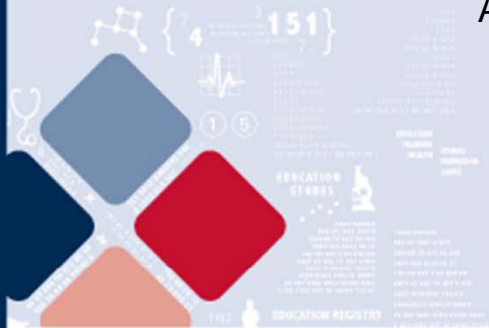


Canada's Faculties of Medicine by the Numbers

2011 CAPER-ORIS Forum

Steve Slade, Vice President Research and Analysis CAPER-ORIS
Canadian Post-MD Education Registry – Office of Research and Information Services
Association of Faculties of Medicine of Canada (AFMC)

Canadian Conference on Medical Education
May 10, 2011
Toronto, Ontario, Canada





Overview



- Office of Research and Information Services (ORIS)
 - Office of the AFMC supported by Canadian faculties of medicine
- Canadian Post-M.D. Education Registry (CAPER)
 - Partnership of AFMC, CAIR, CFPC, MCC, RCPSC, F/P/T governments
- Together, CAPER-ORIS provide wealth of data on academic medicine in Canada

DataSource!

Support for informed health care decision-making

DataSource!
Support for informed healthcare decision-making

MD Program Applicant Database

AFMC's MD program applicant database contains individual level data for all applications and applicants to MD programs. Data elements, such as age, sex and province of residence, permit analysis of applicant trends for all medical faculties in Canada over time. The MD program applicant database supports analysis of repeat and parallel applications, success rates as well as changes in overall demand and opportunity for medical education in Canada.

Source and frequency of data collection:

- Annual.
- 17 Canadian faculties of medicine.
- Updated data is submitted in September of each year.

Data Level and Availability

- 2010/11: Individual level records for all applicants, excluding Ontario.
- 2009/10: Individual level records for all applicants, excluding Queen's University.
- 1990/94 to 2008/09: Individual level records for all applicants.
- 1977/78 to 1992/93: Aggregate level records.

Data Elements

- Socio-demographic: gender, age, province or country of residence, legal status, country of citizenship (limited), marital status (limited), educational attainment.
- Application details: MCAT scores (limited), program and year of application, rating by faculty, applicant response.

Reporting Schedule

- Advance applicant trend tables are published in March at www.afmc.ca.
- Detailed MD program applicant report and historical trends are published in the fall in AFMC's Canadian Medical Education Statistics report, available at www.afmc.ca.

Applications to Cdn Faculties of Medicine

Year	Applications	Applicants
1980/81	18	8
1988/89	20	8
1996/97	20	8
2004/05	30	12

AFMC
The Association of Faculties of Medicine of Canada

CONTACT: Lane Kasley
Tel: (512) 720-1204 ext. 227 E: lkasley@afmc.ca
265 Carling Avenue, Suite 800, Ottawa, Ontario K1S 2E1 WWW.AFMC.CA

Printed: May 2011

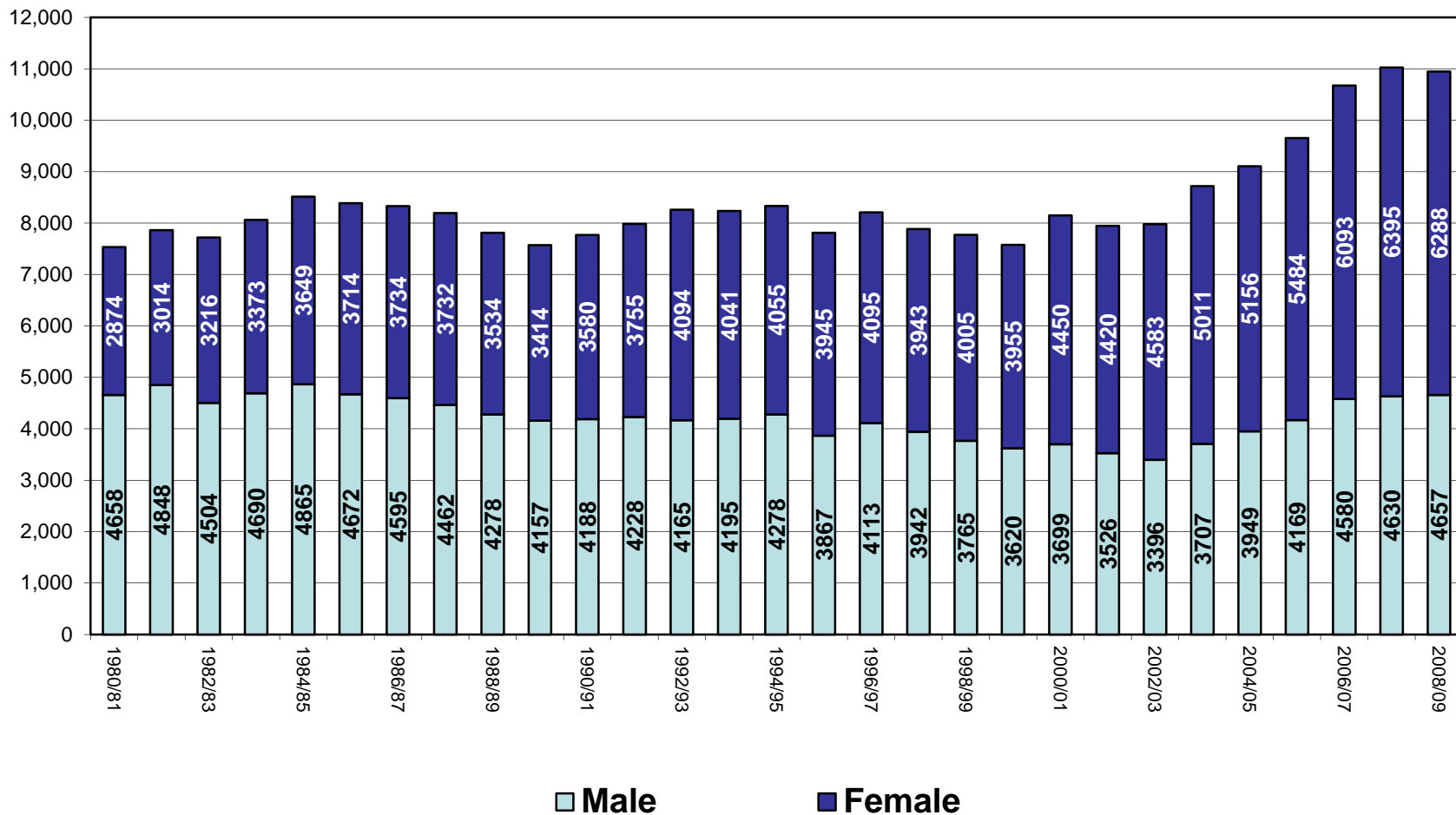
Data on all MD program applications and applicants:

- What are the numbers and demographics of people applying to MD programs?
- How many applications do they submit?
- What are their chances of success?
- For how many years do unsuccessful applicants continue to apply?



MD Program Applicant Database

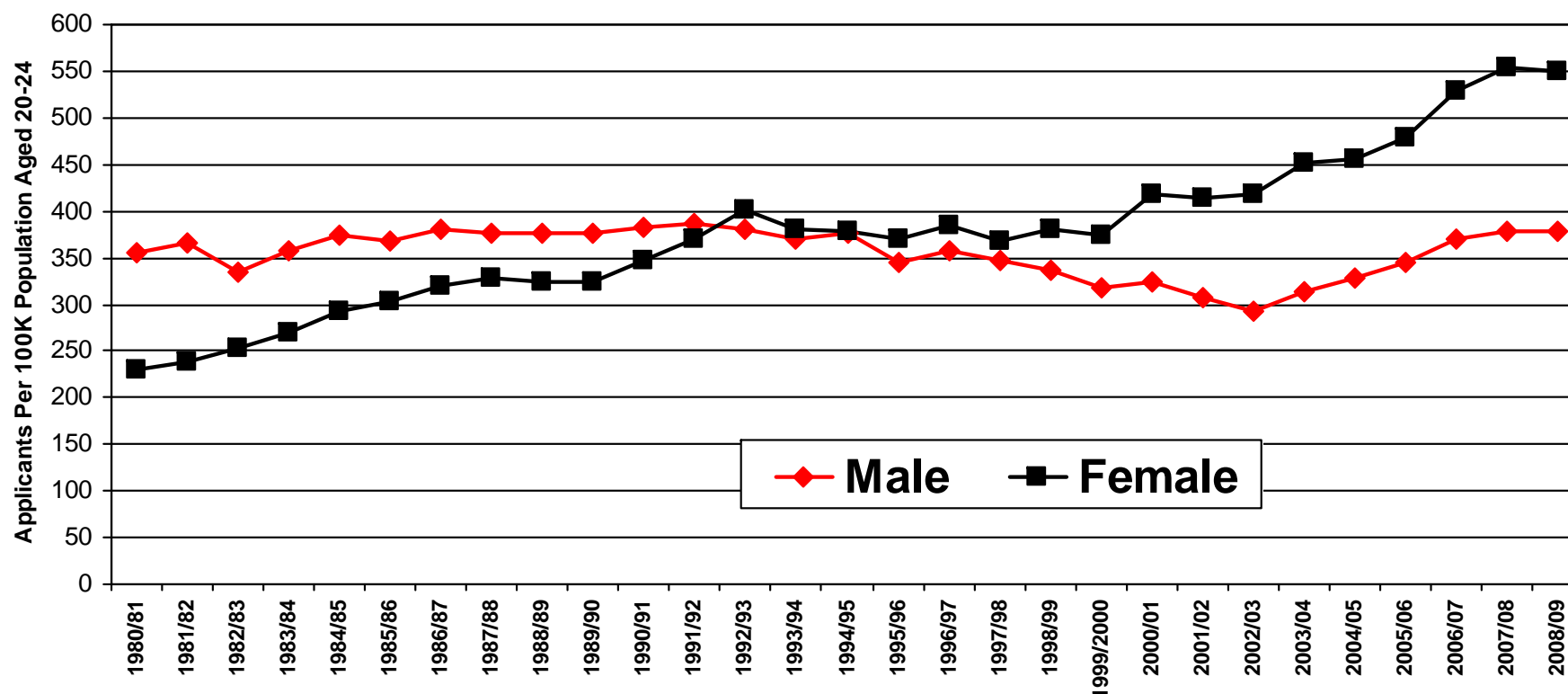
MD Program Applicants by Sex, 1980-81 – 2008-09





MD Program Applicant Database

MD Program Applicants Per 100,000 Population Aged 20-24 Years, by Sex,
Canada, 1980/81-2008/09



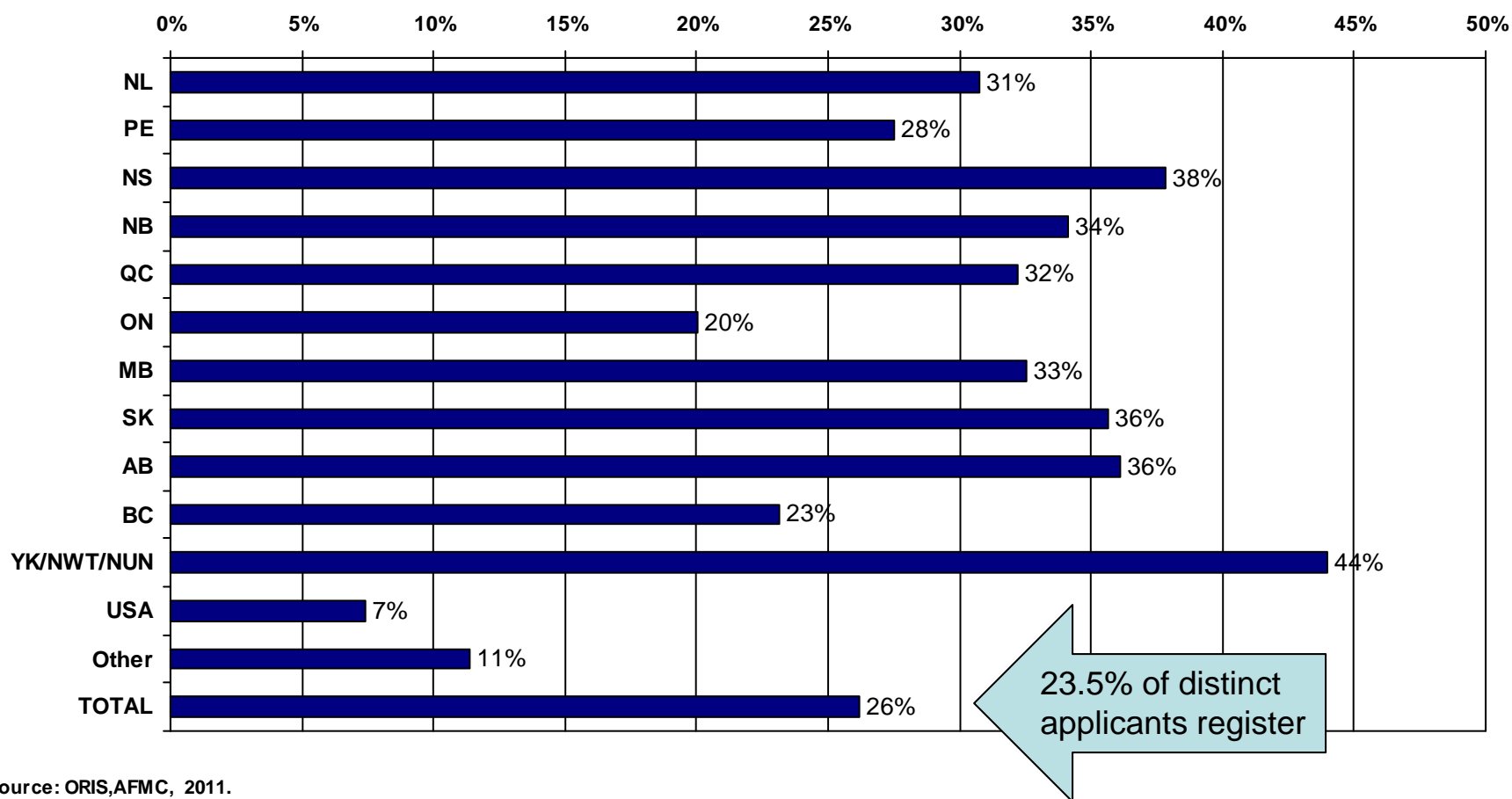
Source: ORIS, AFMC, 2011.

Note: Male and female applicant rates are expressed in relation to the male and female population.



MD Program Applicant Database

MD Program Offer of Admission Rates by Province/Country of Residence of Applicants, Canada, 2008-09

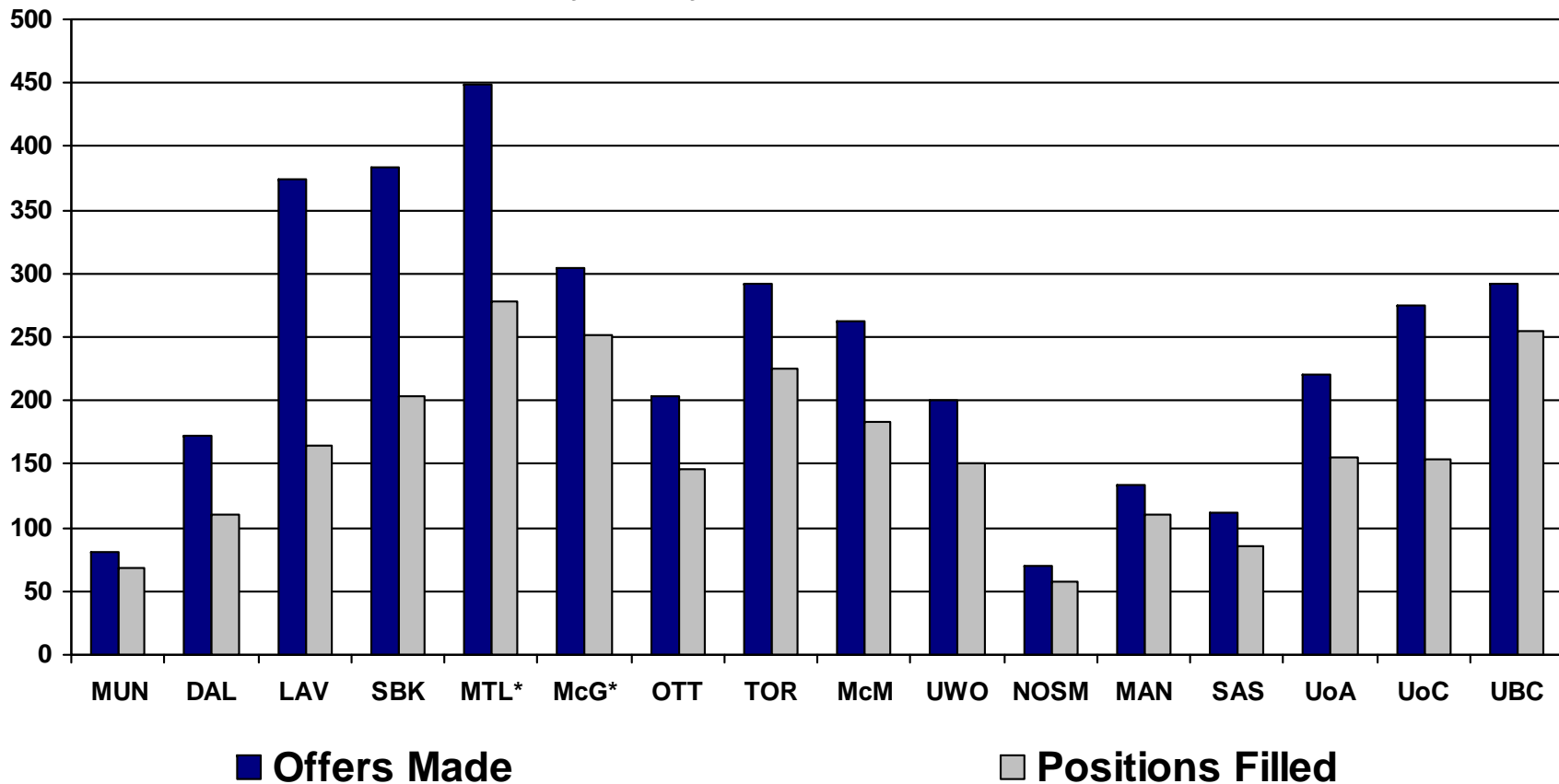


Source: ORIS, AFMC, 2011.



MD Program Applicant Database

Number of MD Program Admission Offers Made and Places Filled,
by Faculty of Medicine, 2008-09



* Includes positions filled in annee prep. / pre-med. Source: ORIS, AFMC, 2011.

DataSource!

Support for informed health care decision-making

DataSource!

Support for informed healthcare decision-making

Undergraduate Medical Education Database

AFMC's UGME database contains data on MD program students registered at faculties of medicine in Canada over time. Data elements permit analysis of socio-demographic trends among medical students, leaves of absence and attrition as well as enrolment growth at regional and satellite campuses. The UGME database measures changes in the size of the national cohort of medical students, the most significant predictor of Canada's future physician supply.

Source and frequency of data collection:

- Annual.
- 17 Canadian faculties of medicine.
- Updated data is submitted in September of each year.

Data Level and Availability

- 2003/04 to 2010/11: Individual level records for all enrolment years per UGME students.
- 1978/79 to 2002/03: Aggregate level records.

Data Elements

- Socio-demographic: gender, age, province or country of residence, legal status in Canada, country of citizenship.
- UGME details: medical faculty providing education, campus (>2005/06), year of study, enrolment status (i.e. repeating year, prolonged program, leave of absence), program sought (MD/PhD, MD/MSc...), quota type (regular, foreign contract) and year of graduation.

Reporting Schedule

- Advance enrolment and MD graduation tables are published in March at www.afmc.ca.
- Detailed UGME report and historical trends are published in the fall in AFMC's Canadian Medical Education Statistics report, available at www.afmc.ca.

Total UGME Enrolment by Gender

Year	Men	Women
1968/69	4200	1000
1976/77	5000	2000
1984/85	4500	3000
1992/93	4000	3500
2000/01	3500	4500
2008/09	4500	6000

AFMC
The Association of Faculties
of Medicine of Canada

CONTACT: Libe Kadiy
Tel: (513) 750-1204 ext. 227 E: lkadiy@afmc.ca
265 Carling Avenue, Suite 800, Ottawa, Ontario K1S 2E1

WWW.AFMC.CA

Printed: May 2011

Data on all UGME students in Canada:

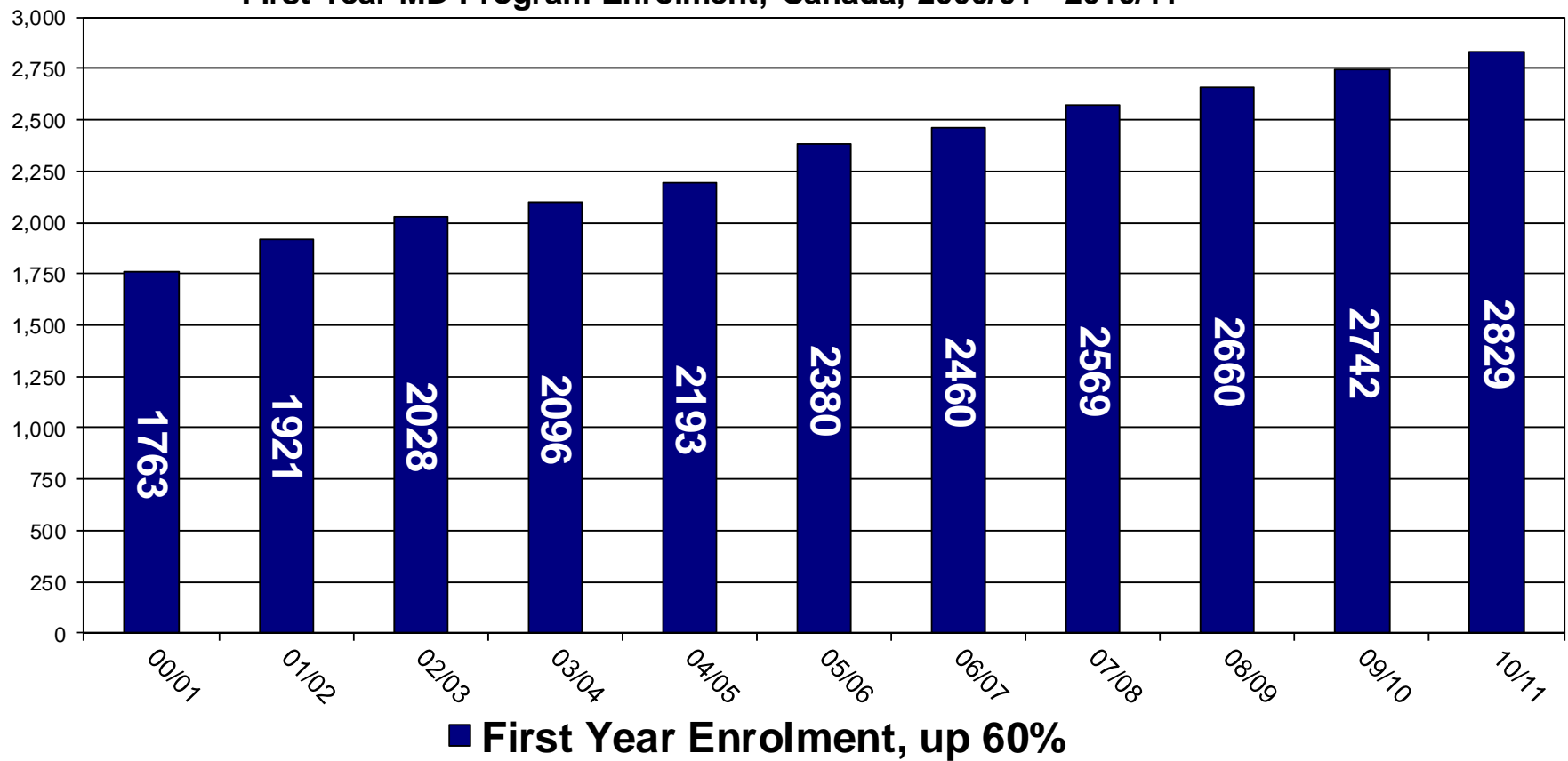
- How many medical students are on their way to becoming doctors?
- What are their demographic characteristics?
- Where are they studying?
- How are enrolment numbers changing?
- How long does it take to graduate?



UGME Database



First Year MD Program Enrolment, Canada, 2000/01 - 2010/11

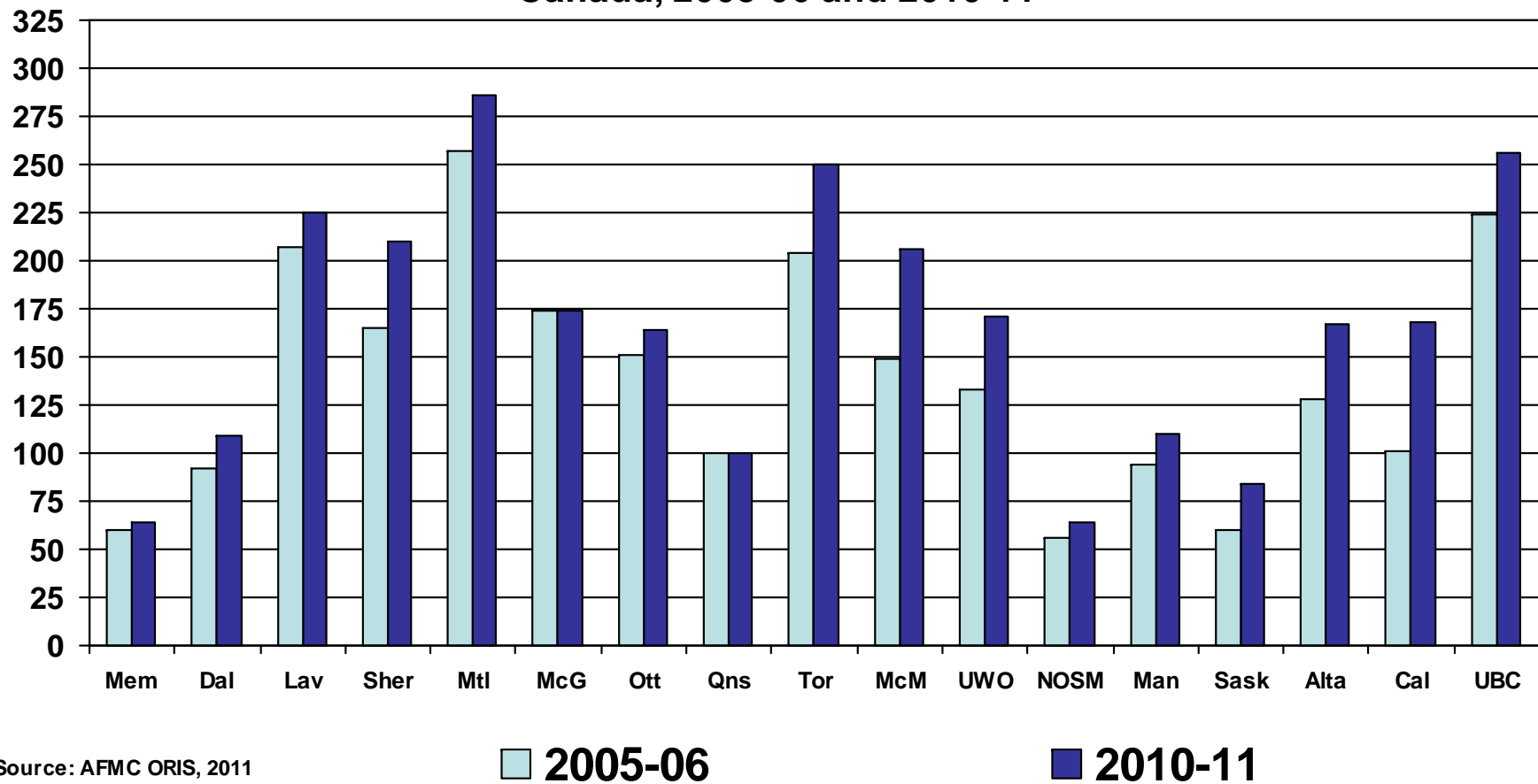


Source: ORIS, AFMC, 2011



UGME Database

**First Year MD Program Enrolment by Faculty of Medicine,
Canada, 2005-06 and 2010-11**

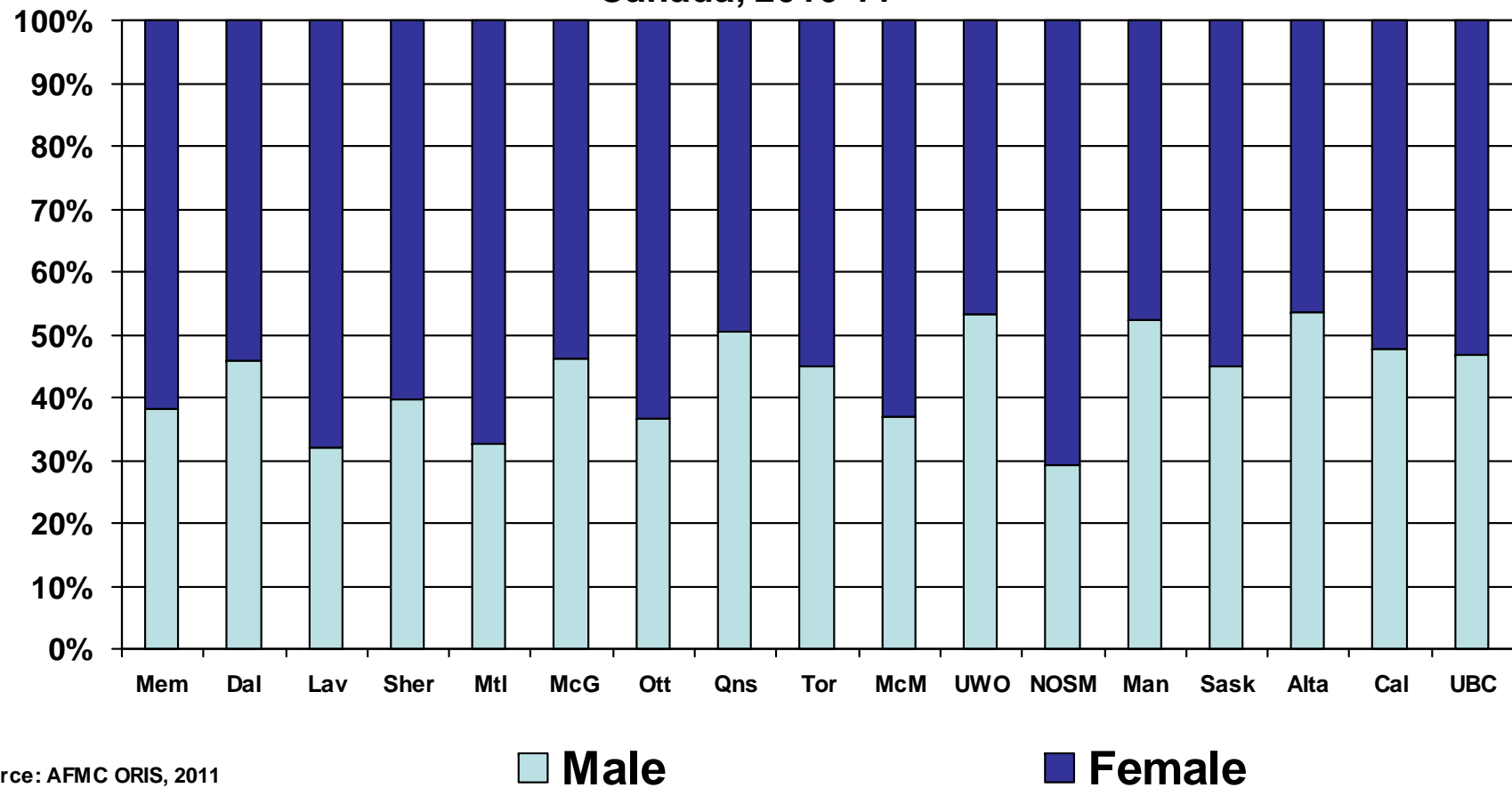




UGME Database



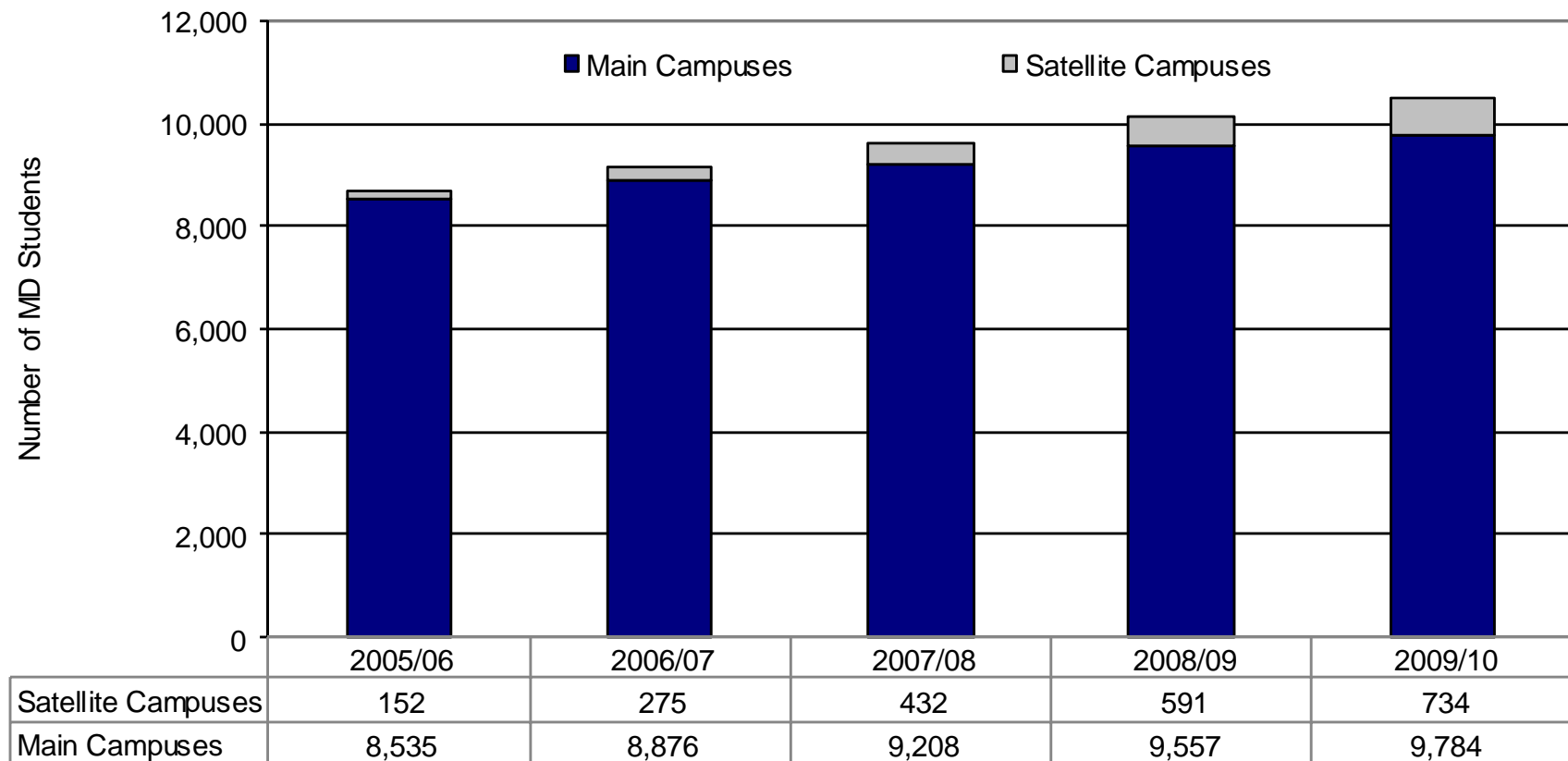
**UGME Enrolment by Sex and Faculty of Medicine,
Canada, 2010-11**





UGME Database

MD Program Enrolment by Site, Canada, 2005/06 - 2009/10

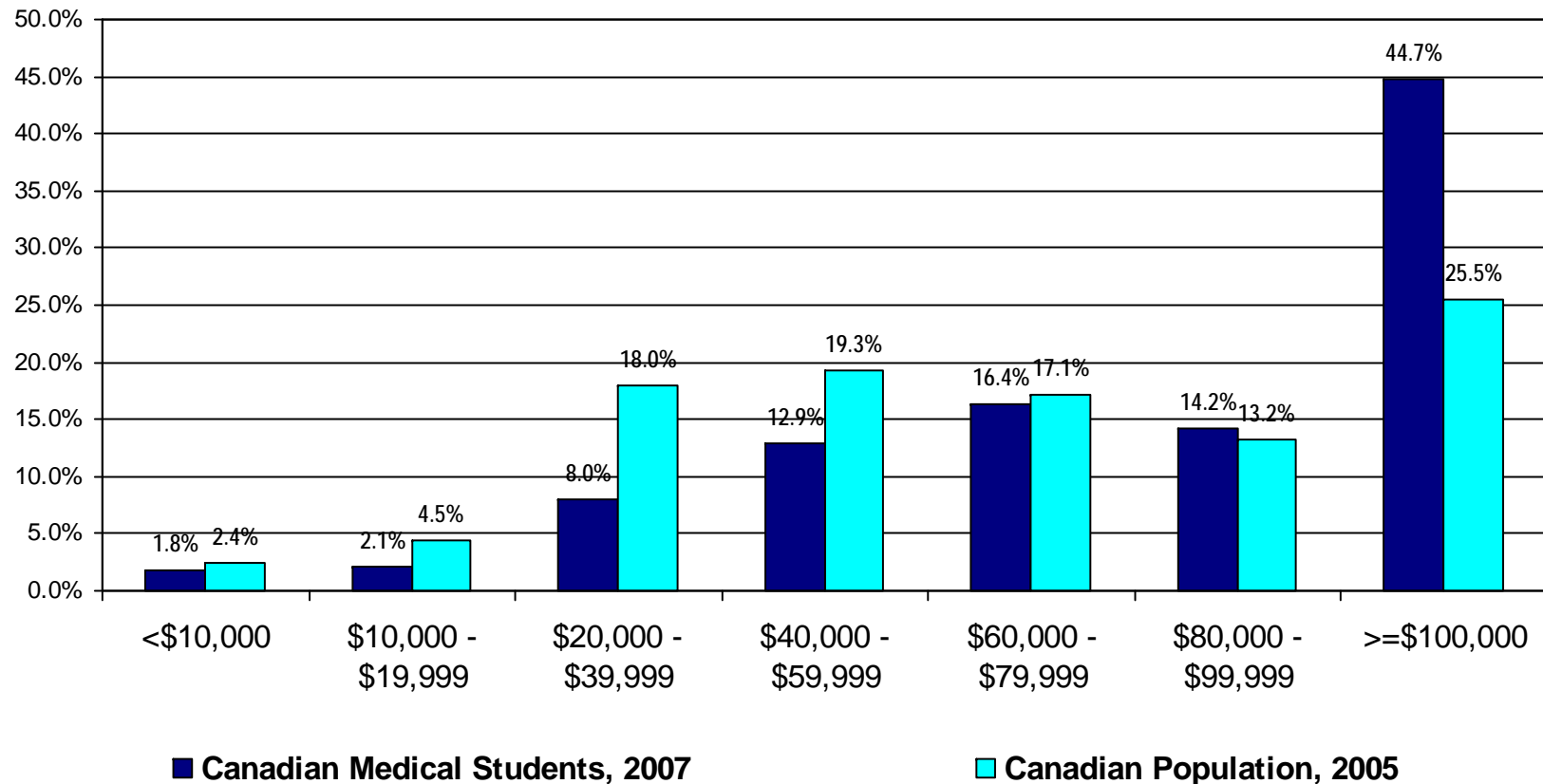


Source: ORIS, AFMC, 2010.



Not the UGME Database

Annual Income Distribution of Canadian Families and the Families of Canadian Medical Students



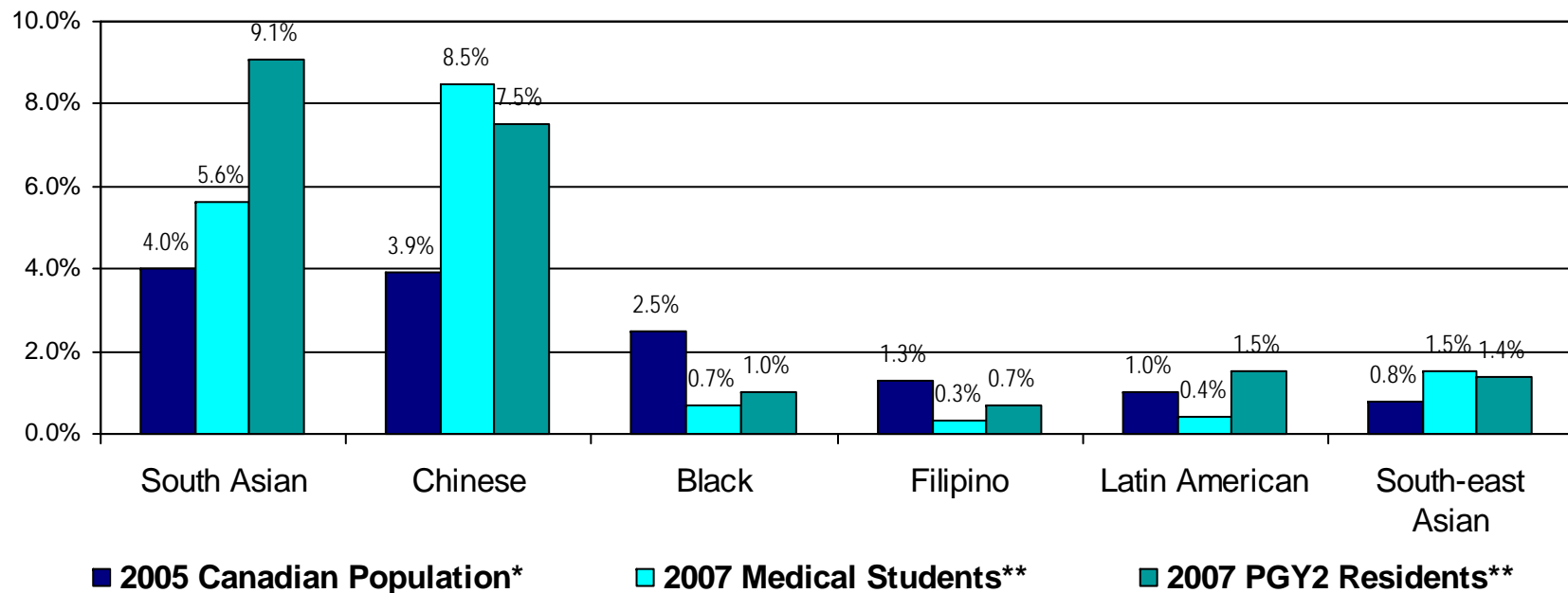
Sources: 2007 National Physician Survey: Medical Student Questionnaire. College of Family Physicians of Canada, Canadian Medical Association, Royal College of Physicians and Surgeons of Canada; Statistics Canada - 2006 Census. Catalogue Number 97-563-XCB2006018.



Not the UGME Database



Visible Minority Groups Among Medical Students, Year 2 Postgraduate Medical Trainees and the General Population, Canada



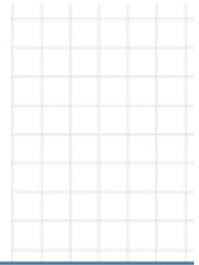
* Statistics Canada, censuses of population, 2006; ** 2007 National Physician Survey. The College of Family Physicians of Canada, Canadian Medical Association, The Royal College of Physicians and Surgeons of Canada.

Note: The Employment Equity Act defines visible minorities as 'persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour.' South Asian includes, for example, 'East Indian,' 'Pakistani,' 'Sri Lankan,' etc. South-east Asian includes, for example, 'Vietnamese,' 'Cambodian,' 'Malaysian,' 'Laotian,' etc.



DataSource!

Support for informed health care decision-making



DataSource!

Support for informed healthcare decision-making

Appointed Faculty Member Database

AFMC's appointed faculty member database captures information about appointed members of Canadian medical faculties over time. The database includes counts of full-time and part-time faculty, broken down by appointment status. Data elements permit analysis across universities and medical disciplines as well as part-time paid versus volunteer faculty. The appointed faculty member database offers metrics on human resources within Canada's faculties of medicine.

Source and frequency of data collection:

- Annual.
- 17 Canadian faculties of medicine.
- Updated data is submitted in June of each year.

Data Level and Availability

- 2001/02 to 2008/09: Individual discipline level records for all faculties of medicine.
- 1977/78 to 2000/01: Aggregate level records.

Data Elements

- Teaching faculty of medicine, teaching discipline type (basic science, medicine, surgery, other), teaching discipline and subspecialty, appointment type (professor, associate professor, assistant professor, instructor, part-time (paid), volunteer).

Reporting Schedule

- Advance faculty trend tables are published in late spring at www.afmc.ca.
- Detailed faculty member tables and historical trends are published in the fall in AFMC's Canadian Medical Education Statistics report, available at www.afmc.ca.

Faculty of Medicine Faculty Member Counts, Canada 2004-05 to 208-09

Year	Full-Time	Part-Time	Total
2004/05	10,000	18,000	28,000
2005/06	10,000	18,000	28,000
2006/07	10,000	18,000	28,000
2007/08	10,000	18,000	28,000
2008/09	10,000	18,000	28,000

AFMC
The Association of Faculties
of Medicine of Canada

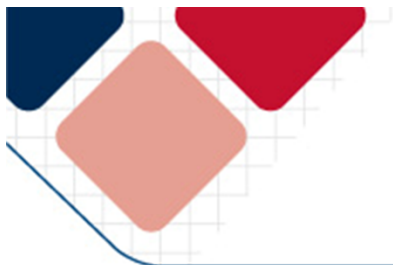
CONTACT: Dana Yashman
Tel: (613) 735-1204 ext. 225 E: Yashman@afmc.ca
265 Carling Avenue, Suite 800, Ottawa, Ontario K1S 2E1

WWW.AFMC.CA

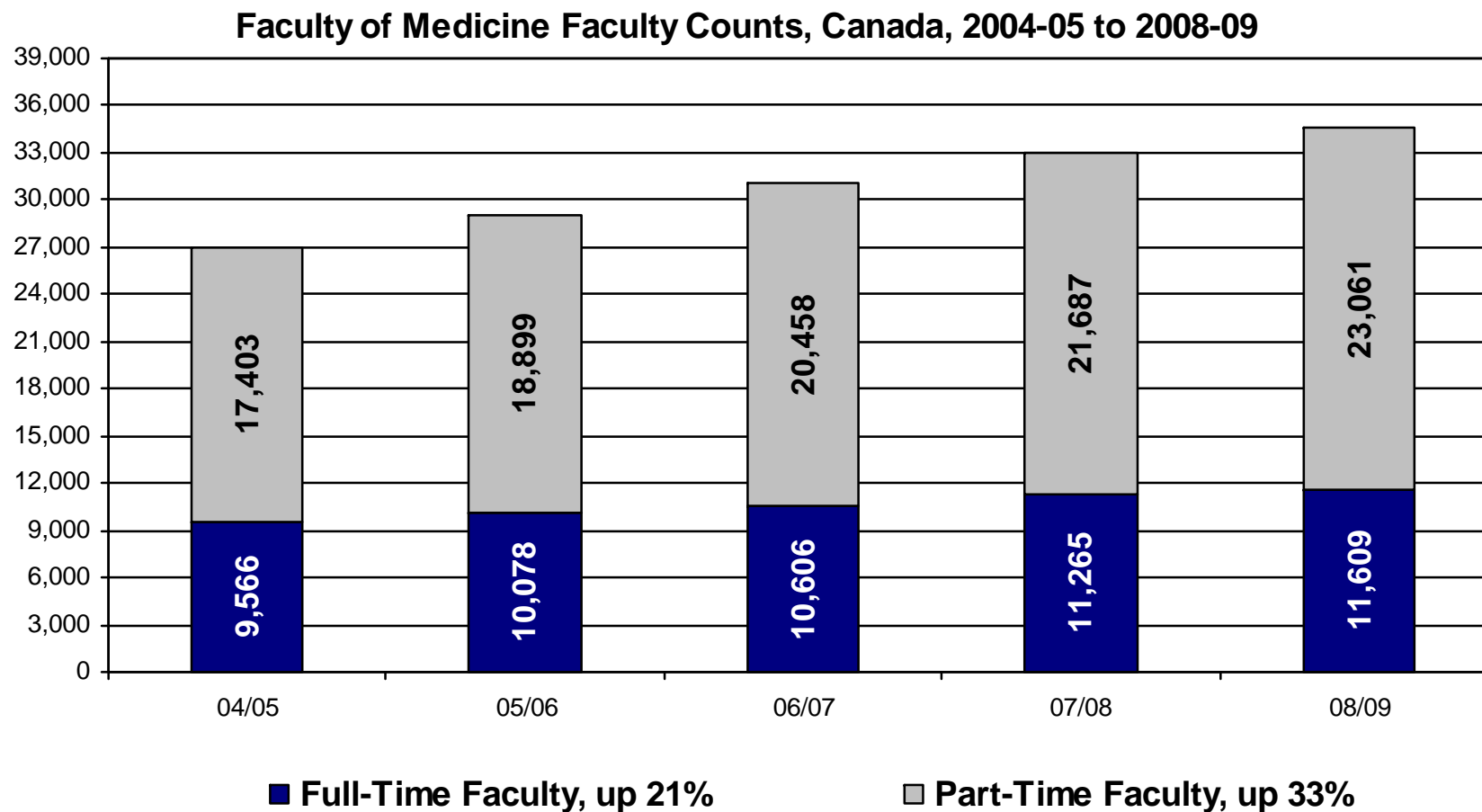
Printed: May 2011

Aggregate data on appointed faculty members and teaching facilities:

- How many appointed faculty members are there?
- What is their appointment status?
- Among part-timers, how many are paid vs voluntary?
- What departments are they appointed to?
- Where does medical education take place?



Faculty Member Database



Source: AFMC ORIS, 2010.

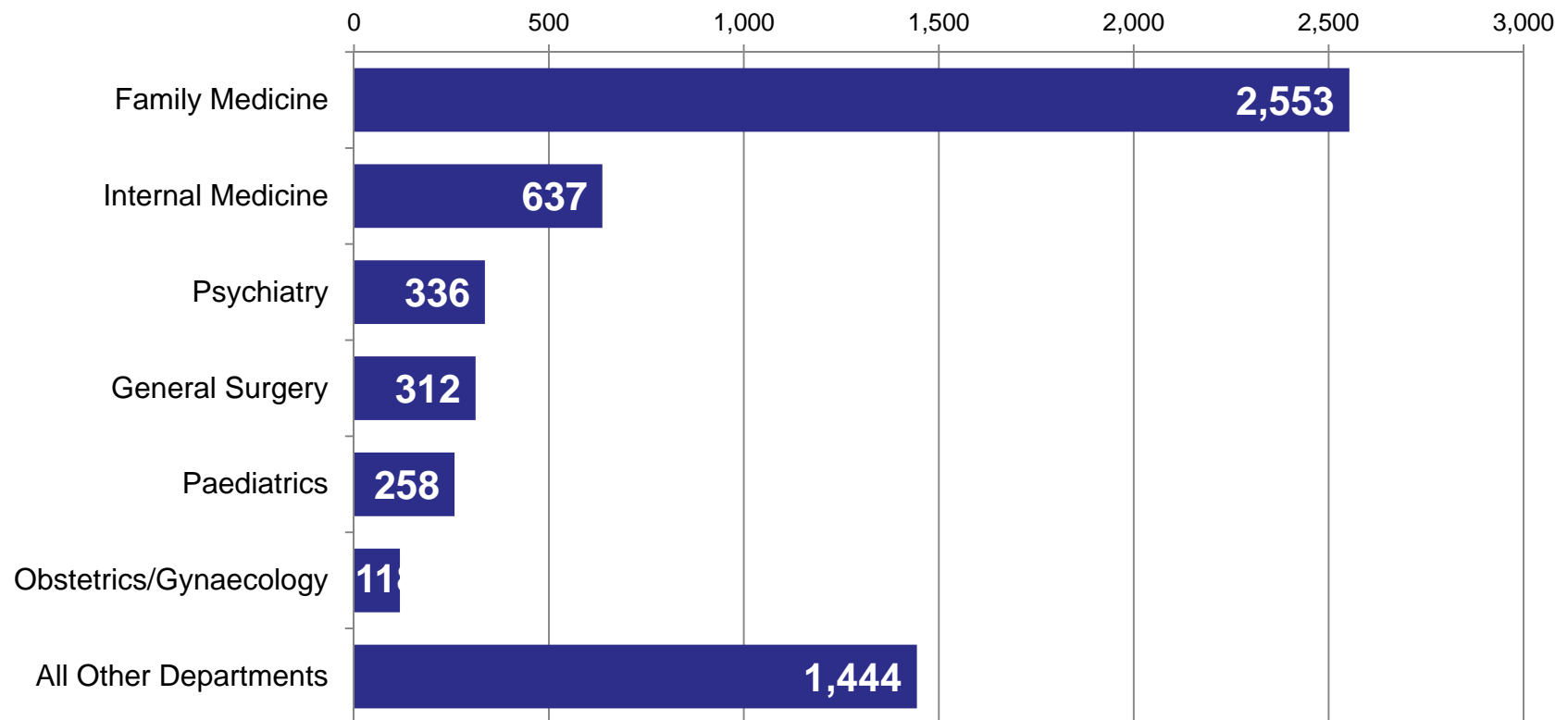
Note: Full-time faculty include professors, associate and assistant professors, instructors and other faculty. Part-time faculty includes paid and volunteer faculty members.



Faculty Member Database



**Growth in the Number of Part-Time Faculty of Medicine Faculty Members,
Canada, 2004/05 to 2008/09**

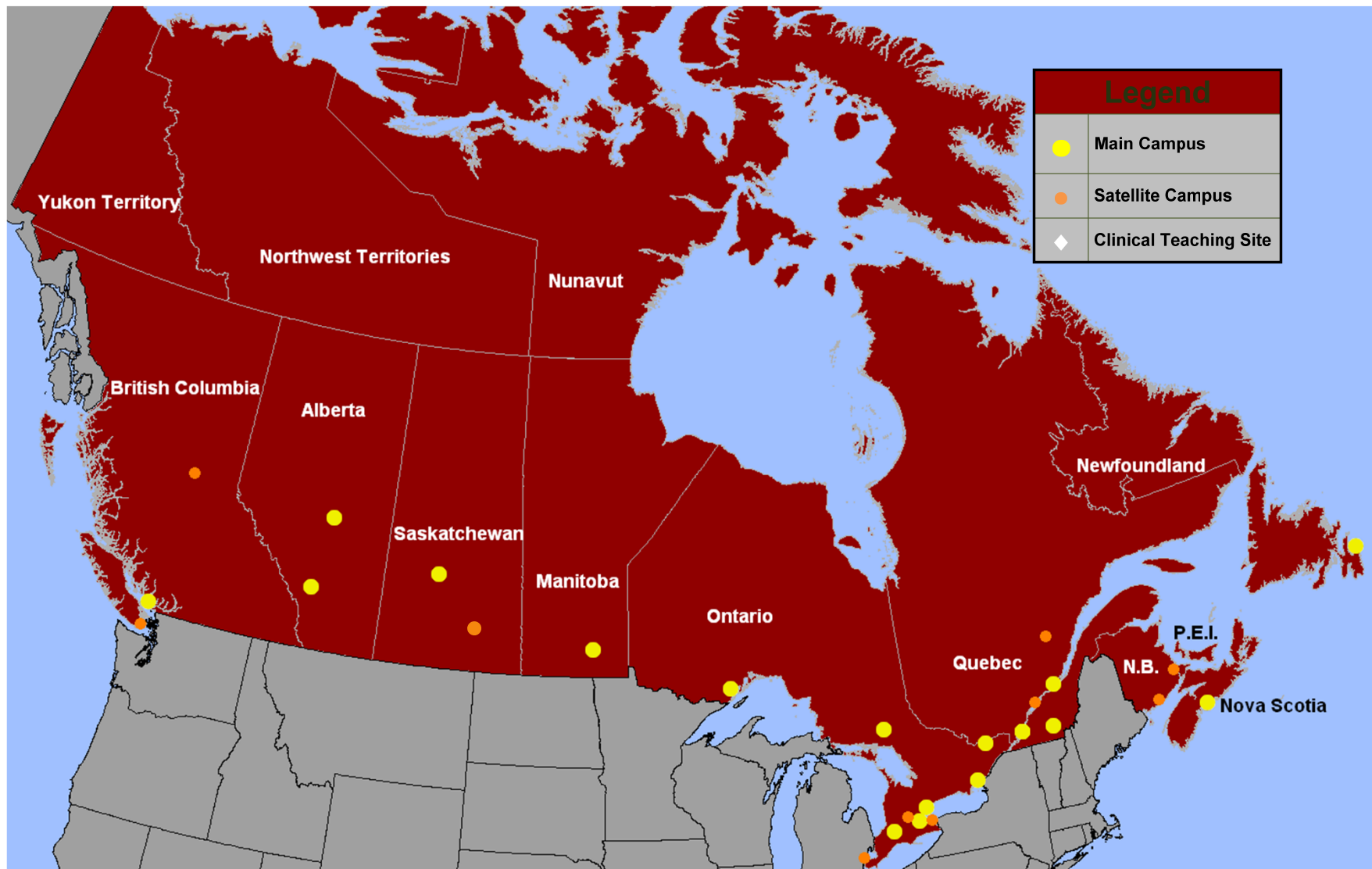


Source: AFMC, ORIS, 2011.

Note: Part-Time faculty includes paid and volunteer faculty members.



Medical Teaching Facilities





Medical Teaching Facilities



DataSource!

Support for informed health care decision-making

DataSource!

Support for informed healthcare decision-making

Canadian Post-M.D. Education Registry

The Canadian Post-M.D. Education Registry (CAPER) is the central repository for statistical information on postgraduate medical education in Canada. CAPER maintains individual-level data for all postgraduate medical residents and fellows. Data elements permit analysis across universities and trainee characteristics, such as place of MD graduation, legal status, age-sex and field of training. Data is captured longitudinally, from the time of entry to training, to the year of exit to practice location following post-M.D. training. The CAPER Database is a resource for informed healthcare planning with respect to the size and composition of Canada's physician workforce.

Source and frequency of data collection:

- Annual
- 17 Canadian faculties of medicine.
- Updated data is submitted in November of each year.

Data Level and Availability

- 1988/89 to 2010/11: Individual level records for all trainees.

Data Elements

- Socio-demographic: gender, DOB, legal status, country of citizenship.

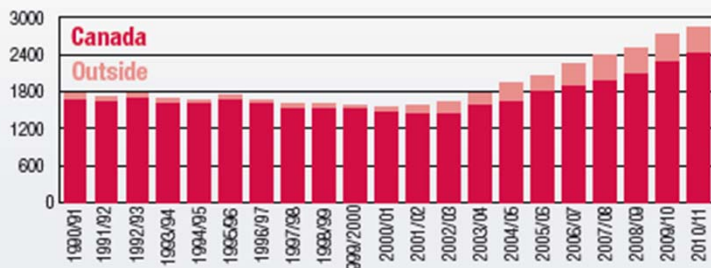
- Training details: training faculty, training specialty, rank level, M.D. school, M.D. country, M.D. year, source of funding, type of funder, contract start/stop dates, participation in clinician investigator programs, CaRMS R-1 Match Program (2008/09), re-entry status, exit year, RCPS-C certification status, year and (sub)specialty.

- Medical practice details: 2, 5, 10, 15 and 20 year practice locations.

Reporting Schedule

- Detailed postgraduate trainee charts, tables and trends are published each spring in CAPER's Annual Census of Post-M.D. Trainees, Provincial Reports and the Individual Field of Training Report, available at www.caper.ca.

First Year Post-MD Trainees by Place of MD Graduation, Canada, 1990/91 - 2010/11



CAPER established in mid-1980's to:

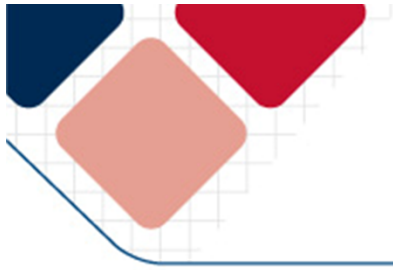
- provide accurate information regarding the size, nature and distribution of post-M.D. programs
- develop a common classification system of post-M.D. trainee categories
- to assist medical schools, participating organizations and others by developing information tables regarding post-M.D. programs and trainees
- to provide a basis for research including longitudinal studies dealing with health care issues in Canada



CAPER's Core Data

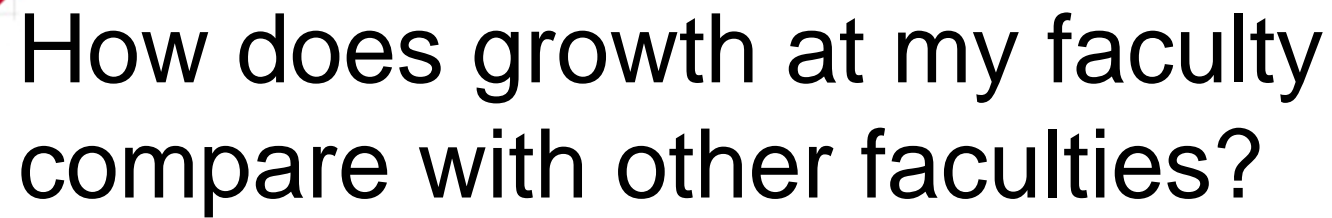


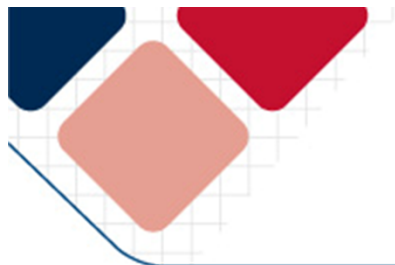
- CAPER #ID
- Age, sex, legal status
- School/Year of MD graduation
- PGME training faculty
- Field of training (CaRMS R1 program)
- Rank level (R1, R2...Fellow)
- Source of funding
- Clinical investigator
- Ongoing practice location (2yr, 5yr, 10yr, etc.)



Example Questions

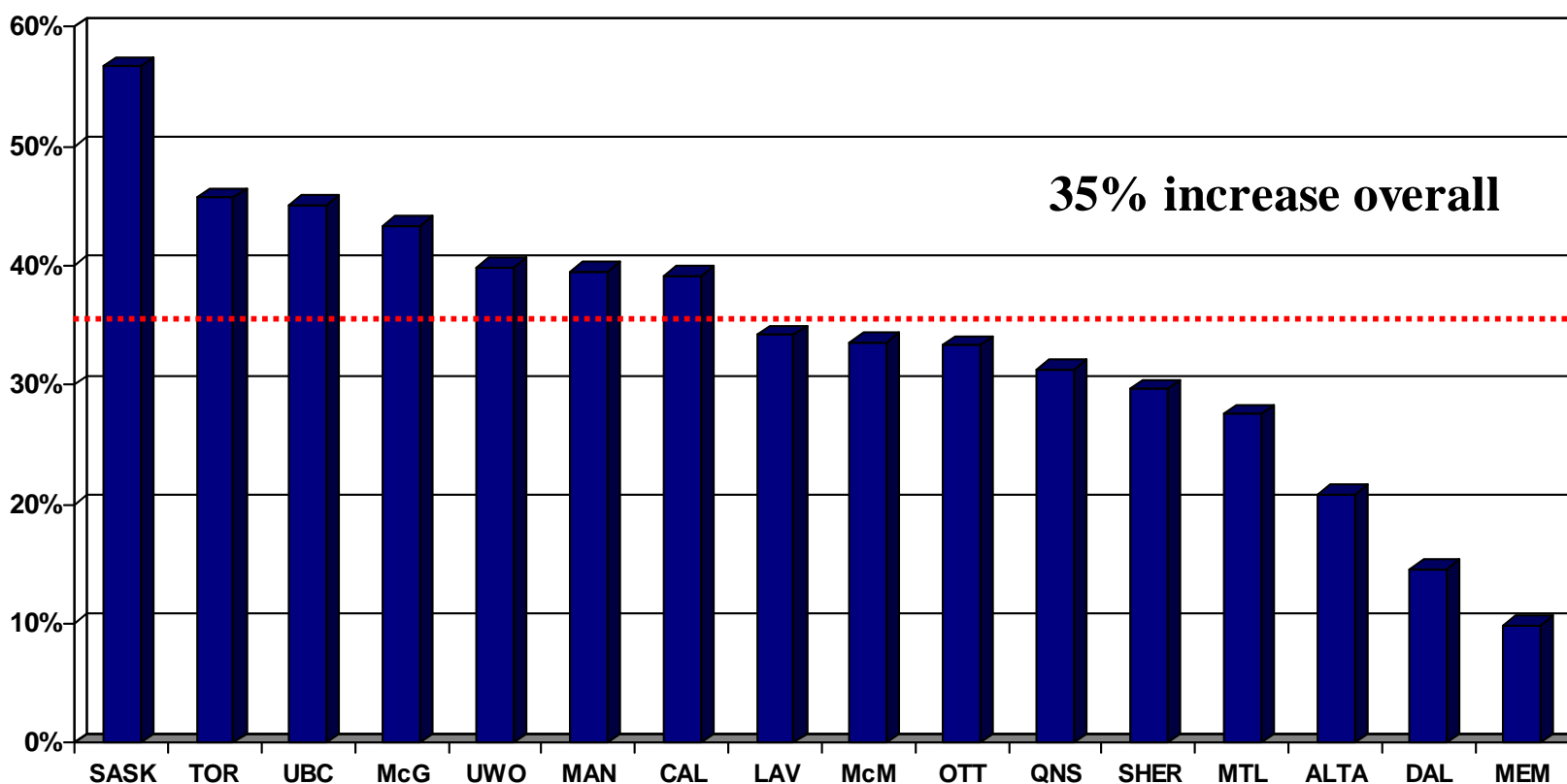
- How does growth at my faculty compare with other faculties?
- Where do our MD grads go for PGME?
- What health care needs are we meeting through our specialty allocation?
- Is it taking longer for trainees to complete their programs?
- How many physicians will come out of our medical education system in the future?
- Where do our grads set up practice?



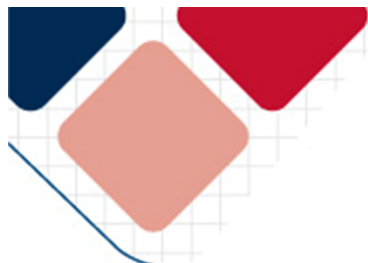


How does growth at my faculty compare with other faculties?

Percent Increase in First Year Post-MD Enrolment by Faculty of Medicine,
Canada, 2005-06 to 2010-11

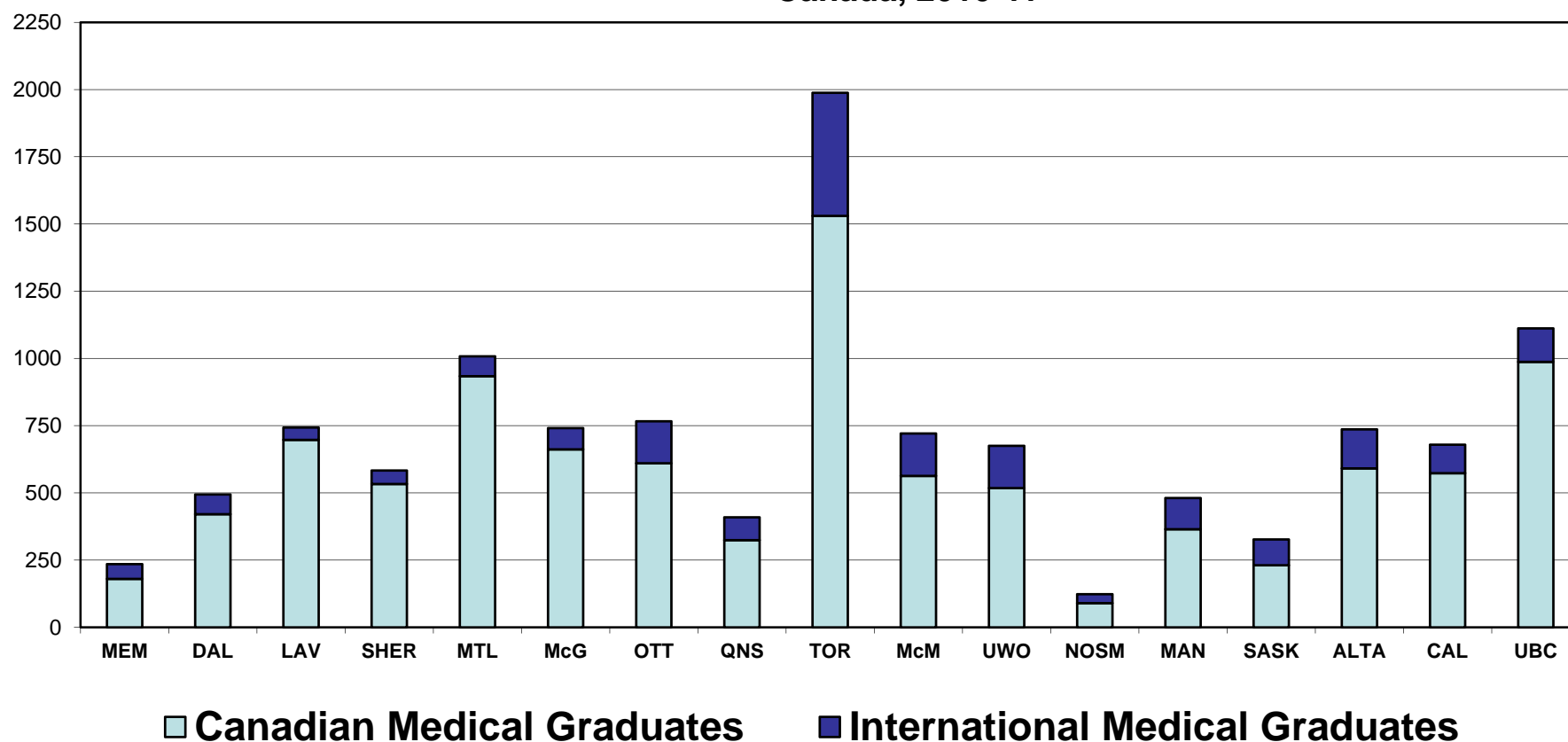


Source: CAPER, 2010. Note: Ministry-funded trainees only.



How does growth at my faculty compare with other faculties?

Post-MD Enrolment by Faculty of Medicine and Place of MD Graduation, Canada, 2010-11

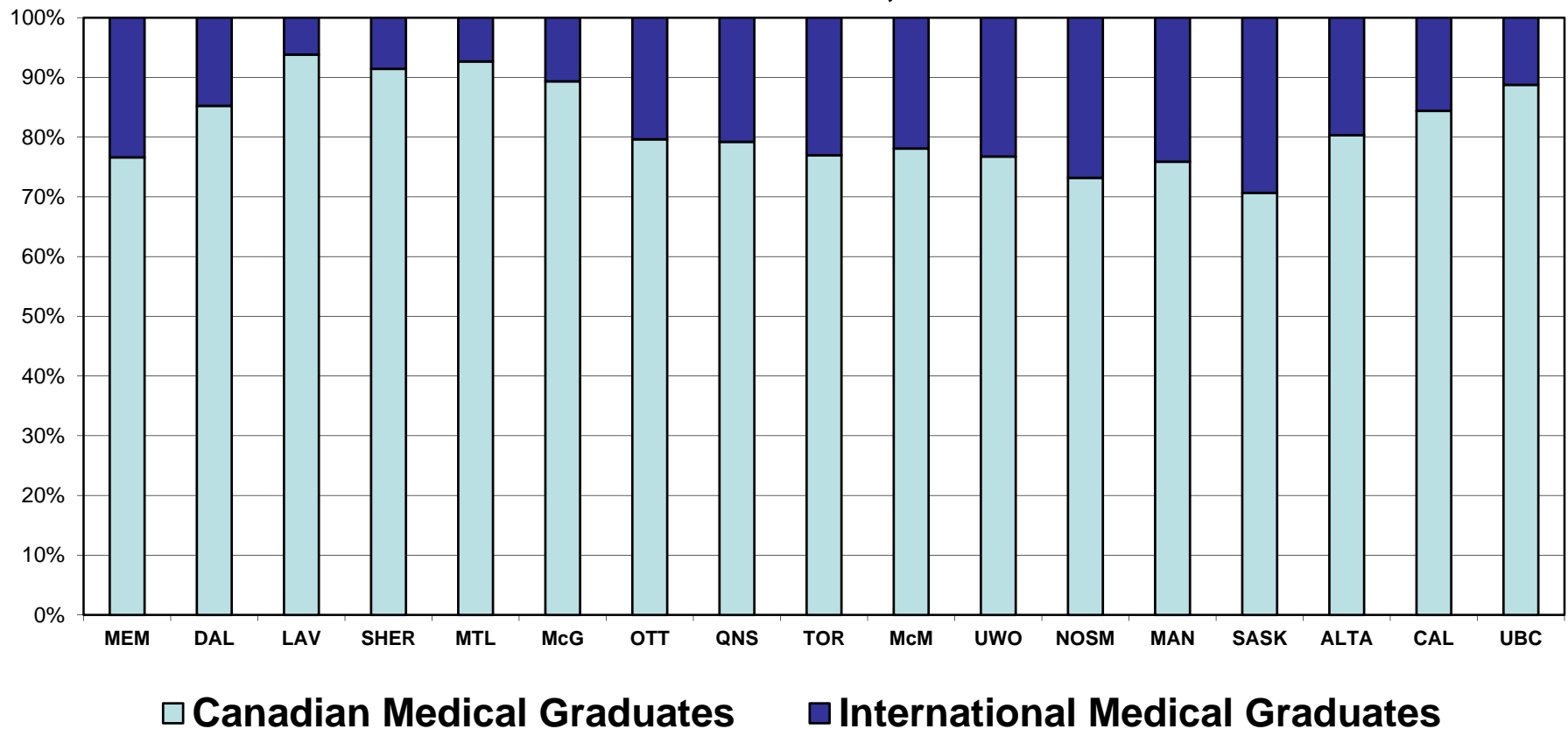


Source: CAPER, 2011. Note: Canadian citizens / Permanent residents only.



How does growth at my faculty compare with other faculties?

Post-MD Enrolment by Faculty of Medicine and Place of MD Graduation, Canada, 2010-11

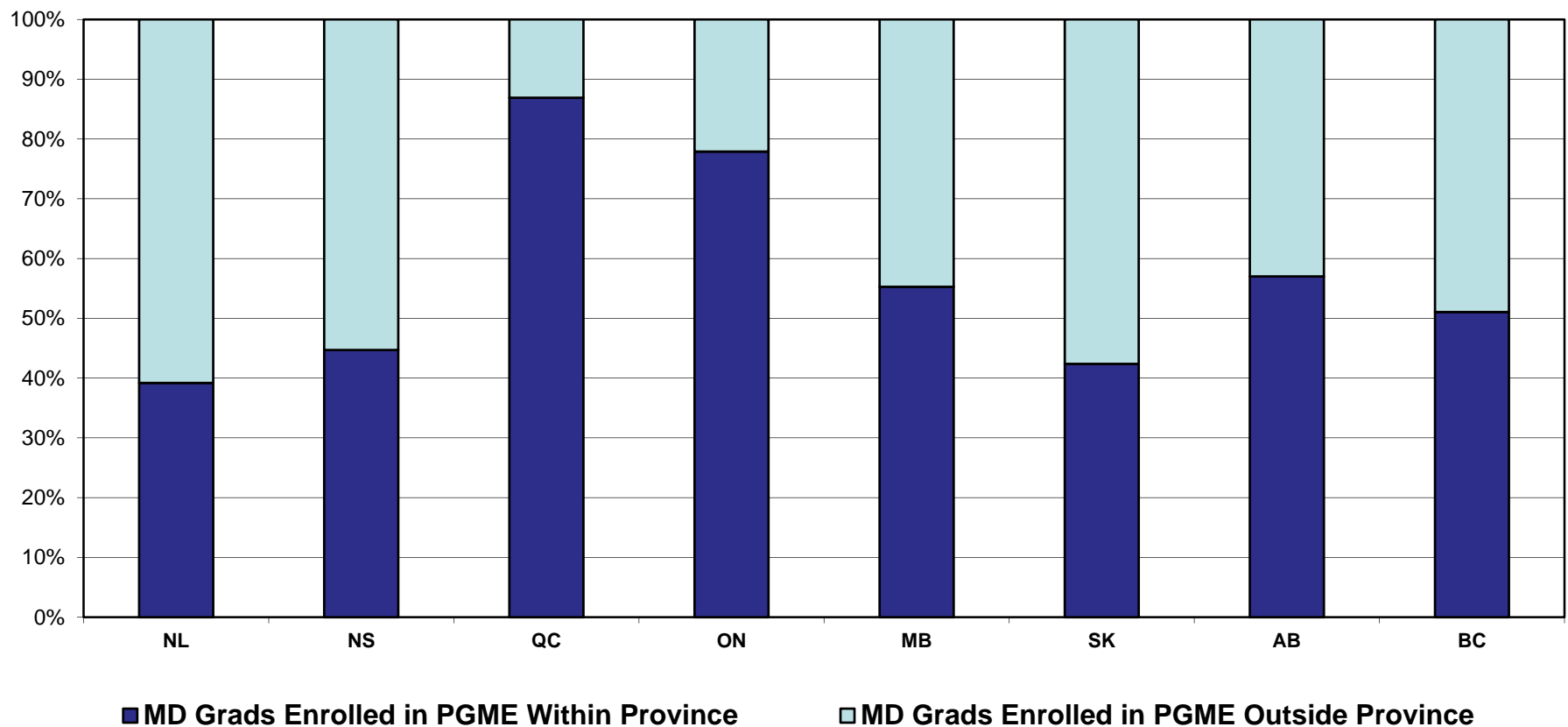


Source: CAPER, 2011. Note: Canadian citizens / Permanent residents only.



Where do our MD grads go for PGME?

Province of Post-MD Training by Province of MD Graduation, Canada, 2010-11

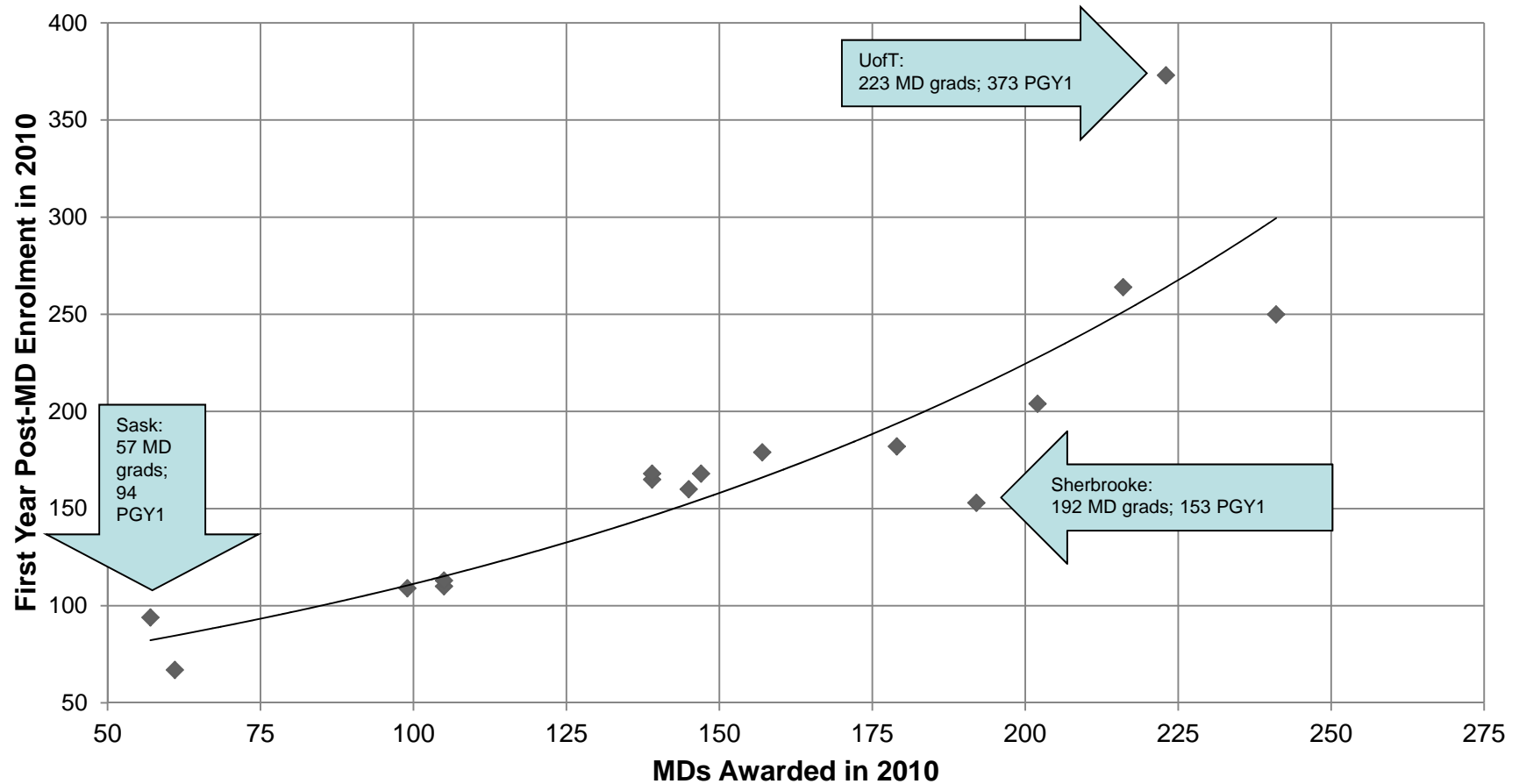


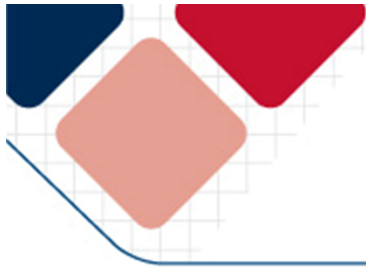
Source: CAPER, 2011. Note: Canadian citizens / Permanent residents only.



Where do our MD grads go for PGME?

**MDs Awarded and First Year Post-MD Enrolment,
17 Canadian Faculties of Medicine, 2010**





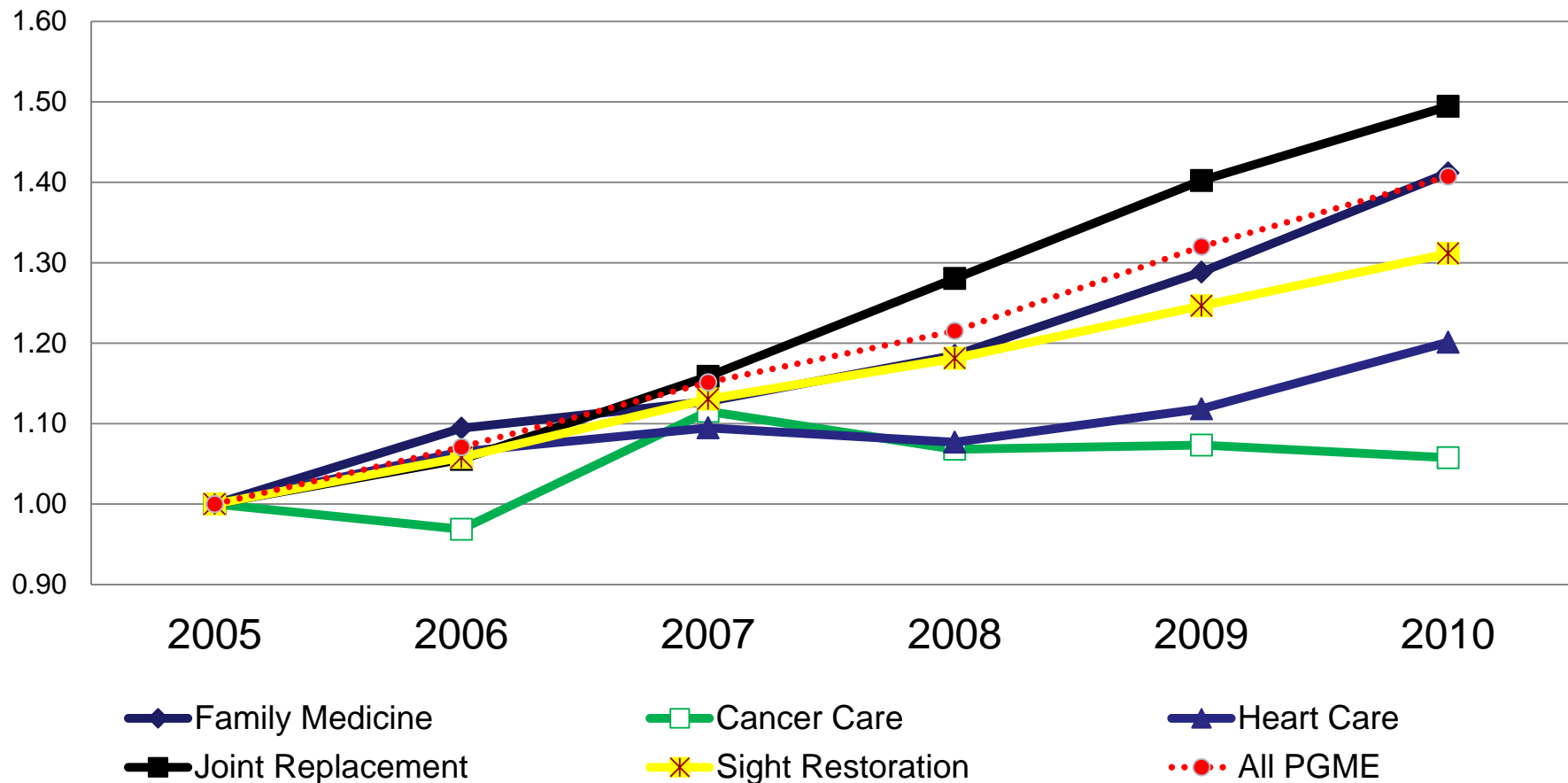
What health care needs are we meeting through our specialty allocation?

PGME training fields relate to stated health care priority areas. For example:

- **Family Doctors** (Family Medicine)
- **Cancer Care** (Radiation Oncology, Medical Oncology, Surgical Oncology, Gynecological Oncology)
- **Heart Care** (Cardiology, Cardiac Surgery)
- **Joint Replacement** (Orthopedic Surgery)
- **Sight Restoration** (Ophthalmology)

What health care needs are we meeting through our specialty allocation?

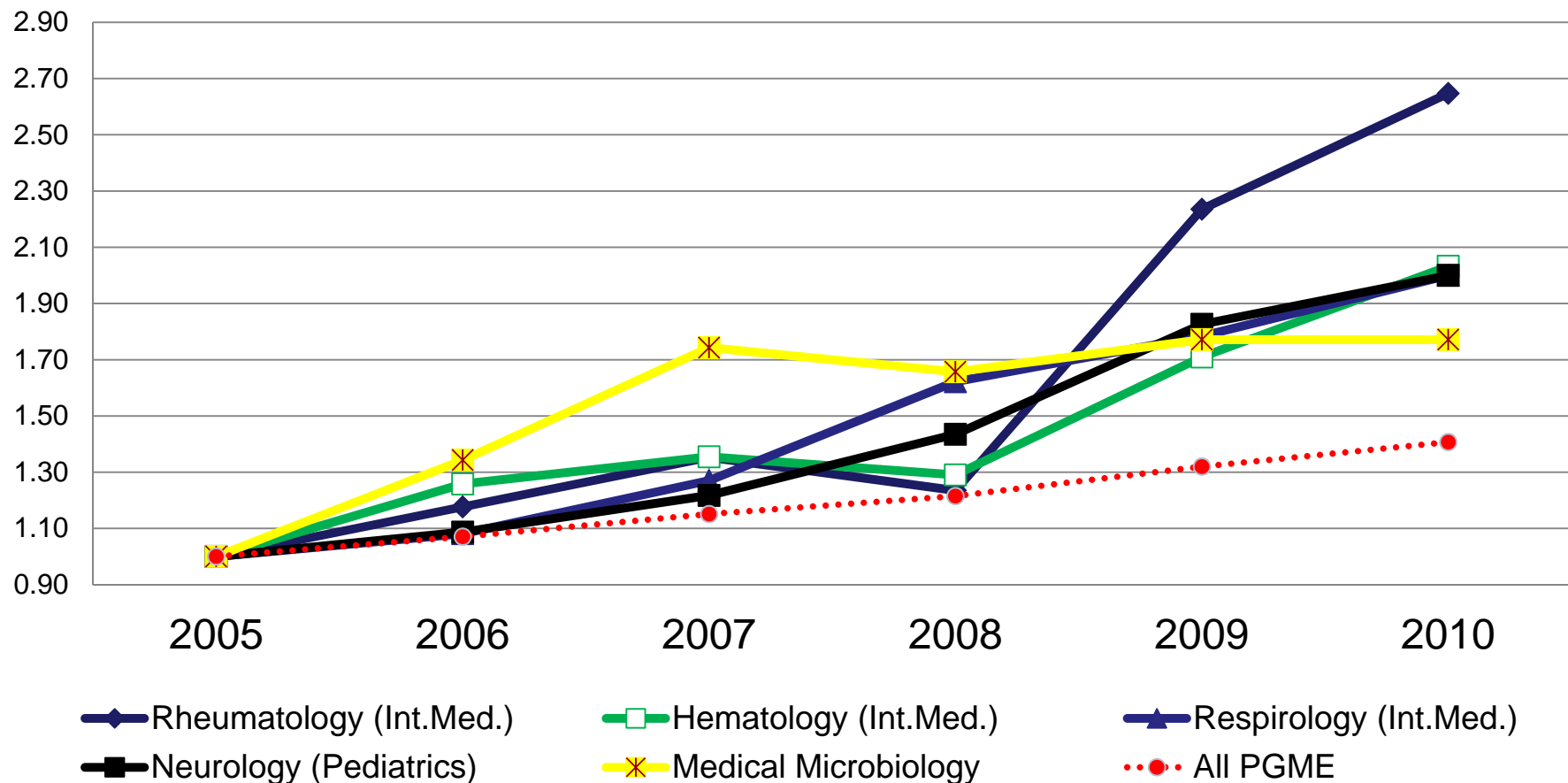
Indexed PGME Enrolment in Health Care Priority Areas,
Canada, 2005-06 to 2010-11



Source: CAPER, 2010. Note: Includes P/T Ministry-funded trainees only.

What health care needs are we meeting through our specialty allocation?

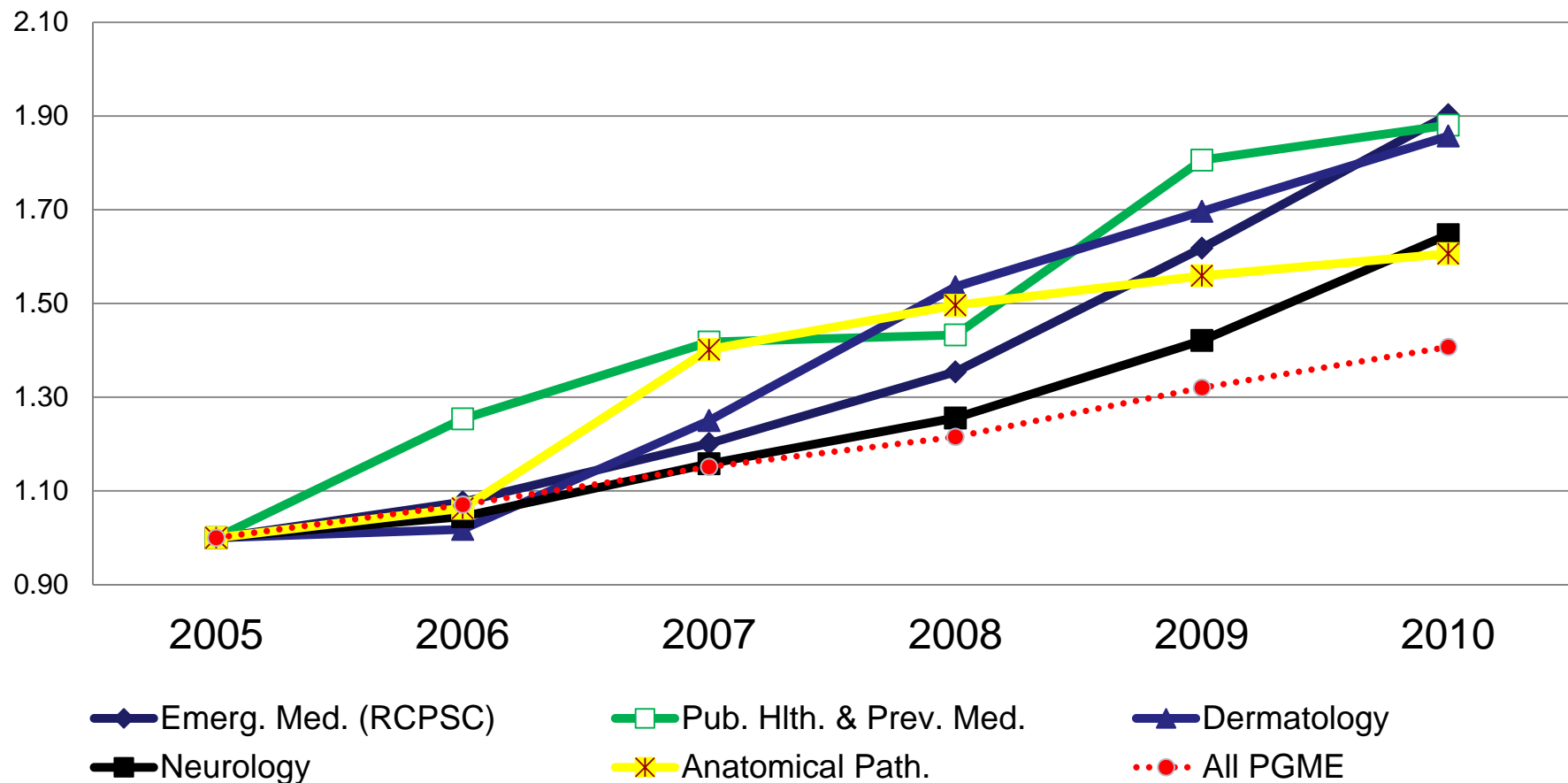
Indexed PGME Enrolment in Selected High Growth Disciplines,
Canada, 2005-06 to 2010-11



Source: CAPER, 2010. Note: Includes P/T Ministry-funded trainees only.

What health care needs are we meeting through our specialty allocation?

Indexed PGME Enrolment in Selected High Growth Disciplines,
Canada, 2005-06 to 2010-11

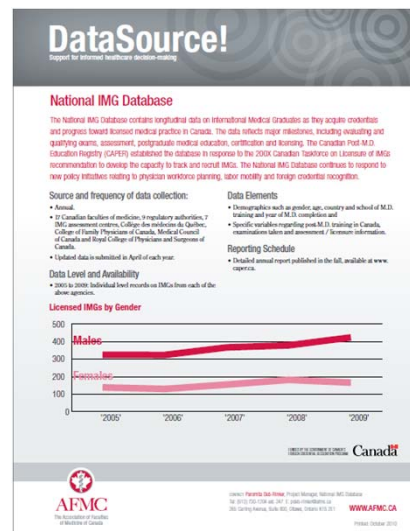
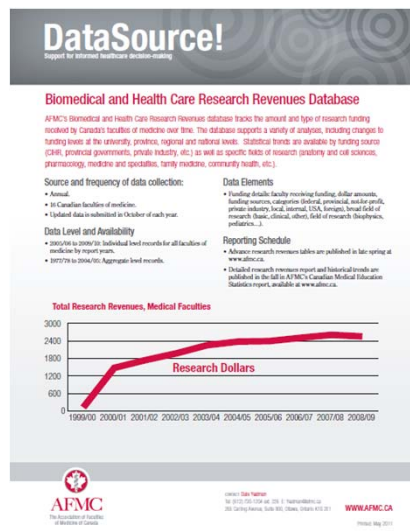
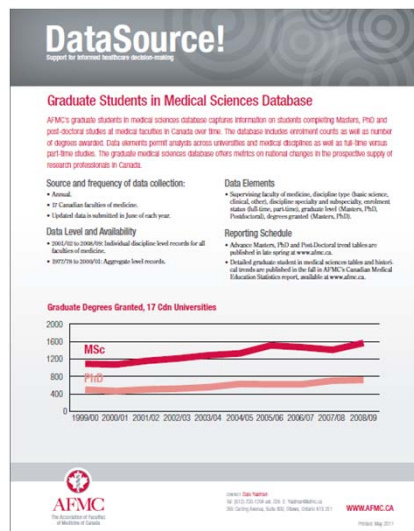
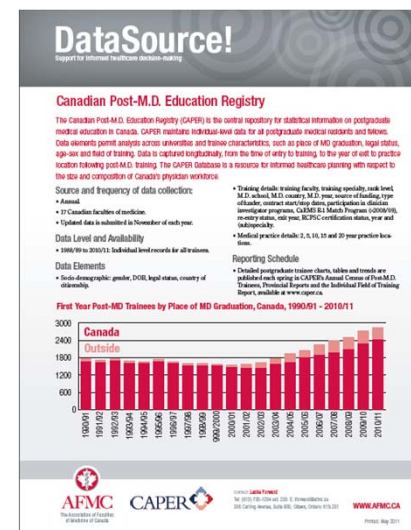
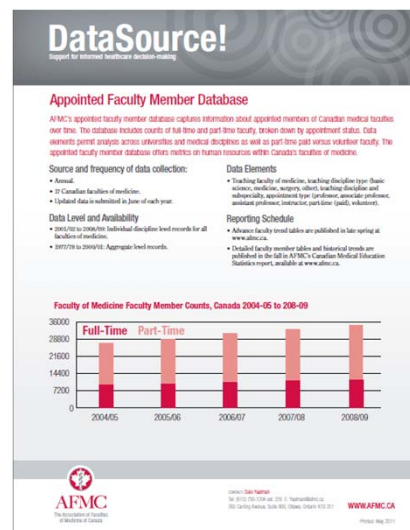
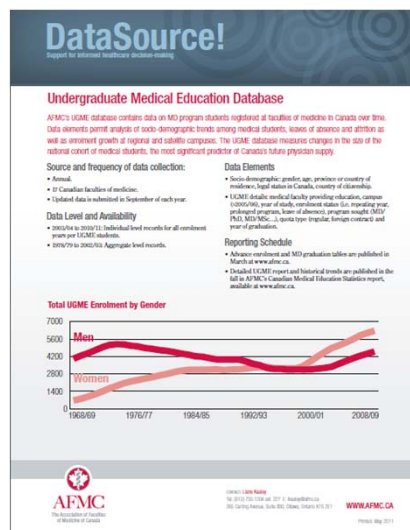
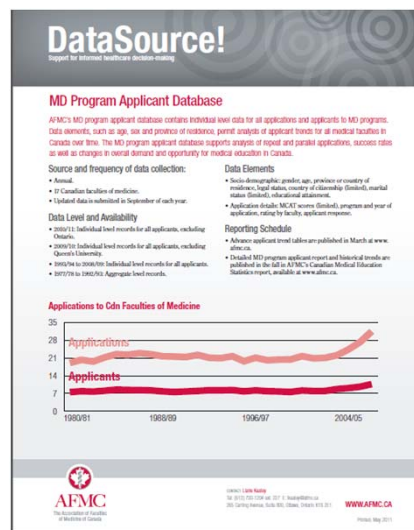


Source: CAPER, 2010. Note: Includes P/T Ministry-funded trainees only.



DataSource!

Support for informed health care decision-making



Grad Students

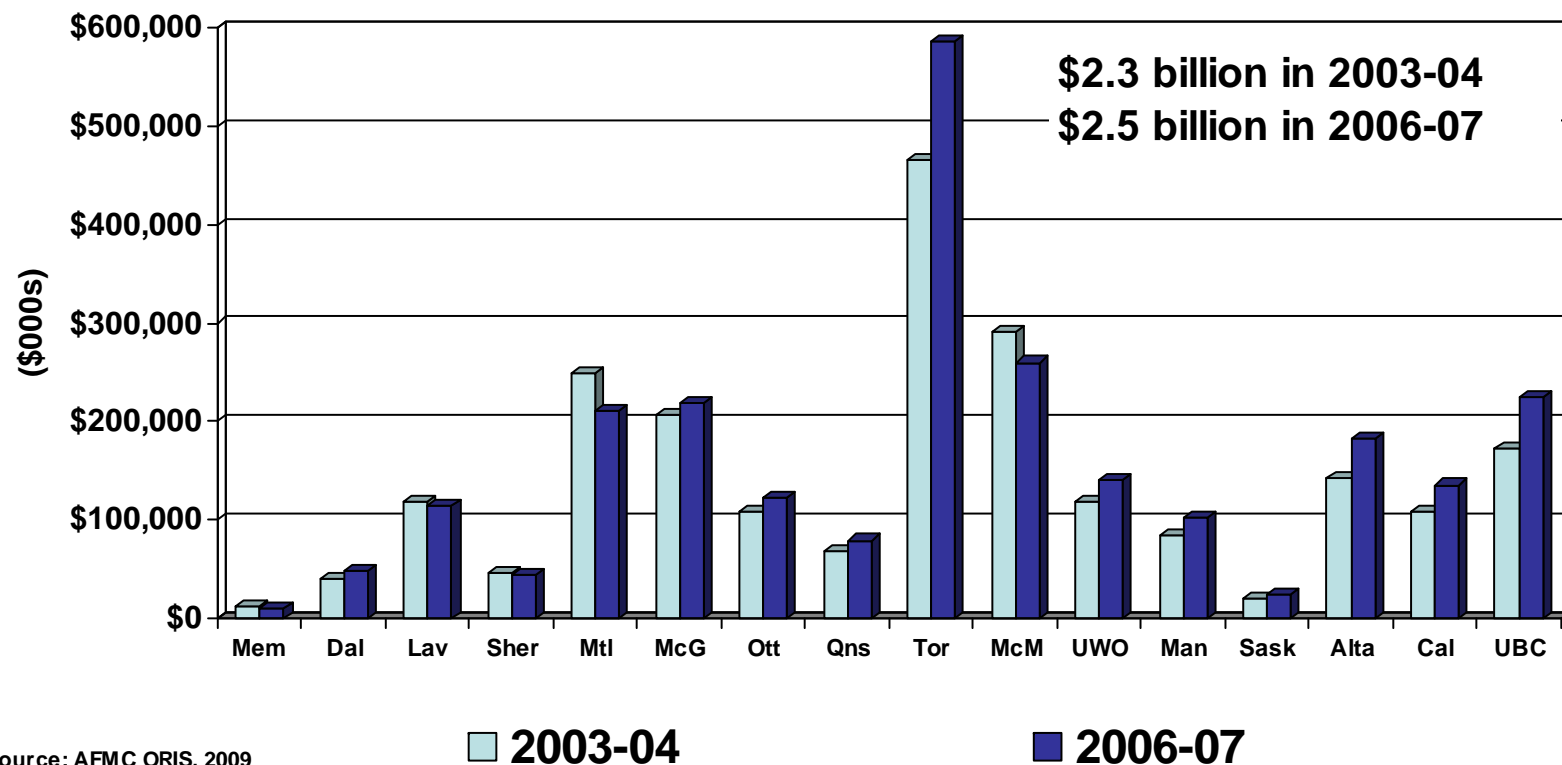
Research

National IMG Database



Research Revenues

**Biomedical and Health Care Research Revenues
by Faculty of Medicine, Canada, 2003-04 and 2006-07**

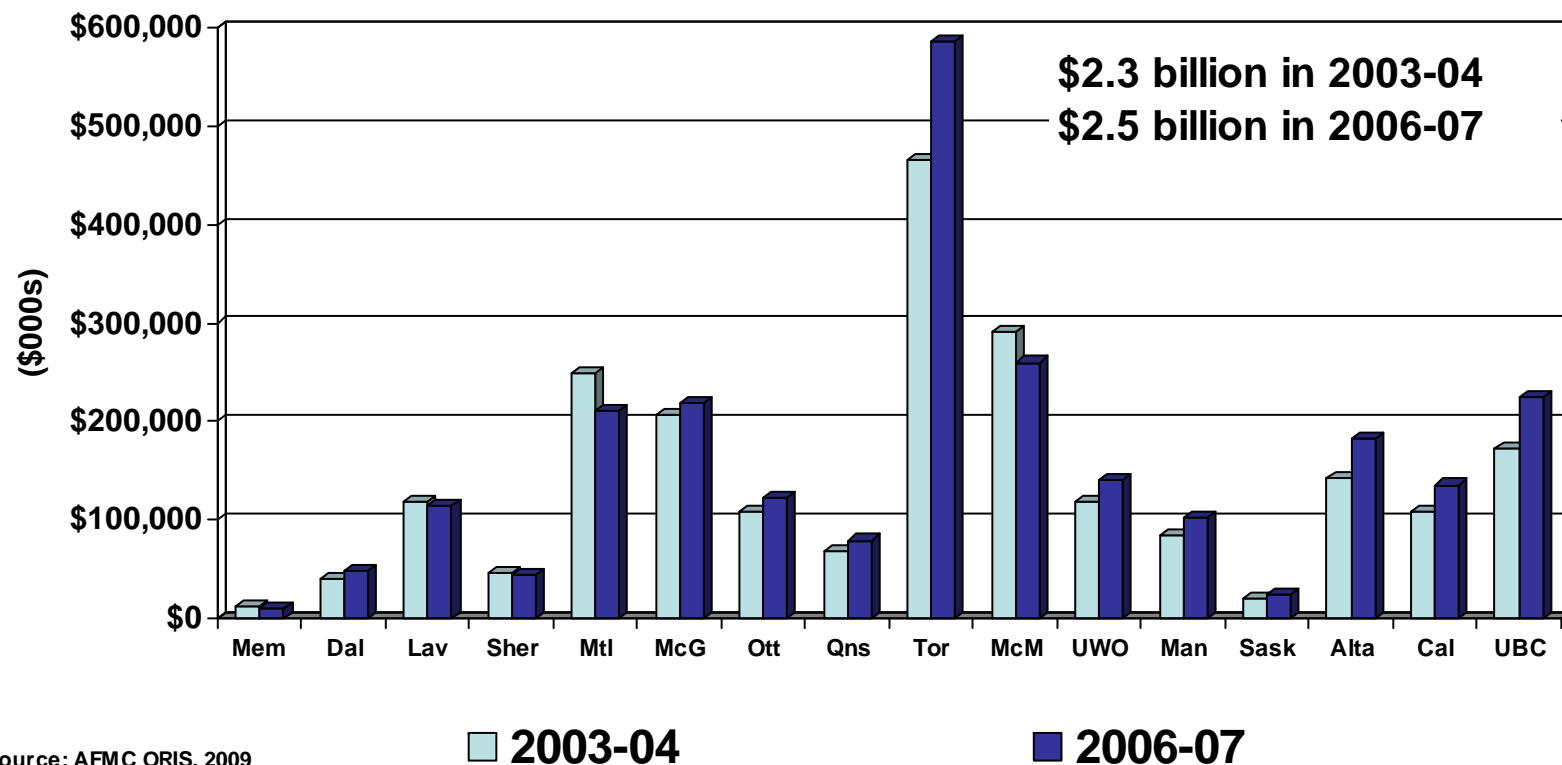


Source: AFMC ORIS, 2009



Research Revenues

**Biomedical and Health Care Research Revenues
by Faculty of Medicine, Canada, 2003-04 and 2006-07**



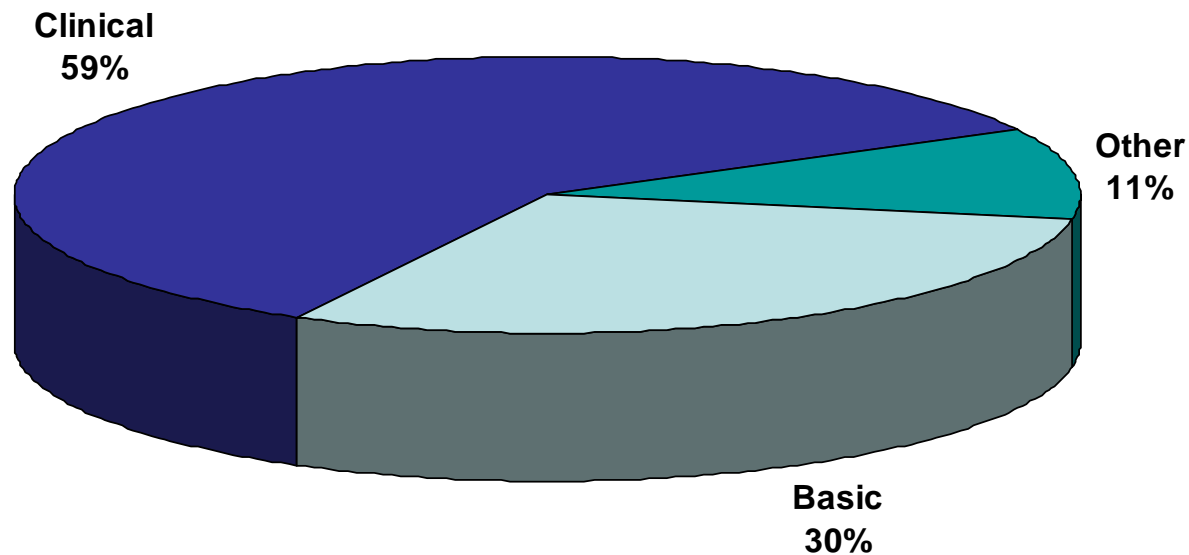
Source: AFMC ORIS, 2009



Research Revenues



**Distribution of Research Revenues Across Broad Research Fields,
Canada, 2006-07**



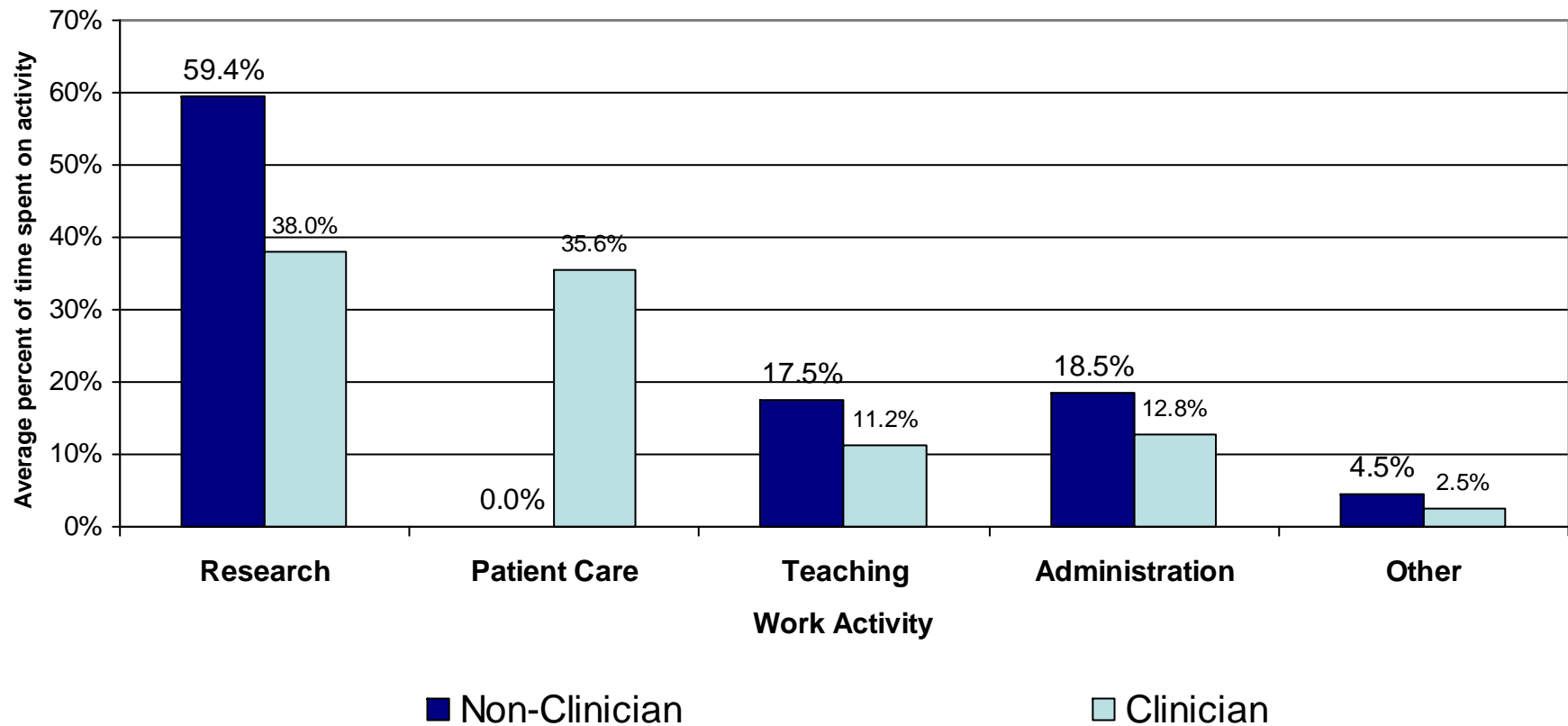
Source: AFMC ORIS, 2009.

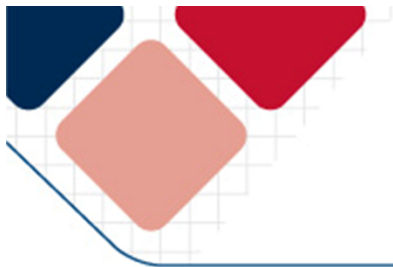
Examples: Clinical includes IM, peds, etc.; Basic includes biochem, genetics, etc.; Other includes community health, etc..



Research Careers

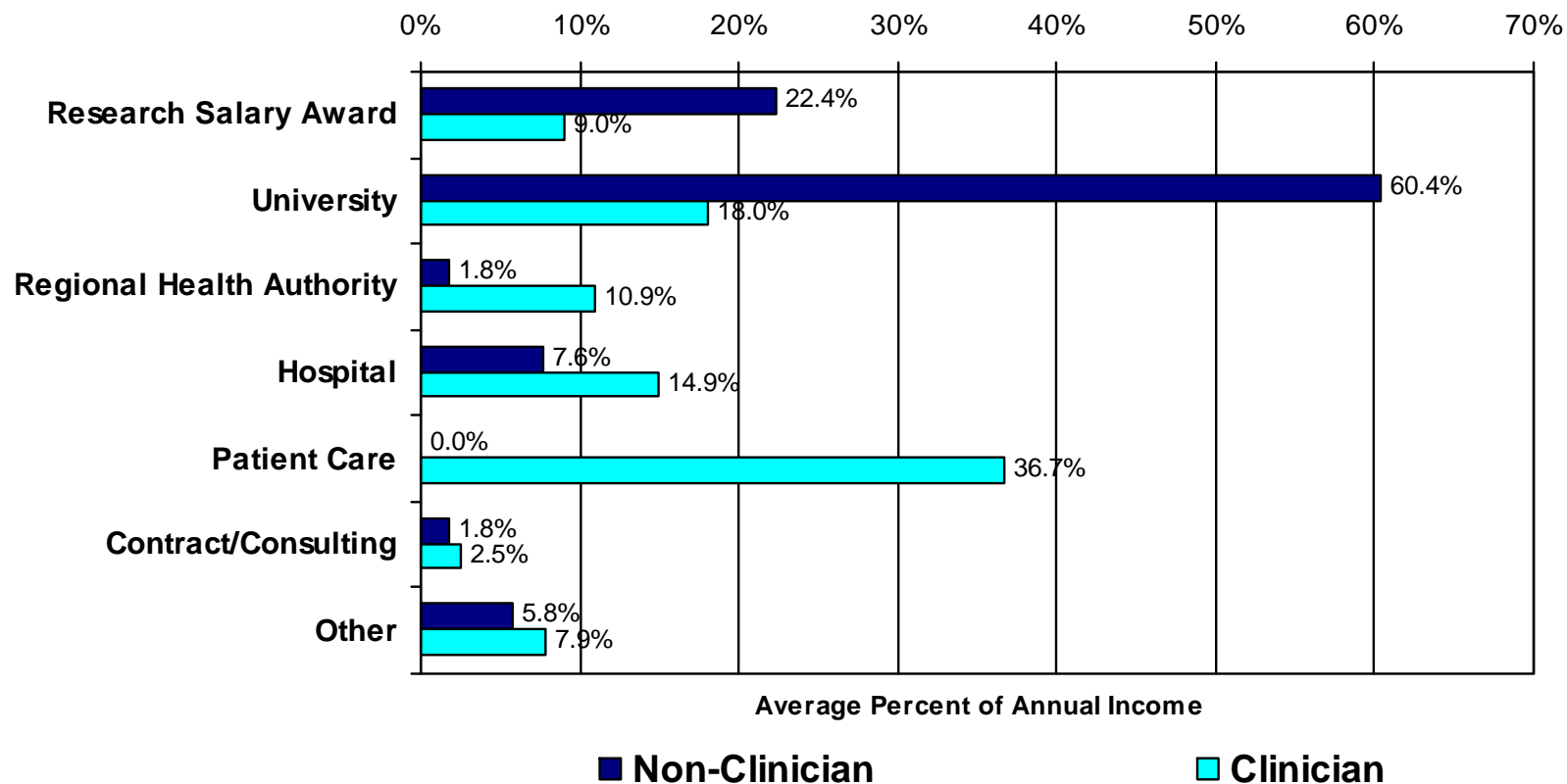
Time Distribution of Clinician and Non-Clinician Health Researchers, Canada, 2010





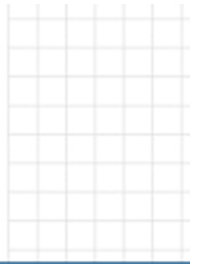
Research Careers

**Income Source Distribution of Clinician and Non-Clinician Health Researchers,
Canada, 2010**





Questions or Suggestions?





Steve Slade
Vice-President, Research and Analysis
(CAPER/ORIS)

265 Carling Ave, Suite 800
Ottawa, ON Canada
K1S 2E1

 T 613-730-1204
 F 613-730-1196

**Canadian Post-M.D.
Education Registry**

sslade@caper.ca
www.caper.ca

THANK YOU!