

LONGITUDINAL AMBULATORY CARE EXPERIENCE (LACE)

Student Handbook



LACE Student Handbook

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Longitudinal Ambulatory Care Experience - (LACE) Student Handbook Acknowledgement and Consent

I, _____, received my copy of the LACE Student Handbook. It is my responsibility to read and understand the policies and procedures set forth in this manual. It is a guide to policies and procedures for the Longitudinal Ambulatory Care Experience (LACE) as an integral part of my education at the UC Riverside School of Medicine.

I understand and acknowledge that the LACE Program has the right to modify or amend policies, practices, assignments, forms, and other institutional guidelines within the limits of the LACE Program. I acknowledge that changes will be communicated to me via UCR email. It is my responsibility to be aware of and review the changes.

Student Name (Print): _____

Student Signature: _____

Date of Signature: _____

Overview of LACE

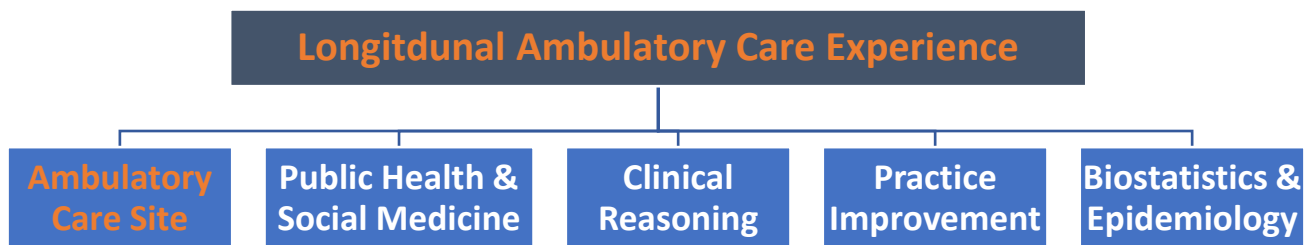
Mission Statement

The mission of the **Longitudinal Ambulatory Care Experience (LACE)** at UC Riverside School of Medicine is to develop innovative **community-based** physician leaders and advocates for the Inland Empire through a **public health** framework with applied **clinical reasoning** and **professional identity formation**. Our future physicians will have extensive knowledge of the provision of population health, preventive care, and chronic disease management in a **team-based, primary care home** model.

Structure & Function

The foundation of the Longitudinal Ambulatory Care Experience (LACE) program is a progressive three-year ambulatory clinical experience that emphasizes core clinical attributes with a focus on professional identity formation.

- LACE is a **required and graded component** of the UC Riverside School of Medicine curriculum.
- The ambulatory care site provides **hands-on clinical experience** through the first three years, creating a link between classroom learning and the real-time application of that knowledge.
- The **professional development** is based on formative feedback through a sustained mentor-mentee relationship with community-based primary care physicians.
- The collective curriculum acts as a bridge between pre-clinical and clinical content with an emphasis on reflection on **metacognition and clinical reasoning**.
- The ambulatory care activities are integrated with coursework in four domains: Public Health & Advocacy, Clinical Reasoning, Biostatistics/Epidemiology, and Practice Improvement.



LACE Program Staff

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LACE Educational Program Objectives

The educational objectives of LACE include the UCR School of Medicine's Core Competencies and Educational Program Objectives (<https://medschool.ucr.edu/ccepo>) that are required for graduation. Each aspect of these eight competencies and their associated objectives are addressed by one or more of the aspects of the LACE program over three years.

Patient Care

Provide patient-centered care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

Knowledge for Practice

Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care.

Practice-Based Learning and Improvement

Demonstrate the ability to investigate and evaluate one's care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning.

Interpersonal and Communication Skills

Demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

Professionalism

Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

Systems-Based Practice

Demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

Interpersonal Collaboration

Demonstrate the ability to engage in an interprofessional team in a manner that optimizes safe, effective patient- and population-centered care.

Personal and Professional Development

Demonstrate the qualities required to sustain lifelong personal and professional growth.

Examples of LACE Educational Activities (UCR SOM Educational Program Objectives)

- **Ambulatory clinical experience**

- Practice and refine core clinical skills and attributes in primary care through preventive care and chronic disease management
 - Establish a longitudinal clinical practice emphasizing continuity of care and the development of population health management skills
 - Improve history-taking and physical examine techniques with patient interviews
 - Write SOAP notes with proper medical terminology
 - Establish patient rapport through health-literate education and discussion, while maintaining professional boundaries with patients and families
- **Professional development relationship with LACE preceptor physician**
 - Establish a sustained mentor-mentee relationship with community-based primary care physicians and between senior and junior medical students
 - Develop professional identity through interactions with physicians and patients and all members of the healthcare delivery team and clinic support staff
 - Teach core LACE concepts to peers and junior students (preparation for future teaching as both a resident and attending physician)
 - Incorporate and share constructive feedback as part of regular formative assessments.
 - Respect diversity and model inclusive behaviors and practices in all settings
- **Bridge pre-clinical knowledge and clinical application of content**
 - Apply clinical reasoning skills to form complex differential diagnoses and management
 - Recognize potential heuristic errors and implicit bias as part of clinical reasoning
 - Introduce population-based principles and practice-based learning
 - Develop clinical correlates to basic sciences lecture content
 - Identify health disparities and opportunities for health advocacy
 - Introduce population-based principles and institute practice-based learning

LACE Student Responsibilities & Requirements

Lectures and Educational Responsibilities

Students are expected to attend all [LACE Lectures](#) (Public Health, Clinical Reasoning, Biostatistics & Epidemiology, and Practice Improvement workshops). These lectures are a fundamental part of the core medical school curriculum. Please refer to each individual LACE course syllabus to review learning objectives, required readings, and course schedules.

The official schedule is available on the [UCR SOM Intranet](#). It is the student's responsibility to check their individual schedule daily for any changes.

Student attendance at the annual [Quality Improvement Conference \(QIC\)](#) is mandatory. Please refer to the "LACE Practice Improvement" section of this handbook for further details on conference participation requirements.

Ambulatory Care Experience Responsibilities

Students will be assigned a LACE site and physician in primary care (Family Medicine, Internal Medicine, Pediatrics). This physician will serve as your assigned LACE preceptor and mentor for the entire three-year program. These mentors will provide:

1. Oversight of clinical development and application of clinical reasoning
2. Implementation of an individualized clinical education plan based on deliverables
3. Professional identity development and career guidance

Students are **required** to attend all assigned LACE days as assigned with an expectation of at least 3.5 hours per session. It is expected that students will not miss their LACE days except for illness or emergencies. In the event a student is unable to attend their assigned LACE day, the student must immediately contact their LACE preceptor and the LACE coordinator to inform the cause for the absence.

In the event a student misses a LACE session, they will be required to attend clinic another day (if possible with the clinical site and LACE faculty) or complete a make-up assignment. Any unreported absence will be reviewed by the LACE Medical Director for further discussion.

Due to limited availability of sites, requests to change LACE preceptors or sites will be considered based on multiple factors and granted only in extenuating circumstances. A student's personal primary care physician may never serve as their LACE preceptor.

LACE Deliverables

Students are required to complete directed assignments for each LACE session throughout the course to reflect the practical application of each four major LACE domains in addition to Clinical Skills and Doctoring courses. These **deliverables** will be performed at the ambulatory site under the LACE preceptor's supervision.

- Deliverables will consist of **direct observations**, performing **basic physical exams**, and/or **obtaining histories** of patients.
- Deliverables will be reported online and evaluated clinically with the LACE preceptor.
- The LACE preceptor may use their discretion to alter the order or expectation of any deliverable to better align with their specific clinic experience.
- A complete list of Deliverables will be **uploaded to Canvas** two weeks prior to the initial LACE session for the year

The students will also complete **documentation** based on these experiences in the form of SOAP (Subjective, Objective, Assessment, and Plan) notes or H&Ps (History & Physical) notes.

- UCR Standard formats for the SOAP and H&P clinical documentation will be available for review through Canvas.
- The history and physical exam expectations are based on the *UCR Standard History and Physical template* as instructed in Doctoring and Clinical Skills courses.
- The student should write a "first draft" of any assigned patient documentation (SOAP and/or H&P note) **on paper or the in the electronic health record**. Their LACE preceptor can review the SOAP note for accuracy and content, after which the student will **submit a copy of the note** to the LACE Coordinator for review and grading credit.
- Please be sure that the patient's name or personal health information (PHI) is not identifiable on the copy.

Expectations for the **clinical content** of the student experience fall into three core categories:

1. **Preventive health and wellness** - includes screening for social determinants of health, identification of risk factors of disease, promotion of health and wellness practices, and implementation of screening evaluations (primary, secondary, and tertiary prevention).
2. **Undifferentiated disease process** - symptom-driven care (i.e. shortness of breath). Although the specific symptoms and/or differential diagnosis may vary by practice type, the fundamental clinical reasoning approach to assessment is shared.
3. **Chronic disease management** - diagnosis-driven care (i.e. diabetes or hypertension). Includes population health management of chronic diseases and coordination of care with community-based resources.

LACE Keys to Success

The success of the student in achieving the educational objectives during their ambulatory site experience depends on several factors:

- Well-defined **expectations** and **goals** (i.e. deliverables)
- Opportunity for **repetitive practice** and refinement
- Informative and **regular feedback** between student and preceptor
- The **motivation** and **attention** of the student

While each LACE preceptor undergoes standardized orientation on expectations and educational objectives, there are strategies that the student can employ during their LACE session to optimize their experience:

- Review expectations and goals (**deliverables**) for each session with the preceptor and discuss learning topics from last session (at the start of session, from 1:30 – 1:40pm)
- Identify a limited number of patients for **deliberate** practice: obtain history, perform focused exam, present the case (it is not always beneficial to observe every patient encounter)
- Patients that **check in early** (15-20 minutes) allow more time for student interviews
- Perform the expected deliverables (obtain history, focused exam) per Block
- Elicit specific constructive feedback from the preceptor on each component, with increasing focus on clinical reasoning throughout the year

- **DO**: Show up on time, ask for opportunities to participate, practice writing notes (on paper or in EHR), engage all clinic staff members in professional manner
- **DO**: Read pertinent clinical topics between patients, work on Practice Improvement Project (PIP) during down time, identify community-based resources for patients

- **DO NOT**: Provide direct unsupervised care to the patient; all patients are the full responsibility of the LACE preceptor and must be seen and examined by the physician
- **DO NOT**: Perform or assist in invasive procedures beyond your level of training (venipuncture, biopsies, intra-articular injections/aspirations)

LACE Clinical Reasoning

LACE Clinical Reasoning is a three-year interactive workshop series focused on (1) integrated [clinical decision-making](#) and (2) [professional identity formation](#) through reflective writing. Students will use an informal and brief writing protocol to externalize thoughts and analyze their own thinking through a process known as metacognition. This conscious reflection is a critical part of the socialization of professional identity.

The course will further explore factors that influence clinical decision-making: evidence-based medicine, population health, applied biostatistics, shared decision-making, patient perspectives, and cognitive errors. Students will have opportunities to apply these learned methodologies with their LACE preceptors during their ambulatory site experiences.

Please refer to the [LACE Clinical Reasoning Course Syllabus](#) for further details.

LACE Public Health & Social Medicine

The LACE Public Health core curriculum titled '[Public Health and Social Medicine: A Focus on Disparities](#)' is vital to exposing students to a variety of foundational health care topics with an integrated focus on community engagement. Topics include health policy, social determinants of health, ethics, health care systems, medical humanities, and preventive medicine. When linked to the LACE Practice Improvement course, this core component of the medical school curriculum equips our future physicians to understand public health and improve the health of the community.

Please refer to the [LACE Public Health Course Syllabus](#) for further details.

LACE Practice Improvement

Practice Improvement is an integral component of the LACE experience. During the three-year course, students are expected to complete a Practice Improvement Project (PIP) that serves to help their LACE site improve the quality of patient care. PIPs may cover a variety of topics, including preventive care management, chronic disease management, and complex case systems management. The most valuable experience for the student is the natural progression from identifying an area for improvement, to testing potential solutions, to communicating the results and unexpected challenges throughout the project.

- All PIPs must be [approved](#) by the LACE preceptor and the LACE Co-Directors.
- The preceptor approving the project is not required to assist the student in research.
- All research and assignments are the responsibility of the student.

- Students can choose to work in groups or alone, but any LACE project must have a related LACE site that it serves in patient care.

The educational requirements related to the Practice Improvement Project grow and develop over the course of three years:

- MS1: Determine a topic and problem statement ([Preceptor Sign-Off Approval](#))
Research and write a Literature Review / Study Design Proposal
Finalize a study design
Create a [poster](#) (on proposed study) to present at annual conference (QIC)
- MS2: Submit project for [IRB review](#)
Implement the project (including data collection)
Write and submit [Paper in Progress](#)
Create a [multi-media oral presentation](#) to present at annual conference (QIC)
- MS3: Completion of project (including data analysis)
Publication level/style write up ([Data Analysis & Study Wrap-Up Paper](#))
Create a [multi-media oral presentation](#) to present at annual conference (QIC)

Students will be expected to present the progression or outcome of their work at the annual conference ([Quality Improvement Conference*](#)) at UC Riverside School of Medicine. This event will serve to disseminate innovative practices and efficient processes in healthcare throughout the Inland Empire. The intention is that LACE will accelerate the healthcare improvement process within the greater community to provide higher-quality, more responsive, and more efficient healthcare. Students are also strongly encouraged to submit a [write-up of their project for publication](#) in a professional healthcare journal.

Please refer to the [LACE Practice Improvement Course Syllabus](#) for further details.

LACE Biostatistics & Epidemiology

The LACE Biostatistics & Epidemiology curriculum introduces basic concepts in biostatistics as they are applied to clinical decision-making and research. The two-year course thread also incorporates population health analysis through an understanding of basic epidemiology. Each topic covered with have overlap with other LACE domains and curriculum.

Please refer to the [LACE Biostatistics & Epidemiology Course Syllabus](#) for further details.

Policies & Procedures: **Grading**

Each of the following are required for a passing LACE grade. Failure to complete any component will result in a failing LACE grade and the opportunity for remediation:

- Attendance to all LACE Ambulatory Site days
- Completion of 70% of LACE Deliverables
- Attendance to all LACE required activities including lectures and conferences
- Completion of Required Public Health Course Assignments – *see Syllabus/Rubric*
- Completion of Required Clinical Reasoning Assignments – *see Syllabus/Rubric*
- Completion/Presentation of Required Practice Improvement Project – *see Syllabus/Rubric*

It is the responsibility of each faculty member to provide direct feedback on assigned material and presentations through each of the LACE domains.

Policies & Procedures: **Evaluations**

Student Evaluations

Student evaluations are a key component of the review process for the program and the community preceptors. Evaluations will be posted to New Innovations one week prior to the end of each block and must be completed no later than one week after the block ends. Failure to complete evaluations in a timely manner will result in an **incomplete grade** for that block.

The purpose of these formative evaluations is to ensure that student experiences align with the educational objectives for LACE. These evaluations serve as an opportunity for feedback on both the LACE preceptor and general feedback for the LACE program to identify potential areas of improvement.

Students are provided opportunities for feedback on their LACE site or preceptors throughout their experience. To protect the professional working relationship, any grossly negative remarks are removed from evaluations before a custom feedback letter is shared with the preceptor.

Faculty Evaluations

In addition to medical students completing evaluations on faculty and each other, LACE preceptors are required to complete a summative student evaluation with criterion-referenced grading (based on competencies: history taking skills, physical examination skills, doctor-patient interaction, and professionalism). The purpose of summative evaluations is to ensure that students are properly performing the skills necessary to become a successful physician.

Policies & Procedures: **Professionalism**

The LACE program strives to create an inclusive and supportive environment for all students. The students are encouraged to reach out to the LACE Program Coordinator and LACE Directors regularly with feedback. In addition to regular formative evaluations per block and summative evaluations per half-year, the LACE staff sends scheduled “check-in” e-mails to each student class and to the preceptors.

It is understood that all students abide by the expectations and guidelines outlined in the [LACE Student Handbook](#). If a student is identified as needing additional assistance in meeting these outlined expectations for any reason (unexcused absences, delayed assignments or evaluations, other concerns related to any component of the LACE program), a meeting will be arranged with the LACE Directors prior to referral to the UCR SOM Professionalism Development Committee. Please refer to the [UCR SOM Handbook](#) for more information on this process.

Policies & Procedures: Statement on Supporting An Abuse-Free Academic Community & Student Conduct Policy

The UCR School of Medicine is committed to establishing and maintaining an environment in which every community member is enabled and encouraged to excel. This will happen only if all of us work in harmony, free of intimidation, exploitation, ridicule, and harassment. We must maintain a productive environment in which no individual is subject to discrimination or abuse. As faculty we must be careful not to abuse our power in dealing with students. As faculty we must be careful to avoid comments that would be viewed as demeaning.

Sexual harassment is a sensitive issue and is illegal within the university setting. The sexual harassment policy of UCR is summarized in the examples below. The complete UCR policy on Sexual Harassment Complaint Resolution is available at <http://titleix.ucr.edu/documents/sexualharassmentpolicy.pdf> (campus policy number 650-73). It is incumbent upon the faculty not only to rigorously adhere to the UCR policy, but also to be vigilant to the possibility that actions or expressions can be misinterpreted.

Specific behaviors that are not acceptable include:

- Sexual harassment, including unwelcome sexual advances or demands, either verbal or physical.
- Using rejection to such advances as a basis for making academic or personnel decisions affecting an individual.
- Discriminating on the basis of gender, race, ethnicity, religion, sexual orientation, national origin, disability, or any other group characteristic.
- Using power to interfere with the activities of another in a manner that is unrelated or counterproductive to the expectations and requirements of his or her position.
- Creating an environment, through abusive behavior, in which the abilities of individuals to function professionally are negatively affected.

No person shall be subject to reprisal for using or participating either in an informal or formal complaint resolution process. It is incumbent on each and every one of us to support the maintenance of an abuse-free environment.

The UCR School of Medicine is committed to establishing and maintaining an environment in which every community member is enabled and encouraged to excel. This will happen only if all of us work in harmony, free of intimidation, exploitation, ridicule, and harassment. We must maintain a productive environment in which no individual is subject to discrimination or abuse. This statement should be read as consistent and in conjunction with policies relating to harassment and discrimination.