Opening in 2010, the Center for Molecular Medicine will dramatically change the northern landscape of the University. “The view from McCarran Boulevard is going to be phenomenal,” says Tom Kozel, professor of microbiology and immunology. “Anyone driving north of the University will clearly see that medical research and education are an important enterprise here.”

Kozel, a long time faculty member of the School of Medicine, has been instrumental in planning the biomedical research building, which will be the first new facility of its type to be built on the campus in more than 20 years. He, along with several other University administrators and representatives from the Whittemore Peterson Institute for Neuro-Immune Disease and Nevada Cancer Institute, has worked diligently to create a space that will not only advance medical research but will increase the school’s ability to train more students.

“Expanding our space is significant because we’ll be able to increase Nevada’s number of trained medical researchers,” says Kozel, who estimates the new building will enable the University to add another 150 student slots to its graduate programs in the biomedical sciences. “Doubling the medical school’s research and laboratory space, the 100,000-square-foot, state-of-the-art facility will house portions of the microbiology and immunology, physiology and cell biology, and pharmacology departments, as well as serve as the headquarters for the Whittemore Peterson Institute and the northern operations center for the Nevada Cancer Institute.

“At the heart of the Center for Molecular Medicine is the goal to improve the health outcomes of Nevadans through education and research,” Kozel says.

Work toward meeting that goal has already begun as medical school scientists and researchers from the Whittemore Peterson Institute combine efforts to understand the causes of Chronic Fatigue Syndrome. As the first institute of its kind in the United States dedicated to finding a cause and cure for the debilitating disorder, the Whittemore Peterson Institute has promoted research at the School of Medicine by financially supporting collaborative projects with investigators from the Department of Microbiology and Immunology.

“Chronic Fatigue Syndrome seems to have immune and viral components to it,” says William Murphy, chair of the Department of Microbiology and Immunology. “People afflicted with Chronic Fatigue Syndrome suffer from continuous fatigue and have significant alterations in immune function. This makes the collaboration between the department with investigators from Whittemore Peterson an easy one.”

Murphy and faculty in the department are working with investigators from the Whittemore Peterson Institute, such as Judy Mikovitz and Dr. Daniel Peterson, to learn more about the causes of Chronic Fatigue Syndrome. In Murphy’s lab, research is being conducted to learn more about the immunological nature of chronic inflammatory disease states. Dorothy Hudig, professor of microbiology and immunology, is collaborating with the institute to characterize defects in natural killer cells of Chronic Fatigue Syndrome patients, while the laboratory of Stephen St. Jeor, professor of microbiology and immunology and director of the University’s cell and microbiology graduate program, has been given funding to examine the presence and activation status of certain human viruses in Chronic Fatigue Syndrome patients.

“The Whittemore Peterson Institute has been a great partner,” says Murphy. “Not only have institute administrators provided research funding, they have also purchased the most advanced level equipment for immunological assessment. It is our hope that these studies will not only help us understand Chronic Fatigue Syndrome but also devise new treatments for patients.”

Construction on the Center for Molecular Medicine will begin this fall.