Alberta

Faculty of Medicine and Dentistry



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 and disseminate no | еw |
|--------------|-----------------------------------|----|
| | knowlede for the benefit of socie | tν |

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

collectivity 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 | 14 |
| Number of Academic Staff | 356 |
| 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

The Professors 91

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. Recently, a member of the Faculty has been the recipient of one of the 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 1997-98, 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 others of the 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.)

| Office of the Dean |
|---|
| Dean DLJ Tyrrell |
| Associate Deans RA Bear CI Cheeseman P Davis G Goldsand PA Gordon GW Raborn JH Weiner |
| Assistant Deans CG Baker MC Palmer BR Stevenson |
| Faculty Service Officers |

V Chlumecky

DM Gupta

Administrative Officers **BK Esslinger** C Iwanicka P Stack Faculty **Departments** Anaesthesia Chair and Professor BT Finucane Professor *AS Clanachan Associate Professor BA Finegan Assistant Professors SN Gupta

RA Kearney

S Rashig

Clinical Professor RC Grego **Associate Clinical Professors HL Carle** MXM Coughlan DB DuVal I M Entwistle SM Ferreira LR Hatch LJ Huston RG Johnston BE Marchak DD Vincent **RG Bergstrom** BJ Bucyk

Assistant Clinical Professors JG Cormack DJ Cubitt JM Dupuis DR Gamez CR Guenther AS Guest

IA Hopkins LY Huang V Jensen N Klassen JT Lilley TA Mayson KA Munn W I Murtha SG Nadeau CJ Noble SA Olson YM Patel S Paterson GA Perez **BZ** Petriw H Reine SL Scott RF Seal JD St Clair RJ Taggesell C Tang DH Wiebe TW Yeh

Clinical Lecturers LB Baron MH Bercovich R Brown **BPV** Delbecq A Gidwanev D Grav DA Hardy R Hauger DT Jolly **B** Knight JP Koller Al MacDonald M Martin K Martindale JA Moir ST Reid ZS Saleh OJ Schneider PD Wildarube Professor Emeritus

DF Cameron

Biochemistry

Professors

Acting Chair and Professor BD Sykes

RC Bleackley DN Brindley *CE Cass MJ Ellison RS Hodges MNG James RN McElhaney M Michalak RO Ryan P Scott *DLJ Tyrrell DE Vance JH Weiner

Associate Professors LB Agellon L Fliegel *R Godbout **CFB Holmes BD** Lemire JC Stone

Assistant Professors *L Berthiaume INM Glover MC Schultz D Stewart Professors Emeriti WA Bridger JS Colter CM Kay NB Madsen AR Morgan

VH Paetkau

LB Smillie

Faculty Service Officer

Administrative Officer GM Redmond

Biomedical Engineering

Chair and Professor PS Allen **Professors** BJ Andrews ZJ Koles *RV Rajotte RE Snyder *FX Witkowski * IF Wolfaardt

Associate Professor *SA Jackson Assistant Professors H Uludag AH Wilman

Professors Emeriti D Fenna DJ Griffiths TR Overton

Adjunct Professors D Bennet MG Faulkner *RH Hooper A Kostov

Cell Biology and Anatomy Chair and Professor

RA Rachubinski **Division al Director** (Anatomy) and Professor

Professors KM Bagnall DA Begg RR Campenot TL Krukoff

DR Russell

Associate Professors *WJ Gallin P Melancon M Pasda *D Pilgrim DN Singh **BR Stevenson** AH Walji

Associate Clinical Professor LP Sterns

Assistant Professors J Aitchison L Berthiaume T Hobman *R Lehner E Shibuya R Wozniał

Professors Emeriti TS Leeson K McFadden RS Smith HIA Zaw-Tun

Family Medicine

Chair and Professor DG Moores Professor *P Jacobs **Associate Professors** NR Bell FR Brenneis R Brownoff A Cave

RG Chavtors

MG Donoff

*RL Fainsinger *B Holroyd P Humphries P Klemka EH Krikke GR Spooner J Triscott

Assistant Professors M Cave

L Gaede S Hughes I O'Hara I Steiner P Yoon

Associate Clinical Professors

D Chang *MA Cherniwchan *GE Cummings KJ Gardener N Hans H Hays CJ Lord **EW Papp** *DL Shragge R Soin *TD Sosnowski

Assistant Clinical Professors WD Armstrong

MA Atrens-Sharko SK Aung AE Ausford **BH Banmann** DW Bond *HA Borkent *M Boulanger *JJ Brown PA Caffaro SW Chambers WE Clelland IF Colliton R Cunningham N Flook JG Gokiert *MS Gross HR Hindle *SK Kelcher TD Kolotyluk DJ Konkin SF Low

*AR Murray *C Neal J Parmar *WR Patton TF Ranieri M Reedyk JG Reilly JM Robinson WE Schneider **FP Schuster** MR Smith RM Stepanko JC Taylor JR Tilley *AF Walker **BRB** Whittaker

DS Mackey

HA Zirk **Clinical Lecturers** *BL Abel JR Andreiuk DM Andriashek FW Armstrong JB Armstrong MD Armstrona H Rahlitz I Bailes AL Bailey LL Baker T Bakshi DJ Barer JB Barsky DL Belcher IF Bell L Bernier-Lycka **GR Blais**

GG Mazurek

T McKeown

DP Miller

JA Mohler

W Molbera

NJ Morison

MG Moss

JD Murphy

DL Myhre

ED Ndovi

S Needham

KD Neilson

AE Nett

BL Oldale

P Palma

P Paludet

DJ Paras

GL Phillips

AJD Pope

*SA Poplawski

*RA Purser

WJ Reynolds

BD Ritchie

JD Ritchie

PJA Ruiter

DR Rvan

JC Routledge

R Rajput

DA Reid

WM Brown MJ Caffaro DR Cave AYL Chiu JF Chiu DJ Cook JE Craig RF Crowe AC Dacunha *JMB Davidson BC Deane LD Duion **RH Dunbar** LR Edwards *CGM Evans JA Field SD Flanagan TF Flanagan P Friese K Ghali SC Ghitter-Mannes IM Godel NM Gray JJ Hankinson VM Hanlon BC Havden TL Heisler ES Holmes DJ Hryciuk JR Hunter MF 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 LM Ma K Mangán PA Marner RA Martin

4

MM Bodmer M Saayman DW Boettger JJ Saunders MA Bowland **GD** Scheirer BW Boyko TW Sefcik TB Bray **RK Sherman** HS Sidhu RG Brown *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 C Young MJ Young Professors Emeriti RR Cherry **GL** Higgins Faculty Service Officer 0 Szafran **Adjunct Professors** *NL Gibson I Meadows

Laboratory Medicine and Pathology

Acting Chair DC Rayner Professors LH Honore LD Jewell LE McGann G Nguyen PA Gordon K Solez RW Yatscoff

Associate Professors G Cembrowski RW Coupland J Hugh HAA Idikio ES Johnson RF Power DC Rayner *AR Turner

Assistant Professors FJ Bamforth R Chibbar C Hao *XC Le R Lai L Puttagunta G Tyrrell

Clinical Professors TA Kasper PKF Petrik

Associate Clinical Professors

JM Danyluk DTP Dawson AJ Derbawka GP Dowling WS Etches DF LeGatt *EH Schloss T Thay DJ Willans

Assistant Clinical Professors
RJ Audette
B Bannach
H Berendt
RC Berendt
G Blakney
LGJ Boutin
G Clarke
LN Denmark
HL Gritter
J Hannon

TE Higa T Higgins GH Johnson **GR** Jones DW Kinniburgh VL McCann DR Mclean DM Morrison GD Neuman G Orlando C Prosser N Rayani LJM Russell N Satkunan ICF Sin G0 Wood HWA Wu

Professors Emeriti CC Lin BW Mielke TK Shnitka RA Stinson RJ Swallow Honorary Associate

Professor

WT McGaw

Adjunct Professors
A Malcolm
M Stewart

Medical Laboratory Science

Acting Director FJ Bamforth

Assistant Professor PL Letendre

Lecturers S Chamberlin M Fraser LE Purdy EE Rivait MA Williams

Clinical Instructors M Ackney R Cunningham I Fenger-Andersen R Lane I Simpson

Administrative Officer
JL McPhee

Medical Genetics

Chair and Professor DW Cox

Professors *I MacDonald DJ Tomkins

*M Walter

Associate Professors JS Bamforth *D Gilchrist H McDermid

Assistant Professors S Andrew *FJ Bamforth DM Glerum NJ Leonard MJ Somerville D Underhill R Wevrick

Medical Microbiology and Immunology

Chair and Professor JR Smiley Professors GD Armstrong *D Befus *M Belosevic *EA Fanning *G Goldsand LJ Guilbert
*PF Halloran
RT Irvin
*RPB Larke
*R Moqbel
*LM Pilarski
*A Rabinowitch
JA Robertson
DE Taylor
*GD Taylor
*DLJ Tyrrell
*JH Weiner

JF Elliott
*SC Houston
K Kane
K Kowalewska-Grochowska
DY Kunimoto
*W Maksymowych
*L Miedzinski
HL Ostergaard
MS Peppler
*JK Preiksaitis

Associate Professors

Assistant Professors
*AM Joffe
R Kumar
*J Robinson
Clinical Professors

L Sialer

*W Vaudry

Clinical Professors SI Hnatko RP Rennie

Associate Clinical Professors *B Romanowski JA Talbot

Assistant Clinical Professors E Blondel-Hill *L Boychuk *! Chiu

*I Chiu JC Galbraith B Lee J Nigrin

Professors Emeriti
JW Carmichael
E Diener
JMS Dixon
FL Jackson
BM Longenecker
RG Marusyk
OEZ Morgante
RLS Whitehouse

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P Dickie

P Dickie R Sherburne KK-Y Yu

Administrative Officer

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Medicine

Chair and Professor PW Armstrong

Associate Professor *DL Saunders

Assistant Clinical Professor *SK Aung

Administrative Officers R Mah JC Morrison

Cardiology

Director and Professor SL Archer Professors
PW Armstrong
C Basualdo
M Haraphongse
BI Jugdutt
FX Witkowski

Associate Professors JR Burton V Dzavik DP Humen KM Kavanagh D Manyari DA Taylor KK Teo **RT Tsuyuki WJ Tymchak

Assistant Professors
*MR Joffres
*MJ Kantoch
SKM Kimber
ED Michelakis
Clinical Professors
PV Greenwood

WKK Hui

Associate Clinical Professors B Cujec

B Cujec SS Gulamhusein Z Lakhani MPJ Senaratne T Talibii

Assistant Clinical Professors LA Kasza

RG Williams

Clinical Lecturers
*NS Brass
DM Hammer
M Hoskinson

TG Muzvka

Clinical Associate DM Hammer

Professors Emeriti RS Fraser RE Rossall Adjunct Professor TJ Montague

Clinical Hematology and Medical Oncology

Director and Professor

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

Assistant Professors *MC Palmer DBC Ritchie

Assistant Clinical Professor *JL Hannon

Professor Emeritus *RN MacDonald

Dermatology and Cutaneous Sciences

Director and Associate Professor A Krol

Associate Professor

AN Lin

Assistant Professor TG Salopek

Clinical Professors

Associate Clinical Professors

DW Groot NA Jampolsky JY Liao

EH Schloss

Assistant Clinical Professors

GJ Lauzon BAS Lycka MB Rogers Clinical Lecturer

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
DW Morrish
A Rabinovitch
EA Ryan
*JZ Scott
J Vance

Associate Professors *WA McBlain EL Toth

Assistant Professors GA Francis TJ Kieffer LE Mereu

Professors Emeriti PM Crockford RN Eidem DM Fawcett GD Molnar

Adjunct Professor S Yokovama

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

JP McKaigney *MS Millan DC Sadowski

Assistant Clinical Professors

RD Cherry JP Ferguson

LM Gramlich **EAG Lalor** DN Todoruk

Clinical Lecturer K Matic General Internal

Medicine Director and Associate

Professor NE Brown Professor CH Harley

Associate Professors BW Fisher DM Gilchrist PG Hamilton *AAC Yeuna

Assistant Professors *SC Houston N Kassam *RZ Lewanczuk

Clinical Professors WR Black

KC Bowering *GF MacDonald

Associate Clinical Professors

*WJ Dickout *IA Ferguson E Kretzul JT McCaffery MG Nutting A I Voth

Assistant Clinical Professors

J Allan *JS Archibald A Cairns DA Campbell NE Gibson MS Millan E Raff DJ Tusz

Clinical Lecturers

A Bharmal RA Hosein S Majumda LER Malowany

Professors Emeriti LM Anholt

JB Dossetor AM Edwards *RN Fidem JAL Gilbert JC Hopkyns

Geriatric Medicine

Director and Professor AL Sclater

Professor PN McCracken

Associate Clinical Professors

AG Juby *JA Triscott

Associate Professor

Assistant Clinical Professor

Clinical Lecturer

DR Rolfson

Adjunct Professor AR Dobbs

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 Grvnoch AW McMahon AG Murray SD Soroka

Associate Clinical Professors

IA Ferguson MW Lee

Adjunct Professor CMF Kjellstrand

Infectious Diseases

Director and Professor SD Shafran

Professors EA Fanning G Goldsand *CL Soskolne **GD** Taylor

*DLJ Tyrrell Associate Professors L-J Chang SC Houston *DY Kunimoto

LJ Miedzinski JK Preiksaitis Assistant Professor

*MA Joffe

Clinical Professor

Associate Clinical Professor LR Boychuk

Assistant Clinical Professors F Rlondel-Hill

Neurology

I Chiu

A Shuaib

Director and Professor

Professors JH Jhamandas WR Martin KG Warren

Associate Professors MG Elleker

DS Fulton AMW Penn

Assistant Professor

M Javidan Clinical Professor

Associate Clinical Professors

E Starreveld NJ Witt

AF Wilson

Assistant Clinical Professors

RN Roberts TE Roberts P Stenerson

Clinical Lecturers B Marynowski ML Myles

Professors Emeriti MH Brooke G Monckton

Adjunct Professor SA Warren

Pulmonary Medicine

Director and Professor

Professors AD Refus *NN Finer *TL Guidotti **RL** Jones M King **I Mavers** R Moabel

Associate Professors

*NE Brown W Chin *PA Hessel DC Lien R Long GC Man

Assistant Professors

*IA Crockett *M Duszyk A Liu LS Melenka EYL Wong

Clinical Professors NRT Gibney TK Lee GF MacDonald

Associate Clinical Professors

JS Archibald WJ Dickout MK Heule S Marchushamer EJ Nobert DF Stollery

Assistant Clinical Professors

LS Melenka IA Shustack **Adjunct Professor**

DA Enarson Professors Emeriti FA Herbert

BJ Sproule Rheumatology

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 LeClerca

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

NB Okun M Sagle A Schepansky

UNIVERSITY OF ALBERTA

Assistant Professors R Chari ST Davidge CG Flood *V Harber

Clinical Professors JJ Boulton JJ Boyd LG Evenson **CF Hoskins** J Marko

IV Tataryn

Associate Clinical Professors

CES Burnett CP Funa SI Genuis SR Langton M Lieberman J Sabourin SN Schuurmans TN Traff

Assistant Clinical Professors GL Black

RC Black M Bow R Chua TFX Corbett TP Gleason S Gross DJ Hodaes G Iwaniuk Alee MS Mah

> P Verma Clinical Lecturers RI Brown MJO Coe

P Lessard C Linton JM McCubbin SJ Reid K Seethram l 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 CE Cass *PA Gordon *AJB McEwan D Murray LM Pilarski ARE Shaw *L Wiebe *PM Venner

Associate Professors *V Baracos *RW Coupland AJ Franko *PE Grundy *WP Gati

R Godbout

*JC Hugh *A Janowska-Wieczorek WA McBlain *MB Parliament CA Spencer MJ Turner M Weinfeld

Assistant Professors RA Rritten *MJ Hendzel *JR Mackey *RB Moore *WH Roa

Lecturer R Mirzavans

Adjunct Professors RS Dav GG Miller **Professor Emeritus**

X Sun

*ARP Paterson Faculty Service Officer

Medical Oncology

Director and Professor AR Belch

Professors *JJ Akabutu *ALA Fields *DW Morrish *AR Turner *PM Venner

Associate Professors *K Courneya

*PE Grundy *A Janowska-Wieczorek *LM Larratt JM Nabholtz MC Palmer

Assistant Professors

H Au *SJ Desai JR Mackey M Smylie

Adjunct Professor GD MacLean KS Tonkin

Assistant Clinical Professor

Medical Physics Director and Associate

Professor **HR** Hooper Associate Professor

RS Slohoda Assistant Professor

DM Robinson **Associate Clinical Professor**

SL Connors

Assistant Clinical Professors GC Field B Murray

Palliative Care Medicine

Director and Professor ED Bruera

Associate Professors CE Cumming RL Fainsinger MD Handman

Assistant Professors **CP Jenkins** JL Pereira **AW Taube**

SM Watanabe **Assistant Clinical Professors** J Danielson

M Hundleby RA Sela

Adjunct Professor C Ripamonti . Research Associates P Lawlor C Nekolaichuk

Research Associates

C Nekolaichuk PW Walker

PW Walker

Radiation Oncology **Director and Associate**

Professor RG Pearcey Professors AW Lees

*AJB McEwan AAE Starreveld

*DS Fulton N Iha BE Krause DG McGowan MR Parliament

Assistant Professor WH Roa

JE Pedersen

Associate Clinical Professors

*Z Catz *RN Ludwig *TJ Terry

Assistant Clinical Professors

*I Birchall **GS Dundas** *S Halls TS Niiiar *TJ Terry

Professor Emeritus RC Urtrason

Surgical Oncology

Acting Director and Associate Professor *CI deGara

Professors *N Kneteman *0G Thurston

Associate Professors *VA Capstick *A Schepansky

Assistant Professor *RB Moore Clinical Professor

*JDS McKean Associate Clinical Professor

*EE Wiens

Assistant Clinical Professors *GJ Lavoie *C McNamee

Ophthalmology **Chair and Professor**

IM MacDonald Associate Professors GT Drummond

MA Walter Clinical Professors **RA Morgan**

KH Shutt **Associate Clinical Professors**

J Buski EJ Hodaes FL Leong-Sit **RLC Johnson**

Assistant Clinical Professors

RJ Casey D Climenhaga H Climenhaga D Cote JJ Foy KR Hennig B Hinz M Greve M Kutzner J Leona-Sit JR Lewis A Macdonald ME Phillips EJ Rudnisky LM Uniat Clinical Lecturers

M Scambler LF Smith Professors Emeriti

WG Pearce

HT Wyatt

Oral Health Sciences

Associate Dean and Chair

GW Raborn Professors

CG Baker **GA** Deane **RE Donnelly** FM Eggert HE ElBadrawy KH Gibb KE Glover I W Kline PW Major WT McGaw NC Milos ZM Pawliuk JFL Pimlott KM Polukoshko PD Schuller DA Scott PG Scott JA Theodore Associate Professors

A Kaburda

DJ Pehowich E Peters JN Pochynok HK Tan

Assistant Professors

C Ash E Edgington

Clinical Professors DPK Cheung M Grace **RD Haryett** CE Hawrish BL Kuzyk JM Plecash HL Samuels FW Tunis J Woronuk DC Yu

Clinical Associate Professors

BS Bennett N Chalk LC Chan A Eastwood CK Fialko-Eshenko B Gitzel D Gotaas KI Hesse BG Kindrachuk E Krause R Labahn VP Lee **BA Linke** DJ MacDougall C MacDonald WR Mather F McIntyre H McLeod

ME Mickleborough LR Moore B Nebbe SK Patterson PL Pierce W Preshing I Ritchie EC Robinson P Schulte JA Scott W Smith A Sneazwell TR Stevenson MT Taciuk **RL** Tegart M Wilson KW Wong CC YII

Clinical Assistant Professors DH Bédard L Best

C Botchway AH Brouwer **EA Burgess** H Campbell CG Caruk S Cobban R Cox J Croutze RRA Croutze M Diah I Doberstein W Dobrovolsky R Famer R Easton P Gainer DBC Hayashi M Howell H Janke G Jansen D Kelner R Kreutz E Kucev **EWL Kwan** S Lockwood J Lockau K Lung W MacKinnon J Mergaert I Mowat

U Nassar **BR Neumann** W Primrose M Prosperi-Porta CJ Revell W Smith L Sterns WG Wesner A0 Wong P Wooding PKC Yeung HC Yu

GB Zenith **Clinical Instructors** S Ahraham-Limneos A Azarko K Bapoo-Mohamed T Bone J Borrelli

E Burgess G Burke D Chow J Dalmer D Eliuk A Fyith L Goerz G Grykuliak KS Habib AKK Hoh **KP** Isbister N Jinnah L Julé M Kaiser A Klassen

M Kun

MIalh

SSS Lau T Lau K Lim J Mack I Mah C Martin-Neumeyer S Mitchell C Neufeld

H Nauven J Pan J Paphangkorakit C Patrickson R Schafers U Szkudlarek A Tam J Thomas C Tuazon GP Wendell I White FM Whitney D Wong Lecturer

V Stanic

Professors Emeriti BK Arora **RV Blackmore** DM Collinson HM Dick AD Fee WT Harley PD MacRae RC McClelland KA McMurchy WC Meyer **GW Meyers** CJ Osadetz IW Osborn DM Paton **CH Pearson** IM Plecash AJ Simons WJ Simpson GH Sperber NR Thomas **GW Thompson**

Paediatrics

Acting Chair and Professor

F Harley **Professors** JJ Akabutu RL Collins-Nakai *DW Cox P Etches EW Gauk FL Harley AB Jones GD Lopaschuk PM Olley *DM Olson **HF Pabst** CMT Robertson

Associate Professors

C Baxter B Bell RM Couch JE Ellsworth KJ Goulden *M Michalak I Rebeyka A Rouget LJ Smith **DW Spady** W Vaudry

Assistant Professors D Andrews S Gilmour R Girgis M Gowrishankar M Kantoch S Lappa R Lehner J Robinson R Schulz

BD Sinclair

Clinical Professors DI Hasinoff RR Moriartev *PA Penkoske J Popowich AR Stewart MI Tedeschini OA Ulan JE Van Aerde

Associate Clinical Professors R Anderson

G Andrew P Byrne I Doka J Dyck S Galante K Lee *GM Lees F Martin TJ Paton PM Pierse FM Rabinovitch HR Rajani JS Tkachyk *JR Waters KS Wong PC Zuberbuhler

Assistant Clinical Professors

A Ausford L Bavdala D Berry M Bhambhani I Buka LM Casey R Chen AM Darwish LJ Dibden NA Dower W Dovle-Chan FW Harris K Horne A Janicka A Joffie C Kyriakides S Lappa RP Lemke I Lolliton JE Lopatka C Maiaesk RA Malinowski LF McGoniale AN Mian *JC Mullen

A Murdock H Osiovich VM Osundwa S Parsons E Phillipos ML Ramji D Roseman E Schuster Al Singh G Sukhrani WA Szymanski J Teoh J Tybkham B Wilson JT Woods

Professors Emeriti GJ Conradi NF Duncan J Godel *LC Grisdale EE McCoy D Schiff WC Taylor

Administrative Officer

G Langer **Adjunct Professors** K Horne **RA Lang**

WM Wenmar

Haematology and **Oncology**

Director and Associate Professor **B** Bell

Professor JJ 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 JE Van Aerde Associate Professor

A Peliowski

Assistant Professor EZ Phillipos

Paediatric Cardiology

Director and Associate Professor JD Dyck Professors RL Collins-Nakai PM Olley

Associate Professor JY Coe

Assistant Professors M Kantoch MA Robertson

Associate Clinical Professor *PA Penkoske

Professor Emeritus NF Duncan

Paediatric Intensive Care

Director and Associate Clinical Professor A Conrad

Associate Clinical Professor A deCaen

Assistant Clinical Professor A Joffe

Pharmacology

Chair and Professor AS Clanachan

Professors TM Allen *GB Baker DA Cook WF Dryden SMJ Dunn T Gordon *GD Lopaschuk MW Radomski PA Smith

Associate Professors AN Bateson WF Colmers WP Gati AAC Yeuna

Assistant Professors BA Bielkiewicz-Vollrath R Schulz AMW Tse FWY Tse

Professors Emeriti GR Frank ARP Paterson

Faculty Service Officer FG Hunter

Administrative Officer JC Deuel

Adjunct Professor IL Martin

Physiology

Chair and Professor EJ Sanders

Professors *SI Archer CI Cheeseman S Harvey AKC Ho SE Jacobs *LW Kline *RZ Lewanczuk *DM Olson KG Pearson A Prochazka RR Stein JD Young

Associate Professors SC Barton CG Benishin

E Karpinski **Assistant Professors**

JR Casey *ST Davidge *M Duszyk JJ Greer *TJ Kieffer *RZ Lewanczuk PV Nguyen

Professors Emeriti K1 Hutchison PKT Pang M Schachter

Administrative Officer OM Findlay

Adjunct Professor *RL Jones

Psychiatry

Chair and Professor RC Bland

Honorary Professor El Picard

Professors GB Baker Al Greenshaw **BK Sinha**

Associate Professors

JH Brooks GG Griener GS Hnatko AS Joyce J Metelitsa SC Newman PH Silverstone

Assistant Professors NJ Coupland J LeMellédo

Lecturer PG Tibbo

Clinical Professors M Blackman CA Blashko KM Collinson

P Flor-Henry KD Gendemann A Gordon DW Grove RE Hibbard S Levin S O'Kelly HM Piktel IS Rosie PM Segal B Sowa PF Steinberg **BF Turner** LB Warneke HM Wojcicki

Associate Clinical Professors LM Adams

II Banasch

HM Barker JE Beach AB Bremness AM Carroll PE Copus NP Costigan RJ Dvck LFustace DR Guinhawa CA Hapchyn L Kagan E Lobo M McCallum KF McKenna P Mills BR Mirtle JW Osinchuk

I Pawluk

TJ Snyder

L Studer

PJ White

BS Sanderman

CM Yaltho

Assistant Clinical Professors R Rishon O Cadsky P Carr C Carter WT Chimich P Chokka PS Chue MG Cummins JM Dewart S Dobrofsky R Drebit

DI Gill DR Ginter RA Gurke L Lawless JB Lefsrud RC Lundeen R Maitra S Matthews WA McCav DW Meakins S Monga F O'Croinin WF Otto MB Parsons SE Purdon

JK Rodgers EM Schwab JR Scott D Shih MCI Swanson RP Tauhner 1 Trichard M Tweddle DYW Wong

Clinical Lecturers

J Acton A Anand D Block S Rowman J Carr J Carvk J Chu A Dawrant

M Demas R Dempsey SC Duncan FM Fogarty N Hanon A Holt ND John V Jordan KL Kirdeikis K Lefko-Singh AW McIntyre E McKaigney S Mitchell C Morhalick

SP Nigam J O'Mahonev C Phillips I Phillins 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 *H Jacobs **I Kiss** WE Piper I Sinah E Starreveld AH Thompson GD Watson AF Wilson NJ Witt

Public Health Sciences

Chair and Professor TW Noseworthy

Professors KS Bay D Hailey CB Hazlett SE Hrudey P Jacobs LM Laing D Menon DI Saunders CL Soskolne *M Stewart DR Wilson

Associate Professors

J Cheng PR Hatcher RS Havward PA Hessel WE Kipp *SC Newman AM Penn *RH Plain L Shanner M Suarez-Almazor A Thompson

Assistant Professors J Church

L Francescutti K Froese G Jhangri

DJ Kutsogiannis XC Le KV Rondeau OH Triska DC Voaklander TC Wild

Clinical Professor IM Howell

Lecturers K Fassbender FW Hall J Vincenten

Professors Emeriti CM Meilicke TA McPherson SM Stinson

Adjunct Professors

D Andriashek DA Birkholz L Breault H Buchwald KC Carriere T Chowdhury J Cowell S Demeter F Fllehoi L Derry K Farris SM Fincham N Fok S Gabos GW Gibbs N Gibson A Goldblatt M Gormley GC Granville TI Guidotti

U Hakkinem J Hatcher H Hoffman D Jirsch D Johnson C Karpilow D Kopetsky PD Langelle Flau P Lightfoot RC May D Mewhort **KR Nickerson** J O'Laney S Optenberg

J Pawlyshyn E Pekeles M Perkurinen DI Philippon P Pierse G Predv L Redfern **RE Rogers** D Schopflocher M Serediak C Shields CB Spooner I Svensen C Urion M Wanke SC Weatherill R Wensel D Wilson

Radiology and Diagnostic Imaging

Diagnostic Radiology

Chair and Professor AJB McEwan Professor DB Russell

R Wolfe

K Wona

K Yu

W Yacoub

Associate Professor SA Jackson

Assistant Professors LJ Filipow RGW Lambert

IR Mercer Lecturer **BH Long**

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Clinical Professors **G** Andrew JDR Miller

Associate Clinical Professors RA Ashforth

R Arnold G Askew I Birchall RC Hennig PG Heslip MK Hirji MA Johnson RN Ludwia CG Maguire **H Philips** D Reich WL Ritchie MT Sin TJ Terry GP Trepanier DB Vickar RS Warshawski

Assistant Clinical Professors

TE Ackerman S Adams TW Alexander WW Anderson M Babiuk J Barrie W Berezowsky R Bhargava B Caplan **RHK Chan** K Cheuna D Emery D Foster **BD** Guspie S Halls R Holub ME Hoskinson M Hutson WG Keenan Glauf M Mah KF O'Kelly M O'Keeffe E Parkinson EJ Preville KN Puznak I Reid

R Sherlock WR Short TC Spiers GD Sterling JF Swersky AS Tang JGE Turner Clinical Lecturers CM Copeland CG Elias H len

DO Adams PD Davey MG Fyans N Horeczko P Hyde S Kitay GM Lees LM Kowand WJ Mackie K Kristjanson JF Mossey NE Maslo EC McMartin M Noga WM Struck I Paskar DA Shamchuk

Nuclear Medicine

C Torbiak

Director and Assistant Clinical Professor CG Maguire

Associate Professor *DP Humer

Assistant Professor AV Joshua JR Scott

Associate Clinical Professor RS Warshowski

Surgery

Chair and Professor SM Hamilton Administrative Officer

TM VandenBroel

Office of Surgical Education D Madu

Cardiothoracic Surgery

Director and Clinical Professor A Koshal Professor *R Yatscof Associate Professor Clinical Professors

ET Gelfand PA Penkoske

Associate Clinical Professors DI Modry JC Mullen SS Nakai IM Rebevka

Assistant Clinical Professors

AJ Graham *CR Guenther CLMcNamee

Professor Emeritus JC Callaghan

General Surgery

Director and Associate Professor CI de Gara Professors KL Bowes SM Hamilton NM Kneteman GL Warnock

Associate Professor CJ de Gara

Assistant Professors S Issa AMJ Shapiro

Clinical Professors

JE Anselmo RF Fraser RA Hallgren DW Jirsch S Kilam

Associate Clinical Professors

RM Hackett BW Johnson AW Procyshyn HL Stewart MH van Wiingaarden

Assistant Clinical Professors

HR Chyczij MH Friedman JD Matheson MA Meier

EK Schmidt AF Trautman

Clinical Lecturers D Callahan KD Dabbs KF Goh 0 Heisler A Prakash **RG Turnbull**

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

WW Yakimets Neurosurgery

Director and Associate Clinical Professor JM Findlay

Professor * I Tulin

Clinical Professors PBR Allen JDS McKean KC Petruk

Associate Clinical Professor KE Aronyk

Assistant Clinical Professors RW Broad WJ O'Callaghan DE Steinke

Clinical Lecturer RJ Fox

Professor Emeritus

RK Weir

Orthopaedic Surgery

Director and Clinical Professor MJ Moreau

Professors *KM Bagnall

DC Reid Clinical Professors RM Glasgow

DWC Johnston Associate Clinical Professors

IG Cinats IK Mahood JB McIvor WM Rigal GG Russell

Assistant Clinical Professors

GD Arnett RA Balvk D Dick TH Greidanus LE Hunka KW James FB Kortbeek GJ Lavoie MV Lavoie PMK Leung DI Makar JF McMillan GJ O'Connor KJ Russell

Clinical Lecturers NM Jomha DD Otto DW Weber

Research Associates

D Hill V Raso

Adjunct Professor I A Davis

Otolaryngology

Director and Clinical Professor DJ Oldring

Clinical Professors

CS Carter WH Kudrvk

Assistant Clinical Professors

JC DiToppa CA FIlintt ID Keohani

Clinical Lecturers

OM Bykowski LT Diduch IA Kostiuk H Seikaly

Plastic Surgery

Director and Clinical Professor **GW Lobay**

Professor *LE McGann

Associate Professors A Ghahary FF Tredaet

Clinical Professors

GL Movsa GH Wilkes

Assistant Clinical Professors

DD Campbell MJ Giuffre T Havashi

Clinical Lecturers

DC Edwards

Professor Emeritus JDM Altor

Surgical Research

Director and Professor GL Warnock

Professors **RV** Raiotte JC Russell *R Yatscoff

Professors Emeriti

KP Kowalewski DC Secord

Research Assistant LF Zhu

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 Professor

GT Todd

Assistant Professor RB Moore

Associate Clinical Professors

DR Madoi JB Metcalfe

Assistant Clinical Professors

RP Abele B Bochinski **EP Estey**

LW Mix

SM Robinson Clinical Lecturers

MI Allard TA Wollin

Professors Emeriti WH Lakey MS McPhee JO Metcalfe

Faculty Divisions

Bioethics

Co-Directors and Professors V Bergum

Professors

*V Bergum *P Byrne *JM Howell

*TW Noseworthy *GB Robertson

*JC Ross-Kerr *D Schiff

Associate Professors

*G Griener *L Shanner

Assistant Professor *DM Wilson

Adjunct Professors RC Fraser NI Inions

H Lantz P Marck DL Smith

Professor Emeritus

JB Dossetor (Chair in Bioethics)

Continuing Medical **Education**

Director and Professor

P Davis

Assistant Directors

SE Low KJ Skeith

Critical Care Medicine

Director and Associate Clinical Professor RG Johnstor

Professors

*SM Hamilton *I Mayers *T Noseworthy

Associate Professors

*P Rvrne *PC Etches *NRT Gibney *A Peliowski *P Penkoske *EE Tredget

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

Associate Clinical Professors

*A Conradi *DL Modry

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 Associate

Professor **BR Holroyd**

Associate Professor

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

Assistant Professor

*L Francescutti

Associate Clinical Professors MA Cherniwchan

DL Shragge TD Sosnowski

Assistant Clinical Professors

D Rond HA Borkent MJ Boulanger JJ Brown R Cunningham R Lee D Mackey *LF McGoniale C Neal SA Poplawski WR Patton DC Perry JC Taylor

Adjunct Associate Clinical

Professor I Vicas

AF Walker

Clinical Lecturers BL Abel M Atrens-Sharko D Barer B Brown CG Campbell K Cromwell R Daloise JMB Davidson B Deane **GM Emerson** CGM Evans

S Flanagan K Foster J Franc-Law

GAI Groot R Hansen D Hoshizaki D Hrvciuk P Jain S Jones R Kruhlak M Long

K Mangan J McKaque J Mohler

W Molberg M Moss AR Murray

DW Neilson K Neilson D Nixon T Noga

G Phillins **RA Purser** P Rawlek

D Reid S Ross G Scheirer R Scheirer

W Sevick L Shenfield R Sherman L Sim

TP Stetsko

DF Stewart

A Ushko C Westover R Yao A Yeung M Young

PW Yoon

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Health Sciences Laboratory Animal Services

Acting Director and Faculty Service Officer PN Nation

Faculty Service Officer TF Bayans

Neuroscience

Acting Director and Professor *WF Dryden

Professors *BI Andrews

*GB Baker *MH Brooke *RB Campenot *SMJ Dunn *T Gordon

*AJ Greenshaw *MM Hodge *JH Jhamanalos

*TL Krukoff *S Kumar

*KG Pearson *RE Peter *WD Pierce

*A Prochazka *A Shuaib

*PA Smith *RB Stein

*D Wahlsten

Associate Professors *AN Bateson *WF Colmers *JI Goldberg

*NC Milos

Assistant Professors *D Bennett *L Buchanan *R Cabeza *JJ Greer *C Hao *A Kinastone *A Kostov *P Nguyen *M Parent *D Treit *A Tse *F Tse *D Wong-Wylie *J Yang

*P Zehr **Clinical Professor** *JDR Miller

Associate Clinical Professor *KC Petruk

Adjunct Professors *CHM Beck *AR Dobbs *IC I ind *BK Mitchell *AH Putnam Rochet

*I Singh

Physical Medicine and Rehabilitation Medicine

Director and Associate Professor DJ Carroll

Clinical Professor M Watt

Associate Professors

LA Bellamy RS Burnham

Assistant Professors

M Chan I Sutkanan

Associate Clinical Professors

LE Gross JM Nagy LCE Trachsel *M Watt

Assistant Clinical Professors

M DiPersio JB Guthrie E Veszpremi

Clinical Lecturer E Sampson

Adjunct Professors *BJ Andrews *RR Stein

Studies in Medical Education/Media Services

Director and Professor *DA Cook

Associate Director and

Professor *SL Aaron

Professor

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

*DLJ Tyrrell (Dean of Medicine, Medical Microbiology and Immunology)

Hematology)

*AH Walji (Cell Biology and Anatomy) Research Associates

*D Blackmore (Medicine Council of Canada) *R Muzyka (Technological Consultant) *GL Warnock (Surgery)

*G Zeschuk (Technological

Consultant

Professor Emeritus *TO Maguire

Surgical Medical Research Institute

Director and Professor *RV Raiotte

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) RE Moskalyk (Dean of

Pharmacy and Pharmaceutical Scencies) LR Olhauser (Registrar,

College of Physicians and Surgeons)

RS Smith (Vice-President Research and External Affairs)

MW Spence (Alberta Heritage Foundation for Medical

Research) J-M Turc (Alberta Cancer

Board)

BJ Silzer, MEd

MJ Wood (Dean of Nursing) Registrar of the University

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 Oral Health Sciences 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 Oral Health Sciences 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 interaction with
 - a. other health sciences and other disciplines of the University to promote comprehensive health care;
 - 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;
 - b. 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
 - e. 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

NIVERSITY OF ALBERTA

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 Oral Health Sciences), 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 three APCRU research themes are (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.

University of Alberta Satellite Dental Clinics 92.2.7

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.

Registration and Licensing 92.3

92.3.1 **DDS Degree**

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

Graduates in dentistry from the University may register in Alberta on payment of a licensing fee without further examination.

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 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 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

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 approved dental schools must write the National Dental Examining Board examinations during their final year. Successful completion of these examinations is required for licensure.

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

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

Dental Hygiene Diploma

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 helow:

Alberta

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

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

Nova Scotia

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 Oral Health Sciences.

Year 1

Year 2

| Instructional and Noninstructional | \$7,200 | \$7,200 |
|------------------------------------|---------|---------|
| Books | 1,200 | 1,100 |
| Dental Kits | 8,000 | 8,300 |
| Dental Students Association | 100 | 100 |
| | Year 3 | Year 4 |
| Instructional and Noninstructional | \$7,200 | \$5,400 |
| Books | 600 | 400 |
| Dental Kits (Instruments) | 900 | 500 |
| Dental Students Association | 100 | 100 |
| NBDE (American) Examinations | _ | 70 |
| NDEB (Canadian) Examinations | _ | 1,665 |
| | | |

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 | 4,700 | 2,000 |
| Membership Fees | 100 | 100 |

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; the Courtyard Concert Series, a noon-hour classical concert series (featuring a grand piano donated by the MSA) for University Hospital patients; 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

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 Oral Health Sciences. 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 Oral Health Sciences 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 §15.9 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) Course grades of 3, 2, and 1 are failing grades. A grade of 4 is a conditional pass and permits a student to meet promotion/graduation requirements when
 - a. the student's overall GPA is 5.0 or better;
 - the combined course weight in which grades of 4 or less are achieved does not exceed 20% of the total course weight in the program year;
 - c. satisfactory course standing is approved by the Faculty. Notwithstanding (b) above, the Faculty may deny a student promotion/ graduation when grades of 4 are achieved in any preclinical/clinical course and/or when reexaminations are not available.
 - d. When these conditions are not met, credit is denied for courses in which a grade of 4 has been received.

(6) Reexaminations

- Students are allowed reexamination privileges only in courses that are failed.
- b. Reexaminations of courses in Years 1 and 2: The Faculty of Medicine and Dentistry Academic Standing and Promotion Committee must approve reexaminations for students who fail two or fewer courses.
- c. Reexaminations of courses in Years 3 and 4: The Faculty of Medicine and Dentistry 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.

- A student repeating a year is not allowed reexamination privileges in that year of the program.
- e. If a reexamination is approved, satisfactory completion of a remedial program may be required by the Faculty of Medicine and Dentistry Academic Standing and Promotion Committee before the student is permitted to take the reexamination.
- Students are advised that it is not possible to make a ruling regarding remediation or reexamination until all grades for a year are received and recorded.
- g. The 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.
- 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.
- (7) Academic Standing: Students are awarded a grade point average (GPA at the conclusion of Years 1, 2, 3 and 4 of the program based on their performance in course examinations held during the year. Final decisions regarding academic standing and promotion to the next year are made by the Faculty Academic Standing and Promotion Committee.
 - No student may proceed to any subsequent year of the DDS program unless all the work of the previous year is successfully completed.
 - b. Students with a GPA of less than 5.0 at the end of any one of Years 1, 2, 3 and 4 will be required to withdraw from the DDS program.
 - 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
 - a. No student will be allowed to repeat Year 1 of the DDS program. At the discretion of the Dean; students in Year 2, 3 or 4 may be allowed to repeat a failed year.
 - b. A student who is repeating a year must achieve a GPA of at least 5.5 and a grade of at least 4 in all courses taken in the repeated year. Students who fail to meet this standard will be required to withdraw.
 - c. Except for laboratory and clinical courses, at the discretion of the Faculty Academic Standing and Promotion Committee acting on the advice of the discipline concerned, a student who repeats the failed year may retain credit for courses previously passed with a grade of 6.0 or better.
 - d. 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 achieved a minimum GPA of 6.0 in the fourth Year of the program;
 - ii. have clinical deficiencies in no more than two clinical courses and have been advised that the deficiency could be corrected within a four-month period of instruction; and
 - iii. have successfully completed all written examinations in the DDS

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 Oral Health Sciences, 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:
 - 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 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" antigen to help determine infectivity risk. If Hepatitis B "e" antigen is positive the offer of acceptance will be withdrawn and registration to the DDS program will not be completed (see §15.9.3).

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 *Universital 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 \star 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" antigen to help determine infectivity risk. If Hepatitis B "e" antigen is positive, the offer of acceptance will be withdrawn and registration to the Dental Hygiene Program will not be completed. (See §15.9.2).

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.
 - b. 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 satisfactorily complete all clinical clerkship requirements in Years 3 and 4, and have a grade point average (GPA) of 5.0 or higher in the work of 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.
 - c. Students must obtain a grade of at least 4 on a comprehensive examination before being promoted or allowed to graduate.
- (6) Courses grades of 3, 2, and 1 are failing grades. A grade of 4 is a conditional pass and will permit a student to meet promotion/graduation requirements when the student's overall GPA is 5.0 or better.

(7) Reexaminations

- Students are allowed reexamination privileges only in courses that are failed
- Students with a GPA of less than 5.0 are not eligible for reexaminations in that year.
- A student repeating a year is not allowed reexamination privileges in that year.
- d. 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.
- e. If a reexamination is approved, satisfactory completion of a remedial program may be required before the student is permitted to take the reexamination.
- f. A student who does not take a reexamination within the period of time prescribed by the Faculty will not be allowed to continue in the program.
- g. The reexamination mark will replace the original final exam mark (as in the case of a deferred mark).
- h. For continuing students who entered the program prior to September 1998, reexamination privileges will be granted only if a student has a GPA greater than or equal to 5.0, and has failed two or fewer courses with course weights less than or equal to 20% of the total course weights for that year of the program.
- 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 Comprehensive Examinations: Students who fail the comprehensive examination may rewrite the exam if their GPA including the comprehensive examination mark is at least 5.0.
- (8) Academic Standing: Students are awarded a grade point average (GPA at the conclusion of Years 1, 2, 3 of the program based on their performance in courses taken during the year. In the case of Year 2 the comprehensive examination mark is included in the GPA. Final decisions regarding academic standing and promotion to the next year are made by the Faculty Academic Standing and Promotion Committee.
 - No student may proceed to any subsequent year of the medical program unless all the work of the previous year is successfully completed.
 - b. Students with a GPA of less than 5.0 at the end of any one of Years 1, 2, 3 will be required to withdraw from the MD program.
 - c. Students with a GPA of less than 5.0 on all Year 3 and 4 courses excluding MED 440/550 (comprehensive exam) will not be allowed to write the comprehensive exam and will be required to withdraw.

- d. Continuing students who entered the program prior to September 1998 and who have a GPA greater than or equal to 5.0, but 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.
- e. Students entering the MD program in September 1998 and beyond who have a GPA greater than or equal to 5.0 but fail more than one course in a Year of the program will be required to withdraw from the program.
- (9) Graduate GPA: At the condition of a student's program, a Graduation GPA will be computed which combines the marks for all elements of work, including the comprehensive, undertaken during Year 3 and 4 of the MD program. In order to graduate a student must achieve a graduation GPA of 5.0 or better.
- (10) Regulations Concerning Repetition of a year because of Academic Failure:
 - a. No student will be allowed to repeat Year 1 of the MD program. At the discretion of the Dean, students in Year 2, 3 or 4 may be allowed to repeat a failed year.
 - b. A student repeating a year is not allowed reexamination privileges in that year of the program.
 - No student is allowed to repeat more than one year of the MD program.
 - d. A student who is repeating a year must achieve a GPA of at least 5.5 and a grade of at least 4 in all courses taken in the repeated year. Students who fail to meet this standard will be required to withdraw.
- (11) 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:
 - a. review, by the Faculty, of the reasons for withdrawal and of the student's academic record;
 - b. Availability of a place, within quota, in the class to which the student seeks readmission. Priority is assigned in the following order:
 - i) students who have met normal promotion requirements.
 - 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.
- (12) 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.
- (13) 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).)
- (14) 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 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 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 Oral Health Sciences 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 Oral Health Sciences relate and integrate these fundamental disciplines with the knowledge, skills, judgment, and performance required of dental practitioners.

In addition to bedside and operating instruction in medicine and surgery, senior students are assigned to the Dental Clinic and the Department of Dentistry, 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.

Also required is a ± 3 course in interdisciplinary studies that has been approved by the Department and is normally scheduled in the evening.

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 Oral Health Sciences for further information.

5 weeks

Year 1 DMED 511

| DMED 512 | ★ 6 | 7 weeks |
|----------|--------------|----------|
| DMED 513 | ★ 6 | 7 weeks |
| DMED 514 | ★ 11 | 13 weeks |
| DDS 510 | ★ 6 | 8 hr/wk |
| DDS 514 | ★ 2 | 0-0-60 |
| DDS 515 | ★ 1 | 15-0-0 |
| DDS 516 | ★ 2.5 | 15-0-45 |
| DDS 517 | ★ 7 | 40-0-135 |
| DDS 518 | ★4 | 54-0-6 |
| DDS 510 | ★ 1 | 15_0_0 |

Year 2

| DMED 521 | ★ 5 | 6 weeks |
|----------|--------------|-----------|
| DMED 524 | ★ 9 | 11 weeks |
| DMED 525 | ★ 3 | 4 weeks |
| DDS 520 | ★ 6 | 8 hr/wk |
| DDS 521 | ★ 2 | 30-0-0 |
| DDS 522 | ★ 2 | 7 weeks |
| DDS 523 | ★ 2 | 7 weeks |
| DDS 524 | ★ 3 | 25-0-50 |
| DDS 525 | ★ 1 | 10-0-0 |
| DDS 526 | ★ 1.5 | 6-27c-0 |
| DDS 527 | ★ 2.5 | 15-0-45 |
| DDS 528 | ★ 1 | 15-0-0 |
| DDS 530 | ★ 2 | 0-60c-0 |
| DDS 531 | ★ 5 | 30-0-90 |
| DDS 532 | ★ 4 | 60-0-0 |
| DDS 533 | ★ 2 | 30-0-0 |
| DDS 534 | ★ 1 | 15-0-0 |
| DDS 535 | ★ 2.5 | 15-45c-0 |
| DDS 536 | ★ 5 | 30-45c-45 |
| DDS 537 | ★ 2 | 15-24c-0 |
| DDS 539 | ★ 1.5 | 15-0-21 |

Effective 2000/2001

| Year | 3 | | |
|------|-----|-------------|----------|
| DDS | 540 | ★ 11 | 0-350c-0 |
| DDS | 541 | ★ 1 | 15-0-0 |
| DDS | 542 | ★ 1 | 15-0-0 |
| DDS | 544 | ★ 2 | 15-27c-0 |
| DDS | 546 | ★ 3 | 23-60c-0 |
| DDS | 547 | ★ 1 | 15-0-0 |

Year 3 (continued) DDS 548 **★**6 15-150c-0 **DDS 549 ★**3 25-0-45 DDS 550 30-30c-0 **★**3 **DDS 551 ★**4.5 15-54c-45 DDS 552 **★**2 0-0-60 DDS 553 **★**5 30-90c-0 **DDS 554 ★**4.5 15-105c-0 **DDS 555 ★**1 15-0-0 **DDS 556 ★**7 30-150c-0 **DDS 557** 30-150c-0 **★**7 **DDS 558 ★**.5 0-12c-0

Effective 2001/2002

| ★ 14 | 0-420c-0 |
|--------------|---|
| ★ 1 | 15-0-0 |
| ★ 1 | 15-0-0 |
| ★ 1.5 | 0-0-45 |
| ★ 3 | 30-36c-0 |
| ★ 3 | 0-80c-0 |
| ★ 3 | 35-24c-15 |
| ★ 3 | 30-30c-0 |
| ★ 2 | 15-0-25 |
| ★4 | 30-60c-0 |
| ★ 2 | 5-0-54 |
| ★ 3.5 | 15-75c-0 |
| ★ 3 | 15-60c-0 |
| ★ 2 | 30-0-0 |
| ★ 2 | 30-0-0 |
| ★ 1.5 | 15-18c-0 |
| ★ 3 | 0-80c-0 |
| | *1 *1.5 *3 *3 *3 *4 *4 *4 *4 *4 *4 *4 *4 *4 *4 *4 *4 *4 |

94.3 Dental Hygiene Diploma

94.3.1 General Information

The Department of Oral Health Sciences 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 \star 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 | ★ 3 | 39-0-0 |
|-----------|--------------|---------|
| D HYG 200 | ★ 3.5 | 43-0-4 |
| | | |
| D HYG 211 | ★ 5.5 | 84-0-0 |
| D HYG 212 | ★ 6 | 0-0-180 |
| D HVG 213 | ★ 3 | 0-900-0 |

Year 1 (continued) D HYG 214 **★**7.5 6-210c-0 D HYG 215 28-0-0 *****2 D HYG 216 14-0-0 D HYG 217 20-0-0 D HYG 220 28-0-26 **★**3 D HYG 222 28-6-0 D HYG 230 **★**1.5 20-0-0 D HYG 231 **★**1 14-0-0 D HYG 232 14-0-0 D HYG 240 28-0-6 D HYG 241 0-12c-0 **DENT 300 ★**∩ 0-8s-0INT D 410 **★**3 0-39s-0MMI 422 28-0-0 OBIOL 202 60-0-0 PHYSL 252 78-0-0 Year 2 D HYG 313 0-471-0 **★**16 D HYG 316 14-0-0 **D HYG 317** 28-0-0 **★**2 D HYG 321 13-39c-0 **★**2 D HYG 322 **★**2 28-0-9 D HYG 325 **★**0.5 0-12c-0 D HYG 326 42-6-0 **★**3 D HYG 329 **★**25 0-75c-0D HYG 340 0 - 48 - 0D HYG 345 14-0-0 ★1 D HYG 386 **★**1 15-0-0 D HYG 387 **★**0.5 0-0-15 OBIOL 300 ★2 28-0-0 OBIOL 302 **★**3 45-0-0 OBIOL 305 42-0-0

94.4 MD Degree

General Information 94.4.1

Important note: The MD program has been revised effective September 1998. The following program listed in this edition of the University Calendar applies only to those students admitted for September 1998. Continuing students in this 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.

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 that are a continuum from autumn of third year to the end of Year 4. This includes a Link course of 4 weeks, followed by a student internship of approximately 54 weeks, an elective program of approximately 14 weeks and a selective program of approximately 4 weeks developed by each student in consultation with the Undergraduate Medical Education Office. A wide range of approved elective and selective programs in all aspects of medical science, medical practice and related areas is available

DMED 514

94.4.2 **Course Requirements**

DMED E11 (E wooks)

| ١. | DIVILL 311 | (o weeks) | 4. | DIVILD 314 | + (IS WEEKS) |
|----|------------|-----------|----|------------|----------------|
| 2. | DMED 512 | (7 weeks) | 5. | MED 516 | (8 hours/week) |
| 3. | DMED 513 | (7 weeks) | 6. | MED 517 | (12 hours) |
| Ye | ar 2 | | | | |
| 1. | DMED 521 | (6 weeks) | 5. | MED 523 | (7 weeks) |

| real Z | | | | | | |
|--------|----------|------------|----|---------|----------------|--|
| 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) | |
| | | | | | | |

Years 3 and 4

NIVERSITY OF ALBERT

| 1. | MED 532 | (4 weeks) | 9. | PAED 546 | (8 weeks) |
|----|-----------|------------|-----|-----------|------------|
| 2. | ANAES 546 | (2 weeks) | 10. | PSYCI 546 | (8 weeks) |
| 3. | F MED 546 | (4 weeks) | 11. | RADDI 546 | (2 weeks) |
| 4. | MED 545 | (2 weeks) | 12. | SURG 546 | (10 weeks) |
| 5. | MED 546 | (10 weeks) | 13. | MED 531 | (36 hours) |
| 6. | MED 547 | (14 weeks) | 14. | MED 541 | (36 hours) |
| 7. | MED 548 | (4 weeks) | 15. | MED 542 | (56 hours) |
| 8. | OB GY 546 | (8 weeks) | 16. | MED 540 | (9 hours) |

Honors in Research Program in Medicine 94.5

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.

Program of Courses 94.6.2

| 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 (*2) 5. MLSCI 262 (*3) 6. MLSCI 263 (*3) 7. MLSCI 270 (*3) 8. PHYSL (*6) 9. Arts Option (*3) | 1. BIOCH 203 (*3) 2. BIOCH 205 (*3) 3. MLSCI 320 (*3) 4. MLSCI 330 (*5) 5. MLSCI 340 (*5) 6. MLSCI 350 (*3) 7. MLSCI 360 (*5) 8. MLSCI 370 (*3) | 1. ★12 chosen from MLSCI 430,460, 466, 475, 481 MMI 440, 426 or 427 or 405 or 415 2. MLSCI 480 (★3) 3. MLSCI 410 (★1) 4. Project course: INT D 491 (★6) or 409 (★3) and Science option (★3) (see Note) 5. INT D 410 (★3) 6. Arts option (★6) 7. Approved option (★3) | |

- (1) During the Phase II clinical rotation, students are assigned to hospital laboratories approved for this purpose by the Council of the Faculty of
- ★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.

Honors in Research Program in Medical 94.7 **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,
 - ★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 Oral Health Sciences 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.

94.10 Continuing Medical Education

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.

94.11 Continuing Oral Health Sciences Education

Courses are offered by the Department of Oral Health Sciences 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:

94.12.1 Primary Certification Programs

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 Haematology

Paediatric Infectious Diseases

Pulmonary Medicine

Rheumatology

94.12.3 Accreditation Without Certification Programs

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

For students seeking more academic careers, opportunities exist for combined clinical and MSc/PhD training through the Clinical Investigators Program. Further information is available from the Office of Research, 2J2.11 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 T51 4P8.

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)

Cell Biology and Anatomy (ANAT)

Biomedical Engineering (BME)

Biochemistry (BIOCH)

Community Health (CO ME)

Dentistry (DDS)

Dentistry (DENT)

Dentistry/Medicine (DMED)

Dental Hygiene (D HYG)

Emergency Medicine (EMER)

Family Medicine (F MED)

Health Services Administration and Community Medicine (H S A)

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)