

# Virtual Mentor

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## POLICY FORUM

### Development of a 3-Year Undergraduate Primary Care Curriculum

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Lake Erie College of Osteopathic Medicine (LECOM) developed an innovative, 3-year medical school curriculum in response to the declining interest in primary care, particularly family medicine. The Primary Care Scholars Pathway (PCSP), one of four student-centered pathways at LECOM, stresses basic-science and clinical-sciences education as well as research and community service. Its mission is to encourage and support students who are interested in primary care medicine—family medicine, general internal medicine, and general pediatrics.

The PCSP is equivalent to a 4-year academic program and was granted approval by the American Osteopathic Association Commission on Osteopathic College Accreditation (AOA COCA) in 2006. A description of and rationale for the program appeared in the September 2007 issue of *Academic Medicine* [1]. The PCSP and the college are linked to osteopathic residency programs through the Lake Erie Consortium for Osteopathic Medical Training (LECOMT) Osteopathic Postdoctoral Training Institution.

#### PCSP Selection

The PCSP candidate selection process differs from that in the other pathways. All osteopathic college candidates are introduced to the PCSP through the web site and mailed materials. They receive further explanation during admission interviews.

Students interested in PCSP do not matriculate directly into that pathway, but enroll in one of the three other curricula and become candidates for PCSP. They must submit a path-specific application that asks about their education, experiences, and motivation to participate in the PCSP, including a self-assessment of their interest in a primary care career. These students become members of the Primary Care Interest Group and must demonstrate a desire and commitment to the area of primary care, perform well in the initial curriculum common to all pathways—e.g., anatomy or osteopathic principles and practices (OPP)—and exemplify characteristics that are essential to those of a primary care physician. They must be highly disciplined and have a deep understanding of their capabilities and the amount of time necessary to succeed in the PCSP.

The PCSP members are then selected based on the application criteria, a program-specific interview, multiple interest-group meetings designed to elicit conversation among the candidates, and their academic standing upon completing the 12-week common curriculum. Students who are not selected for the PCSP remain in their

original matriculation pathway, but may continue as members of the Primary Care Interest Group.

The PCSP fosters the educational and personal development of medical students by nurturing:

- Lifelong learning skills and personal responsibility for learning.
- A relevant knowledge base characterized by depth and breadth of information.
- Skills in critical evaluation and acquisition of new knowledge.

Achieving these objectives demands a shift in the curriculum emphasis from teaching to learning and requires students to be active, independent learners and problem solvers rather than passive recipients of lecture-style information.

### **PCSP Curricula**

The curricula align with the seven core clinical competencies: (1) osteopathic philosophy and osteopathic manipulative medicine, (2) medical knowledge, (3) osteopathic patient care, (4) interpersonal and communication skills, (5) professionalism, (6) systems-based practice, and (7) practice-based learning and improvement. First-year clinical experiences and ongoing mentoring by primary care physicians over the full 3 years reinforce the connection between the curriculum and these core competencies.

The goal of the primary care pathway is to encourage and enable students who desire careers in primary care to fulfill their aspirations. To modify the 4-year medical school curriculum and deliver it in 3 calendar years requires using available time (i.e., summers) and eliminating redundant medical school electives that students often use to “audition” residency programs in which they are interested. The notion that much of the 4th year is redundant or optional has been corroborated. In October 2008, the Josiah Macy, Jr. Foundation conducted a conference on the mission of medical school education, and the summary of this conference recommended modifying curriculum so that graduation could be achieved in 3 versus the traditional 4 years [2].

All critical components of the undergraduate curriculum receive proper and full attention in the PCSP. The first 2 years are the same as those in the other pathways. Following anatomy, PCSP preclinical studies are divided into a core basic-sciences curriculum and a systems curriculum in which students learn the basic and clinical sciences through case-based modules. This case-based knowledge aids them in the proper clinical practice of primary care medicine. Other courses are presented in a lecture-discussion format.

On the first day in the pathway, students are placed with primary care mentors. After rotating with different physicians, each student is matched with a mentor who remains with him or her until graduation. Faculty are selected to be mentors on the

basis of attributes and attitudes that embody the ideals of primary care. During years 2 and 3, students meet with their mentors one-half day per month, on average.

The accelerated curriculum for the preclinical sciences is achieved by eliminating the 2-month summer break that traditionally occurs between first and second year. The Hospital/Clinical Enrichment Sessions in the first semester of year 2 are devoted to enriching students' understanding of humanism in all areas and practices of medicine among diverse populations. Here they observe interactions between the medical team and the patient and family members and also encounter patients themselves.

PCSP students meet twice a week in years 1 and 2 to discuss core medical concepts with the directors. These concepts are integrated with clinical science through the use of case discussions that prepare the students for monthly Capstone Experiences—discussions that take place during the 16 clinical rotations in years 2 and 3.

Students complete the basic-sciences curriculum by March of the second calendar year. Following successful completion of this phase and the first three clinical rotations, students enter year 3 and complete the final 13 rotations in the spring of the third calendar year.

The osteopathic principles and practices (OPP) are integrated into the 3-year curriculum through teaching by the mentors. In the third-semester OPP course, students have the advantage of developing into table trainers for students in the other pathways, thereby intensifying what they learn in this course. This pathway is the only one with a dedicated third-year clinical rotation in osteopathic manipulative medicine (OMM) that imbues students with the knowledge, techniques, and talents through which OPP philosophy is expressed in daily medical care.

### **Clerkship Training**

The sequence and number of rotations that students begin in March of their second year have been modified to meet the mission and goals of the pathway. LECOM has introduced new core rotations to continue OMM education and other essential primary care medical skills. A final subinternship rotation prepares the students for postgraduate education at their planned residency institutions.

Rotation sites have been selected from LECOMT hospitals based on proximity to the main campus and excellence in primary care clinical training. During year 2 and 3 rotations, students are expected to return to the main campus to participate in monthly Capstone Experiences. They meet with primary care physicians to review basic and clinical sciences in the context of case studies in a modified problem-based learning format.

**Table 1** Second academic year rotations

Primary Care Rotations	
1	4 weeks—Family Practice
2	4 weeks—Internal Medicine 1
3	4 weeks—Clinical Overview

PCSP students participate in a Board Preparation Course during their clinical overview rotation. The preparation involves reviewing and testing of basic science and medical education materials that are covered in COMLEX-USA Level 1. Group sessions enhance the review process.

**Table 2** Third academic year rotations

Primary Care Rotations	
4	4 weeks—Ob-Gyn or Pediatrics
5	4 weeks—Pediatrics or OB/GYN
6	4 weeks—Internal Medicine 2
7	4 weeks—General Surgery
8	4 weeks—Medical Selective 1
9	4 weeks—Osteopathic Manipulative Medicine or Psychiatry/Comprehensive Review
10	4 weeks—Psychiatry or OMM/Comprehensive Review
11	4 weeks—Medical Selective 2
12-13	8 weeks—Ambulatory Medicine 1 & 2
14	4 weeks—ENT/Ophthalmology
15	4 weeks—Emergency Medicine
16	4 weeks—Subinternship

The 144-week PCSP curricular calendar satisfies the COCA standard of 130-week minimum and is equivalent to a 4-year academic curriculum.

### **Longitudinal Commitment and Record**

PCSP students are required to commit to primary care careers and enter a postgraduate program in family medicine, general internal medicine, or general pediatric medicine. Afterwards they may enter a fellowship training program in geriatric medicine or osteopathic manipulative medicine.

After graduation from a primary care residency or fellowship, students commit to practice that primary care specialty for a minimum of 5 years. Students who change career paths before fulfilling this commitment forfeit their primary care scholarship and must return a full year's tuition to the college [3].

By carefully selecting students, assigning primary care mentors, introducing primary care clinical experiences early, and providing enrichment experiences, LECOM intends to influence the supply of primary care physicians locally, regionally, and nationally.

### **References**

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