will work with a variety of preceptors including those from CCFP(EM) and FRCP training backgrounds. When possible, the student will be scheduled with the same preceptor for multiple shifts. They will also be expected to attend and participate in the city wide academic rounds in emergency medicine held on Thursdays.

Under the supervision of full-time emergency physicians, students will participate in all aspects of the care of patients with a wide variety of presenting problems. Students will have the opportunity to refine their history taking and physical examination skills, as well as to improve their procedural skills. Students will have the chance to assess patients initially in the emergency department and to be involved in all clinical decisions concerning their patients’ care.

Please note that in recent years Emergency Medicine has become a very popular elective choice, and may fill up several months in advance. Applications are welcomed at any time, but those received well in advance have a better chance of gaining a position. Cancellations of confirmed electives are discouraged and considered unprofessional in all but exceptional circumstances. When necessary, cancellations should be far enough in advance to allow other students the opportunity to have the elective position (generally three months or more).

Energetic, enthusiastic, and highly motivated students who work well in a team setting will benefit most from this elective.

TYPE OF ELECTIVE: Clerkship

DURATION: 2, 3 or 4 weeks

NUMBER OF STUDENTS ACCEPTED: Varies from 2-6 depending on the time of year.

Note: From June to August & during the Christmas-New Year’s period, a reduced number of positions are available
FAMILY MEDICINE

1. **URBAN Family Medicine**

Urban Family Medicine electives are available year round in Calgary. A minimum duration of two weeks is required for these elective experiences.

All visiting urban FM electives are arranged through the Learner Scheduler.

Requests are accepted based on departmental learner capacity. If your request has been accepted the Learner Scheduler will send you an email formally offering you an elective placement. Once you have accepted the placement offer the Visiting Electives Office is notified and they will send you the necessary paperwork.

The Learner Scheduler will place you either at a core teaching site or with a community preceptor. Specific placement details are sent to you approximately 4 weeks prior to your elective start date.

Due to limited learner capacity the department is not normally able to approve electives that are not arranged through the Learner Scheduler.

2. **RURAL and REGIONAL Family Medicine**

Rural and Regional Family Medicine electives in Alberta are available year-round for U of C Clinical Clerks and from October to February for Visiting Clinical Clerks. Most rural communities participate in a number of training programs and space is extremely limited, particularly in the summer months. Minimum duration of electives is two weeks.
HOSPITALIST MEDICINE

A preceptor-based elective that includes shifts (days/nights) and daily rounds at the Foothills Medical Centre.

Under the supervision of Family Physician Hospitalists, students will participate in all aspects of the care of patients admitted to a high volume inpatient medical service. Students will have the opportunity to refine their history taking and physical examination skills, and to experience the process of caring for complex hospital inpatients. Students will have the chance to assess patients initially in the emergency department and to be involved in all clinical decisions throughout their patients’ care.

Students will be expected to work one or two 12-hour shifts per week, and participate in daily rounding, selection and follow up of diagnostic testing, communication with community family physicians, involvement with the multidisciplinary team, and discharge planning. Emphasis will be on following patients from admission through to discharge. Approximate time commitment will be 40-50 hours per week, including all call responsibilities.

This elective is excellent preparation for any student contemplating a career in Family Medicine, or any hospital based specialty. The many diverse roles of a skilled Family Physician will be modelled and explored.

TYPE OF ELECTIVE: Clerkship

DURATION: Minimum 2 weeks to a maximum of 4 weeks.

NUMBER OF STUDENTS ACCEPTED: One at a time.
INTERNAL MEDICINE

1. CARDIOLOGY

Students are encouraged to arrange electives in cardiovascular medicine. The expected time commitment is generally **2 or 4 weeks**. Electives may be completed in a variety of in-patient settings.

These include:
- Ward based Cardiology service, which would include experience on the general Cardiology consult service.
- Cardiac Intensive Care Unit based service, which would include experience on the CICU consult service.
- Students would have an opportunity to assess patients in the emergency room.
- Elective experience at the Foothills Medical Centre or the Peter Lougheed Centre.

The focus of this elective is to gain exposure to common cardiac problems. Students will have an opportunity to develop history taking and physical examination skills. They will also familiarize themselves with a variety of cardiac diagnostic tests.

- **In-patient Coronary Intensive Care Unit (CICU) based service.** The CICU at the Foothills Medical Centre is an 18-bed facility, which is divided into 2 teaching services, with 2 attending Cardiologists. Elective students will be assigned to one of these services. Patients in the CICU tend to be acutely unwell and may be unstable, requiring mechanical ventilation, emergency interventional procedures, and intra-aortic balloon pump support. Students are encouraged to participate in CICU rounds and will observe invasive procedures. Students will be supervised by one of the senior residents when dealing directly with patients.

All elective students are encouraged to attend regularly scheduled teaching rounds which include:
- Clinical- Investigative Conference  Monday 8:00am
- Cardiology Grand Rounds   Tuesday 8:00am
- Journal Club   Thursday 8:00 am

The Cardiology service is only able to accommodate 1 – 2 elective students at any one time. It is strongly recommended that your elective experience be arranged at least 4 months in advance since there is quite a lot of demand for elective spots.
INTERNAL MEDICINE

2. CRITICAL CARE MEDICINE

This rotation is a four-week minimum opportunity on a multidisciplinary intensive care unit. The student will participate in morning rounds and other formal rounds. After some exposure on the unit, the student will assume direct responsibility for patient care under the supervision of the resident and the ICU attending.

TYPE OF ELECTIVE: Clerkship

DURATION: 4 weeks

NUMBER OF STUDENTS ACCEPTED: Maximum of 1 - 2 students per site with rotations offered at the Foothills Medical Centre, the Peter Lougheed Centre and the Rockyview Medical Centre.

PREREQUISITES: Individual interview with the program director around objectives and goals. Must have completed Medical Teaching Unit (MTU) rotation or gained similar inpatient experience prior to being approved for this elective.
INTERNAL MEDICINE

3. DERMATOLOGY

The division of dermatology offers electives during clerkship subject to availability. All electives are for a minimum of 2 weeks.

Elective experience will include exposure to outpatient adult dermatology clinics as well as opportunities to attend subspecialty clinics including the following: immunobullous and collagen vascular dermatology clinics, contact dermatitis clinics, pediatric dermatology clinics, dermatology solid organ transplantation clinic, and wound care clinics

TYPE OF ELECTIVE: Clerkship

DURATION: 2 weeks
INTERNAL MEDICINE

4. ENDOCRINOLOGY

The endocrinology elective will consist of the following:

1. Daily ward rounds with the endocrine fellow and the rotating residents on all inpatients.

2. Initial evaluation and subsequent primary and secondary care for new consultations referred to the preceptor of the week for the Division of Endocrinology.

3. Compulsory attendance in at least three outpatient clinics per week with different staff endocrinologists.

TYPE OF ELECTIVE: Clerkship

DURATION: 2 - 4 weeks

NUMBER OF STUDENTS ACCEPTED: Varies (spaces fill up quickly and sometimes may not be available. Interested students need to apply early.)
INTERNAL MEDICINE

5. GASTROENTEROLOGY

The aim of this program is to develop skills for investigating and managing patients with diseases involving the gastrointestinal tract, the liver, and the pancreas. To achieve this objective, students will be involved in an active consultative service, which includes inpatient care and outpatient ambulatory care. This will include exposure to both medical and surgical patients with nutritional problems. Staff gastroenterologists will closely supervise students but adequate opportunity for patient responsibility will be available to the capable student.

Formal teaching rounds will be regularly held at the Foothills Medical Centre and at the Peter Lougheed Centre. Other facets of gastroenterology may be explored such as pathology rounds which occur episodically.

TYPE OF ELECTIVE: Clerkship (This elective is regarded as a medical and surgical subspecialty.)

DURATION: 2 - 4 weeks

NUMBER OF STUDENTS ACCEPTED: Maximum of 1 or 2 students at any one time.
INTERNAL MEDICINE

6. GENERAL INTERNAL MEDICINE CONSULTATION SERVICE

The Internal Medicine Consultation Service elective involves a rotation whereby the clinical clerk plays an important role as a junior team member assessing a variety of patients with complex medical problems. The consultative service provides assistance to many of the other medical services by helping other physicians manage interesting and often complicated patients. The scope of patient problems is wide, ranging from pre-operative assessment of patient stability for upcoming surgery to the assistance in the management of patients with cardiac, pulmonary, gastrointestinal and multi-system organ problems.

Clinical clerks who take part in the consultation service will be part of a group that consists of a general internist, one or two residents, and one or two medical students. The clerk will have close contact with the general internist and this elective is ideal for medical students who are considering a career in internal medicine.

Clinical clerks who rotate through the consultation service will be expected to attend Grand Rounds on Tuesday mornings (0800 - 0900 hrs), Clinical-Pathology Rounds on Tuesday afternoons (1200 - 1300 hrs), as well as other teaching rounds at the discretion of the attending physician.

Additional Teachings:
FMC : Wednesday 12:00 – 13:00 Nephrology Teaching Rounds in AGW2 or AGW4. Lunch is provided
PLC: Case of the week, Unit 38 Green Team room on Fridays at noon.
RGH: Monday and Wednesday rounds at noon.

TYPE OF ELECTIVE: Clerkship
DURATION: 2 weeks
NUMBER OF STUDENTS ACCEPTED: Maximum of 1 student at PLC
Maximum of 2 students at FMC and RGH
(Note: FMC and RGH are sometimes able to accommodate 3 students at one time.)
INTERNAL MEDICINE

7. GERIATRIC MEDICINE

OBJECTIVES/DUTIES

By the end of the rotation, the student will be able to:

1. Perform a geriatric assessment (including the history, physical examination and interpretation of appropriate laboratory/radiological studies). Prioritize problems and provide initial management to an older patient.

2. Outline an approach to Geriatric syndromes, including:
   - Confusion
   - Unintentional weight loss/failure to thrive
   - Immobility/falls
   - Incontinence (urine and/or fecal)

3. Critically review the drug regimen of an older patient (identifying actual and potential adverse drug effects, drug-drug interactions, and drug-disease interactions) and suggest modifications as appropriate.

4. Describe the Specialized Geriatric Services (GARP, Day Hospital, consult team, clinics, C3), as well as the continuing care system and housing options for older individuals (this information can be used to support older patients in the community or to plan their discharge from acute care hospitals.)

EXPERIENCE

Patients seen by the Geriatric Medicine Service are noted by their complexity. This involves careful assessment of both biomedical and psychosocial issues. Family members/significant others are frequently required to provide collateral history and assist in planning future care. In addition to the clinical problems noted above, the patients seen can present with virtually any of the clinical problems covered in the undergraduate curriculum.

The experience in Geriatric Medicine is primarily a consultative rotation offered at the Rockyview General Hospital or the Foothills Medical Centre. Your assigned preceptor will be a consultant in Geriatric Medicine based at one of these sites. You will be expected to attend outpatient clinics, see inpatient consultations with your preceptor during your rotation, and attend all Divisional rounds which don’t conflict with scheduled departmental/faculty education sessions. The site leaders will inform you of specific educational experiences/resources at your assigned site. There is no call requirement during the two week rotation. We expect you to read about the patients and problems that you see. What you get out of the rotation will be directly related to how much you put into it.
INTERNAL MEDICINE

GERIATRIC MEDICINE

TYPE OF ELECTIVE: Clerkship

DURATION: Minimum 2 weeks

NUMBER OF STUDENTS ACCEPTED: Maximum of 3 students at any one time.
INTERNAL MEDICINE

8. HEMATOLOGY

Clerkship electives in Clinical Hematology are offered at two of the major teaching hospitals in Calgary. The elective offers experience in the care of patients with Hematologic disease in acute care in-patient and consultation as well as ambulatory clinic settings. Elective students will have the opportunity to participate directly in the management of patients in all of these settings. Review of laboratory material (e.g. blood smears, bone marrow aspirates etc) will be included in the clinical review of patient problems.

TYPE OF ELECTIVE: Clerkship

DURATION: 2 - 4 weeks

NUMBER OF STUDENTS ACCEPTED: Maximum of 1 student at each site at any one time. Elective spots are filled quickly. You are encouraged to send your inquiries at least 8-12 weeks in advance.
INTERNAL MEDICINE

9. INFECTIOUS DISEASES

Infectious Diseases Clerkship Selective/Elective Rotation

Each clerk will have a two week (Selective) or two - four week (Elective) clinical block in adult Infectious Diseases. Many students choose adult infectious diseases as their two-week outpatient subspecialty selective preference as scheduled in advance during their core rotation on Internal Medicine. These are preceptor-based elective rotations with the clinical clerk closely supervised by a medicine resident and the attending physician.

The student will be assigned to a specific clinical consultation service (choice based upon availability) at one of the following teaching hospitals: Foothills Medical Centre; Peter Lougheed Centre; or the Rockyview General Hospital. At each site, the ID clerkship elective is evenly split between morning outpatient HPTP clinics (more common infectious conditions) and the inpatient consultation service (more acuity and complexity).

The major objectives of the infectious diseases elective are to:

1. recognize and appreciate the pathogenesis of common infectious syndromes;
2. demonstrate proficiency in the investigation, diagnosis and management of persons with a suspected infectious clinical presentation;
3. develop an understanding of the classification, diagnosis and management of common microbial pathogens;
4. develop an understanding of the pharmacology and uses of the major antibiotic drug classes;
5. understand and implement basic infection control measures utilized in the hospital setting.

Expectations of the clerks

From an academic perspective, the clerk is expected to be proactive, and to participate in daily bedside teaching rounds, formal clinical teaching sessions, and weekly inter-hospital divisional seminars and patient-based clinical case presentations. Learning goals and objectives should be reviewed with the attending physician on the first day of the rotation. A learner may encounter a number of attending physicians during the course of the rotation, and feedback should be elicited at multiple time points.

From an administrative perspective, the clerk is expected to be available for all days during both weeks. Time away will be allowed for regularly scheduled clerkship seminars and exams. There is no on-call responsibility or weekend call (unless desired), however, this is not a “9-5” service. Unless attending morning HPTP clinics, the learner will be expected to be available to see in-patient consultations under the supervision of the resident and/or attending physician. Immediate notification of any absences (scheduled or unscheduled) should be made to the Program Administrator (contact below) or Dr. Andrew Johnson over the course of the elective/selective.

Contact

Report to the HPTP clinic at the hospital to which you have been assigned at 8:00 am on the first day of the elective. You will receive an introduction to the HPTP clinic and meet your preceptor at that time.

The number of learners we are able to accommodate varies.
INTERNAL MEDICINE

10. MEDICAL TEACHING UNIT

Third and fourth year medical students will function as junior team members on Calgary’s medical teaching unit. The Calgary MTU is unique in that the patients carried are generally acute and/or complex. On the team, the elective clerk will be responsible for participating in formal teaching sessions (at least) twice a day, assessing patients and documenting precisely and concisely in the chart, and engaging in a meaningful signover using the electronic medical record signover tool. Frequently, procedures (using ultrasound guidance) will be required, and clerks will often have an opportunity to learn such techniques. Additional opportunities to learn and engage the team are endless, and we strongly encourage creative and novel ways to teach, learn, and care for patients. Bring your motivation, energy, knowledge, skills and ideas!

TYPE OF ELECTIVE: Clerkship

DURATION: 2 - 4 weeks

SITES: Foothills Medical Centre, Peter Lougheed Centre, Rockyview General Hospital
INTERNAL MEDICINE

11. NEPHROLOGY

The rotation will put the clerk in touch with a wide range of medical environments within the scope of renal disease. This includes both acute and chronic problems in the area of glomerular disease, tubulo-interstitial disease, salt and water, hypertension and other disease states. Duties include ward and emergency consultation and outpatient clinics when available. Call is optional. Included in the rotation are nephrology division rounds and formal teaching rounds. The goal of the rotation is to help the student recognize medical problems in a friendly environment while obtaining an approach to diagnosis and treatment.

TYPE OF ELECTIVE: Clerkship

DURATION: 2 weeks

NUMBER OF STUDENTS ACCEPTED: Maximum of 2 students at any one time.
INTERNAL MEDICINE

12. NEUROLOGY - ADULT

INTRODUCTION

Up to 10% of patients seen by family practitioners present with neurologic symptoms and pose neurologic questions to their physicians. Only 15% of the four million Canadians who visit a physician for a chief complaint referable to the nervous system are ever evaluated by neurologists.

Clearly, primary care physicians are routinely called upon to evaluate and manage patients with neurologic disease. Furthermore, neurologic disease accounts for a substantial fraction of health care expenditure and global disease burden. With geriatric patients constituting a steadily increasing fraction of the overall patient population, stroke and degenerative neurologic diseases will become even more prominent public health issues.

For example, stroke was the sixth leading cause of disease burden worldwide in 1990; in the year 2020, it will be the fourth leading cause worldwide and the second leading cause in developed countries. Practicing physicians require a firm understanding of the general principles of clinical neurology. The most suitable setting in which to lay the foundation for that understanding is in a neurology clerkship.

DESCRIPTION

During the elective (the usual time is 2 to 4 weeks), the clinical clerk will have the opportunity to gain experience not only in clinical neurology but also in important related areas such as: neuroradiology, neuropsychology, neuropathology, clinical neurophysiology (EEG, EMG, evoked responses), auditory and vestibular testing, and visual field and ocular motility testing. In addition, didactic and interactive seminar sessions are scheduled throughout the week. A number of these educational venues are directed specifically to the clerks on service.

The clerk will function as a member of the team responsible for the delivery of neurological care at the institution. The clerk will be assigned care of ward patients under the close supervision of a resident and staff neurologist.

There are many general neurology and subspecialty neurology outpatient clinics that clinical clerks may attend. The following broad ranges of outpatient clinic opportunities are offered: Brain Tumour, ALS, Cognitive Assessment, EMG, Epilepsy, Headache, Multiple Sclerosis, Movement Disorders, Neuromuscular, Neuro-ophthalmology, Neuropathic (Cancer) Pain, Stroke, Stroke Prevention, Urgent Neurology, and Vertigo.
INTERNAL MEDICINE

NEUROLOGY - ADULT

The clinical team will consist of the attending neurologists and resident from one or more of the following programs:

- Neurology
- Internal Medicine
- Psychiatry
- Emergency Medicine
- Other disciplines.

During the rotation, the clinical clerk will have some night-call responsibility. Attending and resident staff will always closely supervise night-call. Night-call is built into the experience to provide an opportunity for the clinical clerk to become exposed to various neurological emergencies as well as to the type of neurological problems that present to emergency departments and do not require admission to hospital. The need to provide service is not a consideration when making night-call assignments for clinical clerks as the neurology service has well-established mechanisms in place to deal with service needs of the institution.

GOALS AND OBJECTIVES OF THE CLINICAL NEUROLOGY ELECTIVE

A. Goal

To teach the principles and skills underlying the recognition and management of the neurologic diseases a general medical practitioner is most likely to encounter in practice.

B. Objectives

1. To teach or reinforce the following PROCEDURAL SKILLS:
   a. The ability to obtain a complete and reliable history.
   b. The ability to perform a focused and reliable neurologic examination.
   c. The ability to examine patients with altered level of consciousness or abnormal mental status.
   d. The ability to prepare a clear, concise, and thorough oral presentation of a patient’s history and examination.
   e. The ability to deliver a clear, concise, and thorough written presentation of a patient’s history and examination.
   f. [Ideally] the ability to perform a lumbar puncture.
INTERNAL MEDICINE

NEUROLOGY - ADULT

2. To teach or reinforce the following **ANALYTICAL SKILLS**:
   a. The ability to recognize symptoms that may signify neurologic disease (including disturbances of consciousness, cognition, language, vision, hearing, equilibrium, motor function, somatic sensation, and autonomic function).
   b. The ability to distinguish normal from abnormal findings on a neurologic examination.
   c. The ability to localize the likely site or sites in the nervous system where a lesion could produce a patient's symptoms and signs.
   d. The ability to formulate a differential diagnosis based on lesion localization, time course, and relevant historical and demographic features, an awareness of the use and interpretation of common tests used in diagnosing neurologic disease.
   e. An awareness of the principles underlying a systematic approach to the management of common neurologic diseases (including the recognition and management of situations that are potential emergencies).
   f. An awareness of situations in which it is appropriate to request neurologic consultation, the ability to review and interpret the medical literature (including electronic databases) pertinent to specific issues of patient care.

**TYPE OF ELECTIVE:** Clerkship

**DURATION:** 2 to 4 weeks

**NUMBER OF STUDENTS ACCEPTED:** Recommend 1 - 2 clinical clerks per service (FMC stroke, FMC ward, FMC consults, SHC ward/consults) during each elective period.

**LOCATION:** Foothills Medical Centre (FMC), South Health Campus (SHC).
INTERNAL MEDICINE

13. PULMONARY MEDICINE

The students are attached to the Pulmonary team at the Foothills Medical Centre, Peter Lougheed Centre, and Rockyview General Hospital. Students are expected to attend regular rounds and conferences, and to work-up pulmonary cases reviewing the problems with a resident and the consultant in charge. They will also attend morning rounds and follow up on the patients previously seen by them. Opportunities for experience in the outpatient clinics at the PLC when assigned to the PLC site, and pulmonary function laboratories are available. Emphasis is placed on basic clinical skills, including history-taking, physical examination, chest radiology, pulmonary function, and introduction to specialized techniques such as bronchoscopy.

AIM

Provide Clerks with a challenging rotation in Respiratory Medicine.

OBJECTIVES

- Emphasis will be placed on developing good history taking and physical examination skills and learning to adjust the interview and exam appropriately for patients with respiratory complaints. Clerks will be expected to take a complete occupational history when appropriate.

- Clerks will be expected to interview and examine patients presenting with respiratory complaints and develop an appropriate differential diagnosis, evaluation and treatment plan.

- Clerks will have the opportunity to learn basic chest x-ray, pulmonary function and arterial blood gas interpretation skills.

- Specific objectives also include acquiring information about a variety of respiratory conditions including:
  1. Evaluation and management of the different forms of Obstructive Lung Disease, particularly COPD and Asthma.
  2. Evaluation of Restrictive Lung Diseases including neuromuscular weakness, chest wall disorders, and Interstitial Lung Diseases.
  3. Evaluation of patients with suspected Lung Cancer.
  4. Evaluation and management of patients with Community acquired Pneumonia.
  5. DVT/PE.
  6. Respiratory failure.
  7. Symptoms and CXR findings suggestive of Tuberculosis.
  8. Basic Pulmonary Function Interpretation.
INTERNAL MEDICINE
PULMONARY

TYPE OF ELECTIVE: Clerkship

DURATION: Minimum 2 weeks

NUMBER OF STUDENTS ACCEPTED: Maximum of 1 final year student per site (Peter Lougheed Center, Rockyview Hospital, Foothills Medical Center) at any one time.

NOTE: Unfortunately, The Division of Respirology is unable to provide a formal 2 week elective/selective for 1st and 2nd year medical student (e.g. pre-clerkship). If you are a first or second year medical student inquiring about an elective, please see the link: http://www.respiratorymedicine.ca/documents/med_students_info.pdf located on the Respirology Website.

PREREQUISITES: Completion of the Respiratory System Course. SUPERVISORS: Attending staff on service for pulmonary.
INTERNAL MEDICINE

14. RHEUMATOLOGY

The aim of this elective is to develop clinical and/or investigative skills related to rheumatological diseases. The Division of Rheumatology has a busy outpatient clinical service, and it is closely aligned with the Joint Injury and Arthritis Research Group in the Faculty of Medicine. Outpatient clinics are held at the Richmond Road Diagnostic & Treatment Center and also at the South Campus hospital. Inpatient consultations are conducted in all Calgary hospitals. Travel between locations is necessary. The elective will be tailored to the interests and goals of the student, and broad objectives are to be agreed when the elective time and content are negotiated. This elective would be of particular value for someone considering a career in rheumatology or a related musculoskeletal discipline.

General rheumatology clinics and teaching continue throughout the year. Clinical and laboratory research interests of division members include lupus and autoimmunity, epidemiology and health care analysis, clinical trials, MSK ultrasound, soft tissue disorders, heritable connective tissue disorders, etc.

Each week our structured and formal teaching includes two hours of divisional “rounds” and two hours of low ratio teaching in clinical skills and clinical rheumatology.

TYPE OF ELECTIVE: Clerkship

DURATION: Up to 4 weeks, or longer if involved in a formal research project.

NUMBER OF STUDENTS ACCEPTED: Usually not more than one student at a time, subject to clinic space availability.
MEDICAL OR RADIATION ONCOLOGY

The clinical faculty at the Tom Baker Cancer Centre invites interested students from Calgary and elsewhere in Canada to consider incorporating a medical OR radiation oncology elective into their undergraduate medical program.

Why would you consider such an elective?

- “Cancer” represents a broad spectrum of diseases that affect all organ systems, both in adults and (less commonly) in children.

- Cancer is a common disease; one in three Canadians will eventually be afflicted.

- Clinical problems directly or indirectly relating to cancer are commonplace in general practice, and can be found in all subspecialties of internal medicine.

Potential advantages include:

1. Exposure via an oncologic perspective to two RoyalCollege primary certification specialties, including internal medicine (with emphasis on medical oncology) and/or radiation oncology.

2. An opportunity to focus primarily on ambulatory oncology, which comprises the vast bulk of oncologic practice, and a better understanding of patient flow through the various clinics in a cancer centre.

3. An enhanced comprehension of the multidisciplinary approach to cancer care and the roles of oncologists, non-oncologic specialists, family physicians, nurses, psychologists, palliative care specialists, other health care professionals, and services in the comprehensive care of cancer patients and their families.

4. The recognition that cancer control requires a population based approach, which is readily apparent in Alberta encompassing the spectrum of prevention, screening/early detection, research, treatment and palliative care.

5. An appreciation of the importance of clinical trials in the advancement and refinement of cancer therapy; and of the diverse nature of clinical trials activity within a cancer centre, ranging from local studies to national and international co-operative groups.
Objective:

Recognizing that a significant proportion of students in any medical class will embark on careers in family practice, the major focus of these electives is on a general overview, rather than specifics. Our major intent is to instill in students a positive attitude towards patient-centered cancer care.

TYPE OF ELECTIVE: Clerkship

DURATION: Two weeks in any one subspecialty is recommended.

NUMBER OF STUDENTS ACCEPTED: Variable, depending on other trainee numbers at any particular time.

PREREQUISITES: History and physical examination skills, and enthusiasm to be an active participant in outpatient oncologic assessment.
OBSTETRICS & GYNECOLOGY

I. OBSTETRICS & GYNECOLOGY

Individual electives in Obstetrics & Gynecology can be arranged to suit the individual student's needs and objectives.

All electives must be initially arranged and confirmed through Karen McKeon in the Department of Obstetrics & Gynecology Education Office as listed below.

ELECTIVES ARRANGED DIRECTLY WITH THE PRECEPTOR WILL NOT BE CONSIDERED.

A written statement of objectives will be required. You will be notified as to which site and preceptor you will be placed with at least 2 – 4 weeks prior to the start of your elective. Please contact Karen McKeon regarding the placement.

TYPE OF ELECTIVE: Clerkship in high-risk obstetrics, gynecologic oncology, and general obstetrics and gynecology in the city of Calgary.

DURATION: 2 weeks

NUMBER OF STUDENTS ACCEPTED: Maximum 2 students per 2 week block

PREREQUISITES: Completion of the second year Reproduction Course or equivalent.

The Department of Obstetrics and Gynecology at the University of Calgary is no longer accepting visiting students for electives. This policy is currently under review.
OBSTETRICS & GYNECOLOGY

2. GYNECOLOGIC ONCOLOGY

An opportunity is provided for the student to work on a gynaecologic oncology service. A large outpatient consulting and treatment service, hospitalized patients, and interdisciplinary meetings provide the clinical material for this course. Clerks will be actively involved in the management of patients under supervision.

TYPE OF ELECTIVE: Clerkship

DURATION: Recommended duration is 2 weeks.

NUMBER OF STUDENTS ACCEPTED: Maximum of 2 students at any one time.

RECOMMENDED: Completion of the six-week mandatory Obstetrics & Gynecology clerkship.
OBSTETRICS & GYNECOLOGY

3.  UROGYNECOLOGY
An elective at the Pelvic Floor Clinic (Foothills Medical Centre) with the Urogynecology team. Roughly 75% of your time will be spent with a single preceptor, and the remainder may be spent with a nurse continence advisor, family physician, or other urogynecologists.

Under the supervision of Dr Erin Brennand, students will participate in Urogynecology clinics, cystoscopy days and the OR. You will be expected to round on post-operative patients, make notes, and review with Dr Brennand or her Fellow. Students will have the opportunity to refine their history taking and physical examination skills. Students will have the chance to assess patients initially in the Pelvic Floor Clinic, and to be involved in the decision making process regarding surgical, medical or conservative treatment for Pelvic Floor issues such as incontinence & prolapse.

Students will be expected to work Monday through Friday. There are no call expectations. Students are expected to round on post-operative patients, make notes, and review with Dr Brennand or her fellow. You will have the opportunity to attend Resident Half Days on Friday morning, at your discretion. Approximate time commitment will be 40-45 hours per week.

This elective is excellent preparation for any student contemplating a career in Obstetrics & Gynecology, or Family Medicine.

TYPE OF ELECTIVE:  Clerkship

DURATION: 2 weeks.

NUMBER OF STUDENTS ACCEPTED:  Maximum one student per 2 week block
PALLIATIVE CARE
OBJECTIVES/DUTIES

By the end of the rotation, the student will be able to:

1) Understand the role of the palliative care physician in addressing the unique needs of patients and their families, in terms of pain and symptom control, and their emotional, psychosocial, cultural, and spiritual needs.

2) Understand the role of the interdisciplinary team in palliative and end-of-life care,

3) Demonstrate effective communication skills with patients with advanced illness, including leading a discussion on advanced care planning.

EXPERIENCE

Palliative Care is the active care of patients with advanced, progressive and incurable disease. It includes the early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual.

Students will spend 2 weeks with an inpatient consult team in one of the Calgary area hospitals or on the Intensive Palliative Care Unit at the Foothills Medical Centre. They will also be given the options of a hospice experience and/or a day with a palliative homecare physician within the 2 week period. Students will assess patients for pain and other symptoms and participate in their active management, by following them throughout the 2 week period. There will also be didactic sessions once weekly which will cover the management of common palliative care problems such as pain, delirium and dyspnea.

TYPE OF ELECTIVE: Clerkship or pre clerkship

DURATION: Minimum 1 week, recommended 2 weeks.

NUMBER OF STUDENTS ACCEPTED: Maximum of 3 students at any one time.

CONTACT: Dr. Alison Murray
Unit 47, Foothills Medical Centre,
Calgary, Alberta T2V 1P9
Telephone: (403) 521-3596
Fax: (403) 283 1651
E-mail: amurray@ucalgary.ca

Coordinator: Rachelle Deschamps
Program Administrator
Palliative Medicine Residency Training Program
PATHOLOGY

I. ANATOMICAL PATHOLOGY IN A HOSPITAL SETTING

Students will have the opportunity to establish clinical-pathological correlation by participating in the surgical and autopsy pathology sections of the department.

The emphasis will be on the cellular “Basis of Pathology”. The student will be expected and encouraged to participate actively in the preparation and review of surgical pathology and autopsy cases under the supervision of a pathologist, with the aim of obtaining a better understanding of pathological basis of disease to allow a rational approach to diagnosis in clinical practice.

The student will also have the opportunity to attend and participate in teaching rounds in progress at that time in the Department of Pathology. For those interested, block electives in a particular field of anatomical pathology could also be arranged.

TYPE OF ELECTIVE: Clerkship

DURATION: 2 - 4 weeks

NUMBER OF STUDENTS ACCEPTED: Maximum of 2 students during any one block. (Note: No electives will be scheduled at the Foothills Medical Centre during the first 4 weeks of July)

PREREQUISITES: Familiarity with the use of a microscope and knowledge of the basic mechanisms of disease.

On the first day of this elective, the student should report to the Department of Histopathology (Calgary Lab Services), 11th Floor, Foothills Medical Centre.
2. **FORENSIC PATHOLOGY – SUDDEN DEATH INVESTIGATION**

The Office of the Chief Medical Examiner

The Office of the Chief Medical Examiner in Calgary deals with approximately 2000 unexpected or unexplained deaths each year. This is the regional centre for a provincial system located in a purpose-built complex of offices and morgue, and includes laboratories for histology, photography and x-ray. Alberta has the only comprehensive medical examiner death investigation system in Canada and facilities are equally unique.

The caseload involves approximately 18-30 autopsies per week; approximately 35% of the cases fall into the unnatural category. Undergraduate students are welcome at the case conference and post-mortem examinations held each morning, to follow investigations with the staff of full-time forensic pathologists, and to visit the scene of death with the medical examiner’s investigators. Students are also welcome to attend court with the pathologists.

This elective is best suited to second and subsequent year students who have knowledge of anatomy and general pathology. An extensive data bank will allow research by interested students, and has broad appeal since the information includes both medical and social data. Students are encouraged to keep a "casebook" in lieu of history taking.

**TYPE OF ELECTIVE: Clerkship**

**DURATION:** 2 – 4 weeks

**NUMBER OF STUDENTS ACCEPTED:** Maximum of 2 students at any one time.

**PREREQUISITES:** Knowledge of anatomy and basic pathology desired, but not mandatory.
PATHOLOGY

3. GENERAL PATHOLOGY IN A HOSPITAL SETTING

Students will have the opportunity to establish clinical-pathological correlation by participating in the clinical pathology sections of the department.

The emphasis will be on the cellular “Basis of Pathology”. The student will be expected and encouraged to participate actively in the preparation and review of surgical pathology, clinical chemistry and hematopathology cases under the supervision of a pathologist, with the aim of obtaining a better understanding of pathological basis of disease to allow a rational approach to diagnosis in clinical practice.

The student will also have the opportunity to attend and participate in teaching rounds in progress at that time in the Department of Pathology. For those interested, block electives in a particular field of clinical pathology could also be arranged.

TYPE OF ELECTIVE: Clerkship

DURATION: 2 -4 weeks

NUMBER OF STUDENTS ACCEPTED: Maximum of 2 students during any one block. (Note: No electives will be scheduled at the Diagnostic and Scientific Centre during the first 4 weeks of July)

PREREQUISITES: Familiarity with the use of a microscope and knowledge of the basic mechanisms of disease.

On the first day of this elective, the student should report to the General Pathology (Calgary Lab Services), 4th floor, Diagnostic and Scientific Centre.
PATHOLOGY

4. NEUROPATHOLOGY

Students will be exposed to surgical diagnostic and autopsy neuropathology using light, morphometric, histochemical, and electron microscopic techniques. They will also be expected to work up in detail the clinicopathological correlation of individual cases of neurological interest.

TYPE OF ELECTIVE: Clerkship

DURATION: 4 weeks

NUMBER OF STUDENTS ACCEPTED: Maximum 1 student at any one time.
PATHOLOGY

5. RENAL & TRANSPLANTATION PATHOLOGY

Students will be exposed to the tissue diagnostic and especially clinicopathologic aspects of renal pathology, i.e., light microscopy, immunologic and electron microscopy of renal biopsies, and will combine these findings with basic disease mechanisms and clinical correlates. The pathology of both the native and transplanted kidney will be studied.

TYPE OF ELECTIVE: Clerkship

DURATION: Minimum 2 weeks

NUMBER OF STUDENTS ACCEPTED: To be arranged on an individual basis.
PATHOLOGY

6. UROLOGICAL TUMOR PATHOLOGY

UROLOGICAL TUMOR PATHOLOGY...more than you learned in class.

Students will have an opportunity to experience a busy hospital pathology practice with a strong focus on urological tumor pathology (kidney, prostate, bladder, and testis). Students will interact with surgical pathologists during gross and microscopic specimen examination and will participate in case sign-outs. Students will learn about the most common tumors encountered in the urological pathology practice. They will be at the pathology lab at Rockyview General Hospital, where all of the urological pathology in Calgary is performed. The elective will be a valuable experience for medical students especially who are considering pathology, urology or oncology as a specialty in the future.

TYPE OF ELECTIVE: Clerkship

DURATION: Minimum 2 weeks

NUMBER OF STUDENTS ACCEPTED: Maximum 1 student per 2-week block.
PEDIATRICS

1. CARDIOLOGY

This elective will allow students to increase their skills in the cardiovascular examination of the pediatric patient and in the evaluation of heart murmurs. The student will also have the opportunity to increase their expertise in the interpretation of pediatric electrocardiograms. The experience is primarily through the outpatient clinic, where the student will see a wide variety of cardiac problems, both congenital and acquired. There is ample opportunity to see many different types of cardiac problems both preop and postop. The student will be supervised by multiple cardiologists during this elective time. Optional inpatient experience is also available for students interested in this aspect of pediatric cardiology.

TYPE OF ELECTIVE: Clerkship

DURATION: 2 - 4 weeks

NUMBER OF STUDENTS ACCEPTED: Maximum of 2 students at any one time.

PREREQUISITES: Knowledge of routine cardiac examination and cardiac physiology.
PEDIATRICS

2. CRITICAL CARE MEDICINE

Elective experience in pediatric critical care medicine is offered in the PICU of Alberta Children’s Hospital, a 15-bed medical-surgical unit with approximately 1000 admissions a year from southern Alberta, eastern British Columbia, and south western Saskatchewan.

This is a clinical rotation emphasizing development of clinical assessment skills in a multidisciplinary team environment. Objectives at the completion of a two to four-week rotation include:

- Integration of history, physical exam, lab and imaging data into a comprehensive patient management plan.
- Selection of appropriate tests based on previously obtained data.
- Recommend or modify therapy in response to clinical information.
- Present a patient’s admitting work-up, diagnosis, and plan for management in a complete and well-organized manner.
- Discuss an initial approach to the problems of shock, arrhythmia, respiratory distress and failure, CNS injury, seizures, renal dysfunction and acid-base disturbances, sepsis, and nutrition in the PICU.
- Explain and analyze ethical issues in the ICU.

TYPE OF ELECTIVE: Clerkship

DURATION: 2-4 weeks

NUMBER OF STUDENTS ACCEPTED:
-elective opportunities are available (if space permits) to senior medical students who have completed both their pediatric core clerkship rotation as well as time in either pediatric emergency medicine or adult ICU
-a maximum of 2 weeks per rotation can be offered, but a longer elective may be available if space permits and the elective time spans two residency blocks
-clerkship electives can only be offered when four or fewer residents are rotating in the PICU, and therefore confirmation of elective availability may not be possible until several months before the elective time

PREREQUISITES: Mandatory pediatrics rotation should be completed prior to elective. Current PALS (Pediatric Advanced Life Support) certification highly recommended.
PEDIATRICS

3.  EMERGENCY MEDICINE

The Alberta Children’s Hospital is a regional institution serving the needs of children in Southern Alberta. The Emergency Department sees 70,000 visits per year. There is a wide range of emergent problems from the early neonatal sepsis or congenital heart disease to the adolescent trauma that require appropriate and timely management. Many procedures are also done in the department including laceration repair, fracture reduction, and foreign body removal. Clerk elective times (2 or 4 weeks only) are scheduled in a preceptor based rotation by the chief pediatric emergency fellow. The number of eight-hour shifts is 16 including two weekends per four-week block. There will be 8 shifts and one weekend per two-week elective. The clerk will be the primary medical contact with each patient with the exception of critically ill or injured children where the clerk will be an assistant or observer.

TYPE OF ELECTIVE: Clerkship

DURATION: 2 or 4 weeks only

PREREQUISITES: Completion of the core rotation in pediatrics or emergency medicine at home institution before undertaking this elective is strongly recommended
PEDIATRICS

4. ENDOCRINOLOGY & METABOLISM

During this rotation, clinical clerks are given the opportunity to work at Alberta Children’s Hospital on the Pediatric Endocrinology & Metabolism Service. Under the supervision of an attending Pediatric Endocrinologist, the student will be exposed to a variety of problems related to this specialty, including diabetes, stature concerns, puberty questions and thyroid abnormalities. The clerk will participate in both inpatient and outpatient patient care in addition to attending educational sessions.

TYPE OF ELECTIVE: Clerkship

DURATION: 2 weeks

NUMBER OF STUDENTS ACCEPTED: Maximum 1 student at any one time

PREREQUISITES: Must be a clinical clerk in a recognized Canadian Medical School.
PEDIATRICS

5. GASTROENTEROLOGY & NUTRITION

During this rotation, clinical clerks are given the opportunity to work at Alberta Children’s Hospital on the Pediatric Gastroenterology and Nutrition Service. Under the supervision of an attending Pediatric Gastroenterologist, the student will be exposed to a variety of problems related to this specialty such as failure to thrive, malabsorptive conditions such as celiac disease and cystic fibrosis, inflammatory bowel disease and pediatric liver disease. The clerk will participate in both inpatient and outpatient patient care in addition to observing gastrointestinal procedures and attending educational sessions. The opportunity to embark on a small research project is provided.

TYPE OF ELECTIVE: Clerkship

DURATION: 2 weeks to 3 months

NUMBER OF STUDENTS ACCEPTED: Maximum 1 student at any one time

PREREQUISITES: Students must have completed a core clerkship in either pediatrics or internal medicine. Those with other prior experience in clinical pediatrics would be considered.
PEDIATRICS

6. HEMATOLOGY/ONCOLOGY

Elective experience in pediatric hematology/oncology is a primarily outpatient-based rotation in the Pediatric Hematology/Oncology Clinic at the Alberta Children’s Hospital. The goal of the elective will be to develop the student’s clinical skills and gain exposure to common oncology and hematology problems. The student will rotate through a variety of clinics including general pediatric oncology, hematopoietic stem cell transplant, neuro-oncology, late-effects, general hematology, bleeding disorders, and thrombosis.

Exposure to the inpatient oncology ward as well as inpatient hematology consultation service may be included.

Weekly educational rounds for fellows and any resident or student are offered by the combined divisions of pediatric hematology and oncology.

TYPE OF ELECTIVE: Clerkship

DURATION: 3 (minimum) or 4 weeks

NUMBER OF STUDENTS ACCEPTED: Maximum of 1 student at any one time.
PEDIATRICS

7. INFECTIOUS DISEASES
The aim of the pediatric infectious diseases elective is for the student to develop skills in clinical and laboratory diagnosis and management of patients with infectious diseases. The clinical experience takes place at the Alberta Children’s Hospital and consists of daily ambulatory clinics in the mornings and inpatient consultations in the afternoons. The clinics see acutely ill patients who require ambulatory parenteral therapy for common infectious diseases problems as well as community referrals and follow-up patients with a wide range of infectious diseases problems. The inpatient consultation service sees patients throughout the hospital including the general wards, oncology/bone marrow transplantation ward and intensive care unit. There is ample opportunity for students to have primary contact with a variety of patients. Students are members of a team that consists of the infectious diseases consultant as well as pediatric residents and infectious diseases fellows.

Students will be expected to read about infectious diseases and to participate in regular learning activities for the infectious diseases service. Most students will need to focus their reading not only on the cases they see, but also on general principles of diagnostic microbiology and anti-infective therapy.

Electives are two weeks in duration.

TYPE OF ELECTIVE: Clerkship

DURATION: 2 weeks

NUMBERS OF STUDENTS ACCEPTED: Maximum of 1 student at any one time.

PREREQUISITES: Completion of core pediatric rotation is strongly recommended. Students from International medical schools will only be taken in their final year of training and after completing their core pediatric rotation.
PEDIATRICS

8. MEDICAL GENETICS

This elective provides exposure to some of the common situations encountered in medical genetics. The focus is on providing the student with: 1) a foundation in basic medical genetic fundamentals, 2) an exposure to genetic counselling, 3) an exposure to a focused dysmorphology examination, and 4) a familiarity with some of the common genetic syndromes.

It may be possible to provide the student with enhanced experience in metabolic disease, prenatal genetics, dysmorphology or adult genetics. However, an attempt will be made to expose the student to all disciplines.

TYPE OF ELECTIVE: Clerkship

DURATION: 2 - 4 weeks. Longer rotations could possibly be arranged.

NUMBER OF STUDENTS ACCEPTED: Maximum 1-2 student at any one time.

PREREQUISITES: It would be preferable for the student to have completed previous mandatory rotations in at least one of the following: Pediatrics, Internal Medicine or Obstetrics & Gynecology.
PEDIATRICS

9. NEONATOLOGY

This experience offered to Canadian medical students will expose the student to normal newborn examinations, normal variant in newborn and neonatal intensive care that involves care of infants from birth or admission to discharge or transfer.

Exposure to common problems including the following:
- Complications of prematurity
- Growth aberrance (SGA/LGA)
- Depressed newborn
- Cyanosis in the newborn
- Respiratory distress
- Jaundice
- Feeding and nutritional problems
- Apnea
- Neonatal sepsis/infections
- Resuscitation of newborn
- Chronic lung disease
- Retinopathy of prematurity

All members of the Section of Neonatology, Department of Pediatrics at the Calgary Health Region will participate as preceptors.

TYPE OF ELECTIVE: Clerkship

DURATION: 2 - 4 weeks

NUMBER OF STUDENTS ACCEPTED: 1 - 2 at any given time depending on the number of clinical clerks assigned to Neonatology.

PREREQUISITE: Mandatory pediatrics rotation should be completed before taking this elective.
PEDIATRICS

10. NEPHROLOGY

The section of paediatric nephrology is keen to accept clerks for electives. The service offers clinical experience alongside a multidisciplinary team involved in the care of chronic kidney disease in a service that integrates out-patient visits and hospital admissions. There can be opportunities for learning about the management of the various nephrological presentations including antenatally detected renal tract abnormalities as well as interfacing with the paediatric urologists who share our clinic space.

TYPE OF ELECTIVE: Clerkship

DURATION: 2 - 4 weeks

NUMBER OF STUDENTS ACCEPTED: Usually a maximum of 1 student at any one time.

PREREQUISITE: None apart from a willingness to learn!!
PEDIATRICS

11. NEUROLOGY

The objective of this elective is to introduce the application of the principles of the neurological examination to the different childhood age groups. Emphasis on the newborn and infant with neurological dysfunction will be the basis of this elective. Appropriate inpatient and outpatient clinic care will be supervised with selected reading to illustrate the dynamic theoretical aspects of developmental neurology, and the application of the neuroscientific approach to the challenging infant with neurologic dysfunction.

TYPE OF ELECTIVE: Clerkship

DURATION: 2 weeks (Occasionally 4 weeks will be considered in special circumstances.)

NUMBER OF STUDENTS ACCEPTED: Maximum of 1 student at any one time.

PREREQUISITES: Clinical skills and knowledge of the Neurology Unit in the Children and Women’s Health Course. International students must be in their final year and have completed the core Pediatrics clerkship.
PEDIATRICS

12. PULMONARY MEDICINE

Students will be introduced to a broad range of common problems in pediatric respiratory medicine through a combination of outpatient clinics and inpatient wards. Outpatient clinics include the following: asthma, cystic fibrosis, general pulmonary medicine, respiratory home care, and sleep clinic. Students will also participate in the daily care of inpatients with respiratory problems, and will have the opportunity to observe diagnostic and therapeutic procedures including pulmonary function testing and flexible bronchoscopy.

TYPE OF ELECTIVE: Clerkship

DURATION: 2 weeks

NUMBER OF STUDENTS ACCEPTED: Maximum of 1 student at any one time.

PREREQUISITES: Completion of the core rotation in pediatrics at home institution before undertaking this elective is strongly recommended.
PEDIATRICS

13. RHEUMATOLOGY

TYPE OF ELECTIVE: Clerkship

DURATION: 2-4 weeks

NUMBER OF STUDENTS ACCEPTED: Maximum of 1 student at any one time.

PREREQUISITES: Completion of the core rotation in pediatrics at home institution before undertaking this elective is strongly recommended.
PEDIATRICS

14. RED DEER - COMMUNITY PEDIATRICS

We offer a comprehensive experience in general consulting pediatrics in a small urban community setting. Our group is composed of 6 general pediatricians and there are no subspecialists in Red Deer. We do cover the entire spectrum of pediatric medicine, including neonatology, hospital-based critical care, outpatient based consults, chronic disease management, and child behaviour / developmental assessments. We are associated with a regional hospital with regular emergency consultations, a fully serviced in-patient pediatric ward with 12 beds, a labour and delivery department with 3000 deliveries per year, and a "Level 2 nursery" (including babies on ventilators, preterm neonates down to 32 weeks gestation, management of central lines / TPN / IV medication).

Students will be expected to provide intermittent "on-call" service in the hospital, and will primarily work directly with the attending staff. All staff are enthusiastic to work with learners. Due to high volume of trainees that work with us, we have a limited capacity to accept more students, so please try to notify us with as much time as possible.

TYPE OF ELECTIVE: Clerkship

DURATION: 2-4 Weeks

NUMBER OF STUDENTS ACCEPTED: 1 elective student at any time
PHYSICAL MEDICINE & REHABILITATION

The aim of this elective is to expose the medical student to a broad range of areas within the specialty of Physical Medicine and Rehabilitation and to acquire knowledge of the principles of rehabilitation. In order to provide this broad exposure, the student will be scheduled onto a specific service for each week of their elective. There are a variety of service options, several including a combination of inpatient team and outpatient clinics such as Spinal Cord injury, Acquired Brain injury, Stroke, Pediatric Rehabilitation, Neuromuscular Rehabilitation and EMG, Musculoskeletal medicine, Amputees, Burn rehabilitation, Multiple sclerosis, Spasticity and General Physiatry. If so desired, the student may request specific subspecialty service exposure, or a research elective, if appropriate staff supervisors are available.

TYPE OF ELECTIVE: Clerkship

DURATION: Minimum of 2 weeks; maximum of 4 weeks.

NUMBER OF STUDENTS ACCEPTED: up to 3 at any one time throughout the academic year, with the exception of the summer months depending on available staff supervisors.
PSYCHIATRY

1. FAMILY THERAPY

This elective provides an opportunity for an in-depth study of families with interpersonal relationship problems and the treatment process whereby a clinician facilitates the family's ability to resolve its own difficulties. Students will observe actual family therapy sessions, participate on a "reflecting team" and, depending on aptitude and interest, begin conducting psychotherapeutic family interviews. Pre- and post-session discussions will take place to enhance the development of conceptual skills in understanding family systems and behavioural change.

TYPE OF ELECTIVE: Clerkship

DURATION: 2 - 4 weeks

NUMBER OF STUDENTS ACCEPTED: Depends on the availability of supervisors.
2. GENERAL PSYCHIATRY

The Department of Psychiatry welcomes University of Calgary medical students or students from other medical schools with an interest in psychiatry. The department can negotiate an experience in either an inpatient/outpatient setting or a combination of both. We are also able to offer experiences in acute psychiatry, child and adolescent psychiatry, consultation liaison, and specialty clinics.

TYPE OF ELECTIVE: Clerkship

DURATION: Minimum 2 weeks

NUMBER OF STUDENTS ACCEPTED: Maximum of 1 student on any one service.

PREREQUISITES: Completion of pre-clerkship years.
RADIOLOGY

DIAGNOSTIC IMAGING
Basic familiarization with diagnostic imaging, with an emphasis on diagnostic radiology. The student will spend time in each modality of diagnostic radiology including CT, MRI, ultrasound, x-ray and interventional radiology.

TYPE OF ELECTIVE: Clerkship

DURATION: 2 weeks with a maximum of 2 two-week elective rotations per student.

NUMBER OF STUDENTS ACCEPTED: FMC 1-4 students per 2-week elective space, PLC 1 student per 2-week elective, 2-RGH 1 student per 2-week elective space.

(FMC, PLC, RGH - NO CLERKS in July and August and NO CLERKS for two weeks over the Christmas/New Years break)
Surgery

The Division of Surgery offers elective time to University of Calgary third year students and visiting students in their final or clerkship year. There are five hospital sites within Calgary where clerks may be assigned for a surgery elective.

**Type of Elective:** Clerkship

**Duration:** 2 – 4 weeks (dependent on availability)

**Number of Students Accepted:** The number of students accepted will vary depending on the specialty.

Students will participate in all aspects of the care of patients with a wide range of surgical problems and, as well, will have the opportunity to advance history-taking and physical examination skills. There will be time devoted to assisting in the operating room, assessing patients in the clinic situation and emergency room, as well as daily patient management pre- and post-operatively. Within general surgery, there are a number of specialized surgeons who will preceptor students to allow for exposure to endocrine, breast, colorectal, hepatobiliary and pediatric surgery, as well as surgical oncology.

The following list indicates the surgical specialties that are offered.

**Speciality**
- Cardiac Surgery
- Ophthalmology
- Otolaryngology
- Urology
- Orthopedics
- Plastic Surgery
- General Surgery
- Pediatric Surgery
- Thoracic Surgery
- Vascular Surgery
I. NEUROSURGERY

In this two to four week elective, the student will work on the neurosurgical service at the Foothills Medical Centre. The student will participate in patient evaluation and management in the emergency room and also in the operative management of patients.

Upon completion of this elective, the student should understand the principles of patient management in head injury, intracranial mass lesions, subarachnoid hemorrhage, and many other common neurosurgical conditions (e.g., neck, back pain, and stroke).

TYPE OF ELECTIVE: Clerkship

DURATION: 2 - 4 weeks

NUMBER OF STUDENTS ACCEPTED: Maximum 2 students at any one time at the Foothills Medical Centre.
2. **OPHTHALMOLOGY (2 electives offered)**

I) Offered to 3rd or 4th year medical students attending a Canadian medical school. In this two week elective, the student will attend and work in community based ophthalmologist offices and surgical centers, as well as the urgent care Eye clinic at the Rockyview General Hospital. The student will participate in patient evaluation and management in these clinics.

Upon completion of this elective, the student should understand the principles of ophthalmology in the examination, investigation and management of ophthalmic disorders and the details of these disorders.

**TYPE OF ELECTIVE:** Clerkship  
**DURATION:** 2 weeks  
**NUMBER OF STUDENTS ACCEPTED:** Maximum one student at any one time.
SURGERY

3. TRAUMA SURGERY

The University of Calgary, Department of Surgery, Division of General Surgery, Trauma Service, offers electives in trauma for medical students. Clinical duties include attendance at trauma resuscitation in the emergency department and ongoing acute care support on a dedicated trauma ward. The Calgary Trauma Service admits approximately 1000 (90% blunt, 10% penetrating) trauma admissions per year, 800 of those with an ISS \( \geq 12 \). The principles of trauma, assessment, and resuscitation are emphasized, as well as common initial trauma procedures including airway management and chest tube insertion. Attendance in the operating room is expected for emergency trauma surgeries. Participation on call up to 1:4 is expected. Weekly service specific trauma rounds, monthly multi-departmental trauma rounds, and weekly Division of General Surgery rounds are all provided during the course of the elective.

TYPE OF ELECTIVE: Clerkship

DURATION: 2 weeks

NUMBER OF STUDENTS ACCEPTED: varies
MEDICINE HAT REGIONAL HOSPITAL - ELECTIVES OFFERED

Below you will find a number of electives offered to the University of Calgary clinical clerks at the Medicine Hat Regional Hospital (MHRH). MHRH is an acute care facility, which also includes supportive rehab/transition beds. Core programs at the regional facility include surgical services, mental health, critical care, pediatrics, 24-hour emergency, ambulatory care, obstetrics, neonatal intensive care (Level 2), geriatric services, community health, home care, X-Ray and lab.

**Department of Medicine**
Students will be able to do ward rounds with the internist. They will have the opportunity to see patients in the emergency department as these physicians offer a consultation service. They will also have the opportunity to observe their patients in the office, during stress testing, in the cardiac rehab program as well as on the intensive care unit and in the pulmonary laboratory area.

**Department of Surgery**
consists of general surgery, orthopedics, urology, plastic surgery, ENT, and ophthalmology. The students will be able to do pre-op assessments, assist the preceptor in operating room, and follow patients in the post-op period. The students will also be able to see patients in the emergency department as the Department of Surgery supplies a consultative service to the general practitioners. The students will also be exposed to specialties such as endoscopy, the hand clinic, and the cast clinic.

**Department of Anaesthesia**
offers the opportunity to acquire critical skills in airway management and acute cardio-respiratory critical care. It also presents the opportunity to observe a variety of surgical suites with 4 operating lines daily.

**Emergency Medicine**
is a busy department with twelve emergency room physicians. They attend to 40,000+ cases per year and will do a primary assessment and management of all emergency conditions including: acute myocardial infarctions, cardio-respiratory arrest, and trauma. As a level III trauma centre, the students will also be exposed to both major and minor traumas. The student will be able to learn the skills required for suturing, fracture setting, and applying of casts to name but a few.

**Department of Family Medicine**
has several preceptors available, and the students will be exposed to a general mix of office and hospital practice. Family physicians have privileges in various areas in the hospital and some with obstetrics and gynecology where the students will be able to assist in deliveries, patient management on a day-to-day basis in the hospital including the Family Medicine Maternity Clinic. As well, students will be able to assist in the physician's office practice.

**Department of Pediatrics.**
The department has a 14-bed unit in the hospital. The Department of Pediatrics offers a consultation service and students will be able to assess the patients in the emergency department and assist with admissions. The student will also be able to assist in neonatal cases and in the neonatal intensive care unit. The pediatricians also have a busy office practice and students will be exposed to this as well.
Department of Obstetrics & Gynecology has five preceptors available. There are about a thousand deliveries per year done by family physicians and specialists. The students will be exposed to a variety of obstetrical and gynecological problems from normal deliveries to complex deliveries. Students will be able to assist in surgical cases and opportunities are available to attend colposcopy clinics and attend in the office.

Department of Pathology has four preceptors available. The department is involved in general pathology, histology, and cytology, as well as general laboratory medicine; autopsy practice only forms a very small part of this department’s workload.

Department of Psychiatry has a 31-bed unit that is usually filled to capacity. The students will be exposed to a variety of psychiatric problems and be able to manage a variety of patients on a day-to-day basis.

Department of Dermatology has one preceptor available mainly involved in an office dermatology practice, but also offers a consultation service to the hospital. Therefore, the student will be exposed to a variety of office type dermatological problems and on occasion to the more complex cases seen in the hospital.

All electives are co-ordinated through the office of South Zone Medical Affairs – Medicine Hat Regional Hospital.

TYPE OF ELECTIVE: Clerkship

DURATION: Minimum 2 weeks

NUMBER OF STUDENTS ACCEPTED: Varies.
ELECTIVES CATALOGUE

Program Coordinator
The University of Calgary
Faculty of Medicine
Undergraduate Medical Education
Health Sciences Centre
3330 Hospital Drive NW
Calgary, AB T2N 4N1

E-mail: visiting@ucalgary.ca