# Faculty of Medicine and Dentistry



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# 90 The Faculty of Medicine and Dentistry

# **Faculty Vision**

Leaders in education, research and service, making essential contributions to health.

# **Faculty Mission Statement**

The Faculty of Medicine and Dentistry is dedicated to the improvement of health through scholarship and leadership in our educational programs, in fundamental and applied research and in the prevention and treatment of illness. Central to our mission is the preparation of professionals to provide the highest quality of health care to the people of Alberta and beyond, and the advancement of knowledge and its application through research. All of these activities are being undertaken with Capital Health and other partners. In order to fulfill our responsibilities to society, the Faculty is committed to excellence in our programs as measured by national or international standards.

# **Values Statement**

Scholarship:	We seek an	d disseminate new
	knowledge :	for the benefit of

society.

Respect and Caring: We respect and care for people.

Integrity: We maintain the highest levels of

integrity.

Excellence: We strive for excellence in all our

endeavors.

Community/Teamwork: We work individually and collec-

tively to achieve common Faculty

goals.

Stewardship of Resources: We ensure utilization of resources.

# **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 Divisions	11
Number of Research Groups	16
Number of Academic Staff	366
Number of Clinical Staff	790
Number of Support Staff	235
Number of Trust Employees	397
Numbers of Students and Residents	

Medical Students	420
Medical Residents	470
Dental Students	128
Dental Residents	3
Dental Hygiene Students	82
Medical Laboratory Science Students	75
Graduate Students:	351

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

http://www.med.ualberta.ca

# 91 The Professors

# 91.1 Teaching and Scholarship

The Faculty of Medicine and Dentistry offers a variety of educational opportunities including the MD program, the DDS program, Dental Hygiene, Medical Laboratory Science, Honours undergraduate programs (in conjunction with the Faculty of Science), and graduate (MSc and PhD) programs (in conjunction with the Faculty of Graduate Studies and Research).

The Faculty prides itself in its high-quality clinical care, research, and teaching. In each of the past several years, the graduating MD class has ranked as one of the very top of the 16 Canadian Medical Schools in the national LMCC examinations. Faculty members have received coveted national 3M Teaching Awards and PhD graduates of the Faculty have won the Governor General's Gold Medal at Convocation.

In research, the Faculty attracted more than \$60 million in outside funding for 1998-99, almost one-half of the total for the University of Alberta. Faculty researchers hold a number of prestigious honours including Fellows of the Royal Society (London and Canada), MRC Distinguished Scientist, University Professor, Kaplan Laureates, Howard Hughes researchers, and MRC Councillor. The Faculty is home to one of the National Centres of Excellence and members of faculty are collaborators in other Centres.

This Faculty contributes in a major way to the reputation of this University as one of Canada's very finest.

# 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.)

MXM Coughlan

DJ Cubitt

Office of the Dean
<b>Dean</b> DLJ Tyrrell
Associate Deans RA Bear CI Cheeseman P Davis G Elleker PA Gordon GW Raborn JH Weiner
Assistant Deans CG Baker P Man MC Palmer BR Stevenson
Faculty Service Officers V Chlumecky DM Gupta
Administrative Officers BK Esslinger C Iwanicka P Stack

#### Faculty DB DuVal LM Entwistle Departments SM Ferreira CR Guenther Anesthesiology and LR Hatch Pain Medicine LJ Huston **RG** Johnston Chair and Professor BA Finegan BF Marchak **Professors** WJ Murtha \*AS Clanachan GA Perez BT Finucane RF Seal Associate Professor **Assistant Clinical Professors** RA Kearney LB Baron BJ Bucyk **Assistant Professor** PG Cisar S Rashig JG Cormack **Clinical Professor** BP Delbecq RC Gregg JM Dupuis DR Gamez **Associate Clinical Professors** A Gidwaney RG Bergstrom DP Gray HL Carle

AS Guest

SN Gupta

DA Hardy LY Huang V Jensen DT Jolly N Klassen B Knight JP Koller IA MacDonald K Martindale TA Mayson DA Mercereau JA Moir KA Munn SG Nadeau CJ Noble SA Olson S Paterson **B7** Petriw SJ Reid H Reine ZS Saleh RJ Taggesell C Tang DH Wiebe TW Yeh **Clinical Lecturers** MH Bercovich R Brown C Cave JR Charlton K Drader R Haugen JC Hrazdil M Martin I Nadwidny

# PD Wildgrube **Biochemistry**

OJ Schneider

Chair and Professor BD Sykes

**Professors** RC Bleackley DN Brindley \*CF Cass MJ Ellison L Fliegel RS Hodges MNG James RN McElhaney M Michalak RO Rvan P Scott JC Stone \*DLJ Tyrrell DE Vance JH Weiner

#### Associate Professors LB Agellon \*R Godbout CFB Holmes BD Lemire

MC Schulz

Assistant Professors
\*L Berthiaume
JNM Glover
L Spyracopoulos
D Stuart

D Stuart

Professors Emeriti
WA Bridger
JS Colter
CM Kay
NB Madsen
VH Paetkau
LB Smillie

Faculty Service Officer WT Wolodko

Administrative Officer GM Redmond

# Biomedical Engineering

Chair and Professor PS Allen

Professors BJ Andrews ZJ Koles \*RV Rajotte RE Snyder \*JF Wolfaardt

Associate Professor \*SA Jackson

Assistant Professors C Beaulieu MA Gorassini H Uludag

AH Wilmar

Professors Emeriti D Fenna DJ Griffiths TR Overton

Adjunct Professors D Bennet MG Faulkner \*RH Hooper A Kostov

#### Cell Biology

Chair and Professor RA Rachubinski Professors

RB Campenot \*WJ Gallin TL Krukoff BR Stevenson

Associate Professors P Melançon M Pasdar \*D Pilgrim R Wozniak

Assistant Professors
J Aitchison
L Berthiaume
T Hobman
\*R Lehner
E Shibuya
Z Wang

Professor Emeritus RS Smith

# Dentistry

Associate Dean and Chair

**Professors** CG Baker GA Deane RF Donnelly FM Eggert HF FIBadrawy KH Gibb KE Glover LW Kline PW Major WT McGaw NC Milos ZM Pawliuk JFI Pimlott KM Poliikoshko PD Schuller DA Scott PG Scott JA Theodore

Associate Professors A Kaburda I Kuc E Lam DJ Pehowich E Peters

JN Pochynok

HK Tan

E Edgington

Clinical Professors
DPK Cheung
HK Comton
RD Haryett
EA Krause
JM Plecash
EC Robinson
HL Samuels
JA Scott
EW Tunis
J Woronuk
CC Yu
DC Yu

**Assistant Professors** 

Clinical Associate Professors BS Bennett N Chalk LC Chan R Croutze A Eastwood CK Fialko-Fshenko B Gitzel D Gotaas KI Hesse RTabahn VP Lee J Lockau DJ MacDougall C MacDonald E McIntyre H McLeod ME Mickleborough LR Moore

B Nebbe

PL Pierce

**BR Neumann** 

SK Patterson

W Preshing

W Primrose

EC Robinson

C Revell

J Ritchie

P Schulte

W Smith TR Stevenson MT Taciuk RL Tegart M Wilson KW Wong

Clinical Assistant Professors

DH Bédard L Best C Botchway AH Brouwer CG Caruk S Cobban S Compton R Cox J Croutze M Diab J Doberstein W Dobrovolsky R Eamer R Easton P Gainer DBC Hayashi M Howell H Janke G Jansen D Kelner R Kreutz **EWL Kwan** 

R Neutz EWL Kwan S Lockwood K Lung L Mowat R Mullen U Nassar M Prosperi-Porta A Tam WG Wesner EM Whitney AO Wong

P Wooding

K Acton

E Burgess

G Burke

D Chow

J Dalmer

D David

D Fliuk

J Evancusky

C Fenton

G Grykuliak

KS Habib

S Heglund

AKK Hoh

L Hursin

N linnah

M Kaiser

MIalh

TLau

C Low

I Mah

J Pan

V Luikham

D Lunardon

H Nguyen

M Pokroy

G Salvia

Medicine and Dentistry

C Patrickson

K Sandilands

A Sheppard

U Szkudlarek

J Thomas

C Tuazon

D Wong

BK Arora

HM Dick

AD Fee

WT Harley

PD MacRae

RC McClelland

KA McMurchy

WC Meyer

**GW Meyers** 

CJ Osadetz

IW Osborn

DM Paton

CH Pearson

JM Plecash

AJ Simons

WJ Simpson

GH Sperber

NR Thomas

NK Wood

**GW Thompson** 

**RV Blackmore** 

DM Collinson

GP Wendell

Professors Emeriti

C Martin-Neumeyer

A Fyith

S Abraham-I imneos

K Bapoo-Mohamed

FH Krikke \*S Newman

# **Clinical Instructors**

M Cave D Chang N Hans S Hughes J O'Hara D Ross R Soin I Steiner P Yoon

**Associate Clinical Professors** SK Auna AF Ausford \*MA Cherniwchan KJ Gardener H Hays CJ Lord EW Papp \*DL Shragge \*TD Sosnowski

#### **Assistant Clinical Professors**

WD Armstrong BH Banmann \*DW Bond \*HA Borkent \*M Boulanger \*JJ Brown PA Caffaro SW Chambers WF Clelland **IE Colliton** R Cunningham \*CGM Evans N Flook JG Gokiert \*MS Gross HR Hindle \*SK Kelcher TD Kolotyluk DJ Konkin RT Kruhlak MJ Long SE Low DS Mackey \*AR Murray \*C Neal I Parmar \*WR Patton

### Family Medicine

Chair and Professor DG Moores

Professors **RG Chaytors** \*P Jacobs **GR Spooner** 

#### **Associate Professors** NR Bell

FR Brenneis R Brownoff A Cave \*GE Cummings MG Donoff \*RL Fainsinger \*B Holroyd P Humphries P Klemka

### J Triscott

**Assistant Professors** 

MA Atrens-Sharko TF Ranieri M Reedyk JG Reilly JM Robinson WE Schneider **EP Schuster** 

# **Clinical Lecturers**

MR Smith

JC Taylor

\*AF Walker

**BRB Whittaker** 

JR Tilley

HA Zirk

RM Stepanko

\*BL Abel JR Andreiuk DM Andriashek FW Armstrong JB Armstrong MD Armstrong H Bablitz I Bailes AL Bailey 11 Baker T Bakshi DJ Barer JB Barsky JE Bell L Bernier-Lycka

**GR Blais** 

MM Bodmer

DW Boettger

MA Bowland

BW Boyko TB Bray RG Brown WM Brown MJ Caffaro DB Cave AYL Chiu

IF Chiu D.I.Cook JE Craig RF Crowe AC Da Cunha \*JMB Davidson BC Deane LD Dujon RH Dunbar I R Fdwards SM Fairgrieve-Park

IA Field SD Flanagan TF Flanagan P Friese K Ghali

SC Ghitter-Mannes JM Godel NM Gray DJ Hamilton IJ Hankinson VM Hanlon BC Hayden TI Heisler ES Holmes DJ Hryciuk

JR Hunter ME Hurlburt **GW Jakeway** AJ Jarema CG Johnston RB Kaasa MC Kash PE Keith DA Kent

DG Killick DW Korzenowski RT Kruhlak **GA Lamoureux** R Laughlin DM Leung MR Lidkea MJ Long CC Lopaschuk KAH Lundgard

K Mangán PA Marner RA Martin M Matic GG Mazurek T McKeown DP Miller JA Mohler

LM Ma

W Molberg EM Mori-Torres NJ Morison MG Moss JD Murphy DL Myhre FD Ndovi

S Needham KD Neilson AE Nett BL Oldale P Palma

P Paludet DJ Paras **GL** Phillips AJD Pope \*SA Poplawski

\*RA Purser R Rajput DA Reid WJ Reynolds BD Ritchie JD Ritchie

JC Routledge PJA Ruiter DR Ryan

M Saayman JJ Saunders **GD** Scheirer TW Sefcik RK Sherman HS Sidhu

UNIVERSITY OF ALBERTA

\*TP Stetsko \*DF Stewart K Towers AW Ushko **RJ Vincent** DA Webb RJ Wedel DDS Welch CN Westover ML Wickland-Weller **HP Woytiuk** AK Yeung

#### Professors Emeriti RR Cherry **GL Higgins**

C Young

MJ Young

Faculty Service Officer 0 Szafran

**Adjunct Professors** \*NĹ Gibson 1 Meadows

#### Laboratory Medicine and Pathology

Chair VA Tron Professors LH Honore LD Jewell LE McGann G Nguyen PA Gordon K Solez **RW Yatscoff** 

Associate Professors F1 Ramforth G Cembrowski **RW** Coupland J Hugh HAA Idikio ES Johnson

\*XC Le RF Power DC Rayner \*AR Turner

### **Assistant Professors**

R Chibbar C Hao Rlai L Puttagunta G Tyrrell

**Clinical Professors** TA Kasper PKF Petrik

**Associate Clinical Professors** RC Berendt

JM Danyluk DTP Dawson AJ Derbawka GP Dowling WS Etches I Hannon TF Higa GH Johnson DF LeGatt DM Morrison LJM Russell \*EH Schloss

DJ Willans **Assistant Clinical Professors** 

RJ Audette B Bannach H Berendt G Blakney

T Thay

LGJ Boutin G Clarke LN Denmark **HL** Gritter T Higgins GR Jones DW Kinniburgh PL Letendre VL McCann DR McLean **GD Neuman** G Orlando C Prosser N Rayani N Satkunan ICF Sin

#### Professors Emeriti CC I in

T Sornaraiah

GO Wood

HWA Wu

BW Mielke TK Shnitka **RA Stinson** RJ Swallow

Honorary Associate Professor WT McGaw

**Adjunct Professors** A Hanna A Malcolm M Stewart

#### Medical Laboratory Science

Director FJ Bamforth

**Assistant Professor** LE Purdy

Lecturers S Chamberlin M Fraser H Malcolm FF Rivait MA Williams **Clinical Lecturers** 

M Ackney R Cunningham R Lane H Malcolm I Simpson

Administrative Officer

JI McPhee

#### **Medical Genetics**

Chair and Professor DW Cox

**Professors** \*I MacDonald DJ Tomkins

**Associate Professors** JS Bamforth \*D Gilchrist \*H McDermid \*M Walter

**Assistant Professors** S Andrew \*FJ Bamforth A IK Chan DM Glerum NJI eonard MJ Somerville D Underhill R Wevrick

\*PW Wona

#### Medical Microbiology and Immunology

Chair and Professor JR Smiley

**Professors GD** Armstrong \*D Befus \*M Belosevic JF Elliott \*EA Fanning \*G Goldsand LJ Guilbert \*PF Halloran RT Irvin \*RPB Larke \*R Mogbel \*LM Pilarski \*A Rabinowitch JA Robertson DE Taylor \*GD Taylor DLJ Tyrrell \*JH Weiner

#### Associate Professors \*SC Houston

\*AM Joffe K Kane

K Kowalewska-Grochowska

DY Kunimoto \*W Maksymowych \*I Miedzinski HL Ostergaard MS Peppler \*JK Preiksaitis L Sigler \*W Vaudry

#### **Assistant Professors**

M Barry D Burshtyn B Hazes R Kumar \* J Robinson **Clinical Professors** 

# Associate Clinical Professors

SI Hnatko RP Rennie

\*B Romanowski

JA Talbot

**Assistant Clinical Professors** 

E Blondel-Hill \*L Boychuk \*I Chiu JC Galbraith Blee J Nigrin

Professors Emeriti JW Carmichael E Diener JMS Dixon FL Jackson BM Longenecker RG Marusyk

**RLS Whitehouse Faculty Service Officers** 

P Dickie R Sherburne KK-Y Yu

**OEZ Morgante** 

Administrative Officer M Wohllebe

**Adjunct Professors** DR Bundle N Dovichi MC Finlayson T Mosmann RJ Read MJ Robins B Singh

# GW Stemke Medicine

Chair and Professor T.J. Marrie

Associate Professor \*DL Saunders

#### UNIVERSITY OF ALBERTA

Assistant Clinical Professor \*SK Aung

Administrative Officers R Mah

# JC Morrison Cardiology

Director and Professor SI Archer

Professors PW Armstrong M Haraphongse BI Jugdutt

Associate Professors JR Burton V Dzavik KM Kavanagh SKM Kimber D Manyari DA Taylor \*RT Tsuyuki WJ Tymchak

Assistant Professors \*MR Joffres \*MJ Kantoch ED Michelakis BH Sonnenberg

Clinical Professors PV Greenwood WKK Hui

Associate Clinical Professors B Cujec SS Gulamhusein Z Lakhani MPJ Senaratne

MPJ Senaratne T Talibii DA Taylor Assistant Clinical Professors I A Kasza

TG Muzyka RG Williams Clinical Lecturers \*NS Brass

DM Hammer M Hoskinson Clinical Associate DM Hammer

Professors Emeriti C Basualdo RS Fraser RE Rossall Adjunct Professor

TJ Montague
Adjunct Assistant Prof

Adjunct Assistant Professor MJ Haykowski

# Clinical Hematology and Medical Oncology

Director and Professor AR Turner

Professors
\*JJ Akabutu
\*AR Belch
\*ED Bruera
\*PA Gordon
MJ Mant
\*TA McPherson

Associate Professors
\*ALA Fields
A Janowska-Wieczorek
LM Larratt
\*ARE Shaw
\*PM Venner

DBC Ritchie

Assistant Professors \*MC Palmer

Assistant Clinical Professor
\*Jl Hannon

Professor Emeritus \*RN MacDonald

Dermatology and Cutaneous Sciences

Director and Associate Professor A Krol

Associate Professor

Assistant Professor TG Salopek

Clinical Professors J Brown DW Groot FH Schloss

Associate Clinical Professors DW Groot NA Jampolsky IV Liao

Assistant Clinical Professors GJ Lauzon BAS Lycka MB Rogers GE Searles

Adjunct Professor K Jimbow

#### Endocrinology and Metabolism Director and Associate

Professor RZ Lewanczuk Professors \*DN Brindley CLY Chik \*DC Cumming J Ginsberg \*S Harvey \*SE Jacobs \*WA McBlain DW Morrish A Rabinovitch EA Ryan

Associate Professors GA Francis FI Toth

\*JZ Šcott

LVance

Assistant Professors TJ Kieffer

LE Mereu Assistant Clinical Professor

PA Hardin

Professors Emeriti
PM Crockford
RN Eidem
DM Fawcett

Adjunct Professor S Yokoyama

GD Molnar

#### Gastroenterology

Director and Professor RN Fedorak

Professors \*MT Clandinin ABR Thomson

Associate Professors VG Bain \*MI McBurney BR Yacyshyn

Assistant Professors \*CJ Field K Gutfreund M Ma KL Madsen WW Wong Clinical Professors RJ Bailey RW Sherbaniuk CM Switzer RH Wensel

Associate Clinical Professors EAG Lalor JP McKaigney

\*MS Millan DC Sadowski EA Semlacher

DN Todoruk

Assistant Clinical Professors JP Ferguson LM Gramlich

#### General Internal Medicine

Director and Associate Professor NE Brown Professor CH Harley

Associate Professors BW Fisher DM Gilchrist PG Hamilton RSA Hayward \*AAC Yeung

Assistant Professors \*SC Houston N Kassam \*RZ Lewanczuk SR Majundar F McAlister

Clinical Professors WR Black KC Bowering \*GF MacDonald

Associate Clinical Professors
\*JS Archibald
\*WJ Dickout
\*IA Ferguson
E Kretzul
JT McCaffery
MS Millan
MG Nutting

AJ Voth
Assistant Clinical Professors

A Cairns
DA Campbell
NE Gibson
LER Malowany
E Raff
DJ Tusz
BJ Wirzba

Clinical Lecturers A Bharmal AR Grynoch RA Hosein GJ Hrynchynshyn

Professors Emeriti LM Anholt JB Dossetor \*RN Eidem JAL Gilbert JC Hopkyns

Geriatric Medicine Director and Associate

Professor AL Sclater Professor PN McCracken Associate Professor KF Lechelt

Assistant Professor

R Khurana

Associate Clinical Professors AG Juby

\*JA Triscott

Assistant Clinical Professor S Seneratne

DB Rolfson

Adjunct Professor

AR Dobbs

Clinical Lecturer

Adjunct Associate Professor JE McElhaney

#### Immunology and Nephrology

Director and Professor PF Halloran

Professors R Bear MK Dasgupta T Kovithavongs RA Ulan \*DR Wilson

Associate Professor SM Cockfield

Assistant Professors PM Campbell J Grynoch AW McMahon AG Murray

Associate Clinical Professors IA Ferguson MW Lee

Assistant Clinical Professor SS Caldwell

Adjunct Professor CMF Kjellstrand

#### Infectious Diseases

Director and Professor SD Shafran

Professors
EA Fanning
G Goldsand
\*TJ Marrie
\*CL Soskolne
GD Taylor
\*DLJ Tyrrell

Associate Professors

\*L-J Chang SC Houston \*MA Joffee \*DY Kunimoto LJ Miedzinski JK Preiksaitis

Assistant Professor A Singh

Clinical Professor B Romanowski

Associate Clinical Professors LR Boychuk

Assistant Clinical Professor F Blondel-Hill

#### Neurology

Director and Professor A Shuaib

Professors JH Jhamandas WR Martin KG Warren

Associate Professors MG Elleker DS Fulton AMW Penn Assistant Professors M Javidan \*BD Sinclair

Clinical Professor AF Wilson

Associate Clinical Professors E Starreveld C Tai NJ Witt

Assistant Clinical Professors RN Roberts TE Roberts P Stenerson

Clinical Lecturers B Marynowski ML Myles Professors Emeriti

Professors Emeriti MH Brooke G Monckton Adjunct Professor

#### **Pulmonary Medicine**

Director and Professor SFP Man

Professors
AD Befus

\*NE Brown

\*NN Finer

\*TL Guidotti

\*SM Hamilton
RL Jones
M King
I Mayers
R Moqbel

Associate Professors W Chin \*PA Hessel DC Lien R Long GC Man

Assistant Professors L Cheung RW Damant \*M Duszyk D Sin EYL Wong Clinical Professors

NRT Gibney TK Lee GF MacDonald Associate Clinical Professors

Associate Clinical Pro JS Archibald WJ Dickout MK Heule EJ Nobert DE Stollery

Assistant Clinical Professors A Liu LS Melenka

Adjunct Professor DA Enarson Professors Emeriti EA Herbert

### Rheumatology

BJ Sproule

Director and Professor AS Russell Professor P Davis

Associate Professors SL Aaron WP Maksymowych Assistant Professor

\*M Suarez-Almazor Clinical Professor AA Fitzgerald Associate Clinical Professors SA LeClercq

KJ Skeith Assistant Clinical Professors

PL Chiu JE Homik Clinical Lecturer A Yan

Professor Emeritus JS Percy

# Obstetrics and Gynaecology

Chair and Professor BF Mitchell

Professors DC Cumming NN Demianczuk \*LH Honore DM Olson \*M Radomski JZ Scott

Associate Professors VA Capstick CG Flood NB Okun M Sagle A Schepansky

Assistant Professors R Chari ST Davidge \*V Harber J Schulz

Clinical Professors JJ Boulton JJ Boyd LG Evenson CF Hoskins IV Tataryn

Associate Clinical Professors CES Burnett CP Fung SJ Genuis SR Langton M Lieberman J Sabourin

Assistant Clinical Professors

GL Black
RC Black
M Bow
R Chua
TFX Corbett
TP Gleason
S Gross
DJ Hodges
G Iwaniuk
A Lee
MS Mah

P Verma

SN Schuurmans

TN Traff

Clinical Lecturers RJ Brown MJO Coe P Lessard C Linton B Muir JM McCubbin SJ Reid M Roy K Seethram J Tankel F Tsui T Unger WR Young

Professors Emeriti RP Beck DL Dunlop

#### Oncology

Chair and Professor

**CE Cass** 

#### **Experimental Oncology**

**Director and Professor** D Murray

**Professors** \*TM Allen \*AR Belch CF Cass

\*PA Gordon \*WA McBlain \*AJB McFwan D Murray LM Pilarski ARE Shaw \*L Wiebe

\*PM Venner

**Associate Professors** \*V Baracos

R Britten \*RW Coupland AJ Franko \*PE Grundy \*WP Gati R Godbout \*JC Hugh

\*A Janowska-Wieczorek \*FIam \*MB Parliament

\*RB Moore CA Spencer MJ Turner M Weinfeld

**Assistant Professors** \*MJ Hendzel

\*JR Mackey \*WH Roa

Lecturer R Mirzayans

**Adjunct Professors** GG Miller

Professor Emeritus \*ARP Paterson

Faculty Service Officer X Sun

#### Medical Oncology

**Director and Professor** AR Belch

Professors \*JJ Akabutu \*AR Reich \*ALA Fields \*DW Morrish JM Nabholtz \*AR Turner \*PM Venner

**Associate Professors** \*K Courneva

\*PE Grundy \*A Janowska-Wieczorek \*LM Larratt MC Palmer

K Tonkin **Assistant Professors** 

H Au \*SJ Desai JR Mackey M Smylie

Adjunct Professor GD MacLean

**Assistant Clinical Professor** CH Butts

**Medical Physics** Director and Professor

**BG** Fallone

Associate Professors HR Hooper

RS Sloboda Assistant Professor DM Robinson

Associate Clinical Professor

SI Connors

**Assistant Clinical Professors** GC Field B Murray

#### Palliative Care Medicine

**Acting Director and** Associate Professor **RL Fainsinger** Professor ED Bruera

**Associate Professors CE Cumming** MD Handman SM Watanabe

**Assistant Professors CP Jenkins** JI Pereira AW Taube PW Walker

**Assistant Clinical Professors** S Danielson

M Hundlehy RA Sela

**Adjunct Professors** CL Nekolaichuk C. Rinamonti

D Oneschuk

Research Associates P Lawlor

# **Radiation Oncology**

Director and Associate Professor **RG** Pearcey Professors AW Lees \*AJB McFwan

**Associate Professors** \*DS Fulton N Jha DG McGowan MB Parliament

RG Pearcey **Assistant Professors** R Halnerin

WH Roa **Associate Clinical Professors** GS Dundas

\*RN Ludwia IF Pedersen \*TJ Terry

**Assistant Clinical Professors** \*S Halls TS Niiiar D Severin

\*TJ Terry Adjunct Professor BF Krause

**Professor Emeritus** RC Urtasun

#### Surgical Oncology

Acting Director and Associate Professor \*CJ deGara

Professors \*N Kneteman \*OG Thurston Associate Professors

VA Capstick \*CJ de Gara \*RB Moore \*A Schepansky

Clinical Professor \* JDS McKean

#### **Ophthalmology**

Chair and Professor IM MacDonald Associate Professors GT Drummond

MA Walter **Assistant Professor** JR Lewis

**Clinical Professors** FL Leong-Sit RA Morgan KH Shuft

**Associate Clinical Professors** 

J Buski **RJ** Casey D Climenhaga H Climenhaga EJ Hodges M Greve M Kutzner JR Lewis RLC Johnson I M Uniat

**Assistant Clinical Professors** D Cote JJ Foy KR Hennig B Hinz HN Khan J Leong-Sit

EA Macdonald ME Phillips EJ Rudnisky **Clinical Lecturers** 

M Scambler LF Smith Professors Emeriti

WG Pearce HT Wyatt

# **Paediatrics**

Chair and Professor T Klassen

Professors JJ Akabutu RI Collins-Nakai \*DW Cox P Etches EW Gauk FL Harley AB Jones GD Lopaschuk PM Olley \*DM Olson

CMT Robertson Associate Professors C. Baxter B Bell RM Couch JE Ellsworth K.I. Goulden \*M Michalak I Rebeyka LJ Smith DW Spady

**Assistant Professors** D Andrews JR Dyck S Gilmour R Girais M Gowrishankar M Kantoch S Lappa

W Vaudry

R Lehner D McCalllum J Robinson R Rosychuk R Schulz **BD** Sinclair

V Yiu

UNIVERSITY OF ALBERTA

**Clinical Professors** DJ Hasinoff RR Moriartey \*PA Penkoske J Popowich AR Stewart MI Tedeschini OA Ulan JE Van Aerde MJ Watt

Associate Clinical Professors R Anderson **G** Andrew P Byrne I Doka JD Dyck S Galante K Lee \*GM Lees F Martin TJ Paton PM Pierse **EM Rabinovitch** 

HR Rajani JS Tkachyk \*JR Waters KS Wong

PC Zuberbuhler

**Assistant Clinical Professors** A Ausford L Baydala D Berry M Bhambhani I Ruka LM Casey R Chen AM Darwish LJ Dibden NA Dower

W Doyle-Chan EW Harris K Horne A Janicka A Inffie A Kantoch C Kyriakides S Lappa RP Lemke JE Lopatka C Majaesk BA Malinowski LF McGonigle AN Mian \*JC Mullen A Murdock H Osiovich VM Osundwa

S Parsons E Phillipos ML Ramji D Roseman E Schuster Al Singh G Sukhran WA Szymanski J Teoh

J Tybkham

B Wilson

JT Woods

WC Taylor

Professors Emeriti GJ Conradi NF Duncan J Godel \*LC Grisdale EE McCoy HF Pabst D Schiff

Administrative Officer G Langer

Adjunct Professors K Horne RA Lang WM Wenman

#### Haematology and Oncology

**Director and Associate** Professor B Bell Professor II Akabutu

Assistant Professors \*SJ Desai PE Grundy BA Wilson

#### Infectious Diseases

**Director and Associate** Professor W Vaudry Professor **RPB** Larke

**Assistant Professor** JL Robinson

#### Neonatology

**Director and Associate** Clinical Professor P Byrne

Professors PC Etches IF Van Aerde **Associate Professor** 

A Peliowski **Assistant Professor** 

**EZ Phillipos** 

# Paediatric Cardiology

**Director and Associate** Professor JD Dvck Professors RL Collins-Nakai

Associate Professor JY Coe

PM Olley

**Assistant Professors** M Kantoch MA Robertson

**Professor Emeritus** NF Duncar

Paediatric Intensive Care

**Director and Associate** Clinical Professor A Conradi

**Associate Clinical Professor** A deCaen

**Assistant Clinical Professors** L Lequier

#### Pharmacology

Chair and Professor AS Clanachan **Professors** TM Allen

\*GB Baker WF Colmers DA Cook WF Dryden SMJ Dunn T Gordon \*GD Lopaschuk MW Radomski PA Smith

Associate Professors AN Bateson WP Gati R Schulz AMW Tse AAC Yeung

**Assistant Professors** BA Bielkiewicz-Vollrath E Posse de Chaves FWY Tse

Professors Emeriti GB Frank ARP Paterson

**Faculty Service Officer** FG Hunter

Administrative Officer JC Deuel

Adjunct Professor IL Martin

# Physiology

Chair and Professor **FJ Sanders** 

Professors \*SI Archer CI Cheeseman S Harvey AKC Ho SE Jacobs \*I W Kline \*DM Olson KG Pearson A Prochazka **RB** Stein JD Young

**Associate Professors** SC Barton CG Benishin \*M Duszyk JJ Green E Karpinski \*RZ Lewanczuk

Assistant Professors JR Casey \*ST Davidge \*TJ Kieffer

PV Nguyen Professors Emeriti KJ Hutchison PKT Pang M Schachter

Administrative Officer **OM Findlay** Adjunct Professors

# \*RL Jones **Psychiatry**

\*GR Foxcroft

Chair and Professor RC Bland Honorary Professor

FI Picard Professors GB Baker AJ Greenshaw SC Newman

PH Silverstone Associate Professors JH Brooks GG Griener GS Hnatko

J Metelitsa **Assistant Professors** NJ Coupland J LeMellédo

AS Joyce

#### UNIVERSITY OF ALBERTA

Lecturer PG Tibbo **Clinical Professors** M Blackman CA Blashko KM Collinson P Flor-Henry KD Gendemann A Gordon DW Grover RE Hibbard \$ Levin IG O'Kelly HM Piktel JS Rosie PM Segal B Sowa PI Steinberg BF Turner LB Warneke

Associate Clinical Professors

HM Wojcicki

LM Adams JL Banasch HM Barker JE Beach AB Bremness O Cadsky AM Carroll PE Copus NP Costigan RJ Dyck J Eustace DR Guinhawa CA Hapchyn L Kagan E Lobo M McCallum

KF McKenna P Mills RR Mirtle JW Osinchuk L Pawluk SE Purdon JK Rodgers BS Sanderman TJ Snyder L Studer M Tweddle PJ White

CM Yaltho

**Assistant Clinical Professors** 

B Bishop C Buchholz PF Carr C Carter WT Chimich P Chokka PS Chue MG Cummins JM Dewart S Dobrofsky RH Drebit DJ Gill DR Ginter

RA Gurke JM Hinton A Holt Al Khalig K Lawless JB Lefsrud RC Lundeen R Maitra S Matthews WA McCay DW Meakins S Monga F O'Croinin WF Otto MB Parsons LJ Phillips EM Schwab JR Scott

D Shih

MCJ Swanson

RP Taubner

L Trichard DYW Wong

**Clinical Lecturers** GR Acton H Anand **DNH Block** S Bowman J Carr J Caryk J Chú ML Demas R Dempsey SC Duncan FM Fogarty N Hanon T Hughie ND John V Jordan KL Kirdeikis K Lefko-Singh TR Leiper AW McIntvre

E McKaigney S Mitchell C Morhaliek SP Nigam J O'Mahoney CL Phillips G Schoepp L Schuster Y Shapiro V Singh

L Smit

**DL Spaner** 

D Spence

L Urichuk

J Ustina

Professors Emeriti RT Coutts WG Dewhurst P Hays G Hopkinson JW Urschel TE Weckowicz KA Yonge

Administrative Officer

**Adjunct Professors** A Bateson M Bourin AB Douglass N el-Guebaly \*KM Hegadoren \*H Jacobs \*MB Parent WE Piper I Singh E Starreveld AH Thompson GD Watson AF Wilson NJ Witt

Research Associate

**Public Health** Sciences

Chair and Professor TW Noseworthy Professors N Cherry CB Hazlett P Hessel SE Hrudey P Jacobs LM Laing D Menon \*SF Newman DL Saunders A Senthilselvan CL Soskolne \*M Stewart DR Wilson

**Associate Professors** 

D Cassidy L Carroll \*T Caulfield J Cheng L Franceseutti PR Hatcher RS Hayward WE Kipp XC Le AM Penn \*RH Plain L Shanner M Suarez-Almazor A Thompson

**Assistant Professors** J Church K Froese G Jhangri DJ Kutsogiannis KV Rondeau P Rothe

**Clinical Professor** JM Howell Lecturers EW Hall

OH Triska

TC Wild

J Vincenten Professors Emeriti KS Bay CM Meilicke TA McPherson SM Stinson

**Adjunct Professors** D Andriashek H Au DA Birkholz L Breault H Buchwald KC Carriere T Chowdhury J Cowell T Cradduck S Demeter E Ellehoi L Derry K Farris SM Fincham N Fok S Gabos **GW Gibbs** N Gibson

A Goldblatt M Gormley GC Granville **EL Gross** TL Guidotti **U** Hakkinem J Hatcher H Hoffman D Jirsch D Johnson M Johnson C Karpilow D Kopetsky PD Langelle Flau P Lightfoot RC May D Mewhort **KR Nickerson** J O'Laney S Optenberg

J Pawlyshyn F Pekeles M Perkurinen DI Philippon P Pierse R Plotnikoff G Predy L Redfern **RE Rogers** D Schopflocher

M Serediak

C Shields **CB** Spooner L Svensen C Urion D Voaklander M Wanke SC Weatherill R Wensel D Wilson R Wolfe K Wong W Yacoub

Radiology and Diagnostic Imaging

Diagnostic Radiology

Acting Chair MA Johnson Professors AJB McFwan DB Russell

Associate Professors LJ Filipow

SA Jackson **Assistant Professors** R Bhargava D Emery HE Hoskinson **RGW Lambert** IR Mercer Lecturer BH Lona

**Clinical Professors** G Andrew MT Sin

**Associate Clinical Professors** 

T Ackerman T Alexander RA Ashforth R Arnold I Barrie I Birchall **B** Campbell S Halls RC Hennig PG Heslip MK Hirji M Hutson MA Johnson CG Maguire M O'Keeffe D Reich WL Ritchie T Spiers G Sterling TJ Terry GP Trepanier DB Vickar

**Assistant Clinical Professors** 

RS Warshawski

S Adams WW Anderson S Appavoo G Askew M Babiuk W Berezowsky B Caplan K Cheuna C Chmielowiec N Chochrane D Foster F Gojmerac BD Guspie 0 Haffman R Holub T Horowitz H Jen WG Keenan

G Lauf

C Lummer

P Maguire

M Mah J Ng KF O'Kelly W Parker EJ Preville KN Puznak B Rawat G Raymond R Sherlock WB Short JF Swersky AS Tang B Taylor JGE Turner B Ward

E Wiebe **Clinical Lecturers** T Black CM Copeland

A Duha CG Elias N Horeczko P Hyde S Kitay K Kristjanson C I vwood S Manii NE Maslo M McCarthy R McEwen M Noga R Pawluk L Paskar V Patel M Patrick

**Professor Emeritus** JDR Miller

DA Shamchuk

H Shein

W Sugars

C Torbiak

B Wong

**Nuclear Medicine** 

**Director and Assistant Clinical Professor** CG Maguire

**Assistant Professor** AV Joshua JR Scott

Associate Clinical Professor

RS Warshowski

Surgery Chair and Professor SM Hamilton

Administrative Officer TM VandenBroek

Office of Surgical Education

Cardiothoracic Surgery

**Director and Clinical** Professor A Koshal Professor \*R Yatscoff

Associate Professor \*W Chin

**Clinical Professors** FT Gelfand PA Penkoske

Associate Clinical Professors DI Modry

JC Mullen SS Nakai IM Rebeyka

Assistant Clinical Professors

\*CR Guenther CJ McNamee

**Professor Emeritus** JC Callaghan

**General Surgery Director and Associate** 

Professor CI de Gara **Professors** KL Bowes SM Hamilton NM Kneteman GI Warnock

Associate Professor CJ de Gara

**Assistant Professors** DL Bigam \*SL Logsetty

AMJ Shapiro **Clinical Professors** RA Hallgren DW Jirsch **S Kilam** 

**Associate Clinical Professors** 

DO Adams PD Davey MG Evans RM Hackett BW Johnson GM Lees JF Mossey **EA Plewes** AW Procyshyn MH Stephens HL Stewart WM Struck

**Assistant Clinical Professors** RJ Brisebois HR Chyczij MH Friedman

JD Matheson MA Meier **EK Schmidt** AF Trautman

**Clinical Lecturers** D Callahan CJ Ciona **KD Dabbs** KE Goh 0 Heisler A Prakash AVF Sobev RG Turnbull DC Williams

Professors Emeriti WS Anderson **S Kling** RAL Macbeth **GW Scott** OG Thurston HTG Williams

WTYakimets

WW Yakimets

**Adjunct Professors** AJ Graham SIssa

Neurosurgery

**Acting Director and Clinical** Professor

KC Petruk Professor \*J Tulip

**Assistant Professor** A Gainer

Clinical Professors PRR Allen JDS McKean KC Petruk

**Associate Clinical Professors** KE Aronyk JM Findlay

**Assistant Clinical Professors** RW Broad WJ O'Callaghan DE Steinke

Clinical Lecturer RJ Fox

**Professor Emeritus** BK Weir

#### Orthopaedic Surgery

**Director and Clinical** Professor MJ Moreau Professors \*KM Bagnall DC Reid

**Clinical Professors** RM Glasgow DWC Johnston

**Associate Clinical Professors** 

JG Cinats JK Mahood IR McIvor WM Rigal GG Russell

**Assistant Clinical Professors** 

GD Arnett RA Balyk D Dick TH Greidanus LE Hunka KW James FB Kortbeek

GJI avoie MV Lavoie PMK Leung D.I Makar JF McMillan

GJ O'Connor KJ Russell DW Weber

**Clinical Lecturers** J Bury BJ Greenhill NM Jomha EC Masson DD Otto

Research Associates D Hill

V Raso **Adjunct Professor** 

LA Davis

### Otolaryngology

**Director and Clinical** Professor DJ Oldring **Clinical Professors** 

CS Carter WH Kudryk **Assistant Clinical Professors** 

JC DiToppa **CA Elliott** JD Keohane H Seikaly **Clinical Lecturers** OM Bykowski LT Diduch

#### **Plastic Surgery**

JA Kostiuk

**Director and Clinical** Professor **GW Lobay Professors** \*LE McGann EE Tredget

Associate Professor A Ghahary

Assistant Professor SL Logsetty **Clinical Professors** GL Moysa **GH Wilkes** 

Associate Clinical Professor DD Campbell

**Assistant Clinical Professors** MJ Giuffre T Hayashi **Clinical Lecturers** DC Edwards

**Professor Emeritus** JDM Alton

G Louie

**Adjunct Professor** S Nagata

#### Surgical Research

**Director and Professor** GI Warnock

**Professors RV** Rajotte JC Russell \*R Yatscoff

Professors Emeriti KP Kowalewski

Research Associate LF 7hu

**Assistant Professors** TA Churchill G Korbutt JRT Lakey

**Adjunct Professors** MP Mintchey \*PG Scott

#### **Urological Surgery**

Director and Associate Clinical Professor MP Chetner Professor \*JW Lown

**Associate Professors** RB Moore GT Todd

**Associate Clinical Professors** DR Mador JB Metcalfe

**Assistant Clinical Professors** RP Abele B Bochinski **EP Estey** LW Mix SM Robinson MN Weisler TA Wollin **Clinical Lecturers** 

MJ Allard GJ Grav M Hobart Professors Emeriti WH Lakey

MS McPhee JO Metcalfe **Adjunct Professor** 

# **Faculty Divisions**

### Anatomy

KN Moore

**Director and Professor** DB Russell

**Professors** KM Bagnall DA Begg AH Walji

Associate Professor **DNP Singh** 

Associate Clinical Professor LP Sterns

Professors Emeriti TS Leeson K McFadden HIA 7aw-Tun

#### **Continuing Medical** Education

**Director and Professor** P Davis **Assistant Directors** SF Low **K I Skeith** 

#### Critical Care Medicine

**Director and Associate Clinical Professor RG** Johnston

**Professors** SM Hamilton \*I Mayers \*T Noseworthy

**Associate Professors** \*P Byrne \*PC Etches \*NRT Gibney

\*A Peliowski \*P Penkoske \*EE Tredget

**Assistant Professors** \*A deCaen \*MK Heule \*M vanWijngaarden \*DJ Kutsogiannis

\*DI Modry

**Associate Clinical Professors** \* A Conradi

**Assistant Clinical Professors** \*W Chin \*CR Guenther \*S Marcushamer \*M Meier \*J Mullen \*W Murtha

\*DE Stollery **Clinical Lecturers** \*D Callahan \*D Matheson

# **Emergency Medicine**

**Director and Professor** BR Holroyd

Associate Professor M Bullard **GE Cummings** B Rowe IP Steiner

**Assistant Professors** \*L Francescutti \*PW Poon

Clinical Professor TD Sosnowski

Associate Clinical Professors MA Cherniwchan DL Shragge

**Assistant Clinical Professors** D Bond HA Borkent MJ Boulanger JJ Brown R Cunningham CGM Evans

R Lee \*M Long D Mackey \*LF McGonigle C Neal SA Poplawski WR Patton DC Perry JC Taylor AF Walker

Adjunct Associate Clinical Professor

I Vicas **Clinical Lecturers** BL Abel M Atrens-Sharko D Barer B Brown CG Campbell K Cromwell R Daloise JMB Davidson B Deane S Flanagan K Foster

\*GB Baker I Franc-Law GAJ Groot R Hansen D Hoshizaki D Hryciuk RJ Ibach P Jain \*T Gordon S Jones R Kruhlak S Harvey K Mangan J McKague J Mohler W Molbera

M Moss AR Murray NC Milos DW Neilson K Neilson D Nixon T Noga **G** Phillips RA Purser P Rawlek

SF Reynolds D Treit \*D Wahlsten J Yang G Scheirer R Scheirer W Sevcik

R Sherman \*D Bennett TP Stetsko DF Stewart \*R Cabeza AH Travers KM Chan A Ushko \*C Hao C Westover M Gorassini \*A Kostov A Yeung \*P Nguyen M Young PW Yoon

#### **Health Sciences** Laboratory Animal Services

Director PN Nation

D Reid

S Ross

L Shenfield

I Sim

R Yao

Faculty Service Officer TF Bayans

#### John Dossetor Health **Ethics Centre**

**Director and Professor** V Bergum

**Associate Director Clinical** P Byrne Professors \*V Bergum

\*P Byrne

\*JM Howell \*TW Noseworthy \*GB Robertson \*JC Ross-Kerr \*D Schiff

Associate Professors \*G Griener \*L Shanner \*DM Wilson

Adjunct Professors RC Fraser NJ Inions H Lantz P Marck DL Smith

**Professor Emeritus** JB Dossetor

#### Neuroscience

Professors

**Director and Professor** KG Pearson

\*BJ Andrews \*MH Brooke \*RB Campenot WF Colmers \*WF Dryden \*SMJ Dunn JI Goldberg \*AJ Greenshaw \*MM Hodge \*JH Jhamanalos \*TL Krukoff \*S Kumar WR Martin \*KG Pearson \*RE Peter \*WD Pierce \*A Prochazka \*A Shuaib \*PA Smith \*RB Stein

Associate Professors \*AN Bateson

JJ Greer **Assistant Professors** \*L Buchanan \*M Parent \*A Tse \*F Tse \*D Wong-Wylie \*P Zehr

**Clinical Professor** P Flor-Henry \* IDR Miller \*KC Petruk

Adjunct Professors \*CHM Beck \*AR Dobbs \*JC Lind

\*BK Mitchell \*AH Putnam Rochet \*I Singh

Research Associate

KG Todd

#### Physical Medicine and Rehabilitation Medicine

Director

Clinical Professor M Watt

Associate Professor LA Bellamy

**Assistant Professors** M Chan L Satkunam Associate Clinical **Professors** RS Burnham LE Gross JM Nagy \*M Watt

Assistant Clinical Professors M DiPersio JB Guthrie E Veszpremi **Clinical Lecturers** E Sampson C Tuchak J Townsend **Adjunct Professors** 

# Studies in Medical Education

\*BJ Andrews

\*RB Stein

**Director and Professor** \*DA Cook

Associate Director and Professor \*SL Aaron

Professor EN Skakun

**Educational Associates** \*FR Brenneis (Family Medicine)

\*DN Brindley (Biochemistry) \*NE Brown (Medicine)
\*VA Capstick (Obstetrics and Gynecology)

\*CI Cheeseman (Associate Dean, UGME, Physiology) \*J Crocket (Medicine) \*P Davis (Associate Dean, Continuing Education, Medicine-Rheumatology) \*MG Donoff (Family

Medicine) \*JE Ellsworth (Paediatrics) \*BW Fisher (Medicine-General Internal Medicine) \*G Goldsand (Associate Dean-PGME-Infectious Diseases)

\*C Harley (Medicine) EG Hunter (Pharmacology) \*N Kassam (Medicine) \*PJ Klema (Family Medicine) NJ Leonard (Genetics) L Miedziwski (Infectious

Diseases) \*ME Palmer (Assistant Dean-Clinical Education Oncology) \*W Patton (Emergency

Medicine) \*DC Rayner (Laboratory Medicine and Pathology) \*B Roed (University Teaching

Services) \*DW Spady (Paediatrics) \*BR Stevenson (Assistant Dean-Student Affairs, Cell Biology and Anatomy)

\*AR Turner (Medicine—Clinical Hematology) \*DLJ Tyrrell (Dean of Medicine, Medical Microbiology and Immunology) \*AH Walji (Cell Biology and

Research Associates \*D Blackmore (Medicine Council

of Canada)
\*R Muzyka (Technological
Consultant)

Anatomy)

\*GL Warnock (Surgery)
\*G Zeschuk (Technological Consultant)

Professor Emeritus \*TO Maguire

#### Surgical Medical Research Institute

Director and Professor \*RV Rajotte

#### Additional Members of Faculty Council

President and Vice-Chair R Fraser, PhD

Representatives
J Buckingham (Medical
Librarian)
RA Burns (Alberta Medical
Association)
Doctor of Medicine student
representatives (8)
ALA Fields (Cross Cancer
Institute)
J Goldberg (Faculty of Science)
Medical Laboratory Science
student representatives (2)
F Pasutto (Dean of Pharmacy and
Pharmaceutical Scencies)
LR Olhauser (Registrar, College
of Physicians and Surgeons)
RS Smith (Vice-President

Foundation for Medical Research) J-M Turc (Alberta Cancer Board) J Lander (Acting Dean of Nursing)

Research and External Affairs) MW Spence (Alberta Heritage

Registrar of the University BJ Silzer, MEd

# 92 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.

All students attending the University of Alberta shall use Universal Precautions for blood, body fluids, and tissues at all times within the educational setting to lessen their risk of acquiring or transmitting bloodborne infection from/to another person. These precautions entail the avoidance of direct contact with the blood, blood products, tissues and other body fluids of another person.

The Faculty of Medicine and Dentistry conducts the following programs:

#### **Medical Programs**

- 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 Honors 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) 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.
- (7) Programs leading to accreditation by the College of Family Physicians of Canada
- (8) 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.
- (9) An extensive program of continuing medical education for physicians practising in northern Alberta.

See §94 for details of programs of study.

#### **Dental Programs**

- 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 BSc degree that students registered in the DDS program may apply for after successfully completing the first two years of the DDS program.
- (3) An accredited two-year program leading to the Diploma in Dental Hygiene. A preprofessional year is required before admission to this program
- (4) MSc and PhD degrees in Medical Sciences (Oral Health Sciences).
- (5) An MSc Degree and Certificate in Orthodontics.
- (6) Continuing Education courses are offered by the Department of Dentistry from time to time to provide continuing education for the dental profession. A program outlining dates, course descriptions, participation, and length is prepared annually and distributed to members of the profession.

# 92.1 Department of Dentistry Objectives

- 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
  - creating a university environment that emphasizes the quality of life for staff and students.
- (2) To contribute to 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
  - basic and clinical science organizations and granting agencies to promote disciplinary and interdisciplinary research.
- (3) To graduate competent undergraduate dentistry students, dental hygienists and graduate and postgraduate students by
  - a. attracting, selecting, and then motivating the most suitable and wellqualified students who have the ability to acquire the education and training for a professional and/or academic career;
  - maintaining an undergraduate dentistry curriculum that integrates basic medical and dental sciences, behavior and social sciences, dental clinical sciences, community and preventive dentistry, hospital dentistry, and practice management; incorporates recent concepts, materials, techniques, advances, and research in all areas; and reflects the existing and projected provincial, national, and international oral health needs;
  - maintaining a dental hygiene curriculum that produces students who will complement the present and future dental care delivery system;
  - maintaining 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
  - graduating 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 provide efficient and quality dental treatment for the community that emphasizes and recognizes patient needs.

# 92.2 Affiliated Hospitals and Institutions

#### 92.2.1 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 appropriate hospital authorities, both within and beyond the Capital Health Region of Alberta. 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 Dentistry Pharmacy Centre Buildings.

#### 92.2.2 Family Medicine Rural Teaching Sites

The Department of Family Medicine has an educational relationship with 14 of the 17 Regional Health Authorities. Currently, over 33 rural communities participate in undergraduate and postgraduate education initiatives.

#### 92.2.3 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.

### 92.2.4 University of Alberta Family Medicine Centres

Ambulatory care facilities, specifically designed for undergraduate and graduate education in family practice, are located at the Grey Nuns and Misericordia Community Hospital and Health Centres 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 members of the Department of Family Medicine.

#### 92.2.5 Alberta Primary Care Research Unit—University of Alberta Branch

The Alberta Primary Care Research Unit (APCRU) is composed of two complementary branches within the Faculties of Medicine (and Dentistry), one at the University of Alberta, the other at the University of Calgary. The APCRU is the coordinating infrastructure, organized through the respective Departments of Family Medicine, to foster a multidisciplinary and coordinated approach to the study of primary medical care research in Alberta. One main focus of the APCRU is community practice-based research. This is done through the ongoing relationship between the APCRU and the Alberta Family Practice Research Network (AFPRN) of the College of Family Physicians of Canada (Alberta Chapter). The APCRU research themes include (1) clinical prevention, (2) education/information dissemination, and (3) health services use and outcomes

#### 92.2.6 University of Alberta Surgical-Medical Research

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, fellows, and graduate students 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. The Institute offers four postgraduate courses, three of which are prerequisites for the MSc and PhD degrees in experimental surgery.

#### 92.2.7 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.

#### 92.3 Registration and Licensing

#### 92.3.1 **DDS Degree**

The Department of Dentistry of the University is accredited by the Canadian Dental Association and thereby recognized by the American Dental Association Council of Accreditation.

Regulations regarding the practice of dentistry in any other province in Canada may be obtained by writing to the dental registrar of that province:

#### Alberta

Alberta Dental Association #101 8230-105 Street Edmonton, Alberta T6E 5H9

#### **British Columbia**

College of Dental Surgeons of British Columbia 1125 West 8 Avenue Vancouver, British Columbia V6H 3N4

#### Manitoba

Manitoba Dental Association 308 Kennedy Street Winnipeg, Manitoba R3B 2M6

#### **New Brunswick**

New Brunswick Dental Society 440 Champlain Street Saint John West, New Brunswick E2M 1R9

#### Newfoundland

Newfoundland Dental Association 203 LeMarchant Road St John's, Newfoundland A1C 2H5

#### Nova Scotia

NIVERSITY OF ALBERTA

Nova Scotia Dental Association #12, 5880 Spring Garden Road Halifax, Nova Scotia B3H 1Y1

#### Ontario

Royal College of Dental Surgeons of Ontario 230 St George Street Toronto, Ontario M5R 2N5

#### Prince Edward Island

Dental Association of Prince Edward Island 239 Water Street Summerside, Prince Edward Island C1N 1B4

#### Quebec

Order of Dentists of Quebec Ste 303 801 est rue Sherbrooke Montreal, Quebec H2L 1K7

#### Saskatchewan

College of Dental Surgeons of Saskatchewan #109, 514-23 Street East Saskatoon, Saskatchewan S7K 0J8

Senior students of dental programs approved by the Commission for 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.

#### 92.3.2 Dental Hygiene Diploma

A diploma from the dental hygiene program 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 as listed below:

Alberta Dental Hygienists Association #222, 8567-51 Avenue Edmonton, Alberta T6E 6A8

#### British Columbia

Registrar, College of Dental Hygienists of British Columbia Ste 219 Yarrow Building 645 Fort Street Victoria, British Columbia V8W 1G2

#### Manitoba

Registrar, Manitoba Dental Association 308 Kennedy Street Winnipeg, Manitoba R3B 2M6

#### **New Brunswick**

Registrar, College of Dental Surgeons of New Brunswick 440 Champlain Street Saint John, New Brunswick E2M 1R9

#### Newfoundland

Registrar. Newfoundland Dental Association Campbell Building, 203 LeMarchant Road St John's, Newfoundland A1C 2H1

Registrar. Provincial Dental Board of Nova Scotia 1548 Robie Street Halifax, Nova Scotia B3H 3E6

#### Ontario

College of Dental Hygienists of Ontario #300, 69 Bloor Street East Toronto, Ontario M4W 1A9

#### Prince Edward Island

Registrar,
Dental Association of Prince Edward Island
239 Water Street
Summerside, Prince Edward Island C1N 1C1

#### Quebec

Professional Corporation of Dental Hygiene of Quebec #237, 5757 Decelles Street Montreal, Quebec H3S 2C3

#### Saskatchewan

Registrar, College of Dental Surgeons of Saskatchewan #109, 514-23 Street East Saskatoon, Saskatchewan S7K 0J8

### 92.3.3 Registration to Practise

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

# 92.4 Finance

# 92.4.1 DDS Degree

#### **Estimated Budget for Dental Students**

No student is allowed to purchase a kit without permission of the Department of Dentistry.

Year 1

Year 2

Instructional and Noninstructional	\$7,370	\$7,370
Books	1,200	1,100
Dental Kits	8,000	8,000
Dental Students Association	75	75
	Year 3	Year 4
Instructional and Noninstructional	\$7,370	\$5,410
Books	600	400
Dental Kits (Instruments)	700	400
Dental Students Association	75	75
NBDE (American) Examinations	_	70
NDEB (Canadian) Examinations	_	1,000

# 92.4.2 Dental Hygiene Diploma

Estimated Budget for Students	Year 1	Year 2
Instructional and Noninstructional	\$5,700	\$3,800
Books	900	600
Dental Hygiene Kits	5,000	2,000
Membership Fees	90	90
CNDH Certification Examination		500

**Uniforms:** The student is expected to have a lab coat, uniform, white oxfords, safety glasses and/or prescription glasses. The lab coat, uniform, shoes, and safety glasses are purchased under the direction of the program.

Field Experiences: Students are responsible for their own transportation to and from field experiences scheduled in the Edmonton area.

#### 92.4.3 MD Degree

Information on fees charged to students in the MD and MSc programs is given in §22. 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, 2-45 Medical Sciences Building; phone (780) 492-6350.

# 92.5 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 Dentistry-Pharmacy Hockey Challenge, 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.

# 93 Admission and Academic Regulations

# 93.1 Admission

See §§13 and 14 for general admission requirements to the University. See §15 for specific admission information for the DDS, Dental Hygiene, MD, and BSc in Medical Laboratory Science programs.

# 93.1.1 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, 2J2.11 Walter C Mackenzie Health Sciences Centre.

# 93.2 Academic Standing and Graduation

# 93.2.1 DDS Degree

Important note: The DDS and MD programs have been revised effective September 1998. The programs listed in this edition of the University Calendar apply only to those students admitted for September 1998 and beyond. Continuing students should consult the Calendar in place in the year in which they were admitted, or they should consult the Faculty of Medicine and Dentistry for information about their programs of study. However, academic standing and promotion regulations, as published here, apply to all students in the program. 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 §94.4).

- 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 §23.8.2, Practicum Placements, Professional Practice and the Public Interest and §87 GFC Policy Manual.).
- (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) 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
- b. The Department of Dentistry Academic Standing Committee and the Faculty Academic Standing and Promotion Committee must approve reexaminations for students who fail two or fewer courses. Students with more than two (2) failed courses in any academic year will not be allowed reexamination privileges.
- c. The Department of Dentistry Academic Standing Committee and the Faculty Academic Standing and Promotion Committee may allow reexamination of a 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. 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.
- 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.
- f. The Faculty of Medicine and Dentistry Academic Standing and Promotion Committee will specify by course the remediation/ reexaminations required of a failed student for the purposes of meeting promotion/graduation requirements.

- g. 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.
- The reexamination mark (as in the case of a deferred mark) will replace the original final exam mark.
- j. Reexaminations in all years of the DDS program must be approved first by the Department of Dentistry Academic Standing Committee and then by the Faculty Academic Standing and Promotion Committee.
- k. Over the program reexamination privileges will not exceed five reexaminations to a combined maximum of ★20.
- (7) Academic Standing: Final decisions regarding academic standing and promotion to the next year or graduation are made by the Faculty 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.
  - A student who fails more than two courses in any year of the program will be required to withdraw from the program.
- (8) Regulations Concerning Repetition of a Year Because of Academic Failure
  - 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.
  - b. 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
    - have clinical deficiencies in no more than two clinical courses and have been advised that the deficiency could be corrected within one term of instruction; and
    - 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 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 review, by the Faculty, of the reasons for withdrawal and of the student's academic record.
  - Availability of a place, within quota, in the class to which the student seeks readmission. Priority is assigned in the following order:
    - Students who have met normal promotion requirements
    - Faculty-approved repeating students and students returning after voluntary withdrawal, in order of academic standing
  - 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.
- (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. 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 (See §26.1.4(7)).
- (12) Hepatitis B: Current information indicates that there is a potential risk of transmission of Hepatitis B from practitioner to patients in the clinical dental setting. Therefore, applicants will be required to be tested for Hepatitis B surface antigen by the University Health Centre. Applicants who test positive for Hepatitis B surface antigen will be tested for Hepatitis B "e" and Hepatitis B viral DNA antigen to help determine infectivity risk. If Hepatitis B "e" and/or Hepatitis B viral DNA antigen is positive the offer of acceptance will be withdrawn and registration to the DDS program will not be completed (see §15.8.4).

For those applicants who test negative to Hepatitis B surface antigen and are registered in the DDS program, Hepatitis B vaccination will be required. An exception will be made for those who are medically contraindicated or for those who have proof of Hepatitis B immunity. After vaccination, students will receive a test to determine if they have

developed immunity. If they have not, further Hepatitis B vaccination scheduling will be determined by the University Health Centre. Those students who then fail to develop immunity will be counselled as to their potential risk status during training and future practice.

At all times students will follow *Universal Precautions* when there is potential of exposure to human blood or body fluids.

Hepatitis C: Hepatitis C antibody testing will be performed by the University Health Centre on all students accepted into Dentistry. Those found to be positive will be counselled as to how to minimize the risk of transmission to patients and how to manage their own health. Testing of dental students may be performed a second time at a later stage of their program.

Human Immunodeficiency Virus (HIV): Currently, the data relating to transmission of the human immunodeficiency virus (HIV) from a health care worker (HCW) to a patient in a health care setting is extremely limited, although transmission from patients to a HCW is more common. Therefore, all students accepted into the Faculty of Medicine and Dentistry are encouraged to undergo HIV testing upon admission and at any time during their program when concerns about infection have arisen, but testing for HIV will not be made mandatory at this time.

### 93.2.2 Dental Hygiene Diploma

In addition to the regulations set out in §23, the following apply to students in the Dental Hygiene Program:

- Alberta certification in CPR (Cardiopulmonary Resuscitation) at the Basic Rescuer Level is required.
- (2) Students entering the Dental Hygiene program may be granted credit for courses completed preprofessionally that are deemed by the Department Chair, in consultation with the course coordinator and the Chair of the Academic Standing Committee, to be demonstrably equivalent to courses for which credit is being sought. Credit is considered only when the student has achieved a grade of 6.0 or more in the qualifying course(s).

Students carrying a reduced academic load exceeding a total of  $\star 6$  will not be eligible for awards.

- (3) Recommendations for promotion and graduation are based on a grade of at least 4.0 in each subject and a GPA of at least 5.0.
- (4) Reexaminations: See §23.5.5.
  - 5) Students are permitted to repeat first-year Dental Hygiene only in exceptional cases as determined by the Department Council. A first-year Dental Hygiene student permitted to repeat the failed year must wait out one year before continuing in the program. Repeating students are considered for awards.
- (6) Students seeking readmission to the Dental Hygiene program have their application for readmission considered in competition with all other applicants by the Admissions Committee.
- (7) 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 Academic Standing Committee acting on the advice of the Department concerned. A grade of at least 6.0 is required for Dental Hygiene courses. A failed student in the final year of the program may be designated a Special Category repeating student and may complete graduation requirements at the completion of the Spring/Summer term. Students who carry a reduced academic load exceeding ★6 from the normal Fall/Winter course load are not eligible for awards in that period.
- (8) A Special Category repeating second-year dental hygiene student
  - a. has achieved a minimum GPA of 6.0 in the second-year program;
  - b. has clinical 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
  - has successfully completed all written examinations in the Dental Hygiene program.
- (9) Faculty Advisor: At the discretion of the Academic Standing Committee, 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 Council.
- (10) Hepatitis B: Current information indicates that there is a potential risk of transmission of Hepatitis B from practitioner to patients in the clinical dental setting. Therefore, applicants will be required to be tested for Hepatitis B surface antigen by the University Health Centre. Applicants who test positive for Hepatitis B surface antigen will be tested for Hepatitis B "e" and

Hepatitis B viral DNA antigen to help determine infectivity risk. If Hepatitis B "e" antigen and Hepatitis B viral DNA is positive, the offer of acceptance will be withdrawn and registration to the Dental Hygiene Program will not be completed. (See §15.8.3s).

For those applicants who test negative for Hepatitis B surface antigen and are registered in the Dental Hygiene program, Hepatitis B vaccination will be required. An exception will be made for those who are medically contraindicated or those who have proof of Hepatitis B immunity. After vaccination, students will receive a test to determine if they have developed immunity. If they have not, further Hepatitis B vaccination scheduling will be determined by the University Health Centre. Those students who then fail to develop immunity will be counselled as to their potential risk status during training and future practice.

At all times students will follow *Universal Precautions* when there is potential of exposure to human blood or body fluids.

Hepatitis C: Hepatitis C antibody testing will be performed by the University Health Centre on all students accepted into Dental Hygiene. Those found to be positive will be counselled as to how to minimize the risk of transmission to patients and how to manage their own health.

Human Immunodeficiency Virus (HIV): Currently, the data relating to transmission of the human immunodeficiency virus (HIV) from a health care worker (HCW) to a patient in a health care setting is extremely limited, although transmission from patients to a HCW is more common. Therefore, all students accepted into the Faculty of Medicine and Dentistry are encouraged to undergo HIV testing upon admission and at any time during their program when concerns about infection have arisen, but testing for HIV will not be made mandatory at this time.

Students admitted to the Dental Hygiene program are required to present a certificate of satisfactory medical examination from a physician of the University of Alberta Health Centre as part of the Faculty requirement.

#### 93.2.3 MD Program

**Important note:** The DDS and MD programs have been revised effective September 1998. Continuing students should consult the Calendar in place in the year in which they were admitted, or they should consult the Faculty of Medicine and Dentistry for further information. However, academic standing and promotion regulations, as established here, apply to all students in the program. The terms "Years 1, 2, 3, or 4" should be considered as equivalents to "Phases I, II, IIIA or IIIB".

The program leading to the MD degree is conducted in four Years (1, 2, 3 and 4), Years 1 and 2 are under the direction of a preclinical coordinating committee and Years 3 and 4 under the direction of a clinical coordinating committee. (See §94.3.)

- 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 §23.8.2, Practicum Placements, Professional Practice and the Public Interest and §87 GFC Policy Manual.
- (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 all courses.
- (5) Comprehensive Examinations:
  - 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.
  - At the end of fourth year, students take a comprehensive examination (denoted as MED 440/540) covering material presented in all four years of the program. Students must pass all clinical clerkship

requirements in Years 3 and 4, excluding MED 440/540, before they will be allowed to take the comprehensive examination. The Academic Standing Committee will review eligibility for writing the comprehensive exam after students have met all clinical clerkship requirements, normally in late March.

- Students must pass the comprehensive examination before being promoted or allowed to graduate.
- (6) Students are not ranked or assigned a numeric grade, but are designated as having passed (received credit) or failed a course.

#### (7) Reexaminations

- Students are allowed reexamination privileges only in courses that are failed.
- A student repeating a year is not allowed reexamination privileges in that year.
- c. 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.
- d. If a reexamination is approved, satisfactory completion of a remedial program may be required before the student is permitted to take the reexamination.
- 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.
- The reexamination mark will replace the original final exam mark (as in the case of a deferred mark).
- g. For continuing students who entered the program prior to September 1998, reexamination privileges will be granted only if a student has failed two or fewer courses with course weights less than or equal to 20% of the total course weight for that year of the program.
- h. For students entering the program in September 1988 and beyond, reexamination privileges will be granted only to students failing one course in any year of the program.
- Reexamination of MED 440/540 Comprehensive Examination: Students who fail the comprehensive examination will be granted a reexamination.
- (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.
  - 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, excluding MED 440/540 (comprehensive exam) will not be allowed to write the comprehensive exam and will be required to withdraw.
  - c. Continuing students who entered the program prior to September 1998, who have failed two or more courses with course weights more than or equal to 20% of the total course weights for that Year of the program will be required to withdraw.
  - d. Students entering the MD program in September 1998 and beyond who fail more than one course in a Year of the program will be required to withdraw from the program.
- (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.
  - A student repeating a year is not allowed reexamination privileges in that year of the program.
  - 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 of Undergraduate Medical Education, 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:
  - review, by the Faculty, of the reasons for withdrawal and of the student's academic record;
  - 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.

- 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. (See §26.1.4(7).)
- (13) For students in Medicine, where there is a greater potential for transmission of bloodborne pathogens from students to patients as a result of activities involved in their clinical experience in practice settings, the following procedures will apply:

Hepatitis B: Hepatitis B antigen testing will be performed by the University Health Centre on all students after acceptance into the program. Students who test negative for Hepatitis B surface antigen (HbsAg), Hepatitis B vaccination will be required. An exception will be made for those for whom is medically contraindicated or for those individuals who have proof of prior vaccination and test positive for antibody to Hepatitis B surface antigen (anti-HBs). After vaccination, students will receive a second test to determine if they have converted to produce the appropriate antibody titre. If they have not converted they will receive a second vaccination and again be tested. Those students who then fail to convert will be counselled as their potential risk status during training and future practice. All students who test negative for Hepatitis B surface antigen after vaccination will be tested again for surface antigen and Hepatitis B viral DNA at the end of second year, prior to standing clinical placements.

For students who test positive for Hepatitis B surface antigen their "e" antigen (HbeAg) status and the presence of Hepatitis B viral DNA will be determined. If they are found to be positive for the "e" antigen or the viral DNA they will be counselled as to their risk of infecting patients and they will be required to follow a modified clinical training program.

The decision of the Faculty as to the modifications to the training program may be appealed to the Practice Review Board (§87, GFC Policy Manual).

Hepatitis C: Hepatitis C antibody testing will be performed by the University Health Centre on all students accepted into Medicine. Those found to be positive will be counselled as to how to minimize their risk of transmission to patients and how to manage their own health. Testing of Medical students may be repeated at the end of second year prior to their starting clinical placements.

Human Immunodeficiency Virus (HIV): Currently, the data relating to transmission of the human immunodeficiency virus (HIV) from a health care worker (HCW) to a patient in a health care setting is extremely limited, although transmission from patients to a HCW is more common. Therefore, all students accepted into the Faculty of Medicine and Dentistry are encouraged to undergo HIV testing upon admission and at any time during their program when concerns about infection have arisen, but testing for HIV will not be made mandatory at this time.

# 93.2.4 BSc Program in Medical Laboratory Science

(1) Promotion in the Medical Laboratory Science program depends on passing grades in all subjects of the previous year with a minimum GPA of 5.0, as well as the following requirements:

#### Phase I

Each laboratory instructor assesses the competence in communication, comprehension, and technical skills of each student four 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 5.0 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 technical and academic demands, the student must successfully complete the requirements of both components to receive a passing grade.

Competence in communication, comprehension, and technical skills of each student is assessed by written evaluations in each discipline of each Medical Laboratory Science course. At least five evaluations are completed for each course by practising technologists/scientists. One of these evaluations is a composite completed at the end of the course and is worth 50% of the final technical assessment. The others are weighted equally and are worth 50%. Students must pass the technical component of each course with a mark of 50% or higher. Students who do not achieve this in any one course must satisfactorily complete a remedial period of training in that course, or may be required to withdraw. Students are allowed remedial training in only one course. Students who have entered Phase II on probation and who fail to achieve a mark of 50% in the technical component of any one course are not normally allowed remedial training and must withdraw.

- (2) The quota for Phase I students is 26.
- (3) Reexamination: See §23.5.5
- (4) A student permitted to repeat a course or an entire phase must withdraw unless a minimum average grade of 6.0 is obtained on the repeated work.
- (5) Any student whose technical work or academic performance is deemed unsatisfactory may be required to withdraw from the Faculty.
- (6) For students in Medical Laboratory Science, where there is a greater potential for transmission of bloodborne pathogens from students to patients as a result of activities involved in their clinical experience in practice settings, the following procedures will apply:

Hepatitis B: Hepatitis B antigen testing will be performed by the University Health Centre on all students after acceptance into the program. Students who test negative for Hepatitis B surface antigen (HbsAg), Hepatitis B vaccination will be required. An exception will be made for those for whom is medically contraindicated or for those individuals who have proof of prior vaccination and test positive for antibody to Hepatitis B surface antigen (anti-HBs). After vaccination, students will receive a second test to determine if they have converted to produce the appropriate antibody titre. If they have not converted they will receive a second vaccination and again be tested. Those students who then fail to convert will be counselled as their potential risk status during training and future practice.

For students who test positive for Hepatitis B surface antigen their "e" antigen (HbeAg) status and the presence of Hepatitis B viral DNA will be determined. If they are found to be positive for the "e" antigen or the viral DNA they will be counselled as to their risk of infecting patients.

Hepatitis C: Hepatitis C antibody testing will be performed by the University Health Centre on all students accepted into Medical Laboratory Science. Those found to be positive will be counselled as to how to minimize their risk of transmission to patients and how to manage their own health.

Human Immunodeficiency Virus (HIV): Currently, the data relating to transmission of the human immunodeficiency virus (HIV) from a health care worker (HCW) to a patient in a health care setting is extremely limited, although transmission from patients to a HCW is more common. Therefore, all students accepted into the Faculty of Medicine and Dentistry are encouraged to undergo HIV testing upon admission and at any time during their program when concerns about infection have arisen, but testing for HIV will not be made mandatory at this time.

# 93.3 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 Undergraduate Medical Education office, 2-45 Medical Sciences Building. Under certain conditions, an unsuccessful appeal in the Faculty may be carried to the General Faculties Council Academic Appeals Committee. See §23.8.

Students who have a grievance about a grade in an individual course taught in this Faculty should consult \$23.8, 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 in the Faculty's Undergraduate Medical Education office, 2-45 Medical Sciences Building.

# 93.4 Professional Standards for Students in the Faculty of Medicine and Dentistry

The University Code of Student Behaviour (§26) describes a range of non-academic and academic offences deemed unacceptable and for which a student may be penalized. Additionally, the Faculty of Medicine and Dentistry has filed with the Campus Law Review Committee a list of offences representing gross professional misconduct (see §26.1.4).

# 94 Programs of Study

# 94.1 Protection of Persons in Care

Students should be aware that under the Alberta Protection of People in Care Act, they can be required to satisfy a criminal records check before being allowed to serve a period of internship/practicum placement/work experience placement. Refer to \$23.8.3.

# 94.2 DDS Degree

#### 94.2.1 General Information

**Important note:** The DDS and MD programs have been revised effective September 1998. Continuing students in these program are directed by the Calendar in place in the year in which they were admitted, or they should consult the Faculty of Medicine and Dentistry for further 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, Reproductive Medicine and Urology, 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, judgment, 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 §175 for information on programs of graduate study offered by the Department.

#### 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.

#### 94.2.2 Course Requirements

**Important note:** The DDS program was revised effective September 1998. Students who entered the program prior to September 1998 are directed by the Calendar in place in the year in which they were admitted, or they should consult the Department of Dentistry for further information.

#### Year 1

DMED 511	<b>★</b> 3	5 weeks
DMED 512	<b>★</b> 6	7 weeks
DMED 513	<b>★</b> 6	6 weeks
DMED 514	<b>★</b> 11	14 weeks
DDS 510	<b>★</b> 6	8 hr/wk
DDS 514	<b>★</b> 2	0-0-60

Year 1 (cont'd)	)	
DDS 515	<b>★</b> 1	15-0-0
DDS 516	<b>★</b> 2.5	15-0-45 40-0-135
DDS 517 DDS 518	<b>★</b> 7 <b>★</b> 4	54-0-6
DDS 519	<b>★</b> 1	15-0-0
Year 2		
DMED 521	<b>★</b> 5	6 weeks
DMED 524	<b>★</b> 9	11 weeks
DMED 525	<b>★</b> 3	4 weeks
DDS 520	<b>★</b> 3	4 hr/wk
DDS 521 DDS 522	<b>★</b> 2 <b>★</b> 1	30-0-0 7 weeks
DDS 523	<b>★</b> 6	7 weeks
DDS 524	<b>★</b> 3	25-0-50
DDS 525	<b>★</b> 1	10-0-0
DDS 526 DDS 527	★1.5 ★2	6-27c-0 15-0-35
DDS 528	<b>★</b> 1	15-0-0
DDS 531	<b>★</b> 5 <b>★</b> 4	30-0-90
DDS 532		60-0-0
DDS 533 DDS 534	<b>★</b> 2 <b>★</b> 1	30-0-0 15-0-0
DDS 535	<b>★</b> 3.5	15-66c-0
DDS 536	<b>★</b> 9.5	61-0-156
DDS 537	<b>★</b> 2 <b>★</b> 1.5	15-24c-0
DDS 539	<b>★</b> 1.5	15-0-15
Year 3		
DDS 540 DDS 541	★11 ★1	0-350c-0 15-0-0
DDS 542	<b>★</b> 1	15-0-0
DDS 544	<b>★</b> 2	15-27c-0
DDS 546	<b>★</b> 3	23-60c-0
DDS 547 DDS 548	<b>★</b> 1 <b>★</b> 6	15-0-0 15-150c-0
DDS 549	<b>★</b> 3	25-0-45
DDS 550	<b>★</b> 3	30-30c-0
DDS 551 DDS 552	<b>★</b> 4.5 <b>★</b> 2	15-54c-45 0-0-60
DDS 553	<b>★</b> 5	30-90c-0
DDS 554	<b>★</b> 4.5	15-105c-0
DDS 555	<b>★</b> 1	15-0-0
DDS 556 DDS 557	<b>★</b> 7 <b>★</b> 7	30-150c-0 30-150c-0
DDS 558	<b>★</b> .5	0-12c-0
Effective 2001/	2002	
Year 4		0 (00 0
DDS 560 DDS 562	★14 ★1	0-420c-0 15-0-0
DDS 564	<b>★</b> 1	15-0-0
DDS 566	<b>★</b> 1.5	0-0-45
DDS 568	<b>★</b> 3	30-36c-0
DDS 569 DDS 570	<b>★</b> 3 <b>★</b> 3	0-80c-0 35-24c-15
DDS 571	<b>★</b> 3	30-30c-0
DDS 572	<b>★</b> 2	15-0-25
DDS 573 DDS 574	<b>★</b> 4 <b>★</b> 2	30-60c-0 5-0-54
DDS 574 DDS 575	★2 ★3.5	15-75c-0
DDS 576	<b>★</b> 3	15-60c-0
DDS 577	<b>★</b> 2	30-0-0
DDS 578 DDS 579	<b>★</b> 2 <b>★</b> 1.5	30-0-0 15-18c-0
DDS 580	<b>★</b> 3	0-80c-0

# 94.3 Dental Hygiene Diploma

#### 94.3.1 General Information

The Department of Dentistry offers a Diploma in Dental Hygiene. The Dental Hygiene Program enables students to acquire knowledge and develop skills and attitudes so that they may assume positions of responsibility in private dental practice or community health care settings.

The dental hygienist is an integral member of the health care team and strives to improve oral health by providing preventive and educational services to the public. Clinical dental hygiene services may include assessing patients' health status, inspecting hard and soft tissues of the oral cavity, removing

deposits and stains from teeth, exposing and developing dental radiographs, applying topical fluorides, taking impressions for study models, and polishing amalgam restorations. Educational and management services for individuals and/or groups may include nutritional and oral hygiene counselling and community dental health program planning, implementation, and evaluation.

The Dental Hygiene curriculum includes courses from the Faculty of Medicine and Dentistry. Dental School faculty from other clinical and basic science disciplines provide lectures and instructional assistance in clinic and classroom. During second year, students participate in field experiences in various community settings, such as hospitals, schools, and facilities for the handicapped, chronically ill, and aged. Experience in an external clinic is required.

Also required is a  $\bigstar 3$  course in interdisciplinary studies approved by the Department and normally scheduled in the evening.

The Dental Hygiene Program is approved by the Commission on Dental Accreditation Education of Canada. Successful students must complete the National Dental Hygiene Certification Examination (Canadian). Successful students in the Dental Hygiene Program are encouraged to write 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.

#### 94.3.2 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.

Year 1		
BIOCH 220	<b>★</b> 3	39-0-0
D HYG 200	<b>★</b> 3.5	43-0-4
D HYG 211	<b>★</b> 5.5	84-0-0
D HYG 212	<b>★</b> 6	0-0-180
D HYG 213	<b>★</b> 3	0-90c-0
D HYG 214	<b>★</b> 7.5	6-210c-0
D HYG 215	<b>★</b> 2	28-0-0
D HYG 216	<b>★</b> 1	14-0-0
D HYG 217	<b>★</b> 1	20-0-0
D HYG 220	<b>★</b> 3	28-0-26
D HYG 222	<b>★</b> 2	28-6-0
D HYG 230	<b>★</b> 1.5	20-0-0
D HYG 231	<b>★</b> 1	14-0-0
D HYG 232	<b>★</b> 1	14-0-0
D HYG 240	<b>★</b> 2	28-0-6
D HYG 241	<b>★</b> 1	0-12c-0
DENT 300	<b>★</b> 0	0-8s-0
INT D 410	<b>★</b> 3	0-39s-0
MMI 422	<b>★</b> 2	28-0-9
OBIOL 202	<b>★</b> 4	60-0-0
PHYSL 252	<b>★</b> 6	78-0-0
Үеаг 2		
D HYG 313	<b>★</b> 16	0-471-0
D HYG 316	<b>★</b> 1.5	14-2c-0
D HYG 317	<b>★</b> 2	28-0-0
D HYG 321	<b>★</b> 2	13-39c-0
D HYG 322	<b>★</b> 2	28-0-9
D HYG 326	<b>★</b> 3	42-6-0
D HYG 329	<b>★</b> 2.5	0-75c-0
D HYG 340	<b>★</b> 2	0-48-0
D HYG 345	<b>★</b> 1	14-0-0
D HYG 386	<b>★</b> 1	15-0-0
D HYG 387	<b>★</b> 0.5	0-0-15
OBIOL 300	<b>★</b> 2	28-0-0
OBIOL 302	<b>★</b> 3	45-0-0
OBIOL 305	<b>★</b> 3	42-0-0

# 94.4 MD Degree

#### 94.4.1 General Information

**Important note:** The MD program was revised effective September 1998. The following program listed in this edition of the University Calendar applies only to those students admitted from September 1998 and on. Continuing students in this program, who registered previous to 1988, are directed by the Calendar in place in the year in which they were admitted, or they should consult the Faculty of Medicine and Dentistry for further information.

The program leading to the MD degree is conducted over four years, Years 1 and 2 are under the direction of an interdepartmental coordinating committee and Years 3 and 4 are under the direction of a second interdepartmental committee.

Years 1 and 2 are the pre-clinical years in which the material is presented in a series of system-based course blocks. Each block presents the material in a reasoned progression from basic information to clinical application. There are two separate, but coordinated courses, dealing with the social/sociological/public health and clinical skills aspects of medicine, which are scheduled throughout this period.

Years 3 and 4 are the clinical years. Year 3 includes a Link course of 3 weeks, followed by a student internship of approximately 49 weeks. During this latter period there is also some opportunities for elective courses and a holiday period. Year 4 is a senior clinical year of approximately 34 weeks, which includes some courses, student rotations, electives and a holiday period. Each student in consultation with the Undergraduate Medical Education Office, develops their own electives program. A wide range of approved elective programs in all aspects of medical science, medical practice and related areas is available.

#### 94.4.2 Course Requirements

#### Year 1

1.	DMED 511	(5 weeks)	4.	DMED 514	,
2.	DMED 512	(7 weeks)	5.		(8 hours/week)
3.	DMED 513	(6 weeks)	6.	MED 517	(12 hours)
Ye	ar 2				
1.	DMED 521	(6 weeks)	5.	MED 523	(7 weeks)
2.	DMED 524	(11 weeks)	6.	MED 526	(8 hours/week)
3.	DMED 525	(4 weeks)	7.	MED 527	(12 hours)
4.	MED 522	(7 weeks)	8.	MED 520	(9 hours)
Ye	ear 3				
1.	MED 532	(3 weeks)	7.	OB GY 546	6 (6 weeks)
2.	ANAES 546	(1 week)	8.	PAED 546	(6 weeks)
3.	F MED 546	(4 weeks)	9.	PSYCI 546	(6 weeks)
4.	MED 545	(2 weeks)	10.	SURG 546	(6 weeks)
5.	MED 546	(6 weeks)	11.	MED 531	(36 hours)
6.	MED 547	(8 weeks)			
Ye	ear 4				
1.	MED 556	(6 weeks)	6.	SURG 556	(6 weeks)
2.	MED 557	(5 weeks)	7.	MED 542	(3 weeks)
3.	MED 558	(4 weeks)	8.	MED 541	(36 hours)
4.	PAED 556	(3 weeks)	9.	MED 540	(9 hours)
5.	PSYCI 556	(3 weeks)			

# 94.5 Honors in Research Program in Medicine

This program is for students looking for in-depth exposure to research during medical school. (Each candidate must spend a minimum of 24 weeks [approximately two summers] of active involvement in a research project to fulfil the requirements of the Honors in Research program.) There is an application procedure, final report requirement, and a minimal GPA stipulation. The program is monitored by the Medical Sciences 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, 2J2.11 Walter C Mackenzie Health Sciences Centre.

# 94.6 Degree of BSc in Medical Laboratory Science

#### 94.6.1 General Information

The Faculty of Medicine and Dentistry offers an undergraduate degree program in Medical Laboratory Science to meet the demand for more highly qualified research laboratory personnel; for senior and supervisory technologists in large hospitals, government, and private laboratories; and for teaching positions in various schools of medical laboratory technology. The BSc in Medical Laboratory Science is a versatile degree that allows access to a multitude of advanced degrees and programs.

The preprofessional year and Phases I and III of the program are normal university years. Phase II, beginning approximately July 1, consists of clinical hospital laboratory training under the direct supervision of the Faculty of Medicine and Dentistry. If successful in their clinical phase, students may write certification examinations with the Canadian Society for Medical Laboratory Science.

**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 before beginning Phase I.

#### 94.6.2 Program of Courses

Phase I		Phase II – Clinical Rotation (See Note 1)		Phase III (See Note 2)	
1. MMI 240 (★6) 2. MLSCI 230 (★3) 3. MLSCI 235 (★1) 4. MLSCI 250 (★3) 5. MLSCI 262 (★3) 6. MLSCI 262 (★3) 7. MLSCI 270 (★2) 8. PHYSL (★6) 9. Arts Option (★3)	1. 2. 3. 4. 5. 6. 7.	BIOCH 203 (★3) BIOCH 205 (★3) MLSCI 320 (★3) MLSCI 330 (★5) MLSCI 340 (★5) MLSCI 350 (★3) MLSCI 350 (★3) MLSCI 350 (★3) MLSCI 370 (★3)	1. 2. 3. 4. 5. 6. 7.	★12 chosen from MLSCI 430,460, 466, 475, 481 MMI 440, 426 or 427 or 405 or 415 MLSCI 480 (★3) MLSCI 410 (★1) Project course: INT D 491 (★6) or 409 (★3) and Science option (★3) (see Note) INT D 410 (★3) Arts option (★3)	

#### Notes

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

# 94.7 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 7.5 in courses taken in the first and second phases of the program and will have completed STAT 141, 151, 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 PhD in Medical Sciences 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, B-117 Clinical Sciences Building.

# 94.8 Degree of Bachelor of Medical Science

The degree of Bachelor of Medical Science may be awarded to students in the MD program at the end of the second year of that program who have fulfilled the following requirements at this or another university:

#### First Year

Two Science Courses
Three Arts or Science Courses

#### Second Year

Two Science Courses
Three Arts or Science Courses

#### Third Year

First-year of the MD Program

#### Fourth Year

Second-year of the MD Program

#### **Provisions**

- None of the courses in the first and second year has been used for credit toward another degree.
- (2) The program does not include more than seven junior arts or science courses.
- (3) The science courses include
  - a. ★6 or equivalent in Inorganic Chemistry,
  - b. ★6 or equivalent in Organic Chemistry,

- c. ★6 or equivalent in Biology (may include Microbiology, Zoology, Genetics, Botany, Entomology, Bacteriology, Immunology),
- d. ★6 or equivalent in Physics.
- (4) The Science options do not include first-year courses in physiology.
- (5) At least the final two years have been taken at the University of Alberta.
- (6) A grade point of 4.0 or higher in all courses and a GPA in each year of at least 5.0 or equivalent is presented.
- (7) Not more than two reexaminations have been written for the purpose of obtaining passing marks or raising the GPA to the required 5.0.

#### 94.9 **Graduate Studies**

The Faculty of Medicine and Dentistry offers Master's and PhD degrees, as well as a Postgraduate Diploma in Health Services Administration. The Department of Dentistry also offers an MSc Degree in Orthodontics. Details on these programs can be found in the Graduate Programs section of the Calendar, listed by department.

#### **Continuing Medical Education** 94.10

Continuing Medical Education provides practising physicians with the opportunity to remain up-to-date in knowledge, skills and attitudes. The Division organizes various postgraduate learning events for family practitioners and specialists. These include one- to three-day conferences in Edmonton or a resort area, regional conferences in outlying hospitals of central and northern Alberta, a telephone conference program to physicians in smaller communities, an evening course series, major university-based courses, clinical traineeships and distance learning programs, and a medical information service in the teaching hospitals of Edmonton. The Division cosponsors teaching events with various para-medical organizations if they appear to relate to improvement of health care. The Division enjoys the support of the College of Family Physicians of Alberta, Alberta Health, and the Alberta Medical Association.

Inquiries about these programs should be directed to the Associate Dean Director, Continuing Medical Education, 2J3 Walter C Mackenzie Health Sciences Centre, University of Alberta, Edmonton, AB T6G 2R7.

#### **Continuing Dentistry Education** 94.11

Courses are offered by the Department of Dentistry to provide a program of continuing education for the dental profession. A program outlining dates, course descriptions, participation, and length is prepared annually and distributed to the profession.

#### 94.12 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 program in Emergency Medicine and a diploma program in Care of the Elderly are also available with an additional year of training.

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

#### **Primary Certification Programs** 94.12.1

Anaesthesia **Anatomical Pathology** Cardiac Surgery Dermatology

Diagnostic Radiology **Emergency Medicine** 

General Pathology

General Surgery

Haematological Pathology

Internal Medicine

Medical Microbiology

Neurology Neurosurgery

Nuclear Medicine

Obstetrics and Gynaecology

Occupational Medicine Ophthalmology

Orthopaedic Surgery

Otolaryngology

**Paediatrics** 

Physical Medicine and Rehabilitation

Plastic Surgery

Psychiatry

Radiation Oncology

Urology

#### 94.12.2 Certificate of Special Competence Programs

Cardiology

Endocrinology

Gastroenterology

Geriatric Medicine

Haematology

Infectious Diseases

Medical Oncology

Nephrology

Paediatric Cardiology

Paediatric Endocrinology and Metabolism

Paediatric Infectious Diseases

**Pulmonary Medicine** 

Rheumatology

#### **Accreditation Without Certification Programs** 94.12.3

Critical Care Medicine

Neonatology

Inquiries regarding these programs should be directed to the Associate Dean, Postgraduate Medical Education, 2J2.06 Walter C Mackenzie Health Sciences Centre, University of Alberta, Edmonton, AB T6G 2R7

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, #802, 151 Slater Street, Ottawa, ON K1P 5H3. Certificate of Special Competence and Accreditation Without Certification Programs 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 written in May of the final year of medical school. Part II is 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, #900, 10180-101 Street, Edmonton, AB

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.

#### 95 Courses

Faculty of Medicine and Dentistry courses are listed in §201, Course Listings, under the following subject headings:

Anaesthesia (ANAES) Anatomy (ANAT) Biomedical Engineering (BME) Biochemistry (BIOCH)

Cell Biology (CELL)

Dentistry (DDS)

Dentistry (DENT)

Dentistry/Medicine (DMED)

Dental Hygiene (D HYG)

Family Medicine (F MED)

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)

Pathology (PATH)

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)