

**UCSF School of Pharmacy
Bridges Pharmacy
2015 Design Phase Progress Executive Summary and Proposal**

This is an Executive Summary of the Full Report, which is available on the Bridges Pharmacy website.

On January 19, 2016, following a presentation at the January 11 full faculty meeting, faculty voted to endorse the updated version of the PharmD curricular blueprint, including the integrated/blocked didactic curriculum. This document is the proposal that faculty endorsed.

Summary

The UCSF School of Pharmacy (SOP) Bridges Pharmacy curriculum project has made progress on a number of fronts while focusing on the targets and adhering to the principles proposed by the faculty in June 2014. The curricular blueprint endorsed in June 2015 has been refined by the Core Science & Practice of Therapeutics Work Group (Core WG) to include a proposed integrated block structure for the core didactic curriculum. The Frontiers in Science & Practice of Therapeutics Work Group (Frontiers WG) launched a pilot of its Seminar in Emerging Science in Fall 2015 to great success. The Experiential Science & Practice Working Group (Experiential WG) has designed a set of early interprofessional clerkships with the School of Medicine (SOM) that will be implemented in Winter 2016. During the initial Design Phase of Bridges Pharmacy, the Design, Resource, Integration, Visioning, Execution (DRIVE) team coordinated among the groups, secured and stewarded funding for the process, implemented a website and newsletter, established on-going relationships with peer schools of pharmacy undergoing curricular transformation, and spoken in local, national, and international arenas about this work. Next steps will involve a transition from the design phase to the development phase.

Refinements to Curricular Blueprint

Following a presentation at the School of Pharmacy Full Faculty Meeting on June 4, 2015, the faculty voted to endorse a high-level blueprint for the Bridges Pharmacy curriculum. This blueprint has been further refined and the current version is reflected in Figure 1 with key comparisons to the current ("Pathways") curriculum summarized in Table 1.

Key characteristics include:

- Late July/early August (Summer Block II) **start** with an **Orientation and Welcome Block**. This block will serve to give students the foundational knowledge and skills necessary for the systems-based blocks, as well as to prepare them for early immersion in a variety of experiential activities.
- Calendar alignment with the SOM **Welcome** and **Inquiry Immersion blocks**. Interprofessional education is at the core of the Bridges curricula at UCSF. The block design will expand opportunities for interprofessional education through schedule alignment.
- Organization of the **Core didactic curriculum** around **seven systems blocks** of **approximately 8-week intervals**. As delineated in the Core WG Report, below, a block design requires integration across multiple scientific disciplines while demonstrating to students the relevance of each to addressing healthcare problems.
- Placement of **Synthesis Weeks** at the conclusion of most blocks to allow for purposeful integration of material within and between blocks. A potential drawback of a block-style curriculum is the tendency to leave behind material covered in prior blocks. Synthesis Weeks will be designed specifically to integrate material between blocks, to provide multidisciplinary perspectives on capstone cases, and accommodate integrative, comprehensive student assessments.
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Figure 1: Bridges Pharmacy Curricular Blueprint

Year 1			Year 2			Year 3					
7/3/17			7/2/18	Break		7/1/19	Advanced Experiential	Depth Project			
7/10/17			7/9/18			7/8/19					
7/17/17			7/16/18			7/15/19					
7/24/17			7/23/18	Depth Project	EE - Community & Health System IPPEs	7/22/19					
7/31/17	Welcome Block/Orientation	EE - Onboarding & Training	7/30/18				7/29/19				
8/7/17				8/6/18			8/5/19				
8/14/17				8/13/18	Endocrinology Block	Frontiers & Depth Project	8/12/19	Break			
8/21/17				8/20/18					8/19/19	Advanced Experiential	Depth Project
8/28/17				8/27/18					8/26/19		
9/4/17	Welcome Block	Frontiers	9/3/18	EE - HS IPPEs	EE - HS IPPEs	9/2/19					
9/11/17						9/10/18			9/9/19		
9/18/17						9/17/18			9/16/19		
9/25/17						9/24/18			9/23/19		
10/2/17						10/1/18			9/30/19		
10/9/17	Synthesis Week		10/8/18	Synthesis Week		10/7/19	Advanced Experiential	Depth Project			
10/16/17	Break		10/15/18			10/14/19					
10/23/17	Cardiovascular Block	Frontiers	10/22/18	Psychiatry & Neurology Block	Frontiers & Depth Project	10/21/19	Advanced Experiential	Depth Project			
10/30/17						10/29/18					10/28/19
11/6/17						11/5/18			11/4/19		
11/13/17						11/12/18			11/11/19	Advanced Experiential	Depth Project
11/20/17						11/19/18			11/18/19		
11/27/17		11/26/18			11/25/19						
12/4/17		12/3/18			12/2/19	Advanced Experiential	Depth Project				
12/11/17	Synthesis Week		12/10/18	Synthesis Week				12/9/19			
12/18/17	Break		12/17/18			12/16/19					
12/25/17	Break		12/24/18	Break		12/23/19	Break				
1/1/18	Inquiry Immersion		12/31/18			12/30/19					
1/8/18	Cardio-respiratory Block	Frontiers	1/7/19	ID & Oncology Block	EE - Health System IPPEs	1/6/20	Advanced Experiential	Depth Project			
1/15/18						1/14/19					1/13/20
1/22/18						1/21/19			1/20/20		
1/29/18						1/28/19			1/27/20		
2/5/18						2/4/19			2/3/20		
2/12/18		2/11/19			2/10/20	Advanced Experiential	Depth Project				
2/19/18		2/18/19			2/17/20						
2/26/18		2/25/19	Synthesis Week		2/24/20						
3/5/18		3/4/19	Inquiry Immersion		3/2/20	Advanced Experiential	Depth Project				
3/12/18	Synthesis Week		3/11/19					3/9/20			
3/19/18	Break		3/18/19	Break		3/16/20					
3/26/18	Renal & Gastrointestinal Block	Frontiers	3/25/19	Life Cycle Block	Frontiers & Depth Project	3/23/20	Advanced Experiential	Depth Project			
4/2/18						4/1/19					3/30/20
4/9/18						4/8/19			4/6/20		
4/16/18						4/15/19			4/13/20	Advanced Experiential	Depth Project
4/23/18						4/22/19			4/20/20		
4/30/18		4/29/19	PROGRESS EXAMS		4/27/20						
5/7/18		5/6/19	Break		5/4/20						
5/14/18		5/13/19			5/11/20	Depth Project Presentations & Licensure Exam Review					
5/21/18		5/20/19	Advanced Experiential	Depth Project	5/18/20						
5/28/18		5/27/19					5/25/20				
6/4/18	Synthesis Week				6/3/19		6/1/20				
6/11/18	PROGRESS EXAMS				6/10/19		6/8/20				
6/18/18	Break		6/17/19		6/15/20						
6/25/18		6/24/19			6/22/20						

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- **Frontiers in Science and Practice of Therapeutics Seminar** running throughout the first and second year. This seminar series provides students with perspectives on cutting-edge science and practice in therapeutics at UCSF and beyond. It incorporates each of the six UCSF domains of science linked to improved health care, introduces students to diverse career paths in pharmacy, and, ideally, provides inspiration for students' Depth Projects.
- **Early Experiential** activities running throughout the first and second year, including joint **Clinical Microsystems Clerkships** with SOM and an **Early Experiential Block** during the summer of the second year. The Early Experiential block will provide students with opportunities for Early Experiential training at a future Advanced Experiential site, allowing them to "hit the ground running" at the end of their didactic training. Alternatively, students can select other high-value extracurricular experiences (e.g., specialty internships or other programs) as "externships" to explore additional career options.
- **Depth Project** beginning in second year and continuing until graduation. The Depth Project introduces students to the skills of developing background knowledge in a focused area, leading to the design and execution of an implementation project (research project, quality improvement project, educational initiative, etc.). Students will begin Phase I of their Depth Projects in the summer of their second year, with selection of a mentor and project as well as completion of a comprehensive, written literature review in the topic area. When this is completed, students will design and implement their Phase II implementation project, with presentation of the results shortly before graduation. Students requiring additional focused time to work on their Phase II projects may elect to use up to 2 blocks of Advanced Experiential time towards completion of their Depth Projects.

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- **Advanced Experiential (AE)** training begins during Spring Block II of the second year. Students will complete a minimum of 6 Advanced Pharmacy Practice Experiences (APPEs) during the 8 AE blocks. A maximum of two AE blocks may be used to pursue further APPEs, to provide more time for Depth Project work, to engage in innovative external experiences that do not qualify as APPEs, to interview for postgraduate training programs, or to pursue other approved professional development activities.
- Bridges to **Enhanced Training**. The vision of the Bridges Pharmacy curricula is that all students will complete additional training beyond their PharmD, either during the course of their pharmacy education at UCSF, or upon graduation. For students who wish to pursue this training prior to graduation (e.g. PhD, Masters, fellowship), transition to these programs would occur at the end of the second professional year. Students would then return to complete their Advanced Experiential curriculum before graduating with the PharmD degree. It is expected that most students will pursue additional training after graduation (residency, fellowship, Masters and/or PhD).

Table 1: Comparison of Pathways and Bridges Curricula

Characteristic	Pathways	Bridges
Total Enrolled Quarters	12	12
Didactic Instruction Weeks (including Finals weeks, Synthesis weeks, Progress Exam weeks)	88-98	76
Advanced Experiential Blocks Possible (6 weeks each)	4-8	8
Required Core APPE	4	4
Required Elective APPE	0-4	2
Elective Other Advanced Experiential (APPE or other)	0	1-2
Starting quarter	Fall Term P1	Summer Block II P1
Advanced Experiential Start Quarter	Spring Block I P3	Spring Block II P2
Graduation quarter	Winter P4	Spring P3
Aligned activities with School of Medicine	IPE Core Curriculum	IPE Core Curriculum Systems Ground School Inquiry Immersion Clinical Microsystems Clerkships
Focused Projects	Pathway projects	Depth Project
Focused Project minimum time commitment	120-720 hours	>300 hours
Progress Examinations	None	P1 & P2
Course Grading	A-F & P-NP	TBD