

Faculté de pharmacie

Université 
de Montréal



Entry-Level Pharm.D. Clinical Rotations: The Montréal Experience

Tania Choquette
Ema Ferreira
Louise Mallet

June 2009



Objectives

At the end of this presentation, the learner will be able to :

1. Outline the organizational structure for the development of the Pharm.D. experiential learning program at the University of Montreal;
2. List the barriers for the development of the Pharm.D. experiential learning program;
3. Describe the first community clinical clerkship of the Pharm.D. program.



Pharm.D. program

Program started in August 2007

- Number of students admitted in the program: 200 students
- Community clinical rotation at the end of 1st year
 - In 2008, 193 students
 - In 2009, 192 students
- Hospital clinical rotation: at the end of 2nd year
 - In 2009, 177 students

Comparison B.Pharm. – Pharm.D.

	<i>B.Pharm.</i>	<i>Pharm.D.</i>
Credits (total)	142	164
Structure	Disciplinary courses Laboratories Clinical rotations	Modules : •Drugs and the human body •Drugs and society •Skill labs •Integration activities •Clinical rotations
Rotations/student	2 rotations Total: 14 weeks OPQ: 24 weeks including internship	7 clinical rotations Total: 40 weeks OPQ: none
Credits for clinical rotations	9.6%	24%
Evaluation	Knowledge-facts Competencies	Competencies Knowledge-facts



Competencies - Pharm.D.

- **Cross-curricular**
 - Professionalism
 - Communication
 - Teamwork and interdisciplinary
 - Scientific reasoning and critical appraisal
 - Autonomy
 - Leadership

- **Specific to the profession**
 - Pharmaceutical care
 - Community services
 - Management of operations

Programme Pharm.D.

Trimestre Automne

Trimestre Hiver

Prolongation

Shadowing

AN 1

Module 1	PHA 1110	PHA 1120	PHA 1130	PHA 1140	PHA 1150	PHA 1160	PHA 1170	PHA 1180 Immuno
	Fonctionnement normal du corps humain 1 à 4				LADMER 1 à 3			Soins Pharm.
Module 2	PHA 1210 – Le pharmacien, professionnel de la santé				PHA 1220 – Le pharmacien et le patient			
	PHA 1215 – Le pharmacien et la loi							
Module 3	PHA 1310 – Pratique professionnelle 1				PHA 1320 - Pratique professionnelle 2			
Module 4	PHA 1410 – Activités d'intégration en pharmacie 1				PHA 1420 - Activités d'intégration en pharmacie 2			
Module 5					PHA 1510 - Stage			

AN 2

Module 1	PHA 2110 Hémato-Néphro	PHA 2120 Infectio 1	PHA 2130 Infectio 2	PHA 2140 Gastro	PHA 2150 Cardio 1	PHA 2160 Cardio 2
	Soins pharmaceutiques			Soins pharmaceutiques		
Module 2	PHA 2210 – Le pharmacien et le savoir scientifique			PHA 2220 – Le pharmacien-conseil		
Module 3	PHA 2310 – Pratique professionnelle 3			PHA 2320 – Pratique professionnelle 4		
Module 4	PHA 2410 – Activités d'intégration en pharmacie 3			PHA 2420 – Activités d'intégration en pharmacie 4		
Module 5				PHA 2510 - Stage		

AN 3

Module 1	PHA 3110 Endo	PHA 3120 Pneumo-Rhumato	PHA 3130 GynObs-Uro-ORL	PHA 3140 Dermato	PHA 3150 Neuro	PHA 3160 Psycho	PHA 3170 Onco
	Soins pharmaceutiques			Soins pharmaceutiques			
Module 2	PHA 3210 – Le pharmacien et la communauté			PHA 3220 – Le pharmacien gestionnaire			
Module 3	PHA 3310 – Pratique professionnelle 5			PHA 3320 – Pratique professionnelle 6			
Module 4	PHA 3410 – Activités d'intégration en pharmacie 5						
Module 6				Cours à option			

AN 4

Module 4					PHA 4410 – Intégr. 6
Module 5	PHA 4510T - Stage	PHA 4520T - Stage	PHA 4530 - Stage	PHA 4540 - Stage	PHA 4550 - Stage

Clinical rotations

B.Pharm.	1 st year	2 nd year	3 rd year	4 th year	Post-program
Rotations	OPQ (120 h)	OPQ (120 h)	OPQ (120 h)	2 clinical rotations 7 weeks in hospital 7 weeks in community practice	OPQ Internship (600 h)

Pharm.D.	1 st year	2 nd year	3 rd year	4 th year
Community pharmacy	PHA 1510 (4 weeks)			PHA 4510T PHA 4520T (8 weeks/rotation)
Hospital setting		PHA 2510 (4 weeks)		PHA 4530 (8 weeks) PHA 4540 (4 weeks)
Elective rotation				PHA 4550 (4 weeks)

OPQ = Ordre des pharmaciens du Québec

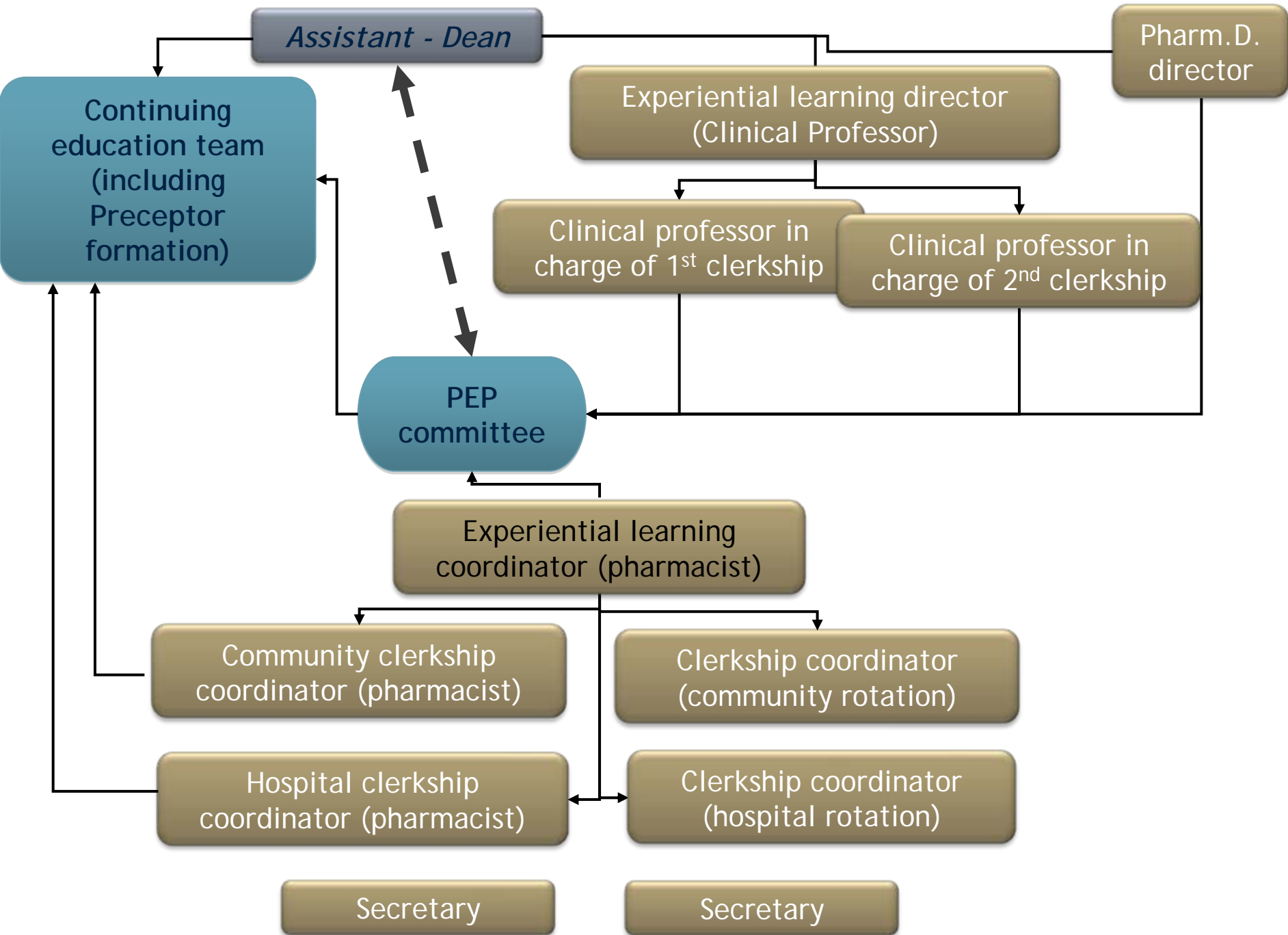


Experiential learning TEAM

- Clerkship coordinators
- Pharmacists
 - Community and hospital coordinators
 - Experiential learning coordinator
- Secretaries
- Clinical professors

Experiential learning TEAM over the years

Year	Clerkship coordinator	Pharmacist	Professor	Secretary	
1985	-	1	1	-	Total = 2
1995		2	1		Total = 3
2005	1	2	2	1	Total = 6 In preparation for the Pharm.D. program
...					
2007	1	3	3	2	Total = 9 Pharm.D. program begins First-year rotation begins
2008	2	3	3	2	Total = 10 Second –year Pharm.D. rotation begins





Clerkship coordinators

- 2 non-pharmacists, « professionals », full time
 - Hospital rotations
 - Community rotations
- Main contact for students and preceptors
 - Provide information on the clinical rotation to students and preceptors
 - Provide answers to students and preceptors' questions
 - Redirect queries to professor or pharmacists as needed
- Assign students to rotation sites
- Follow up of immunization and CPR training
- Meet with students on a regular basis and as needed
- Oversee correspondence



Community and hospital clerkship coordinators

- Pharmacist
- 3-4 days per week, also work in community pharmacy or hospital pharmacy
- Tasks:
 - Recruitment of rotation sites and in charge of accreditation (over 300 pharmacies and 50 hospital settings)
 - Participation in the development of the clinical clerkship
 - Preceptor training
 - Over 400 preceptors in community pharmacies and over 500 in hospitals
 - Visits of community pharmacies or hospitals
 - Support of preceptors
 - Participation in the pre-clerkship meeting with students and assignment of rotations



Experiential learning coordinator

- Pharmacist
- 4 days per week, also works in a community pharmacy
- Tasks:
 - Overseeing of all tasks related to experiential learning
 - Gives direction to team, calendar of tasks and activities, writes procedures
 - Human resources management
 - Links with faculty members, other health sciences faculties, pharmacy organizations
 - Develops clerkship with other members of team
 - Preceptor training
 - Participates to preceptor recognition
 - Conducts rotation evaluation



Clinical professor

- Clinical professor
- Develops a specific rotation
(in collaboration with team members):
 - Objectives
 - Teaching tools
 - Evaluation
- Answer questions of team, students and preceptors
- Follows students with difficulties
- Validates final students' grades



Experiential learning director

- Clinical professor
- Assures that all clerkships meet the Pharm.D. program objectives
- Oversees development of objectives, tools, evaluation
- Presides of the accreditation committee
- Will develop a mechanism to evaluate the program
- Elaborates research projects on experiential learning



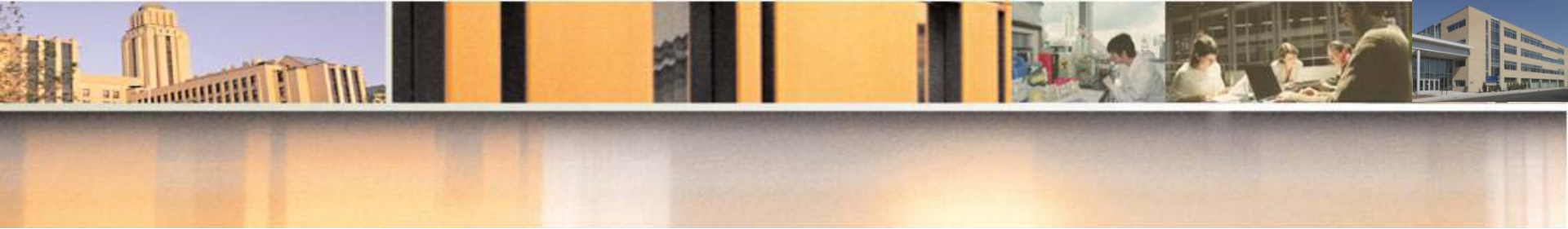
Secretaries

- 2 full time secretaries
- Correspondence
- Scheduling of visits
- Update database on preceptors and students
 - 600 students in clinical rotations per year
 - 1100 preceptors



“Cliniciens associés”

- 3 baseline courses
- University title
 - Valid for 3 years
 - Provides university privileges
- Renewal of title
 - Essential with Pharm.D. program
 - Renewal courses given over 20 times to over 600 pharmacists
- CA community practice: 355 (14)
- CA hospital: 474 (13)



PHA 1510

Community pharmacy 1

Community pharmacy 1

PHA 1510



PHA 1510

- First rotation out of seven
- At the end of the first year of the Pharm.D. program
- Four weeks
- 100 students in May and 100 students in June
- Pre-requisite for the second year rotation (PHA 2510)



Objectives

- The student integrates a community pharmacy team under the supervision of a preceptor (*clinicien associé*)
- The student continues to develop his competencies, in particular
 - Professionalism
 - Verbal communication
 - Autonomy



Rotation specifics

- Four weeks
 - Full time (40 h / week - 5 days)
- 1 to 2 h / day of « *homework* »
 - Schedule determined by preceptor
 - Minimum of 20 h / week of direct contact with the assigned preceptor
 - Weekly meeting (1 hour)



Tools developed for the rotation

- Clinical rotations guide
- Syllabus
- Le cahier d'accompagnement du stagiaire (CAS) (Student Learning Guide)
- Direct Observation Booklet (COD vs DOB)
- Global Evaluation of Competencies (FEGC)



Clinical Rotation Manual

- Used for all seven rotations
- Available electronically or paperback
- General information common to all rotations
 - Description of faculty staff
 - Responsibilities
 - Schedule
 - Types of supervision
 - Rules and regulations
 - Student preparation information
 - Insurance
 - Learning contract



Direct Observation Booklet

- Use for different student activities
- Objectives
 - To document performance throughout the rotation
 - To allow for enough sample size
 - To encourage feedback
- Used on a daily basis for different tasks
- Under the responsibility of the student

Date :

Contexte :

Activités		
<input type="checkbox"/> Histoire pharmacothérapeutique	<input type="checkbox"/> Consultation MVL	<input type="checkbox"/> Explication ou conseils au patient
<input type="checkbox"/> Évaluation de l'état physique	<input type="checkbox"/> Préparation du médicament	<input type="checkbox"/> Suivi téléphonique
<input type="checkbox"/> Ouverture et mise à jour du dossier	<input type="checkbox"/> Saisie de l'ordonnance et rédaction d'étiquette	<input type="checkbox"/> Autre :

Éléments de compétence		
<input type="checkbox"/> Établit la raison principale de la consultation	<input type="checkbox"/> Respecte et applique les lois, règlements et normes de pratique	<input type="checkbox"/> Transmet les informations au patient
<input type="checkbox"/> Recueille les informations pertinentes	<input type="checkbox"/> S'assure de la justesse de l'étiquetage et du conditionnement approprié du produit fini	<input type="checkbox"/> Vérifie la compréhension du patient
<input type="checkbox"/> Inscrit les informations dans le dossier-patient		<input type="checkbox"/> Identifie le besoin d'un suivi

1. Professionnalisme	<input type="checkbox"/> Respecte ses patients
	<input type="checkbox"/> Est disponible et agit avec diligence
2. Communication	<input type="checkbox"/> Reconnaît ses limites et obtient l'assistance lorsque nécessaire
	<input type="checkbox"/> Agit dans un délai approprié
	<input type="checkbox"/> Fait preuve d'empathie, de tact et de respect
	<input type="checkbox"/> Utilise les techniques de communication (écoute active, questions ouvertes, consultation interactive,...)
4. Raisonnement scientifique et pensée critique	<input type="checkbox"/> Adapte le contenu et le vocabulaire au patient
	<input type="checkbox"/> Identifie les barrières à la communication et les surmonte
	<input type="checkbox"/> S'assure de l'exactitude des informations
6. Leadership	<input type="checkbox"/> Vérifie ses sources d'information
	<input type="checkbox"/> Est proactif et a de l'initiative

Commentaires	
Points à améliorer	Points forts
Incident critique (s'il y a lieu) :	

Appréciation de l'activité		
-	R	+

Pharmacien : _____

Étudiant : _____



Global Competency Evaluation Form

- Evaluates global performance of the student
 - After 2 weeks: student + preceptor
 - At the end of the rotation: preceptor only
- Cross-curricular competencies are evaluated through specific competencies
- Determines if the student reaches the objectives essential to pass the rotation
- Pass or fail grade



ÉVALUATION FORMATIVE

Code Permanent : _____

Nom de l'étudiant : _____

Signature de l'étudiant : _____ Date _____

Nom du clinicien associé : _____

Signature du clinicien associé : _____ Date _____

Compétences spécifiques						Profil global de l'étudiant
Soins pharmaceutiques			Gestion de la pratique et des opérations			
Obtient et organise l'information	Analyse l'information	Conçoit le plan d'interventions	Applique le plan d'interventions	Gère son temps de façon efficace	Participe au processus de distribution des médicaments et la prestation des services	
						Afin de verser une mention au profil des compétences transversales de l'étudiant, notez les éléments suivants en tenant compte de la performance globale de l'étudiant pour tout son stage pour les points suivants ombragés.

Éléments de compétences spécifiques

-	R	+	-	R	+	-	R	+	-	R	+	-	R	+	-	R	+
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Éléments de compétences transversales

1.1- Respect des autres

1.2- Attitude professionnelle

1.3- Disponibilité et reconnaît ses limites

2.1- Communication verbale

2.4- Technologies de l'information

3.1- S'intègre à l'équipe

4.1- Démarche scientifique

5.1- Autocritique / Curiosité scientifique

5.2- Objectifs d'apprentissage / Autonomie

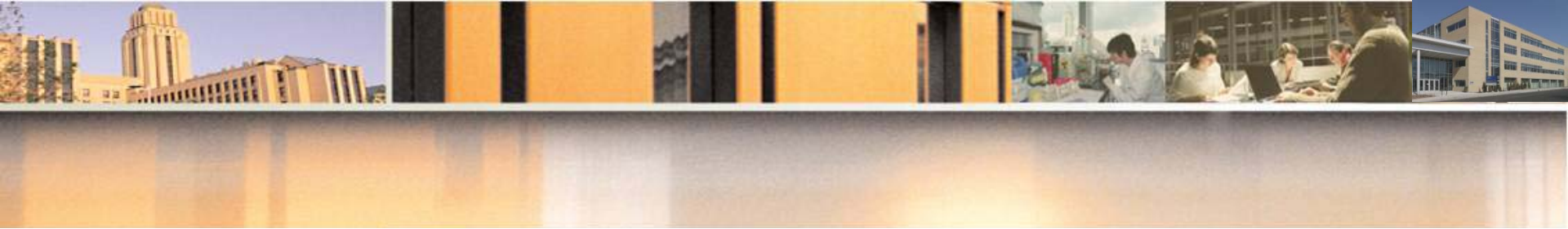
6.5- Proactivité et initiative

-	R	+				-	R	+				-	R	+	-	R	+
-	R	+				-	R	+							-	R	+
-	R	+	-	R	+							-	R	+			
-	R	+				-	R	+							-	R	+
						-	R	+									
			-	R	+	-	R	+							-	R	+
			-	R	+	-	R	+							-	R	+
									-	R	+						
-	R	+							-	R	+				-	R	+



Results of a focus group

- Preceptors found the students well prepared and very proactive compared to first year B.Pharm. Students
- The direct observation booklet was useful to create daily opportunities of feedback and liked by both preceptors and students
- Pharmaceutical care plans were not well mastered by the students
- Students appreciated the opportunity to be able to apply first year learnings to real patients
- It was difficult to evaluate dispensing tasks with the direct observation booklet



PHA2510

Hospital pharmacy 1

Hospital pharmacy 1

PHA2510



What worked well....

- Team work
 - Clinical professors
 - Coordinators
 - Pharmacists
 - Secretaries
- Support
 - Evaluation consultant
 - Techno-pedagogue
 - Graphic designer
 - Pharmacists with experience in supervision of students
- Tools developed
- Faculty support



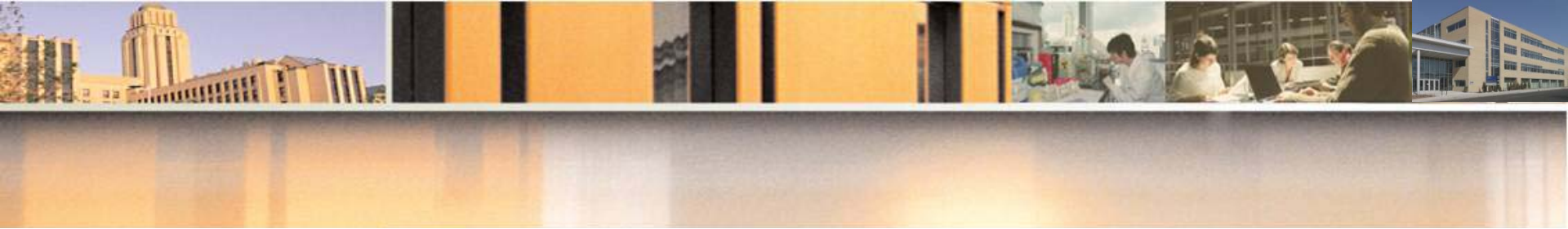
Challenges/barriers

- Finding enough hospital and community rotations
- Training « *cliniciens associés* »
- Retention of our clinical sites and « *cliniciens associés* »
- Working with a part-time team
- Retention of our TEAM
- Monetary issues
- To be ready for September 2010



Research

- Ferreira E. et coll. Evaluation of the first- year entry-level Pharm.D. community pharmacy rotation at Université de Montréal (AFPC)
- Ferreira E., et coll. Evaluation of the first- year entry-level Pharm.D. community pharmacy rotation at Université de Montréal (AACP, July 2009)
- Evaluation of our tools: global competency evaluation tool, direct observation evaluation



QUESTIONS ?

