



STRATEGIC PLAN

Overview

The University of Nevada, Las Vegas (UNLV) School of Medicine will address the clearly identified need to advance Southern Nevada's health care to meet the growing demands of a diverse and aging population. Las Vegas is the largest urban area in the U.S. without a dedicated, allopathic public medical school. It ranks near the bottom nationally for the number physicians available to care for its residents. Bringing a medical school to Southern Nevada will be one of the single greatest achievements at UNLV in terms of benefiting the community by ensuring residents have access to care, including medically underserved and diverse populations. The UNLV School of Medicine will capitalize on the strengths of existing academic programs in UNLV schools and colleges of Allied Health Sciences, Dental Medicine, Community Health Sciences, Nursing, the College of Sciences, and other health-science related programs. We will build the medical school from a foundation of excellence – recruiting the best faculty and the best students – and applying the same business model that was used for the successful launch of the Boyd School of Law. Our objective is to attract, educate and retain doctors committed to practicing in Southern Nevada.

The UNLV School of Medicine will be an innovative center for teaching future Nevada physicians how to work in health care teams, apply cutting-edge technology, and develop novel, yet classically-based treatment solutions for diseases of the present and future. The UNLV School of Medicine will be part of a world-class academic medical center that serves the community and works collaboratively with local health care institutions and professionals to enhance clinical care. The school will develop specialized treatment programs, while also developing nationally recognized research programs aimed at preventing, treating and curing diseases. The UNLV School of Medicine will integrate public undergraduate medical education and graduate medical education – or residencies – to cultivate more physicians to serve Southern Nevadans. We will build clinical, education and research programs in cardiology, neuroscience, mental health and addiction, cancer and orthopedics.

The UNLV School of Medicine also will generate a significant return on investment for the community and for the state.

Guiding principles:

1. *Selecting and educating students who will stay or return to Nevada to practice and teach.*
2. *Selecting and educating a diverse student body that will understand and value all the cultural aspects of medicine and the strengths of Nevada communities.*
3. *Teaching and demonstrating to students the special needs and health care issues of an urban population that includes an unusually large youthful demographic, an increasing number of retirees and a community that hosts approximately 40 million visitors annually.*
4. *Teaching students through small group problem- and team-based learning so that students understand the importance of relationships in medical care and how to address medical issues with best practices. Educational space will be organized so that interdisciplinary teams can study and work together.*
5. *Educating students how to combine the traditional skill of history taking, and physical examination with use of genomic information and advanced technology.*

Students

The student body of the UNLV School of Medicine will embody the mission and vision of the University. We will recruit and select academically talented students from Southern Nevada and surrounding communities who exemplify the diverse population the school will serve. Students will be selected based on personal characteristics reflected in their personal experiences and aspirations. Our students will demonstrate compassion, commitment, cultural competence, a desire to learn, perseverance, resilience, integrity and honesty. They will have outstanding interpersonal skills that will help them create meaningful and supportive relationships with their peers, faculty, patients and community. Our students will actively participate in the Las Vegas community during their entire medical school experience through service learning. They will work in community clinics, health care and non-profit agencies, in public hospitals, and at the VA Center – making this a medical school truly grounded in the community it serves. We also plan to obtain fully-funded scholarships for the entire first class of 60 students for the full-four years; 56 scholarships already have been committed toward this effort.

Academic Curriculum

The UNLV School of Medicine curriculum centers on the importance of relationships in health care and will foster long-term connections between students and faculty, health care professionals, patients, families and the community. Students will learn how to provide compassionate care in teams of health professionals including physicians, nurses, nurse practitioners, dentists, physical therapists, social workers, occupational therapists and others in the pursuit of the best patient outcomes and satisfaction at the lowest cost.

A UNLV School of Medicine education will emphasize the basics of medicine – fundamental clinical skills of physical exam and diagnosis, clinical reasoning and interpretation,

communication, professionalism, and ethics — while employing the most technologically advanced equipment and genomic data. Our students will learn how to provide patient care using a thorough analysis of historical and physical patient data instead of relying on a variety of expensive tests. The UNLV School of Medicine will teach the classical thought process for integrating information, making a differential diagnosis, and targeting which tests to order. Our students will be fluent in how to use the human genome, information technology, and whatever the next evolution may be, to think through how to make diagnoses and treat diseases.

Specific elements of our curriculum plan are as follows:

- **Immersion:** The first phase of the curriculum will begin with a six-week course leading to each student becoming a certified emergency medical technician (EMT) with orientation to the community, public health and cultural awareness.
- **Foundations in Medical Science:** Students will learn medicine using an organ system approach that integrates basic and clinical sciences. Students will learn in small groups for approximately a year and a half. They also will learn medical Spanish, virtual microscopy and virtual anatomy. A special feature of the UNLV curriculum provides coroner's office experience with the ability to participate in autopsies and crime scene evaluations. All students will have the opportunity for a meaningful community service learning experience during the Foundations in Medicine Science phase.
- **Foundations in Clinical Science:** Students will have a full year of outpatient, integrated clerkships. They will experience firsthand the specialties of family medicine, internal medicine, neurology, obstetrics and gynecology, pediatrics, psychiatry, and surgery in a medical-home practice model with faculty and residents. Students will get to know their patients and community over time and develop important relationships with physicians, nurses, and other members of the health care team. Working with UNLV's William F. Harrah Hotel College of Administration, our students will be immersed in an approach to patient care that incorporates state-of-the art hospitality.
- **Career Preparation and Scholarship:** The third phase of the curriculum will encompass hospital sub-internships and intensive care experience rotations as well as electives and completion of a scholarly project. Again, the connection to the Nevada community will be experienced through a Nevada Community Medicine rotation. Our students will be well prepared for the transition to residency with an intensive capstone rotation tailored to their chosen field.

We are developing certificate training for medical students, health professional students and community members who want advanced education to supplement their activities. Once developed these programs will be available to health care professionals and the public if they qualify:

- **Community and Population Health:** Physicians are required to be community leaders who can address public health issues. This may involve an epidemic outbreak, ensuring proper immunization of children, public health education, and even advocacy for new laws to better protect the community and residents.
- **Clinical Research:** Physicians need to understand various clinical research methods to assess the newest information to use in patient care and to incorporate in their practices. This program will ensure a physician can actively participate in clinical trials and compile the findings for others to evaluate and use in clinical patient care.

- **Bioethics:** Physicians need to apply bioethics in today's the health care world; some issues are very controversial. Ethical issues can involve end-of-life care; human subjects' research protection, women's health care, and synthetic biology (the production of genetic material from chemical synthesis). Having experts who can help guide patients and their families through these issues is essential.
- **Business and Finance:** Physicians need to have a fundamental understanding of business and finance, especially if they want to become administrators of their own practice or become part of leadership in health care facilities. These individuals will need an in-depth education in many areas that may overlap with a MBA program but more geared toward health care.
- **Leadership and Community:** Physicians need to prepare for leadership roles in their communities. This program will educate them about not-for-profit and for-profit organizations that play a crucial role in our communities to support health care. Working with the UNLV Greenspun College of Urban Affairs, we will develop a program to instill a deep understanding of urban medicine and its role in society so students can learn leadership skills necessary to improve these serves.
- **Mental Health and Addiction:** Mental health and addiction is an important issue in Nevada and urban life. We will offer a special program for health care teams including social workers, nurses, physicians, economists, addiction specialists, and others in the field, to explore options for treatment, management and research. This program is in addition to the students' core rotation in psychiatry and mental health training throughout their curriculum. Particular attention will focus on finding cost-effective solutions to address behavioral health issues.

Research

The UNLV School of Medicine will build on areas of current strength and greatest community need. Current strengths include neuroscience, cardiology, and cancer; the greatest needs are mental health and addiction. For instance, UNLV School of Medicine will develop early research programs with the Cleveland Clinic/Lou Ruvo Center for Brain Health, focusing on Parkinson's, Alzheimer's and Multiple Sclerosis patient care and provide high-level clinical trial research. These findings will be useful as the UNLV School of Medicine research develops anonymous genomic profiles of patients' sets with these diseases. This may potentially lead to new clinical trials with drugs targeting an individual's actual genetic makeup. Such work is already taking place at UNLV. Two additional areas of strength at UNLV include radio-pharmacology and computational science with large databases. Medical research in genomics and medical imaging will utilize these strengths and will be of great value to the medical community. Another important clinical area for the development of research is orthopedics.

Health-Sciences Library

A key to future medical education is a next-generation health sciences library consisting of the highest level of technology while remaining high-touch among students, faculty and librarians. We will design this resource center so all health science students can study in teams and for members of the public to use as a resource. Students and faculty will benefit from a robust, behind-the-scenes computing infrastructure that translates collections of all formats: books, journal articles, videos, and data sets delivered digitally in a cross-platform cloud environment. We will create physical and virtual learning communities to support evidence-based, interdisciplinary discovery of the latest research information. Physical learning spaces will incorporate multimedia for exploration and discovery and for the creation of new

knowledge. Library experts will be available as guides and teachers to provide research consultation in real and virtual spaces. The library's institutional repository will capture and disseminate scholarly UNLV papers, research and conference proceedings to showcase the intellectual output of its health sciences faculty and scholars for the world to discover and use.

Medical Community Partnerships

UNLV will work collaboratively with existing Las Vegas institutions to establish our city as a world-class medical destination providing the highest levels of clinical care. Partnering with physicians in the community to help educate our medical students, residents, and fellows is essential to keep physician graduates practicing in Nevada. Currently, many patients have to leave Las Vegas for care because there are not enough specialist in various diseases. We will develop programs led by our faculty with specialties and subspecialties to help fill the widest health care voids. For instance, Las Vegas currently has two liver-transplant surgeons practicing at University Medical Center (UMC). The surgeons are faculty from the University of Nevada, School of Medicine (UNSOM) and they perform kidney transplants but there is no fully established program to allow them to perform liver and pancreas transplants. Partnering with UMC to supplement this program will benefit the community and improve access to care for these medical services.

Graduate medical education programs will be developed to include, at a minimum, a variety of primary specialty residencies, and the major subspecialties of internal medicine and pediatrics. These programs will be built with the administrative support and faculty leadership of the UNLV School of Medicine and with the partnership of regional hospitals, outpatient facilities and physicians. These programs already are in the planning stages.

A new partnership with the VA Southern Nevada Healthcare System (VA) will be equally synergistic with shared faculty members, educational, and research programs. A mental health and addiction program will be built in collaboration with VA faculty members.

Because medical students need to experience all types of medical practice settings, UNLV School of Medicine will partner with one or more hospitals in Las Vegas. Through this business model, the UNLV School of Medicine will not need to build a new hospital – traditionally a huge cost for medical schools. This will save money, which can be better used elsewhere.

Further, we will work closely with UNLV's William F. Harrah Hotel College of Administration and its excellent customer satisfaction and customer service programs. We plan to emulate the College's standards of quality, service, and excellence, and build these values into the UNLV School of Medicine programs. As a result, we will be well positioned to seamlessly become a critical part of the medical tourism business proposed for Las Vegas.

Finally, since the inception of the UNLV School of Medicine, we have worked closely with UNSOM to ensure coordination to promote efficient and effective public medical education in Nevada. For example, we have partnered to work on a Clinical and Transitional Research project through the National Institute of General Medical Sciences. We will continue to collaborate with UNSOM to ensure Nevada has the best health care possible.

10-Year Goals

The UNLV School of Medicine promises to be a powerhouse academic medical center that will:

- educate and train doctors for urban practice
- be fully accredited
- graduate 60 students a year to start, growing to 120-180
- increase the number of physicians staying or returning to Las Vegas after they complete residency programs
- generate up to \$48 million dollars of external research grants and contracts per year
- recruit 120 new faculty physicians and scientists
- generate 5,300 new jobs by 2025, growing to 8,000 jobs by 2030
- generate an economic impact of \$800 million per year by 2025, growing to \$1.2 billion by 2030
- generate \$4 of non-state funds for every \$1 of state funds
- secure \$350 million of philanthropic support

Summary

Nevada is unable to meet the health care needs of its citizens. Las Vegas is the largest urban area in the U.S. without a public medical school. Southern Nevada needs a top-tier academic medical center with a locally managed school of medicine as part of the business model. The UNLV School of Medicine will improve access to high-quality health care in Southern Nevada, increase the number of medical specialists, and generate high-level clinical and specialty care. It will expand the medical expertise in the community by increasing the number of physicians and trained specialists who are committed to serving the region. The UNLV School of Medicine also will provide access to medically underserved and diverse populations. The accompanying academic medical center will serve as the core infrastructure for the entire medical community and generate top-quality research that spans basic science and clinical research.