

SCHOOL OF PHARMACY MEMORIAL UNIVERSITY ENTRY LEVEL PHARM D UPDATE

AFPC Conference

May 31, 2014

Presented by: Lisa Bishop





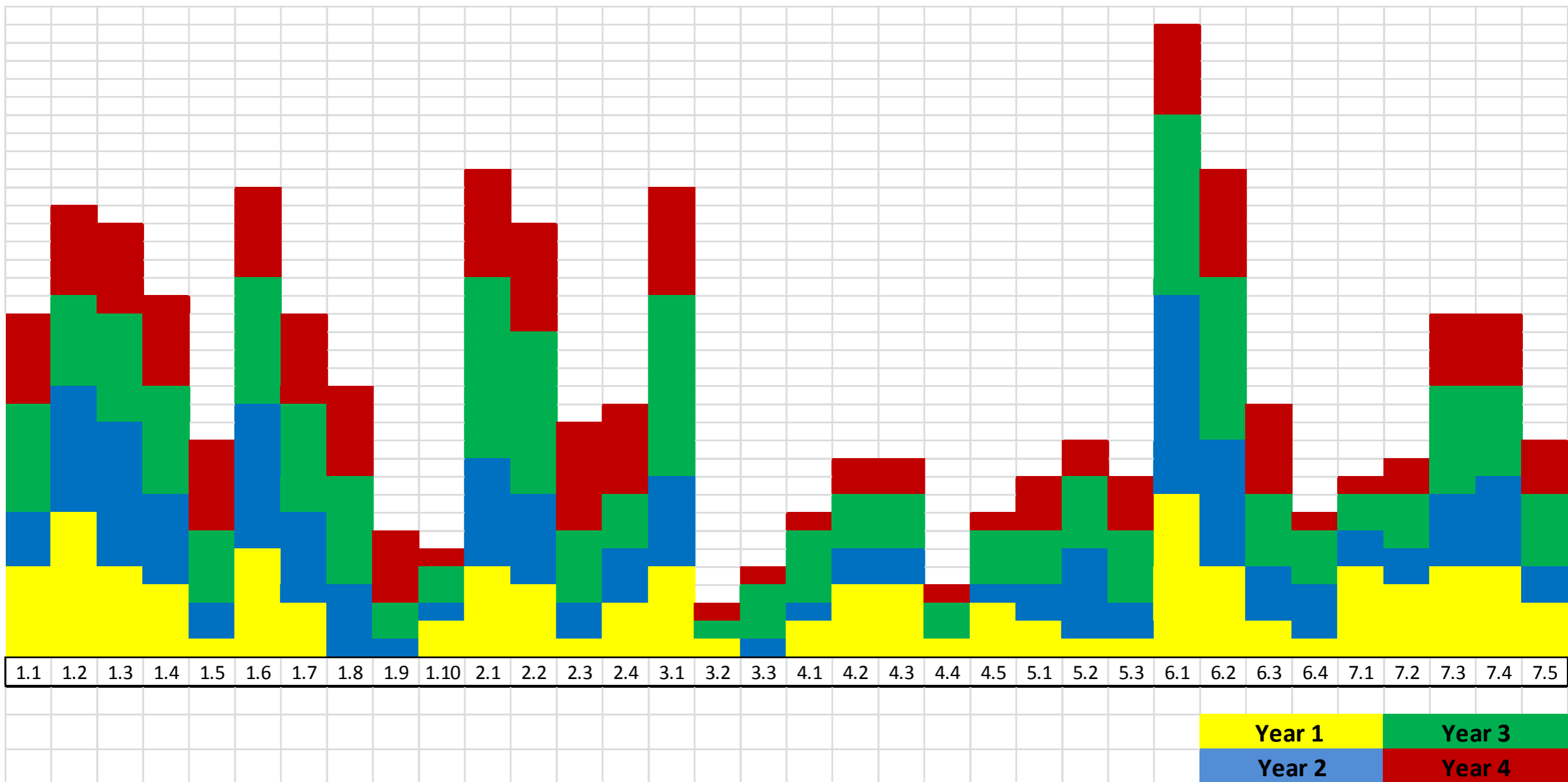
CURRENT STATUS

- **Early planning stages**
- **Anticipated enrollment date 2017**
- **Considering 4-year program (2-years pre)**
- **Class size 40 – 50**
- **Exploring Bridging Program**

PROGRESS TO DATE

- **Preliminary contact with government, pharmacy board**
- **Curriculum Planning and Development Committee**
 - Mapping of curriculum against educational outcomes

CURRICULUM MAPPING



CHALLENGES

- **SPE sites**
 - Development of sites in community, family medicine, international
 - Working closely with health authorities
 - Re-establishing other rotations (eg. research, DI, administration)
- **Admissions**
- **Physical space**
- **Resources**

NEXT STEPS

- **Stakeholder meetings**
 - Practicing pharmacists/alumni
 - Students
 - Faculty/staff
 - Health authorities
 - Provincial pharmacy organizations
 - Government

NEXT STEPS

- **Design curriculum**
 - Pre-requisites
 - Pharmacy curriculum
- **Bridging Program**

Dalhousie College of Pharmacy

2014 Pharm D status update



Prerequisites

● Approved by Faculty:

- ▶ Chemistry, biology, social science, math, statistics, english
- ▶ Anatomy, microbiology, organic chemistry, biochemistry, genetics, electives

Curricular Design

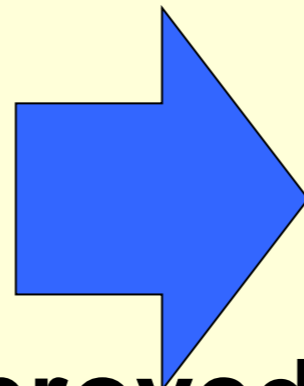
- **Proposed but in further development**
 - ▶ 3 years of skills lab
 - ▶ 2 and ½ years of Critical Appraisal Series
 - ▶ Physiology, immunology, pharmacology
 - ▶ Integrated pharmaceutical science course
 - ▶ Social, behavioural and administrative modules each term
 - ▶ Integrated PBL courses
 - ▶ Nutrition, geriatrics, pediatrics, pregnancy and lactation
 - ▶ Alternative health
 - ▶ Interprofessional thread

PEP

- **Final year – advanced PEP**
- **Introductory PEPs in first 3 years**
- **Exploring longitudinal early exposure**

Approval Process

Concept paper



Full Proposal

- **Concept paper approved at Faculty level and Senate subcommittee – moving to next Senate level**
- **Simultaneously developing full proposal**
- **Initial and simultaneous consultation with government**
- **Planned implementation fall 2016**

- MANITOBA



Pharmacy Education in Manitoba: A History

- **1986** – Academic review of the Faculty of Pharmacy

Recommendations:

- Relocation to medical campus should be investigated
- Expand curriculum to 4 years
- Preceptorship education program
- **Pharm. D. program development**
- **We have been developing PharmD program for 28 years**





1655

Registered Pharmacists (CPhM)



COLLEGE OF
PHARMACISTS
OF MANITOBA



1395

Practicing Pharmacists (CPhM)

33

Registered PharmDs

21

Practicing PharmDs

1972

Oldest PharmD

2013

Newest PharmD

Origin of Degree

9-Canada

24 - USA

21 practicing
14 Faculty at University of Manitoba
1 non-patient care
4 non-practicing



UNIVERSITY
OF MANITOBA



UNIVERSITY
OF MANITOBA

University of Manitoba



Current

- 4 Year BSc(Pharm) program Full Accreditation 2013-2019
- 1 year prerequisites
- Will increase pre-requisites to 2 years
- Council of Post-Secondary Education Approval, University of Manitoba Senate and Board of Governors approval to proceed with full proposal granted 2014
- In Strategic Plan 2012-2017
- Early stages of PharmD in development
- E2P and bridging program 2020



UNIVERSITY
OF MANITOBA



University of Saskatchewan

Progress towards PharmD Curriculum

Yvonne M. Shevchuk

Progress towards PharmD

- Steering Committee established in 2013
 - Terms of reference approved at division
 - Organizational chart and structure established
- Full day faculty retreat in May 2013
 - established guiding principles
- In-depth discussion with U of T

Progress towards PharmD

- Admissions working group and curriculum development working group established
- Remainder of working groups – practice experiences, faculty development and support and bridging program working groups will be established soon
- A number of subgroups within the curriculum development working group to be established- teaching and learning methods, skills development, student assessment and program evaluation, content and themes

Progress towards PharmD

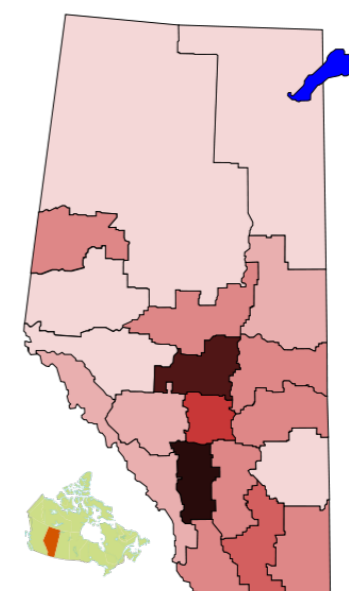
- Stakeholder consultations began Jan 2014
 - Ministries of Health, Advanced Education, and Economy and SASHN Board
 - Student town hall
 - Health regions, CSHP-SaskBranch, SCP,PAS, employers - continuing
- One page fact sheet developed for stakeholder consultations

Progress towards PharmD

- Notice of Intent to Planning and Priorities Committee of Council submitted April 7, 2014
- Meeting with PPC on June 4th
- Expected that all faculty will be involved through at least one working group
- Regular reports provided at Division meetings

PharmD: A Cross Country Update

Christine Hughes, BScPharm, PharmD, FCSHP
Associate Dean, Undergraduate Programs
(Acting) & Associate Professor
Faculty of Pharmacy & Pharmaceutical Sciences
University of Alberta

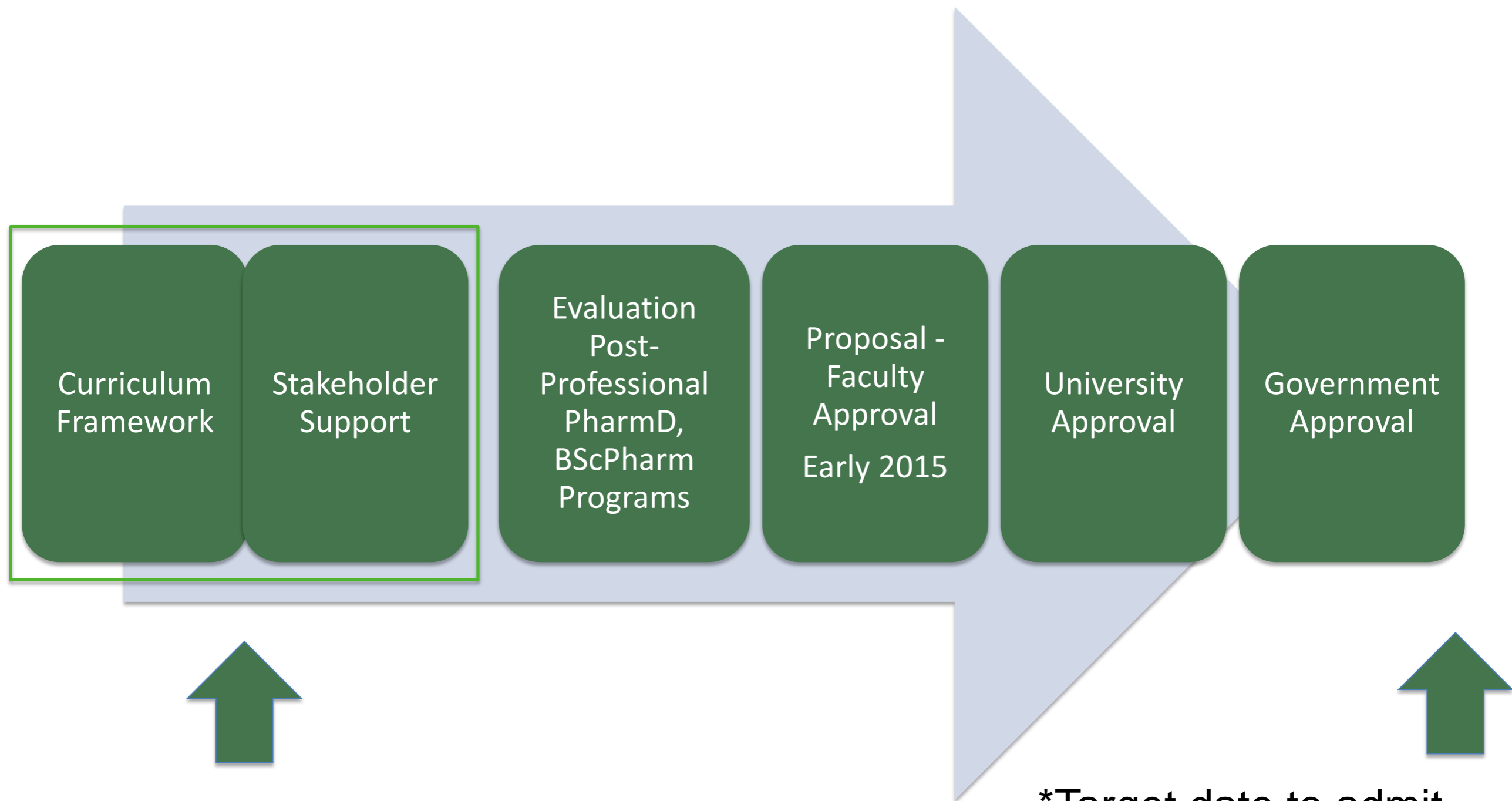


The (Recent) Road Map to ELPD in Alberta...

- Post-Professional PharmD Program started in September 2013 (admitted 10 students in first class)
- New Curriculum Development Steering Committee for ELPD formed in September 2012 (recommenced work in late 2013)
- Target for implementation of entry level PharmD: Fall 2017



Entry-Level PharmD Development and Approval Timeline



e.g. Framework Components:
Goals, Outcomes, Design Elements,
Pre-Pharmacy requirements, Courses

*Target date to admit
students is Fall 2017

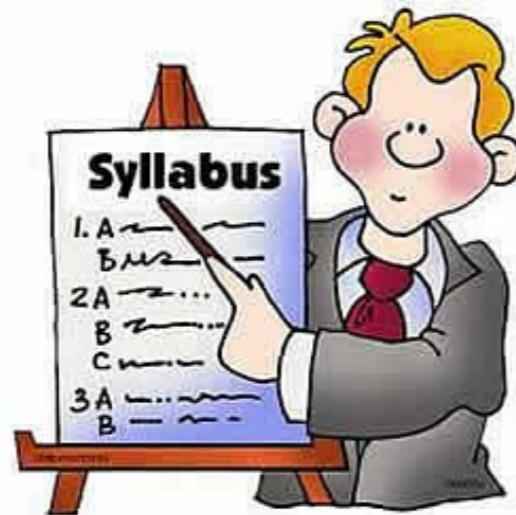
*Pending Faculty, University and Government approval

Progress to date...

- Outline proposal strategy
 - Curriculum revision vs. re-development
 - Work with University administration
- Identify pre-pharmacy courses (2 years)
 - Environmental scan
 - Modified Delphi approach
 - Work with other Faculties (e.g. Campus Saint Jean)
- Curriculum Framework components (draft)
 - Program goal and outcomes
 - Curriculum design elements
 - Program overview
- Identify priority areas
 - e.g. Experiential Education

Next Steps...

- Curriculum Framework approval
- Formation of Working Groups
 - Develop course syllabi



What will position us for success....

- ‘Bumps’ along the way....learn from experiences and from others
 - Network with colleagues
 - Published literature on curriculum re-development
- Experience with post-professional PharmD
 - Evaluation plan
- Strengths of existing BScPharm program to build on vs. new curriculum
 - Integration
 - Re-development of skills courses in 2nd and 3rd year of program
- Evaluation of BScPharm program underway
- Committed faculty, staff, students, preceptors, stakeholders.....
- Practice environment in Alberta
- New hires (support)
 - Curriculum Development Manager (starts Aug 2014)
 - Program Administrator – Doctor of Pharmacy Program
- New space for teaching (e.g. Practice Skills Lab)

Challenges....

- Capacity for experiential rotations
 - ELPD
 - Concurrent post-professional PharmD / bridging programs
- Faculty members
 - Time for planning
 - Burnout
 - Support needed (faculty development)
- Implementation
 - Minimizing double teaching
- Unexpected roadblocks?

“There is nothing wrong with change, if it is in the right direction.”

.....Winston Churchill



UBC

**DR. PETER LOEWEN, B.SC.(PHARM),
ACPR, PHARM.D., FCSHP**

Waterloo PharmD: Preparing the Next Generation of Pharmacists

WATERLOO
PHARMACY

pharmacy.uwaterloo.ca

David Edwards, BScPhm, PharmD, MPH
Professor and Hallman Director

PharmD Approval and Implementation

- Approval to offer the entry-to-practice PharmD program received in January 2013
- PharmD Planning Committee organized and working groups established to revise previously approved PharmD curriculum
- Revised curriculum approved by Pharmacy Faculty Council in May 2013
- First class admitted to PharmD program in Jan 2014 (Class of 2017)

PharmD Transition

- 1st and 2nd year students (currently in 2nd and 3rd year) were given the option to transition into the PharmD program (Class of 2015 and Class of 2016)
- 100% of students in both classes elected to transition
- First PharmD graduates in 2015
- Primary difference between the BScPharm and PharmD programs is the experiential component

Experiential Education @ Waterloo

BScPharm	PharmD
Community Service Learning	Community Service Learning
Co-op placements (16 months)	Co-op placements (12 months)
Clinical Capstone (assessment)	Clinical rotations (6 months)

Bridging PharmD

- Designed as a part-time program for Waterloo graduates only
- Key features include online courses, prior assessment of learning and clinical placements in local area where students are living and working
- May transition to a non-traditional PharmD program for graduates of other pharmacy programs
- First intake of students in January 2015

Faculty Update
University of Toronto
Leslie Dan Faculty of Pharmacy
CPERC Conference, May 31st, 2014
Saskatoon



PharmD Curriculum Update: 240 students

- Year 3 successfully implemented!
- May 5 to 9, 2014: Transition Week
- Students now in their Advanced Pharmacy Practice Experiences (APPE) – starting May 12th 2014, for 35 weeks
- All students to complete APPE by May 8th, 2015



PharmD Curriculum

- OCP has waived the 12-week internship requirements for our graduates
- Many elective offerings in year 3
- 7 new courses to be added for the 2014-15 academic year
- Total number of Selective and Elective courses in year 3: 28
- Modifications to year 1: Calculations and Pharmacology as courses



Other Faculty updates

- The Combined PharmD / MBA program to be offered to the class of 1T7 (students who will enter their 2nd year); program to commence in the fall of 2015
 - 5 years + one term to obtain dual degrees
 - Last two years will be with the Rotman School of Management
- “PharmD for Pharmacists” program to start in January 2015, with admissions process underway shortly
- Clinician Scientists in Pharmacy Practice: now 7



New Faculty Research Centres

- Centre for Pharmaceutical Oncology
 - From drug discovery to early clinical trials
- Centre for Pharmacy Management and Innovation
 - Research and education with a focus on exploring the impact of new models of pharmacy care
- Centre for Collaborative Drug Research (jointly with Medicine)
 - 3 themes: neuroscience; personalized medicine and natural health products



THANK YOU!



University of Toronto ↑

Leslie Dan Faculty of
Pharmacy →



Doctor of Pharmacy (Pharm.D.) Program Implementation: an Up-Date

***Faculté de pharmacie
Université Laval
Québec, CANADA***



5rd Annual Canadian Pharmacy Education and Research Conference
71th AGM of the Association of Faculties of Pharmacy of Canada
May 31st to June 3rd, 2014 Saskatoon



Overview

- A 4-year entry-level Doctor of Pharmacy program
- A professionalization approach
 - Set of 5 professional competencies
 - Competency development plan (w/ expected stage for each year)
- Learning Continuum
- Simulation Laboratory



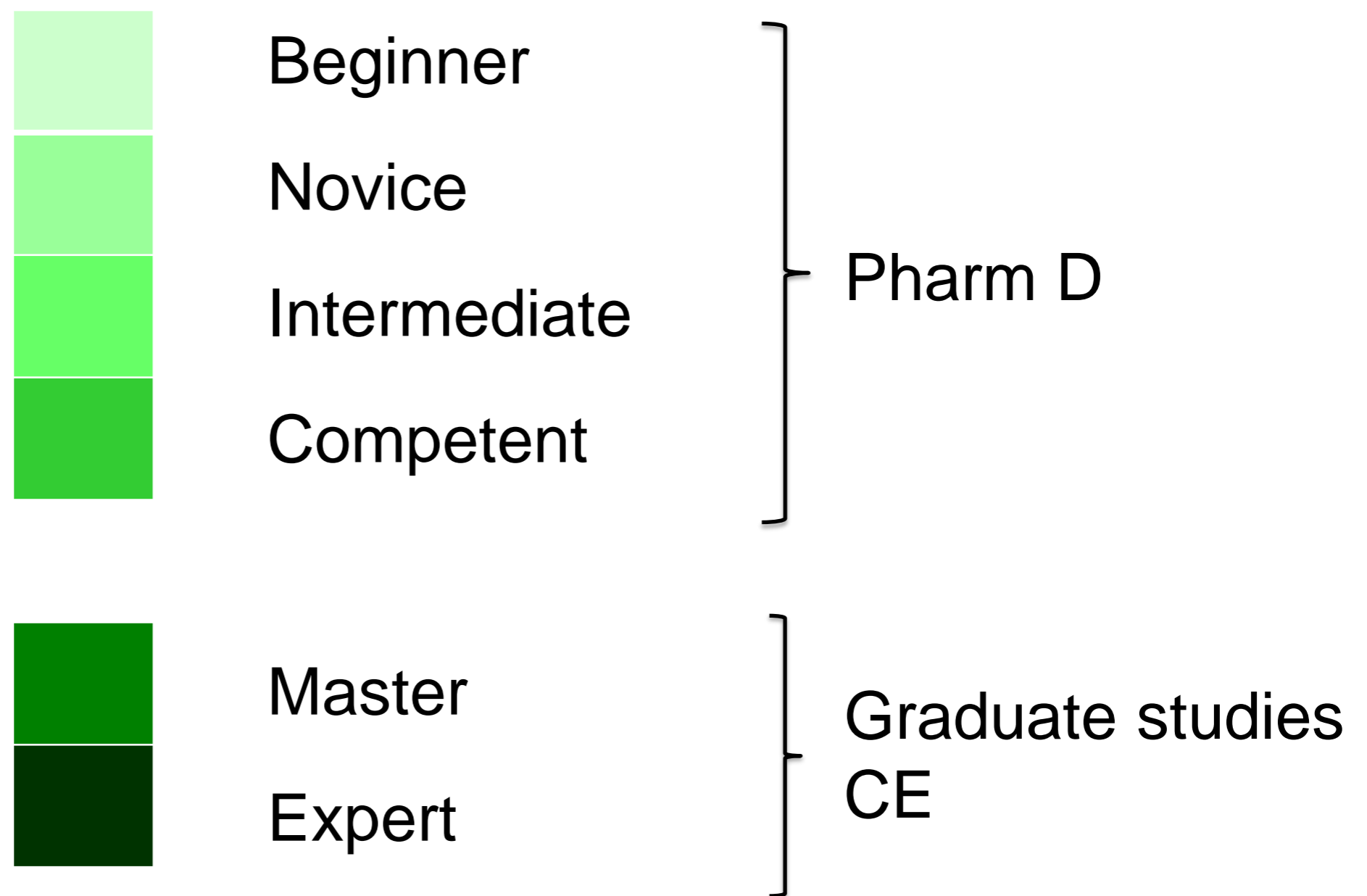


5 professional competencies in Pharmacy

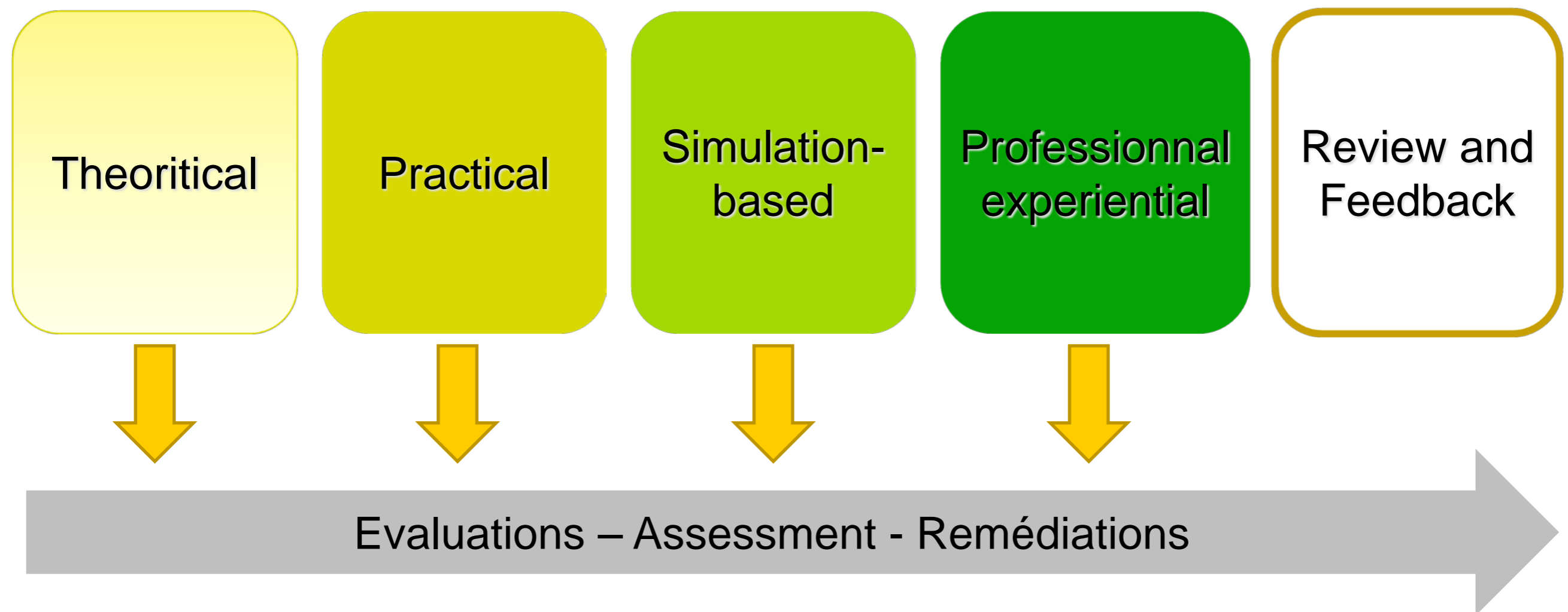
- 1) Implementation of medication therapy
- 2) Dissemination of pharmaceutical knowledge
- 3) Handling medication
- 4) Managing pharmacy operations
- 5) Commitment to professionalism

The progress map for learning

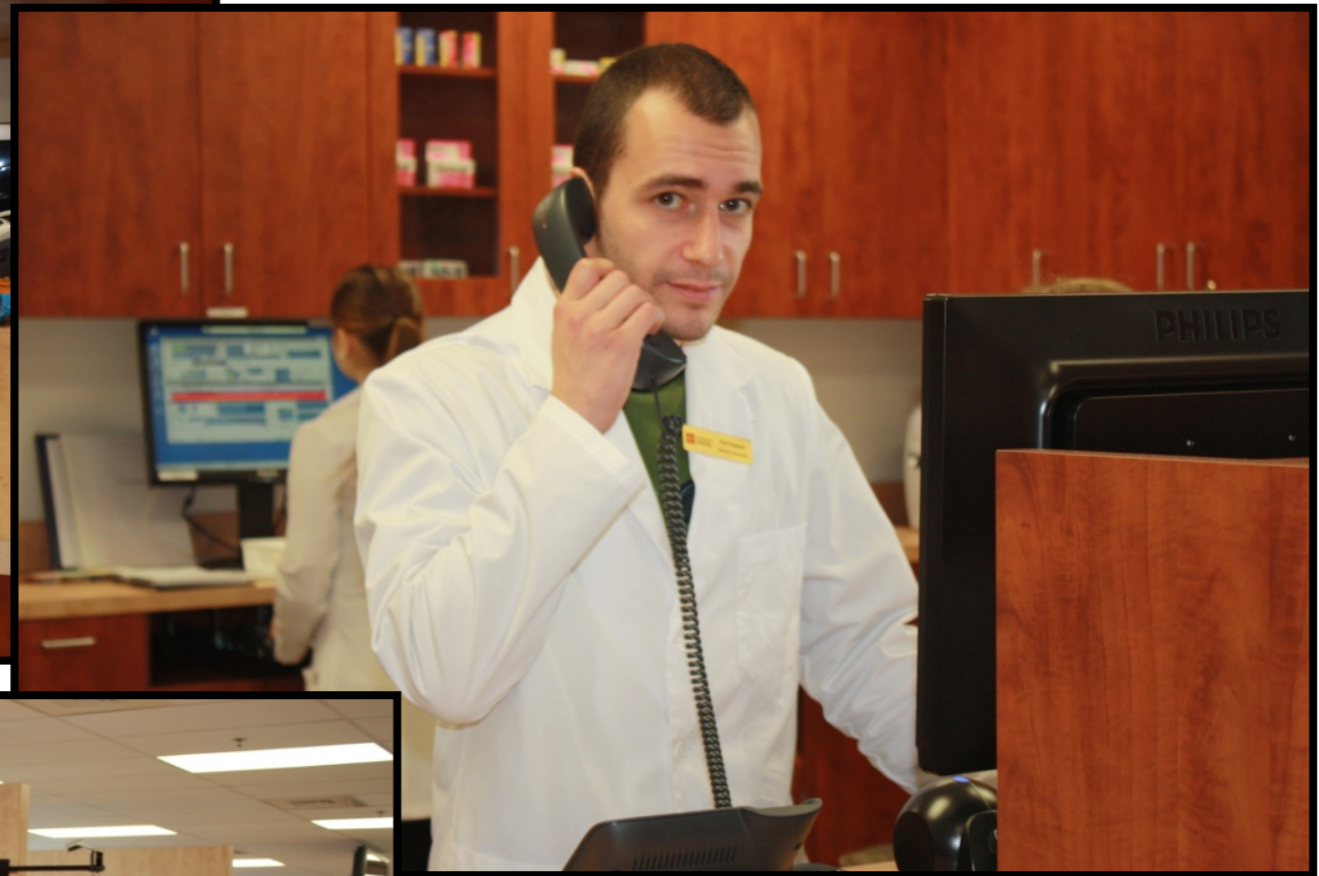
A scale developed and based on a 4-stage pathway :



Learning Continuum



Simulation Lab





What's positive

- To move forward to a new approach
- To better integrate basic to clinical sciences
- Simulation enhances preparation for clerkship



What remains challenging

- A totally new approach – no model
- A 180° turn for the professors & teaching staff
- In-depth reorganization of the Faculty



Facts

- Fall 2014: 4th year of implementation
- From 158 to 170 to 192 students a year
- Bridging Bachelor-Pharm D Program
- Revise M Sc Hospital Pharmacy Program

Competencies:
the foundation
of our Pharm.D.



June 2014

Pierre Moreau - BPharm, PhD
Professeur et Doyen

- ◆ 2001-2002: Needs assessment and Feasibility Study
- ◆ 2002-2003: Competency framework and Guiding principles
- ◆ 2004: Macro Components of the CBC (horizontal integration)
- ◆ 2005-2006: Course development and Assessment strategy (vertical integration)
- ◆ 2007: First class in a new Competency-based curriculum
- ◆ 2009-2013: Competency-driven adjustments



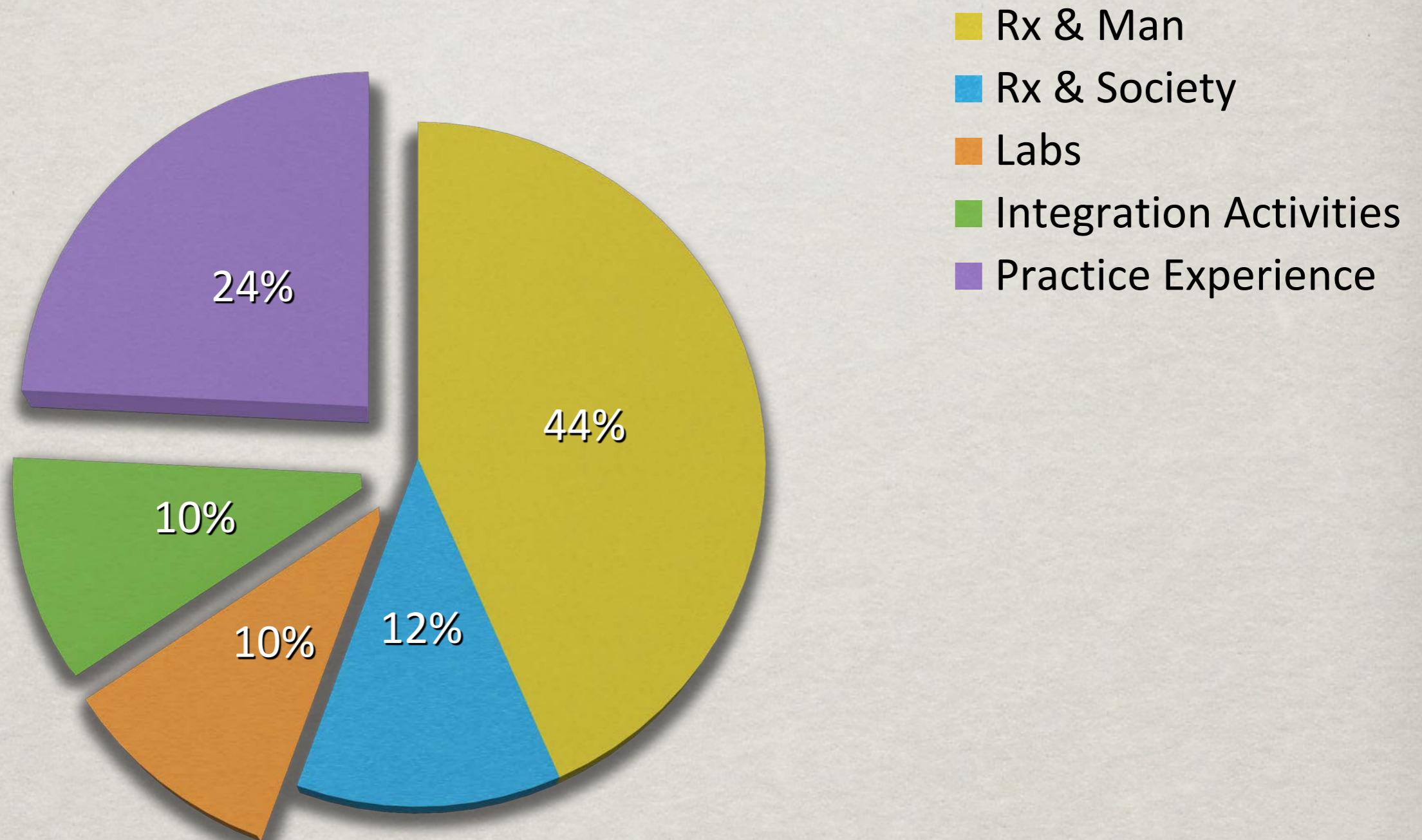
◆ Reverse Engineering

- In a Knowledge-based program, outcomes (competencies) are not measured during learning.
- Course's learning objectives are mapped to determine if students are «prepared» for the expected outcomes.

◆ ...or Direct Engineering

- Expected outcomes are practiced and measured regularly, with different levels of expectations as students progress within the curriculum.
- Our choice: Develop a flexible CBA to prepare competent pharmacists for professional challenges.





- ◆ Engage deeper in our health care system
 - Goal: Learn to become more proactive first-line resources
- ◆ Focus more on patients, less on medicines
 - Goal: Learn to put the patient at the centre of interest
- ◆ Collaborate more efficiently with other HCP
 - Goal: Learn to engage in inter-professional collaboration
- ◆ Offer broader services to our society
 - Goal: Learn to develop community / public health services



POTENTIAL PATTERN

▲ Innovating in Teaching Collaborative Practice with a Large Student Cohort at Université de Montréal

Marie-Claude Vanier, BPharm, MSc¹

Pierre-Yves Therriault, PhD²

Paule Lebel, MD, MSc^{3,5}

France Nolin, MSc⁴

Hélène Lefebvre, PhD⁵

Isabelle Brault, PhD⁵

Eric Drouin, MD³

Nicolas Fernandez, PhD⁵

*For the Interfaculty Operational Committee for Collaborative Practice Teaching at
Université de Montréal**

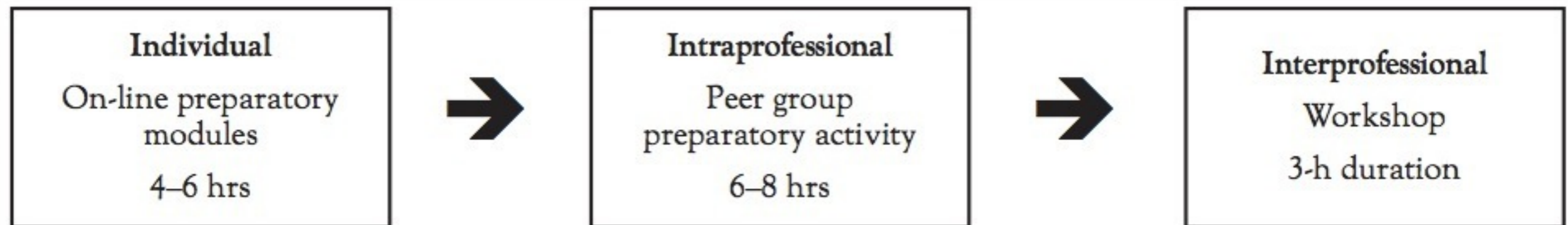


FIGURE 1. Interprofessional Education Continuum.

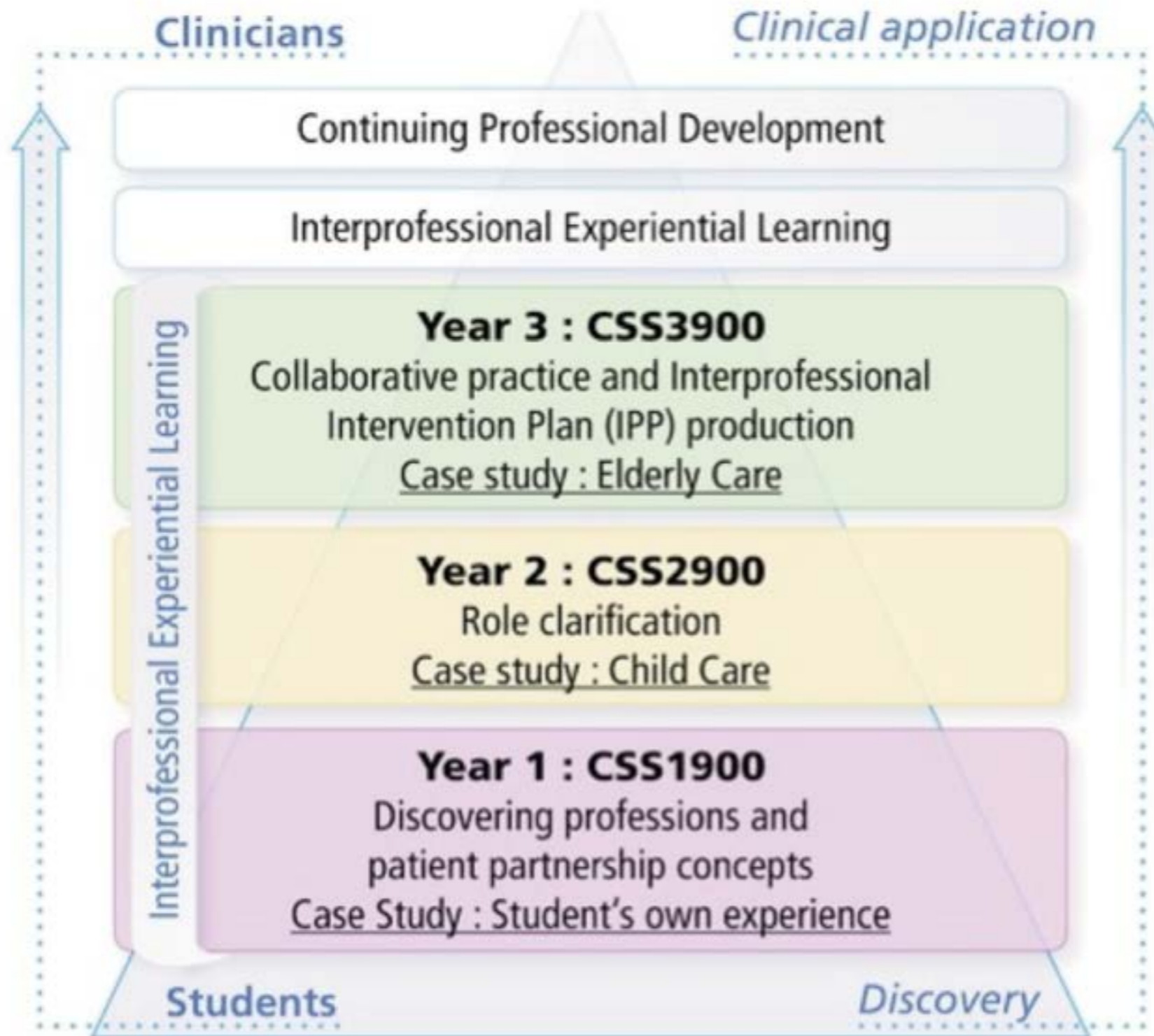


FIGURE 2. Three Stage Process of Progressive Competency Development.

- ◆ Engage deeper in our health care system
 - Goal: Learn to become more proactive first-line resources
- ◆ Focus more on patients, less on medicines
 - Goal: Learn to put the patient at the centre of interest
- ◆ Collaborate more efficiently with other HCP
 - Goal: Learn to engage in inter-professional collaboration
- ◆ Offer broader services to our society
 - Goal: Learn to develop community / public health services



- ◆ Significant projects
 - 2 semester duration - 2 annual themes
- ◆ 40 teams of 10 students
 - 5 students of year-1 and year-2 per group
 - Obligation to team up with community stakeholders
- ◆ A lot of liberty to foster creativity
 - supervised by 2 professors and 3 pharmacists knowledgeable in public health
- ◆ Evaluation component
 - In third year

