

Faculty of Medicine and Dentistry

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The Faculty of Medicine and Dentistry

Faculty Vision

To build an exceptional socially accountable Faculty through leadership in education, research and patient care and to be recognized as graduating highly skilled doctors for Canada.

Faculty Mission Statement

The Faculty of Medicine and Dentistry serves the public good through excellence in medical and health professions education, research and patient care. We build partnerships essential to a high-performing academic health sciences centre.

Faculty Educational Mandate

The University of Alberta Faculty of Medicine and Dentistry is dedicated to excellence in professional health care education, graduating competent generalist physicians and health care professionals responsive to the health care needs of our communities.

Undergraduate Medical Education: www.med.ualberta.ca/programs/MD

Undergraduate Dental/Dental Hygiene Education: www.dent.ualberta.ca

Undergraduate Medical Laboratory Science Education: www.med.ualberta.ca/programs/MLS

Undergraduate Radiation Therapy Education: www.med.ualberta.ca/programs/radth

Strategic Initiatives

The Faculty has defined three strategic priorities that will enable it to serve the public good:

1. Engage Communities
2. Define Excellence
3. Organize for Excellence

Values

1. Scholarship: To discover, interpret and disseminate new knowledge that promotes and restores health.
2. Respect, Compassion and Caring: To use these ideals to guide how we teach our students, care for our patients and work with our colleagues.
3. Integrity: To carry out our responsibilities to our patients, our students and our colleagues, maintaining the highest moral standards.
4. Social Accountability: To Engage all levels of the broad community in order to address their priority health concerns.
5. Excellence: To be dedicated to the highest standard of conduct in teaching, research and patient care
6. Partnership: To partner in education, research and health care for the greater good of the communities we serve.

Faculty Overview

In striving to realize its vision and to fulfill its mission, the Faculty contributes to the academic environment of the University of Alberta, City of Edmonton, and Province of Alberta. The interdependence of teaching, research, and delivery of health care not only necessitates the scholastic endeavours described herein, but also generates a major economic impact on the communities encompassed. A few facts:

Number of Departments	20
Number of Faculty Divisions	2
Number of Faculty (includes 42 FSO's)	783
Number of Administrative Professional Officers	27
Number of other (Academic Staff)	419
Number of Clinical Academic Colleagues	2063
Number of Support Staff	1438
Numbers of Students and Residents	
Medical Students	663
Medical Residents and Fellows	927

Dental Students	142
Dental Residents	4
Dental Hygiene Students	152
Medical Laboratory Science Students	85
Radiation Therapy Students	5
Graduate Students	586

In subsequent sections of this document, the departments, divisions and members of staff are listed along with summaries of the various programs offered. The Faculty warmly welcomes feedback and questions and can be contacted as follows:

Faculty of Medicine and Dentistry
2J2.00 WC Mackenzie Health Sciences Centre
University of Alberta
Edmonton, Alberta, Canada T6G 2R7
(780) 492-6621; FAX (780) 492-7303
www.med.ualberta.ca

The Professors

Teaching and Scholarship

The Faculty of Medicine and Dentistry offers a number of outstanding educational programs including the Medical Degree, the Doctor of Dental Surgery, Dental Hygiene, Medical Laboratory Science and Radiation Therapy. The Faculty also offers honors undergraduate programs in collaboration with the Faculty of Science and graduate MSc, PhD and MD/PhD programs in collaboration with the Faculty of Graduate Studies and Research.

The Faculty is now one of Canada's preeminent health sciences faculties, offering outstanding clinical care to patients, conducting world-class research and providing innovative educational programs to graduate and undergraduate students.

Faculty educators and clinicians work within one of Canada's largest health care regions and Faculty researchers attract over \$201 million annually in peer-reviewed research funding. The Faculty enjoys national and international recognition in the form of numerous Fellows of the Royal Society of Canada (FRSC) and two Fellows of the Royal Society (FRS), Canada Research Chairs, University Professor, Kaplan Laureates, Howard Hughes International Scientists and Laureates of Prix Galien and Manning awards. Graduates of the Faculty are highly regarded and go on to assume national and international leadership roles in a diverse number of health care fields.

Members of the Faculty

Note: An asterisk (*) by the name indicates a secondary appointment within the Faculty. (This is not used for Deans and Directors.)

Office of the Dean

Dean

R Fedorak

Vice-Dean, Faculty Affairs

D Kunimoto

Vice-Dean, Education

S Schipper

Vice-Dean, Research

D Evans

Chief Operating Officer

V Wulff

Senior Associate Dean,

Dental Affairs

P Major

Associate Deans

J Choy (Clinical Faculty)

T Hillier (MD Program)

T Hobman (Research Facilities)

R Kearney (Postgraduate Medical Education)

J Konkin (Community Engagement)

M Lang (Faculty Development)

M Lewis (Learner Advocacy & Wellness)

H Ostergaard (Research, Graduate Programs)

L Richer (Clinical/Translational Research)

J Romney (Health Informatics)

P Smyth (Professionalism)

D Campbell-Scherer (Lifelong Learning)

Assistant Deans

S Andrew (Education, Quality and Accreditation)

E Dance (Resident Affairs)

Vacant (MD Academics)

H Goetz (Diversity)

C Goldstein (Student Affairs)

S Gourishankar (MD Admissions)

K Taylor (Advancement)

L Purdy (Graduate Student Affairs)

W Wong (Postgraduate Medical Education)

Directors

P Brett-MacLean (Arts and Humanities in Health and Medicine)

N Gibson (Simulation)

F Janke (Rural & Regional Health)

T Kemble (Indigenous Health Initiatives)

L Sonnenberg (Academic Technologies)

Faculty Departments

Anesthesiology and Pain Medicine

Interim Chair and Professor

S Rashedi

Administrative Officer

J Jubinville

Professors

BA Finegan

RA Kearney

S Rashedi

M Zaugg

Associate Professors

B Dick

D Dillane

B Kerr

Assistant Professor

S Bourque

Clinical Professors

JN Armstrong

D Cave

DB DuVal

F Gragas

DP Gray

R Haugen

R Hudson

*MS Jacka

N Klassen

B Knight

J Lilley

S Paterson

RF Seal

S Sidhu

MK Simmonds

S Wilson

Associate Clinical Professors

M Auld

E Barnard

RG Bergstrom

E Bishop

R Brown

M Buss

A Chiarella

A Christ

MR Cohen

K Doyle

T Eliasson

M Ewanchuk

KA Faccenda

A Farries

J Green

M Hogan

V Ip

P Kulkarni

BE Marchak

L Nadwidny

T Ozelsel

GA Perez

B Ramsey

H Sandhu

MR Simmonds

I Sobolev

G Steel

J Taam

*D Townsend

P Wildgrube

TW Yeh

M Yukawa

Assistant Clinical Professors

B Achen

A Barker

K Bateman

JM Berube

S Bhachu

R Bhalla

M Breiting

BJ Bucyk

D Chen

R Cheng

PG Cisar

K Drader

JM Dupuis

J Escuder

C Fedorow

A Fielding

W Flexer

V Ford

A Freed

JP Gelinis

S Gupta

DA Hardy

P Holinski

LY Huang

CM Hui

B Kapitowski

N Kembhavi

M Knezevich

JP Koller

B Kropelin

ER Lazar

T Leung

C Mack

V Maraghy

P Matthey

DA Mercereau

JA Moir

D Muzyka

C Needham

CJ Noble

A Nunes

T O'Leary

P Paetsch

J Pash

D Patil

BZ Petriw

J Popoff

M Quinn

SJ Reid

A Roopnundh

L Scheeler

D Snider

R Sondekoppan

J Soong

B Sowa

S Stetsko

C Tang

*C Torok-Both

C Twomey

BP Unger

O Ziwenga

Clinical Lecturers

N Baldonado

S Behmanesh

V Bobart

J Bohn

C Booyen

R Boyle

S Broemling

A Brown

E Campbell

J Campbell

C Cave

D Chan

JR Charlton

A Cheng

JH Chin

E Chou

B Chung

A Datta

J Fugger

R Gamez

A George

A Gilchrist

B Godlewski

C Goldie

B Goranson

K Gregg

Y Gu

S Halliday

K Hawkins

S Hoda

E Hoepfner

JC Hrazdil

R Kindzierski

J Klinck

T Kosick

E Kwon

A LaFontaine

M Lalonde

W Lam

J Largoza

D Leighton-Lane

J Marois

L McGowan

J Moyo

A Neufeld

AC Ng

MC Ng

S Nickolet

L Noonan

K Oman

C Osmond

R Quapp

*K Reid

T Rimmer

T Rudge

F Rudolph

K Rutten

OJ Schneider

P Seguin

S Singh

G Smith

C Strydom

D Terblanche

H Ting

J Tse

V Tran

I Wachowski

Q Wensveen

Z Van den Heever

Adjunct Professors

P Brindley

C Eagle

W Etches

Adjunct Associate Professors

E Luccinetti-Zaugg

Adjunct Assistant Professors

G Bostick

S Bourque

A Chuck

Professor Emeritus

BT Fincucane

Biochemistry

Chair and Professor

CFB Holmes

Assistant Chair,

Administration

M Hobman

Professors

RC Bleackley

DN Brindley

J Casey

MJ Ellison

L Fliedel

JNM Glover

*R Godbout

BD Lemire

*L Li

A MacMillan

M Overduin

M Michalak

L Schang

MC Schultz

L Spyrapoulos

BD Sykes

*DJ Tyrrell

DE Vance

JH Weiner

*D Westaway

H Young

Associate Professors

*S Bakash

R Fahman

C Fernandez-Patron

IS Goping

J Lemieux

D Stuart

N Touret

H Wille

*D Zhang

Assistant Professors

D Gross
J Hebert
KE Jones
S Kalra
G Kawchuk
T McMullen

Assistant Adjunct Professors

S Adeeb
A Adesida
A Amirfazli
Y Belhamadia
N DeZanche
DH Gul
B Holinski
J Jaremko
D Krushelnycky
EHM Lou
H Rouhani
T Tang
L Unsworth
A Vette
A Yahya
RJ Zemp

Cell Biology**Chair and Professor**

RA Rachubinski

Administrative Officer

KM James

Professors

L Berthiaume
*E Foley
*MJ Hendzel
T Hobman
*R Lehner
P Melançon
T Simmen
R Wozniak

Associate Professors

JB Dacks
G Eitzen
*SC Hughes
P LaPointe
A Simmonds

Assistant Professor

Q Tan

Adjunct Professors

JD Aitchison
B Montpetit

Professors Emeriti

RB Campenot
TL Krukoff
RS Smith

**Critical Care
Medicine****Interim Chair and Associate
Professor**

S Bagshaw

Administrative Officer

Vacant

Professors

PG Brindley
WD Chin
RTN Gibney
DJ Kutsogiannis (special
continuing)
D Zygun (seconded to AHS)

Associate Professors

M Jacka (special continuing)
W Sligl (special continuing)

Assistant Professors

S van Diepen (special continuing)
R Chowdhury (special
continuing)

Adjunct Professor

*E Tredget

Adjunct Associate Professors

*L Cheung
*C Karvellas
*R Khadaroo
*S Widder

Adjunct Assistant Professors

*R Brisebois
M Douma

Clinical Professors

*S Duggan
*N Gibson
*C Johnston
RG Johnston
M Meier
*MH Stephens
DE Stollery

Associate Clinical Professors

J Davidow
D Djogovic
M Heule
W Murtha
G Singh
A Sobey
D Townsend

Assistant Clinical Professors

M Ballerman
D Carney
M Henry
D Hudson
A Liu

S Marcushamer

E MacIntyre
D Markland
*JD Matheson
S Norris
*D Paton-Gay
E Rokosh
A Romanovsky
S Skoretz

***M Simmonds**

G Suen
C Torok-Both
M Zibdawi

Clinical Lecturers

B Buchanan
*P Engels
O Rewa

Dentistry**Chair and Professor**

PW Major

**Associate Chair (Student
Affairs)**

TR Stevenson

Associate Chair (Academic)

SK Patterson

**Associate Chair (Dental
Hygiene)**

S Compton

**Associate Chair (Graduate
Studies and Research)**

P Flood

**Associate Chair (DDS Clinical
Education)**

A Senior

**Associate Chair (Clinical
Operations)**

D Lunardon

**Assistant Chair
(Administration)**

S Roy

Communications Officer

C Deslaurier

Curriculum Coordinator

G Gaudet-Amigo

Professors

O Addison
S Compton

DN Dederich

FM Eggert
T El-Bialy
M Febbraio
P Flood
C Flores-Mir
G Heo
LW Kline
L Levin
PW Major
WT McGaw
NC Milos
SK Patterson
E Peters

Associate Professors

M Amin
C Cable
A Chow
S Elahi
D Graf
M Lagravere Vich
H Lai
U Nassar
MN Yoon

Assistant Professors

M Gibson
Y Torrealba

Clinical Professors

T Carlyle
R Cox
W Dobrovolsky
P Gainer
S Ganatra
B Gitzel
D Gotaas
L Kamelchuk
A Kilistoff
M Lalh
S Lalh
B Linke
K Lung
W Preshing
J Ritchie
C Robinson
TR Stevenson
P Williamson
KW Wong
CC Yu
DC Yu
G Zenith

Associate Clinical Professors

M Armstrong
T Aucoin
K Bapoo-Mohamed
DH Bedard
C Blackman
L Campbell
R Croutze
K Habib
I Hernandez
M Howell
L Hursin
D Kelner
I Kornerup
B Kula
EWL Kwan
VP Lee
T Lee-Knight
J Lockau
S Lockwood
D Lunardon
DJ MacDougall
BR Neumann
P Parashar
M Parfitt
K Sauze
A Senior
A Sheppard
E Steinbring
R Talwar
HK Tan
J Valentine
J Yacyshyn

Assistant Clinical Professors

B Aucoin
P Bartkus
M Bennett
TS Bennett
Y Berlin-Broner
L Best
A Brodie
D Brown
K Cheng
S Chiew
J Clarke
J Cornish
D Correia
K Currie
T Debevc
A Dela Cruz
D Demchuk
W Dewar
M Duncan
J Eberhardt
G Grykuliak
D Haberstock
S Houshyar
I Hucal
J Jacob
N Kaipatur
D Kemp
K Khabra
E Lam
R Lee
S Lee
K Lobbay
D Lobb
I Mah
W Male
M Major
L Mar
J Margolus
F Marquez
D Maskell
M Mueller
RT Nawrot
I Ongaro
C Pacheco-Pereira
R Pratt
J Pruner
R Reiter
R Straga
A Sumar
R Tepy
S Thawer
D Tsujikawa
T Vankka
T Verhaeghe
D Vincelli
J White
B Wong
M Wright
P Wu

Clinical Instructors

J Alcazar
G Austin
P Badri
D Burnham
P Chowdhury
D Czernick
S Dalpe
G Forrest
M Gosselin
S Heron
N Kim
N Kobagi
S Lee
C Layton
J Lo
MA Mandich
J Pereira
D Perusini
L Riemer
L Rosselli
J Snesrud
J Van Malsen
A Wong
J Yalte

SR Yasini

J Yu

Faculty Service Officers

D Harley
K Rasmussen
D Romanyk

Adjunct Professors

J Carey
L Le

Adjunct Associate Professors

M Doschak
H El-Hakim
E Kalaydjian
J Nychka
A Paladino

Adjunct Assistant Professors

M Alsaleh
N Alsufyani
S Armijo Olivo
S Butler
J Ferencz
R Figueiredo
V Leon-Salazar
B Owen

Professors Emeriti

BK Arora
HM Dick
HE ElBadrawy
KE Glover
WT Harley
WC Meyer
CJ Osadetz
JW Osborn
DM Paton
J Pimlott
JM Plecash
KM Polukoshko
GW Raborn
PD Schuller
DA Scott
GH Sperber
GW Thompson
NK Wood

**Emergency
Medicine****Chair and Associate Professor**

W Sevcik

Professors

M Bullard
BR Holroyd
C McCabe
B Rowe

Clinical Professors

J Franc
T Graham
R Lee
W Sevcik
S Sookram

Associate Clinical Professors

E Berdusco
MA Cherniowchan
*A Cojocar
GE Cummings
J Davidow
E Dance
D Djogovic
K Dong
S Dong
C Evans
R Hansen
K Jahangir
A Mirza
M Mrochuk
*A Naismith
R Purser
C Rabuka
W Thirsk

Assistant Clinical Professors

D Bond

MJ Boulanger

JJ Brown
E Chang
S Chow
R Cunningham
R Daloise
*N Dhaliwal
B Edgumbe
D Ha
M Haager
A Hanson
K Harris
D Hoshizaki
P Jain
A Kabaroff
R Keyes
C Kjelland
V Krisik
R Kruhlik
K Lam
N Lam
D Lefebvre
K Lobay
M Long
G Lung
R MacDonald
C Macgougan
M Mackenzie
S MacLachlan
*S MacLean
K McLelland
S Mithani
A Murray
J Norum
R Oland
DC Perry
C Peterson
SA Poplawski
J Pritchard
M Rico
D San Agustín
G Scheirer
R Scheirer
N Shariff
F Soibelman
A Stagg
*L Thomas
A Ushko
AF Walker
*I Williamson
R Yao
AD Yeung

Clinical Lecturers

*E Alonso
J Anderson
T Anderson
D Ariano
N Arya
H Austin
K Bacon
A Bagherli
D Barer
J Bawden
M Bennett
J Bitangcol
*J Bly
T Braun
J Breton
L Burkart
C Campbell
H Canham
B Cassidy
J Chang
S Chapman
M Chen
JR Chin
B Crawford
K Cromwell
M Curial
I Cvetkovic
S Datta
V Davis
B Deane
P Delaney
J Deol

*N Dhaliwal
C Domke
S Doran
E Dromey
J DuPreez
S Fisher
S Flanagan
A Foran
C Garcea
E Gawley
Y Grishin
S Gupta
AD Haponiuk
S Haque
L Hillier
D Hoshizaki
D Hryciuk
M Inwood
S Jones
A Khair
A Kirkham
A Kulaga
M Lai
P Lali
KH Lee
*V Lee
Y Li
J Liddle
P Linehan
C Lucyk
W Ma
S Macdonald
*K Mailo
K Mangan
*L Maternisz
G Mazurek
J McKague
G Meikle
S Meleshko
A Mistry
J Mohler
W Molberg
K Muwanguzi
DW Neilson
K Neilson
LK Nguyen
D Nixon
K O'Brien
J Pattison-Bacon
S Potgieter
B Read
J Reid
R Reid
J Reitsma
R Ribeiro
R Rosenblum
S Ross
J Sainsbury
A Seguin
*H Shanmuganathan
L Sharma
R Sherman
K Singh
R Singh
K Smith
TF Stetsko
DF Stewart
J Stonehocker
*C Sweeney
J Thompson
A Toeg
M Tubman
D Watrich
C Westover
D Wheeler
S Wiens
R Wittmeier
C Wong
A Yeung
M Young
J Zaozirny
*R Zhang

Adjunct Professors
S Ali
L Francescutti

Assistant Adjunct Professors
S Curtis
*L Evered
S Jelinski
S Lucyk
P McLane
M Oliva
B Windwick

Associate Adjunct Professors
W Craig
H Jou
D Nichols
T Turner
I Vicas
M Yarema
P Yoon

Family Medicine

Chair and Professor
LA Green

Administrative Officer
M Perreault

Professors

GM Allan
NR Bell
A Cave
BM Dobbs
N Drummond
P Humphries
J Konkin
C Lebrun
DG Moores
J Triscott

Associate Professors

HL Banh
FR Brenneis
D Campbell-Scherer
L Charles
S Garrison
F Janke
L Keenan
D Klein
MR Kolber
S Koppula
C Korownyk
D Manca
D Nichols
J Parmar
D Ross
S Ross
G Salvalaggio
S Schipper
L Steblecki

Assistant Professors

RJ Abraham
L Au
O Babenko
K Chan
JT Chmelicek
T DeFreitas
A Gruneir
S Kostov
A Lee
MP Morros

Clinical Professors

FW Armstrong
SK Aung
AE Ausford
AL Bailey
G Blais
JF Chiu
I Colliton
*TFX Corbett
*I De Kock
N Flook
*T Graham
TD Kolotyluk
EP Schuster
H Woytliuk
H Zirk

Associate Clinical Professors
M Abbasi

*PH Amigo
PMD Armstrong
*E Berdusco
BV Briz
J Bromley
BJ Bunting
*MA Cherniwchan
WE Clelland
JE Craig
*GE Cummings
NAC Da Cunha
DP Edgcombe
*CGM Evans
AC Gigg
N Hans
HR Hindle
M Hurlburt
AA Indar
K Jahangir
P Jensen
P Kivi
GA Lamoureux
*DL Larose
A Lindblad
KAH Lundgard
B Lycka
LM Ma
A Marin
BK McPeak
BJ Millar
AM Milne-Epp
*M Mirhosseini
*A Mirza
MB Moran
R Naiker
A Naismith
P Ondrus
EW Papp
HJ Peng
*RA Purser
OS Rahaman
BD Ritchie
JM Robinson
M Rose
S Simon
A Spak
*Y Tarumi
*V Thai
M Wesner
M Wickham
*GR Wolch

Assistant Clinical Professors

D Abdellatif
S Ahmadinejad
G Ahmed
FO Akindele
T Baksh
JP Balko
DH Banmann
D Behn Smith
PM Belda
JE Bell
RS Birkiil
*DW Bond
*M Boulanger
BW Boyko
*JJ Brown
*S Burton-MacLeod
A Butler
DA Carew
R Carter
J Caulfield
S Chakravarty
TS Chan
HJL Chen
SA Christenson
D Corby
JJ Coughlin
*R Cunningham
WJ Daviduck
P De Caigny
NS Dhaliwal
E Denga
KD Dinyari
V Duta

KA Dykin
S Edani
*B Edgecumbe
SM Fairgrieve-Park
LL Fallis
TF Flanagan
*WV Flexer
LK Freeman
DC Fung
TL Fung
AL Gainer
K Ghali
SM Giles
CR Gingles
BD Greidanus
*MS Gross
CE Haig
RA Halse
RS Hauptman
SR Heckman
J Hirji
CD Hodgson
ES Holmes
J Jamieson
J Janmohamed
RB Kaasa
H Kammerer
KP Kelly
A Kittler
*KM Koliaska
DW Korzenowski
R Kraut
*RT Kruhlik
D LaBuick
R Laughlin
K Laverty
LC Lee
K Leung
K Loeffler
*MJ Long
SS Lou
SE Low
BA Macedo
SBA MacLean
JA Makokis
KJ Malczyk
LE Mann Hosford
MG Mannarino
CW Marcet
BW Martin
RA Martin
TJ McDonald
T McKeown
PS McKernan
RC Misfeldt
R Modi
GC Moe
EM Mori-Torres
JD Morrow
M Askar
*B Nankissoor
ED Ndovi
C Bablitz
JO Ojedokun
T Nordli
M Noh
RL Oishi
C Parameswaran
TM Penrod
*EB Persson
B Pezeshki
*SA Poplawski
M Rafati
R Ram
TF Ranieri
N Rao
M Razavy
GJ Rey-Parra
*M Rico
RD Rogers
K Rylance
S Samuel
*GD Scheirer
WE Schneider
G Schwalfenberg
S Shakil

MTL Shandro
Y Shi
J Shimizu
*CA Sikora
LL Smith
SD Smith
S Soehn
S Squires
H Sternberg
J Stickney-Lee
L Thomas
EJ Thompson
GA Torok-Both
EB Tredget
SA Tsikata
*AW Ushko
PM Verones
DRJ Vincent
*AF Walker
VM Warren
L Wasilenko
J Weaver
ML Wickland-Weller
I Williamson
JA Wismark
M Yan

Clinical Lecturers

S Abood
W Ackermann
RJ Ackroyd
BM Adams
M Addison
FO Adebayo
*I Ahmad
RM Ahmad
I Akinjise
DR Akintola
A Algu
N Alingry
N Al-Kayssi
E Almaden-Camacho
A Al-Mausawi
EJ Alonso
S Altayeb
I Amusan
RR Anderson
K Anderson-Hill
JR Andreiuk
DM Andriashuk
S Annand
KL Anstey
A Anyaduba
A Aradi
JJ Argals
GL Armstrong
IG Armstrong
GM Arps
N Arruj
M Askar
K Atchison
WB Azzi
C Bablitz
H Bablitz
SA Backlin
JJ Badenhorst
JL Baergen
B Bahler
JL Baker
*DJ Barer
CS Barr
CA Barreth
KR Barry
DC Bartie
LA Beamish
N Bector
PE Bell
M Benard
K Bennett
JE Bergens
K Bernes
L Bernier-Lycka
A Bertagnoli-Hansen
S Beshai
CJ Beyers
S Bhardwaj

Q Bhayat
LS Bick
JJ Blaker
JD Bly
S Borrelli
CE Botha
ML Botha
N Botha
PJ Bouch
GC Boughen
HG Bowden
L-E Bredesen
LE Brehmer
KL Brown
HD Brussow
RM Buck
LE Burger
PL Burke
EA Button
TJ Byers
E Calhoun
N Cameron
GL Campbell
KB Cardinal
N Cardinal
LJ Carter
MR Cassim
DR Chan
GK Chan
JC Chan
KS Chandrasenan
R-Y Chang
M Chapelski
SG Charbonneau
A Chari
I Chatterjee
HN Chau
M Chaudhry
U Chauhan
FJ Cheng
V Chetty
R Cheung
BP Chew
JY Chi
S Chiang
ME Chisholm
PK Chiu
K Chow
RS Chow
JC Christiansen
J Chronopoulos
Z Chrzanowski
WG Church
L Coetzee
JM Colebrook
PH Collins
A Coma
PR Comeau
JR Corrigan
NB Corser
EC Côté
P Coulson
CJ Crewe
RF Crowe
S Crum
H Cuddihy
C Cull
M Currie
L Curtis
KM Daniel
MC Darby
TS Darnell
RG Davidson
WLM Dawson
JA D'Costa
*BC Deane
J de Bruyn
L de Freitas
JJ de Jager
HL De Jongh
LM Der
H de Ridder
KM Desmarais
KS De Villiers
WT de Vos
E de Waal

LM Der
N Dhaliwal
A Dobrousin
A Draginda
D Duffy
B Dufresne
S Duia
GS Dulai
RH Dunbar
GC Du Plessis
GS Du Plessis
M Du Plessis
SL Durocher
T Du Toit
NM Easton
M Easwara Murthi
AE Ekanem
I Elawadly
EO El-Hajj
SA Eliason
CJ Ellis
JF Erasmus
M Erasmus
TN Erickson
AJ Esterhuizen
D Ethier
J Fanaeian
DG Faulder
HL Fernandes
LA Fernando
DW Fields
MT Fillion
BL Fischer
M Fisher
*SD Flanagan
JT Fletcher
RW Flook
AH Fong
C Foolen
MA Forder
JS Fowke
I Gagnon
MB Gallagher
J Galipeau
KE Game
S Gandham
CM Gannon
AS Garbutt
LA Garland
*E Gawley
C Gee
AG Genge
R Ghiassi-Razavi
SC Ghitler-Mannes
C Giang
SK Gill
JM Godel
AB Gokul
H Goosen
CG Gordillo
HA Gordon
A Gossmann
R Gounden
WJ Gouws
K Govender
TJ Graham
RJ Gregg
RI Greidanus
W Griffin
RR Gurges
A Halladay
J Hamm
JD Hammond
RR Hanelt
VM Hanlon
P Hansrai
AL Hargrove
AC Harmse
C Hartley
M Hartt
B Hasan
DA Hasinoff
M Hauptfleisch
J Hawkwood
BC Hayden
M Hemphill

JA Hernberger
EE Hibbitts
JS Hilner
SJ Hitchen
*C Hlushak
KL Ho
KA Hoffart
WD Hogarth
J Holm Jhass
SM Hood
S Horvey
AJ Hrdlicka
*DJ Hryciuk
JC Huang
KD Huber
KW Hult
C Iordache
A Jackson
WG Jacobs
L-A Jansma
AJ Jarema
A Jaroni
A Jeraj
AL Jerome
SL John
PM Johnson
LDT Jones
PH Jordaen
AL Jorgensen
MJ Kapusta
NS Karnik
MMK Karpivovich
S Karpman
D Kasavan
KA Kasha
JC Kassam
M Kauchali
K Kay-Pfau
JS Keay
RE Keller
A Keough
WA Khalfalla
OT Khan-Afridi
M Khurana
L Kibria
S Kibria
RL Kijewski
DG Killick
JEM Kirkwood
AJ Kohler
AM Kohler
S Konyonenbelt
HM Kornder
VD Krinke
IE Kritzinger
SG Kroeker
LM Kulak
AL Kutash
P Kwan
S Kwon
CC Kwong
KN Ladd
C Laidlaw
M Lal
RA Lamoureux
EP Landsbergen
PK Laratta
JM LaRue
CR Lavoie
HP Le
H Leam
JH Lee
VK Lee
EA Leishman
K Letley
PJ Lewis
B Li
E Li
Z Li
G Liaghathi-Nasseri
MM Lim
C Lin
S Liu
FH Lo
JM Loge
RM Loisel

BM Long
B Lott
C Louw
AJ Louw
C Lu
C Ma
CJ MacCarthy
IR MacDonald
JM Maciejko
DW MacIver
SJ MacIver
J Mackenzie
P Maheshwari
KD Mailo
AG Mallett
S Manchikanti
M Maneshgar
*K Mangan
MA Manning
M Marcu
O Markevych
KAC Martin
KO Martin
S Mausolf
JL May
A Mayes
*GG Mazurek
AM McBain
K McBeath
M McCall
DM McCarty
A McDonald
KD McFarlane
MM McGinley
JMJ McIntryre
C McKibbin
NE McNeilly
KL McNicol
KL Meador
DM Michaels
D Millard
L Minders
GW Ming
S Minnett
JR Minsos
V Mittra Melrose
TM Mogus
ZA Mohamed
TM Mohanraj
*JA Mohler
*W Molberg
MK Morrison
DM Morrow
FM Mosaico
SM Moussa
JM Muller
JD Murphy
CJ Muscat
RJ Muthanna
WM Myburgh
F Mydeen
O Naidoo
L Nanninga-Penner
AS Narula
CA Naylor
*KD Neilson
RAJ Neuels
PJ Newnham
LP Nguyen
KM Nicholson
R Nieman
MJ Nizam
AE Noga
RD Northcott
BC Nwaka
J Obst
AM Ochs
JA O'Connor
SO Ogbeide
OS Oladele
JD Olesen
CE Olson
GW Oman
JF Oosthuizen
O Oosthuizen
P Oosthuizen

WDL Orr
E Osegbue
C Otto
SE Oyama
P Palma
DJ Paras
EJ Park
CA Pask
JS Paterson
AA Pathan
M Pattison-Bacon
TA Peebles
KJ Penner
LD Pernisie
G Perry
A Peters
LM Pfeiffer
I Phelps
TJ Phillips
DA Pickle
K Piebiak Patterson
BL Piepgrass
HM Plucinska
M Poitras
AJD Pope
HJH Potgieter
NA Potvin
NS Potvin
KA Powell
GD Prince
J Prins
M Pronovost
M Quinn
JK Quong
I Ragiavji
AR Rahn
IS Rai
R Rajput
J Ramsahoye
G Ramsay
D Rasmussen
NP Rattan
A Raubenheimer
S Raubenheimer
JC Regehr
KM Rekieh
PI Renfree
D Rengan
A Riaz
Q Rizvi
JA Robinson
MJ Rodych
AM Rosborough
B Rowe
AQ Saincher
M Saint-Martin
JM Sametz
GM Samyia
LC Savage
AL Sawchuk
MR Sayeed
S Sayers
JE Schimpf
GO Seavilleklein
R Sedlak
M Senekal
BD Sereda
CA Sereda
M Sfazi
N Shahoo
E Shaker
S Shaker
*RK Sherman
R Shute
SP Silvalingam
RJ Simard
A Singh
J Singh
S Slack
J Slanina
JL Smith
SJ Smith
V Smith
D Smyth
CM Soneff
RS Soni

P Sonpar
KJ Sorenson
WB Steed
*TP Stetsko
*DF Stewart
D Steyn
S Sultana
CM Sweeney
A Swinton
E Tailfeathers
OA Taiwo
T Taiwo
A Tamm
K Tariq
IS Taylor
MJ Thain
MA Theman
CJ Thomson
C Ticu
G Tirschmann
RH Tomy
LB Torok-Both
R Torrie
T Tran
JWY Tsang
JE Tse
UR Tulus
JK Tupper
I Turner
RL Turner
SL Turner
F Unwala
E van der Merwe
T Van De Venter
I Van Niekerk
SA Van Zyl
A Vasanji
L Venter
O Vicarrudin
Z Vicarrudin
M Viljoen
GS Vitug
JS Voldeng
EG Walter
RG Warren
SM Warwick
W Wash
S Wat
T Webster
DS Welch
F Wepener
L Wepener
*CN Westover
RJ White
BM Wiens
LA Willox
DL Witharana
TM Withers
AD Witten
GM Wong
AJ Woo
BL Wood
JL Woodruff
GH Woolsey
LA World
KW Worry
D Woudstra
MB Wray
BM Wu
M Wylie
S Yalfo
DL Yamabe
S Yao
Y Yao
*AK Yeung
TTC Yeung
*MJ Young
JFW Yue
F Zakaria
DK Zalasky
E Zdrill
RX Zhang
JM Zielinski

Professors Emeriti
RG Chaytors

MG Donoff
GR Spooner
I Steiner

Faculty Service Officers
S Khera
O Szafran

Adjunct Professors
VE Baracos
DJ Clandinin
E Esmail
RL Fainsinger
DK Heyland
B Holroyd
C Jardine
N Keating
DL Myhre
CLM Nekolaichuk
S Ross
SM Watanabe
E Waugh
DM Wilson

Adjunct Associate Professors
J Jackson
D Naidu
DM Oneschuk
C Poth
A Tan

Adjunct Assistant Professors
MA Arain
J Arndt
M Cave
F Esfandiarpour

Care of the Elderly Director and Professor
J Triscott

Professor
B Dobbs

Assistant Professor
K Chan
A Gruneir

Associate Professor
J Parmar

Clinical Professor
H Zirk

Associate Clinical Professors
M Abbasi
P Kivi
LM Ma
A Marin
MB Moran

Assistant Clinical Professors
S Ahmadinejad
H Kammerer
K Leung
EM Mori-Torres
B Pezeszki
N Rao
S Samuel
J Shimizu
J Stickney-Lee
L Wasilenko
AWG Waugh
J Weaver

Clinical Lecturers
A Bertagnoli-Hansen
MT Fillion
J Gounden
JC Huang
AL Jerome
M Khurana
AL Kutash
B Li
E Li
Z Li
BM Long
M Marcu
C Otto
EJ Park
A Peters
AM Rosborough

M Saint Martin
T Taiwo

Laboratory Medicine and Pathology

Chair and Professor
M Mengel

Administrative Officer
(vacant)

Professors

J Acker
*P Campbell
LWL Chui
S Damaraju
*J Elliott
G Granville
J Hugh
R Kumar
R Lai
XC Le
XF Li
*TW McGaw
S Nahimiak
XL Pang
*J Preiksaitis
L Puttagunta
C Sergi
K Solez
*AR Turner
G Tyrrell
*D Wishart

Associate Professors

G Bigras
B Chiu
J Deschenes
S Drews
J Fuller
CH Lee
R Leng
DC Rayner
LJM Russell
B Sis
I Sosova
*S Taylor
A Thiesen
F van Landeghem

Assistant Professors

B Adam
J Bacani
C Charlton
M Croxen
T Dingle
S Drews
N Giannakopoulos
LG Hidalgo
I Izevbave
*E Leslie
K Schnabl
A Szkotak
A Tsui
H Zhang

Clinical Professors

P Alakija
RC Berendt
G Cembrowski
G Clarke
P Colbourne
S Girgis
J Hannon
TE Higa
T Higgins
GH Johnson
GR Jones
M Kattar
DW Kinniburgh
A Lacson
DF LeGatt
C O'Hara
C Prosser
N Satkunam
*EH Schloss

JR West

Associate Clinical Professors

S Anwar
LM Aye
B Balachandra
H Berendt
S Brown
S Chow
WF Dong
M Estey
C Ewanowich
A Fuezery
C Ispas
*K Kowalewska – Grochowski
S Kulkarni
MW Lee
JQ Lu
MN Mahmood
P Makarla
GD Neuman
N Rayani
K Rodriguez-Capote
M Saddik
S Silverman
D Tung
K Wong

Assistant Clinical Professors

M Anand
B Adeagbo
M Agoumi
H Aydin
B Bannach
M Bodnar
E Brooks-Lim
L Canterbury
T Chaba
S Chan
G Charrois
C Chatterton
W Chen
K Chung
A Edgecombe
S El Malti
C Garady
H Gerges
HL Gritter
T Hailu
A Halpin
J Huang
T Hung
J Hwang
T Jones
S Khan
H Khanam
K Khetani
MC Lee
PL Letendre
N Lilić
A Macyk-Davey
VL McCann
DR McLean
A Meliti
J Moreno
Q Nakonechny
T Nazir
R Onell
J Raizman
W Ramsey
K Rodriguez-Capote
A Reid
R Riso
K Schnabl
F Siadat
A Sim
K Sivarajah
D Thomas
A Thompson
B Tong
B Walker
C Walker
M Weinberg
GO Wood
C Wu
Y Zhu

Clinical Lecturers

M Beach
A Box
S Das
J Gray
R Hsu
D Lee
C Mather
V Meunier
A Miller
H Paulin
L Schmitt
L Stang
E Turley
MH Yu
L Zhao

Professors Emeriti

FJ Bamforth
MK Dasgupta
*JB Dossetor
PA Gordon
LH Honore
S Hruday
LD Jewell
ES Johnson
CC Lin
GA Machin
LE McGann
BW Mielke
G Nguyen
RP Rennie
RA Stinson
RJ Swallow
P Venner

Adjunct Professors

S Gabos
G Jiang
M Lai
J Martin
I Mirza
PN Nation
J Xing
L West
XE Zhang

Medical Laboratory Science

**Director and Associate
Professor**

LE Purdy

Administrative Officer
(vacant)

Associate Professors

J Holovati
K Lew
M Keelan
R Martindale
A VanSpronsen
CJ Ward

Assistant Professor

V Villatoro
Lecturer
EE Rivait

Clinical Lecturers

R Cunningham
Other Academic
K Matejka (ATS appointment)
A Nevesinjac (ATS appointment)

Medical Genetics

Chair and Professor
M Walter

Administrative Officer
SD Barham

Professors

*K Aitchison
S Andrew
*D Eisenstat
*OJ Lehmann
*L Mitchell

MJ Somerville
*O Suchowersky
Z Wang
R Wevrick

Associate Professors

*W Allison
*F Berry
*F Bolduc
*D Burshtyn
AJK Chan
*D Graf
S Hughes
SL Hume
NJ Leonard
K Siriwardena
S Taylor
*D Underhill
T Yokota

Assistant Professors

O Caluseriu
*J Hocking
S Jain Ghai
*G Jickling
K Niederhoffer

Assistant Clinical Professors

S Merchant
M Yoshimoto

Professor Emeriti

S Bamforth
DW Cox
D Gilchrist
*H McDermid
*IM MacDonald

Medical Microbiology and Immunology

Chair and Professor
M Gotte

Professors

*C Anderson
*N Ashbolt
*D Befus
*M Belosevic
D Burshtyn
*JF Elliott
DH Evans
*M Fabbraio
*P Flood
E Foley
*S Forgie
*PF Halloran
*T Hobman
M Houghton
K Kane

*P Lacy
*K Magor
*A Mason
HL Ostergaard
*LM Pilarski
*C Power
*JK Preiksaitis
*J Robinson
*L Schang
JR Smiley
*C Szymanski
*GD Taylor
*J Tuszyński
DLJ Tyrrell
*GJ Tyrrell
*JH Weiner
*LJ West

Associate Professors

T Baldwin
B Hazes
*D Hemmings
R Ingham
K Kowalewska-Grochowska
*S Pukatzki
*L Saxinger
M Shmulevitz

*G Tipples

Assistant Professors

A Bhavsar
*S Elahi
*M Hawkes
*M Kulka
D Marchant
*R George
*C Richard
*E Shokrollah
*S Urschel
*S Yanow

Clinical Professor

*B Romanowski

Assistant Clinical Professors

A Chandran
T Dragan
J Kanji
P Naidoo
J Nigrin
N Solomon
R Verity
HY Zhou

Professors Emeriti

E Diener
JMS Dixon
LJ Guilbert
SI Hnatko
RT Irvin
FL Jackson
BM Longenecker
RG Marusyk
*L Miedzinski
JA Robertson
*L Sigler
DE Taylor

Faculty Service Officers

D Dragon
K Ellison
J Gnarp
S Ogg
A Reiger

Medicine

Chair and Professor
B Ballermann

**Assistant Chair,
Administration**
B Hiscock

Cardiology

**Division Director and
Professor**
W Tymchak

Professors

PW Armstrong
H Becher
JR Burton
B Cujec
W Dafeo
J Ezekowitz
MM Graham
PI Kaul
DH Kim
ED Michelakis
B O'Neill
I Paterson
P Raggi
RT Tsuyuki
RC Welsh

Associate Professors

T Bungard
C Butler
G Gyenes
SKM Kimber
S Koshman
LD Lalonde
MS McMurtry
G Oudit
G Pearson
R Sandhu

M Shanks
BH Sonnenberg
I Vonder Muhl

Assistant Professors

K Baine
G Sutendra

Clinical Professors

J Choy
T Fenske
SS Gulamhusein
WKK Hui
Z Lakhani
MPJ Senaratne
DA Taylor
RG Williams

Associate Clinical Professors

N Alhulaimi
NS Brass
M Chan
PK Cheung
LA Kasza
W Keeble
E Lockwood
S Sharma
M Shibata
S Sivakumaran
B Tyrrell
M Vo
N Wahab
J Windram

Assistant Clinical Professors

M Dorsch
Y Fu
D Hammer
M Hanninen
T Hruczkowski
A Jones
F Khadour
S Khandekr
RCM Leung
TG Muzyka
G Nogareda
KV O'Reilly
K Ranjbar
S Sharma
T Taher
L Valtuille
J Wong
KS Woo

Clinical Lecturers

A Altherbish
I Bader
K Chan
S Tilley

Professors Emeriti

PV Greenwood
M Haraphongse
BI Jugdutt
WC Chang
R Coulden
J Dyck
S Goodman
M Kanthoch
R Sheldon

Adjunct Associate Professor
H Lemieux

Adjunct Assistant Professors

M Haykowsky
A Janmohamed
C Norris

Clinical Hematology

**Division Director and
Professor**
J Brandwein

Professors

LM Larratt
DBC Ritchie

Associate Professor
I Sandhu

Assistant Professors
A Peters
L Saini
L Sun
C Wu
N Zhu

Associate Clinical Professors
M Game
M Taparia

Assistant Clinical Professors
L Bolster
A Fagarasanu
S Lapner
E Liew
J Patterson

Assistant Clinical Professor (Secondary)
M Bodnar

Clinical Lecturers
M Hnatiuk
T Van Slyke

Faculty Service Officer
M Hamilton (FSO II - Assistant Teaching Professor)

Adjunct Professor
C Venner

Professors Emeriti
A Janowska-Wieczorek
MJ Mant
AR Turner

Preventive Medicine

Division Director and Associate Professor
S Straube

Professors
N Cherry

Associate Professors
B Quemerai
L Svenson

Assistant Professor
A Doroshenko

Clinical Professor
G Predy

Associate Clinical Professors
R Briggs
D Hinshaw
K Koliaska
J Talbot

Assistant Clinical Professors
N Abbasi
G Benade
O Bennett
A De Villiers
G Keays
M Lavoie
J Oda
T Parminder
R Rani
C Sarin
C Sikora
P Smyczek
H Virani
W Yacoub

Clinical Lecturers
V Cho
K Klein
M Singal

Adjunct Professors
R Coppock
G Gibbs
T Giudotti

Adjunct Associate Professors
K Corbet
K Harrison
H Hoffman
V Lappi
B Lauber
R Stacy
S Tsekrekos
E Waclawski

Adjunct Assistant Professors
T Lawley
M Magnan
L Miller

Adjunct Professor (Secondary)
S Armijo-Olco

Professor Emeritus
J Beach

Department of Medicine

Clinical Professors (Secondary)
C Johnston
D Legatt
C Prosser
K Siminoski
D Stollery

Associate Clinical Professor (Secondary)
C Els

Adjunct Associate Professor
N Dower

Adjunct Assistant Professor
F Davoine

Adjunct Professor
B Rowe
S Vohra

Adjunct Professor (Secondary)
M Ospina

Dermatology and Cutaneous Sciences

Divisional Director and Professor
R Gniadecki

Professors
J Elliott
T Salopek

Clinical Professors
J Brown
M Dytoc
J Rao
MJA Sapjiazko
EH Schloss
GE Searles

Associate Clinical Professors
JY Liao
M Taher

Assistant Clinical Professors
E Chow
P Grewal
M Kalisiak
CP Keeling
C Lortie
P Lubitz
Z Taher
NR Wasel

Assistant Clinical Professor (Secondary)
Hung, Tawny

Clinical Lecturers
I Day
T Kwok
TC Nakatsui

Adjunct Professors
L Fiorillo
GJ Lauzon

Endocrinology and Metabolism

Division Director and Professor
PA Senior

Professors
CLY Chik
RZ Lewanczuk
L Mereu
DW Morrish
EA Ryan
AM Sharma
S Sharma
J Vance

Assistant Professor
M Ghosh
T Tateno
R Yeung

Clinical Professors
T McNab
J Romney

Assistant Clinical Professors
J Jacquier
S Li
R Mitchell
S Pertman
M Shahidi

Clinical Lecturers
S Cawsey
T Olateju
S Parameswaranathan
W Wong

Associate Clinical Professors
PA Hardin
K Hopkins
S Kwong
A Opgenorth

Adjunct Associate Professors
JA Johnson
T McMullen

Adjunct Assistant Professor
M Marcet-Palacios

Professor Emeriti
PM Crockford
G Molnar
A Rabinovitch
E Toth

Gastroenterology

Division Director and Professor
D Baumgart

Professors
VG Bain
LA Dieleman
RN Fedorak
K Goodman
LM Gramlich
P Jacobs
M Ma
KL Madsen
A Mason
DC Sadowski
GS Sandha
S Van Zanten
W Wong

Associate Professors
R Bhanji
L Bistriz
J Gonzalez-Abrales
KS Guttfreund
D Kao
D Karvellas
K Kroeker
A Lazarescu
A Montano-Loza
P Tandon
CKW Wong

Assistant Professors
B Halloran
F Peerani
R Sultanian
S Zepeda-Gomez

Clinical Professors
RJ Bailey
CM Switzer

Associate Clinical Professors
A Bala
*MS Millan
EA Semlacher
J Siffledeen

Assistant Clinical Professors
JP Ferguson
N Hoque
A Kohansal
K Matic
A Morse
R Penner
C Render
S Robbins
V Selvarajah
L Stead
DN Todoruk
BMA Walters
A Waye
K Wong
M Zeman

Clinical Lecturers
P D'Souza
A Hanna
J Jin
A Lim
G Lutzack
M Pinchbeck

Adjunct Professors
D Cox
JB Meddings

General Internal Medicine

Division Director and Professor
N Kassam

Professors
BW Fisher
PG Hamilton
R Hayward
SR Majumdar
F McAlister
R Padwal

Associate Professors
V Daniels
CE Goldstein
*R Khurana
J Ringrose
L Rourke
WWK Sia

Assistant Professor
P Hwang

Clinical Professors
K Bowering
A Colbourne
N Dean
NE Gibson
E Kretz
*GF MacDonald
BJ Wirzba

Distinguished Clinical Professor
A Voth

Associate Clinical Professors
R Al-Agha
H Bertozzi
A Brisebois
G Hrynchyshyn
J Kachope
C MacDonald
LER Malowany

F Morales
MG Nutting
E Raff
G Ramsay
A Tapardel
SZia

Assistant Clinical Professors
J Allen
L Amin
A Au
D Au
N Bakshi
D Bartha
M Baur
L Bridgland
JP Ferguson
T Bryan
PM Buckle
RJ Burris
J Cesarz
R Chea
K Craig
A Ghani
E Gilbert
P Guo
R Hrimiuc
S Ip
M Karolak
PH Lam
J Kachope
M Karolak
PH Lam
R Maraj
M Moreau
B Nankissoor
J Nicholson
JE Rouget
S Salman
M Suave
H Tarhoni
E Toor
YN Westra
T Wuerz

Clinical Lecturers
C Augusto
P Ao
J Bakal
A Bharmal
K Birdi
T Carpenter
K Cernohorsky
S Chapelsky
T Chan
S Chihirir
H Choi
R Choudhury
A Fahoum
M Gill
RA Hosein
H Leon
P Mathura
G Nikoleychuk
M Obeidat
M Osman
M Osman
K Ross
M Russell
J Senez
D Slabu
B Sugars
S Vijay
A Wassef

Assistant Clinical Professor (Secondary)
S Khinda

Clinical Lecturers
C Augusto
P Ao
J Bakal
A Bharmal
K Birdi
T Carpenter
K Cernohorsky
S Chapelsky
T Chan
S Chihirir
H Choi
R Choudhury
A Fahoum
M Gill
RA Hosein
H Leon
P Mathura
G Nikoleychuk
M Obeidat
M Osman
M Osman
K Ross
M Russell
J Senez
D Slabu
B Sugars
S Vijay
A Wassef

Assistant Clinical Professor (Secondary)
S Khinda

Assistant Clinical Professor (Secondary)
D Gilchrist
A Yeung

Adjunct Associate Professors
S Bagshaw
A Esmail

Adjunct Assistant Professor
G Suen

Professor Emeritus
CH Harley

Clinical Professor Emeritus
TK Lee

Geriatric Medicine

Division Director and Professor
A Wagg

Professors
K Alagjakkrisnan
A Juby
DB Rolfsen

Assistant Professors
W Gibson

Associate Clinical Professors
K Lechelt
FM McAllister-Lawson

Assistant Clinical Professor
D Rucker

Clinical Lecturers
F Carr
A Hussain
N Rajabali

Adjunct Professor
J Triscott

Nephrology

Division Director (Interim) and Professor
B Braam

Professors
B Ballermann
PM Campbell
SM Cockfield
SN Davison
PF Halloran
K Jindal
SW Klarenbach
NI Pannu

Associate Professors
MJ Courtney
S Gourishankar
N Jahroudi
AW McMahon
AG Murray
R Pauly

Assistant Professors
A Bello
A Hildebrand
N Lam
S Shojai
S Thompson
K Wen

Clinical Professors
S Caldwell
S Duggan
U Oarni

Associate Clinical Professors
JSJ Bradley
V Deved
S Habib
SP Reddy
S Shurraw

Assistant Clinical Professors
M Michalska
A Pisani

Clinical Lecturer
N Shah

Assistant Clinical Professor (Secondary)
A Romanovsky

Adjunct Professor
M Tonelli

Adjunct Assistant Professor
D de Freitas

Professors Emeriti

MK Dasgupta
T Kovithavongs
RA Ulan

Infectious Diseases**Division Director and Associate Professor**

K Doucette

Professors

SC Houston
AM Joffe
DY Kunimoto
N Lee
JK Preiksaitis
S Shafran
JD Taylor

Associate Professors

R Ahmed
I Chiu
LM Saxinger
SW Smith

Assistant Professors

C Cervera

Clinical Professors

L Miedzinski
B Romanowski
A Singh

Associate Clinical Professors

LR Boychuk
C Boyington
R Harrison
S Rosser

Assistant Clinical Professors

H Hoang
A Isaac
D Kabbani
J Kanji
A King
D Marion
L Remington

Clinical Lecturer

J Chen

Faculty Service Officer

R Cooper (FSO II - Assistant Teaching Professor)

Professors Emeriti

EA Fanning
G Goldsand

Adjunct Professor

L Tyrrell

Adjunct Associate Professor

W Sliq

Neurology**Division Director and Professor**

D Zochodne

Professors

N Ahmed
K Butcher
JRM Camicioli
MG Elleker
DW Gross
T Jeerakathil
JH Jhamandas
W Johnston
S Kalra
S Kar
J Miyasaki
C Power
A Shuaib
ZA Siddiqi
O Suchowersky
D Westaway

Associate Professors

G Blevins
BH Buck
F Giuliani

J Jirsch
KA Khan
T Roberts
V Sim
P Smyth

Assistant Professors

F Ba
G Jickling
T Steve

Associate Clinical Professors

R Jassal
J McCombe
M Muratoglu
ML Myles
M Siddiqui
C Tai
NJ Witt

Assistant Clinical Professors

M Bussiere
B Edguer
M Hamadeh
J Kashmere
M Knash
K Makus
C Phan
R Pokroy
N Rizvi
RN Roberts
M Saqur
PE Stenerson

Clinical Lecturers

J McDermott
T Nowacki
BJ Stewart
N Sudharshan

Professors Emeriti

MH Brooke
W Martin
G Monckton
K Warren

Adjunct Professor

K Todd

Adjunct Assistant Professor

S Cleary

Physical Medicine and Rehabilitation Medicine**Director and Professor**

C Ho

Professors

N Ashworth
KM Chan
V Mushahwar
L Satkunam

Clinical Professor

M Watt

Associate Professors

S Gray
J Hebert
D Naidu

Associate Clinical Professors

H Acharya
R Burnham
M DiPersio
J Townsend
C Tuchak

Assistant Professors

P Pilarski
J Yu

Assistant Clinical Professors

AR Aly
S El-Maadawy
J Irvine
H Lindstrom
B Rambaransingh
E Sampson
R Thiara

Assistant Clinical Professor**(Secondary)**

A Currie

Clinical Lecturers

J Chia
S Gonzales
D Gray
C Hlushak
N Kain
A Lo
T Yen

Professors Emeritus

T Gordon

Pulmonary Medicine**Division Director and Professor**

RW Damant

Professors

P Lacy
DC Lien
R Long
I Mayers
M Stickland
H Vliagoftis

Associate Professors

M Bhutani
L Cheung
M Kalluri
A Kapasi
D Vethanayagam
JG Weinkauff
EYL Wong

Assistant Professors

K Halloran
A Hirji
M Smith

Associate Clinical Professors

JS Archibald
W Dickout
MK Heule
W Leung
J Richman-Eisenstat
J Sebastian
EL York

Associate Clinical Professor (Secondary)

S Marchushamer

Assistant Clinical Professors

M Bibeau
B Chiam
V Dhawan
J Dirks
A Gillson
K Grimsrud
L Melenka
K Mulchey
A Parhar
A Shustak
K Sideri
P Wei
J Yehya

Clinical Lecturers

C Chung
H Iqbal
C Irani
C Laratta
P Li
N Rajwani

Clinical Lecturer (Secondary)

D Carney

Faculty Service Officer

B McNab (FSO II - Assistant Teaching Professor)

Adjunct Professors

D Adamko
DA Enarson
NRT Gibney

Adjunct Associate Professors

G Broderick

L Cameron**Adjunct Assistant Professor**

G Verma

Professors Emeriti

D Befus
N Brown
G Man
P Man
Rheumatology

Division Director and Professor

JW Cohen Tervaert

Professors

S Aaron
WP Maksymowych

Associate Professors

JE Hornik
S Keeling
A Oswald
EA Yacyshyn

Assistant Professor

A Clifford

Clinical Professor

R Ferrari

Associate Clinical Professors

S Akbar
S Katz
DE Sholter
KJ Keith
A Yan

Associate Clinical Professor (Secondary)

J Hall

Assistant Clinical Professors

A Abdulsamad
PL Chiu
HN Jones
S Senaratne

Clinical Lecturers

N MacLean
N Madsen
L Olaru
J Soo
C Ye

Professor Emeriti

P Davis
AS Russell

Obstetrics and Gynecology**Chair and Professor**

R Chari

Administrative Professional Officer

Shannon Charney

Professors

R Chari
ST Davidge
C Flood
BF Mitchell
DM Olson
M Sagle
J Schulz
RW Turnell

Associate Professors

VA Capstick
S Chandra
D Hemmings
V Jain
T Motan
A Schepansky
H Steed

Assistant Professor

M Hyakutake
Other Academic:
S Ross (CAST appointment)
M Ospina (TRAS appointment)

Clinical Professors

M Bow
R Chua
T Corbett
S Genius
T Gleason
*G Gray
R Hemmings
DJ Hodges
CF Hoskins
G Iwaniuk
M Lieberman
MS Mah
SN Schuurmans
IV Tataryn
T Unger
R Uretsky

Associate Clinical Professors

C Barnes
D Barreth
E Bader
S Baydock
G Black
R Black
RJ Brown
H Danial
E DeDoming
G Jiwa
D Larose
A Lee
AM Long
J Mayo
JM McCubbin
B Muir
H Robinson
M Roy
D Slade
F Tam
J Tankel
M Tauh
F Tsui
P Verma
J Wang
K Wiebe
C Wittner-Smith
B Wong

Assistant Clinical Professors

C Ballemann
G Brassard
CL Cooke
J Griffiths
*S Gross
S Halleran
J Havelock
N Jilwah
A Kim
N Marais
JM McCubbin
*D Mihalicz
P Patel
*S Reid
A Romanovsky
K Seethram
T Stryker
A Uretsky
T Wells
C Young

Assistant Clinical Professors

A Romanovsky
K Seethram
T Stryker
A Uretsky
T Wells
C Young

Clinical Lecturers

A Abdulhafid
D Ahn
A Aiken
C Bentz
C Cham
A Daniel
C Dolhaniuk
J Fernandez de Lara
D Fraser
N Gupta
B Guthrie
J Hilton
N Hubner
R Janmohamed
F Javed
J Jeffery

C Kerr
M Lacasse
A Lukwinski
S McCauley
D McCubbin
A Neilson
O Oyewole
G Pelinska
A Poirier
S Pin
N Raguz
J Sabourin
A Skorenki
D Smithson
*B St Martin
A Whitford

Professors Emeriti

RP Beck
D Cumming
N Demianczuk
L Honore
J Marko

Clinical Professor Emeritus

JJ Boulton

Adjunct Professors

K Hegadoren
L Hornberger
A Kozyrskiy
S Tough
G Metz

Associate Adjunct Professors

R Khurana
L Postovit
W Sia

Assistant Adjunct Professors

Y Fu
D Kingston

Oncology**Chair and Professor**

DDE Eisenstat

Associate Chair, Graduate Studies

A Underhill

Assistant Chair, Administration

C Henderson

Experimental Oncology**Interim Director**

R Godbout

Professors

R Godbout
MJ Hendzel
D Murray
J Tuszyński
M Weinfeld

Associate Professors

G Chan
MM Hitt
J Lewis
M Pasdar
L-M Postovit
DA Underhill

Assistant Professors

K Baker
A Gamper
I Ismail

Adjunct Professors

J Hugh
R Lai

Adjunct Professor Emeritus

*L Wiebe

Adjunct Associate Professors

S Baksh
*JJ Deschenes
P Grundy
I-S Goping
S Persad

R Fallman
Adjunct Clinical Professor
 RC Berendt
Adjunct Assistant Professor
 *R Leng
Clinical Professor
 R Mirzayans
Associate Clinical Professor
Faculty Service Officer
 X Sun
Professor Emeriti
 C Cass
 LM Piliarski
 ARE Shaw
 J Turner

Medical Oncology

Director and Professor

S North

Professors

AR Belch
 CH Butts
 A Joy
 JR Mackey
 M Sawyer
 M Smylie
 K Tonkin

Associate Professors

Q Chu
 J Easaw
 K King
 S Koski
 KE Mulder
 R Sangha
 A Scarfe
 J Spratlin

Assistant Professors

S Basi
 M Chu
 M Ho
 M Kolinsky
 C Venner
 JWT Walker

Associate Clinical Professor

N Chua

Assistant Clinical Professors

N Basappa
 A Fontaine
 S Ghosh
 J Meza-Junco
 J Price Hiller

Adjunct Professors

J Brandwein
 *K Courneya
 *LM Larratt
 *DW Morrish

Adjunct Associate Professor

SJ Desai

Adjunct Assistant Professor

LD Bolster
 SG Cheng
 S McKillop
 AC Peters
 LK Saini
 IS Sandhu
 NY Zhu

Adjunct Clinical Assistant Professor

JM Patterson

Professor Emeritus

ALA Fields
 P Venner

Medical Physics

Director
 BG Fallone

Professors

BG Fallone
 RS Sloboda
 B Tomanek

Associate Professors

N DeZanche
 M MacKenzie
 S Rathee
 T Riauka
 J Sharp
 DM Robinson
 S Steciw
 B Warkentin
 A Yahya

Assistant Professors

H-S Jans
 M Larocque
 K Wachowicz

Clinical Professors

SL Connors
 GC Field
 B Murray

Associate Clinical Professors

G Menon
 H Warkentin

Assistant Clinical Professors

L Baldwin
 B Burke
 SSC Burnett
 J Hancock
 B Long
 I Nygren

Adjunct Professor

J Cunningham

Professional Service Officer

A Tessier

Oncologic Imaging

Interim Director and Professor

F Wuest

Professor

AJB McEwan

Associate Professor

R Schirrmacher

Associate Clinical Professor

P Kumar

Assistant Clinical Professor

S Sharma

Adjunct Clinical Professor

M Johnson

Adjunct Associate Clinical Professor

D Williams

Adjunct Assistant Clinical Professors

A Bistriz
 B Campbell
 E Hudson
 M Janoski
 R MacEwan
 M Smerdely

Adjunct Assistant Professors

FA Buteau
 T Sykes
 Professional Service Officers
 J Wilson
 M Wuest

Professor Emeriti

S McQuarrie
 J Mercer

Palliative Care Medicine

Director and Professor
 SM Watanabe

Professors

V Baracos
 RL Fainsinger
 C Nikolaichuk

Assistant Professor

K Fassbender

Clinical Professors

CE Cumming
 S Steggle
 I de Kock
 Y Tarumi

Associate Clinical Professors

P Amigo
 M Mirhosseini
 V Thai
 G Wolch

Assistant Clinical Professors

S Burton-MacLeod
 J Turner

Adjunct Professors

WD Duggleby
 *KL Olson

Radiation Oncology

Director and Professor

WH Roa

Professors

D Fulton
 N Jha
 M Parliament
 RG Pearcey

Associate Professors

J Amanie
 B Danielson
 A Fairchild
 Z Gabos
 K Joseph
 A Murtha
 S Patel
 R Scrimger
 N Usmani
 D Yee

Assistant Professors

B Debenham
 F Huang
 E Wiebe

Clinical Professors

S Chafe
 T Nijjar
 D Severin
 K Tinkel

Assistant Clinical Professors

K Chu
 J Cuartero
 HW Liu

Adjunct Associate Professor

*BE Krause

Adjunct Assistant Professor

ML McNeely

Adjunct Assistant Clinical Professor

E Pituskina

Professor Emeritus

RC Urtasun
 Radiation Therapy Program
 Director
 S Fawcett

Faculty Service Officers

B Chwyl
 J Dewhurst
 J Duquette
 H Gaunt
 L Grose
 J Middleton
 K Osmar
 C Palmaria

K Rans

Ophthalmology and Visual Sciences

Chair and Professor

KF Damji

Professors

OJ Lehmann
 IM MacDonald

Associate Professors

CJ Rudnisky
 Y Sauve
 E Weis

Clinical Professor

EA Macdonald
 M Tennant

Associate Clinical Professors

SM Chan
 D Climenhaga
 H Climenhaga
 MC Edwards
 M Greve
 B Hinz
 EJ Hodges
 RLC Johnson
 M Kutzner
 JR Lewis
 DY Mah
 CE Solarte
 LM Uniat

Assistant Clinical Professors

CF Baker
 D Cote
 M Dorey
 KR Hennig
 J Heston
 J Hodges
 K Kassiri
 GB Kaye
 J Leong-Sit
 N Pollock
 E Rech
 R Riyaz
 R Somani
 K Gan

Clinical Lecturers

S Abuswider
 J Badilla
 H Burnett
 A Chan
 S Chen
 H Eshytayah
 K Gill
 M Rasouli
 J Ting
 M Scambler
 D Senekal
 H Strungaru
 B Wakeman

Contract Academic Staff

Teaching (CAST)
 GT Drummond

Professors Emeriti

WG Pearce
 HT Wyatt

Pediatrics

Chair and Professor

S Gilmour

Assistant Chair,

Administration

M Davison

Professors

I Adatia
 K Aziz
 P Cheung
 JY Coe
 RM Couch
 J Dyck

JR Dyck

DD Eisenstat
 JE Ellsworth
 *L Fljegel
 L Fiorillo
 S Forgie
 *D Gilchrist
 S Gilmour
 M Gowrishankar
 P Grundy
 *G Hnatko
 L Hornberger
 M Kantoch
 *T Klassen
 A Kozyrskij
 P Kantor
 *T Lacaze
 R Lehner
 GD Lopaschuk
 *E Lou
 P Massicotte
 *M Michalak
 L Mitchell
 AR Osornio Vargas
 H Rajani
 J Robinson
 R Rosychuk
 R Schulz
 *CM Sergi
 B Sinclair
 *M Somerville
 K Stobart
 *O Suchowsky
 *B Thebaud
 *K Todd
 W Vaudry
 S Vohra
 MJ Watt
 L West
 J Wong
 V Yager
 V Yiu
 L Zwaigenbaum

Associate Professors

*D Adamko
 T Alexander
 S Ali
 I Amirav
 J Andersen
 D Andrews
 S Baksh
 *S Bamforth
 *L Bajzar
 G Ball
 L Baydala
 C Birkman
 *A Chan
 B Clark
 IW Craig
 D Davies
 L Dibden
 *BD Dick
 C Dosman
 J Duff
 *H El-Hakim
 K Forbes
 R Girgis
 R Goetz
 A Haqq
 D Hartfield
 L Hartling
 H Huynh
 M Jetha
 C Joynt
 H Kolski
 M Lang
 B Lee
 *NJ Leonard
 M Lewis
 A Mackie
 C Majaesic
 P Mandhane
 A Newton
 L Mitchell
 *DB Nicholas

R Persad
 S Persad
 M Pinsk
 C Rassmussen
 *G Rempel
 L Richer
 *DW Spady
 E Tham
 J Turner
 T Turner
 *P Wales
 J Walton
 RB Wright
 J Zap
 D Zhang

Assistant Professors

D Allain
 R Arent
 J Atallah
 *M Bauman
 M Belletruitti
 *R Blackadar
 F Bolduc
 A Bruce
 *C Bukutu
 M Carroll
 T Colen
 J Conway
 S Curtis
 A Dixon
 *K Dong
 *H El-Hakim
 M Hawkes
 H Jou
 *S Jain-Ghai
 NS Khoo
 *S Jain-Ghai
 NS Khoo
 J MacLean
 S McKillop
 C Morgan
 F Morneau-Jacob
 M Prowse
 *V Raso
 E Rosolowsky
 D Rumsey
 L Ryerson
 G Schmolzer
 J Silverman
 L Sonnenberg
 S Urschel
 M van Manen
 A Wan
 E Wine
 Y Yanishevsky

Clinical Professors

KB Anderson
 G Andrew
 C Baxter
 I Buka
 P Byrne
 A Conradi
 A de Caen
 S Desai
 *CA Hapchyn
 A Joffi
 RR Moriartey
 A Peliowski
 E Phillippos
 L Sim
 J Smallhorn
 J Van Aerde
 B Wilson

Associate Clinical Professors

F Ajamian
 N Anton
 S Carr
 I Dhunoo
 S Escoredo
 S Galante
 D Garros
 L Hendson
 A Janicka
 M Kumar
 C Kyriakides

K Lee
L Lequier
M Levinsky
P Lidman
JE Lopatka
A Malinowska
D McConnell
LF McGonigleK Meier
PM Pierson
EM Rabinovitch
MA Ramji
K Ramlall
J Rutledge
W Sevcik
R Sharon
J Tyeikhani
T Vander Leek
L Wincott
M Witmans
KS Wong
SK Wong
PC Zuberbuhler

Assistant Clinical Professors

J Ackland-Snow
V Anand
A Antiniuk
M Antunes
G Apostol
R Arent
D Berry
C Bester
E Bolster
I Chapados
R Chatur
T Chibuk
A Currie
M Davidson
A Elswaniya
M Enarson
P Enarson
S Ensenat
A Estey
J Foulds
B Frohlich
S Gallagher
G Garcia Guerra
EW Harris
M Harvey-Blankenship
R Hutchings
M Kundra
V Kumaran
S Lappa
J Lee
RP Lemke
H Leonard
B Malinowski
T Masterson
B McCook
AN Mian
F Mohammed
M Montgomery
*R Mueller
J Pei
E Persson
D Pon
M Qureshi
D Radisic
A Rahman Reichert
D Roseman
N Saini
M Shaik
M Spavor
K Stevens
J Stevens
G Sukhrani
WA Szymanski
J Teoh
D Thomas
J Toye
A Tse-Chang
K Waters
L Zorzela

Clinical Lecturers

G Al-Naami
M Bowman

J Brar
M Chan
J Drager
H Dreise
A Dubov
E Estrabillo
E Feidrich
J Kassiri
T Kherani
K Kulkarni T Kutnikoff
T Ladha
S Nakhuda
G Schmolzer
C Slatter

Faculty Service Officers

M Ansarian
L Evered
K Goulden
B Islam
J Patidar
M Oliva
R Tang-Wai
M Zhang

Professors Emeriti

J Akabutu
C Baxter
NF Duncan
E Gauk
J Godel
*LC Grisdale
F Harley
AB Jones
EE McCoy
PM Olley
HF Pabst
CMT Robertson

Pharmacology**Interim Chair and Professor**

G Baker

Professors

*P-Y Cheung
WF Colmers
PE Light
*GD Lopaschuk
PE MacDonald
*IL Martin
*OJ Pittman
E Posse de Chaves
R Schulz
PA Smith
AM-W Tse
FW-Y Tse
*M Zaugg

Associate Professors

*B Kerr
A Holt
*PK Jurasz
F Plane
*JM Seubert
S Sipione

Assistant Professors

*S Bourque
B Hubbard
A Taylor

Professors Emeriti

TM Allen
AS Clanachan
GB Frank
WP Gati
RM Henderson
AAC Yeung

Clinical Professor Emeritus

EE Daniel

Faculty Service Officer

M Davies

Physiology

Chair and Professor
JD Young

Professors

*D Ali
K Ballanyi
*B Ballermann
*GB Braam
*JR Casey
*CB Chan
X-Z Chen
*ST Davidge
*C Dickson
GD Funk
JJ Greer
*LW Kline
Z Kassiri
*RZ Lewanczuk
*BF Mitchell
PV Nguyen
*DM Olson
A Prochazka

Associate Professors

*RT Alexander
E Cordat
EM Leslie
*DH Freed
S Gosgnach
J Jackson
*G Oudit
S Pagliardini
*Y Sauve

Assistant Professors

R Clugston
*E Wine
J Yue

Professors Emeriti

SC Barton
V Agyapong
CG Benishin
CI Cheeseman
M Duszyk
S Harvey
AKC Ho
SE Jacobs
BF Mitchell
KG Pearson
EJ Sanders
RB Stein

Faculty Service Officers

S Das (FSO II - Assistant Teaching Professor)
JR Mitchell (FSO I - Assistant Teaching Professor)
K Smith (FSO I - Assistant Teaching Professor)

Psychiatry**Chair and Professor**

X Li

Administrative Officer

S Phillips

Professors

K Aitchison
G Baker
L Breault
NJ Coupland
SM Dursun
AJ Greenshaw
S Kar
J-M LeMelledo
PH Silverstone
KG Todd

Associate Professors

P Brett-McLean
*B Dick
W Friend
E Fujiwara
L Stovel
I Winship

Assistant Professors

A Choy
N Mitchell

Clinical Professors

JL Banasch

J Beach
M Blackman
CA Blashko
AB Bremness
C Buchholz
PE Carr
AM Carroll
P Chokka
P Chue
KM Collinson
JM Dewart
R Drebit
J Eustace
P Flor-Henry
KD Gendemann
A Gordon
RA Gurke
CA Hapchyn
RE Hibbard
AS Joyce
L Kagan
M McCallum
JG O'Kelly
JW Osinchuk
L Pawluk
HM Piktel
SE Purdon
J Rodgers
JS Rosie
PM Segal
D Shih
T Snyder
L Studer
LB Warneke
PJ White

Associate Clinical Professors

V Agyapong
D Block
O Cadsy
L Calhoun
C Carter
WT Chimich
J Chiu
M Demas
RJ Dyck
C Els
CK Froelich
DR Ginter
DR Guinhawa
O Hodlevskyy
A Khullar
M Levinsky
WA McCay
P Mills
BR Mirtle
C Moreau
NJ Mulholland
V Newton
R Oswald
MB Parsons
LJ Phillips
BS Sanderman
JR Scott
Y Shapiro
B Stich
M Swanson
DYW Wong
N Youssef

Assistant Clinical Professors

G Ahmed
M Astorga
K Balachandra
R Brown
A Cojocar
M Cummins
O Din
S Dobrofsky
LP Ennis
N Fisher
V Gupta
G Hetherington
J Hinton
ND John
K Kelly
K Kirdeikis

K Lawless
A Leung
D Li
J Long
E McKaigney
DW Meakins
J Perez-Parada
CL Phillips
A Poukhovski
T Prior
A Salmon
G Schoepp
W Smart
L Smit
B Stonehocker

Clinical Lecturers

V Agyapong
S Aldandashi
M Al-Ghamdi
M Alikouzeharan
M Astorga
A Aulakh
F Bahrey
D Bailey
S Berg
E Boffa
J Bolster
L Burbach
J Carr
C Chrenek
C Zarnnecki
M del Pilar Castillo Abadia
K Devoulyte
SC Duncan
L Elwell
W Fewer
S Folescu
SC Frank
R Gill
JT Gillese
T Girvin
M Goodwin
R Granger
A Haag
L Harper
J Hibbard
C Hrushka
T Hugie
E Hunting
F Jahandar
I Khan
B Ko
C Kovithavongs
R LaFrance
H Lari
Z Latif
L LeclairK Lefko-Singh
K Leicht
L Litwinson
B Lorraine
N Mahil
J Malmberg
O Manuwa
M Marsh
E Martin
J McCahill
D McManus
S Mitchell
C Morhaliek
K Morin
G Mowat
D Nahirney
T Oommen
L Ostolosky
R Rabeeh
D Rawani
D Read
K Redman
P Rodd
M Salsali
R Seutter
D Sinclair
P Soper
DL Spanner
N Tomy

N Toofaninejad
J Ustina
L Vanriper
L War
H Wilkes
C Woods

Professors Emeriti

RC Bland
R Coutts
GS Hnatko
SC Newman

Adjunct Professors

R Coutts
N el-Guebaly
*KM Hegadoren
P Nguyen
C Power
B Rowe
A Shuaib
E Starreveld
O Suchowersky
J Triscott
TC Wild
NJ Witt
K Wolff
J Yager

Adjunct Associate Professors

B Kerr
J Lind
H McKim
P Tibbo
L Urchuk
L Zwaigenbaum

Adjunct Assistant Professors

R Block
S Duggal
F Giuliani
K Goddard
C-T Lai
A Mardon
N Malykhin
R Marsh
H Pazderka-Robinson

Radiology and Diagnostic Imaging**Chair and Professor**

D Emery
Diagnostic Radiology Program Directors
R Bhargava
A Kanigan

Professors

*C Beaulieu
R Bhargava
*P Boulanger
R Coulden
D Emery
RGW Lambert
*AH Walji
*AH Wilman

Associate Professors

J Abele
S Dhillon
J Jaremko
G Low
M Noga
R Owen
*R Thompson

Assistant Professors

*T Darsaut
T Hillier
E Lou

Honorary Professor

*M Grace

Clinical Professors

W Anderson
LJ Filipow
RC Hennig
H Jen

MA Johnson
L Le
M O'Keefe
G Raymond
K Siminoski
E Wiebe

Associate Clinical Professors

T Ackerman
T Alexander
RA Ashforth
G Askew
J Barrie
I Birchall
D Bruce
S Crowther
MK Hirji
M Hoskinson
M Hutson
S Jackson
A Kumar
G Lauf
K Lee
C Lywood
R MacEwan
S Naik
R Pereira
WL Ritchie
G Sterling
J Swersky
DB Vickar
RS Warshawski

Assistant Clinical Professors

B Ahmed
S Appavoo
G Armstrong
J Baron
S Bates
S Bhutani
T Black
B Campbell
J Carscadden
C Crawley
H Dhlwajo
D Doucette-Preville
A Duha
CG Elias
J English
J Fingard
S Greenspan
BD Guspie
B Hnatiuk
R Holub
T Horwitz
M Hudson
R Hung
P Hyde
L Jamieson
M Janicki
M Janoski
A Kanigan
WG Keenan
S Kitty
J Korzan
T Kotylak
P Kozairz
A Kwan
N Lakis
B Ling
C Lummer
S Manji
NE Maslo
R McEwen
I McKerlie
D McNally
E Ngan
E Niven
D Olson
A Panu
K Papas
L Paskar
V Patel
R Pawluk
EJ Preville
KN Puznak
A Raja

B Rawat
R Receiver
J Rempel
A Rouget
R Samji
P Sarlieve

M Scott
M Seidler
D Shamchuk
H Shein
N Shergill
R Sherlock
H Sidhu
A Singh
M Smerdely
P Spiers
W Sugars
AS Tang
B Taylor
C Torbiak
R Turner
G Van der Merwe
D Williams
C Winter
S Winters
T Yeo

Clinical Lecturers

H Al-Attar
W Block
M Butcher
K Chu
W Fu
K Fung
N Khorrani
W Koberstein
F Kozin
K Leung
N Merchant
S Ou
M Pitts
C Plewes
K Sahi
K Samji
E Sonnex
B Smith
P Sunner
A Thompson
R Van Dijk

Professor Emeritus

DB Russell
Nuclear Medicine
Program Director
C Winter

Assistant Professor

J Abele
*AJB McEwan

Professor

*AJB McEwan

Associate Clinical Professors

M Hoskinson
H Jen
M O'Keefe
RS Warshawski

Assistant Clinical Professors

B Ling
AS Tang
B Taylor
C Winter

Assistant Clinical Professors

B Ling
AS Tang
B Taylor
C Winter

Senior Director, Undergraduate Education

I Bratu
Senior Director, Postgraduate Education
E Wright

Surgery

Chair and Associate Professor
DC Williams

Divisional Director, Surgical Research

Colin Anderson

Senior Director, Undergraduate Education

I Bratu

Senior Director, Postgraduate Education

E Wright

Director, Graduate Studies

F Berry

Health Informatics, Innovation and Technology

T Winton

Assistant Chair, Administration

Anatomy

Director and Associate Professor

DJ Livy

Professor

AH Walji

Associate Professors

P Lemelin
D Livy
C Webber

Assistant Professors

J Hocking
K Rabey

Adjunct Associate Professor

*L Satkunam

Professor Emeriti

DA Begg
K McFadden

Cardiac Surgery

Director and Associate Clinical Professor

R MacArthur

Associate Professors

D Freed (Special Continuing)
S Meyer
Jayan Nagendran

Assistant Professor

J Nagendran (Special Continuing)

Clinical Professors

JC Mullen
*IM Rebeyka
DB Ross
S Wang

Associate Clinical Professors

M Al Aklabi
CR Guenther
A Khani-Hanjani
R MacArthur
DL Modry

Assistant Clinical Professors

H Buchholz
MC Moon

Adjunct Professors

WD Chin
*DE Johnstone
*LJ West

Assistant Adjunct Professor

CM Norris

Professor Emeritus

E Gelfand

General Surgery

Director and Professor

*DL Bigam

Professors

DW Birch
CJ de Gara
*NM Kneteman
*AMJ Shapiro
JS White

Associate Professors

RJ Brisebois
K Buttenschoen
K Fathimani (special continuing)
S Karmali
R Khadaroo
*T McMullen

Assistant Clinical Professors

CM Norris

Professor Emeritus

E Gelfand

General Surgery

Director and Professor

*DL Bigam

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CJ de Gara
*NM Kneteman
*AMJ Shapiro
JS White

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K Fathimani (special continuing)
S Karmali
R Khadaroo
*T McMullen

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*AMJ Shapiro
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RJ Brisebois
K Buttenschoen
K Fathimani (special continuing)
S Karmali
R Khadaroo
*T McMullen

Assistant Clinical Professors

CM Norris

Professor Emeritus

E Gelfand

D Schiller

S Widder

Assistant Professor

H Wang (special continuing)

Clinical Professors

KD Dabbs
DW Jirsch
S Kilam
*MA Meier
MH Stephens

Associate Clinical Professors

DO Adams
M Chatenay
PD Davey
*MG Evans
*A Indar
GM Lees
*AVF Sobey
EA Plewes
C Sample
WM Struck

Assistant Clinical Professors

J Bayne
R Beekman
D Berg
A Borowiec
P Boora
A Cadilli
D Callahan
C Ciona
T Gomes
E Haase
O Heister
R Jutta
J Kennedy
KR Klingbeil
JD Matheson
P Miles
D Mok
*SA Morris
D Olson
D Paton-Gay
AVF Sobey
R St Germaine
B Tsang
AF Trautman
WJ Yakimets

Clinical Lecturers

I Ahmad
G Alhassani
J Andrichow
A Bennett
H Cox
O Farooq
GC Ibbotson
C Jadick
N MacEachern
MA Mohamed
K Naidoo
D Reddy
MS Sabir
M Shaw
JK Stewart
M Swenia
N Wasey

Professors Emeriti

KL Bowes
SM Hamilton
RAL Macbeth
GW Scott
OG Thurston
WW Yakimets

Adjunct Professors

*TW Theman
P Wales
*AH Walji

Neurosurgery

Director and Associate Clinical Professor

M Wheatley

Associate Professors

C O'Kelly

Assistant Professors

T Darsaut
B Krushelnicky (special continuing)
T Sankar

Clinical Professors

KE Aronyk
JM Findlay
V Mehta

Associate Clinical Professors

MM Chow
RJ Fox
AKY Nataraj
DE Steinke
BM Wheatley

Assistant Clinical Professor

RW Broad

Professor Emeriti

KC Petruk
BKA Weir

Orthopaedic Surgery

Director and Associate Clinical Professor

E Masson

Professor

NM Jomha

Associate Professors

A Adesida
*SK Dulai
M Menon

Clinical Professor

*MJ Moreau

Associate Clinical Professors

RA Balyk
JG Cinats
D Dick
H Jiang
PMK Leung
J Mahood
E Masson
GJ O'Connor
DD Otto
GG Russell
A Scharfenberger
DW Weber

Assistant Clinical Professors

GD Arnett
J Bergman
MJ Bouhane
R Chan
RRM Glasgow
GR Goplen
RL Henderson
E Huang
LE Hunka
FB Kortbeek
A Lalani
GJ Lavoie
MV Lavoie
A Manolescu
JF McMillan
PJ Paul
DM Sheps
RE Stiegelmar
J Toreson
C Hui
R Perla
J Bury

Clinical Lecturers

D Durand
D Glasgow
S Kumar
M Lapner
C Panaro
B Pederson

Associate Adjunct Professors

L Beaupre

*JS Hebert

C Lebrun
WA Moussa
E Parent

Assistant Adjunct Professors

D Hill
*DJ Naidu
V Raso

Professor Emeritus

DM Hedden
DC Reid

Otolaryngology

Director and Professor

H Seikaly

Professors

JR Harris
H Seikaly
J Wolfaardt
E Wright

Associate Professors

K Ansari
D Cote (special continuing)
A Ho
S Nayyar
D O'Connell (special continuing)
M Osswald
*TC Uwiera

Assistant Professor

Y Al-Rajhi (special continuing)

Clinical Professors

CS Carter
WH Kudryk

Associate Clinical Professors

MW Allegretto
JC DiToppa
JD Keohane
R Liu

Assistant Clinical Professors

H Al-Hajjaj
Y Al-Rajhi (special continuing)
N Gomaa (special continuing)
R Seemann

Clinical Lecturers

R Chowdhury
MA Mohamed
P Nesbitt
N Rizk

Adjunct Professor

M Zhang

Pediatric Surgery

Director and Associate Clinical Professor

MG Evans

Associate Professors

I Bratu
B Dicken
SK Dulai
*H El-Hakim (special continuing)
D Kiddoo
PD Metcalfe
*J Olson
*J Pugh
TC Uwiera

Professor Emeriti

DM Hedden

Clinical Professors

*KE Aronyk
MJ Moreau
IM Rebeyka
*GH Wilkes

Associate Clinical Professors

MG Evans
GM Lees
JK Mahood
JB Mclvor

Assistant Clinical Professor**Clinical Lecturers**

EC Eksteen
S Southon

Plastic Surgery**Director and Associate Professor**

J Olson

Professor

EE Tredget

Assistant Professors

R Guilfoyle (special continuing)
PO Kwan (special continuing)
A Ladak (special continuing)
J Wong (special continuing)

Clinical Professors

GL Lobay
G Louie
M Morhart
GH Wilkes

Associate Clinical Professors

DD Campbell
DC Edwards

Assistant Clinical Professors

TF Chong
MJ Giuffre
LJ Korus
T Riegel
P Schembri
J Toy
J Wolfli

Clinical Lecturers

T Hayashi
BM Mehling
J Zhu

Professor Emeritus

JDM Alton

Adjunct Professors

L McGann
S Nagata

Assistant Adjunct Professor

K Sabri

Surgical Medical Research Institute**Director and Professor**

G Rayat

Surgical Oncology**Director and Associate Professor**

T McMullen

Professors

DL Bigam
C deGara
J Harris
N Kneteman
RB Moore
H Seikaly
J Shapiro
JS White

Associate Professor

E Bedard

Clinical Professors

KD Dabbs
G Lavoie

Adjunct Associate Professors

CA Capstick
A Schepansky

Associate Clinical Professor

CD O'Hara

Assistant Professors

E Haase
Surgical Research

Director and Professor

CC Anderson

Professors

B Agrawal
CC Anderson
GS Korbutt
RV Rajotte
G Rayat
EE Tredget

Associate Professors

A Adesida
F Berry
TA Churchill
B Zheng

Faculty Services Officer

LF Zhu

Professors Emeriti

KP Kowalewski
GW Scott
DC Secord

Adjunct Professors

P Cheung
MP Mintchev
*RW Yatscoff
LJ West

Thoracic Surgery**Director and Associate Professor**

E Bedard

Associate Professors

E Bedard
K Stewart
TL Winton

Assistant Professor

B Laing (special continuing)

Assistant Clinical Professors

S Johnson
A Valji

Transplant Surgery**Director and Professor**

NM Kneteman

Professors

D Bigam
NM Kneteman
J Shapiro

Assistant Professor

B Laing (special continuing)

Urological Surgery**Director and Associate Professor**

T Schuler

Professors

RB Moore
KF Rourke

Associate Professors

NE Jacobsen
*D Kiddoo
*PD Metcalfe
KF Rourke
T Schuler

Assistant Professor

A Fairey (special continuing)

Clinical Professor

MP Chetner

Associate Clinical Professors

HJ Evans
GJ Gray

Assistant Clinical Professors

DJ Bochinski
EP Estey
M Hobart
MN Weisler
TA Wollin

Clinical Lecturer

B St Martin
S De

Professors Emeritus

MS McPhee

Vascular Surgery**Director and Associate Clinical Professor**

G Winkelaar

Clinical Professor

H Chyczij

Associate Clinical Professor

K Alibhai
R Turnbull
G Winkelaar

Assistant Clinical Professor

Y Abdulrehmann

Clinical Lecturer

L Davis
V Gunn

Faculty Divisions**Community Engagement****Associate Dean and Associate Professor**

J Konkin

Program Directors**Associate Professor and Director, Community Engaged Research**

L Keenan

Director, Global Health

(Vacant)

Director, Indigenous Health

P Small Legs-Nagge

Director, Inner City Health

(Vacant)

Associate Professor and Director, Rural and Regional Health

F Janke

Adjunct Professors

K Aziz
M Frishkopf
P Hamilton
S Houston
D Moores
D Myhre
K Solez
K Stobart
R Turnell
D Zakus

Adjunct Associate Professors

L Baydala
V Caine
K Dong
F Janke
L Keenan
D Nichols
G Renwick
M Sharifzadeh-Amin

Adjunct Assistant Professors

R Ahmed
L Bridgland
M Chan
J Dacks
K Kelly
E Makwarimba
S Williams

Adjunct Assistant Clinical Professor

M Caffaro

Adjunct Academic Colleague

P Ondrus

Health Sciences Laboratory Animal Services**Director**

N Bosvik

Faculty Service Officers

N Bosvik
D Domahidi
M Dziwenka

John Dossetor Health Ethics Centre**Director and Assistant Clinical Professor**

*G Goldsand

Assistant Professor

*M van Manen

Adjunct Professors

*P Brindley
D Truscott

Associate Adjunct Professors

T Bailey
*P Brett-MacLean

***D Davies**

D Kieser
D Kunyk
*D Sellman
L Shanner

Clinical Professors

*P Byrne
*AR Joffe

Associate Clinical Professor

*D Garros

Assistant Adjunct Professors

I Iyioha
H Janz
A Mardon

Assistant Clinical Professor

*B Leier

Clinical Lecturers

V Seavilleklein
E Wasylenko

Professors Emeriti

W Austin
V Bergum
*JB Dossetor
RJ Sobsey

Neuroscience and Mental Health Institute**Director and Professor**

D Zochodne

Professors

*GB Baker
*K Ballanyi
*C Beaulieu
*D Bennett
*R Camicioli
*F Colbourne
*WF Colmers
*RA Dixon
*S Dursan
*K Fouad
*GD Funk
*AJ Greenshaw
*JJ Greer
D Gross
*S Harvey
*K Hegadoren
*JH Jhamandas
G Jickling
N Jomha
*S Kar
R Lambert
*BKV Maraj
*WR Martin
*J Misiaszek

P Nguyen**D Pilgrim*****C Power*****A Prochazka****T Sankar*****A Shuaib*****P Silverstone*****PA Smith*****D Treit*****A Tse*****F Tse*****R Wevrick*****D Wylie*****J Yager*****J Yang****Associate Professors*****DW Ali*****CA Boliek*****KM Chan*****D Collins*****B Dick*****CT Dickson*****M Gorassini*****A Hudson*****P Hurd*****S Kaloira*****B Kerr*****V Mushahwar*****E Posse de Chaves*****CT Putman*****Z Siddiqi*****A Waskiewicz*****CF Westbury****Assistant Professors*****T Allison*****F Bulduc*****K Butcher*****J Caplan*****J Cummine*****E Fujiwara*****F Giuliani*****S Gosgnach*****K Jones*****B Kerr****J Lemieux*****N Malykhin*****C Rasmussen*****Y Sauve*****A Singhal*****S Sipione*****C Sturdy*****C Webber*****S Wiebe*****I Winship****Adjunct Professors*****JC Lind*****J Norton****Adjunct Assistant Professor*****F Dolcos****Professors Emeriti*****AR Dobbs*****TL Krukoff*****S Kumar*****A Spencer*****RB Stein****Faculty Service Officer*****C Hanstock****Centres/Institutes**

www.med.ualberta.ca/
departments

Additional Members of Faculty Council**President and Vice-Chancellor**

D Turpin, CM, PhD, LLD, FRSC

Representatives

Registrar, University of Alberta
Registrar, Alberta Dental Association

Registrar, Alberta Dental Hygienist Association

One representative, Cross Cancer Institute

One representative, Alberta Medical Association

One representative, Alberta Innovates

One representative, College of Physicians and Surgeons of Alberta

Three representatives, Alberta Health Services (one referral hospital; one from Community Health Services; one from Public Health)

One representative, AHS Mental Health and Addictions Services

Dean, Faculty of Kinesiology, Sport, and Recreation

Dean, Faculty of Nursing

Dean, Faculty of Pharmacy and Pharmaceutical Services

Dean, Faculty of Rehabilitation Medicine

One representative, Faculty of Science

One medical librarian

General Information

The Faculty of Medicine of the University of Alberta was established in 1913 and until 1922 conducted a three-year undergraduate medical program in the basic medical sciences.

In 1923, a full program of clinical instruction began, and the first Doctor of Medicine (MD) degrees were awarded in 1925.

Dental education was instituted at the University of Alberta in 1917 in the School of Dentistry under the Faculty of Medicine. The first full degree program was offered in 1923, and the first class graduated in 1927. The School became the Faculty of Dentistry in 1944. Dental Auxiliary training was instituted in 1961. In 1962, the School of Dental Hygiene came into being. A program of graduate studies was formally approved in 1962.

In 1996, the Faculty of Dentistry was merged with the Faculty of Medicine to become the Faculty of Medicine and Dentistry.

University Infectious Diseases Regulation

See University Infectious Diseases Regulation.

Medical Programs

1. A fully accredited four-year program leading to the degree of Doctor of Medicine. At least two pre-medical years at university are required before admission to this program.
2. A program whereby students in the MD program who fulfil specified requirements in research may receive the degree of Doctor of Medicine "with Special Training in Research."
3. A four-year program leading to the degree of Bachelor of Science in Medical Laboratory Science, which may be entered after a preprofessional year.
4. A program whereby students in Medical Laboratory Science who fulfil specified requirements in research may receive the degree of Bachelor of Science in Medical Laboratory Science "with Honors in Research."
5. A program whereby students in the MD Program who fulfil specified requirements may be awarded the Bachelor of Medical Science degree at the conclusion of their second year in the MD program.
6. A program whereby students in the Radiation Therapy Program who fulfil specified requirements may receive the degree of Bachelor of Science in Radiation Therapy.
7. At the graduate level, programs leading to the degree of Master of Science or Doctor of Philosophy. Also programs leading to the degree of Master of Public Health (formerly, Master of Health Service Administration) or the Diploma in Health Service Administration.
8. Programs leading to accreditation by the College of Family Physicians of Canada.
9. Programs leading to eligibility for specialist qualification, in all clinical specialties, by the Royal College of Physicians and Surgeons of Canada are offered in cooperation with affiliated hospitals.
10. An extensive program of continuing medical education for physicians practising in northern Alberta.
11. A program whereby students obtain both the MD degree and PhD degree to prepare them for a career as a clinician-scientist.
See Programs of Study for details of programs of study.
12. A program of combined study which permits highly qualified students to earn both the MD and MBA degrees within five years.

Dental and Dental Hygiene Programs

1. An accredited four-year program leading to the degree of Doctor of Dental Surgery (DDS). At least two pre-dental years at university are required before admission to this program.
2. A Bachelor of Medical Science degree that students registered in the DDS program may apply for after successfully completing the first two years of the DDS program.
3. A two-year Advanced Placement program leading to a degree of Doctor of Dental Surgery (DDS). Applicants must possess a dental degree from a dental program recognized by the World Health Organization.
4. An accredited three-year program leading to the BSc (Dental Hygiene Specialization). One pre-dental hygiene year at the postsecondary level is required before admission to this program.

5. A BSc (Dental Hygiene Specialization) degree which is direct entry upon successful completion of the University of Alberta Dental Hygiene Diploma Program.
6. A BSc (Dental Hygiene Specialization) post-diploma degree completion program. Primary requirements are completion of ★30 postsecondary courses and successful completion of an accredited Canadian or international dental hygiene diploma program.
7. MSc and PhD degrees in Medical Sciences (Oral Biology, Dentistry and Dental Hygiene).
8. MSc and PhD degrees and certificate in Medical Sciences (Orthodontics).
9. The Department of Dentistry sponsors a wide variety of continuing dental education opportunities throughout the year through the Continuing Dental Education program. Didactic, clinical and laboratory courses are offered both on campus and occasionally at other sites within the province. Local and visiting speakers of national and international reputation provide continuing education of a high quality.
See Programs of Study for details of programs of study.

Department of Dentistry Objectives

1. To provide an academic and intellectual milieu in a university setting that facilitates all aspects of education and research in dentistry and allied health and scientific fields by
 - a. Attracting, selecting, and motivating the most qualified academic and non-academic staff; and
 - b. Creating a university environment that emphasizes the quality of life for staff and students.
2. To contribute to and incorporate the advancement of knowledge in dentistry and allied fields by doing research, publishing research papers, and communicating and interacting with
 - a. Other health sciences and other disciplines of the University to promote comprehensive health care;
 - b. The dental profession, dental auxiliaries, auxiliary-training programs, and the community to promote oral health; and
 - c. Basic and clinical science organizations and granting agencies to promote disciplinary and interdisciplinary research.
3. To deliver undergraduate, postgraduate and graduate oral health education to prepare students to meet the challenges of rapid knowledge and technology advancements, changing demographics, shifting oral health priorities and globalization.
 - a. Attract, select, and then motivate the most suitable and well-qualified students who have the ability to acquire the education and training for a professional and/or academic career;
 - b. Maintain a dentistry and dental hygiene curriculum that integrates basic medical and dental sciences, behavior and social sciences, dental clinical sciences, community and preventive dentistry, hospital dentistry, and practice management;
 - c. Incorporate recent concepts, materials, techniques, advances, and research in all areas; and reflect the existing and projected provincial, national, and international oral health needs;
 - d. Maintain an education program that allows for the smooth transition from graduation to practice and ensures that students are competent to practise efficiently and responsibly; and
 - e. Graduate students who are competent to assume roles of leadership and service in their professions and communities.
4. To provide the opportunity and stimulus for continued learning through postgraduate, graduate, research, and continuing education programs.
5. To serve as a partner with the private-practice community, community health centres and hospital clinics to address the problem of some groups having less access to care - including those with specific health care needs, low-income groups, under-represented minorities and those who live in underserved rural and urban communities.

Affiliated Hospitals and Institutions

Affiliated Hospitals

The Faculty of Medicine and Dentistry, University of Alberta, conducts its undergraduate, postgraduate and continuing clinical education activities through affiliation agreements and/or special arrangements with Alberta Health Services. The Faculty is located in the Walter C Mackenzie Health Sciences Centre (which includes the University of Alberta Hospitals), the Heritage Medical Research Centre, the Medical Sciences, Clinical Sciences, and Edmonton Clinic Health Academy buildings, Li Ka Shing Centre for Health Research Innovation, the Katz

Group - Rexall Centre for Pharmacy and Research, the Zeidler Ledcor Centre and the Cross Cancer Institute and the Kaye Edmonton Clinic.

Family Medicine Rural Teaching Sites

The Department of Family Medicine engages over 33 rural communities in undergraduate and postgraduate education initiatives.

Northern Health Services Program

Through an affiliation with the Inuvik Health Board, a regular rotation of clinical faculty, residents, and elective students to Inuvik areas (Mackenzie Area Ambulatory Program) is maintained.

University of Alberta Family Medicine Centres

Ambulatory care facilities, specifically designed for undergraduate and postgraduate education in family practice, are located at the Grey Nuns and Misericordia Community Hospitals, the Northeast Community Health Centre and the Royal Alexandra Hospital. These "Family Medicine Centres" allow medical and other health science students to participate in providing comprehensive and continuing health care to a representative section of the community under the supervision of academic family physicians.

University of Alberta Surgical-Medical Research Institute

The University of Alberta Surgical-Medical Research Institute (SMRI) is a multi-user facility that provides laboratory space and equipment for research activities of research investigators and fellows in the Faculty of Medicine and Dentistry in the field of experimental surgery and medicine. Facilities include rooms suitable for operating on large and small animals, a biochemistry and histology laboratory, and the Medicine/Dentistry Electron Microscopy Unit, located in the Institute. In addition to research activities, the SMRI provides major teaching facilities for surgical residents in training and for core training (surgical skills) for postgraduate Year 1, postgraduate Year 2, graduate, and summer students. The surgical facilities are also used for running continuing medical education courses for medical and paramedical practitioners to study the latest innovations in medicine.

University of Alberta Satellite Dental Clinics

The Satellite Clinics in northern Alberta provide an educational experience for senior Dentistry and Dental Hygiene students while delivering care to patients in remote areas. This program is supported by Alberta Health Services.

Cross Cancer Institute

The Cross Cancer Institute is a tertiary cancer facility operated by Alberta Health Services (AHS) (the provincial health authority for cancer) that provides cancer services for northern Alberta and houses the Department of Oncology. The AHS and the University of Alberta conducts its cancer research and training programs through an affiliation agreement.

Tom Baker Cancer Centre

The Tom Baker Cancer Centre is a tertiary cancer facility operated by Alberta Health Services (AHS) (the provincial health authority for cancer) in Calgary that provides cancer services for southern Alberta and houses the Department of Oncology. The AHS and the University of Calgary conducts its cancer research and training programs through an affiliation agreement.

Registration and Licensing

DDS Degree

The Department of Dentistry of the University is accredited by the Commission on Dental Accreditation of Canada.

Regulations regarding the practice of dentistry in any other province in Canada may be obtained by writing to the dental registrar of that province. Contact information is available from the Canadian Dental Association (www.cda-adc.ca).

Senior students of dental programs approved by the Commission on Dental Accreditation of Canada must write the National Dental Examining Board examinations during their final year. Successful completion of these examinations is required for licensure.

Graduates are also eligible to write licencing examinations in most of the states in the United States and the examinations of the National Board of Dental Examiners of the American Dental Association.

The Doctor of Dental Surgery (DDS) degree and the Doctor of Dental Medicine (DMD) degree (granted by some Canadian and United States universities) are equivalent degrees.

Dental Hygiene Diploma/Bachelor of Science (Dental Hygiene Specialization)

A diploma/Bachelor of Science (Dental Hygiene Specialization) degree does not, in itself, confer the right to practise. A dental hygienist desiring to practise dental hygiene in Canada should consult the appropriate provincial licencing body. Contact information is available from the Canadian Dental Hygienists Association (www.cdha.ca).

Registration to Practise

The Registrar of the Alberta Dental Association and College may refuse to issue a license and/or registration certificate to practise dentistry to any applicant with a criminal record. Likewise, the College of Registered Dental Hygienists of Alberta (CRDHA) may refuse to issue a license and/or registration certificate to practise dental hygiene to any applicant with a criminal record.

BSc in Radiation Therapy

The Canadian Association of Medical Radiation Technologists (CAMRT) is the organization that provides the national certification examination and competency profile. Students are eligible to access the CAMRT examination upon completion of all program requirements. Under the Alberta Health Professions Act, radiation therapists must be licensed by the regulatory college, Alberta College of Medical Diagnostic and Therapeutic Technologists (ACMDTT) to practice in Alberta. The ACMDTT endorses the CAMRT national examination as the certifying examination.

After successful completion of the CAMRT national certification examination, graduates are eligible to access the American Registry of Radiologic Technologists' (ARRT) certification examination.

Finance

DDS Degree

Tuition fees for the program can be found in Fees Payment Guide.

Note: The figures are approximate for 2018-2019 and do not include GST; figures are subject to change without notice.

Additional Costs for DDS Students	Year 1	Year 2
Electronic Textbook	5,300	0
Equipment & Instrumentation Rental	9,100	10,800
Dental Students Association	7575	
	Year 3	Year 4
Electronic Textbook	0	0
Equipment Rental	20,500	16,700
Dental Students Association	7575	
National Dental Examining Board (refer to www.ndeb.ca)		N/A

Bachelor of Science (Dental Hygiene Specialization)

(for students admitted to new three year program in 2017 and forward)

Tuition fees for the program can be found in Fees Payment Guide.

Note: All costs noted below are approximate for 2018-2019 and do not include GST; costs are subject to change and can be effected by economic conditions such as exchange rates. Students pay the fees in effect at the time of registration.

The Dental Hygiene program at the University of Alberta uses an electronic textbooks system (VitalSource). This textbook system is included in the fees.

Additional Costs for Students	Year 2	Year 3	Year 4
Electronic Textbook	2,122	0	0
Equipment & Instrumentation Rental	2,855	5,955	6,955
Dental Students Association	75	75	75
Professional Exam Fee	N/A	N/A	675

(refer to www.ndhcb.ca)

External Practicum Experiences: Students are responsible for their own transportation to and from practicum experiences scheduled in the Edmonton area.

Bachelor of Science (Dental Hygiene Specialization)

(for students admitted into fourth year for 2017 and 2018)

Tuition fees for the program can be found in Fees Payment Guide.

Note: The figures are approximate for 2018-2019 and do not include GST; figures are subject to change without notice.

Additional Costs for Students	Year 4
Books	200
Equipment & Instrumentation Rental	500
Dental Students Association	75

Bachelor of Science (Dental Hygiene Specialization) Post Diploma Degree Completion Program

Additional Costs for Students

Books 200

Advanced Placement Program (DDS)

Tuition fees for the program can be found in Fees Payment Guide.

Note: The figures are approximate for 2018-2019 and do not include GST; figures are subject to change without notice.

Additional Costs for Students	Year 1	Year 2
Electronic Textbook	5,300	0
Equipment & Instrumentation Rental	22,500	18,300
Dental Students Association	75	75
National Dental Examining Board (refer to www.ndeb.ca)		N/A

MD Degree

Information on fees charged to students in the MD and MSc programs is given in Registration and Fees. In addition, medical students spend approximately \$2,000 each year for books, supplies and instruments. Fourth-year medical students pay an examination fee of approximately \$700 to the Medical Council of Canada in January of their final year.

All medical students are encouraged to take the following courses: First Aid, Cardiopulmonary Resuscitation, and Advanced Cardiac Life Support. Students are responsible for the corresponding fees.

Some remuneration is presently given to final year MD students by Alberta Health, Government of Alberta.

Details of scholarships and other financial assistance for medical students are available in the Awards section of this Calendar or by contacting the MD Program Office, Admissions and Undergraduate Medical Education, 1-002 Katz Group Centre for Pharmacy and Health Research; phone (780) 492-6350.

BSc in Radiation Therapy

Tuition fees for the program can be found in Fees Payment Guide. Figures are subject to change without notice.

National Certification Examination fees are payable to the Canadian Association of Medical Radiation Technologists at www.camrt.ca/certification/international/. It is mandatory that all students are student members of the Alberta College of Medical Diagnostic and Therapeutic Technologists (ACMDTT) and must pay the student membership fee at www.acmdtt.com/Registration/StudentApplicants.aspx.

Medical and Dental Society Memberships

The Medical Students' Association (MSA) is the officially recognized organization of medical students. It provides social, informative, and cultural activities for medical students, and sponsors several important community projects. It is authorized to collect a membership fee from each student. The Association provides the following annual awards: the Outstanding Teacher Awards presented to one teacher for excellence as an educator in each year of the program; the Shaner Award presented to a graduating student for exceptional contributions to the work of the Association; the Mackenzie Award presented to a graduating student judged most proficient in clinical skills; and the Fried Award presented to the student intern who has demonstrated exceptional clinical aptitudes in Paediatrics. Some projects sponsored by the MSA and run by medical students are the University of Alberta branch of Shinerama, a program dedicated to raising money for Cystic Fibrosis research; a medical student choir; and IATROS, a student medical journal dedicated to publishing student articles and increasing communication between current students and alumni. Many social activities and sports events are also planned through the year.

The Medical Alumni Association is an organization of all graduates in Medicine from the University of Alberta. The Association takes an active interest in the Faculty and provides a limited loan fund for undergraduate and graduate students. In addition, the Association participates in a number of awards to students and, from time to time, finances specific projects in the Faculty. The Association meets annually in conjunction with the Alberta Medical Association meeting.

The Dental Students' Association (DSA) is registered with the Students' Union Student Groups. The DSA represents all Dentistry and Dental Hygiene students at the University. It is the DSA's responsibility to organize and communicate involvement in a number of activities by students in the Department of Dentistry. Involvement in activities of a social and professional nature include participation in activities with the greater student body on campus, inter/intra-departmental activities, and community involvement. The DSA fosters professional relations with the greater community through involvement in fund raising for a number of charitable organizations, and by providing resources and information to the community. Annual involvement in health awareness initiatives allows students to provide information and dental products to various groups, including students on campus during Health Awareness Week.

The DSA coordinates a number of formal events welcoming students to their respective professions and encouraging involvement in their professional

associations. A number of less formal social events and sporting activities, including the annual curling bonspiel, are also scheduled throughout the year. The DSA works with the Faculty to present concerns and facilitate change, and together, provide students the ability to make contributions to create an enjoyable and successful program.

The Dental Alumni Association is an organization of all graduates in Dentistry from the University of Alberta. The Association takes an active interest in the Department of Dentistry of the Faculty of Medicine and Dentistry and participates in a number of awards to dental students. In addition, the Association provides limited funds to finance specific projects in the Department and honors convocating students and graduates of the silver anniversary class..

Admission and Academic Regulations

Admission

See Admission to Undergraduate Programs and General Admission Requirements for general admission requirements to the University. See Admission Requirements by Faculty for specific admission information for the DDS, Dental Hygiene, MD, BSc in Medical Laboratory Science and BSc in Radiation Therapy programs.

Combined Program for the Degrees of MD and PhD

Highly qualified students wanting to pursue a career of teaching and research in basic medical science or clinical medicine may enrol in a program of approximately six to eight years leading to the acquisition of both an MD and a PhD degree.

Students in the first year of the MD program may apply to the Combined Program. If acceptable to the appropriate department, to the Faculty of Medicine and Dentistry, and to the Faculty of Graduate Studies and Research, the student is admitted to the PhD program. Normally, on completion of two years of the MD program, the student registers in the PhD program. The time needed to complete the requirements for the PhD depends on the applicant's previous training and the nature of the research. On completion of the PhD program, the student reenters the Faculty of Medicine and Dentistry and completes the requirements for the MD degree.

Students interested in such a program may obtain further information from the Office of Research, Faculty of Medicine and Dentistry, 2-13 Heritage Medical Research Centre.

Combined Program for the Degrees of MD/MBA

The Faculty of Medicine and Dentistry and the Faculty of Business offer a program of combined study which permits highly qualified students to earn both the MD and MBA degrees in five years.

Each student must apply separately to the Faculty of Medicine and Dentistry (for admission into the MD program) and at any time in the first two years of the MD program, may apply to the Faculty of Graduate Studies and Research (for admission into the MBA program).

Academic Standing and Graduation

DDS Degree

The program leading to the DDS degree is conducted in four years (1, 2, 3 and 4) under the direction of the Faculty committees (see DDS Degree).

1. No credit will be granted for courses completed in preprofessional years and no course exemptions will be allowed.
2. The Dean, or Supervisor acting on behalf of the Dean, may immediately deny assignment of a student to, withdraw a student from, or vary terms, conditions or site of practicum/clinical placement if the Dean or Supervisor has reasonable grounds to believe that this is necessary in order to protect the Public Interest. (See Practicum Intervention Policy).
3. The Council of the Faculty of Medicine and Dentistry approves the principle that the means of assessing a student's progress and determining a student's grades may vary from one course to another in accordance with the nature of the course. Factors other than examination results may be used to a variable extent by instructors in determining grades.
4. Students are advised at the beginning of each course and year of the procedures to be used in their evaluation, the determination and reporting

- of their grades, and the standards required by the Faculty. Students are also advised of the procedures for appeal established with the Faculty and the University. Students must satisfactorily complete all components of all courses.
5. On their official transcripts students are not ranked or assigned a numeric grade, but are designated as having passed (received credit) or failed a course.
 6. Reexaminations
 - a. Students are allowed reexamination privileges only in courses that are failed.
 - b. The Associate Chair, Academic must approve reexaminations for students who fail two or fewer courses or components of DDS 509, DDS 529, DDS 545, or DDS 565. Students with more than two (2) failed courses or components of DDS 509, DDS 529, DDS 545, or DDS 565 in any academic year will not be allowed reexamination privileges.
 - c. The Associate Chair, Academic may allow reexamination of a didactic component of a course if a student fails the didactic component of a clinical or laboratory course but passes the clinical or laboratory portion. Reexamination is not permitted in courses that are entirely clinical or laboratory or in clinical or laboratory components of courses that include both didactic and clinical or laboratory components.
 - d. If a reexamination is approved, satisfactory completion of a remedial program may be required by the Associate Chair, Academic before the student is permitted to take the reexamination.
 - e. Students may be granted rewrites at the end of each term for failed courses within that term that meet the above requirements, but not exceeding more than two overall in an academic year. The Academic Standing Committee would be notified of all reexaminations granted.
 - f. A student who does not take a reexamination within the period of time prescribed by the Faculty will not be allowed to continue in the program.
 - g. The reexamination mark (as in the case of a deferred mark) will replace the original final exam mark.
 - h. Over the program, reexamination privileges will not exceed five reexaminations. In DDS 509, DDS 529, DDS 545, or DDS 565 all components must be successfully completed and each reexamination in a component of these courses will compose one of the five reexamination privileges.
 - i. See Reexaminations for further information regarding when reexaminations are not permitted.
 7. Academic Standing: Final decisions regarding academic standing and promotion to the next year or graduation are made by the Faculty of Medicine and Dentistry Academic Standing and Promotion Committee.
 - a. No student may proceed to any subsequent year of the DDS program and will be required to withdraw unless they have passed all courses for that academic year.
 - b. A student who fails more than two courses in any year of the program will be required to withdraw from the program.
 - c. For promotion and graduation, students need to adhere to and meet the requirements as stated in the department's Attendance Policy.
 - d. Awards distribution will be based on a full course load only and utilizing original not remedial grades in calculation of the GPA.
 8. Regulations Concerning Repetition of a Year because of Academic Failure
 - a. No student will be allowed to repeat any year of the DDS program with the exception of fourth year students who may be granted the status of "Special Category Repeating Student". See below for details.
 - a. Special Category Repeating Student: a student who fails to meet some requirements in the final-year of the program may be designated a Special Category repeating student. In order to be considered as a Special Category repeating student in fourth-year Dentistry, the student must
 - i. have clinical deficiencies in no more than two clinical disciplines and have been advised that the deficiency could be corrected within one term of instruction; and
 - ii. have successfully completed all written examinations in the DDS program.
Further information regarding the Special Category repeating student may be obtained from the Department Office. Students repeating the final year are not eligible for awards.
 9. Voluntary Withdrawal: A student wanting to temporarily withdraw registration from the DDS program is required to make written application to the Associate Dean of the Faculty of Medicine and Dentistry, stating the reasons for withdrawal and the intended period of withdrawal. Readmission to the DDS program following voluntary withdrawal is based on the following:
 - a. a review, by the Faculty, of the reasons for withdrawal and of the student's academic record.
 - b. availability of a place, within quota, in the class to which the student seeks readmission. Priority is assigned in the following order:
 - i. students who have met normal promotion requirements
 - ii. Faculty-approved repeating students and students returning after voluntary withdrawal, in order of academic standing
 - c. The length of time the student interrupts studies leading to the DDS degree must not exceed two years in total.
 10. Faculty Advisor: At the discretion of the Faculty, an advisor may be assigned to students having difficulty meeting promotion requirements. The method of assignment and role of the advisor is determined by the Faculty and/or Department.
 11. All students registered in the Dentistry program are required by provincial legislation to be registered in the Educational Register of the Alberta Dental Association and College. This registration permits the practice of dentistry within the confines of the formal dental curriculum. Students in the DDS program are required to adhere to the professional code of ethics of the Alberta Dental Association and College. (Amendments to the Code of Student Behaviour occur throughout the year. The official version of the Code of Student Behaviour, as amended from time to time is housed on the University Governance website at www.governance.ualberta.ca.)
 12. Medical Testing and Immunization Requirements: See University Infectious Diseases Regulation.
 13. Certification in CPR (Cardiopulmonary Resuscitation) at the Basic Rescuer Level is required.
- ### DDS Advanced Placement Program
- The program leading to the DDS Advanced Placement is conducted in a minimum of two years (see DDS Advanced Placement Program, Years 3 and 4 of the DDS Program).
1. No credit will be granted for courses completed prior to admission and no course exemptions will be allowed.
 2. The Dean, or Supervisor acting on behalf of the Dean, may immediately deny assignment of a student to, withdraw a student from, or vary terms, conditions or site of practicum/clinical placement if the Dean or Supervisor has reasonable grounds to believe that this is necessary in order to protect the Public Interest. (See Practicum Intervention Policy.)
 3. The Council of the Faculty of Medicine and Dentistry approves the principle that the means of assessing a student's progress and determining a student's grades may vary from one course to another in accordance with the nature of the course. Factors other than examination results may be used to a variable extent by instructors in determining grades.
 4. Students are advised at the beginning of each course and year of the procedures to be used in their evaluation, the determination and reporting of their grades, and the standards required by the Faculty. Students are also advised of the procedures for appeal established with the Faculty and the University. Students must satisfactorily complete all components of all courses.
 5. On their official transcripts students are not ranked or assigned a numeric grade, but are designated as having passed (received credit) or failed a course.
 6. Reexaminations
 - a. Students are allowed reexamination privileges only in courses that are failed.
 - b. The Associate Chair, Academic must approve reexaminations for students who fail two or fewer courses or components of DDS 545, DDS 565. Students with more than two (2) failed courses or components of DDS 545, DDS 565 in any academic year will not be allowed reexamination privileges.
 - c. The Associate Chair, Academic may allow reexamination of a didactic component of a course if a student fails the didactic component of a clinical or laboratory course but passes the clinical or laboratory portion. Reexamination is not permitted in courses that are entirely clinical or laboratory, or in clinical or laboratory components of courses that include both didactic and clinical or laboratory components.
 - d. If a reexamination is approved, satisfactory completion of a remedial program may be required by the Associate Chair, Academic before the student is permitted to take the reexamination.
 - e. Students may be granted rewrites at the end of each term for failed courses within that term that meet the above requirements, but not

exceeding more than two overall in an academic year. The Academic Standing Committee would be notified of all re-examinations granted.

- f. A student who does not take a reexamination within the period of time prescribed by the Faculty will not be allowed to continue in the program.
 - g. The reexamination mark (as in the case of a deferred mark) will replace the original final exam mark.
 - h. See Reexaminations for further information regarding when reexaminations are not permitted.
7. Academic Standing: Final decisions regarding academic standing and promotion to the next year or graduation are made by the Faculty of Medicine and Dentistry Academic Standing and Promotion Committee.
 - a. No student may proceed to next year of the Program and will be required to withdraw unless they have passed all courses for that academic year.
 - b. A student who fails more than two courses in any year of the program will be required to withdraw from the program.
 - c. For promotion and graduation, students need to adhere to and meet the requirements as stated in the department's Attendance Policy.
 - d. Awards distribution will be based on a full course load only and utilizing original not remedial grades in calculation of the GPA.
 8. Regulations Concerning Repetition of a Year because of Academic Failure: Students in the DDS Advanced Placement Program will not be permitted to repeat a year.
 9. Voluntary Withdrawal: A student in the DDS Advanced Placement Program who chooses to withdraw, forfeits the position and will not be readmitted.
 10. Faculty Advisor: At the discretion of the Faculty, an advisor may be assigned to students having difficulty meeting promotion requirements. The method of assignment and role of the advisor is determined by the Faculty and/or Department.
 11. All students registered in the DDS Advanced Placement Program are required by provincial legislation to be registered in the Educational Register of the Alberta Dental Association and College. This registration permits the practice of dentistry within the confines of the formal dental curriculum. Students in the program are required to adhere to the professional code of ethics of the Alberta Dental Association and College (Amendments to the Code of Student Behaviour occur throughout the year. The official version of the Code of Student Behaviour, as amended from time to time is housed on the University Governance website at www.governance.ualberta.ca).
 12. Medical Testing and Immunization Requirements: See University Infectious Diseases Regulation.
 13. Certification in CPR (Cardiopulmonary Resuscitation) at the Basic Rescuer Level is required.

Dental Hygiene Diploma/Bachelor of Science (Dental Hygiene)

The following applies to students in all Dental Hygiene programs:

1. Certification in CPR (Cardiopulmonary Resuscitation) at the Health Care Provider Level is required and provided by the Program.
2. Students entering the Dental Hygiene program may be granted credit for courses completed that are deemed by the Program Director, in consultation with the course coordinator and the Chair of the Department Academic Standing Committee, to be demonstrably equivalent to courses for which credit is being sought.
3. Students carrying an academic load reduced by ★6 or more from the full course load of their academic year will not be eligible for awards.
4. The Associate Dean/Department Chair, or Supervisor acting on behalf of the Associate Dean, may immediately deny assignment of a student to, withdraw a student from, or vary terms, conditions or site of practicum/clinical placement if the Associate Dean or Supervisor has reasonable grounds to believe that this is necessary in order to protect the Public Interest. (See Practicum Intervention Policy.)
5. The Council of the Faculty of Medicine and Dentistry approves the principle that the means of assessing a student's progress and determining a student's grades may vary from one course to another in accordance with the nature of the course. Students are advised at the beginning of each course and year of the procedures to be used in their evaluation, the determination and reporting of their grades, and the standards required by the Faculty. Students are also advised of the procedures for appeal established within the Faculty and the University. Students must satisfactorily complete all components of all courses.
6. Recommendations for promotion and graduation are based on a grade of at least D in each subject and a GPA of at least 2.0.

The notation of "With Distinction" is awarded to a graduating student in the Dental Hygiene Diploma program who has obtained an average GPA of 3.5 or higher in the second and third years of the program with a minimum GPA of 3.3 in either year and no failing grades over the entire program.

The notation of "With Distinction" is awarded to a graduating student registered in a minimum of ★24 in the BSc Dental Hygiene program who has obtained an average GPA of 3.5 or higher in the third and fourth years of the program with a minimum GPA of 3.3 in either year and no failing grades over the entire program.

7. Reexaminations: See Reexaminations.
 - a. Students are allowed reexamination privileges only in courses that are failed.
 - b. The Department of Dentistry Academic Standing Committee and the Faculty Academic Standing and Promotion Committee must approve reexaminations for students who fail one or two courses. Students with more than two failed courses in any academic year will not be allowed reexamination privileges.
 - c. The Department of Dentistry Academic Standing Committee may allow reexamination of the didactic component of a course if a student fails the didactic component of a clinical course but passes the clinical portion. Reexamination is not permitted in courses that are entirely clinical or in clinical components of courses that include both didactic and clinical components.
 - d. A student repeating a year is not allowed reexamination privileges in that year of the program.
 - e. If a reexamination is approved, satisfactory completion of a remedial program may be required by the Faculty of Medicine and Dentistry Academic Standing and Promotion Committee before the student is permitted to take the reexamination.
 - f. Students are advised that it is not possible to make a ruling regarding remediation or reexamination until all grades for a year are received and recorded.
 - g. The weight of reexamination is at least that of the final examination, but may be more (at the discretion of the Program Director in consultation with the course coordinators).
 - h. The reexamination mark (as in the case of a deferred mark) will replace the original final exam mark.
 - i. Any student who, after reexamination and/or evaluation fails to meet promotion/graduation requirements, is deemed to have failed the year.
 - j. A student who does not take a reexamination within the time period prescribed by the Faculty will not be allowed to continue in the program.
 - k. During the Dental Hygiene Diploma program, reexamination privileges will not exceed four reexaminations or a maximum of ★18 in total over all two years of the program.
 - l. For students registered in a BSc Dental Hygiene program, the total reexamination privileges will not exceed five reexaminations or a maximum of ★20 in total over all three years of the program.
8. Reexamination Procedure Students in any Dental Hygiene program are permitted to repeat any year, only in exceptional cases as determined by the Faculty Academic Standing and Promotion Committee. Repeating students are considered for awards, if taking a full course load.
 - a. The Faculty of Medicine and Dentistry Academic Standing and Promotion Committee will specify by course the reexaminations required of a failed student for the purposes of meeting promotion/graduation requirements.
 - b. Students registered in the final year of all Dental Hygiene programs will write reexaminations at the end of the first term for first term courses, and by May 30 for second term and two-term courses.
 - c. All other students in Dental Hygiene programs will take reexaminations as scheduled by June 30.
9. A failed student who repeats the failed year may retain credit for passed courses, other than laboratory and clinical courses, only at the discretion of the Faculty of Medicine and Dentistry Academic Standing and Promotion Committee acting on the advice of the Department concerned. A grade of at least C+ is required for Dental Hygiene courses. Students carrying an academic load reduced by ★6 or more from the full course load of their academic year will not be eligible for awards.
10. A Special Category repeating third-year Dental Hygiene Diploma student or Special Category repeating Dental Hygiene BSc student
 - a. has achieved a minimum GPA of 2.7 in the year requiring repetition;

- b. has clinical/practicum deficiencies in no more than two clinical courses and is advised that the deficiency could be corrected within a four-month period of instruction; and
 - c. has successfully completed all written examinations in the Dental Hygiene program.
11. **Voluntary Withdrawal:** A student wishing to temporarily withdraw registration in the Dental Hygiene Programs is required to make written application to the Dental Hygiene Program Director, stating the reasons for withdrawal. Readmission to the Dental Hygiene programs following voluntary withdrawal will be based on the following:
- a. review, by the Faculty of the reasons for withdrawal and the student's academic record;
 - b. availability of a place, within quota, in the class to which the student is seeking readmission. Priority will be assigned in the following order:
 - i. students who have met normal promotion requirements.
 - ii. Faculty approved repeating students and students returning after voluntary withdrawal, in order of academic standing.
 - c. The length of time the student interrupts studies leading to the Dental Hygiene Diploma or Bachelor of Science (Dental Hygiene Specialization) programs must not exceed two years in total.
12. **Faculty Advisor:** At the discretion of the Faculty, a Faculty advisor may be assigned to students having difficulty meeting promotion requirements. The method of assignment and the role of the Faculty advisor is determined by the Faculty.
13. **Medical Testing and Immunization Requirements:** See University Infectious Diseases Regulation.

MD Program

The program leading to the MD degree is conducted in four Years (1, 2, 3 and 4), under the direction of the Faculty committees. (See MD Degree.)

1. No credit will be granted for courses completed in preprofessional years and no course exemptions will be allowed.
2. The Dean, or Supervisor acting on behalf of the Dean, may immediately deny assignment of a student to, withdraw a student from, or vary terms, conditions or site of practicum/clinical placement if the Dean or Supervisor has reasonable grounds to believe that this is necessary in order to protect the Public Interest. (See Practicum Intervention Policy.)
3. The Council of the Faculty of Medicine and Dentistry approves the principle that the means of assessing a student's progress and determining a student's grades may vary from one course to another according to the nature of the course. Factors other than examination results may be used to a variable extent by instructors in determining grades, but students are informed at the beginning of the course how grades are to be determined.
4. Students are advised at the beginning of each course, and year of the attendance requirements of the procedures to be used in their evaluation, the determination and reporting of their grades, and the standards required by the Faculty and the University. Students who are absent for more than two days in any course in which attendance is compulsory will not be given credit for that course and will be asked to repeat the course. Students must satisfactorily complete all components of a course to receive a passing grade, irrespective of the overall mark. Students must satisfactorily complete all components of all courses.
 - a. All students enrolled in the MD program are bound by and shall comply with the Professional Code of Ethics governing the profession and practice of medicine. The Professional Code of Ethics refers to all relevant professional codes and practice standards for medical doctors including:
 - i. Code of Applicant Behaviour
 - ii. Canadian Medical Association Code of Ethics
 - iii. College of Physicians and Surgeons of Alberta Code of Conduct
 - iv. Professional Standards for Students in the Faculty of Medicine and Dentistry
 - v. Student Pledge of Conduct
 - vi. Faculty Code of Conduct
 - b. Students are held accountable to the Code of Student Behaviour and should be familiar with it. (See Professional Standards for Students in the Faculty of Medicine and Dentistry)
 - c. Thereinafter, any reference to students' academic performance will encompass the adherence to the Professional Code of Ethics.
5. **Comprehensive Examinations:**
 - a. At the end of second year, students take a preclinical comprehensive examination (denoted as MED 520) covering material presented in the first two years of the program.
 - b. After completing year three requirements, students must successfully complete an objective structured clinical examination (OSCE) as the first component of MED 540, comprehensive examination. This first exam covers material presented in the first three years of the program. At the end of fourth year, students will then be required to successfully complete the second component of MED 540 comprehensive examination by completing a knowledge-based assessment. This exam will cover material presented in all four years of the program. All other program requirements must be successfully completed in order to be eligible to take the second examination knowledge-based assessment.
 - c. Students must pass the above comprehensive examination(s) before being promoted to the next academic year (MED 520) or allowed to graduate (MED 540).
6. Students are not ranked or assigned a numeric grade, but are designated as having passed (received credit) or failed a course.
7. **Reexaminations**
 - a. A student will not be granted reexamination privileges if the student has passed the course/clerkship.
 - b. A student repeating a year is not allowed reexamination privileges in that year.
 - c. Students are advised that reexamination may not be granted until all grades for the academic year are received and recorded.
 - d. If the student has not yet been granted a previous reexamination in the current academic year, reexamination privilege may be granted at the discretion of the Course/Clerkship Coordinator in consultation with the Associate Dean, MD Program.
 - e. If reexamination is not granted by the Course/Clerkship Coordinator, the student will be brought to the appropriate Academic Standing Committee where reexamination may be considered.
 - f. If the student has already been granted reexamination privileges in other courses/clerkships in the current academic year, reexamination may only be granted by the appropriate Academic Standing Committee after student performance from the entire academic year is considered.
 - g. If a reexamination is granted, the reexamination mark will replace the original final exam mark (as in the case of a deferred mark).
 - h. If a reexamination is granted, satisfactory completion of a remedial program may be required before the student is permitted to take the reexamination.
 - i. Reexamination of MED 540 Comprehensive Examination: Students who fail this comprehensive examination may be granted a reexamination. Only the Associate Dean, MD Program may grant this reexamination.
 - j. A student who does not take a reexamination within the period of time prescribed by the Faculty will not be allowed to continue in the program.
 - k. A student who fails reexamination will be deemed to have failed the course and will be referred to the appropriate Academic Standing Committee.
8. **Academic Standing:** Final decisions regarding academic standing and promotion to the next year of graduation are made by the Faculty Academic Standing and Promotion Committee with recommendations from the Academic Standing Committees.
 - a. No student may proceed to any subsequent year of the medical program and will be required to withdraw unless they have passed all courses for that academic year.
 - b. Students who do not pass all Year 3 and 4 courses, except MED 540 will not be allowed to write the comprehensive exam and will be required to withdraw.
9. **Regulations Concerning Repetition of a year because of Academic Failure:**
 - a. No student will be allowed to repeat Year 1 of the MD program. At the discretion of the Dean, students in Year 2, 3 or 4 may be allowed to repeat a failed year.
 - b. A student repeating a year is not allowed reexamination privileges in that year of the program.
 - c. No student is allowed to repeat more than one year of the MD program.
10. **Voluntary Withdrawal:** A student wishing to temporarily withdraw registration from the MD program is required to make written application to the Associate Dean, MD program, stating the reasons for withdrawal and the intended period of absence. Readmission to the MD Program following voluntary withdrawal will be based on the following:
 - a. review, by the Faculty, of the reasons for withdrawal and of the student's academic record;

- b. availability of a place, within quota, in the class to which the student seeks readmission. Priority is assigned in the following order:
 - i. students who have met normal promotion requirements.
 - ii. Faculty approved repeating students and students returning after voluntary withdrawal, in order of academic standing.
 - c. The length of time the student interrupts studies leading to the MD degree must not exceed two years in total.
11. Faculty Advisor: At the discretion of the Faculty, an advisor may be assigned to students having difficulty meeting promotion requirements. The method of assignment and role of the advisor shall be determined by the Faculty.
 12. All students registered in the MD program are required by provincial legislation to be registered in the Educational Register of the Alberta College of Physicians and Surgeons. This registration permits the practice of medicine within the confines of the formal medicine curriculum. Students in the MD program are required to adhere to the professional code of ethics of the Alberta College of Physicians and Surgeons. (Amendments to the Code of Student Behaviour occur throughout the year. The official version of the Code of Student Behaviour, as amended from time to time is housed on the University Governance website at www.governance.ualberta.ca.)
 13. Medical Testing and Immunization Requirements: See University Infectious Diseases Regulation.

BSc Program in Medical Laboratory Science

All students enrolled in Medical Laboratory Science program are bound by and shall comply with the Professional Code of Ethics governing the profession and practice of medical laboratory technology. The Professional Code of Ethics refers to all relevant professional codes and practice standards for the practice of medical laboratory technology. See Professional Standards for Students in the Faculty of Medicine and Dentistry.

1. Academic Standing: Final decisions regarding academic standing and promotion to the next year or graduation are made by the Faculty of Medicine and Dentistry Academic Standings and Promotion Committee based on recommendations of the Medical Laboratory Science Academic Standing Committee.
2. Promotion in the Medical Laboratory Science program depends on passing grades in all subjects of the previous year with a minimum GPA of 2.0, as well as the following requirements:

Phase I

Each laboratory instructor assesses the competence in communication, comprehension, and technical skills of each student several times throughout the academic year. These assessments are documented as a written evaluation that the student is asked to sign. At the end of the Phase, the instructors assign each student a pass or probationary rating based on these evaluations. Students with a GPA of 2.0 who have a majority of unsatisfactory technical ratings are permitted to proceed into Phase II on probation. Students in Phase II who are on probation must withdraw if they receive an unsatisfactory technical rating in any one course. Students entering Phase II with a majority of pass ratings from all the Phase I Medical Laboratory Science courses are assessed as having satisfactory standing.

Phase II

For those Medical Laboratory Science courses with both technical and academic demands, the student must successfully complete the requirements of both components to receive a passing grade.

Each student's competence in communication skills, comprehension of material, technical skills and professional behaviour will be assessed according to the Competency Based Objectives (CBOs) for each Medical Laboratory Science course. To pass each course, students must demonstrate competence in each CBO as outlined in the course manual. Students who do not achieve this level of competence in any one course will be required to satisfactorily fulfill specified course or performance competence standards within a given period of time. Students requiring additional training time in more than one course may be required to withdraw from the program. Students who have entered Phase II on probation (see Phase I) will not normally be allowed additional remedial training to reach competence and will be required to withdraw from the program if they do not meet the CBOs in the normal period of time.

3. The Dean, or Supervisor acting on behalf of the Dean, may immediately deny assignment of a student to, withdraw a student from, or vary terms, conditions or site of practicum/clinical placement if the Dean or Supervisor has reasonable grounds to believe that this is necessary in order to protect the Public Interest. (See Practicum Intervention Policy.)
4. The Division of Medical Laboratory Science Technical Standards Policy defines the necessary knowledge, skills, professional behaviours, and

attitudes required of students. Please see the Medical Laboratory Science website for further information.

5. Promotion in the BSc program in Medical Laboratory Science Post-Professional Certification completion program depends on passing grades in all subjects of the previous year with a minimum GPA of 2.0.
6. Reexamination:
 - a. Students are allowed reexamination privileges only in courses that are failed.
 - b. Students must achieve a GPA of 2.0 inclusive of the failed course in order to be considered for reexamination.
 - c. The Division of Medical Laboratory Science Academic Standings Committee must approve reexamination.
 - d. If reexamination is approved, satisfactory completion of a remedial program may be required before the student is permitted to take the reexamination.
7. A student permitted to repeat a course or an entire phase must withdraw unless a minimum average grade of 2.7 is obtained on the repeated work.
8. Any student whose technical work or academic performance is deemed unsatisfactory may be required to withdraw from the Faculty.
9. Voluntary Withdrawal: A student wishing to temporarily withdraw registration from the MLS program is required to make written application to the Director, stating the reasons for withdrawal and the intended period of absence. Readmission to the MLS program following voluntary withdrawal will be based on the following:
 - a. review, by the Faculty, of the reasons for withdrawal and of the student's academic record;
 - b. availability of a place, within quota, in the class to which the student seeks readmission.
 - c. The length of time the student interrupts studies leading to the BSc in MLS degree must not exceed two years in total.
10. Faculty Advisor: At the discretion of the Faculty, a Faculty advisor may be assigned to students having difficulty meeting promotion requirements. The method of assignment and the role of the Faculty advisor is determined by the Faculty.
11. First class standing: awarded to students with a GPA of not less than 3.5 while enrolled in a normal academic course load.
12. With Distinction: awarded to graduating students who have obtained an average GPA of not less than 3.5 during the final 60 credits of course work.

BSc Program in Radiation Therapy

The following apply to students in the Bachelor of Science in Radiation Therapy.

1. Grades
 - a. The means of assessing a student's progress and determining a student's grades may vary from one course to another, according to the nature of the course. Factors other than examination results may be used to a variable extent by instructors in determining grades. Students are informed at the beginning of each course how grades are to be determined.
 - b. Students must satisfactorily complete all components of all courses in order to receive passing grades in those courses, irrespective of their overall mark.
2. Promotion and Academic Performance
 - a. Academic Performance: Progression in the program is term by term. Accordingly, all students in a particular co-hort of the program will be registered in the same courses in each term (see Degree of BSc in Radiation Therapy.) Students are also held accountable to the University's Code of Student Behaviour and should be familiar with it. See Code of Student Behaviour.
For promotion and graduation, students need to adhere to and meet the requirements as stated in the program's Attendance Policy.
All students enrolled in the Radiation Therapy program are bound by and shall comply with the Professional Code of Ethics governing the profession and practice of Radiation Therapy. The Professional Code of Ethics refers to all relevant professional codes and practice standards for the practice of Radiation Therapy including:
 - i. Professional Standards for Students in the Faculty of Medicine and Dentistry.
 - ii. Student Pledge of Conduct
 - iii. CAMRT Member Code of Ethics and Professional Conduct
 - iv. ACMDTT Code of Ethics

Hereinafter, all references to students' academic performance will encompass the adherence to the Professional Codes of Ethics. Students are

also held accountable to the University's Code of Student Behaviour and should be familiar with it. See Code of Student Behaviour.

- b. **Academic Standing:** Final decisions regarding academic standing and promotion to the next year or graduation are made by the Faculty of Medicine and Dentistry Academic Standing and Promotion Committee based on recommendations of the Radiation Therapy Program Academic Standing Committee.

Final approval of academic standings is conducted at the end of each student's academic year, with the exception of students that fall into the categories of "Unsatisfactory Standing" and "Required to Withdraw". Students falling in either of these categories will be assessed at the end of the term in which they received either of these standings.

 - i. **First-Class Standing:** Awarded to a student who obtains a GPA of 3.5 or above and passes all courses while enrolled in the full normal academic/clinical course load after the completion of the academic year.
 - ii. **Satisfactory Standing:** For promotion, a student must pass all courses and obtain a minimum GPA of 2.7.
 - iii. **Conditional Standing:** Whenever a student receives a final grade of less than a B- in a Radiation Therapy Program course, the student's total academic and clinical performance in the program will be reviewed. This review will be considered in determining continuation in the program. To clear conditional standing, the student must achieve a minimum of Satisfactory Standing in all terms of the proceeding academic year.
 - iv. **Unsatisfactory Standing:** Students who fail any academic course in an academic year (Fall, Winter, Spring & Summer) will not be allowed to progress to the next term, will placed on probation and may be required to repeat the full program year in which the failure occurred.
 - v. **Required to Withdraw:** Any student who
 1. fails any clinical course;
 2. is unable to obtain a minimum GPA of 2.7 in any term
- c. **Probation:** Students who have either been required to withdraw and who have successfully appealed or have an unsatisfactory standing will be placed on probation.

To clear probation and qualify for promotion, the student must achieve Satisfactory Standing in all terms during the probationary year. Students who fail to do so will be required to withdraw. A course failure during the probationary period may result in a required to withdraw. Only one year of probation is allowed while registered in the BSc in Radiation Therapy program.
3. **Clinical Performance:**
 - a. A student who is absent more than two clinical days in any one clinical course may need to make up the lost time before being allowed to continue in the program.
 - b. The Program Director, or designate acting on behalf of the Program Director, may immediately deny assignment of a student to, withdraw a student from, or vary terms, conditions or site of a practicum/clinical placement if the Program Director or designate has reasonable grounds to believe that this is necessary in order to protect the public interest. (See Practicum Intervention Policy).
4. **Voluntary Withdrawal:** A student wanting to temporarily withdraw registration from the Radiation Therapy Program is required to make written application to the Program Director of the Radiation Therapy Program, stating the reasons for withdrawal and the intended period of withdrawal. Each request will be considered on a case by case basis. Readmission to the Radiation Therapy Program following voluntary withdrawal will be assessed on a case by case basis. Readmission is not guaranteed due to quota. If the length of time the student interrupts their studies exceeds two years, the student will not be granted readmission into the Radiation Therapy Program.
5. **Faculty Advisor:** At the discretion of the Faculty, a Faculty advisor may be assigned to students having difficulty meeting promotion requirements. The method of assignment and the role of the Faculty advisor is determined by the Faculty.
6. **Reexamination:** See Reexaminations
 - a. Reexamination is not permitted in clinical courses.
 - b. The Radiation Therapy Program Academic Standings Committee must approve all reexaminations.
 - c. Students are advised that it is not possible to make a ruling regarding remediation or reexamination until all grades for a term are received and recorded.
 - d. If a reexamination is approved, satisfactory completion of remedial coursework may be required by the Radiation Therapy Program Academic Standing Committee and/or the Faculty Academic Standings and Promotion Committee before the student is permitted to take the reexamination.
 - e. The weight of reexamination is at least that of the final examination.
 - f. The reexamination mark (as in the case of a deferred mark) will replace the original final exam mark.
 - g. A student who does not take a reexamination within the time prescribed by the Faculty will not be allowed to continue in the program.
7. **Graduation:**
 - a. **Academic Performance for Graduation:** Students must achieve Satisfactory Academic Standing or First Class Standing in their final year of the program; successfully complete all program requirements; and present a graduation average of at least 2.7. The graduation average is a cumulative measure of a student's grade points obtained while registered in the program in all years and terms, including Spring/Summer. It is the quotient of (a) the total number of grade points earned by a student in courses credited to the degree and (b) the total weight of those courses.
 - b. The notation of "With Distinction" is awarded to a graduating student who has obtained an average GPA of 3.5 or higher and no failing grades over the entire program.
8. **Clinical Placement Policies and Requirements:** All students must comply with all Clinical Placement Policies and Requirements.
 - a. Clinical Placements will be facilitated at various cancer centres in Alberta that provide radiation therapy services. Students are responsible for their transportation to clinical placements and for the costs of travel, living and accommodations.
 - b. Students must purchase two lab coats and may wish to purchase uniforms for the clinical courses during the program.
 - c. Valid certification of CPR (Cardiopulmonary Resuscitation) at the Healthcare Provider Level required and must be maintained throughout the program. A CPR-Healthcare Provider certificate is valid for one year from the date of the course. Evidence of recertification in each subsequent year is required.
 - d. **Technical Standard:** Students whose skills and abilities change during their studies must declare this change to the program designate for clinical placements immediately. The program will attempt to provide reasonable accommodation, however the student may be required to withdraw from the program if this is not possible.
 - e. **Medical Testing and Immunization:** See University Infectious Diseases Regulation.
 - f. **N-95 Respirator Fit Testing:** Students are required to be fit tested for N 95 respirators. Check with the Program office for the procedures to obtain this fit testing. The associated costs are the responsibility of the student.
 - g. **Police Information Check:** Students must clear a Police Information Check requiring a Vulnerable Sector Check. Refer to Requirement for Police Information Checks.
 - h. The Program Director, or Designate acting on behalf of the Program Director, may immediately deny assignment of a student to, withdraw a student from, or vary terms, conditions or site of practicum/clinical placement if the Program Director, or Designate has reasonable grounds to believe that this is necessary in order to protect the Public Interest. (See Practicum Intervention Policy.)

Appeals and Grievances

Students may appeal academic standing decisions in the Faculty. There are informal ways to appeal as well as strict deadlines for submission of formal appeals. Students may obtain the Faculty's complete appeal regulations from the Office of the Dean, 2J2 Walter Mackenzie Health Sciences Centre. Under certain conditions, an unsuccessful appeal in the Faculty may be carried to the General Faculties Council Academic Appeals Committee. See Appeals and Grievances.

Students who have a grievance about a grade in an individual course taught in this Faculty should consult Appeals and Grievances, which describes the informal process for addressing concerns about grades. There is also a formal process in the Faculty for appealing a grade. This process, including deadlines for submission of an appeal, is set out in the Faculty's academic appeal regulations, available from the Office of the Dean, 2J2 Walter Mackenzie Health Sciences Centre.

Professional Standards Expectations for Students and Applicants in the Faculty of Medicine and Dentistry

The University Code of Student Behaviour describes a range of non-academic and academic offences deemed unacceptable and for which a student may be penalized. Refer to the Code of Student Behaviour and the Code of Applicant Behaviour. Amendments to the Codes occur throughout the year. The official version of the Codes, as amended from time to time is housed on the University Governance website at www.governance.ualberta.ca.

Please note: Medicine, Dentistry, Dental Hygiene, Medical Laboratory Science and Radiation Therapy are regulated health professions that are governed by the Health Professions Act in a manner that protects and serves the public interest. Students selected for admission to these programs will be expected to uphold specific ethical principles and values reflected in the professional code of ethics of their respective professional/licensing bodies. As such, student conduct during the admissions process, including (but not limited to) any and all communications and interactions with the Faculty before and during admission, are considered part of the admission process and may be taken into account during admission deliberations. Admission may be denied to applicants who communicate or act in a manner that may be considered inappropriate or unprofessional regardless of academic standing.

Also see Code of Applicant Behaviour.

Programs of Study

Protection for Persons in Care

Students should be aware that under the Protection for Persons in Care Act all students going to any clinical placement or rotation in Alberta are required to complete a Police Information Check (also known as a Criminal Record Check, Security Clearance Check, or Police Clearance), which must include a Vulnerable Sector Check. The clinical practice site will determine the criteria for acceptance/denial of a placement. Students are responsible for having a criminal record check completed upon receiving conditional admission to the Faculty.

Students who have concerns related to their ability to provide a clear Police Information Check should consult with the Faculty. The ultimate responsibility for ensuring that students meet the requirements of clinical agencies lies with the students. Other background checks may be required by a clinical agency, such as a child intervention record check. Students will be advised if any additional background checks are required by a clinical agency. See Requirement for Police Information Checks for more information on the general requirements concerning Police Information Checks and the fees associated with them.

Should a student subsequently be charged or convicted while enrolled in the program, the student must advise the Faculty. Students should be aware that having an unclear Police Information Check can prevent them from securing a clinical placement and hence, preclude them from graduating from the program and/or becoming licensed to practice.

MD with Special Training in Research

This program is for students looking for in-depth exposure to research during medical school. (Each candidate must spend a minimum of 24 weeks [two consecutive summers] of active involvement in scientific research and present oral and written reports to fulfil the requirements for the MD with Special Training in Research.) The program is monitored by the MD Research Committee, and each student is supervised by a staff member. Successful students are recognized on their transcripts and medical diplomas. For information, contact the Office of Research, Faculty of Medicine and Dentistry, 2-13 Heritage Medical Research Centre. Successful students receive recognition on their transcripts and degrees through the notation "with Special Training in Research."

Honors in Research Program in Medical Laboratory Science

This program is for students looking for in-depth exposure to research during Medical Laboratory Science education. Students wanting to pursue this program will have a GPA of at least 3.5 in courses taken in the first and second phases of the program and will have completed STAT 141, STAT 151, STAT 337, or equivalent. Students must spend one summer (16 weeks) and complete a ★6 research course offered by the Division. All students are supervised by a staff member who has shown commitment to the project and to the financial support

of the student for the summer months. The program is monitored by the MD Research Committee. Successful students receive recognition on their transcripts and degrees through the notation "With Honors in Research." For information, contact the Director, Division of Medical Laboratory Science, 5-411 Edmonton Clinic Health Academy.

Graduate Studies

The Faculty of Medicine and Dentistry offers Master's, PhD and MD/PhD degrees. Details on these programs can be found in the Graduate Programs section of the Calendar, listed by department.

Continuous Professional Learning

Continuous Professional Learning provides practicing physicians with the opportunity to remain up-to-date in knowledge, skills and attitudes. The division currently offers the Video-conference program, the Urban Program and PCN customized programs for urban physicians. The division is also involved in the Physician Learning Program, a collaboration project with the University of Calgary. The Physician Learning Program is an evidence-based, practice specific learning tool. Using provincial data sources to capture both perceived and unperceived learning needs, physicians can become informed about their individual needs and receive guidance and assistance in the pursuit of educational activities in light of the evidence. The Division enjoys the support of the College of Family Physicians of Alberta, Alberta Health, and the Alberta Medical Association (<http://albertapl.ca>)

Inquiries about these programs should be directed to the Associate Dean, Continuous Professional Learning, 2-590 Edmonton Clinic Health Academy, University of Alberta, Edmonton, AB T6G 1C9.

Continuing Dentistry Education

The Department of Dentistry sponsors a wide variety of continuing dental education opportunities throughout the year through the Continuing Dental Education program. Courses are offered both on campus and occasionally at other sites within the province. Annually, thousands of dentists, dental hygienists, dental assistants and others participate in the many lecture, hands-on clinical and laboratory-type courses that are offered. Local and visiting speakers of national and international reputation provide continuing education of a high quality.

Postgraduate Medical Education

Postgraduate medical training is a component of eligibility for licensure in Canada. Programs are operated by the University of Alberta according to guidelines established by the College of Family Physicians of Canada and by the Royal College of Physicians and Surgeons of Canada.

Postgraduate training accredited by the College of Family Physicians of Canada is available under the auspices of the Department of Family Medicine. In addition to the standard two-year program required for certification in Family Medicine, a Certificate of Added Competency (CAC) recognizing enhanced skills in the area of Emergency Medicine, Care of the Elderly, Enhanced Surgical Skills, Family Practice Anesthesia, Palliative Care, Occupational Medicine and Sport and Exercise Medicine are also available.

Specialty programs accredited by the Royal College of Physicians and Surgeons of Canada include the following:

Primary Certification Programs

- Anesthesiology
- Anatomical Pathology
- Cardiac Surgery
- Dermatology
- Diagnostic Radiology
- Emergency Medicine
- General Pathology
- General Surgery
- Hematological Pathology
- Internal Medicine
- Medical Microbiology
- Neurology (Adult and Pediatric)
- Neurosurgery
- Nuclear Medicine
- Obstetrics and Gynecology
- Occupational Medicine
- Ophthalmology
- Orthopedic Surgery

- Otolaryngology Head and Neck Surgery
- Pediatrics
- Physical Medicine and Rehabilitation
- Plastic Surgery
- Psychiatry
- Public Health and Preventive Medicine
- Radiation Oncology
- Urology

Subspecialty Certification

- Cardiology (Adult and Pediatric)
- Child and Adolescent Psychiatry
- Critical Care Medicine
- Developmental Pediatrics
- Endocrinology (Adult and Pediatric)
- Forensic Pathology
- Forensic Psychiatry
- Gastroenterology (Adult and Pediatric)
- Geriatric Medicine
- Geriatric Psychiatry
- Hematology
- Infectious Diseases (Adult and Pediatric)
- Medical Oncology
- Neonatal Perinatal Medicine
- Nephrology (Adult and Paediatric)
- Occupational Medicine
- Pediatric Emergency Medicine
- Pediatric Hematology/Oncology
- Pediatric Radiology
- Respiriology (Adult and Pediatric)
- Rheumatology

Special Programs

- Clinician Investigator Program

Special programs accredited by Professional sub-specialty organizations include the following:

- Clinical Biochemistry – accredited by Canadian Academy of Clinical Biochemistry
- Clinical Microbiology – accredited by the Canadian College of Microbiologists
- Histocompatibility and Immunogenetics – accredited by the American Society of Histocompatibility and Immunogenetics
- Molecular Genetics - accredited by the Canadian College of Medical Geneticists
- Cytogenetics - accredited by the Canadian College of Medical Geneticists
- Biochemical Genetics - accredited by the Canadian College of Medical Geneticists

Inquiries regarding these programs should be directed to the Associate Dean, Postgraduate Medical Education, 2-76 Zeidler Ledcor Centre, University of Alberta, Edmonton, AB T6G 2E1.

All postgraduate medical trainees are registered as graduate students in the Division of Postgraduate Medical Education of the Faculty of Medicine and Dentistry and pay a program registration fee.

Application for entry-level postgraduate positions in all Primary Certification Programs is made through the Canadian Resident Matching Service (CaRMS) in the final year of medical school. Further information is available from the Canadian Resident Matching Service, 2283 St Laurent Blvd Ste 110, Ottawa, ON K1G 3H7. Certificate of Special Competence program require prior training in a Primary Certification Program. All international medical graduates must pass the Evaluating Examination and Part I of the Qualifying Examination of the Medical Council of Canada. Information is available from the Medical Council of Canada, Box 8234, Station T, Ottawa, ON K1G 3H7.

The requirements for a portable license valid in all Canadian provinces except Quebec are as follows:

1. An MD degree.
2. The Licentiate of the Medical Council of Canada (LMCC), obtained after successfully passing Parts I and II of the Medical Council of Canada Qualifying Examination (MCCQE). Part I is normally written in May of the final year of medical school. Part II is normally written after completing 12 months of postgraduate clinical training.
3. Certification from either the College of Family Physicians of Canada or the Royal College of Physicians and Surgeons of Canada.

Further information regarding licensure is available from the College of Physicians and Surgeons of Alberta, #2700 Telus Plaza, 10020-100 Street NW, Edmonton, AB T5J 0N3.

The requirements for entry of Special Programs are program specific and is available from the programs directly. Application for positions in Special Programs is made directly to the program.

Note: For classification purposes, postgraduate medical students are considered graduate students. As such, they have the option of paying fees to the Graduate Students' Association.

Postgraduate Dental Education

General Practice Residency

The General Practice Residency is designed to enhance the diagnostic, treatment planning and clinical skills of general dentists in management of patients with complex systemic health issues, as well as key specialty disciplines so that they can successfully deliver a broader range of oral health care services.

This general practice residency program is one calendar year in length, July 1 through June 30. Three recent DDS graduates are accepted each year, generally graduates of accredited Canadian dentistry programs.

Under the direction of dental specialists and general practitioners, residents will provide care to patients who frequently are not seen in community dental practices for reasons of systemic disease or disability. Patients are treated at University of Alberta Hospital during scheduled day-time hours, during a walk-in emergency clinic evenings and week-ends, and occasionally on-call. Residents also provide patient care at the University of Alberta School of Dentistry in the Edmonton Clinics and other affiliated hospitals. Through seminar sessions and clinical teaching, the areas of endodontics, periodontics, prosthodontics, oral surgery, dental implants, pediatric dentistry, hospital dentistry, conscious sedation, advanced oral diagnosis and treatment planning, oral medicine, orofacial pain and advanced general dentistry are taught.

An important additional component of this residency program will include health care rotations by each resident to an underserved area of this province.

Combined Program for the Degrees of MD and PhD

The MD/PhD combined program is intended for exceptional students who are seriously committed to a career in medical research. Highly qualified students wishing to pursue a career of teaching and research in either basic medical science or in clinical medicine may enrol in a program of approximately six years' duration leading to the acquisition of both an MD and a PhD degree from the University of Alberta. To be eligible for the combined program, students must already have been admitted to the MD program. Students are admitted to the combined program on the recommendation of the MD/PhD Committee.

Students entering the MD program from a preprofessional medical or a bachelor's program, and who are interested in applying to the MD/PhD program, should do so in their first year of medical school. For these students, admission into the program begins after completion of the second year of the MD program. Alternately, students who are transferring from a University of Alberta graduate program to the MD program are eligible to enrol immediately in the combined program. The most common route is for students to complete the first two years of the MD program, apply for and be admitted into the PhD program, and when the PhD is completed, return to the final two years of the MD program. Students pursuing the combined program will be assessed fees for both the MD and the PhD programs.

Students interested in such a program may obtain further information from the Office of Research, Faculty of Medicine and Dentistry, 2-13 Heritage Medical Research Centre, University of Alberta, (780) 492-9721, janis.davis@ualberta.ca.

Courses

Faculty of Medicine and Dentistry courses are listed in Course Listings, under the following subject headings:

- Anaesthesiology and Pain Medicine (ANAES)
- Anatomy (ANAT)
- Biochemistry (BIOCH)
- Biomedical Engineering (BME)
- Cell Biology (CELL)
- Dentistry (DDS)

- Dentistry (DENT)
- Dentistry/Medicine (DMED)
- Dental Hygiene (D HYG)
- Family Medicine (F MED)
- Laboratory Medicine Pathology (LABMP)
- Medical Genetics (MDGEN)
- Medical Laboratory Science (MLSCI)
- Medical Microbiology and Immunology (MMI)
- Medicine (MED)
- Medicine, Interdepartmental (INT D and MED)
- Neuroscience (NEURO)
- Obstetrics and Gynaecology (OB GY)
- Oncology (ONCOL)
- Ophthalmology (OPHTH)
- Oral Biology (OBIOL)
- Paediatrics (PAED)
- Pharmacology (PMCOL)
- Physics/Biomedical Engineering (PH BE)
- Physiology (PHYSL)
- Postgraduate Medical Education (PGME)
- Psychiatry (PSYCI)
- Public Health Sciences (PHS)
- Radiology and Diagnostic Imaging (RADDI)
- Surgery (SURG)

Programs

Bachelor of Science (Dental Hygiene Specialization)

General Information

The Department of Dentistry offers a Bachelor of Science (Dental Hygiene). The Dental Hygiene Program enables students to acquire knowledge and develop understanding and abilities so that they may assume varied responsibilities in clinical practice, health promotion, teaching, community health care, and research.

The dental hygienist is an integral member of the health care team and strives to improve oral health by providing education, preventive services and therapeutic treatment to the public. The dental hygienist with a baccalaureate degree is a leader in developing, initiating and evaluating oral health interventions in diverse patient populations that prevent and control oral disease and promote oral wellness. The ultimate goal of a baccalaureate program is to educate professionals who contribute significantly to the improvement of oral health.

The dental hygienist with a baccalaureate degree is a leader in developing initiating oral health interventions that prevent and control oral disease and promote oral wellness. The ultimate goal of a baccalaureate program is to educate professionals who contribute significantly to the improvement of oral health.

Bachelor of Science (Dental Hygiene) graduates are prepared to work in a large number of settings including, but not limited to private dental practices, independent dental hygiene practice, research, education, industry, health care institutions or health promotion agencies. Graduates are prepared for intra and inter professional collaborative practice. This degree prepares graduates to pursue post baccalaureate or graduate level programs.

The Dental Hygiene curriculum includes courses from biomedical, behavioural and clinical sciences. In each year of the program, students participate in external practicum experiences within the city and surrounding districts in various community settings, such as hospitals, schools, long-term care facilities, and community agencies/clinics. An experience in an external rural clinic is required.

The Dental Hygiene Program is approved by the Commission on Dental Accreditation Education of Canada. Successful students are eligible to complete the National Dental Hygiene Certification Examination (Canadian) and the National Board Dental Hygiene Examinations of the American Dental Association.

Further details may be obtained from the Director of the Dental Hygiene Program, Faculty of Medicine and Dentistry.

Orientation

It is mandatory that each student, after acceptance into the program, attend Orientation. This is scheduled immediately before the beginning of the first term of each year.

Course Requirements

The numbers following a course name indicate either the number of weeks assigned to the course or the number of hours spent in lectures, clinics and laboratories.

Bachelor of Science (Dental Hygiene)

Bachelor of Science (Dental Hygiene) (Dental Hygiene Diploma plus)

Students completing the Dental Hygiene Diploma program in 2018 who enrol in the Bachelor of Science degree will complete Year 4 courses.

Year 4

- D HYG 413 - Advanced Practicum
- D HYG 414 - Addictions Awareness and Interventions for Tobacco Cessation
- D HYG 417 - Practice Management : Small Business and Entrepreneurship
- D HYG 418 - Long Term Care and Dental Hygiene Services
- D HYG 422 - Health Information and Policy
- D HYG 431 - Topics in Dental Hygiene
- D HYG 440 - Advocacy for Change in Healthcare
- D HYG 468 - Introduction to Research Methods and Critical Appraisal
- Two Options ★6 78-0-0

Note: (a minimum of one at the 300- or 400-level with the approval of Program Director) A maximum of ★3 from PAC courses is permitted.

Bachelor of Science (Dental Hygiene) (one preprofessional year plus)

Year 2

- BIOCH 200 - Introductory Biochemistry
- D HYG 240 - Oral Radiology I
- D HYG 250 - Human Anatomy
- D HYG 251 - Anatomical Structures for Dental Hygiene Practice
- D HYG 255 - Oral Health Sciences I
- D HYG 256 - Oral Health Sciences II
- D HYG 260 - Dental Hygiene Theory and Practice I
- D HYG 270 - Behavioural Sciences I
- D HYG 299 - Dental Hygiene Collaborative Practice I
- MMI 133 - Medical Microbiology for Health Care Professionals
- OBIOL 202 - Oral Biology I
- PHYSL 210 - Human Physiology

Year 3

- D HYG 329 - External Rotation
- D HYG 340 - Oral Radiology II
- D HYG 355 - Oral Health Sciences III
- D HYG 356 - Oral Health Sciences IV
- D HYG 360 - Dental Hygiene Theory and Practice II
- D HYG 370 - Behavioural Sciences II
- D HYG 399 - Dental Hygiene Collaborative Practice II
- OBIOL 302 - Oral Biology II
- OBIOL 305 - Pathology
- PMCOL 300 - Introduction to Pharmacology

Year 4

- D HYG 455 - Oral Health Sciences V
- D HYG 456 - Oral Health Sciences VI
- D HYG 460 - Dental Hygiene Theory and Practice III
- D HYG 470 - Behavioural Sciences III
- D HYG 480 - Behavioural Sciences IV
- D HYG 499 - Dental Hygiene Collaborative Practice III
- One Option ★3

Bachelor of Science (Dental Hygiene) Post Diploma Degree Completion Program

A Bachelor of Science (Dental Hygiene) Post Diploma Degree Completion program will prepare diploma dental hygiene graduates to participate more fully and productively in a health care system that emphasizes prevention, primary care, accountability, quality and cost effectiveness. The dental hygienist with a baccalaureate degree is a leader in developing and initiating oral health interventions that prevent and control oral disease and promote oral wellness, and in facilitating change itself. The ultimate goal of a baccalaureate program is to prepare students to contribute significantly to the improvement of oral health goals in current and future health care delivery systems by preparing well-qualified professionals with knowledge, skills, and awareness at the baccalaureate degree level.

The degree completion program will provide educational opportunities accessible to all qualified candidates tailored to the experienced dental hygienist, the adult learner and the distance learner.

Program A

Bachelor of Science (Dental Hygiene) Post Diploma Degree Completion Program: University of Alberta, Dental Hygiene Diploma Graduates of 1998-2001.

This program is intended for students who graduated from the University of Alberta Dental Hygiene Program between 1998-2001. Dental Hygiene graduates of 1998-2001 have completed the extended diploma curriculum. The degree completion program consists of the following courses:

- D HYG 417 - Practice Management : Small Business and Entrepreneurship
- D HYG 418 - Long Term Care and Dental Hygiene Services
- D HYG 431 - Topics in Dental Hygiene
- D HYG 440 - Advocacy for Change in Healthcare
- Two Options ★6 78-0-0

Note: (at the 300- or 400-level with the approval of Program Director) A maximum of ★3 from PAC courses is permitted.

Program B

Bachelor of Science (Dental Hygiene) Post Diploma Degree Completion Program: University of Alberta, Dental Hygiene Diploma Graduates (prior to 1998 as well as 2008 and forward) and dental hygiene graduates from other programs.

This program is intended for University of Alberta graduates prior to 1998 as well as 2008 and forward and diploma dental hygiene graduates from accredited dental hygiene programs in Canada and internationally.

The degree completion program consists of the following courses:

- D HYG 417 - Practice Management : Small Business and Entrepreneurship
- D HYG 418 - Long Term Care and Dental Hygiene Services
- D HYG 422 - Health Information and Policy
- D HYG 431 - Topics in Dental Hygiene
- D HYG 440 - Advocacy for Change in Healthcare
- D HYG 468 - Introduction to Research Methods and Critical Appraisal (or equivalent health research course)
- Four options ★12 156-0-0

Note: (with the approval of the Program Director, two at the 300- or 400-level) A maximum of ★3 from PAC courses is permitted.

Program C

Bachelor of Science (Dental Hygiene) Post Diploma Degree Completion Program: University of Alberta, Dental Hygiene Diploma Graduates (Year 2002 - 2007).

Graduates of the University of Alberta Dental Hygiene Program of 2002-2007 will be required to complete the following courses:

- D HYG 417 - Practice Management : Small Business and Entrepreneurship
- D HYG 418 - Long Term Care and Dental Hygiene Services
- D HYG 422 - Health Information and Policy
- D HYG 431 - Topics in Dental Hygiene
- D HYG 440 - Advocacy for Change in Healthcare
- D HYG 468 - Introduction to Research Methods and Critical Appraisal (or equivalent health research course)
- SOC 210 - Introduction to Social Statistics (or equivalent statistics course)
- Three options ★9 117-0-0

Note: (with approval of Program Director, two at the 300- or 400-level) A maximum of ★3 from PAC courses is permitted..

BSc in Medical Laboratory Science Post-Professional Certification degree completion

General Information

The Faculty of Medicine and Dentistry offers a program for degree completion for Canadian Society for Medical Laboratory Science general certificate holders. Because of the changing nature of the field, there is a practise requirement that must be met (see Admission).

The program requires ★75 additional study post-diploma and ★60 must be completed through the University of Alberta.

Program of Courses

Year 1

- BIOL 107 - Introduction to Cell Biology
- CHEM 101 - Introductory University Chemistry I
- CHEM 102 - Introductory University Chemistry II
-
- CHEM 164 - Organic Chemistry I **OR**
- CHEM 261 - Organic Chemistry I
-
- CHEM 263 - Organic Chemistry II
- MLSCI 244 - Pathogenic Microbiology I
- MLSCI 245 - Pathogenic Microbiology II
- MLSCI 320 - Analysis and Communication of Biomedical Information
-
- STAT 141 - Introduction to Statistics **OR**
- STAT 151 - Introduction to Applied Statistics I **OR**
- STAT 337 - Biostatistics
-
- Approved MLS options (★6)

Spring/Summer

- BIOCH 200 - Introductory Biochemistry
- BIOCH 330 - Nucleic Acids and Molecular Biology
- Arts options (★6)

Year 2

- MLSCI 410 - Introduction to Clinical Laboratory Management
- MLSCI 480 - Molecular Genetic Approaches to the Study and Diagnosis of Disease
- INT D 410 - Interprofessional Health Team Development
- Arts option (★3)

Project course

- MLSCI 491 - Research Project
- **OR**
- MLSCI 409 - Research Project **AND**
- Science option (★3)

★12 chosen from

- MLSCI 420 - Emerging Trends in Medical Laboratory Science
- MLSCI 430 - Advanced Hematology
- MLSCI 460 - Clinical Biochemistry
- MLSCI 466 - Applied Toxicology
- MLSCI 475 - Clinical Immunology
- MLSCI 481 - Techniques in Molecular Biology
- MMI 405 - Advanced Microbial Pathogenesis
- MMI 415 - Advanced Viral Pathogenesis
- MMI 426 - Medical Parasitology

DDS Advanced Placement Program

General Information

The Department of Dentistry offers an advanced placement DDS degree to a selected number of students who already possess a dental degree from a dental program recognized by the World Health Organization. After admission into the program, these students will enter the third year of the program and will be fully integrated with the third year students. The purpose of the program is to enable these students to write the National Dental Examining Board examinations for certification to practice dentistry in Canada.

Curriculum for Advanced Placement Students

Prior to entry into the program, students will be required to participate in and complete DDS 829 - Introduction to DDS Advanced Placement. Upon completion of DDS 829, students will follow the third year DDS curriculum, including assignments to treat patients in the University's Department of Dentistry clinics under the supervision of the clinical faculty.

The curriculum for second-year Advanced Placement students will follow the fourth year DDS curriculum which will include assignments to the Satellite Dental Clinic in northern Alberta and external hospitals. Thus students are able to relate their field of health service to the science and art of preventing, treating, and alleviating disease.

Technical Standards

The School of Dentistry Technical Standards Policy defines the necessary knowledge, skills, professional behaviors, and attitudes expected of students. Please see the School of Dentistry website for further information.

Course Requirements

Year 1

- DDS 541 - Dental Pharmacology
- DDS 545 - Clinical Practice I
- DDS 547 - Geriatrics
- DDS 555 - Practice Management

Year 2

- DDS 565 - Clinical Practice III

DDS Degree

General Information

Curriculum

The Department of Dentistry offers a four-year (11-term) program leading to the degree of Doctor of Dental Surgery (DDS), following satisfactory completion (after senior matriculation) of at least two preprofessional years of university education. The preprofessional years provide the necessary background in inorganic chemistry, organic chemistry, biology, physics, biochemistry, statistics, the humanities, and social sciences.

The first and second years of the dental program are combined with the MD program. The curriculum is taught in blocks and covers areas as Infection, Immunity and Inflammation, Endocrine System, Cardiovascular, Pulmonary and Renal Systems, Gastroenterology and Nutrition, Musculoskeletal System, Neurosciences, Oncology. These subjects are augmented by dental courses offered by the respective divisions. The lectures, laboratories, seminars, and clinics offered by the Department of Dentistry relate and integrate these fundamental disciplines with the knowledge, skills, judgement, and performance required of dental practitioners.

Senior students are assigned to the Dental Clinic and the Department of Dentistry at the University of Alberta Hospital. An experience in the Satellite Dental Clinic and the external hospitals is required in the final year of the program. Thus students are able to relate their field of health service to the science and art of preventing, treating, and alleviating disease.

See Graduate Programs for information on programs of graduate study offered by the Department.

Technical Standards

The School of Dentistry Technical Standards Policy defines the necessary knowledge, skills, professional behaviors, and attitudes expected of students. Please see the School of Dentistry website for further information.

Library

The Medical Sciences reading room of the John W Scott Health Sciences Library contains a comprehensive selection of reference materials and textbooks on dentistry and related subjects. In addition, it contains most current dental journals in English and other languages, and the Index to Dental Periodical Literature, an index to all dental periodicals since 1839.

Orientation

It is mandatory that each student, after acceptance into the program, attend Orientation. This is scheduled immediately before the beginning of the first term of each year.

Course Requirements

Year 1

- DDS 509 - Pre-Clinical Practice of Dentistry I
- DDS 510 - Patient-Centred Care
- DDS 514 - Anatomy (Dental)
- DDS 518 - Oral Biology I
- DMED 511 - Foundations of Medicine and Dentistry
- DMED 513 - Endocrine System
- DMED 515 - Cardiovascular System
- DMED 516 - Pulmonary System
- DMED 517 - Renal System

Year 2

- DDS 506 - Gastroenterology and Nutrition
- DDS 507 - Neurosciences and Organs of Special Senses
- DDS 508 - Oncology
- DDS 517 - Psychiatry
- DDS 520 - Patient-Centred Care
- DDS 523 - Musculoskeletal System
- DDS 529 - Pre-Clinical Practice of Dentistry II
- DDS 532 - Oral Biology II
- DDS 533 - Oral Pathology

Year 3

- DDS 541 - Dental Pharmacology
- DDS 545 - Clinical Practice I
- DDS 547 - Geriatrics
- DDS 555 - Practice Management

Year 4

- DDS 565 - Clinical Practice II

Degree of Bachelor of Medical Science

1. The degree of Bachelor of Medical Science may be awarded to students in the DDS or MD program at the end of the second year of that program who have fulfilled the following requirements at this or another university:
2. Two or more years of social sciences, general sciences, physical sciences or engineering, with successful completion of undergraduate course work totaling no less than ★60 with one academic year of ★30.
3. Successful completion of Year 1 and 2 of the DDS or MD program.

Provisions

1. None of the courses mentioned above have been used for credit toward another degree.
2. The final two years must be taken at the University of Alberta.
3. All courses have been successfully completed.

Degree of BSc in Medical Laboratory Science

General Information

The Faculty of Medicine and Dentistry offers an undergraduate degree program in Medical Laboratory Science. The program is designed to develop competent, critical thinking, reflective medical laboratory technologists who effectively contribute to the care of patients and who are committed to excellence in professional practice.

This degree also prepares graduates to pursue post-baccalaureate or graduate programs that may lead to advanced practice opportunities.

The preprofessional year and Phases I and III of the program are normal university years. In Phase I foundational concepts are taught. Phase II, consists of clinical hospital laboratory training under the direct supervision of the Faculty of Medicine and Dentistry. In Phase III students explore advanced concepts in laboratory medicine. If successful in all competency based objectives, students may write certification examinations with the Canadian Society for Medical Laboratory Science, general certification.

Note: Because individuals working in hospital laboratories run some risk of infection from materials they handle, all students in the Medical Laboratory Science program must take a series of immunizations approved by the Office of the Dean of Medicine and Dentistry and the Health Sciences Council before beginning Phase I. See University Infectious Diseases Regulation .

Orientation

It is mandatory that each student, after acceptance into the program, attend Orientation. This is scheduled immediately before the beginning of the first term.

Program of Courses

Phase I

- MLSCI 200 - Transition to Clinical Practice
- MLSCI 230 - Hematology
- MLSCI 235 - Hemostasis
- MLSCI 242 - Pathogenic Microbiology I
- MLSCI 243 - Pathogenic Microbiology II
- MLSCI 250 - Human Histology and Histotechnology
- MLSCI 262 - Clinical Biochemistry
- MLSCI 263 - Clinical Biochemistry
- MLSCI 270 - Transfusion Science
- PHYSL (★6)
- Arts Option (★3)

Phase II - Clinical Rotation (See Note 1)

- BIOCH 200 - Introductory Biochemistry
- BIOCH 330 - Nucleic Acids and Molecular Biology
- MLSCI 320 - Analysis and Communication of Biomedical Information
- MLSCI 330 - Clinical Hematology
- MLSCI 340 - Clinical Microbiology
- MLSCI 350 - Histopathology
- MLSCI 360 - Clinical Biochemistry
- MLSCI 370 - Transfusion Science

Phase III (See Note 2)

- MLSCI 480 - Molecular Genetic Approaches to the Study and Diagnosis of Disease
- MLSCI 410 - Introduction to Clinical Laboratory Management
- INT D 410 - Interprofessional Health Team Development
- Arts option (★3)

★12 chosen from

- MLSCI 420 - Emerging Trends in Medical Laboratory Science
- MLSCI 430 - Advanced Hematology
- MLSCI 460 - Clinical Biochemistry
- MLSCI 466 - Applied Toxicology
- MLSCI 475 - Clinical Immunology
- MLSCI 481 - Techniques in Molecular Biology
- MMI 405 - Advanced Microbial Pathogenicity

- MMI 415 - Advanced Viral Pathogenesis
- MMI 426 - Medical Parasitology

Project course:

- MLSCI 491 - Research Project
- **OR**
- MLSCI 409 - Research Project **AND**
- Science option (★3)

Notes

1. During the Phase II clinical rotation, students are assigned to hospital laboratories approved for this purpose by the Council of the Faculty of Medicine and Dentistry.
2. ★3 in a Science option are required if a ★3 project is completed. ★0 in a science option are required if a ★6 project is attempted.

Degree of BSc in Radiation Therapy

General Information

The Department of Oncology in the Faculty of Medicine and Dentistry at the University of Alberta offers an undergraduate degree in Radiation Therapy. The program is designed to develop a competent, critical thinking, reflective radiation therapist who effectively contributes to the care of the patient with cancer and who is committed to excellence in professional practice.

Program design support learners' progression from knowledge through skill acquisition to synthesis and competency. It also enables the development towards achievement of the described professional qualities of a radiation therapist by thinking, communicating, and acting in increasingly sophisticated ways. This degree prepares graduates to pursue post-baccalaureate or graduate programs that may lead to advanced practice opportunities.

In addition, students will learn the foundations of research and engage in group research projects during the clinical component of the fourth year of the degree program. For admission information See Bachelor of Science in Radiation Therapy.

Orientation

It is mandatory that each student, after acceptance into the program, attend the Faculty of Medicine and Dentistry Orientation. This is scheduled immediately before the beginning of the first term.

Program of Courses

Year 1 (Preprofessional)

Program Requirements ★30

- BIOL 107 - Introduction to Cell Biology
- CHEM 101 - Introductory University Chemistry I
- CHEM 261 - Organic Chemistry I
- 100-Level (★3) ENGL
-
- MATH 113 - Elementary Calculus I **OR**
- MATH 114 - Elementary Calculus I **OR**
- MATH 134 - Calculus for the Life Sciences I
-
- PHYS 124 - Particles and Waves
- PHYS 126 - Fluids, Fields, and Radiation
- STAT 151 - Introduction to Applied Statistics I

★6 from

- 100-Level PSYCO **AND/OR** 100-Level SOC

For Non-University of Alberta Learners:

- ★3 Statistics
- ★3 Cell Biology
- ★3 English
- ★3 General Chemistry
- ★3 Organic Chemistry
- ★3 Calculus Math
- ★6 Physics
- ★6 Psychology/Sociology

Note: Preprofessional courses can be completed at any Canadian postsecondary institution, provided they are of rigor and can be given equivalent credit for the courses noted above. It is the learner's responsibility to check that any course taken outside the University of Alberta qualifies for equivalent preprofessional credit.

For University of Alberta Learners:

Year 2

- ONCOL 253 - Cancer Biology
- ONCOL 233 - Concepts and Applications in Medical Physics
- CELL 201 - Introduction to Molecular Cell Biology
- RADTH 205 - Patient Care Principles and Practices
- PHYSL 210 - Human Physiology
- ONCOL 243 - Radiation Protection and Safety
- ANAT 200 - Human Morphology
- ONCOL 234 - Therapeutic and Imaging Equipment in Radiation Therapy
- ONCOL 254 - Principles of Oncology
- ONCOL 255 - Introduction to Oncology
- RADTH 260 - Radiation Therapy Clinical Practicum I

Year 3

- ONCOL 335 - Radiobiology
- RADTH 301 - Principles and Practices in Radiation Therapy
- ONCOL 355 - Treatment Planning and Dosimetry I
- ANAT 305 - Cross-Sectional Anatomy
- RADTH 328 - Health Care Advocacy and Policy
- ONCOL 309 - Clinical Oncology I
- ONCOL 310 - Clinical Oncology II
- ONCOL 356 - Treatment Planning and Dosimetry II
- ONCOL 306 - Imaging Principles/Pathology
- INT D 410 - Interprofessional Health Team Development
- RADTH 360 - Clinical Simulation and Reasoning
- RADTH 401 - Radiation Therapy Research Methodology

Year 4

- RADTH 460 - Radiation Therapy Clinical Practicum II
- RADTH 461 - Radiation Therapy Clinical Practicum III

- DMED 517 - Renal System
- INT D 410 - Interprofessional Health Team Development (0-32.5-0)
- MED 516 - Physicianship I (16 hours/week)
- MED 517 - First-Year Elective

Year 2

- MED 520 - Pre-Clinical Exam
- MED 521 - Gastroenterology and Nutrition
- MED 522 - Reproductive Medicine and Urology
- MED 523 (★6) (7 weeks)
- MED 524 - Neurosciences and Organs of Special Senses
- MED 525 - Oncology
- MED 526 - Physicianship II (12 hours/week)
- MED 527 - Second Year Elective
- MED 529 - Psychiatry

Year 3

- F MED 546 - Family Medicine Student Internship
- MED 531 - Physicianship III /Transitions
- MED 543 - Integrated Community Clerkship
- MED 546 - Medicine Student Internship
- MED 547 - Clinical Electives
- OB GY 546 - Obstetrics and Gynaecology Student Internship
- PAED 546 - Paediatrics Student Internship
- PSYCI 546 - Psychiatry Student Internship
- SURG 546 - General Surgery

Year 4

- MED 540 - Exams (9 hours)
- MED 541 - Physicianship IV /Transitions
- MED 555 - Geriatrics Student Internship
- MED 557 - Clinical Electives
- MED 558 - Emergency Medicine Students Internship
- MED 556 - Medicine Student Internship
- SURG 556 - Specialty Surgery

Certificate in Biomedical Research

The Certificate in Biomedical Research is offered by the Departments of Biochemistry, Cell Biology, Pharmacology, and Physiology. Students who pursue the certificate will be engaged in world-class biomedical research programs and will acquire a broad range of research skills through substantive laboratory course and independent research project experiences.

Students wishing to pursue the Certificate in Biomedical Research must discuss their program of study both with their own program advisor and, where different, a program advisor in one of the Departments of Biochemistry, Cell Biology, Pharmacology or Physiology. Completion of the certificate must be recorded with the Biomedical Sciences Undergraduate Education Committee at least one week prior to the application deadline for convocation (see Academic Schedule). Students wishing to receive the Certificate in Biomedical Research must also apply through Undergraduate Student Services in their home Faculty by the application deadline for convocation (see Academic Schedule).

Students may pursue the Certificate in Biomedical Research by fulfilling the existing requirements for their program and by completing at least ★18 in courses as follows:

- Presentation at a research day or conference either on or off campus.

A minimum of ★3 in senior laboratory skills courses selected from:

(See Note 2).

- BIOCH 398 - Research Project (See Note 3)
- BIOCH 401 - Biochemistry Laboratory
- BIOL 391 - Techniques in Molecular Biology and Bioinformatics
- BIOL 398 - Research Project
- CELL 398 - Research Project (See Note 3)
- IMIN 372 - Research Techniques in Immunology
- MLSCI 481 - Techniques in Molecular Biology
- MMI 352 - Microbial Pathogenesis
- MMI 391 - Current Methods in Molecular Biology
- MMI 490 - Advanced Techniques in Microbiology and Immunology
- PHYSL 310 - Experimental Techniques in Physiology
- PMCOL 301 - Introduction to Research in Pharmacology
- PMCOL 337 - Experimental Procedures in Pharmacology

MD Degree

General Information

The program leading to the MD degree is conducted over four years. The curriculum committee is responsible for the overall design, management and evaluation of a coherent and coordinated curriculum.

Years 1 and 2 are the pre-clerkship years in which the material is presented in a series of system-based and longitudinal courses. Each course presents the material in a reasoned progression from basic information to clinical application building on foundational knowledge and skills in step-wise fashion, providing progressively increasing clinical exposure.

Years 3 and 4 are the clerkship years, commonly called the clinical clerkship. During the clerkship, each student must maintain a record of the number and variety of the student's clinical experiences, in order to ensure that the objectives of the clerkship have been met. Year 3 includes clinical rotations or an integrated community based clerkship, a longitudinal Physicianship III/Transitions course, as well as opportunities for elective courses. Year 4 is a senior clinical year, which includes clinical rotations, electives, and a longitudinal Physicianship IV/Transitions course.

Orientation

It is mandatory that each student, after acceptance into the program, attend Orientation. This is scheduled immediately before the beginning of the first term.

Course Requirements

Year 1

- DMED 511 - Foundations of Medicine and Dentistry
- DMED 513 - Endocrine System
- DMED 515 - Cardiovascular System
- DMED 516 - Pulmonary System

★3 - ★6 in courses which explore current biomedical research literature selected from:

(See Note 2).

- BIOCH 409 - Biochemistry Tutorial
- BIOCH 425 - Proteomics
- BIOCH 465 - Methods in Molecular Biophysics
- BIOCH 495 - Special Topics in Biochemistry
- CELL 405 - Cell Biology of Disease
- CELL 425 - Systems Biology
- CELL 445 - Current Topics in Cell Biology
- IMIN 401 - Comparative Immunology
- IMIN 405 - Innate Immunity
- IMIN 452 - Advanced Immunology
- MMI 405 - Advanced Microbial Pathogenicity
- MMI 415 - Advanced Viral Pathogenesis
- MMI 436 - Inflammation
- MLSCI 430 - Advanced Hematology
- NEURO 450 - Readings on Selected Topics in Neuroscience
- ONCOL 425 - Advanced Topics in Cancer Research
- PMCOL 415 - Cardiovascular Pharmacology
- PMCOL 416 - Current Topics in Endocrine Pharmacology
- PMCOL 425 - Problem Solving in Pharmacology and Therapeutics
- PHYSL 444 - Current Topics in Neuroscience
- PHYSL 466 - Undergraduate Tutorial

A minimum of ★9 in directed research project(s) selected from:

(See Note 2).

- BIOCH 398 - Research Project (See Note 3)
- BIOCH 481 - Design and Construction of Synthetic Biological Systems I
- BIOCH 497 - International Directed Research Project
- BIOCH 498 - Directed Research Project
- BIOCH 499 - Directed Research Project
- BIOL 498 - Research Project
- BIOL 499 - Research Project
- CELL 398 - Research Project (See Note 3)
- CELL 498 - Research Project
- CELL 499 - Research Project
- MLSCI 409 - Research Project
- MLSCI 491 - Research Project
- MMI 498 - Research Project in Infection and Immunity
- MMI 499 - Independent Research in Infection and Immunity
- NEURO 451 - Honors Research Project in Neuroscience
- NEURO 452 - Honors Research Project in Neuroscience
- NEURO 498 - Honors Research Project in Neuroscience I
- NEURO 499 - Honors Research Project in Neuroscience II
- PHYSL 461 - Undergraduate Research Project
- PHYSL 467 - Undergraduate Research Project
- PHYSL 468 - Undergraduate Research Thesis I
- PHYSL 469 - Undergraduate Research Thesis II
- PMCOL 302 - Introduction to Research in Pharmacology
- PMCOL 401 - Pharmacology Tutorial
- PMCOL 402 - Pharmacology Tutorial
- PMCOL 498 - Pharmacology Research Program

Notes:

Students should plan the completion of the research certificate in consultation with the program advisor of one of the departments listed to ensure appropriate courses are taken.

1. The form of presentation includes both oral and poster.
2. The courses and research projects listed are examples and the lists are not exclusive. Courses and research projects other than those listed may be approved as equivalent. For more information, please consult your program advisor. Final approval is by the Biomedical Sciences Undergraduate Education Committee.
3. BIOCH 398 and CELL 398 may be used for credit towards ★3 in senior laboratory skills courses or ★9 in directed research project(s), but NOT both.