UNIX School of MEDICINE

VISION STATEMENT

Overview

The University of Nevada, Las Vegas (UNLV) School of Medicine will address the well-identified need to further advance healthcare in Southern Nevada and establish the foundation to meet the demands of a growing and aging population. Las Vegas is the largest urban area in the U.S. without a dedicated, allopathic public medical school and is challenged to provide access to quality healthcare to all of its citizens. The UNLV School of Medicine will create a significant return on investment for the state and will be one of the single greatest achievements at UNLV in terms of benefiting the community by providing access to high-quality healthcare in Southern Nevada, including those medically underserved and diverse populations. The UNLV School of Medicine will capitalize on the strengths of existing academic programs in the schools of Allied Health Sciences. Dental Medicine, Community Health Sciences, Nursing, the College of Sciences, and other health-science related programs throughout the university. We will build from a foundation of excellence – recruiting the best faculty and the best students, applying the same business model we 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 a diverse group of future Nevada doctors how to work in healthcare teams, apply cuttingedge 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 healthcare institutions and professionals to enhance clinical care for all citizens – including the development of 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 doctors staying to serve Southern Nevada residents. We will build clinical, education and research programs in cardiology, neuroscience, mental health and addiction, cancer and orthopedics.

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.
- 3. Teaching and demonstrating to students the special needs and healthcare 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, while recognizing and understanding the unique demands of the region.
- 4. Teaching students through problem- and team-based learning so that students understand how to address medical issues with best practices; Educational space will be organized so that interdisciplinary teams study and work together.
- 5. Educating students thoroughly in history taking and physical examination coupled with use of genomic information and advanced technology.

Academic Curriculum

The UNLV School of Medicine will introduce students to a team-based approach to healthcare that will determine their postgraduate success. Students will learn how to most effectively provide care in conjunction with various types of health professionals including 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. Certificate training will also be developed for medical students, other health professional students, and community members who want advanced education to supplement their activities. A UNLV School of Medicine education will emphasize the basics of medicine by building on the classic "history and physical exams" approach while employing the most technologically advanced equipment and genomic data. It will address healthcare costs and how patient treatment is impacted by the everincreasing time demands on physicians and a system that encourages a wide series of tests instead of a thorough analysis of historical and physical stages of treatment. The UNLV School of Medicine will teach the classical thought process for integrating information, making a differential diagnosis, and targeting 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. In addition to the usual medical educational content, six specialty programs will be offered as core blocks for all students and over time certificate programs in these areas will be developed that will be open

to healthcare professionals at any level and to the public if they qualify. These areas include:

- 1. **Community and Public Health** Most physicians are required to be leaders who can address public health issues as they arise in their communities. This may mean dealing with epidemics, insuring proper immunization of children, educating and explaining public health issues, and even advocating for new laws to protect the public.
- 2. **Clinical Research** To assess the newest information for patient care, physicians need to be well versed and understand various clinical research methods. This in-depth knowledge must be incorporated into practice. This program will ensure a physician can do his/her own clinical trials and compile the findings for others to evaluate and incorporate into clinical patient care.
- 3. Bioethics There are many aspects to understanding the ethics of the healthcare world and some issues are very controversial. Ethical issues can revolve around such things as end-of-life care, human subjects research protection, women's health care issues, and synthetic biology (the production of genetic material from chemical synthesis). Having experts who can help those who need to make decisions in these areas is essential.
- 4. **Business and Finance** All medical students need to have a fundamental understanding of business and finance, but some will want to become administrators of their own practice or become part of other types of administrative activities. They will need an in-depth education in many areas that overlap with an MBA program but that might be more geared to a medical field's activities.
- 5. Leadership and Community All medical students need to prepare to assume leadership roles in their community. This program will further that preparation and teach an understanding of the many not for profit and for profit organizations that support healthcare in our communities. Working with the Greenspun College of Urban Affairs, a program to instill a deep understanding of urban medicine and its role in society will be developed and students will learn the leadership skills necessary to improve these serves.
- 6. **Mental Health and Addiction** While psychiatry is a core rotation for all medical students and mental health is taught throughout the curriculum, because this is such an important issue in both Nevada and urban life, it is important to offer a special program that will involve healthcare teams including social workers, nurses, physicians, economists, addiction specialists, and others in the field, to explore all of the options for treatment, management and research into these entities. Particular attention will be given to finding low cost solutions to these problems.

Research

The UNLV School of Medicine will build on areas of current strength and also 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 that will be coordinated with the Cleveland Clinic/Lou Ruvo Center for Brain Health, whose focus is to care for patients with Parkinson's, Alzheimer's and Multiple Sclerosis, and provide high-level clinical trials research. This can be supplemented by UNLV School of Medicine research, which will develop anonymous genomic profiles of sets of patients with these diseases. Accordingly, this may potentially lead to new clinical trials with drugs that target an individual's actual genetic makeup. Such work is already taking place at UNLV but needs to be expanded. Two other areas of strength at UNLV include radio-pharmacology and computational science with large databases. Additional medical research in these areas would complement the UNLV School of Medicine and be of great value to the medical community.

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. Additionally, partnering with key physicians in the community to educate our medical students, medical residents, and fellows will be essential to the future ability of Las Vegas to keep physician graduates practicing in Nevada. Currently, many patients are required to leave Las Vegas for treatment because there are not enough physicians who specialize in various diseases. We will develop programs that are led by faculty with specialties and subspecialties that help fill our widest healthcare voids. For instance, Las Vegas currently has two liver-transplant surgeons practicing at University Medical Center. 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 increase available services.

Graduate medical education (GME) programs will be developed which will include, at a minimum, all types of primary specialty residencies, and the major subspecialties of internal medicine and pediatrics. In the Las Vegas area, 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. Planning for these programs will be in 2015.

A new partnership with the VA Southern Nevada Healthcare System will be equally synergistic with shared faculty members, educational, and research programs. Because medical students need to experience all types of medical practice, UNLV School of Medicine plans to also partner with one or more private 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 – which will save money which may be utilized elsewhere.

Further, we will work closely with UNLV's William F. Harrah Hotel College of Administration and its excellent program on customer satisfaction and customer service. We plan to emulate the Hotel College's standards of quality, service, and excellence and build those values into programs of the UNLV School of Medicine. In this way, we will be positioned to seamlessly become a key 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 the entire state has the best healthcare possible.

Health-Sciences Library

A key to this education of the future is a next-generation health sciences library consisting of the highest level of technology while remaining high-touch among students, faculty, and librarians. Students and faculty will benefit from a robust, behind-the-scenes computing infrastructure translating to collections of all formats: books, journal articles, videos, and data sets delivered digitally in a cross-platform cloud environment. Physical and virtual learning communities will be created to support evidence-based, interdisciplinary discovery of the latest research information. Physical learning spaces will incorporate multimedia for both exploration and discovery but also in support of 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.

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 current healthcare needs of its citizens and 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 healthcare in Southern Nevada, increase the number of medical specialists, and generate high-level clinical care and specialty care. It will expand the medical expertise in the community and increase the number of doctors 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.