University of Nevada, Reno School of Medicine
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Medical Education Program Highlights
The University of Nevada, Reno School of Medicine (UNR Med) combines research-intensive, cutting-edge biomedical sciences with community-based clinical education to create a unique medical school experience for students and faculty. Our mission is to improve the health and well-being of all Nevadans and their communities. Highlights of our program include:

• The required immersive experience in rural health care provides students with an opportunity to engage in the full range of clinical and community health issues experienced by physicians in communities with limited resources and access to specialty care. This provides an opportunity to increase students’ clinical skills, knowledge, problem-solving, and decision-making skills while learning firsthand the unique aspects of life and health care in our state’s rural and frontier areas.
• UNR Med has a major emphasis on encouraging our future physicians to embrace their role as teachers. Our yearlong Teaching in Medicine elective is taken by nearly the entire class of graduating students, giving them an opportunity to provide education, guidance, and mentorship to their junior colleagues, while developing the skills needed to step into their new teaching role as resident physicians.
• The Student Outreach Clinic is a student-run, voluntary experience founded by students at UNR Med more than 30 years ago. It continues to thrive as a place for students to provide a valuable service to the community, learn from early hands-on experience, and develop the administrative and leadership skills that are increasingly required of physicians. With general medicine, pediatric, women’s health, geriatric, and dermatologic clinics, the Student Outreach Clinic has expanded its impact in the underserved Reno health care community.

Curriculum
Curriculum description
UNR Med has a traditional 4-year curriculum with 2 years of biomedical sciences education, enhanced by clinical experiences, followed by 2 years of fully immersive clinical education.

• Year 1 includes 40 weeks of instruction across 5 organ systems–based blocks. The Practice of Medicine (POM) course serves as the introduction to clinical skills course and runs concurrently with the blocks in the fall and spring. POM includes weekly community-based ambulatory care experiences for every student.
• Year 2 includes 31 weeks of instruction across 5 additional blocks in which students revisit the organ systems introduced in Year 1, but with an emphasis on pathophysiology. The Advanced Clinical Skills course runs concurrently with the blocks for both fall and spring and includes a second longitudinal community-based ambulatory care experience.
• The Context of Patient Care course serves as a transition between Years 2 and 3 where students receive exposure to the full spectrum of patient care including health policy, patient safety, public health, and preventative medicine. This course also prepares students for their clerkship experiences with further emphasis on clinical skills and understanding their role as third-year clerks.
• Year 3 marks the transition to the clinical phase of the medical education program. Students rotate through 7 required clerkships over 48 weeks. Additionally, students are provided an opportunity for a 4-week selective experience that is designed for career exploration. Ongoing clinical skills development is done in the longitudinal Clinical Reasoning in Medicine course. The third year also offers an opportunity for select students to have an early experience in rural health by completing their internal medicine and pediatrics clerkships in Elko, Nevada.
• Year 4 includes 32 weeks of electives, in addition to the required 4-week Advanced Clinical Experience in Rural Health course. All graduates of UNR Med are required to have an immersive clinical rural health experience in either the third or fourth year.


Curriculum changes since 2010
Our preclerkship curriculum underwent a substantial reform in academic year 2012–2013. After an extensive evaluation of the prior curricular structure, the Medical Education Steering Committee adopted a plan to transition from a discipline, course-based structure to an integrated organ systems–based approach. This included transition to a centralized management system through the Office of Medical Education. This structure continues presently, however, following a recent whole curricular review, discussions have begun regarding the next phase of reform.

The clerkship curriculum underwent a significant change in academic year 2017–2018 with the introduction of 2 new required 4-week experiences each, in neurology and selectives (career exploration). To accommodate these new experiences, 2 existing clerkships (internal medicine and surgery) were shortened from 12 to 8 weeks each.
For much of our 50-year history, UNR Med was the sole MD-granting institution in the state of Nevada. As public medical education has expanded in our state, it has afforded us an opportunity to focus our resources in Northern Nevada, where the school is based. In academic year 2018–2019, UNR Med ceased the operation of clerkships at the Las Vegas campus and transitioned all student clerkship rotations to the Reno campus.

Since 2010, our class size has increased from 62 to 70 students. This increase in class size did not substantially change our structure but rather was an expansion to fill preexisting available teaching capacity.

Assessment
Our medical education program objectives were last revised in 2017. With this revision, we transitioned from objectives based on the ACGME domains of competence to objectives based on the Physician Competency Reference Set.


With the transition to a systems-based curriculum for the preclinical phase of the MD program, several new assessment methodologies were introduced.

- Integration of assessments associated with new pedagogical approaches including team-based learning as well as small-group and case-based activities
- Weekly formative self-assessments of foundational biomedical science content
- Assessment strategies to leverage the available technology of a newly constructed high-fidelity simulation center
- Expansion of clinical assessments using standardized patients in Years 1–3 using technology in the newly constructed standardized patient center

Pedagogy
We use multiple pedagogical approaches to achieve our medical education program objectives, which we have expanded and diversified since 2010. Changes include the expansion of peer teaching in Years 1 and 2 clinical courses, simulations integrated into preclinical courses and clerkships, addition of case-based learning and team-based learning, expansion of the use of standardized patients in Years 1–3, and an emphasis on self-directed learning. Other ongoing pedagogical approaches include:

- Hands-on clinical experiences in ambulatory and inpatient settings
- Small- and large-group discussions
- Laboratory-based experiences for pathology and microbiology as well as traditional cadaver and digital dissection in anatomy
- Lecture, with an increasing emphasis on enhanced, interactive sessions
- Early clinical preceptorship experiences
- Self-directed learning/tutorial
- Simulations

Clinical experiences
As a community-based medical school, we work closely with our local and regional affiliates to provide a comprehensive clinical education. Students rotate through each of the local hospitals, including the VA hospital. Our UNR Med clinical practices as well as private physician offices and outpatient practices affiliated with the major local health systems serve as clinical training sites for our required and elective experiences.

Students have their first formal clinical experience within weeks of matriculation, when they perform interviews with volunteers who share their personal stories as patients. They work weekly with standardized patients and, beginning in the spring semester of the first year, students participate in weekly community-based ambulatory preceptorships.

While we do have major health system partners, including the local VA medical center, we do not own a hospital or major health system. As a community-based medical school, we rely on our community partners to provide clinical experiences. Nearly all of our required clinical experiences as well as our electives are based in part or entirely at our inpatient and outpatient community sites.

The most significant challenge in designing and implementing clinical experiences for our medical students is the availability of clinical training sites. The community-based nature of our program also brings challenges in ensuring consistent experiences for our students, who learn at a variety of locations with a variety of clinical faculty members.

Curricular Governance
Our bylaws designate the Medical Education Steering Committee (MESC) as the main curriculum committee with authority for overall design, management, and evaluation of the undergraduate medical education program. Two committees serve under the MESC: the Years 1–2 Curriculum Committee and Years 3–4 Curriculum Committee are responsible for the creation, implementation, coordination, and evaluation of the preclerkship and clerkship/elective phases, respectively.

There is close collaboration with the departments for the management of the curricular content and assessments. Budget management for teaching is divided between the Office of Medical Education, which provides salary support for defined administrative and leadership roles in the curriculum (e.g., clerkship director), and the academic departments, which provide the academic time for faculty to engage in teaching.

Education Staff
Reporting to the dean, the senior associate dean for academic affairs leads the academic programs of the School of Medicine, including GME, UME, and admissions and student affairs.
• The UME program is led by the associate dean for medical education, who has broad oversight and responsibility for the curriculum of the MD program. The associate dean does not have direct oversight or responsibility for students before matriculation, nor those in GME programs.

• The associate dean for admissions and student affairs, in collaboration with the associate dean for medical education, is responsible for learner support through the Learning and Wellness Resource Center (LWRC), which includes the learning specialists. The LWRC, in collaboration with the teaching faculty and the staff of the Office of Medical Education, tracks the academic progress of all students from matriculation to graduation and ensures provision of comprehensive support services, as needed.

• Reporting to the dean, the senior associate dean for faculty oversees faculty development activities. Ongoing faculty development needs are determined collaboratively with the Office of Medical Education to ensure alignment with best practices in medical education. The Office for Faculty and the Office of Medical Education partner to deliver effective faculty development across a broad range of topics.

The Office of Medical Education provides administrative support for the implementation and delivery of the curriculum at all levels.

• The director of curriculum development and assessment manages the systems-based blocks that make up the preclinical phase of the curriculum.

• Foundational science content is taught by a combination of basic science and clinical science educators.

Faculty Development and Support in Education

Our school offers a range of faculty development opportunities to enhance teaching effectiveness, research, and scholarship as well as leadership development. This is accomplished through orientations, workshops, longitudinal faculty development courses, and individual consultations. UNR Med supports programs and departments by facilitating retreats and offering targeted training activities:

• The Association of College and University Educators program provides training in educational best practices.

• The Academy for Development in Academic Medicine program provides education and mentoring for graduate students and residents interested in careers in academic medicine.

• Faculty interest groups such as Women in Medicine are supported.

• The Faculty Development Funding program provides research and professional development funding opportunities to all academic and administrative faculty members.

Teaching and educational activities are included in the evaluation criteria for promotion and tenure decision at UNR Med in all tracks; however, they are particularly emphasized as a metric in the clinical educator track.