NEW MEXICO SUCCESS STORY

CULTIVATING RESEARCH FOR A HEALTHIER TOMORROW

\[ f_{\text{kill}} = 2 \cdot \text{BVF} \cdot L \cdot \frac{\text{BVF} \cdot K_1 (r_b/L) - K_1 (r_b/(L \cdot \sqrt{\text{BVF}}))}{\sqrt{\text{RVE} \cdot r_v \cdot K_1 (r_v/L) \cdot (1 - \text{RVE})}} \]
Vision
The University of New Mexico Health Sciences Center will work with community partners to help New Mexico make more progress in health and health equity than any other state by 2020.

Mission
Our mission is to provide an opportunity for all New Mexicans to obtain an excellent education in the health sciences. We will advance health sciences in the most important areas of human health with a focus on the priority health needs of our communities. As a majority-minority state, our mission will ensure that all New Mexicans have access to the highest-quality health care.

Core Values
The UNM Health Sciences Center’s most important value is a steadfast duty to improve the health of all New Mexicans. We will serve our patients and the public with integrity, accountability and the highest level of professionalism. We will strive as an institution and as individuals to recognize, cultivate and promote all forms of diversity; to fully understand the health needs of our communities; and to advance clinical, academic and research excellence. We are committed to performing our duties with compassion and respect for our patients, learners and colleagues.
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The University of New Mexico Health Sciences Center is our state’s only academic health center – one of fewer than 100 in the nation. We train much of New Mexico’s health provider workforce while offering the highest-quality clinical care to our residents.

But we are also charged with planning for the state’s health needs. This takes many forms. For example, we conduct an annual workforce analysis that tells policymakers how many health providers we require, and where. We also are engaged in discovering new methods of health care delivery that will benefit future generations while building our capacity for population health research.

This is where our vibrant and growing research enterprise plays such an important role. I’m pleased to report that our research funding continued to grow last year, even as this arena has grown progressively more competitive nationally. In fact, while other academic health centers are struggling, we’re thriving. This speaks to the incredible dedication of our faculty, staff and students. I’m very proud of their accomplishments.

Grant funding is just one way to measure a research program’s success, however. Our scientific inquiry ultimately must improve the lives of the people we serve. One sign that we’re succeeding in this effort is the 37 new private companies created since 2004 from research that was done here.

New business development contributes to New Mexico’s economic vitality and holds the potential to transform the treatment of many serious diseases and chronic conditions. This represents our highest and most enduring values.

I want to congratulate our researchers for their contributions, and I am confident that we can look forward to their continued success in coming years.
Some things just improve with time. I’m pleased to report that our research enterprise at the UNM Health Sciences Center has once again seen year-over-year growth, achieving a record $156 million in grant funding for FY 2014 – a 5 percent increase.

We have maintained this upward trajectory amid a broad decline in the overall level of funding for academic research. With federal dollars declining, we have strengthened our internal capacities while forging strategic partnerships with other entities, such as Sandia National Laboratories.

Affordable Care Act-related grants and contracts have been central to our success. The Office of Research and the Clinical & Translational Science Center provide a suite of training and support services for investigators seeking awards. Over the past three years, we have submitted 144 applications for ACA-related funding and seen an amazing 49 percent success rate, for a total of $46 million.

We can look forward to continued growth with the successful renewals of our Clinical and Translational Science Award and the UNM Cancer Center’s NIH Center Core Grant.

Meanwhile, we garnered national recognition by hosting this year’s Land of Achievement: Extending the Reach of Science with SBIR/STTR Programs, the 16th annual Small Business Innovation Research-Small Business Technology Transfer conference. This National Institutes of Health event brought together hundreds of researchers, NIH program officers, small business entrepreneurs and company representatives.

UNM HSC also provided vital leadership by serving as the hub of a regional consortium that brings together researchers from throughout the Western states. New Mexicans can justly take pride in the scope of our groundbreaking biomedical research.
The College of Nursing continued to provide leadership both locally and nationally over the past year, with innovative research and service, and a growing array of grants and contracts.

The College has historically focused on promoting and enhancing health and wellness, along with creative approaches to helping patients, families and communities manage health challenges.

Our research addresses cancer prevention and screening, sleep apnea, pain, respiratory conditions, childhood asthma and rural health, along with problems affecting particular populations, such as Native Americans and veterans.

College of Nursing faculty lead important projects and participate as members of interdisciplinary teams. They also contribute to local and national initiatives dedicated to advancing the science of health, including UNM's Clinical & Translational Science Center and the federally funded Patient-Centered Outcomes Research Institute.

We also engage in translational science by collaborating with others to help implement evidence-based solutions while growing our partnerships with other organizations, government and industry.

The Nurse-Family Partnership Program is one example where nursing faculty, students, alumni and other practitioners make a difference within the community. This model, in which nurses work closely with new parents, already has shown promising outcomes and has the potential to improve children's health throughout their development.

The College's longstanding model of collaborative research and service continues to bear fruit as we work with colleagues and partners to address New Mexico health priorities.
College of Pharmacy researchers are dedicated to finding cures, novel treatments and non-invasive diagnostics for some of the nation’s deadliest diseases and public health threats.

Research at the College focuses on improving outcomes for stroke victims, growth and neurocognitive deficits associated with prenatal alcohol exposure, novel therapeutics and interventions for infectious diseases, the prevention of coronary artery disease and the treatment of congestive heart failure.

College researchers are also examining and finding treatments for diseases associated with exposure to air and traffic pollutants, pesticides, tobacco and UV exposure, as well as arsenic, uranium and other heavy metals, and environmental toxins. Cancer research focuses on diagnosing and treating leukemia, breast, ovarian, prostate and other cancers. Other investigations involve novel drug and vaccine delivery, medication therapy management and serious adverse drug reactions.

The College received more than $7.8 million in extramural research support this fiscal year – a remarkable 40 percent increase compared to total research awards in FY 2014. Most impressively, total National Institutes of Health funding increased 121 percent over the same period. This growth has translated into a significant improvement in the College’s national research performance rankings: the American Association of Colleges of Pharmacy ranked the College 27th in total funding and 29th in NIH funding for federal FY 2013 among 130 U.S. colleges of pharmacy.

The College promotes interdisciplinary scientific collaborations via its Request-for-Proposals Intramural Pilot Funding Initiative. It is fostering team science collaborations and building on its areas of excellence to increase extramural funding, including large-scale programmatic grants and other high-impact outcomes.
The UNM School of Medicine had another record-setting year in overall research funding success. In a challenging environment for academic health centers, we continued to grow our research enterprise in an approach that is highly integrated with our clinical and educational missions.

The School’s total research funding increased to more than $133 million in FY 2014, including significant increases in cancer and pediatric clinical trials, awards associated with the Patient Protection and Affordable Care Act, and continued success in basic research and programmatic grants from the National Institutes of Health.

Several new programs will help train medical and graduate students in the art of discovery and translation of new knowledge to better care for those affected by illness. Under the umbrella of our Clinical & Translational Science Center, we continued to develop our Signature Research Programs in cancer, cardiovascular and metabolic disease, child health, infectious diseases and immunity, and environmental health, with a special emphasis on brain and behavioral health.

The Brain and Behavioral Health Institute is developing our extensive clinical and research expertise to facilitate interdisciplinary solutions to the myriad diseases of brain and behavior facing New Mexicans. The institute has reached out across the state to talk to patients, families and support groups to better understand those needs that we can best address through collaboration.

In line with our core values, we are supporting and training the next generation of investigators and caregivers to achieve our Vision 2020 initiative to improve the health and access to care for all New Mexicans.
Electroconvulsive therapy sounds scarier than it looks.

An electrode placed on a sedated patient’s right temple sends 25-millisecond bursts of electricity surging through the brain for seven seconds, inducing a 40-second seizure. Drugs briefly paralyze the patient’s muscles; only faint twitching in one foot betrays what is happening.

“It’s really anticlimactic,” says Christopher Abbott, MD, medical director of UNM’s Electroconvulsive Therapy Service. But ECT, as it is known, can yield dramatic results for patients with severe, treatment-resistant depression.

A month-long course of ECT treatments often relieves depression symptoms while spurring the growth of new neurons in the hippocampus, a brain structure that plays a central role in forming long-term memories, Abbott says.

He is part of a $12 million multi-modal neuroimaging investigation to explore the neural basis of psychiatric disorders. Abbott conducts MRI scans of patients’ brains before, during and after ECT to better understand how the treatment works and which patients are most likely to benefit.

Abbott, who completed his residency in psychiatry and earned a master’s degree in clinical and translational research at UNM, credits Juan Bustillo, MD, a professor of psychiatry and neurosciences, for his mentorship in neuroimaging. “He's been really instrumental in helping me develop my research career,” Abbott says.

Abbott, who also was a Mentored Clinical Research Scholar, credits the UNM Clinical & Translational Science Center for providing multiple resources to support his research. “It's unusual to have a high-tech scanner this close to patients,” Abbott says. “We are in a really unique position to be able to capitalize on our inpatient psychiatric facility and get people into the scanner.”
Nature is unkind to decomposing bodies. Muscle, skin and internal organs slacken and lose their form as time, temperature and other factors drive the inexorable process of decay.

Tissue breakdown brings with it substantial changes in chemical composition and physical properties, explains Natalie Adolphi, PhD, who is exploring ways to enhance magnetic resonance imaging (MRI) of human corpses.

The same MRI methods that allow doctors to get detailed images of soft tissue in living patients don’t work as well once tissue cools and decomposition sets in, explains Adolphi, a research associate professor in the Department of Biochemistry and Molecular Biology.

“My goal is to understand the effect of post-mortem changes in both temperature and time since death,” Adolphi says, “and then be able to account for those by adjusting imaging protocols to give high-quality images that could then be used diagnostically to aid in determining things like the cause and manner of death.”

Adolphi has teamed up with pathologist Kurt Nolte, MD, director of UNM’s Center for Forensic Imaging in the Office of the Medical Investigator (OMI), and radiologist Gary Hatch, MD, the center’s assistant director, to conduct tissue experiments using OMI’s 1.5-Tesla MRI scanner.

http://vimeo.com/hscTV/adolphi
In work funded by the National Institute of Justice, the trio has conducted experiments on animal tissue (using by-products of food production) – mainly from pigs, because it closely resembles human tissue. Adolphi experimentally adjusts the scanner’s sampling rate to compensate for temperature and time post-mortem to obtain the highest quality image, creating a reference standard for pathologists to use.

New Mexico’s OMI, which handles all autopsies in the state, is unique in the U.S. for having both a clinical MR scanner and clinical CT scanner in the autopsy suite, Adolphi says. “It really makes possible a level of access for forensic investigation that just normally wouldn’t be available at other medical examiner’s offices.”

The forensic imaging center is a partnership between the departments of Radiology and Pathology, the School of Medicine and OMI, says Nolte, who has performed or supervised more than 4,000 conventional autopsies. “The purpose of the center is to really foster interdisciplinary and multispecialty research, as well as provide support for clinical imaging,” he says.

Pathologists performing autopsies sometimes encounter serious obstacles due to severely decomposed tissue, Nolte says. “To be able to adjust MR scanners so that they can image tissues that are decomposed, too hot, too cold – all of the different variables – so that forensic pathologists can then get a window into anatomy that may be difficult to dissect, is very important.”

Hatch, who studied “virtual autopsy” techniques in Switzerland before coming to UNM three years ago, helps Adolphi identify changes in anatomical structures in her research. The Swiss, he says, are studying how much of the traditional autopsy method could be replaced by digital tools that include medical imaging, laser scans and high-resolution color photos.

Adolphi believes the research holds tremendous potential. “The next level would be a new grant further down the road that takes the methods we have developed in this basic study and applies them in a rigorous and systematic way to human subjects,” she says.
The spectrum of human health research is truly expansive, ranging from the tiniest of molecules to whole communities.

UNM’s Center for Development and Disability (CDD) focuses on the social determinants of health – with strategies like supporting prenatal care and strengthening parent-child relationships for low-income, first-time mothers – through an evidence-based model called the Nurse-Family Partnership (NFP).

With key support from the College of Nursing and the New Mexico Children, Youth and Families Department, CDD is participating in this home-visiting health program, which enables licensed nurses to share knowledge and support with at-risk young families. NFP nurses are deployed in Albuquerque’s South Valley (the highest at-risk area in the state) to work with teen and single mothers who lack a regular primary care provider, as well as those involved in substance abuse, smoking or other risk factors that hinder good prenatal care and parenting.

Expectant mothers who are less than 28 weeks pregnant and voluntarily enroll in the program receive home visits from a specially trained nurse throughout their pregnancy and until their baby turns two years old.

“Initially, weekly nurse visits involve pending moms and dads, and oftentimes grandparents who might be heavily involved in child care,” says CDD director Marcia Moriarta, PsyD, the partnership’s principal investigator.

“Topics for discussion are based on the families’ desires – anything from maximizing baby safety to what to expect from a 1-year-old,” Moriarta adds. “The critical component here is our nurses. They’re highly qualified, incredibly empathetic, enormously patient and truly caring. Our nursing professionals make great home visitors and have been strong partners in this study.”

By helping these vulnerable young mothers achieve healthier pregnancies and births, stronger child development and a path toward economic self-sufficiency, both mother and child benefit – as do communities.
In a decades-long research career devoted to unlocking the secrets of multiple sclerosis, Oscar Bizzozero, PhD, credits patient interactions as the key to his lab’s success.

“MS is the most common neurological disorder of young adults,” says Bizzozero, professor and chair of the Department of Cell Biology and Physiology. “It is a devastating diagnosis and it hits them in their prime.”

The disease’s daily impact first hit home several years ago when Bizzozero gained a research lab assistant with MS. Now, the National Multiple Sclerosis Society helps support his investigations into how the disease progresses at a cellular level and provides feedback on issues that patients believe are important.

“Working with the MS Society is gratifying,” he says. “Their members are well-informed and highly curious about the state of research.”

In previous studies, Bizzozero discovered a protein unique to MS. He has also found that the disease’s progression involves the immune system attacking brain and spinal cord cell proteins.

In normal circumstances, an enzyme complex called the proteasome would activate to remove the damaged cells, but MS patients seem to have little or no supply of the complex and it never switches “on.” Bizzozero’s team is investigating whether this failure is unique to MS or present in other disorders, such as Parkinson’s disease, he says.

Bizzozero and his team also hypothesize that oxidized cells contribute to cell death. If true, then preventing that oxidation may be key to preventing disability in patients with progressive MS. Long-term, they hope their research will suggest new treatments to halt the progression of the disease.

**Principal Investigator**
Oscar Bizzozero, PhD
Professor and Chair, Department of Cell Biology and Physiology

**Grant Name**
Impaired Activity of the Proteasome Activator PA28 in MS

**Grantor**
National Multiple Sclerosis Society
Fetal Alcohol Syndrome (FAS) renders about three in 1,000 U.S. newborns developmentally disabled, causing severe cognitive impairment, distinctive facial features, organ defects and vision and hearing problems. The more a pregnant mother drinks, the greater the risk.

But FAS is just the tip of the iceberg, says Daniel Savage, PhD, a UNM Regents professor and chair of the Department of Neurosciences. “Lurking beneath FAS are more than 10,000 newborns each year affected by Fetal Alcohol Spectrum Disorder,” he says. “That’s a higher prevalence than autism.”

Fetal Alcohol Spectrum Disorder (FASD) is a less-severe neurodevelopmental condition caused by a combination of prenatal alcohol consumption and other risk factors, like smoking, inadequate prenatal care and poor overall maternal health. FASD causes functional brain damage in newborns, affecting intellectual ability, memory, attention, language expression, social perception and abstract thinking. These lifelong cognitive deficits can lead to failure in school, dependent living and trouble with the law, as well as increased risk for medical conditions like obesity, diabetes, hypertension and certain cancers.

Savage was recently awarded an $8.1 million National Institutes of Health grant to support the New Mexico Alcohol Research Center, one of just 18 NIH-designated alcohol research centers, and the only one targeting mechanisms and diagnosis of FASD, as well as effective interventions.

The center comprises 15 faculty investigators from the departments of Neurosciences, Psychology, Pediatrics and OB/GYN, as well as the College of Pharmacy and the Mind Research Network. Their projects range from preclinical research on how prenatal alcohol exposure causes functional brain damage to clinical studies targeting earlier detection and improved interventions for adverse neurobehavioral consequences associated with FASD.

Researchers at the Center are also investigating how drinking during pregnancy alters neurotransmitters in the brains of alcohol-exposed offspring, and whether existing drugs might help reverse some of the behavioral problems associated with FASD-stricken children.

The work focuses on a neurotransmitter called histamine, Savage explains. The activation of histamine type 3 receptors inhibits glutamate, an excitatory neurotransmitter, potentially suppressing learning and memory.

“FASD kids’ histamine systems seem to be in overdrive, inhibiting glutamate and thereby suppressing neurotransmission,” Savage says. He hopes to identify existing compounds that block histamine’s ability to activate those type 3 receptors, thereby boosting glutamate-powered neurotransmission by “inhibiting inhibition.”
UNM researcher Ludmila Bakhireva, MD, PhD, explores the neural correlates of Fetal Alcohol Spectrum Disorder, employing state-of-the-art imaging technology and behavioral measures to identify early signs of functional brain damage in infants prenatally exposed to alcohol.

Bakhireva, an associate professor in the College of Pharmacy, and Julia M. Stephen, PhD, of the Mind Research Network, are using magneto- and electro-encephalography to scan 120 mother-baby pairs at six and 20 months of age for early signs of atypical brain development. It’s UNM’s first NIH-funded prospective cohort study of pregnant women and their children affected by prenatal alcohol exposure.

“FASD is often not diagnosed until behavioral deficits become apparent in school-aged children,” Bakhireva says. “We would like to develop tools for diagnosis in the first two years of life.”

With Johnnye Lewis, PhD, of the College of Pharmacy, Bakhireva also measures multiple biomarkers to gauge the combined effects of prenatal alcohol exposure and environmental toxicants on children in the Navajo Birth Cohort. They hope this research will reduce health disparities in the Navajo Nation and improve reproductive health outcomes.

Approximately 15 percent of pregnant women use alcohol, with rates as high as 20 percent reported in recent decades. Bakhireva believes her research could help more fetal alcohol-affected children receive effective early intervention, sparing them devastating disabilities later in life.
Tularemia, a life-threatening flu-like illness, can spread naturally to humans who come into contact with infected animals, like rabbits. But *Francisella tularensis*, the bacterium that causes the disease, can also be harnessed in a bomb.

“In an act of war or terrorism, that bomb is going to be releasing an aerosol,” says Terry Wu, PhD, a research assistant professor in the Department of Internal Medicine. “The most dangerous form of tularemia is caused by inhalation.”

With support from the Defense Threat Reduction Agency, Wu and UNM colleagues are collaborating with Sandia National Laboratories on biotechnology that could help protect soldiers exposed to such a weapon.

The Sandia researchers leading the project, Jeffrey Brinker, PhD, and Carlee Ashley, PhD, have engineered “protocells” – nanoparticles that can be filled with antibiotics and modified to release them in selected tissues at highly controlled rates.

A soldier heading into battle could take a single capsule filled with nanoparticles designed to release an antibiotic after exposure to the infectious agent. The antibiotic would continue to be released over the period of time required to completely eliminate infection.

The drug-delivery system shows promise far beyond the battlefield. Protocells could be modified to target a tumor without damaging surrounding tissue. Or they could be used to reduce public health threats from infectious diseases like tuberculosis, delivering a full course of antibiotic in a single capsule.

The technology works well from an engineering perspective, says Wu. He’s conducting animal studies to determine the safety and drug-releasing properties of protocells.

“Ultimately,” he says, “we want to know whether the protocell is safe, and if so, what’s the best way to apply it.”
Prostate cancer is, by far, the most commonly diagnosed cancer among American men. Ridding the body of it would be so much easier if medical oncologists could see the cancerous cells and kill them where they hide. Yubin Miao, PhD, has developed a tool to do just that.

The new peptide he and his team in the College of Pharmacy have developed strongly binds to a specific receptor that prostate cancer cells display in abundance. Normal cells display few or none of these receptors. “This receptor is over-expressed on prostate cancer cells,” Miao says. “By targeting the receptors, you can differentiate cancer cells from normal cells.”

Miao’s team derived its molecule from a naturally occurring peptide, engineering it to have a far stronger binding affinity and include a radioactive atom called a radionuclide. They used several intricate chemical reactions to create these custom-designed peptides, then thoroughly tested their binding affinity.

Radionuclides can be used for either diagnostic or therapeutic purposes. Attaching a radionuclide that emits gamma rays makes the peptide visible in a SPECT or PET scan, allowing doctors to locate the cancer cell to which the peptide has bound. A radionuclide that emits beta rays will also kill the tumor cell once the peptide has latched on.

Miao and his team coined the term “theranostic” to describe their peptide’s dual therapeutic and diagnostic ability.

The team is testing the peptide in animal models to pave the way for human studies. They hope their man-made molecule will be used in a clinical setting to help medical oncologists find and kill cancer cells wherever they may be.
The eyes, it is said, are the windows to the soul, but for Arup Das, MD, PhD, they also hold clues to a cure for a devastating disease called diabetic retinopathy.

Twenty-nine million diabetic Americans – including an estimated eight million undiagnosed patients – face the threat of gradual vision loss as blood vessels leak into the light-sensitive rear portion of the retina. “Diabetes is a big problem,” says Das, chief of the Division of Ophthalmology in the Department of Surgery. “The question is, are we ready?”

Some 150,000 New Mexicans live with diabetes and 50,000 may develop the eye disease. “There are many underserved people with diabetes and advanced eye diseases,” Das says. “If I can help them in any way, I’ll fulfill my dream.”

About 15 years ago, the quest for a cure brought together Das and cell biologist Paul McGuire, PhD. “It was a fortuitous partnership and an opportunity to apply what I had been doing to a more clinically relevant problem,” McGuire says.

Das injects medication into the eyes of retinopathy patients to help them regain some of their lost vision, but the treatment falls short of sustainable relief. “I see all the limitations of our current treatment because half of the patients don’t respond to it,” he explains. Even patients who regain some of their lost vision must return for numerous injections, he adds.

Now, the duo is testing a new treatment targeting a molecule called angiopoietin-2 that spurs the growth of new blood vessels in the retina but also causes them to leak. Taking their promising research from mice to people, the team is acquiring post-mortem human eye tissue in a new collaboration with Madras Diabetes Research Foundation in Chennai, India.

Das and McGuire are also investigating methods for spotting diabetic retinopathy earlier. “There is a period of 10 to 15 years where there are no signs,” Das explains. “You don’t see any bleeding in the retina, but silently there is some damage going on.” The late onset of the disease makes it particularly challenging to treat.

The pair’s research has been conducted in the Cell Biology and Physiology Department’s laboratory for nearly 17 years. Consistent funding pays for supplies, student researchers, administrative support and grant tracking, enabling the search for a cure to go forward, McGuire says.

While Das and McGuire seek new treatments, Das offers some wise advice: “The most important way to prevent blindness is through diet and controlling blood sugar, blood pressure and blood cholesterol. If a patient doesn’t control their diabetes, treatments will be ineffective.”
“HOW DO YOU KEEP THIS BEAUTIFUL CELL HEALTHY?”

...asks Dusanka Deretic, PhD. She’s talking about the eye’s photoreceptor cell, which she has studied for more than 10 years to understand another leading cause of blindness – retinitis pigmentosa.

The disease, inherited and incurable, causes patients to progressively lose these retinal cells. Deretic explores mutations in a molecule called rhodopsin in the photoreceptor cells of frogs in her lab at the Fluorescence Microscopy Center. The frogs’ large photoreceptor cells are ideal to study the eye disease.

“It’s the most complicated cell,” says Deretic, a research professor in the Department of Surgery. “It’s not only very sensitive but it also has to be maintained throughout your life.”

Deretic compares a photoreceptor cell to a multi-story building in which rhodopsin resides. To maintain healthy eyesight, the molecule must restrict its movement to certain parts of the building. “If it goes everywhere, it causes everything to collapse and die,” she says, “and that is how you lose vision.”

Deretic is also collaborating with University of Edinburgh researchers to study two forms of retinitis pigmentosa in hopes of finding a common cure.
If nature obeys the laws of physics, shouldn’t cancer tumors obey them, too?

Vittorio Cristini, PhD, followed that reasoning to develop his “master equations of cancer” mathematical models, which use results from routine noninvasive or minimally invasive tests to predict an individual’s response to chemotherapy treatment.

Cristini has shown that this method accurately predicts liver, pancreatic and esophageal cancer responses. Now, he plans to expand his research to include personalized breast cancer treatment.

Cristini, the Victor and Ruby Hansen Surface Professor in Molecular Modeling of Cancer at the UNM Cancer Center, explains that biology is still very important in understanding cancer. “Cancer is a complex, multi-scale, micro-structured material in space and in time,” he says.

Genes, he says, change the cellular environment and those changes alter the physical transport properties within a tumor. Cristini’s equations describe those physical processes and aim to provide the missing link between the genes and the tumor’s behavior.

Cristini’s current project will apply these master equations to normal breast development. He hopes to learn why cancer develops as a perturbation – a disturbance to normal development. “Ultimately,” he says, “we would like to develop a multi-scale simulator that can show the entire progression from normal duct all the way to breast cancer.”

The project includes a concurrent clinical trial being conducted at the UNM Cancer Center to use the equations to guide breast cancer treatment for patients. The clinical trial might find new biomarkers for breast cancer while shedding light on how chemotherapy drugs reach the tumor in breast tissue.

“We need to assess how the predictive value of chemotherapeutic efficacy correlates to clinically relevant outcomes,” Cristini says. “Then we can use [the equations] as a tool in the clinic.”
Natural Networking:
Using VIVO to Promote Team-Based Research

To hear Ed Weagel describe it, VIVO sounds a little like a speed dating service for biomedical researchers looking to connect.

“It’s for academics to find each other – maybe a mentor or mentee, or recruiting someone to come here for residency or graduate school,” says Weagel, biomedical informatics manager for UNM’s Clinical & Translational Science Center.

In more formal terms, VIVO is a highly searchable online networking system that enables scientists to identify colleagues who share their research interests. Its use has grown throughout the UNM Health Sciences Center since UNM received its Clinical and Translational Science Award.

“Right now, it’s being used by more and more departments as a faculty web page,” Weagel says. “The department will have a list of faculty names and those will be linked to VIVO profiles.” More than 800 faculty members have created profiles with varying degrees of detail, he adds.

UNM took a big step toward embracing VIVO on an institution-wide basis in 2012, when Pope L. Moseley, MD, chair of the Department of Internal Medicine, required all 250 faculty members in his department to adopt it. “You do that, and suddenly you’ve got some weight,” Moseley says.

VIVO has been of particular benefit within the Mountain West Research Consortium, an 11-institution partnership formed to spur inter-university collaboration, Moseley says.

When awarding pilot grants within the consortium, “We insist that people use VIVO as the first cut in looking for a mentor,” Moseley says. “You’re training people in research, but you’re also teaching people a networking tool – you’re training people in team science.”
Scientific resources are hard to come by in the wide-open, empty spaces of the West. Low population density and a shared medical frontier pose unique challenges for clinical care and biomedical research.

To meet those challenges, biomedical research must embrace a team approach, says Richard S. Larson, MD, PhD, executive vice chancellor and vice chancellor for research at the UNM Health Sciences Center.

That’s why UNM led the formation of the Mountain West Research Consortium, with the goal of building research capacity throughout the western United States.

“A single investigator can’t do everything that is needed on many research projects,” Larson says. “It’s important to be able to leverage our capacity and build resources. Being part of a large network of universities enables us to do that.”

The idea of banding together as a consortium grew from a meeting in Albuquerque in 2009. By the end of the gathering, attendees from universities in Alaska, Idaho, Montana, Nevada and Wyoming had agreed to form a research network. Hawaii later joined the 11-member consortium.

The consortium benefited from the Institutional Development Award (IDeA) program, launched by the National Institutes of Health (NIH) in 1999 in recognition that federal research funding has historically lagged in many Western states.

Today more than 20 research projects have benefited from the program and more are in the pipeline. The consortium provides opportunities for collaboration and research training, as well as access to shared resources and services. Synergy has been achieved through joint pilot funding, VIVO networking, mini-sabbaticals, junior faculty mentoring and an undergraduate biomedical research pipeline program.

Principal Investigators
Bill Shuttleworth, PhD
Professor, Department of Neurosciences; Associate Director, Clinical & Translational Science Center

Richard S. Larson, MD, PhD
Professor, Department of Pathology; Executive Vice Chancellor and Vice Chancellor for Research, UNM Health Sciences Center; Director and Principal Investigator, Clinical & Translational Science Center
The very challenges that Mountain West researchers face sometimes reveal unique resources and opportunities. Montana, for instance, has a public health program with a national reputation for its work in Native American health concerns. Wyoming had developed a distance education model worthy of study, says Bill Shuttleworth, PhD, co-director of UNM’s Clinical & Translational Science Center (CTSC).

Researchers from across the region are now coming to Albuquerque, he says. “Just opening the door is often all that is needed to see real changes,” Shuttleworth says. “Many times what they need is funding for teaching release time.”

Visiting researchers give a grand rounds lecture, which yields insight into their areas of study. “At the same time,” he adds, “they’re meeting with successful researchers here who have been through the grant process and know what types of review their efforts will be up against.”

Pope L. Moseley, MD, chair of Department of Internal Medicine and associate director of the CTSC, has partnered with the CTSC bioinfomatics group to expand the use of VIVO – the shared professional database that allows investigators to search for current member research interests.

The consortium was recently awarded a $20.4 million NIH grant to further develop research ties. UNM’s $5.3 million share of the grant will enable the Health Sciences Center to serve as the regional biostatistics core and for additional visiting professors, new training programs and mini-sabbaticals by researchers.

“There is a lot of benefit for UNM in these collaborations,” Shuttleworth says. “We have been able to expand faculty research into other states and other patient populations.”

“This is a tremendous achievement,” Larson adds. “I anticipate this will be a platform for further strengthening our relationships with other institutions in the region.”
It’s going to take a village to defeat the epidemic of diabetes in the United States, says longtime researcher David Schade, MD, who has recruited for his studies hundreds of patients with Type 1 and Type 2 diabetes.

“We are going to win this race,” says Schade, chief of the Division of Endocrinology in the Department of Internal Medicine. “A lot of people are working on different aspects of this very complicated disease.”

Schade conducts his studies at the Diabetes Research and Treatment Center, launched decades ago by the late Leonard Napolitano, former dean of the School of Medicine, at Schade’s behest. The research center is hosting new research to find the best treatment for Type 2 diabetics.

The Glycemia Reduction Approaches in Diabetes Effectiveness study will compare the effectiveness of four drugs in 5,000 diabetics who have developed high blood sugar because they cannot make or use insulin properly.

Schade is partnering with physicians from across the UNM Health Sciences Center to manage the care of some 200 New Mexicans participating in his latest study. “Collaboration is the name of the game,” he says. “There is lots of help at our university, lots of expertise and people always say yes.”

Schade also is seeking therapies to help Type 1 diabetics, who cannot produce insulin. “We don’t have a magic bullet yet,” he says. His studies have helped predict the occurrence of the disease five years before a diagnosis, but the search for a drug to prevent it is frustrating. “We are not smart enough right now,” he says. “There is too much we don’t know.”
With obstructive sleep apnea, the upper throat closes and patients stop breathing numerous times during the night, putting them at risk for developing vascular disease that causes a treatment-resistant form of high blood pressure.

Nancy Kanagy, PhD, a professor in the Department of Cell Biology and Physiology, is seeking to understand why that happens.

Just how sleep apnea worsens blood pressure is not well understood, but up to one in five people may suffer from it. When the National Institutes of Health put out a call for proposals on sleep apnea research several years ago, Kanagy realized UNM’s experience in conducting vascular studies could provide a novel approach.

“Most researchers were looking at the sympathetic nervous system,” Kanagy says. “We thought, ‘Why not develop a model to investigate vascular changes and contributions to the elevated blood pressure?’”

Kanagy’s team first developed a rat model of sleep apnea and found that it only takes about 14 days for repeated exposure to hypoxia (low oxygen) during sleep to increase blood pressure, even during waking hours. They found that hypoxia increases production of an artery-constricting peptide called endothelin, which elevates blood pressure. Ongoing studies are investigating exactly how that happens.

The team is also investigating the role of hydrogen sulfide ($\text{H}_2\text{S}$) in controlling blood pressure. Sleep apnea patients show significantly lower $\text{H}_2\text{S}$ levels compared with normal sleepers. The molecule seems to limit inflammation and open arteries, leading to many positive effects in the cardiac and vascular systems.

“Long-term, we are hoping that a better understanding of these mechanisms will lead to new and more effective therapies to treat cardiovascular disease in sleep apnea patients,” Kanagy says.

**Principal Investigator**
Nancy L. Kanagy, PhD
Professor, Department of Cell Biology and Physiology

**Grant Name**
Hydrogen Sulfide Regulation of Vascular Tone and Blood Pressure

**Grantor**
National Institutes of Health/
National Heart, Lung, and Blood Institute

**Collaborators/Mentors**
Laura Gonzalez Bosc, PhD, and Benjimen Walker, PhD
The Sixth Annual Research Day Awards Ceremony was held on October 30, 2014. For the Excellence in Research Awards, four colleagues were nominated by their peers and selected by a faculty committee for outstanding research contributions.

**Award recipients were recognized for their excellence in research in four categories:**

- **Basic Science Research**
  - Laurie Hudson, PhD

- **Clinical Science Research**
  - Robin Ohls, MD

- **Junior Faculty Research**
  - Ellen Beswick, PhD

- **Population Science Research**
  - Vallabh O. “Raj” Shah, PhD

**Last Year’s Excellence in Research Award Winners**

**Kathleen Haaland, PhD**

*Clinical Science Research, 2013*

Neuroscientist Kathleen Haaland’s laboratory studies the cognitive and neuroanatomical correlates of movement after unilateral stroke. A professor in the Department of Psychiatry, Haaland has published more than 100 papers and chapters in a career spanning more than 30 years. Her research into limb apraxia (difficulty performing complex movements) could help with rehabilitation for patients suffering from movement disorders.

**Pamela Hall, PhD**

*Junior Faculty Research, 2013*

With her focus on the problem of bacterial resistance (particularly methicillin-resistant *Staphylococcus aureus*), Pamela Hall’s research has tremendous relevance for patients and health providers alike. An assistant professor in the College of Pharmacy, Hall earned her PhD in pharmacology from Case Western Reserve University and trained as a post-doctoral fellow at the National Institutes of Health, as well as at the UNM School of Medicine.
The third avenue is a signaling pathway, she says. “The overall goal of my research program is developing novel animal models and utilizing human tissues to pinpoint the precise mechanism in chronic inflammation to target for new therapeutic approaches.”

Ohls found that two hormones – erythropoietin and darbepoetin – were effective and carried an unexpected side benefit: they actually protected the brains of children who received them. “We looked at their cognitive scores at 2 years of age and again at 4 and 6,” Ohls says. “We show significant effects with both of the medications we’ve studied.”

“It looks like it’s coming along and eventually it will become the standard of care for preterm babies,” Ohls says of her research. “We certainly have laid the foundation.”

With her UNM colleagues, she is studying a painkiller called ketorolac for its surprising tumor-fighting properties. “We’re in the final stages of our initial clinical trial,” she reports.
A rowing hobby taught Doug Vincent that it’s not only important to have a powerful stroke, but also a long and smooth recovery—which, he says, also happens to be true for mimicking blood flow during cardiopulmonary bypass surgery.

Vincent is the CEO of Design Mentor, Inc., a New Hampshire medical device company that is developing a pulsatile pressure cardiac pump that mimics the human heart to maintain optimal blood flow during bypass surgery. He won the Pitch Fiesta at October’s National Institutes of Health Small Business Innovation Research and Technology Transfer Conference in Albuquerque.

Hosted by the UNM Health Sciences Center, the three-day conference focused on NIH Small Business Innovation Research and Technology Transfer (SBIR/STTR) programs, which in 2014 provided more than $758 million to support small businesses developing new therapies and medical devices. The conference brought together scientists, engineers, computer programmers, doctors, nurses, entrepreneurs and investors interested in learning about this funding source and in strategies for developing innovative health care solutions.

“NIH SBIR/STTR is crucial for transforming basic discoveries into practical improvements in health care,” says Richard S. Larson, MD, PhD, UNM HSC’s executive vice chancellor and vice chancellor for research. New Mexico inventors and small businesses have obtained almost $15 million in SBIR/STTR support since 2010. That funding has supported portable imaging systems to diagnose diabetic retinopathy, 3-D ultrasound technology to detect congenital heart defects in infants, magnetic nanoparticle biopsy techniques and improved feeding devices for use in neonatal intensive care units, among others.

Albuquerque Mayor Richard J. Berry spoke about the city’s support for biomedical entrepreneurship. “I have a deep and profound respect for anybody here today who is taking the great work that happens with the help of NIH and bringing it to the market to help people be well and survive and spend many fulfilling years with their loved ones,” Berry said.
$156,103,365
Total awards in FY 2014
$28.5 million increase since 2005

287
Principal investigators extramurally funded

37
Business start-ups over 10 years

1,002
Total full-time faculty

BY THE NUMBERS

HSC RESEARCH 2014

83
Community research sites in New Mexico

1 of 42
National institutions with both an NIH-designated Cancer Center and a Clinical and Translational Science Award

1,346
Proposals submitted

821
Proposals awarded
## SUPPORT FOR SCIENCE

**Growing our Own**

### INVESTIGATORS

**Prioritizing Research**
- Strategic Planning
- Tracking and Continuous Quality Improvement

### KNOWLEDGE

**Education**
- Food and Drug Administration
- Commercialization
- Seminars
- Online or Face-to-Face
- Good Clinical Practice

**Training**
- KL2 (Mentored Clinical Research Scholar Awards)
- Junior Faculty Mentoring
- Undergraduate Pipeline Network
- Masters in Clinical Research
- Clinical and Translational Investigators Program
- Mentor Training Program

### SUPPORT

**Cores**
- Biomedical Informatics
- Biostatistics
- Community Engaged Research Core
- Drug Discovery
- Clinical Research Unit
- Human Imaging Core
- Translational Lab
- Flow Cytometry
- Microscopy
- Genomics

**Pilot Programs**
- Clinical and Translational Pilots
- New Technology and Commercialization
- Linking Clinical Trials and Re-purposing
- Linking Technology to Translational Investigation
- Community Interventions Leading to Better Health Outcomes
- Research Allocation Committees
- Cancer Center Pilots
**Partners**
- Regional Consortiums
- National Labs (Los Alamos, Sandia)
- State/Community Partners
- New Mexico Angels

**Facilitation**
- Biodesign Program
- Synergy Meetings
- VIVO (IT Tool That Enables Collaboration)

**Weekly Announcements of Funding Sources**
- National Institutes of Health
- Agency for Healthcare Research and Quality
- Health Resources and Services Administration
- Patient-Centered Outcomes Research Institute

**Training**
- Grantsmanship
- Team Science
UNM HSC supports training in the biomedical sciences at all levels, engaging students and faculty through outreach initiatives and innovative programs to enhance biomedical excellence. We are pleased to recognize the outstanding students and researchers from our campus who have successfully obtained funding from a National Institutes of Health Research Training and Research Career Development program. These highly competitive national awards help to grow our education and research missions to produce the next generation of diverse and highly qualified biomedical scientists across the spectrum of human health.

Mario Aragon, PhD Candidate  
T32 Scholar, NIH/NHLBI  
Research Interest: Humoral mediators of endothelial cell activation following exposure to air pollutants and inhaled nanoparticles  
Mentor: Matthew Campen, PhD

Dawn Delfin, PhD  
KL2 Scholar, NIH/NCATS  
Research Interest: Alterations to the cardiac extracellular matrix during heart failure and resulting consequences on cardiac stem cell therapy  
Mentors: Matthew Campen, PhD, Mary Walker, PhD, and Carlos Roldan, MD

Jonathan L. Brigman, PhD  
K22 Scholar, NIH  
Research Interest: Understanding the maladaptive behavioral changes that occur in alcohol abuse, drug addiction and numerous neuropsychiatric disorders

Darrell Dinwiddie, PhD  
KL2 Scholar, NIH/NCATS  
Research Interest: Integrative genomic analysis of respiratory viral infections to elucidate determinants of pathogenesis  
Mentors: Stuart Winter, MD, and Scott Ness, PhD

Alba A. Chavez-Dozal, PhD  
K12 Scholar, NIH/NIGMS  
Research Interest: Investigating the molecular pathogenesis of Candida albicans, including the role of secretory proteins in virulence and biofilm formation  
Mentor: Samuel Lee, MD, PhD

Rubi Figueroa-Teran, PhD  
K12 Scholar, NIH/NIGMS  
Research Interest: Enzymatic biofuel cells for production of energy for biomedical applications  
Mentor: Plamen Atanassov, PhD

Jayne M. Christen, PhD  
K12 Scholar, NIH/NIGMS  
Research Interest: Identification of potential vaccine candidates for infectious diseases using a virus-like particle display technology  
Mentor: Bryce Chackerian, PhD

Natalie Fredette, PhD Candidate  
T32 Scholar, NIH/NHLBI  
Research Interest: Estrogen-mediated signaling through the G protein-coupled estrogen receptor  
Mentor: Eric Prossnitz, PhD

Erin Crossey, PhD  
T32 Scholar, NIH/NIAID  
Research Interest: Bacteriophage virus-like particles as vaccine platforms: from heart disease to malaria  
Mentor: Bryce Chackerian, PhD

Brian M. Gray, PhD  
K12 Scholar, NIH/NIGMS  
Research Interest: Role of agr-mediated quorum sensing in Gram-positive bacterial pathogens, and elucidating how novel small molecular inhibitors of quorum sensing block the activation of pathogenic programs in Staphylococcus aureus  
Mentors: Hattie Gresham, PhD, and Pamela Hall, PhD

Seth Daly, MS  
T32 Scholar, NIH/NIAID  
Research Interest: Anti-virulence strategies targeting methicillin-resistant Staphylococcus aureus  
Mentor: Pamela Hall, PhD

Anastacia Griego, BS  
F31 Scholar, NIH/NCI  
Research Interest: Regulation of human papillomavirus replication via cell signaling pathways  
Mentor: Michelle Ozbun, PhD
**John Hammond, PhD**  
K12 Scholar, NIH/NIGMS  
Research Interest: Phenotypic plasticity in mosquitoes and its effects on disease transmission  
Mentors: Helen Wearing, PhD, and Felisa Smith, PhD

**Molly Harmon, PhD Candidate**  
T32 Scholar, NIH/NHLBI  
Research Interest: Cardiovascular risk associated with contaminants from legacy uranium mining sites  
Mentor: Matthew Campen, PhD

**Stephanie Jerman, PhD Candidate**  
F31 Scholar  
Research Interest: OFD1 as constituent of a multimeric protein complex in odontoblast primary cilia  
Mentor: Angela Wandinger-Ness, PhD

**Jaime Javier Juarez, PhD**  
K12 Scholar, NIH/NIGMS  
Research Interest: Development of a bioanalytical platform for high-throughput biological assays  
Mentor: Andrew Shreve, PhD

**Michael Kivitz, BS, BA**  
T32 Scholar, NIH/NIAID  
Research Interest: The contribution of wounding to human papillomavirus infections

**Britta Lindquist, MD/PhD Candidate**  
F31 Scholar, NIH/NINDS  
Research Interest: Studying regulation of neuronal activity and cerebral blood flow during spreading depolarizations in the brain, to develop interventions that decrease metabolic depletion and increase blood supply to vulnerable tissue after stroke  
Mentor: Bill Shuttleworth, PhD

**Christy Magcalas, PhD Candidate**  
T32 Scholar, NIH/NIAAA  
Research Interest: Studying how prenatal ethanol exposure affects adolescent exposure to ethanol and how NMDA antagonist ketamine alters glutamatergic receptor function in the frontal cortex and related behavioral outcomes  
Mentor: Derek Hamilton, PhD

**Michael Mandell, PhD**  
T32 Scholar, NIH/NIAID  
Research Interest: TRIM-mediated autophagic targeting of HIV-1  
Mentor: Vojo Deretic, PhD

**Kristopher D. Marjon, PhD**  
T32 Scholar, NIH/NHLBI  
Research Interest: Mechanisms of hematopoietic stem/progenitor cell homing and cell adhesion to specific microenvironments  
Mentor: Michael Bogenschutz, MD

**Kristin L. Marquardt, BSc**  
T32 Scholar, NIH/NIAAA  
Research Interest: Impact of prenatal ethanol exposure on executive function in mice  
Mentor: Jonathan Brigman, PhD

**Martha Martinez Grimes, PhD**  
K12 Scholar, NIH/NIGMS  
Research Interest: Investigating the functional role of vacuolar ATPase proton pumps in the fungal pathogen Candida albicans  
Mentor: Karlett Parra, PhD

**Levi Maston, MD/PhD Candidate**  
T32 Scholar, NIH/NHLBI  
Research Interest: Role of the adaptive immune system in the development of chronic hypoxia-induced pulmonary hypertension  
Mentor: Tom Resta, PhD

**Russell Morton, PhD**  
K12 Scholar, NIH/NIGMS  
Research Interest: Investigating synaptic abnormalities in the hippocampus induced by prenatal alcohol exposure  
Mentors: C. Fernando Valenzuela, MD, PhD, and Leah Freeman, PhD

**Prashant Nighot, PhD, DACPV**  
K01 Scholar, NIH  
Research Interest: Investigating homeostasis of intestinal epithelium and pathophysiology of intestinal diseases, with a focus on intestinal tight junction barrier and experimental models of intestinal inflammation

**Charles Norton, PhD Candidate**  
T32 Scholar, NIH/NHLBI  
Research Interest: Oxidative signaling pathways mediating enhanced pulmonary vasoconstrictor sensitivity in a rat model of chronic hypoxia-induced pulmonary hypertension  
Mentor: Tom Resta, PhD
Robert Oliver, AB
T32 Scholar, NIH/NIAAA
Research Interest: Drug and alcohol addiction, with emphasis on micro-RNAs
Mentor: Nora Perrone-Bizzozero, PhD

Jessica Osmond, PhD
T32 Scholar, NIH/NHLBI
Research Interest: Effects of intermittent hypoxia on signaling in mesenteric arteries
Mentor: Nancy Kanagy, PhD

Jennifer Pascal, PhD
K12 Scholar, NIH/NIGMS
Research Interest: Multi-scale modeling of cancer tumors
Mentor: Vittorio Cristini, PhD

Danielle Plomaritas, MS
T32 Scholar, NIH/NHLBI
Research Interest: Contribution of cellular redox and reactive oxygen species to enhanced acid-sensing ion channel 1-dependent calcium entry in a rat model of chronic hypoxia-induced pulmonary hypertension
Mentor: Nikki Jernigan, PhD

Chelsea Saito-Reis, PhD Candidate
T32 Scholar, NIH/NHLBI
Research Interest: Role of CD82 in regulating hematopoietic stem cell adhesion and signaling
Mentor: Jennifer Gillette, PhD

Sabrina L. Samudio-Ruiz, PhD
K01 Scholar, NIH/NCI
Research Interest: Epigenetic alterations and corresponding changes in gene expression associated with the development of platinum resistance in ovarian cancer cells
Mentor: Alan Tomkinson, PhD

Montaser Shaheen, MD
K01 Scholar, NIH/NHLBI
Research Interest: The role of hPso4 in DNA repair and chemotherapy resistance
Mentor: Alan Tomkinson, PhD

Joshua Sheak, MD/PhD Candidate
T32 Scholar, NIH/NHLBI
Research Interest: Mechanisms of vasoconstriction in a rat model of persistent pulmonary hypertension of newborns
Mentor: Tom Resta, PhD

Akshay Sood, MD, MPH
K23 Scholar, NIH
Research Interest: Determining the effect of central adiposity and the pro-inflammatory balance of serum adipokines on specific physiologic and pathophysiologic sub-phenotypes of asthma in pre-menopausal women
Mentors: Marianne Berwick, PhD, Mark Schuyler, MD, and Clifford Qualls, PhD

Robert Taylor, PhD
K12 Scholar, NIH/NIGMS
Research Interest: Studying cancer metastasis through synthesis of novel magnetic nanoparticles for immunomagnetic isolation of circulating tumor cells and downstream characterization using next-generation sequencing
Mentor: Rama Gullapalli, MD, PhD

Lauren Topper, BSc
T32 Scholar, NIH/NIAAA
Research Interest: Effects of developmental ethanol exposure on neuroinflammation
Mentor: C. Fernando Valenzuela, MD, PhD

Christina R. Tyler, BS
F31 Scholar, NIH/NIMH
Research Interest: Neuroepigenetics

Mitchell Tyler, PhD
T32 Scholar, NIH/NIAID
Research Interest: Development of next-generation virus-like particles targeting HPV
Mentors: Bryce Chackerian, PhD, and Andrea Allan, PhD

Claire Wilcox, MD
K23 Scholar, NIH/NIAAA
Research Interest: Pharmacotherapeutic treatment of addictions and neuroimaging
Mentor: Michael Bogenschutz, MD

Kayla R. Zehr, PhD Candidate
T32 Scholar, NIH/NHLBI
Research Interest: Interactions of nitric oxide and cytochrome P4501A1, and the regulatory role of caveolae and omega-3 polyunsaturated fatty acids
Mentor: Mary Walker, PhD
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<td>UNM Sandoval Regional Medical Center</td>
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CHANCELLOR FOR HEALTH SCIENCES

RICHARD LARSON
UNM Foundation .................................................. $800,869
Private Gifts for Research
UNM Foundation .................................................. $566,822
Private Gifts for Research
UNM Foundation .................................................. $373,360
Private Gifts for Research
UNM Foundation .................................................. $189,232
Private Gifts for Research

HEALTH SCIENCES LIBRARY AND INFORMATICS CENTER

PATRICIA BRADLEY
Center for Public Service Communications ......................... $52,799
NLM/UNM Native Health Information Services
Houston Academy of Medicine .................................... $15,000
Outreach
GALE HANNIGAN
Houston Academy of Medicine .................................. $24,983
Good Information for Good Health: Online Continuing Education for New Mexico Health Professionals

PHILIP KROTH
HHS/Agency for Healthcare Research and Quality .............. $228,697
Minimizing Stress, Maximizing Success of Physician’s Use of Health Information and Communications Technologies

OFFICE OF RESEARCH

PAUL ROTH AND RICHARD LARSON
Association of American Medical Colleges ...................... $107,100
Developing a Workforce to Improve Health and Reduce Disparities

Animal Resource Facility

RICHARD LARSON
New Mexico VA Health Care System ................................ $25,048
Veterinary Services for the New Mexico Veterans Affairs Health Care System

KEVIN O’HAIR
NIH/Office of the Director ........................................ $490,983
Health Sciences Center Animal Resource Facility Improvement

Clinical & Translational Science Center

MARK BURGE
The University of Utah ........................................... $40,366
Iron-Induced Oxidative Stress and Mitochondrial Dysfunction: Effects on Insulin Secretion and Insulin Sensitivity

The University of Utah ........................................... $3,000
Iron-Induced Oxidative Stress and Mitochondrial Dysfunction: Effects on Insulin Secretion and Insulin Sensitivity

DARRELL DINWIDDIE
PerkinElmer Consulting Agreement $7,204
PerkinElmer Consulting Agreement $1,510

DEIRDRE ANN HILL
NIH/National Cancer Institute .................................... $32,846
Towards a Transdisciplinary Understanding of Breast Cancer Survival Disparities

ALBERTA KONG
NIH/National Heart, Lung, and Blood Institute ................ $681,838
ACTION PAC: Adolescents Committed to Improvement of Nutrition & Physical Activity

NIH/National Heart, Lung, and Blood Institute ................ $36,899
ACTION PAC: Adolescents Committed to Improvement of Nutrition & Physical Activity

Oregon Research Institute ...................................... $604
Adaptation and Evaluation of a Family-Based Mindful Eating Intervention for Overweight Adolescents

RICHARD LARSON
NIH/National Center for Advancing Translational Sciences ........ $1,272,790
UNM Clinical & Translational Science Center

University of Nevada, Las Vegas ................................ $900,256
Clinical and Translational Research Infrastructure Network IDEa-CTR/CROEB

NIH/National Center for Advancing Translational Sciences ........ $294,308
UNM Clinical & Translational Science Center

NIH/National Center for Advancing Translational Sciences ........ $85,546
UNM Clinical & Translational Science Center

Biomedical Research Institute of New Mexico ................ $68,999
Exercise Interventions During Voluntary Weight Loss in Obese Older Adults

The Mind Research Network .................................... $16,127
Preterm Infants’ Mu-rhythm Suppression Evaluation Study

The Mind Research Network .................................... $3,928
Sensitivity to Intravenous Ethanol: Neuroimaging and Behavioral Phenotypes

ROBERT WILLIAMS
NIH/National Institute on Minority Health and Health Disparities .... $1,328,537
New Mexico Center for Advancement of Research, Engagement and Science on Health Disparities

NIH/National Institute on Minority Health and Health Disparities .... $645,048
New Mexico Center for Advancement of Research, Engagement and Science on Health Disparities

Financial Aid

MARY FENTON
HHS/Health Resources and Services Administration ............ $635,203
ACA-Scholarship for Disadvantaged Students-Allopathic Medicine

HHS/Health Resources and Services Administration ............ $126,378
ACA-Scholarship for Disadvantaged Students-Medical Laboratory Science

Ashley Wegele
### COLLEGE OF NURSING

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<th>Name</th>
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### COLLEGE OF PHARMACY

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<td>Early Indices of Atypical Neurodevelopment with Fetal Alcohol Exposure</td>
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COLLEGE OF PHARMACY (continued)

LINDA FELTON
Biomedical Research Institute of New Mexico ..................... $154,500
Drug Formulation Development for VA Research
Biomedical Research Institute of New Mexico ..................... $150,000
Formulation Development Services

LARRY GEORGOPoulos
HealthInsights New Mexico ............................................. $101,196
Medication Navigation Project
Molina Healthcare of New Mexico ...................................... $100,000
Telephonic MTM Services
Ventegra ................................................................. $40,000
Ventegra Conference Services Agreement
UNM Medical Group .................................................... $30,600
Consultant Pharmacy Services
Ventegra ................................................................. $20,000
Ventegra Conference Services Agreement
New Mexico Health Connections ....................................... $14,000
New Mexico Health Connections Contract Review and Consultation
First Nations Community Healthsource, Inc. ........................ $6,000
First Nations Community Healthsource

PAMELA HALL
NIH/National Institute of Allergy and Infectious Diseases .......... $426,936
Apolipoprotein B and Control of S. Aureus Quorum Sensing
Sandia National Laboratories ........................................... $83,000
Optimization of Mesoporous Silica Nanoparticle-Supported Lipid Bilayers ('Protocells') for In Vivo Delivery of Antibiotic Compounds
Sandia National Laboratories ........................................... $45,300
Optimization of Mesoporous Silica Nanoparticle-Supported Lipid Bilayers ('Protocells') for In Vivo Delivery of Antibiotic Compounds

ANNA HAMIDOVIC
NIH/National Institutes of Health ....................................... $75,500
Efficacy of Intranasal Insulin in Relieving Symptoms of Tobacco Abstinence Syndrome

Laurie Hudson
NIH/National Cancer Institute ........................................... $82,748
Capitalizing on NSAID Enantiomer Selectivity for Cancer Therapy
NIH/National Cancer Institute ........................................... $43,880
Capitalizing on NSAID Enantiomer Selectivity for Cancer Therapy

NIH/National Institute of Environmental Health Sciences .......... $18,120
Predicting Novel Arsenic Targets in DNA Repair Pathways
NIH/National Cancer Institute ........................................... $6,120
Capitalizing on NSAID Enantiomer Selectivity for Cancer Therapy

JOHNHEE LEWIS
HHS/Centers for Disease Control and Prevention ..................... $1,000,000
ACA A Prospective Birth Cohort Study Involving Uranium Exposure in the Navajo Nation

JIM LIU
NIH/National Institute of Environmental Health Sciences .......... $336,352
Arsenic Co-Carcinogenesis with UVR: Nitrosation and Oxidation of Target Proteins
NIH/National Institute on Drug Abuse ................................... $241,189
Methamphetamine-Induced Alterations in Brain Tissue Oxygenation
Massachusetts General Hospital ........................................... $10,000
General Anesthesia and Alzheimer's Disease Neuropathogenesis
NIH/National Institute of Environmental Health Sciences .......... $5,000
The 8th Conference on Metal Toxicity and Carcinogenesis

Renee-Claude Mercier
Harvard Hospital ........................................................... $1,800
Multicenter Gram-Negative Surveillance Program

YUBIN MIAO
NIH/National Cancer Institute ........................................... $453,000
Novel Receptor-Targeting Theranostic Peptides for Prostate Cancer

JEFFREY NORENBERG
Invicro ................................................................. $198,105
68Ga Labeling of DOTA-Conjugated Peptide: Labeling Optimization and Kit Formation
Invicro ................................................................. $57,400
PET/CT Imaging of 68Ga-MLN6907 in Tumor-Bearing Mice, Biodistribution & Whole Blood PK of MLN6907, 111In Labeling and Shipment
Invicro ................................................................. $44,314
SPECT/CT Imaging of 99m Tc-Mibi and 201TI, Co-Injected and of 125-a-Bungarotoxin on a Pharmacologically-Induced Mouse Model Spinal Muscular Atrophy
Invicro ................................................................. $42,500
Invicro-Takeda Boston 213Bi Study
Invicro ................................................................. $27,292
Invicro-Takeda Boston 213Bi Study
Invicro ................................................................. $23,524
PET/CT Imaging of 68Ga-MLN6907 in Tumor-Bearing Mice of Four Different Tumor Types with Varying GCC Expression Levels
Invicro ................................................................. $20,919
Radiolabeling Method Development and SPECT/CT Imaging of High and Low Specific Activity
Invicro ................................................................. $17,950
SPECT/CT Imaging of 99m Tc-Mibi and 201Tl, Co-Injected, SPECT/CT Imaging of 123I-MIBG, and SPECT/CT Imaging of 125I-alpha-bungarotoxin in a Mouse Model of Amyotrophic Lateral Sclerosis
Invicro ................................................................. $14,447
SPECT/CT Imaging of 125I-Tyrosine in Young and Old Sprague-Dawley Rats
Invicro ................................................................. $14,111
Radiolabeling Method Development and SPECT/CT Imaging of 186 Re-sestamibi in Healthy Control Mice
Invicro ................................................................. $11,521
DanBIRT Studies
invicro..................................................$9,993
Enriched Fumaric Acid and Derivatives Dosing and Tissue Resection Study

invicro..................................................$8,695
SPECT/CT Imaging of 99mTc-MIBI and 201Tl, Co-Injected, and of 125I-a-bungarotoxin in a Pharmacologically-Induced Mouse Spinal Muscular Atrophy

invicro..................................................$6,749
Radiolabeling Method Development and SPECT/CT Imaging of the 186 Re-sestamibi in Healthy Control Mice

Dennis Raisch
Medical University of South Carolina...............................$60,674
Southern Oncology Network on Adverse Reactions (SONAR)

Sabrina Samudio-Ruiz
NIH/National Cancer Institute.......................................$114,405
EGF Receptor, DNA Methylation and Platinum Resistance in Ovarian Cancer

Lynda Welage
UNM Medical Group..................................................$29,000
Pharmacy Consultant Services

Traci Michelle White
Mesilla Valley Hospice...............................................$35,152
Mesilla Valley Hospice Pharmacist Clinician Agreement

Kristina Wittstrom
Sandia National Laboratories.........................................$4,200
Isotope Request

Sandia National Laboratories.........................................$2,100
Isotope Request

Poison Control

Blaine Benson
National Capital Poison Center.....................................$123,804
Consulting Services Agreement

HHS/Health Resources and Services Administration.............$108,718
Poison Control Stabilization and Enhancement Program

School of Medicine

David Pitcher
New Mexico Department of Health.................................$1,165,618
Sustain Level 1 Trauma Center Designation & Improve Financial Viability of Trauma Services

Carolyn Voss
New Mexico Department of Health.................................$30,933
Think First Injury Prevention Project

New Mexico Department of Health.................................$14,318
Vasectomy Sterilization Surgical Procedures Project

New Mexico Department of Health.................................$8,624
Vasectomy Sterilization Surgical Procedures Project

New Mexico Department of Health.................................$8,624
Vasectomy Sterilization Surgical Procedures Project

Thomas Williams
UNM Hospital.........................................................$10,000
Memorandum of Agreement

Anesthesiology

Nicholas Lam
American Society of Anesthesiologists.........................$3,000
Glutamate Causes Persistent Allodynia

Biochemistry and Molecular Biology

Natalie Adolphi
Harris County Institute of Forensic Sciences.....................$4,351
Radiography and Computed Tomography for Quantification of Bone Density in Infant Decedents

Jeffrey Griffith
New Mexico State University......................................$10,000
New Mexico Idea Networks of Biomedical Research Excellence

Meilan Liu
American Diabetes Association, Inc..............................$134,585
The Role of DsbA-L in Regulating Liver Mitochondria Function and Insulin Sensitivity

Karlett Parra
American Heart Association......................................$50,000
The Beta Subunit of the Yeast PFK Complex Modulates Glucose-Dependent Reassembly of V-ATPase Pumps

Martina Rosenberg
Tennessee Technological University..............................$15,000
CAT Dissemination

Vallabh Shah
Veteran’s Administration Medical Center .......................$15,438
Intergovernmental Personnel Act

Kristina Trujillo
NIH/National Cancer Institute.................................$154,360
Using Biomarkers of Field Cancerization to Identify Breast Tissue at Risk for Tumorigenesis

Biomedical Research Educational Program

Jennifer Gillette
IntelliCyt Corporation................................................$5,000
Summer Research Assistantship

Brain and Behavioral Health Institute

Richard Campbell
New Mexico Governor’s Commission on Disability.............$50,000
Survey of Youth Sports Concussion Study

Cancer Research and Treatment Center

Wadih Arap
NIH/National Heart, Lung, and Blood Institute..................$355,786
Regulation of the Paracrine Angiogenic Function of Cardiac Myocytes by Cardiomyocyte PDGFR-a

Fenry Monickaraj, PhD
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ELIZABETH MCGUIRE
New Mexico Cancer Care Alliance ........................................ $96,691
Clinical Trial Phase III
New Mexico Cancer Care Alliance ........................................ $91,250
Clinical Trial Phase III

SCOTT NESS
NIH/National Cancer Institute ........................................... $578,638
Alternative RNA Splicing and Protein Products in Leukemia Outcome (PO11)
NIH/National Institute of Dental and Craniofacial Research ........... $424,914
Mutation and Target Genes in Adenoid Cystic Carcinoma
NIH/National Institute of Dental and Craniofacial Research ........... $9,859
Mutations and Targets Genes in Adenoid Cystic Carcinoma

JANET OLIVER
NIH/National Cancer Institute ........................................... $352,638
Integrative Cancer Nanoscience and Microsystems Training Center

RENATA PASQUALINI
U.S. Department of Defense .............................................. $2,654,230
IMPACT: Assessing Drug Response and Prognosis in Breast Cancer Using AAVP- Based Targeted Molecular-Genetic
NIH/National Eye Institute .............................................. $230,000
Targeted Modulation of Angiogenesis by VEGF Peptidomimetic Antagonists
American Association for Cancer Research ................................ $125,000
Octreotide-Targeted Treatment of Neuroendocrine Tumors of the Pancreas
University of Texas Health Science at Houston .......................... $43,991
Targeting Core
Rice University ................................................................ $41,088
Optical Systems for In-Vivo Molecular Imaging of Cancer

DULCINEA QUINTANA
New Mexico Cancer Care Alliance ........................................ $171,763
Clinical Trial Agreement

ASHWANI RAJPUT
New Mexico Cancer Care Alliance ........................................ $312,631
Clinical Trial Phase I
New Mexico Cancer Care Alliance ........................................ $200,024
Clinical Trial Phase I
Mayo Clinic ..................................................................... $90,600
ACOSOG Services Agreement
Brigham and Women’s Hospital .......................................... $66,000
ACOSOG Services Agreement
Mayo Clinic ..................................................................... $66,000
ACOSOG Services Agreement

MELANIE ROYCE
NIH/National Cancer Institute ........................................... $129,683
Minority-Based Community Clinical Oncology Program
New Mexico Cancer Care Alliance ........................................ $101,041
Clinical Trial Phase III
NIH/National Cancer Institute ........................................... $90,000
Minority-Based Community Clinical Oncology Program
Oregon Health & Science University ..................................... $32,758
Southwest Oncology Group Service Agreement

MONTASER SHAHEEN
NIH/National Heart, Lung, and Blood Institute ................... $135,657
The Role of hP53α4 in DNA Repair and Chemotherapy Resistance
New Mexico Cancer Care Alliance ........................................ $123,295
Clinical Trial Phase III

New Mexico Cancer Care Alliance ........................................ $94,705
Clinical Trial Phase II
Lovelace Biomedical & Environmental Research Institute ........ $32,828
INST 1117: Biomarkers for Epigenetic Therapy of Lung Cancer

LARRY SKLAR
NIH/National Institute of Mental Health ............................... $799,999
Molecular Libraries Biological Database
Washington University School of Medicine in St. Louis ........... $273,151
Novel DNA Double Strand Break Repair Targeting Therapeutics for Cancer Treatment
Carnegie Mellon University .............................................. $146,470
Small Molecule Discovery with HTS Multiplex Flow Cytometry and FAP Technology
Oxnard Foundation ......................................................... $100,000
Unbiased Screening to Identify Novel Therapies for Pediatric ALL

ALAN TOMKINSON
NIH/National Institute of General Medical Sciences ............... $230,230
Cellular Functions of Eukaryotic DNA Ligases
Lawrence Berkeley National Laboratory ................................ $86,643
Structural Cell Biology of DNA Repair Machines
NIH/National Institute of General Medical Sciences ............... $28,121
Roles of DNA Ligase 1 in Mammalian DNA Metabolism
NIH/National Institute of Environmental Health Sciences .......... $23,976
Roles of L1g3 and XRCC 1 Genes in Genome Stability

CHERYL WILLMAN
NIH/National Cancer Institute ........................................... $1,808,387
UNM Cancer Center Support Grant
NIH/National Cancer Institute ........................................... $545,046
Molecular Signatures for Outcome Prediction & Therapeutic Targeting in ALL
NIH/National Cancer Institute ........................................... $321,220
Peptide-Directed Protocols and Virus-like Particles: New Nanoparticle Platforms for Targeted Cellular Delivery of Multicomponent Cargos
New York University ......................................................... $211,307
Targeted Nanotherapeutics for Acute Lymphoblastic Leukemia Therapy
University of Colorado Denver ........................................... $151,556
Testing Targeted Therapy in Philadelphia Chromosome-like ALL
St. Jude Children’s Research Hospital ................................... $142,170
ARRA - Verification, Validation and Discovery of Findings in TARGET’s Acute Lymphoblastic Leukemia
Memorial Medical Center of Las Cruces ................................ $132,240
Professional Services

RESEARCH ANNUAL REPORT 2014
Cheryl Willman (Continued)
New Mexico Cancer Care Alliance ........................................... $115,322
Executive Director Services Agreement
NIH/National Cancer Institute ........................................... $112,521
Expand NCI-Supported Community Outreach Capacity Through Community Health Educators of the National Outreach Network
St. Baldrick’s Foundation ...................................................... $100,000
Identification, Characterization and Treatment of Ph-like Standard Risk ALL
Cowboys for Cancer Research ........................................... $82,753
Cowboys for Cancer Research
Cowboys for Cancer Research ........................................... $82,753
Cowboys for Cancer Research
NIH/National Cancer Institute ........................................... $75,000
Clinical Trials: Reporting Program
New Mexico Cancer Care Alliance ........................................... $51,431
Executive Director Services Agreement
Albuquerque Area Indian Health Service .................................... $25,000
IHS Oncology Diagnostic and Therapeutic Services Agreement
New Mexico Cancer Care Alliance ........................................... $17,247
Services Agreement
New Mexico Cancer Care Alliance ........................................... $8,358
Administrative Services Agreement

Bridget Wilson
NIH/National Institutes of General Medical Sciences ................................... $2,593,428
Center for the Spatiotemporal Modeling of Cell Signaling

Cell Biology and Physiology

Oscar Bizzozero
National Multiple Sclerosis Society ........................................... $374,695
Impaired Activity of the Proteasome Activator PA28 in MS
NIH/National Institute of Neurological Disorders and Stroke ................................... $226,500
Cellular, Molecular and Functional Characterization of Proteasomes in EAE
NIH/National Institute of Neurological Disorders and Stroke ................................... $186,863
The Pathogenic Role of Protein Aggregation in Inflammatory Demyelination

Nikki Jernigan
NIH/National Heart, Lung, and Blood Institute ................................... $339,750
Vascular Smooth Muscle Function in Pulmonary Hypertension
NIH/National Heart, Lung, and Blood Institute ................................... $30,200
Vascular Smooth Muscle Function in Pulmonary Hypertension

Eric Prossnitz
NIH/National Cancer Institute ........................................... $303,925
G Protein-Coupled Estrogen Receptor and Breast Carcinogenesis

Benjamin Walker
NIH/National Heart, Lung, and Blood Institute ................................... $270,049
Minority Institutional Research Training Program

Center for Infectious Disease and Immunity

Julie Lovchik
Sandia National Laboratories ........................................... $22,500
Development of a Sustainable Anthrax Diagnostic Test for Countering the Biological Threat

Michelle Ozbun
NIH/National Institute of Allergy and Infectious Diseases ................................... $235,966
Biology of Infectious Disease and Inflammation

Terry Wu
DOD/Defense Threat Reduction Agency ...................................... $2,000,000
Evaluation of Novel Subunit Tularemia Vaccines in Rat & Non-Human Primate Aerosol Infection Models
DOD/Defense Threat Reduction Agency ...................................... $8,732
Evaluation of Novel Subunit Tularemia Vaccines in Rat & Non-Human Primate Aerosol Infection Models
Sandia National Laboratories ........................................... $437,762
Development of a Mesoporous Silica Nanoparticle-Supported Lipid Bilayer Platform for Targeted, Triggered, Sustained and Systemic Delivery of Antibiotics
DOD/Defense Threat Reduction Agency ...................................... $417,123
Evaluation of Novel Subunit Tularemia Vaccines in Rat and Non-Human Primate Aerosol Infection Models

Continuing Medical Education

William Rayburn
Astellas Pharma Global Development, Inc ....................................... $387,830
Immunosuppression for Kidney Transplant Recipients: How to Maximize Outcome and Minimize Graft Failure
AstraZeneca Pharmaceuticals, LP ........................................... $353,000
Using Evidence-Based Treatment to Optimize Control of Elevated Serum Triglycerides
Alexion Pharmaceuticals, Inc ........................................... $250,000
New Horizons in Kidney Transplant: Preventing Antibody-Mediated Rejection in Sensitized Patients
Novo Nordisk, Inc ........................................... $250,000
Individualizing Obesity Management: A Personalized Approach to Pharmacologic Medications for Weight Loss and Comorbid Conditions
Astellas Pharma Global Development, Inc ....................................... $151,160
Blending the Science and Art of Medicine in the Individualized Treatment of Metastatic Castration-Resistant Prostate Cancer: Real Cases, Difficult Choices - You Make the Call
Astellas Pharma Global Development, Inc ....................................... $141,600
Antifungal Pharmacology: Practical Considerations to Maximize Therapeutic Benefit and Tolerability
Teva Pharmaceutical Industries, LTD ........................................... $125,000
Blending the Science and Art of Medicine in the Individualized Treatment of Metastatic Castration-Resistant Prostate Cancer
Celgene Corporation ........................................... $91,875
Therapeutic Strategies in Psoriatic Arthritis
Amgen, Inc ........................................... $37,475
PeerView Video-Therapeutic Strategies in Psoriatic Arthritis: Focus on New Agents

Nikki Jernigan
NIH/National Heart, Lung, and Blood Institute ................................... $30,200
Vascular Smooth Muscle Function in Pulmonary Hypertension

ERIC PROSSNITZ
NIH/National Cancer Institute ........................................... $303,925
G Protein-Coupled Estrogen Receptor and Breast Carcinogenesis

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Nikki Jernigan
NIH/National Heart, Lung, and Blood Institute ................................... $30,200
Vascular Smooth Muscle Function in Pulmonary Hypertension

40 UNIVERSITY OF NEW MEXICO HEALTH SCIENCES CENTER
Janssen Scientific Affairs, LLC .................................................. $30,000
Blending the Science and Art of Medicine in the Individualized Treatment of Metastatic Castration-Resistant Prostate Cancer

Dendreon Corporation ..................................................... $26,160
Blending the Science and Art of Medicine in the Individualized Treatment of Metastatic Castration-Resistant Prostate Cancer

Bayer HealthCare Pharmaceuticals, Inc. .............................. $25,000
Assessing the Clinical Implications of Recent and Late-Breaking Data on Hemophilia Management: What's New From Melbourne?

Chílene Comprehensive Health Care Facility ........................ $1,325
Third International Meeting on Indigenous Women's Health

IHS Piñon Health Center .................................................. $450
Diagnosis and Treatment of Myofascial Pain Syndromes

Tsaille Health Center ...................................................... $275
Third International Meeting on Indigenous Women's Health

NNMC Financial Management Branch ............................... $275
Third International Meeting on Indigenous Women's Health

Lovington Municipal Schools ........................................... $250
44th Annual Carrie Tingley Hospital Winter Conference

Dental Medicine

GARY CUTTRELL
New Mexico Higher Education Department ........................... $1,000,000
UNM Dental Residency Program

Sandoval County .............................................................. $67,200
Dental Services

Albuquerque Public Schools ............................................... $25,000
Dental Hygiene

Artesia General Hospital .................................................. $11,136
Dental Anesthesia Services

CHARLES TATLOCK
New Mexico Department of Health ......................... $234,887
Basic Oral Health Services

The ECHO Institute

SANJEEV ARORA
HHS/Center for Medicare and Medicaid Services ............... $2,806,541
ACA-Project ECHO: A Scalable Model for Increasing Primary Care Capacity

Leona M. and Harry B. Helmsley Charitable Trust ............. $2,170,628
Endocrinology teleECHO Program

Leona M. and Harry B. Helmsley Charitable Trust ............. $2,170,162
Endocrinology teleECHO Program

Leona M. and Harry B. Helmsley Charitable Trust ............. $2,152,912
Endocrinology teleECHO Program

DOD/U.S. Army Medical Command ............................... $262,690
Army ECHO: Intergovernmental Personnel Act

Leona M. and Harry B. Helmsley Charitable Trust ............. $192,600
Project ECHO Planning Grant

DOD/U.S. Army Medical Command ............................... $123,537
Army ECHO: Intergovernmental Personnel Act

DOD/U.S. Army Medical Command ............................... $56,691
Army ECHO: Intergovernmental Personnel Act

DOD/U.S. Army Medical Command ............................... $52,444
Army ECHO: Intergovernmental Personnel Act

DOD/U.S. Army Medical Command ............................... $50,648
Army ECHO: Intergovernmental Personnel Act

DOD/U.S. Army Medical Command ............................... $49,369
Army ECHO: Intergovernmental Personnel Act

DOD/U.S. Army Medical Command ............................... $46,181
Army ECHO: Intergovernmental Personnel Act

MIKIAM KAMAROMY
University of California, Davis .......................... $15,000
Technical Assistance - Project ECHO

Emergency Medicine

LAURA BANKS
New Mexico Transportation Department .................. $200,000
Pedestrian Safety Initiative

New Mexico Crime Victims Reparation Commission ........ $73,000
Intimate Partner Violence Death Review Team Coordination

New Mexico Crime Victims Reparation Commission ........ $73,000
Intimate Partner Violence Death Review Team Coordination

New Mexico Department of Health .......................... $65,000
Hospitals and Health Systems Preparedness

New Mexico Transportation Department .................. $60,000
Railroad Pedestrian Safety Initiative

New Mexico Department of Health .......................... $50,000
Public Health Action Curriculum for Teens

New Mexico Department of Health .......................... $3,500
Medical Reserve Corps Volunteer Capacity-Building Award

DARREN BRAUDE
DOD/Department of the Air Force ......................... $324,384
Educational Service Agreement

DOD/Department of the Air Force ......................... $322,215
Educational Service Agreement

DOD/Department of the Air Force ......................... $294,000
Educational Service Agreement

Bernalillo County Fire Department ......................... $74,437
Medical Directorship

Bernalillo County Fire Department ......................... $63,053
Medical Directorship

Gypsum Medical Associates of New Mexico, PC ........ $52,080
Professional Services
Darren Braude (continued)
City of Albuquerque ............................................................... $27,527
Paramedic Training Program
Gypsum Medical Associates of New Mexico, PC ........................... $26,040
Professional Services
New Mexico Emergency Medical Systems ............................... $13,695
EMS Innovations Conference
City of Rio Rancho ............................................................... $8,000
Professional Services Agreement
Bernalillo County Sheriff’s Department ................................. $6,000
Professional Services Medical Director and SWAT Training
Town of Cochiti Lake ......................................................... $3,450
Medical Director Services
Motion Picture Set Medics, LLC .............................................. $2,604
Professional Services
Cameron Crandall
Shire Human Genetic Therapies, Inc. .................................... $92,531
Clinical Trial Agreement - Phase III
HHS/Centers for Disease Control and Prevention ...................... $30,000
Intergovernmental Personnel Act
Massachusetts General Hospital .......................................... $3,500
Clinical Trial Agreement
Jon Kenneth Flemming
Olive View Medical Center-UCLA ....................................... $7,000
EMERGENCY ID NET
Andrew Harrell
U.S. National Park Service .................................................. $24,000
Grand Canyon National Park - EMS Medical Services
New Mexico Department of Homeland Security & Emergency Management ......................................................... $22,075
Urban Search & Rescue Task Force, Medical Direction
New Mexico Emergency Medical Systems ............................. $5,250
EMS Medical Direction Consortium Field Response Program
U.S. National Parks Service ................................................. $4,090
EMS Refresher Training
Steven Mclaughlin
New Mexico State Fair ....................................................... $49,185
Emergency Medical Services
New Mexico Public Safety Department .................................. $48,000
Medical Direction
City of Rio Rancho ............................................................... $35,000
Medical Director Services
American Medical Response Ambulance Service, Inc .............. $28,642
Professional Services
Valencia Regional Emergency Communication Center ............. $9,000
Medical Director Services
City of Rio Rancho ............................................................... $4,000
Professional Services
Central New Mexico Community College ................................ $3,504
Medical Director - Professional Services
Brian Moore
New Mexico Department of Health ....................................... $50,000
Statewide Emergency Medical Services Medical Direction Project
Robert Sapien
HHS/Health Resources and Services Administration ............... $200,000
New Mexico Child Ready Program
HHS/Health Resources and Services Administration ............... $129,997
EMS for Children State Partnership
New Mexico Department of Health ....................................... $50,000
School Nurse Behavioral Health Training Project
New Mexico Department of Health ....................................... $37,003
Telehealth and the Emergency Care of Acutely Ill or Injured Children: A Pilot Program Aiding Rural and Tribal Facilities to Become Child-Ready
HHS/Health Resources and Services Administration ............... $19,995
EMS for Children State Partnership
New Mexico Department of Health ....................................... $11,105
New Mexico Child Fatality Review Data Organizer
Sara Skarbek-Borowska
New Mexico Department of Health ....................................... $2,531
Helping New Mexico Become Child-Ready: A Pediatric Trauma and Emergency Medicine Course
Family and Community Medicine
Karen Armitage
Robert Wood Johnson Foundation ........................................ $165,000
A Hero for Our Time: Health Extension Health Policy and Health Care
William Athas
New Mexico Department of Health ....................................... $29,909
Geospatial Capacity Building
Antoinette Benton
New Mexico Department of Health ....................................... $472,113
Transdisciplinary Evaluation and Support Clinic
New Mexico Human Services Department ............................. $169,400
Pre-Admission Screening and Resident Review
New Mexico Human Services Department ............................. $50,050
Pre-Admission Screening and Resident Review
New Mexico Human Services Department ............................. $50,050
Pre-Admission Screening and Resident Review
James Cheek
New Mexico Department of Health ....................................... $19,999
CMS Physician Interview Project
Gayle Dine’chacon
HHS/Indian Health Service ................................................ $161,536
American Indians Into Medicine


**DEBORAH HELITZER**  
University of Texas Health Science Center at Tyler  .......................... $88,197  
Evaluation Core of the Southwest Center for Agricultural Health, Injury  
Prevention and Education

**MIRIA KANO**  
Colorado Foundation for Public Health and the Environment ........ $14,993  
ACA-New Mexico LGBT Health Improvement Network

**NIKKI KATALANOS**  
HHS/Health Resources and Services Administration  ............... $121,796  
Physician Assistant in Primary Care

**ARTHUR KAUFMAN**  
Molina Healthcare of New Mexico ................................. $442,980  
Professional Services  
New Mexico Health Insurance Exchange  .................. $375,000  
ACA-Health Insurance Exchange Outreach  
American Academy of Family Physicians  .................. $50,000  
Peers for Progress Economic Evaluation  
Commonwealth Fund .............................................. $35,000  
ACA-Sustainability of the National Primary Care Extension Program  
Molina Healthcare of New Mexico  .................. $25,000  
Care Coordination Services  
National Center for Frontier Communities  .................. $15,000  
National Network for Rural and Frontier Capacity Evaluation and Consultation  
Hidalgo Medical Services  .................. $15,000  
Forward NM Evaluation

**SARAH LATHROP**  
New Mexico Department of Health  ............................ $698,477  
New Mexico Emerging Infections Program

**LAWRENCE LEEMAN**  
Anonymous Non-Profit Foundation  .................. $28,775  
Early Training Grant

**JULIE LUCERO**  
National Congress of American Indians  .............. $95,672  
NARCH VII NCAI: CBPR Dissemination

**MARTHA COLE MCGREW**  
New Mexico Children, Youth and Families Department  ........ $500,000  
Professional Services  
Blue Cross Blue Shield of New Mexico  .................. $219,564  
Care NM Services  
Bernalillo County Juvenile Detention Center  .................. $100,186  
Professional Physician Services  
UNM Medical Group  ............................................. $98,425  
Center for Reproductive Health Memorandum of Agreement  
First Choice Community Healthcare  .................. $54,080  
First Choice Community Healthcare  
New Mexico Corrections Department  .................. $40,000  
Professional Physician Services  
Presbyterian Healthcare Services  .................. $16,200  
Professional Services  
First Choice Community Healthcare  .................. $11,718  
Professional Services Agreement  
Molina Healthcare of New Mexico  .................. $10,000  
Case Management

**JANET PAGE-REEVES**  
National Science Foundation  .................. $732,511  
Understanding the Role of Culture, Identity, Epistemology & Bi-Culture

End of Table

East Central Ministries ................................................ $1,500  
ACA-Culturally Appropriate Options for Diabetes Prevention and Care for Low-Income Latinos

**TASSY PARKER**  
University of Wisconsin ........................................... $29,131  
Healthy Children, Strong Families: American Indian Communities  
Preventing Obesity

**VERONICA PLAZA**  
Southwest Creations Collaborative  .................. $49,000  
Hacia la Universidad in APS

**ROBERT RHYNE JR.**  
HHS/Agency for Healthcare Research and Quality  ............... $274,351  
Health Extension Rural Office: Translating Research Into Localities

**VALERIE ROMERO-LEGOTT**  
HHS/Health Resources and Services Administration  ........ $730,259  
Health Career Opportunity Program  
HHS/Health Resources and Services Administration  ........ $111,764  
Mental Behavior Health Academy

**HELENE SILVERBLATT**  
HHS/Health Resources and Services Administration  ........ $305,010  
ACA-New Mexico Area Health Education Centers

**FRANCISCO SOTO MAS**  
Southwest Center for Agricultural Health, Injury Prevention and Education  ........ $19,967  
Health and Safety Issues in Organic Farming: A Qualitative Study

**KRISTINE TOLLESTRUP**  
HHS/Health Resources and Services Administration  ........ $176,138  
New Mexico MCH Public Health Training Institute  
New Mexico Department of Health  .................. $9,405  
New Mexico Public Health Learning Collaborative

**NINA WALLERSTEIN**  
NIH/National Institute on Drug Abuse  .................. $677,496  
Family Listening Program: Multi-Tribal Implementation and Evaluation  
NIH/National Institute on Drug Abuse  .................. $190,203  
RezRIDERS Project and Program  
San Francisco State University  .................. $40,469  
Distinguished Visiting Professor Agreement  
Healthy Native Communities Partnership, Inc  .................. $17,091  
Healthy Native Communities Partnership
Family and Community Medicine (continued)

**ROBERT WILLIAMS**
NIH/National Institutes of Health .................................................. $349,433
Stereotyping in Medical Student Decision-Making: Presence, Origins and Solutions

**ALLEN ADOLPE**
AbbVie .......................................................... $466,705
Clinical Trial Agreement Phase III

**BINA AHMED**
Hamilton Health Sciences Corp .............................................. $115,932
Clinical Trial Agreement

**SANJEEV ARORA**
American Academy of Pediatrics .............................................. $140,352
Enhancing Child and Youth Epilepsy Care via the ECHO Model
New Mexico Human Services Department ................................ $120,270
Hepatitis C Project
SC Liver Research Consortium, LLC ............................................ $29,124
Clinical Trial Agreement Phase IV
Gilead Sciences .......................................................... $17,820
Clinical Trial Phase III
AbbVie .......................................................... $7,600
Speaker Agreement
Roche Molecular Systems, Inc ............................................. $7,200
Clinical Trial

**EDGAR BOEDEKER**
DVA/Veteran's Administration Medical Center .......................... $123,319
Intergovernmental Personnel Act

**CRISTIAN GEORGE BOLOGA**
Givaudan Flavors Corporation ................................................. $305,000
Givaudan Research Agreement

**STEVEN BRADFUTE**
Los Alamos National Laboratory ................................................ $90,662
Mosaic Glycoprotein as an Immunogen for a Filovirus Vaccine Candidate

**MARK BURGE**
Sanofi US Services, Inc ..................................................... $188,719
Clinical Trial Phase III

**MARCOS BURGOS**
New Mexico Department of Health ........................................ $99,073
Tuberculosis Medical Care, Consultation & Education Services

**KATHLEEN COLLERAN**
Novartis Pharmaceuticals Corporation ..................................... $88,972
Clinical Trial Phase III

**RICHARD CROWELL**
Lovelace Respiratory Research Institute .................................... $53,580
Factors for Epigenetic Silencing of Lung Cancer Genes

**RAVI DURVASULA**
Biomedical Research Institute of New Mexico ......................... $65,000
Antibody-Based Paratransgenics for Pierce's Disease: Advanced Methods for Transmission Blocking and Environmental Monitoring

**MICHELLE HARKINS**
Novartis Pharmaceuticals Corporation ..................................... $28,867
Clinical Trial
New Mexico Department of Health .......................................... $1,582
School Nurse Training Project

**CARLA HERMAN**
Donald W Reynolds Foundation ............................................... $250,000
Next Steps in Physicians’ Training in Geriatrics

**THERESA HEYNEMANN**
Cystic Fibrosis Foundation .................................................. $35,940
CF Care Center Program
KaloBios Pharmaceuticals, Inc ................................................ $32,458
Clinical Trial Agreement Phase II
Cystic Fibrosis Foundation .................................................. $27,000
Program for Adult Care Excellence
The University of Utah ....................................................... $12,000
Multicenter Validation of Predictive Sputum Biomarkers in Cystic Fibrosis

**RICHARD HOFFMAN**
Foundation for Informed Medical Decision Making .................. $30,832
Medical Editor Agreement

**MICHIELLE IANDIORIO**
University of Colorado Denver Anschutz Medical Campus ........ $246,500
New Mexico AIDS Education and Training Center

**PATRICIA KAPSNER**
Novo Nordisk, Inc ....................................................... $265,281
Clinical Trial Agreement Phase III
MannKind Corporation ....................................................... $1,000
Clinical Trial Phase III

**DENECE KEESLER**
HHS/Health Resources and Services Administration ................ $180,000
Radiation Exposure Screening Education Program
Lovelace Respiratory Research Institute .................................... $75,000
Occupational Medicine Services
New Mexico Department of Health ......................................... $35,000
Clinical Prevention Initiative Project
HHS/Health Resources and Services Administration ................ $10,946
Enhance Cancer Screening and Education Program Activities
Johns Hopkins University .................................................... $6,000
Development of a Medical Screening Program for Former LANL & SNL Workers
Lovelace Respiratory Research Institute ..................................... $6,000
Consulting Services
Honeywell Corporation ........................................ $2,500
Honeywell Aerospace of Albuquerque-Clinician Services

IRENA KING
Fred Hutchinson Cancer Research Center .................................. $31,076
TREC Coordination Center

WARREN LASKEY
DVA/Veteran’s Administration Medical Center ........................ $741,549
VA Interventional Cardiology
DVA/Veteran’s Administration Medical Center ........................ $702,593
VA Interventional Cardiology

THOMAS MA
National Institute of Diabetes and Digestive and Kidney Diseases .......................... $299,852
TNF-Alpha Regulation of Intestinal Paracellular Transport

GREGORY MERTZ
NIH/National Institute of Allergy and Infectious Diseases ........... $549,349
Andes Virus Transmission and Pathogenesis in Chile

POPE MOSELEY
Albuquerque Area Indian Health Service .................................. $87,488
IHS Specialty Services
Technical University of Denmark ........................................... $34,363
Professional Services Agreement
Zenith Administrators ................................................... $25,000
Outpatient Professional Services
QTC Medical Group ................................................... $10,750
Second Medical Opinion Evaluations

PRASHANT NIGHOT
National Institute of Diabetes and Digestive and Kidney Diseases ........ $147,916
Role of the Chloride Channel ClC-2 in Intestinal Tight Junction Barrier Recovery

TUDOR OPEA
Technical University of Denmark ........................................... $26,678
Professional Services Agreement
University of Gothenburg ................................................ $25,000
Visiting Scientist Agreement
Rosalind Franklin University of Medicine and Science ........................................... $11,665
Structural and Functional Analysis of Glucose Transporters
AstraZeneca Pharmaceuticals, LP ........................................... $10,000
Database Support

DOUGLAS PERKINS
NIH/Fogarty International Center ........................................... $242,882
Training and Research on Severe Malarial Anemia
NIH/Fogarty International Center ........................................... $216,242
Training and Research on Severe Malarial Anemia
Los Alamos National Laboratory ........................................... $130,088
Characterize the Emergence of Antibiotic Resistance and Virulence in the Immunocompromised Population

ARTI PRASAD
The Bell Group, Inc. .................................................. $25,000
Professional Services: UNMMG Center for Life
The Weil Foundation .................................................. $10,000
Seventh Biennial Symposium of Integrative Medicine Professionals in the Land of Enchantment

ARIEL RIVAS
U.S. Department of Agriculture ........................................... $20,000
Systems Biology-Based Analysis of Animal Infectious Diseases Conference

MARK ROHRSCEIB
Dialysis Clinic, Inc. .................................................. $57,679
Post-Doctoral Fellowship

DAVID SCHADE
George Washington University .............................................. $629,972
Glycemia Reduction Approaches in Diabetes: A Comparative Effectiveness Study
NIH/National Institute of Diabetes and Digestive and Kidney Diseases ........................................ $386,015
Diabetes Prevention Program Outcomes Study
Case Western Reserve University ........................................... $116,744
Epidemiology of Diabetes Intervention and Complications
Case Western Reserve University ........................................... $44,435
Hearing Impairment in Long-Term Type I Diabetes
Case Western Reserve University ........................................... $9,690
Epidemiology of Diabetes Intervention and Complications
University of South Florida .............................................. $2,000
Type I Diabetes TrialNet

AKSHAY SOOD
Miners Colfax Medical Center .............................................. $98,743
Medical Consultation and Care
NIH/National Institute of Environmental Health Sciences ........................................ $15,000
Household Air Pollution from Solid Fuel Combustion Smoke and Global Health Equality
Miners Colfax Medical Center .............................................. $605
ACA-Building Capacity for Novel Screening Delivery for Chronic Conditions to Benefit Miners in New Mexico

KARLA THORNTON
McCune Charitable Foundation .............................................. $15,000
The New Mexico Peer Education Project

MARK UNRUH
Baystate Medical Center ................................................ $207,696
ACA-Shared Decision Making and Renal Supportive Care
Dialysis Clinic, Inc. ................................................ $184,574
DCI Biostatistician
Dialysis Clinic, Inc. ................................................ $157,594
Predicting Chronic Kidney Disease in an Underserved Population
Dialysis Clinic, Inc. ................................................ $155,100
DCI Medical Directorship and QA
Dialysis Clinic, Inc. ................................................ $86,435
Salary Support
Dialysis Clinic, Inc. ................................................ $60,000
ENaC as a Novel Mechanism for Hypertension and Volume Expansion in Type II Diabetes

Debbie Lovato and Virginia Severns, MS
Internal Medicine (continued)

**BRUCE WILLIAMS**
HHS/Health Resources and Services Administration ........................................ $694,866
Comprehensive HIV Early Intervention Services/ Ryan White Part C Outpatient EIS Program
HHS/Health Resources and Services Administration ........................................ $472,628
Coordinated Services and Access to Research for Women, Infants, Children & Youth

**PHILIP ZAGER**
Dialysis Clinic, Inc. .......................................................... $715,105
Medical Directorship and QA

**Molecular Genetics and Microbiology**

**KIRAN BHASKAR**
NIH/National Institute of Neurological Disorders and Stroke ......................... $330,313
The Role of Inflammasome Signaling in Tauopathies

**JUDY CANNON**
NIH/National Institute of Allergy and Infectious Diseases .......................... $377,500
The Role of PKCtheta in T-Cell and T-ALL Migration

**BRYCE CHACKERIAN**
NIH/National Institute of Allergy and Infectious Diseases .......................... $281,041
A VLP-based Platform for Vaccine Discovery
Sandia National Laboratories .................................................. $30,000
Characterization of Nanoparticle-Based Nerve Agent Countermeasures
Sandia National Laboratories .................................................. $15,000
Characterization of Nanoparticle-Based Nerve Agent Countermeasures
Sandia National Laboratories .................................................. $10,000
Characterization of Nanoparticle-Based Nerve Agent Countermeasures

**VOJO DERTIC**
NIH/National Institute of Allergy and Infectious Diseases .......................... $656,042
Autophagy Against Tuberculosis and HIV
NIH/National Institute of Allergy and Infectious Diseases .......................... $399,998
Pattern Recognition Receptors and Autophagy in Mtbc Control in AIDS
NIH/National Institute of Allergy and Infectious Diseases .......................... $70,715
Pattern Recognition Receptors and Autophagy in Mtbc Control in AIDS

**JEREMY EDWARDS**
NIH/National Human Genome Research Institute ........................................ $450,000
Haplotyping Resolved Sequencing Technology

**CAROLYN MOLD**
Sandia National Laboratories .................................................. $150,000
CB-SEED-25 Universal Nano-Adjuvant System

**JOHN O’ROURKE**
Leidos, Inc. ........................................................................ $12,000
Construction of N-Terminal MS2/PP7 Libraries

**MARY ANN OSLEY**
NIH/National Institute of General Medical Sciences ................................. $340,587
Genetic Analysis of H2B Ubiquitylation in Yeast

**MICHELLE OZBUN**
NIH/National Institute of Dental and Craniofacial Research ....................... $188,750
Targeted Therapy for EGFR Pathway in HPV + HNSCCs
NIH/National Cancer Institute ................................................................ $33,441
Regulation of Human Papillomavirus Replication via Cell Signaling Pathways
New Mexico Biopark Society .................................................................. $12,144
Detection of Elephant Endotheliotropic Herpes Viruses Strains EEHV1A and EEHV1B in ABQ BioPark Elephants
Novartis ......................................................................................... $3,080
Cyclophilin Inhibition of HPV Infection

**XUEXIAN YANG**
American Lung Association .................................................................. $40,000
Counter-Regulation of Allergic Asthma

**Neurology**

**COREY FORD**
Biogen Idec .............................................................................. $245,813
Clinical Trial Agreement
Novartis ....................................................................................... $222,936
Clinical Trial Phase III
Genentech, Inc. ........................................................................... $163,567
Clinical Trial Phase III
Novartis ....................................................................................... $47,988
Clinical Trial Agreement Phase III
University of Michigan ......................................................................... $3,000
Purchase Service Agreement

**BRANKO HUISA**
University of Arizona ......................................................................... $147,600
Platelet-Oriented Inhibition in New TIA and Minor Ischemic Stroke
AstraZeneca Pharmaceuticals, LP ...................................................... $43,090
Clinical Trial Phase III

**MOLLY KING**
Yale University ........................................................................... $1,212
Insulin Resistance Intervention after Stroke Trial

**JIM LIU**
NIH/National Institute of General Medical Sciences ............................... $1,061,222
Integrative Program in CNS Pathophysiology Research

**LESLIE MORRISON**
University of California, San Francisco ................................................. $290,006
Modifier Genes as Biomarkers for Cerebral Cavernous Malformation Progression
University of California, San Francisco ................................................. $15,165
Modifier Genes as Biomarkers for Cerebral Cavernous Malformation Progression
University of Rochester .......................................................................... $12,080
FOR-DMD: Double-Blind Randomized Trial to Optimize Steroid Regimen in Duchenne Muscular Dystrophy
University of Rochester .......................................................................... $8,000
MDA Travel Support for FOR-DMD: Double-Blind Randomized to Optimize Steroid Regimen in Duchenne Muscular Dystrophy

**SULOJIT PAUL**
NIH/National Institute of Neurological Disorders and Stroke .................. $327,010
Role of Brain-Specific Tyrosine Phosphatase STEP in Neuroprotection and Death
JOHN PHILLIPS
The Mind Research Network ........................................... $134,549
MRN Medical Director
Pharm-Olam International ............................................ $47,962
Clinical Trial Phase III
Pharm-Olam International ............................................ $30,976
Clinical Trial Phase III
The Mind Research Network ........................................ $1,207
MRN Medical Director

RANJANA PODDAR
NIH/National Institute of Neurological Disorders and Stroke ........ $330,313
Hyperhomocysteinemia and Ischemic Stroke

STEVEN POSSE
Rigshospitalet ................................................................. $39,272
Epilepsy by Brain Imaging-Focus on Simultaneous EEG & fMRI
University of Minnesota .............................................. $23,224
Magnetic Resonance Spectroscopy of Breast Cancer Using Model-Based Localization

GARY ROSENBERG
NIH/National Institute of Neurological Disorders and Stroke ......... $471,531
Bio-Markers for White Matter Injury in Mixed and Vascular Cognitive Impairment
NIH/National Institute of Neurological Disorders and Stroke ........ $330,313
White Matter Hypoxia in Novel Model of MMP - Mediated Inflammation Shift/SP
The Mind Research Network .......................................... $119,162
Administrative Operations
U.S.-Israel Binational Science Foundation ............................. $22,230
Blood-Brain Barrier Permeability Abnormalities and Post-Stroke Cognitive Decline
The Mind Research Network .......................................... $19,443
Administrative Operations
Eastern New Mexico Medical Center .................................. $5,000
Professional Services

JENNIFER ANN VICKERS
New Mexico Department of Health .................................... $131,875
Children’s Medical Services

Neurosciences

ANDREA ALLAN
NIH/National Institute of Environmental Health Sciences ............ $302,138
Epigenetic Changes in the Glucocorticoid Receptor Gene Due to Arsenic Exposure
NIH/National Institute of Environmental Health Sciences ............ $30,214
Epigenetic Changes in the Glucocorticoid Receptor Gene Due to Arsenic Exposure
NIH/National Institute of Mental Health ................................ $29,301
The Epigenetic Link Between Environmental Exposure and Adult-Onset Depression
NIH/National Institute of Mental Health ................................ $28,501
The Epigenetic Link Between Environmental Exposure and Adult-Onset Depression
NIH/National Institute of Environmental Health Sciences ............ $26,873
Epigenetic Changes in the Glucocorticoid Receptor Gene Due to Arsenic Exposure

JONATHAN BRIGMAN
NIH/National Institute on Alcohol Abuse and Alcoholism ............. $153,153
Corticostrital Networks and NMDAR Medication of Habitual and Flexible Action in the Mouse

LEE ANNA CUNNINGHAM
NIH/National Institute on Alcohol Abuse and Alcoholism ............. $334,368
Prenatal Alcohol and Adult Hippocampal Neurogenesis - MPI

ERIN MILLIGAN
NIH/National Institute on Drug Abuse .................................. $321,363
Spinal Neuroimmune Mechanisms Underlying IL-10 Gene Therapy for Pain Control
STC@UNM ................................................................. $25,000
NorBirt & DANBIRT Therapeutics to Control Chronic Neuropathic Pain

NORA PERRONE-BIZZOZERO
NIH/National Institute on Drug Abuse .................................. $411,355
Competing Roles of MicroRNAs and RNA-Binding Proteins in Drug Addiction
The Mind Research Network .......................................... $55,052
Minig the Genomewide Scan: Genetic Profiles of Structural Loss in Schizophrenia
NIH/National Institute on Drug Abuse ................................ $31,710
Competing Roles of MicroRNAs and RNA-Binding Proteins in Drug Addiction

DANIEL SAVAGE
NIH/National Institute on Alcohol Abuse and Alcoholism ............. $295,062
Fetal Ethanol Effects on Histaminergic Regulation of Neurotransmission

CLAUDE SHUTTLEWORTH
NIH/National Institute of Neurological Disorders and Stroke ........ $315,627
Spreading Depolarizations and Post-Ischemic Injury
NIH/National Institute of Neurological Disorders and Stroke ........ $32,659
Adenosine Receptor Activation in Spreading Depolarization and Ischemic Injury

CARLOS VALENZUELA
NIH/National Institute on Alcohol Abuse and Alcoholism ............. $388,990
Alcohol and Cerebellar Circuits
NIH/National Institute on Alcohol Abuse and Alcoholism ............. $377,311
Alcohol and Cerebellar Circuits
NIH/National Institute on Alcohol Abuse and Alcoholism ............. $302,145
Alcohol and Developing Neuronal Circuits
NIH/National Institute on Alcohol Abuse and Alcoholism ............. $142,451
Alcohol Research Training in Neuroscience
NIH/National Institute on Alcohol Abuse and Alcoholism ............. $84,466
Alcohol and Cerebellar Circuits
NIH/National Institute on Alcohol Abuse and Alcoholism ............. $23,500
Alcohol and Developing Neuronal Circuits

JASON PORTER WEICK
American Heart Association ............................................. $140,000
Functional Integration of Induced Pluripotent Stem Cell-Derived Neurons in a Cell Replacement Therapy for Stroke
Neurosurgery

DENIS BRAGIN
American Heart Association ............................................. $140,000
Mitigation of Brain Microvascular Shunting by DRPs

ANDREW PHILLIP CARLSON
Edge Therapeutics .......................................................... $119,557
Clinical Trial Phase I

JEFF HILL
Tarix Pharmaceuticals, LLC ................................................. $66,588
Evaluation of Therapeutic Peptides in Acute Stroke and Multiple Sclerosis Models

MARC MALKOFF
University of Cincinnati ..................................................... $87,603
Ethnic/Racial Variations of Intracerebral Hemorrhage Clinical (per patient part)
University of Cincinnati ..................................................... $55,124
Ethnic/Racial Variations of Intracerebral Hemorrhage
University of Minnesota ..................................................... $31,485
Antihypertensive Treatment of Cerebral Hemorrhage

EDWIN NEMOTO
Rio Grande Neurosciences, Inc. ............................................. $75,454
PEMF in TBI and CVA and NeuroInflammation

TAMARA ROITBAK
NIH/National Institute of Neurological Disorders and Stroke ............................................. $330,313
In-Vivo Inhibition of Specific microRNAs

CHRISTOPHER TAYLOR
Johns Hopkins University ..................................................... $142,558
MISTIE III A Phase III Randomized, Open-Label, 500-Subject Clinical Trial of Minimally Invasive Surgery Plus rt-PA in the Treatment of Intracerebral Hemorrhage

HOWARD YONAS
Presbyterian Healthcare Services ........................................... $1,420,000
Professional Services/Consultations
U.S. Department of Veterans Affairs ....................................... $167,133
Provide Neurosurgery Services for NMVAHCS
U.S. Department of Veterans Affairs ....................................... $159,174
Provide Neurosurgery Services for NMVAHCS
U.S. Department of Veterans Affairs ....................................... $83,566
Provide Neurosurgery Services for NMVAHCS
Health South Rehabilitation Hospital ..................................... $36,000
Medical Director

U.S. Department of Veterans Affairs ....................................... $27,855
Provide Neurosurgery Services for NMVAHCS
U.S. Department of Veterans Affairs ....................................... $26,529
Provide Neurosurgery Services for NMVAHCS
U.S. Department of Veterans Affairs ....................................... $26,529
Provide Neurosurgery Services for NMVAHCS
New Mexico Department of Health ....................................... $16,860
UNM Pain Center Naloxone Co-Prescription Pilot Project

New Mexico Tumor Registry

CHARLES WIGGINS
NIH/National Cancer Institute ............................................... $2,644,915
SEER Surveillance, Epidemiology and End Results
NIH/National Cancer Institute ............................................... $2,395,196
Core Infrastructure Support for Surveillance, Epidemiology and End Results
NIH/National Cancer Institute ............................................... $22,346
SEER Patterns of Care/Quality of Care Study
New Mexico Department of Health ....................................... $6,330
Data Surveillance & Tracking Services for DOH BCC and CRC Programs
U.S. Department of Justice .................................................. $2,000
Radiation Exposure Compensation Program

Obstetrics and Gynecology

EVE ESPEY
Anonymous Sponsor .......................................................... $336,011
Fellowship in Family Planning
Anonymous Non-Profit Foundation .......................................... $250,000
Clinic Construction and/or Lease Support
Anonymous Non-Profit Foundation .......................................... $97,636
Fellowship
The University of Utah ....................................................... $24,570
Research Agreement
Association of Professors-Gynecology/Obstetrics .................. $12,269
Evaluation of a Simulation-Based Patient Safety Curriculum to Improve Resident Self-Efficacy

YUKO KOMESU
NIH/National Center for Complementary and Alternative Medicine ............................................. $363,271
Brain-Centered Therapy Versus Medication for Urgency Urinary Incontinence: An RCT

ELLEN MOZURKIEWICH
rEVO Biologics, Inc. ............................................................ $4,230
Clinical Trial - Phase III

JOSEPH OGBURN
Alpha Omega Alpha ........................................................... $2,000
Increasing Long-Acting Reversible Contraception: Use With Improved Contraception Counseling Among Methadone-Using Women

VALERIE RAPPAPORT
Illumina, Inc. ................................................................. $8,305
Clinical Trial Phase III

WILLIAM RAYBURN
New Mexico Department of Health ....................................... $260,100
Prenatal Medical Services Project
Planned Parenthood of New Mexico ....................................... $96,200
Professional Services
Albuquerque Area Indian Health Service ................................ $66,751
IHS Specialty Services
First Choice Community Healthcare ........................................... $77,162

Midwifery Services

New Mexico Department of Health ........................................ $15,960

High-Risk Prenatal Care

Hidalgo Medical Services ...................................................... $710

Advanced Life Support in Obstetrics

Crownpoint Healthcare Facility ............................................. $395

Advanced Life Support in Obstetrics

**REBECCA ROGERS**

NIH/National Institute of Child Health and Human Development ... $298,988

RCT of Hypnotherapy vs. Tolterodine for OAB: Voiding and Brain Activation Changes

RTI International ............................................................. $290,035

Pelvic Floor Disorders Network Center Grant (ESTEEM Study)

Brown University ............................................................. $6,395

Tailored Outcomes for Female Urinary Incontinence

**RAJEEV HARAL Singh**

Society of Family Planning .................................................. $70,000

Nitrous Oxide for Essure Sterilization Trial

Society of Family Planning .................................................. $68,518

Post-Partum IUD Insertion Pain Study

Society of Family Planning .................................................. $15,000

Nitrous Oxide for Pain Management of IUD Insertion in Nulliparous Women

Society of Family Planning .................................................. $1,482

Post-Partum IUD Insertion Pain Study

**Office of the Medical Investigator**

**MICHELLE BARRY**

National District Attorneys Association ................................ $2,700

National District Attorneys Association Faculty Contract

**WENDY HONEYFIELD**

New Mexico Department of Health ........................................ $3,433

New Mexico Sudden Unexpected Infant Death Registry

**EVAN MATZES**

New Mexico Public Safety Department ................................... $12,000

Paul Coverdell Forensic Science Improvements Grants Programs

**KURT NOLTE**

Portland State University ................................................... $16,776

Acute Alcohol Use and Suicide

**LOIS PROE**

New Mexico Department of Health ....................................... $7,367

New Mexico Violent Death Reporting System

**ROSS ZUMWALT**

DVA/Veteran’s Administration Medical Center ........................ $75,832

Provide Autopsy Services for POWs

New Mexico Crime Victims Reparation Commission ............... $44,546

Grief Intervention for Homicide Survivors

DVA/Veteran’s Administration Medical Center ........................ $26,091

Provide Autopsy Services for POWs

New Mexico Department of Health ....................................... $19,285

New Mexico Sudden Unexpected Infant Death Registry

New Mexico Crime Victims Reparation Commission ............... $13,364

Grief Intervention for Homicide Survivors

U.S. Attorney’s Office ...................................................... $10,000

Expert Witness Testimony for U.S. Attorney

**Orthopaedics**

**THOMAS DECOSTER**

U.S. Department of Justice ............................................... $19,995

Expert Witness

Center for Orthopaedic Trauma ........................................... $5,000

Orthopaedic Trauma Fellowship Grant

**BURKE GURNEY**

Langford Consulting, Inc .................................................. $16,461

Jones Professional Services Agreement

Langford Consulting, Inc .................................................. $14,820

Jones Professional Services Agreement

Biomedical Research Institute of New Mexico ....................... $2,621

Exercise Interventions During Voluntary Weight Loss in Obese Older Adults

**CHRISTOPHER HANOSH**

Stryker Orthopaedics ..................................................... $1,000

Orthopaedic Grand Rounds and Resident Lectures

**ANTONY KALLUR**

The University of Iowa ................................................... $1,152

(BRAIST II) Radiographic Status of Subjects and Change in Cobbangle at a Minimum of 2 Years After Termination from BRAIST

**ROBERT SCHENCK**

ExplorAbilities, Inc ..................................................... $14,550

Professional Services

**GEHRON TREME**

Stryker Orthopaedics ..................................................... $10,844

AAOS Annual Meeting

Stryker Orthopaedics ..................................................... $2,771

Educational Grant - Musculoskeletal Pathology Conference

Stryker Orthopaedics ..................................................... $1,801

Educational Grant - International Pediatric Orthopaedics Symposium to Fund Residents

**DANIEL WASCHER**

U.S. Department of Justice ............................................... $18,390

Expert Witness Testimony

Smith & Nephew, Inc ..................................................... $18,000

Educational Grant-Following Support Program

**Pathology**

**MICHELLE BARRY**

Intersociety Council for Pathology Information ...................... $1,000

Medical Student Interest Group

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**Suzy Davies, PhD**
### Pathology (continued)

**Elaine Bear**
NIH/National Institute of Mental Health ........................................... $480,333
Live Imaging of Brain Circuitry in Mouse Models of PTSD

**Therese Bocklage**
Liedos Biomedical Research, Inc. ..................................................... $37,841
ARRA-TCGA Tissue Source Site-UNM

**Douglas Clark**
TriCore Reference Laboratories ........................................................ $2,184,609
Medical Direction
United Blood Services ................................................................. $298,261
Professional Services

**Vittorio Cristini**
National Science Foundation ......................................................... $422,472
Collaborative Research: Multiscale Modeling of Mammary Gland Development
University of Southern California ...................................................... $106,076
Multi-Scale Complex Systems Transdisciplinary Analysis of Response to Therapy
Methodist Hospital Research Institute .............................................. $70,724
Center for Transport Oncophysics (PSOC)
Methodist Hospital Research Institute .............................................. $49,638
Center for Systematic Modeling of Cancer Development
SK Infrared LLC .............................................................................. $49,000
Dynamic Infrared Imaging of Skin Cancer
Methodist Hospital Research Institute .............................................. $39,938
Center for Oncophysics: PSOC Expansion
The Methodist Hospital ................................................................. $33,987
Predictive Physical Modeling of Chemotherapeutic Drug Transport and Tumor Response
University of Texas Health Science Center at Houston ....................... $13,581
Texas Center for Cancer Nanomedicine
Methodist Hospital Research Institute .............................................. $8,486
Center for Oncophysics: PSOC Expansion

**Kendall Crookston**
Blood Systems Foundation .............................................................. $82,620
Transfusion Medicine Fellowship

**Tracy Irene George**
Allakos, Inc. .................................................................................... $55,000
Phenotyping and Cell Signaling Pathways in Human Mast Cells and Mast Cell Disease

**Patti Gravitt**
University of Maryland ............................................................... $14,833
Vaginal Microbiota, Immune Responses and Vulvovaginal Symptoms During Menopause

**Glynnis Ingall**
Crowpoint Healthcare Facility ......................................................... $38,400
Laboratory Directorship
Crowpoint Healthcare Facility ......................................................... $3,200
Laboratory Directorship

**Sarah Lathrop**
New Mexico Department of Health .................................................. $172,285
ACA-New Mexico Emerging Infections Program

**Diane Lidke**
NIH/National Institute of General Medical Sciences ......................... $285,264
Single Molecule Imaging to Quantify FCRI Signaling Dynamics
Human Frontier Science Program ....................................................... $110,000
Nano-Mechano-Biology: Spatiotemporal Remodeling of Membrane Nanoplastforms Under Mechanical Forces
University of Texas Health Science Center at Houston ....................... $25,012
Mechanisms of Apoptotic Calcium Signaling
NIH/National Institute of General Medical Sciences ......................... $18,542
Single Molecule Imaging to Quantify FCRI Signaling Dynamics

**Kurt Nolte**
Research Institute at Nationwide Children’s Hospital ......................... $10,000
Pediatric CT Scan Study
University of Maryland ................................................................. $1,220
Computer-Assisted Identification Project

**Larry Sklar**
Lovelace Biomedical and Environmental Research Institute ................ $82,875
Detection and Usage of Novel Compounds to Stimulate NLRP3 Inflammasome Activity

**Angela Wandinger-Ness**
NIH/National Institute of General Medical Sciences ......................... $634,872
Academic Science Education and Research Training
NIH/National Cancer Institute ......................................................... $71,444
Capitilizing on NSAID Enantiomer Selectivity for Cancer Prevention and Therapy
NIH/National Institute of Dental and Craniofacial Research ................ $31,146
OFD1 as Constituent of a Multimeric Protein Complex in Odontoblast Primary Cilia

**Cosette Wheeler**
NIH/National Institute of Allergy and Infectious Diseases .................. $2,597,969
Interdisciplinary HPV Prevention Center
NIH/National Institute of Allergy and Infectious Diseases .................. $2,545,494
Epidemiology and Prevention Interdisciplinary Center for Sexually Transmitted Infections

**Bridget Wilson**
Los Alamos National Laboratory ...................................................... $113,500
Three-Dimensional Molecular Tracking of IgE-Fc3RI in Live Cells

**Stephen Young**
Nano MR ....................................................................................... $174,050
Specimen Acquisition Study to Evaluate the NanoMR Pathogen Detection System

**Ross Zumwalt**
New Mexico Department of Health .................................................. $25,000
Public Health Preparedness and Response to Bioterrorism
U.S. Attorney’s Office ................................................................. $20,000
Expert Witness Testimony
New Mexico Crime Victims Reparation Commission ........................................... $8,909
Grief Intervention for Homicide Survivors

**Pediatrics**

**SHIRLEY ABRAHAM**
Oregon Health & Science University ................................................................. $34,250
Regional Hemophilia Network-Mountain States
University of Colorado .................................................................................... $29,520
Preventions of Complication in Hemophilia Through HTCS
American Thrombosis and Hemostasis Network ......................................... $17,500
ATHN Data Quality Counts
University of Colorado Denver ........................................................................ $13,080
Prevention of Complication in Hemophilia Through HTCS

**KOH BOAYUE**
Children's Hospital of Philadelphia ................................................................ $127,500
Clinical Trial Agreement
St. Baldrick's Foundation ............................................................................... $52,500
St. Baldrick's Infrastructure Grant
Children's Hospital of Philadelphia ............................................................... $20,000
Clinical Trial Phase III
Children's Hospital of Philadelphia ............................................................... $15,200
Clinical Trial
Children's Hospital of Philadelphia ................................................................ $10,000
Health Effects After Anthracycline and Radiation Therapy: Dexrazoxane and Prevention of Anthracycline
Children's Hospital of Philadelphia ............................................................... $6,000
Clinical Trial Phase II
Children's Hospital of Philadelphia ................................................................ $3,800
Health Effects after Anthracycline and Radiation Therapy: Dexrazoxane and Prevention of Anthracycline

**FRANCINE CAFFEY**
New Mexico Department of Health .................................................................. $9,337
Summer Asthma Institute Project

**LORETTA CORDOVA DE ORTEGA**
New Mexico Department of Health ................................................................ $317,555
Children's Medical Services Outreach Clinics Project
Molina Healthcare of New Mexico .................................................................. $60,000
In-Home Assessments
Children's National Medical Center ................................................................ $40,000
Professional Services
Gerald Champion Regional Medical Center .................................................. $25,000
Professional Services
San Juan Regional Medical Center ............................................................... $25,000
Professional Services Agreement
Taos Clinic for Children and Youth .............................................................. $10,000
Professional Services via Telemedicine
PHC-Las Cruces, Inc. ....................................................................................... $5,610
Professional Services/Consultations
Northern Navajo Medical Center ............................................................... $4,800
Pediatric Genetics Clinics
Mountain View Regional Medical Center .................................................... $2,500
Professional Services

**ANDREA DUNCAN**
New Mexico Department of Health ................................................................. $118,000
Developmental Care Continuity Program

New Mexico Department of Health ................................................................. $70,640
Developmental Care Continuity Program

**BETH GOENS**
Ben Archer Health Center, Inc. ....................................................................... $550
Professional Service Agreement

**RANDY HEIDENREICH**
New Mexico Department of Health ................................................................ $116,472
CMS Newborn Screening

**ALBERTA KONG**
Del-Jen, Inc. ..................................................................................................... $77,376
Albuquerque Job Corps

**JANE McGrath**
New Mexico Human Services Department .................................................. $1,100,000
Envision New Mexico: The Initiative for Child Healthcare Quality
New Mexico Department of Health ............................................................... $292,857
School-Based Health Center Health Provision in the Schools
New Mexico Human Services Department .................................................. $259,097
School-Based Health Center Behavioral Health Quality Improvement
New Mexico Department of Health ............................................................... $200,000
Office of School and Adolescent Health
New Mexico Department of Health ............................................................... $122,857
School-Based Health Center Health Provision in the Schools
Molina Healthcare of New Mexico ................................................................. $100,000
Molina Quality Improvement Project with Envision New Mexico
New Mexico Department of Health ............................................................... $75,000
Teen Outreach Program
New Mexico Department of Health ............................................................... $52,000
Race to the Top Early Learning Challenge
New Mexico Public Education Department .................................................. $50,000
GRADS Program
AcademyHealth .............................................................................................. $38,000
Analysis of Welligent Data
New Mexico Department of Health ............................................................... $5,000
Zip to Health Resource Guides

**ESMERALDA ELISA Morales**
HHS/Health Resources and Services Administration .................................... $333,642
New Mexico Pediatric Pulmonary Center
HHS/Health Resources and Services Administration .................................... $292,866
New Mexico Pediatric Pulmonary Center
MARY RAMOS
New Mexico Department of Health ........................................ $25,000
New Mexico School Nurse Workforce Survey

BETSY VANLEIT
Nova Southeastern University ............................................. $2,500
Amputation and Prosthetic Evidence-Based Medicine

KRISTI WATTERBERG
NIH/National Heart, Lung, and Blood Institute .......................... $398,621
Adrenal Function and Adverse CV Outcomes at Age 6 After Extremely Preterm Birth
NIH/National Heart, Lung, and Blood Institute .......................... $374,693
Adrenal Function and Adverse CV Outcomes at Age 6 After Extremely Preterm Birth
NIH/National Institute of Child Health and Human Development ... $286,230
Cooperative Multicenter Neonatal Research Network
Research Triangle Institute .................................................... $104,968
Cooperative Multicenter Neonatal Research Network
Wayne State University ....................................................... $2,507
Effect of Hydrocortisone on the Cardiac Mass of Premature Incubated Infants

STUART WINTER
New Mexico Department of Health ................................. $15,000
Children's Medical Services - Camp Enchantment

CRAIG WONG
National Institute of Diabetes and Digestive and Kidney Diseases .... $555,246
Pediatric Investigation for Genetic Factors Linked with Renal Progression
The Children's Mercy Hospital ............................................. $56,723
CkID Clinical

Pediatrics Center for Development & Disability

TANYA BAKER-MCUE
New Mexico Human Services Department ......................... $900,000
Mi Via
New Mexico Division of Vocational Rehabilitation ................. $400,000
DVR Project Search
New Mexico Division of Vocational Rehabilitation ................. $150,000
DVR Project Search

SOPHIE BERTRAND
New Mexico Children, Youth and Families Department ............... $1,607,516
ACA Home Visiting Training
New Mexico Children, Youth and Families Department ............... $1,508,000
Family Child Care
New Mexico Children, Youth and Families Department ............... $150,000
ACA Early Childhood ECHO
New Mexico Department of Health ........................................ $30,400
Statewide Transition Coordination
New Mexico Children, Youth and Families Department ............... $16,500
Reflective Supervision NM Tiered Quality Rating & Improvement System

ANTHONY CAHILL
New Mexico Human Services Department .............................. $250,000
Increasing the Quality of Life of New Mexicans with Brain Injuries and Caregivers Through Effective Support Services
American Association on Health and Disability ....................... $179,524
Project Accessibility USA: Health Promotion for Women with Disabilities
New Mexico Governor’s Commission on Disability ........................................ $94,550  
Support for the Southwest Disability Conference

New Mexico Developmental Disabilities Planning Council ............................ $12,000  
Support for New Mexicans With Disabilities at the Southwest Disability Conference

**CATHERINE McCCLAIN**

New Mexico Department of Health .................................................. $3,313,822  
DOH Autism Programs

New Mexico Department of Health .................................................. $1,269,750  
Early Childhood Evaluation Program State General, Part B and Part C

New Mexico Department of Health .................................................. $1,269,750  
Early Childhood Evaluation Program

New Mexico Department of Health .................................................. $878,931  
MFCMP Program

HHS/Health Resources and Services Administration ............................ $670,480  
NM LEND: Leadership Education in Neurodevelopmental Disabilities

Navajo Nation .............................................................................. $598,647  
Growing in Beauty Program Therapy Services

HHS/Administration for Children and Families .................................. $335,215  
University Centers for Excellence in Developmental Disabilities Education

New Mexico Department of Health .................................................. $513,600  
Race To The Top Early Learning Challenge

New Mexico Department of Health .................................................. $496,415  
Employment Institute

New Mexico Public Education Department ........................................ $478,548  
Contract

New Mexico Department of Health .................................................. $334,894  
Administration of the Supports Intensity Scale in New Mexico

Utah State University ........................................................................ $272,950  
Indian Children’s Program

New Mexico Department of Health .................................................. $158,000  
Race to the Top Early Learning Challenge

New Mexico Public Education Department ........................................ $53,640  
Pre-K Race to the Top Early Learning Challenge (FOCUS TQRIS)

New Mexico Department of Health .................................................. $20,000  
DDSD Statewide Training Database

Association of Maternal and Child Health Programs ......................... $20,000  
New Mexico Act Early State Systems Team

**MARCIA MORIARTA**

New Mexico Children, Youth and Families Department ....................... $939,672  
ACA-Nurse Family Partnership Program

New Mexico Children, Youth and Families Department ....................... $704,754  
ACA-Nurse Family Partnership Program

New Mexico Children, Youth and Families Department ....................... $344,554  
ACA-Nurse Family Partnership Program

New Mexico Children, Youth and Families Department ....................... $325,000  
Infant Mental Health Clinical Training

New Mexico Children, Youth and Families Department ....................... $200,000  
Infant Mental Health Community of Practice

New Mexico Children, Youth and Families Department ....................... $150,000  
Infant Mental Health Team

New Mexico Children, Youth and Families Department ....................... $25,000  
Infant Mental Health Treatment

**PAT OSBORN**

U.S. Department of Education ...................................................... $100,912  
Project for New Mexico Children Who Are Deaf-Blind

Rio Rancho Public Schools ............................................................. $31,130  
Rio Rancho Consultations

Santa Fe Public Schools .............................................................. $25,652  
Santa Fe Consultations

Portales Municipal School District .................................................. $9,246  
Portales Consultations for Autism

Las Vegas City Schools ............................................................... $7,886  
Las Vegas Schools Consultation on Autism

Lovington Municipal Schools ......................................................... $6,281  
Lovington Schools Consultation

Santa Rosa Consolidated Schools ................................................... $3,980  
Santa Rosa Consultations

Albuquerque Public Schools ......................................................... $3,300  
Albuquerque Public Schools Consultations

Hagerman Municipal Schools ......................................................... $2,280  
Hagerman Schools Consultation

**PEDIATRICS PREVENTION & POPULATION SCIENCES**

**THERESA CRUZ**

New Mexico Human Services Department ................................... $75,916  
CHILE Plus, Social Marketing and Statewide SNAP-ED Evaluation

New Mexico Coalition of Sexual Assault Programs, Inc. .................... $65,219  
Sexual Violence Prevention Statewide Coordination

New Mexico Coalition of Sexual Assault Programs, Inc. .................... $65,219  
Sexual Violence Prevention Statewide Coordination

New Mexico Department of Health ................................................ $43,000  
Prevention Research Center Sexual Violence Prevention Technical Assistance Project

New Mexico Department of Health ................................................ $14,000  
Prevention Research Center Sexual Violence Prevention Technical Assistance Project

**SALLY DAVIS**

HHS/Centers for Disease Control and Prevention ............................ $750,000  
Prevention Research Center Core & Village Interventions and Venues for Activity II

HHS/Centers for Disease Control and Prevention ............................ $535,610  
Prevention Research Center

New Mexico Department of Health ................................................ $127,857  
ACL School-Based Health Centers Projects

United Way .................................................................................... $120,000  
Promoting Healthy Lives (ACL Teen Centers)

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Rebecca Selman, RN
Sally Davis (Continued)
New Mexico Department of Health ........................................ $75,000
Teen Outreach Program
To’ohajiilee Community School ........................................... $43,873
Primary Care Provider for To’ohajiilee Community School
New Mexico Primary Care Association ................................ $20,000
Integrated Medicaid Enrollment
New Mexico Department of Health .................................... $20,000
Implementing Evidence-Based Recommendations that Promote Physical Activity To Reduce the Risk for Developing Chronic Diseases, Including Certain Cancers in Communities

Glenda Fallas
New Mexico Human Services Department .................. $127,785
CHILE Plus, Social Marketing and Statewide SNAP-ED Evaluation

Jessica Rose Goodkind
NIH/National Institute on Minority Health and Health Disparities . . . $384,288
Addressing Social Determinants to Reduce Refugee Mental Health Disparities

Patricia Keane
New Mexico Human Services Department .................. $555,189
CHILE Plus, Social Marketing and Statewide SNAP-ED Evaluation
Con Alma Health Foundation ........................................ $7,500
Evaluating Benefit Acceptance Policies in New Mexico’s Farmers’ Market

Shiraz Mishra
NIH/National Institutes of Health ................................ $252,921
New Mexico’s Future Researchers Exploring Science and Health (SEPA)
DHHS/National Center for Chronic Disease Prevention and Health Promotion ........................................ $225,000
Low-Dose CT Lung Cancer Screening: Informed Decision Making and Smoking Cessation

Janet Page-Reeves
Bernalillo County ......................................................... $15,480
Community Food Needs Assessment

Linda Peñaloza
New Mexico Department of Health ................................ $125,761
Youth Risk Resiliency Survey Project
New Mexico Department of Health ................................ $47,999
Youth Risk Resiliency Survey Project
New Mexico Public Education Department ................ $18,952
ESHE Evaluation
New Mexico Public Education Department ................ $6,000
ESHE Evaluation

Psychiatry

Christopher Abbott
The Mind Research Network ............................................... $123,572
Multimodal Imaging of Neuropsychiatric Disorders: Mechanisms & Biomarkers (COBRE II)

Cheryl Aine
The Mind Research Network ............................................... $60,918
Multimodal Imaging of Neuropsychiatric Disorders: Mechanisms & Biomarkers (COBRE II)
The Mind Research Network ............................................... $39,873
Multimodal Imaging of Neuropsychiatric Disorders: Mechanisms & Biomarkers (COBRE II)

Deborah Altschul
New Mexico Children, Youth and Families Department ........ $496,834
CYFD Systems of Care
New Mexico Behavioral Health Collaborative/Human Services Department ................ $269,170
Screening, Brief Intervention and Referral to Treatment
San Felipe Pueblo ....................................................... $69,668
San Felipe Home Visiting
Anonymous Sponsor .................................................... $43,000
Home Visiting
New Mexico Children, Youth and Families Department ........ $26,619
CYFD Home Visiting

Jeanne Bereiter
New Mexico Children, Youth and Families Department ........ $63,100
Rural Psychiatric Services-Child Fellowship Training

Michael Bogenschutz
University of Southern Denmark .................................. $1,233,492
Project Elderly
NIH/National Institute on Drug Abuse ........................... $612,048
Comparing Interventions for Opioid-Dependent Patients Presenting in Medical Emergency Departments
Heffter Research Institute ............................................... $199,276
Effects and Therapeutic Potential of Psilocybin in Alcohol Dependence

Caroline Alberta Bonham
Albuquerque Area Indian Health Service ....................... $359,334
IHS Center for Telehealth Excellence Project
Hidalgo Medical Services ........................................... $150,000
Psychiatric Services
Hidalgo Medical Services ........................................... $149,973
Psychiatric Services
New Mexico Human Services Department ................ $142,348
Behavioral Health Services
Mescalero Apache Schools ........................................... $55,000
Mescalero SBHC
NIH/National Institute of Mental Health ....................... $7,500
NIMH Outreach Partnership

Juan Bustillo
The Mind Research Network ............................................... $260,759
Multimodal Imaging of Neuropsychiatric Disorders: Mechanisms & Biomarkers (COBRE II)

Annette Susan Crisanti
OptumHealth New Mexico ........................................... $91,072
Adult Transformation: Healthy Homes
OptumHealth New Mexico ........................................... $25,000
To’ohajiilee Behavioral Health
ERIK ERHARDT
The Mind Research Network ................................................ $11,629
Multimodal Imaging of Neuropsychiatric Disorders: Mechanisms & Biomarkers (COBRE II)

SARAH FELDSTEIN EWING
NIH/National Institute on Alcohol Abuse and Alcoholism ............. $49,499
Neuroimaging Mechanism of Change in Psychotherapy for Addictive Behaviors

DAVID GRAEBER
Bernalillo County Juvenile Detention Center ................................. $69,265
Professional Services

PAULA HENSLEY
Forest Research Institute ........................................................ $5,000
Clinical Trial Agreement

DINA HILL
Yale University ....................................................................... $20,000
Development of a Dyslexia Screening Test

BRIAN LOUIS ISAKSON
OptumHealth New Mexico ........................................................ $78,639
Jail Diversion Project
OptumHealth New Mexico ...................................................... $50,000
Military, Veteran and Family Support Services

AVRON KRIECHMAN
New Mexico Department of Health ........................................... $125,000
Telehealth School-Based Health Centers

STEPHEN LEWIS
Feinstein Institute for Medical Research ................................... $114,585
ACA-Improving Care & Reducing Cost
Feinstein Institute for Medical Research .................................... $19,715
RAISE
Feinstein Institute for Medical Research .................................... $4,250
RAISE

RODNEY MCNEASE
Albuquerque Healthcare for the Homeless, Inc.......................... $25,000
SCI Services

RASHMI SABU
HHS/Substance Abuse and Mental Health Services Administration... $397,969
ACTION-Garret L. Smith Grant Federal Program Evaluation
HHS/Substance Abuse and Mental Health Services Administration... $388,488
ACTION

JULIE GRIFFIN SALVADOR
OptumHealth New Mexico ....................................................... $188,200
NIDA TCA Total Community Approach
OptumHealth New Mexico ....................................................... $138,763
Treatment for Pregnant and Postpartum Women
OptumHealth New Mexico ....................................................... $52,000
Total Community Approach

HELENE SILVERBLATT
New Mexico Department of Health ........................................... $225,000
Public Psychiatry Program

ROBERT THOMA
The Mind Research Network ................................................... $107,236
Multimodal Imaging of Neuropsychiatric Disorders: Mechanisms & Biomarkers (COBRE II)

MAURICIO TOHEN
Sangre de Cristo Community Health Care Partnership ................ $4,000
Sangre (SBIRT) Psychiatric Consultation

CLAIRE ELIZABETH WILCOX
NIH/National Institute on Alcohol Abuse and Alcoholism ............. $162,012
Neural Mechanisms of Change During Treatment of Alcohol Use Disorders with Prazosin

NIH/National Institute on Alcohol Abuse and Alcoholism ............. $12,601
Neural Mechanisms of Change During Treatment of Alcohol Use Disorders with Prazosin

MARIA YELLOW HORSE BRAVEHEART
NIH/National Institute of Mental Health ..................................... $188,398
Iwankapiya-Healing: Historical Trauma and Group IPT for American Indians

NIH/National Institute of Mental Health ..................................... $187,236
Iwankapiya-Healing: Historical Trauma and Group IPT for American Indians

Radiology

GARY HATCH
National Institute of Justice ..................................................... $498,616
Investigation of Post-Mortem Magnetic Resonance Imaging for the Detection of Intraneural Hemorrhage

The Forensic Sciences Foundation, Inc....................................... $2,940
Detection of Neural Injury in Shaken Infants: A Pilot Investigation Using Post-Mortem Magnetic Resonance Imaging

PHILIP HEINTZ
Sandia National Laboratories .................................................. $2,095
Earth Core CT Scans

LOREN KETAI
NIH/National Center for Complementary and Alternative Medicine ............................................. $192,239
Brain-Centered Therapy Versus Medication for Urgency Urinary Incontinence: An RCT

DANIEL SANDOVAL
HHS/Indian Health Service ..................................................... $2,920
Radiation Protection Survey and Review

PHILIP WIEST
New Mexico Department of Health ........................................... $83,081
Breast and Cervical Cancer Early Detection Program

U.S. Department of Veterans Affairs ........................................ $44,816
VA Radiological and Nuclear Medicine Diagnostic and Therapy Services

U.S. Department of Veterans Affairs ........................................ $21,953
VA Radiological and Nuclear Medicine Diagnostic and Therapy Services
## Research Protections

**Richard Larson**  
U.S. Department of Veterans Affairs .................................................. $149,580  
Institutional Review Board Agreement

New Mexico VA Health Care System .................................................. $90,620  
Institutional Review Board Services

New Mexico Department of Veterans Affairs .................................. $16,764  
Institutional Review Board Services

**Surgery**

**Arup Das**  
NIH/National Eye Institute .................................................. $369,950  
*Inflammatory Chemokines: A Novel Target in Early Diabetic Retinopathy*

New Mexico Commission for the Blind ........................................ $140,000  
*Emergency Medical Eye Care Program*

New Mexico Commission for the Blind ........................................ $125,000  
*Physician Administrative & Consultative Services*

U.S. Department of Veterans Affairs ........................................ $99,051  
*Sphingosine 1-Phosphate: A New Target for Early Diabetic Retinopathy*

New Mexico Commission for the Blind ........................................ $60,000  
*Emergency Eye Care Program*

U.S. Department of Veterans Affairs ........................................ $35,339  
*Phosphate: A Novel Target in Early Diabetic Retinopathy*

**Dusanka Deretic**  
NIH/National Eye Institute .................................................. $355,152  
*Rhodopsin Trafficking and Photoreceptor Membrane*

**Wanil Shetty**  
New Mexico Department of Health ........................................ $6,000  
*CMS Cleft Palate Clinics*

## UNIVERSITY OF NEW MEXICO MEDICAL GROUP

**Rodney McNease**  
Albuquerque Public Schools .................................................. $8,000  
*Behavioral Health Assessment and Treatment for Students*

## UNM SANDOVAL REGIONAL MEDICAL CENTER

**Kevin Rogols**  
New Mexico Department of Health ........................................ $51,702  
*SRMC Trauma*

Sandoval County .................................................. $14,000  
*Sandoval County DWI and Prevention Program*

Sandoval County .................................................. $14,000  
*Sandoval County DWI and Prevention Program*
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