



ORGANIZATIONAL UNIT PROPOSAL FORM

DIRECTIONS: Use this form when proposing a new organizational unit, center, institute, department, school, or college.

DATE OF REQUEST: 9/01/2014

Date of AAC Approval:

December 3, 2014

INSTITUTION: University of Nevada, Las Vegas

NAME OF PROPOSED UNIT: Nevada Institute of Personalized Medicine (NIPM)

Date of Board Approval:

DATE OF IMPLEMENTATION: Upon Approval

PART 1

A. Action requested

Approval of the creation of the institute.

B. Brief description and purpose of proposed unit

NIPM, previously called Quantitative Health Sciences (QHS), during the conception phase is a proposed new research institute funded in part from a Knowledge Fund grant from the Governor's Office of Economic Development (GoED) and some matching funds from UNLV. These funds will be used to hire an Executive Director, a Business Development Officer, and an Administrative Assistant. Funds will also be used to hire a team of faculty collectively focused on personalized medicine. Many others will participate in the institute as adjunct faculty. The institute will conduct research and clinical trials, integrating genomics, computational biology, health informatics, and community health and outcomes research to drive personalized medicine. This will involve training and education of students, research, and clinical activities pertaining to clinical care of patients. This will lead to funded grants, leading to private investment, jobs, and economic development in the health care sector.

C. Outline plans for the success of the proposed unit

We propose three phases of development of the institute. The first 2-3 years will be a building phase where UNLV faculty are recruited, additional faculty are hired, and partnerships with external entities are cultivated. We will also form an external company to work with the institute in delivering personalized medicine to the community. Phase II will start in years 2-3 and continue for several years. During this phase, we expect to have some NIH and Picori project grants funded including R15, R21, R34, R01, and SC grants, etc. We will also apply for programmatic grants such as a NIH COBRE, which is considered a key milestone. Successes in projects will help foster applications for the community, private investment and a financially sustainable institute in phase 3.

PART II

A. Mission statement

The Nevada Institute of Personalized Medicine (NIPM) at the University of Nevada, Las Vegas is working to improve individual and systemic health care through translational clinical scientific research, education and workforce training, commercialization of new technologies, and job creation.

B. Goals and objectives

i. Teaching

Although, this will be implemented later, we plan to develop combined BS/MS degrees and PhD degree programs. Faculty hired into the institute may teach parts of classes in their areas of expertise, but will be appointed to primarily perform research.

ii. Research

The main mission of the research institute will be individual projects of members related to human health. The members will also work together on a joint project integrating clinical trials, genomics, computational biology, health informatics, and community health and outcomes research. This will be for the purpose of personalized medicine, where patient's genomes are analyzed and used to drive medical decision making.

iii. Service

The faculty members of the institute will participate on various committees in their home departments with service loads typical of a faculty member in their home department. This will likely include service on graduate student committees. There will also be some service within NIPM.

C. Major participants or collaborators

i. Internal to campus

Faculty in the School of Life Sciences, Mathematics, Department of Chemistry, School of Nursing, College of Engineering (Dept. of Computer Science), School of Community Health Sciences, and possibly other departments will be participating in NIPM on an as needed basis.

ii. External to campus

Affiliates will be from organizations that are collaborating with UNLV and want to have a stronger connection. UNLV currently has policies for individuals from outside organizations to obtain affiliations with academic units and this would be an extension of those existing policies to the new institute. Several external organizations have already been contacted and plan to collaborate with NIPM. The organizations include the Luo Ruvo Cleveland Clinic for Brain Health, Comprehensive Cancer Centers of Nevada, HealthCare Partners of Nevada, Switch Communications, Las Vegas Heals, and NevBio. As the institute develops, we plan to engage other collaborative partners.

D. Evidence of contact within and between affected academic units

The interactive collaborations thus far, were in preparation of the funded Knowledge Fund proposal and formation and meeting of the Internal Advisory Board, and the Faculty Search Committee. Individuals involved in the proposal preparation were Tim Porter, College of Sciences (COS); Martin Schiller (COS, now NIPM); Jillian Inouye, School of Nursing (SON); Shawn Gerstenberger, School of Community Health Sciences (SCHS); and also included were Monica Lounsbury (Provost's Office) and Tom Piechota (VPRED and PI). Now serving on the IAB which has had its initial meeting are: Tim Porter (COS), Martin Schiller (NIPM), Jillian Inouye (SON), Shawn

Gerstenberger (SCHS), Carl Reiber (Provost's Office), Joe Lombardo (National Supercomputing Center), Zack Miles, Office of Economic Development (OED), Barbara Atkinson (UNLV School of Medicine), and Tom Piechota (VPRED). We have also engaged Janet Dufek and Barbara St. Pierre-Snyder, who are Faculty Fellows for the Collaborative Research and Education (CoRE) health initiative.

E. Proposed physical location

The initial location will be in the Harry Reid Center for Environmental Studies and White Hall.

F. Proposed organizational structure (include organizational structure within the campus)

NIPM will be run by an Executive Director, who will be advised by an Internal Advisory Board (IAB) comprised of UNLV administrators and faculty. The Executive Director will report to the Vice President for Research and Economic Development (VPRED). All faculty within UNLV will have a home department/college and then an affiliation with the institute. The Executive Director will work with the IAB, manage administrative staff, provide reports to GoED and other entities funding the institute and oversee the day-to-day operations of the institute. She/He will also cultivate community partnerships. There are several divisions or affinity groups within NIPM and each will be led by a program coordinator that organizes the efforts of faculty in each affinity field. The program coordinators will comprise an Executive Committee that will help implement the goals of NIPM. Based on these concepts, bylaws will be developed that include the specific details of how the institute functions. These will be reviewed by the IAB and submitted to the VPRED for approval.

G. Activities to be sponsored (e.g. courses, seminars, research, and outreach) – indicate if courses or seminars will be offered through the proposed unit. Please specify if they will be offered for academic credit and applicable to a degree program. Give estimated enrollment.

After 2-4 external faculty are recruited, we plan to create our degree programs. This will involve teaching of at least 2-3 team-taught graduate level classes in the areas of Bioinformatics, Biostatistics, and Big Data. The rest of the curriculum will come from already existing classes. A curriculum for the BS/MS degree has been designed and conceptually approved by the faculty in the School of Life Sciences. The program will be modified and run out of NIPM in collaboration with other units. We also plan to implement monthly seminars that include both internal and external speakers. The institute will work with the VPRED office to sponsor competitive faculty seed grants to take advantage of the NGS sequencing core and to forward the mission of the institute. The institute also plans to work closely with a newly formed commercial gateway to help facilitate the use of genome sequence data in local health care decision making. Local business leaders have been recruited and commercialization plans are at the early stages of development.

H. Resource Analysis – source of funds necessary for the proposed change (enrollment-generated state funds, reallocation of existing funds, grants, other state funds)

Initial funding of the institute will come from the GoED Knowledge Fund grant, from UNLV (Provost and VPRED offices), and from the NV INBRE grant. Additional revenue will come from indirect cost recovery obtained from grants. We expect future revenue from clinical genomic services, private donations, licensing of intellectual property, and graduate educational programs.

I. Projected Budget – identify portions of costs which will require state resources, grants, gifts and/or contracts

A projected three year budget is enclosed. Costs will be covered by the GoED Knowledge Fund grant and from funding by the Provost and VPRED as agreed upon during negotiations.

Please attach any supporting documentation (i.e. support letters from community, industry).



School of
NURSING

UNIVERSITY OF NEVADA, LAS VEGAS

September 30, 2014

Martin R. Schiller
Executive Director, Quantitative Health Sciences Initiative
Professor, School of Life Sciences
University of Nevada, Las Vegas
4505 Maryland Pkwy.
Las Vegas, Nevada 89154-4004

Dear Dr. Schiller,

I am happy to write this letter of support for the new Nevada Institute of Personalized Medicine (NIPM), previously called Quantitative Health Sciences (QHS). This new research institute will conduct research and clinical trials, integrating genomics, computational biology, health informatics, and community health and outcomes research to drive personalized medicine. Of particular importance is the interdisciplinary nature of this institute that will include UNLV faculty and students from other disciplines. This will involve training and education of faculty and students in research and clinical activities pertaining to clinical care of patients. The Schools of Nursing and Allied Health Sciences are highly supportive of the development of NIPM and hope to be included in NIPM programs.

Sincerely,

Carolyn Yucha, RN, PhD, FAAN
Dean, Schools of Nursing and Allied Health Sciences



Jeffrey L. Cummings, MD, ScD
Director, Lou Ruvo Center for Brain Health
Camille and Larry Ruvo Chair for Brain Health
Professor, Cleveland Clinic Lerner College of Medicine

September 30, 2014

Martin Schiller, PhD.
Executive Director
Quantitative Health Sciences Initiative
University of Nevada, Las Vegas
4505 Maryland Parkway
Las Vegas, Nevada 89154-4004

Dear Dr. Schiller:

I am extremely enthusiastic about the new Quantitative Health Sciences Initiative and the Nevada Institute of Personalized Medicine. The Cleveland Clinic Lou Ruvo Center for Brain Health provides care to patients with Alzheimer's disease, Parkinson's disease or multiple sclerosis. All of these disorders have important genetic contributions which represent risk factors or disease facilitation factors. We look forward to many opportunities that the Nevada Institute of Personalized Medicine will create for our clinicians, scientists, our patients and families of our patients who are very concerned for their risk for disease development. We will seek opportunities for grant funding, philanthropic support, student exchanges and collaborative meetings that will enrich the scientific environment for the Cleveland Clinic Lou Ruvo Center for Brain Health and UNLV. I look forward to supporting your program as it evolves. Your program represents an important new direction and resource for UNLV and Nevada.

Sincerely,

Jeffrey L. Cummings, M.D., Sc.D.
Director, Cleveland Clinic Lou Ruvo Center for Brain Health
Camille and Larry Ruvo Chair for Brain Health
Professor of Medicine, Cleveland Clinic Lerner College of Medicine
of Case Western Reserve University