# Sherbrooke (Canada) Faculty of Medicine Its educational journey with Primary Health Care (PHC)

August/September 2012. PAHO Dialogue on Education Oriented Towards PHC

Paul Grand'Maison, M.D.,M. Sc.,FCMFC, FACSS Director, Office of International Relations (BRI) Director, WHO/PAHO Collaborating Center (since 2001) on the developpement of health human resources.





## « The direction in which education starts a man will determine its future mind »

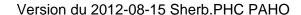
-Platon





## Outline of the presentation

- Sherbrooke Medical School
- Commitment to PHC
- MD Program
- Curriculum and PHC
- Clinical Training sites
- Results
- Challenges







# **Sherbrooke Facutly of Medicine and Health Sciences**







#### Mission

Rooted in the communities to which it is committed and in which it is evolving, the Faculty of Medicine and Health Sciences is dedicated to training, research and the sharing of knowledge, fostering critical and creative thought for the purpose of improving the health and well-being of people and populations.





#### **Values**

Recognizing its social responsibility, the Faculty of Medicine and Health Sciences places student training at the heart of its actions, with an emphasis on the following values:

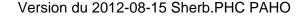
- Excellence
- Innovation
- Partnership
- Commitment
- Professionalism





### **Faculty History**

- Founded in the 60's to respond to the needs of communities out of large cities
- Comitted towards PHC
- Recognized for its educational innovations
- Since 2001: A WHO/PAHO Collaborating Center on the development of health human resources
- 2006 : Faculty of Medicine and Health Sciences







# Sherbrooke Faculty of Medicine: History of educational programs

• 1961: Foundation of the Faculty

• 1966: First MD students

• 1966: First Master and PhD students

• 1978: Nursing Sciences

• 1979: Biochemistry

• 1984: An Office of Medical Education

• 2001: Pharmacology

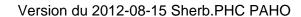
• 2007: Physiotherapy and Ergotherapy





### Faculty in 2012

- ~ 525 full-time teachers
  - o 185 researches (65 clinician researchers)
  - o 340 clinicians
- $\sim 1~200$  part-time teachers
- $\sim 3500$  students
- $\sim 1000$  employees







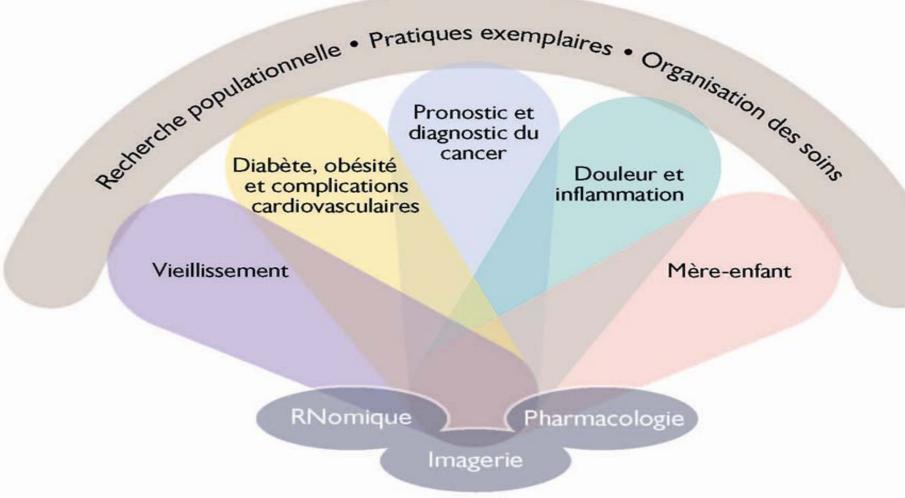
## Programs and number of students September 2012

Programs	Number of students
M.D.	~ 825 (210, in fisrt year)
Residency programs	~ <b>725</b>
Bachelor degree Nursing Sciences	~ 450
Biochemistry	~ 100
Pharmacology	~ 180
Addiction Therapists	~ 250
Physiotherapy and Ergotherapy (Integrated Bachelor degree and Master)	~ 420
Masters and PhDs	∼ 375 (full-time) ∼ 150 (part-time)
Total	~ 3 500





#### **Research Areas**

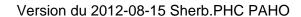






#### Sherbrooke commitment to PHC

- Long term commitment
- Mission considering Social Responsability
- Expected results re graduates:
  - Family Medicine: 50%
  - «Generalist specialties »: 25%
- Fam. Med. Residency program (since 1970) in regional areas
- International collaboration





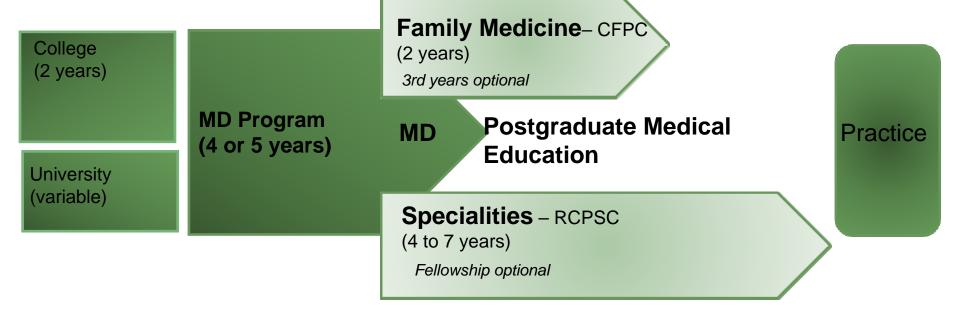


### SHERBROOKE MD PROGRAM





#### Training physicians

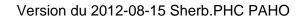






#### Sherbrooke MD Program

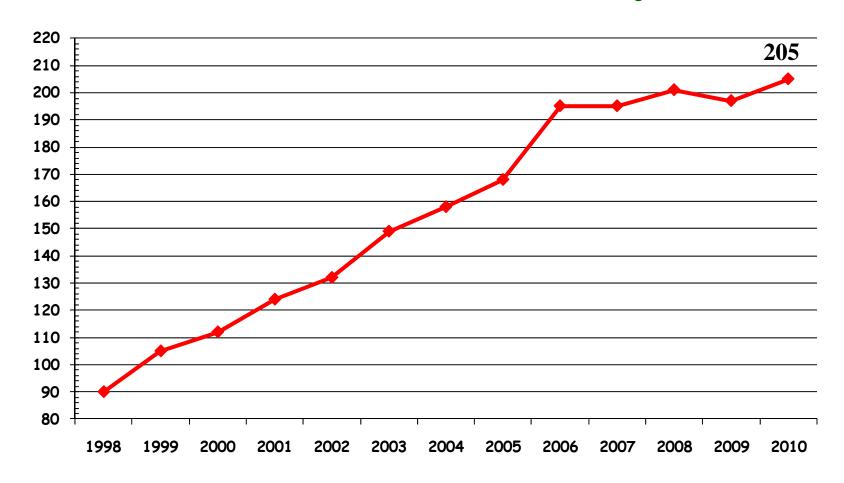
- 1966: First students. System-based curriculum
- 1987: Major reform : PBL and COE
- 1998-2010: ↑ number of 1st year students (90 to 210)
- 2006 : 2 outside campuses (whole program)
- 2006 : Clerkship reform :
  - o CanMeds
  - Task-based educational approach
- 2011 : Reflexion for a renewal (for 2014)







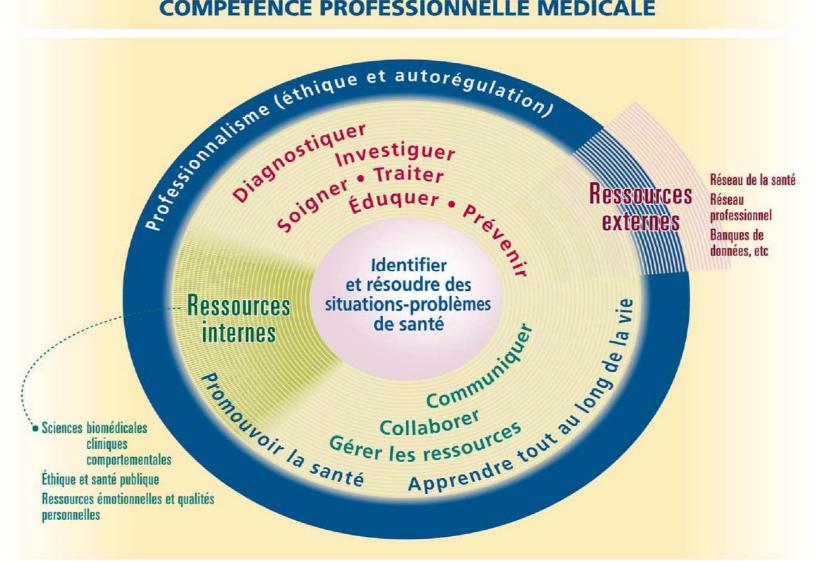
#### MD: Admissions in 1st year







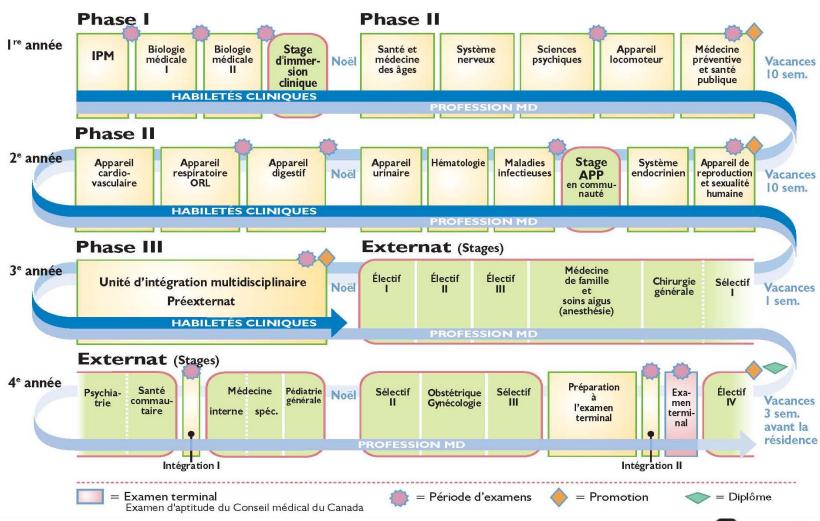
#### COMPÉTENCE PROFESSIONNELLE MÉDICALE







## 4 years MD program





## MD Program: Characteristics (1)

Terminal competencies based on professional roles

Systems/organs based curriculum

• Integration of basic and clinical sciences, theoretitical and pratical learning



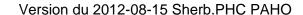


## MD Program: Characteristics (2)

- 4 years program:
  - o 18 months of clerkship

• Small group and active learning activities (over 70%)

• Comprehensive student evaluation















#### Clerkship

- Task-based educational approach derived from 100 clinical situations
- 48 weeks of regular rotations
- 16 weeks of electives
- Clinical reasonning learning sessions (n=56)
- Evaluation : In-training evaluation, OSCE, terminal national exam





#### 2006: 2 outside campuses

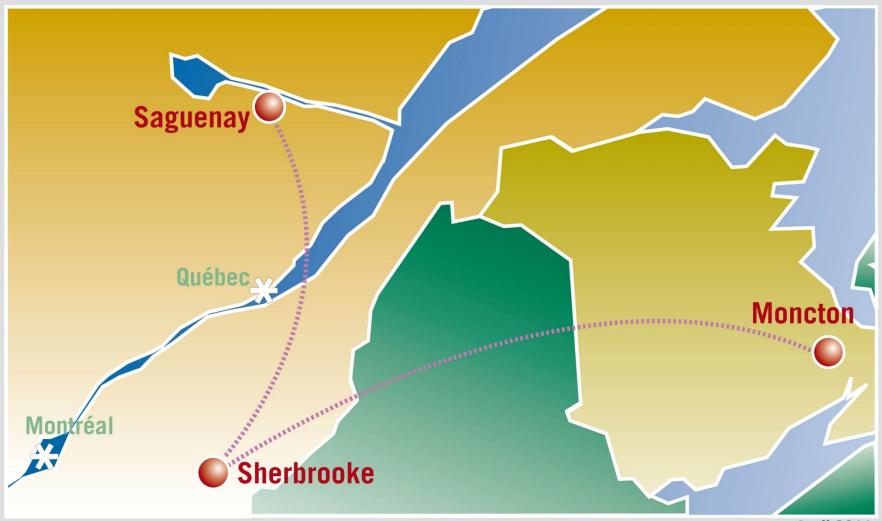
- Social Responsibility
- A response to the need of increasing number of physicians in Quebec
- Expectation: a larger proportion of graduates choosing Family Medicine or "generalist specialties"
- Improve preparation for and establishment of practice in out of large centers







#### **MD** Sherbrooke: 3 sites



Avril 2011

#### Full DME in 2 distant sites

City	Saguenay	Moncton
Region	Saguenay-Lac-St-Jean	New Brunswick Francophone
Population city	140 000	120 000 (50 000 French speaking)
Distance from Sherbrooke	500 km	1 000 km
Contributing MDs	~ 150	~ 150
Partner University	UQAC	University of Moncton





#### **Sherbrooke MD Students 2011-2012**

	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year (1 <sup>st</sup> semester)	4th year (clerkship)
MONCTON (All from N B)	27	26	24	Distributed
SAGUENAY (All from Quebec)	36	34	33	through the whole health care institutions
SHERBROOKE (Quebec, Maritimes, Western Canada, international)	150	150	145	network (Quebec, New Brunswick)
TOTAL	213	210	202	200

**GRAND TOTAL**  $\rightarrow$  825





# MD CURRICULUM AND PRIMARY HEALTH CARE





#### **Curriculum and PHC**

- Y-1: 2 weeks of clinical immersion
- Y-2: 2 weeks of clinical immersion
- Preclinical years small group teaching:
  - $-\sim 25\%$  by family physicians
  - $-\sim 25\%$  by « generalist specialists »
- Clerkship:

Family Medecine	8 weeks
« Generalist specialities »	20 weeks
Public Health	4 weeks

Leadership role of family physicians





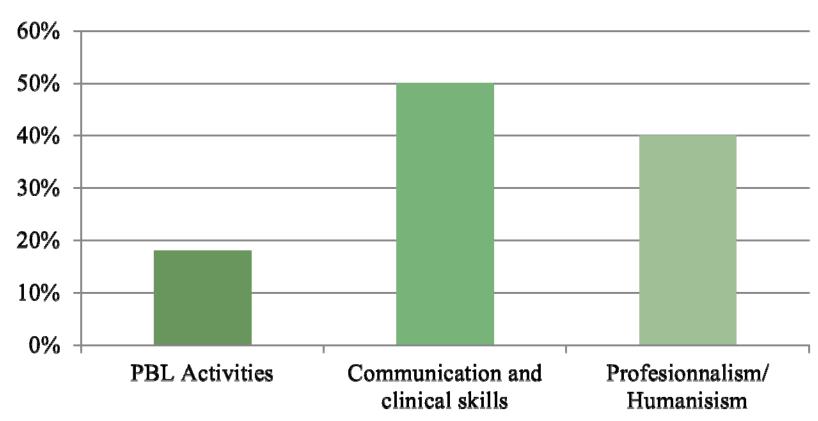
# Curriculum and PHC: Family Medicine Leadership

- Program director
- Clerkship director
- Communication and clinical skills unit director
- Professionalism unit director
- Significant involvements in various program comittees





# % of teachers being family physicians for small group teaching activities







### Clerkship: PHC related disciplines

Discipline	Duration (weeks)	% of positions in community based health care institutions
Family Medecine	8	100%
Public Health	4	100%
Internal medicine	4	
General surgery	4	
General psychiatry	4	
General pediatrics	4	
General obstetrique&gynecology	4	





# Sherbrooke Residency program in Family Medecine

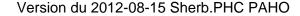
- 2 years (the norm in Canada)
- > 50% of the training in Fam. Med. teaching units (FMTU)
- All FMTU (n=8) are located in communities and interact with a community hospital
- All FMTU receive residents and clerks
- High % ( $\sim$ 50%) of graduates establishing their practice in smaller cities (< 100,000)
- 2011 : Highest % of graduates still practicing in rural and remote areas afert 5 years





### **Clinical Training Sites**

- Comprehensive network of health care institutions
- In urban, sub-urban, rural and remote areas
- From primary care to tertiary care
- Compulsory 16 weeks of clerkship in sub-urban, rural and remote areas
- Faculty development +++

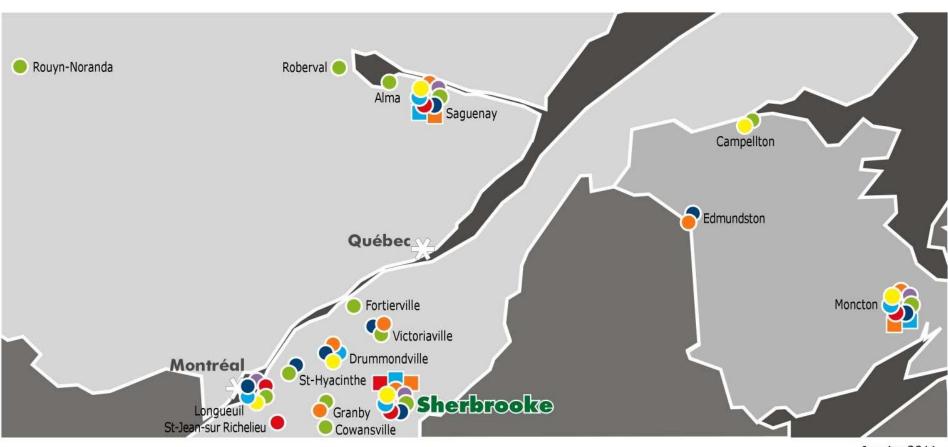






## Faculté de médecine et des sciences de la santé de l'Université de Sherbrooke

#### **MILIEUX DE STAGE À L'EXTERNAT 2011-2012**



Janvier 2011

- Chirurgie générale
- Chirurgie spécialisée sélectif
- Médecine de famille et soins aigus
- Médecine interne
- Médecine spécialisée sélectif
- Médecine spécialisée obligatoire

- Obstétrique gynécologie
- Pédiatrie générale
- Pédiatrie spécialisée sélectif
- Psychiatrie
- Santé communautaire



# Sherbrooke network of collaborating health care institutions

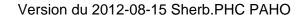
- Regrouped in the « RUIS »
  - Integrated University network of health care institutions for clinical care, teaching and research
- All with an official agreement with the University delineating educational obligations
- All teachers :
  - university teaching nomination
  - Remunerated
  - Faculty development





# Sherbrooke network of collaborating health care institutions: distribution

- 1 University hospital at Sherbrooke : ~ 45% of clerkship rotations including general specialties and sub specialties
- 6 Community hospitals in mid-size cities (50,000 to 100,000 people)
- 10 community health care institutions or community clinics in small cities (less than 50,000 people)







## **RESULTS**



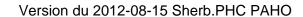


#### **Sherbrooke MD Graduates**

• Integrated professional roles in line with CanMedS

Success at national exams

High match rate for residency programs







# Sherbrooke MD Graduates: Residency program match

Discipline	0/0*
Family Medicine	~ 45% / 50%**
« Generalist specialities » (General Internal Medicine, General Surgery, Psychiatry, Pediatrics, Ob-Gyn)	~ 30%
SubSpecialties	~ 20%/25%

- \* Mean for the last 5years
- \*\* 1st choice for Family Medicine: 32% to 38%





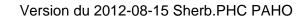
## FUTURE OF MEDICAL EDUCATION IN CANADA (FMEC) ASSOCIATION OF FACULTIES OF MEDICINE OF CANADA (AFMC)





### FMEC-AFMC (2010): Emphasis

- Social Responsability
- Responsiveness to population needs
- Generalism
- Prevention and public health
- Community-based learning contexts

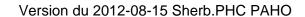






### **Challenges**

- Apathy/Self-satisfaction
- Resistance/Cowardness
- Absorption in other pursuits
- Hidden curriculum against PHC
- Recognition of the value of PHC by other stakeholders







#### « DOING IT IS COSTLY »

# « NOT DOING IT WILL BE MUCH MORE COSTLY »

47





## « The greatest difficulty in life is to make knowledge effective, to convert it into practical wisdom »

-William Osler





#### International commitment for PHC (1)

#### • Associations :

CC WHO/PAHO, Network-TUFH, THE Net, World Leadership on Social Accountability, etc.

#### • Mali:

- Partnership > 15 years
- Development of Fam.Med. Residency programs and Fam.Med. Clinics
- Multi million \$ project





### International commitment for PHC (2)

#### • Uruguay:

- Partnership > 6 years
- Support for MD program orienation towards PHC
- Support of Fam.Med. Residency program
- $-\sim 2$  millions \$ project

#### Haïti :

- Partnership since 2010
- MD program towards core competencies, responsiveness to health care needs and PHC
- − ~\$500,000 project



