

**Research Annual Report 2015** 



#### UNIVERSITY OF NEW MEXICO HEALTH SCIENCES CENTER VISION, MISSION AND CORE VALUES

#### 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.

#### 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. We will ensure that all people in our majority-minority state 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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#### FROM THE CHANCELLOR FOR HEALTH SCIENCES



Paul B. Roth, MD, MS



One of the great things about working at an academic health center is seeing the many ways in which our missions of education, research and clinical care reinforce one another.

Our biomedical research enterprise, which has long focused on developing stateof-the-art diagnostic and therapeutic technology, is also a powerful driver of economic activity in New Mexico.

Each year, UNM Health Sciences Center research activity pumps tens of millions of dollars into the state's economy, supporting hundreds of well-paid, highly skilled jobs.

An additional economic boost comes in the form of new private sector biotech startups that are spun off from UNM HSC research innovations. Each of these new startups has the potential to grow into a thriving business, creating more jobs and opportunity in our state.

This year, we were fortunate to see renewal of funding for our Clinical & Translational Science Center, which does a tremendous job of training and mentoring the next generation of researchers, creating a clear pathway to continue building on our successes. Our program was one of only four nationally that had an exceptional score, allowing it to be fully funded.

And the UNM Cancer Center won coveted comprehensive designation from the National Cancer Institute. We earned an "outstanding" evaluation in four key areas of competence from the National Cancer Advisory Board.

These are examples of what makes an academic health center unique and what enables the Health Sciences Center to make such a significant impact on the health and well-being of New Mexicans.

We all can be proud of these accomplishments, and I'm grateful to our entire research community for the passion, creativity and dedication they bring to their work.



# FROM THE EXECUTIVE VICE CHANCELLOR AND VICE CHANCELLOR FOR RESEARCH

We did it again! I am pleased to report that the UNM Health Sciences Center continues to make scientific breakthroughs while building its research mission, but in FY 2015 we once again outdid ourselves, securing a record total of \$161 million in funding.

Our funding success is a tribute to the inspired work of our faculty, students and staff, who continue to break new ground in so many areas and have done a terrific job of putting UNM on the map as a center of research and innovation.

This achievement caps more than a decade of continual growth in extramural funding and highlights our focus on developing major new discoveries that improve the health and well-being of New Mexicans.

But that is only part of the story.

The past year also saw the renewal of National Institutes of Health funding for our Clinical & Translational Science Center. The comprehensive designation bestowed on the UNM Cancer Center by the National Cancer Institute is another major achievement. These developments make us one of only 29 institutions in the nation with both a Comprehensive Cancer Center and a Clinical and Translational Science Award.

Adding to the good news, the Brain and Behavioral Health Institute recently won a five-year \$11.6 million grant from the National Institute of General Medical Sciences to develop a new Center for Brain Recovery and Repair.

As you'll read in these pages, our researchers are also finding fresh ways to tackle youth obesity, protecting our communities with new methods for diagnosing and treating tuberculosis and searching for more effective tools to fight deadly MRSA infections.

Stay tuned for further discovery and innovation!



Richard S. Larson, MD, PhD

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#### FROM THE DEAN OF THE COLLEGE OF NURSING



Nancy Ridenour, PhD, RN, APRN, BC, FAAN

(Maney Ridenous)

The College of Nursing celebrated its 60th anniversary in 2015, marking a long-standing tradition of providing local and national leadership and innovation with a comprehensive approach to meeting our education, practice and research missions.

Throughout its history, the College has focused on promoting and enhancing health and wellness, along with creative initiatives and strategies to help patients, families and communities manage health challenges.

Our research portfolio includes important work in cancer prevention and screening, sleep apnea, pain, respiratory conditions, women's health, childhood asthma and rural health, along with problems affecting particular populations, such as Native Americans and veterans.

College of Nursing faculty serve as leaders and key members of interdisciplinary research 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. Faculty also hold leadership roles in national and international organizations and share the results of their research widely to extend the impact of their work across New Mexico and well beyond.

One project being led by Stephen Hernandez, PhD, is exploring Air Force officer and enlisted nursing personnel's perceived levels of stigma and barriers to accessing mental health services to deal with issues of stress and resilience.

The project's findings will provide a foundation to further study the unique population of military nurses and medical technicians with the long-term goal of developing meaningful interventions for this vulnerable group.

The College's long tradition of collaborative research and service continues to bear fruit. We will continue to work with colleagues and partners to address New Mexico health priorities for many years to come.

#### FROM THE DEAN OF THE COLLEGE OF PHARMACY

COLLEGE of PHARMACY

College of Pharmacy scientists are creative visionaries.

With a combined 21 active U.S. patents and another 34 patent applications pending, our faculty researchers are seeking innovative solutions to combat deadly diseases and health issues. Some of their work has led to patents on important inventions to treat melanoma and tuberculosis and to better diagnose pneumonia and other infections.

Our faculty members engage in a wide variety of research that seeks to understand how arsenic and uranium cause disease, how a radiotracer might diagnose appendicitis or better treat asthma – even how smokers might kick the habit without packing on the pounds.

Our scientists are dedicated to advancing human health through better drugs or drug target identification and in clinical settings to achieve better therapeutic outcomes and improvements in health care policies.

Research funding at the College continues to grow. Thanks in part to our "Request-for-Proposals Intramural Pilot Funding Initiative," which stimulated interdisciplinary collaboration on large-scale grant proposals, research grants and contracts awarded to our faculty members exceeded \$7.1 million last year. We now rank in the top tier of colleges of pharmacy in National Institutes of Health (NIH) funding and in total research dollars.

More than 30 of our faculty members are involved in research. Faculty submitted 80 proposals during FY 2015. Impressively, 50 of these proposals were funded, for a success rate of 63 percent.

This year, a team of environmental health researchers successfully obtained a prestigious NIH P50 grant to establish the Center for Native American Environmental Health Equality Research. The researchers also submitted an NIH P42 Superfund Basic Science Research Center application that will investigate the impact of exposure to toxic metals on human health.



Lynda S. Welage, PharmD, FCCP

And I Welage







#### FROM THE EXECUTIVE VICE DEAN OF THE SCHOOL OF MEDICINE



Martha Cole McGrew, MD

The UNM School of Medicine continued its success in growing research funding and programmatic initiatives amid an increasingly competitive environment for research support.

In the fiscal year ending in June 2015 the school set another record in total funding, reaching \$143 million. This represents an increase of \$10 million compared to FY 2014.

National Institutes of Health (NIH) support for research has remained nearly flat over the past five years. Given that and the declining purchasing power of awarded funds, the School of Medicine's success is all the more remarkable.

Two UNM departments, Family Medicine and Pathology, were ranked in the Top 10 in the country among their peer departments for NIH funding. Ten faculty members received more than \$1 million in NIH funding – with three of those receiving more than \$3 million.

With strong participation from the School of Medicine, the Clinical & Translational Science Center (CTSC) submitted the second-best application nationwide and received NIH funding for its second five-year award.

The CTSC consistently leads in team science, population health and community engagement, often serving as a model for larger institutions. The refunding of the CTSC ensures that this key translational research framework will continue to underpin and support School of Medicine research.

Our six Signature Programs continue to support team science in key areas of health, including cancer, brain and behavioral health, infectious disease and immunity, child health, cardiovascular and metabolic disease and environmental health.

The National Cancer Institute recently bestowed coveted "comprehensive" designation on the UNM Cancer Center. According to the NIH, comprehensive cancer centers demonstrate an added depth and breadth of research, as well as substantial trans-disciplinary research that bridges the scientific areas of basic, clinical and community-based research related to cancer.

Acute Pain: Outside of this Algorithm

(Post Stroke, Complex

**Regional Pain** 

Syndrome)

**Behavioral** 

**Fibromyalgia** 

# Determine possible etiology of pain and contributory co-morbidities Neuropathic Musculoskeletal/ Mechanical Inflammatory Multiple Etiologies GAME CHANGER GAME CHANGER • Central Pain Syndromes

Is Pain

Chronic?

Yes

No

# PRACTICE DETAILING TACKLES He OPIOID OVERPRESCRIPTION

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People living in rural counties are nearly twice as likely as people in big cities to overdose on prescription painkillers, so it's not surprising that New Mexico, with its wide-open spaces, has one of the highest death rates from prescription opioids in the U.S.

It's a disturbing trend for Robert Rhyne, MD, a professor of Family & Community Medicine and co-director of the Clinical & Translational Science Center's Community Engagement and Research Core.

"Small-town docs are passionately interwoven into their communities, caring for friends and neighbors," Rhyne says. "Entire towns' reliance on their local physicians leaves little time for professional networking, education or advancement. The challenge becomes providing the highest standards of care when geographically isolated."

Rhyne believes that the treatment of chronic noncancer pain (CNCP) such as arthritis, back pain or headaches is a frustrating problem for rural primary care providers. "We're overprescribing pain medication based on a dated medical paradigm," he says.

"Newly established clinical guidelines can take years for adoption into clinical practice," Rhyne adds, "so we're developing a system called practice detailing to deliver the most current evidence-based information in the most usable format for rural practitioners to manage CNCP."

Rhyne's team is conducting a comparative study designed to deliver CNCP guidelines in a toolkit that rural clinicians can – and will – apply to their patients using an algorithm that best fits rural practices.

From that algorithm, developed partly with feedback from community clinicians, the detailed toolkit is continually evolving to provide evidence-based clinical guidelines for treating CNCP patients with and without opioids.

"We're training physicians to better conduct patient assessments and explore treatment options such as physical and behavioral therapy or sleep therapy, surgical interventions, acupuncture and others – with opioids as the final treatment option," Rhyne explains.

"We're adaptive and interactive, using two-way communication to create better information and buy-in from rural practitioners in communities across the state."

Principal Investigator Robert Rhyne, MD Professor and Vice Chair of Research, Department of Family & Community Medicine

#### Grant Name

Health Extension Rural Offices: Translating Research into Localities

#### Grantor

Agency for Healthcare Research and Quality

# RESEARCH RENEWAL UNM'S CLINICAL AND TRANSLATIONAL SCIENCE AWARD EXTENDED



#### Principal Investigator

**Richard S. Larson, MD, PhD** Executive Vice Chancellor and Vice Chancellor for Research, UNM Health Sciences Center; Professor, Department of Pathology

#### Grant Name

UNM Clinical & Translational Science Center

Grantor National Institutes of Health The UNM Clinical & Translational Science Center (CTSC) was awarded a five-year, \$23-million grant renewal in 2015 following a fierce national competition.

It received one of the highest scores in the nation, becoming one of only four such centers nationally to receive full Clinical and Translational Science Award (CTSA) funding from the National Institutes of Health (NIH).

This award recognizes UNM's success in conducting innovative, cutting-edge biomedical research that quickly and safely converts fresh ideas into New Mexico clinical practice, says Richard S. Larson, MD, PhD, executive vice chancellor and vice chancellor for research at the UNM Health Sciences Center.

"Through our CTSC, we're bringing state-of-the-art therapies and technologies to our citizens and our families that otherwise wouldn't be available," Larson says. "We're accelerating basic health discovery and ways of delivering care into clinical trials in practices in all 33 counties across the state. It's very exciting."

The CTSC pools essential resources for researchers to more efficiently collaborate, design and conduct their studies, while adding an extensive mentoring program to help young scientists learn to create novel medical innovations.

The CTSC also guides investigative teams who are continually introducing important new medications, diagnostic tools, and best-practice protocols to treat New Mexico patients with complex diseases like addiction, obesity and diabetes.

In addition to supporting research by increasing laboratory space, cultivating junior researchers, offering regulatory and legal guidiance

and directing technology and resources, the CTSC will launch new programs to improve innovative study designs, direct prototype development and steer promising results through the commercialization process.

UNM's biomedical research has delivered discoveries in many areas, including infectious disease, metabolic disorders and substance abuse. More than 500 CTSC researchers and support staff have led the way in developing vaccines for deadly infections like drug-resistant tuberculosis, Larson says. They currently conduct 125 clinical trials across every New Mexico county, along with extensive community-based research throughout the state.

The NIH introduced the CTSA network in 2006 to speed new drug therapies, vaccines and diagnostic tools through the developmental pipeline from bench to bedside. UNM first joined the CTSA consortium in 2010, becoming one of just 62 universities in the country with a program to convert basic laboratory discoveries into medical therapies and devices that make a real difference in patients' lives.

"Our first five years provided a sturdy foundation on which to expand our effectiveness in developing new health and treatment concepts, and seeing them all the way through to actual patient care," Larson says. "In the future we'll be adding to CTSC's scope and focus, particularly in the areas of translational workforce development, multi-site study support, participant recruitment and CTSA consortium-wide initiatives."



In addition to its tremendous economic contribution to New Mexico – nearly 40 biotech businesses have spun off from research conducted at UNM over the past decade – the renewed CTSA represents UNM HSC's ascendance into the higher tier of academic health centers nationally, Larson adds.

"Perhaps most importantly, the CTSA enables us to conduct meaningful research that brings hope to our patients throughout the state," he says. "This accomplishment demonstrates the terrific progress we have made in just five years as a CTSA recipient. We are excited to contemplate the many new advances in coming years that will benefit New Mexicans."





Cancer Center

"Fifteen years ago, we made a promise to be of service to the people of New Mexico and to overcome New Mexico's cancer burden," says Cheryl Willman, MD.

"To do that, we sought to be one of the nation's very best: a National Cancer Institute-designated comprehensive Cancer Center," says Willman, director and CEO of the UNM Comprehensive Cancer Center. "And we delivered!"

The Cancer Center underwent a rigorous process to achieve its comprehensive designation last summer. The highly sought-after designation recognizes the center's achievements in four areas: providing integrated cancer diagnosis and treatment, providing access to national clinical trials, conducting world-class cancer research and educating the next generation of cancer health care and scientific professionals.

UNM's cancer research is supported by more than \$72 million in annual extramural funding and takes advantage of regional scientific and engineering strengths. Cancer Center scientists collaborate with colleagues at Sandia National Laboratories, Los Alamos National Laboratory and the Lovelace Respiratory Research Institute.

UNM scientists also work with researchers at New Mexico State University. These collaborations have led to breakthroughs in targeted therapies and cancer diagnostics.

The UNM Comprehensive Cancer Center also conducts clinical research. As part of the Oncology Research Information Exchange Network, it is launching a program to offer patients an opportunity to have their cancer tumors sequenced to benefit not only cancer research but also themselves when newer, better treatments become available.

In addition, the Cancer Center's NCI Community Oncology Research Program grant supports access to clinical trials in diverse communities throughout the state, helping patients and cancer scientists alike.



Principal Investigator Cheryl Willman, MD Director and CEO, UNM Comprehensive Cancer Center

Grant Name P30 Cancer Center Support Grant

Grantor National Institutes of Health/ National Cancer Institute



### EARLY DETECTION BEHAVIORAL HEALTH SCREENING IN A PRIMARY CARE SETTING

In the substance use and mental health world, researchers know that early detection and treatment can greatly improve outcomes. In New Mexico these conditions often go untreated because of stigma and lack of access due to the limited behavioral health workforce.

Deborah Altschul, PhD, aims to address these challenges head-on with her New Mexico Screening, Brief Intervention and Referral to Treatment program.

"Most people already go to primary and urgent care for other health issues," she says. "Our goal is to infuse behavioral health into these settings. That way, treatment is easily accessible in nonthreatening settings."

Each of the grant's sites houses a behavioral health provider along with a certified peer support worker. Every patient undergoes a universal screen that takes only minutes to complete.

If the screen is positive for substance abuse, depression, anxiety or trauma, patients are immediately introduced to the behavioral health team for further assessment and treatment. "This increases access to convenient, evidence-based treatment," Altschul says.

Altschul and her team collect data on every person who is screened. They follow 20 percent of the patients who screen positive every six months for two years to evaluate whether this approach effectively integrates behavioral health into primary care settings.

"By putting screening and treatment where people already are comfortable seeking help, we hope to catch substance abuse and mental health issues before they become big problems," Altschul says.

"Additionally, given our state's limited behavioral health workforce and health disparities, this research has major implications for public health in New Mexico."



#### Principal Investigator Deborah Altschul, PhD

Assistant Professor and Division Chief, Community Behavioral Health, Department of Psychiatry and Behavioral Sciences

#### Grant Name

New Mexico Screening, Brief Intervention and Referral to Treatment

#### Grantors

Substance Abuse and Mental Health Services Administration, New Mexico Behavioral Health Services Division





#### **Principal Investigator**

**Bill Shuttleworth, PhD** Director, UNM Brain & Behavioral Health Institute, Regents' Professor, Department of Neurosciences

#### Grant Name

UNM Center for Brain Recovery and Repair

#### Grantor

National Institutes of Health/National Institute of General Medical Sciences

The human brain – containing some 86 billion neurons (and trillions of connections among them) – is the most intricate known structure in the universe. A special team is needed to tackle this complexity and devise new treatments for neurological diseases and injuries.

UNM's Brain & Behavioral Health Institute (BBHI) takes a multidisciplinary approach to attacking brain-related problems, bringing together researchers from across campus, including the departments of Neurology, Neurosurgery, Neurosciences and Psychiatry and Behavioral Sciences.

"Research and education have traditionally been quite compartmentalized," says BBHI director Bill Shuttleworth, PhD, Regents' Professor in the Department of Neurosciences and associate director of the Clinical & Translational Science Center. "BBHI dramatically changes the dynamic. We have an opportunity to leverage each other's expertise to enrich research programs and be more responsive to national funding opportunities."

One example is the competitive five-year \$11.6 million federal grant that BBHI recently secured to establish a new Center for Brain Recovery and Repair. The grant from the National Institute of General Medical Sciences will fund five junior investigators to launch new research into brain stimulation techniques and ways of regenerating brain tissue.

The money will also help provide research support. "We're a platform to facilitate diverse programs that address brain health across the lifespan," Shuttleworth says. "This is one of BBHI's key achievements to date."

BBHI is committed to tailoring its patient-centered research to meet the unique needs of New Mexicans. Starting in 2013, BBHI faculty spent 18 months meeting with individuals and advocacy organizations to find out what mattered most to them.



Community groups "are really the engine pulling the train," Shuttleworth says. He credits the New Mexico Brain Network, a coalition of patient advocacy organizations, with helping to shape the research agenda. "They helped us develop a meaningful program."

Network representatives will be included in steering committees to help shape the center's development, he says. The group has been meeting monthly and is also working with the Alan Alda Center for Communicating Science at Stony Brook University.

The Alda Center generally focuses on teaching scientists to communicate with the public, but the New Mexico advocates have helped flip the paradigm; now, the center has become interested in teaching scientists how to listen to laypeople. This work is funded by a federal Patient-Centered Outcomes Research Institute award to BBHI to facilitate progress in Alzheimer's disease, cerebral cavernous malformations and autism.

"We're trying to do something special," Shuttleworth says. "We're trying to pull people together from very different groups across campus. People have been working on brain disorders at UNM for decades and there has been a pentup feeling that we could do more collaboratively, across disciplines."

BBHI is making progress in its research, Shuttleworth says. "It has an ambitious agenda. But, still, there's a lot of hard work to do to break down some of those barriers. We're looking for opportunities to collaborate."







# SIGNAL ACHIEVEMENT FINDING NEW WAYS TO FIGHT A DEADLY INFECTION

The Centers for Disease Control lists Methicillin-resistant Staphylococcus aureus (MRSA) as a top threat to human health and have called for a national strategy to combat it. At UNM, Pamela Hall, PhD, and her research team are doing their part, looking for a new way to defeat MRSA.

It is an important battle. In the past, MRSA was known as a hospital-acquired disease, striking patients who have compromised immune systems. But even healthy people – from kids to pro-football players – can contract it. The past few years have seen the drug-resistant germs evolving faster and faster, Hall says.

"It is going to take a multi-level offensive to defeat MRSA," says Hall, an assistant professor in the College of Pharmacy's Department of Pharmaceutical Sciences. "But if we can find the means to disarm the bacteria, then we can defeat them."

Bacteria become drug-resistant when a few germs survive exposure to an antibiotic. Killing off their competition actually makes it easier for the remaining germs to multiply.

Hall's lab is testing anti-virulence signaling strategies. If vaccines can be developed that block the bacteria's ability to recognize and communicate with each other, they won't become activated and begin to colonize – meaning no infection to eradicate and no chance of resistance developing.

Hall and her team have found that targeting virulence regulation systems can actively protect from MRSA. The next step is gaining a better understanding of how the vaccine will perform against different types of MRSA.

The stakes are high. A future without effective strategies to battle MRSA would mean a step back to the pre-antibiotic world, where even a small cut could be catastrophic.



Principal Investigator Pamela Hall, PhD Assistant Professor, Department of Pharmaceutical Sciences

#### Grant Name

Apolipoprotein B and Control of S. *aureus* Quorum Sensing

Grantor National Institutes of Health

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# PROTECTING VULNERABLE COMMUNITIES INHALED TB VACCINE COULD SAVE MILLIONS OF LIVES

Dominique Price wants to wage a war on tuberculosis with a vaccine that works.

"I am extremely motivated," says Price, a postgraduate student in the Department of Pharmaceutical Sciences.

TB is one of the world's deadliest contagious diseases – 9 million people developed the disease in 2009, and 1.5 million died from it – but most fatalities are preventable.

The current injectable vaccine, known as Bacille Calmette-Guerin or BGG, is used in more than 100 countries, but it provides little protection in most hard-hit areas of the world, including Southeast Asia and Africa.

"It does not generate a strong immune response in the lungs, the prime region where we need the immune cells," says Pavan Muttil, PhD, an assistant professor in Pharmaceutical Sciences.

"We could treat the disease by giving a vaccine directly into the lungs," adds Muttil, the principal investigator of a study designed to develop a better TB vaccine.

Price and Muttil's research suggests that the BCG vaccine's ineffectiveness is partly due to people's exposure to non-tuberculosis mycobacteria in soil and water.

The body develops ways to "compartmentalize immunity" by triggering an immune response to some pathogens while avoiding a response to others that are not necessarily harmful to the body, Price says. But the mycobacteria, which belong to the same family as tuberculosis, confuse the immune system, rendering the injectable vaccine less effective.

Price tested in mice whether a dry powderized form of the vaccine could provide better protection if delivered directly to the lungs.

Mice exposed to mycobacteria got sick after receiving the current BCG vaccine through the skin. But when they received a vaccine via the lungs, the mice developed an effective immune response.

"The mice were able to fight off the bacteria," Price says. "That is really exciting."





Principal Investigator Pavan Muttil, PhD Assistant Professor, Department of Pharmaceutical Sciences, College of Pharmacy

#### **Co-Investigator**

Dominique Price Biomedical Sciences Graduate Program Doctoral Candidate, Department of Pharmaceutical Sciences

#### Grant Name

Pulmonary BCG Immunization for Uniform Protection Against TB

#### Grantor

Bill and Melinda Gates Foundation Grand Challenges Exploration; College of Pharmacy



## TACKLING TB RAPID DIAGNOSTIC TEST SPEEDS TREATMENT

Acc.V Spot Magn Det WD Exp 30.0 kV 3.0 15549x SE 7.4 0



Principal Investigator Graham Timmins, PhD Associate Professor, Department of Pharmaceutical Sciences

**Grant Name** Pyrazinamide Breath Test for TB

#### Grantor

National Institutes of Health/ National Institute of Allergy and Infectious Diseases "What I kind of do is put unusual things together," says Graham Timmins, an associate professor in the College of Pharmacy's Department of Pharmaceutical Sciences.

It's a modest statement from a researcher who holds seven UNM-affiliated patents that involve innovative technology to quickly diagnose tuberculosis and other lung infections.

Another Timmins patent proposes a more effective treatment for TB, and yet another involves evaluating sunscreens for their protection against all potentially damaging solar radiation.

His research focuses on using stable isotope-related compounds and free radical biology – the unusual things he puts together – to better diagnose and treat some common and deadly diseases.

Asked which of those patents he is most proud of, Timmins groans. "Ahh," he says. "It's like which of your children do you love the most?"

Let's start with his rapid breath-test technology, known as the urease breath test. Ureases are bacterial enzymes that are expressed by many bacteria. "If you look at serious lung pathogens," Timmins says, "most of them have it."

Timmins' stable isotope-labeled tracer compound, inhaled by a patient through a nebulizer or inhaler, fills the entire lung. It detects and identifies different infections upon exhalation – and does so within minutes.

"You can screen for tuberculosis," Timmins says. "You can see if somebody's got pneumonia. You might be able to see the difference between viral and bacterial pneumonia."

His rapid breath-test technology patents have led to the creation of a company, Avisa Pharma, headquartered in Santa Fe. The company has raised \$8 million and its first clinical development is focusing on using



If there is a theme to Timmins' work, it is speed.

"What we're trying to do is have a very, very rapid screening test for TB so the whole thing could be over in five or 10 minutes," Timmins says. The fastest TB diagnostic test now takes three hours and the technology it uses is relatively un-portable.

TB is most common in developing countries where transportation is limited – it can take a full day for a patient to travel to a clinic or a clinician to travel to a rural area to conduct testing.

"With this," Timmins says, "you could put everything in a backpack and you could just cycle to a village and test a whole lot of people. If somebody can be diagnosed and have their drug susceptibility determined in that single encounter, then you don't lose them to follow-up. That's a major improvement."

The test, which has worked in 10 minutes in animal trials, could have a huge impact: the disease infects millions of people worldwide and results in 1.5 million deaths each year.

"Sometimes," Timmins says, "it's just speed. You can potentially diagnose earlier in the processes, with the assumption that if you can intervene earlier there'll be a better outcome."

Another of his innovations modifies an existing TB drug with stable isotopes to improve its infection-fighting effectiveness. "It's very, very complex," Timmins says. "It's taken me seven or eight years to figure it out." Yet another patent addresses the efficacy of sunscreens in protecting against melanoma. Sun Protection Factor ratings only measure protections against ultraviolet radiation, not all of the potentially damaging wavelengths. Timmins' patent involves analyzing a sunscreen for all the potential melanoma protection factors.

And another involves using the breath test to rapidly diagnose *pseudomonas aeruginosa* in cystic fibrosis patients. Once it is established, it's a very difficult infection to eradicate, but when caught early it can be eliminated. Timmins hopes the test will significantly improve the lives of some cystic fibrosis patients.

Timmins, who joined UNM in 2001, has been recognized many times for his research accomplishments. In 2013 he received the STC.UNM Innovation Fellow Award thanks to his prolific record.

While accolades and patents are prestigious and pharmaceutical companies may show profit, Timmins says the questions that underlie the research are his real motivators.

"The reason you do it is to get at these questions," Timmins says. "Most smart people just like working problems."

# MOTIVATING MINORS HIGH-TECH HELP IN FIGHTING ADOLESCENT OBESITY





Principal Investigator Jeanne Dalen, PhD Research Assistant Professor, Office of Pediatric Research

#### Grant Name

Adaptation and Evaluation of a Family-Based Mindful Eating Intervention for Overweight Adolescents

#### Grantor

National Institutes of Health/National Center for Complementary & Alternative Medicine Teenagers love high-tech gear, so it makes sense to use the latest gadgets to improve their health.

But few studies have been done on using technology to motivate teens to become more active and lose weight, says Jeanne Dalen, PhD, research assistant professor in the Office of Pediatric Research.

Dalen and her team studied three different brands of activity trackers – devices that record data such as steps taken, heart rate and calories burned. "Researchers usually use these just to collect data," she says. "We began to ask if fitness trackers are motivating in and of themselves."

The challenge is a major one: 35 percent of U.S. teenagers are overweight and one in six has metabolic syndrome.

In a recent study Dalen divided adolescents ages 11-16 into three groups. Each tested three different trackers for several weeks.

"We wanted to know if they would wear them and what they would like," Dalen says. "Fitness trackers are beginning to be paired with motivational websites, so people can really start to become engaged on a social level and on a motivational level, using computer technology."

Dalen is also studying the effectiveness of a meditation-based mindful eating program for teens. "This may represent a unique scientific approach to the current adolescent obesity epidemic," she says.

Her team has identified an unexpected barrier to adolescent enrollment, though.

"We are seeing success once families are enrolled and begin to experiment with eating mindfully together at mealtime," she says. "But sometimes the last thing a teenager is going to want to do is anything that their parent thinks is a good idea."



# EXPLORING THE LINK BETWEEN ALCOHOL AND PARTNER VIOLENCE

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Intimate relationships are complex, fueled by biology, chemistry, emotions, environment and upbringing. Mixing in alcohol with often contentious issues such as finances, child rearing or in-laws can quickly ignite domestic violence.

Intimate partner violence is a big problem in the U.S. An estimated 22.4 million physical assaults are committed every year, costing \$6.2 billion in direct medical and mental health services alone.

Investigator Brandi Fink, PhD, a KL2 Scholar in the Clinical & Translational Science Center, believes that alcohol-induced over-arousal plays a crucial role in heightening patterns of violence between couples.

"Fifty to 75 percent of partner violence incidents involve one or both partners under the influence of alcohol," she says. "You can't study partner violence without studying the effects of alcohol."

Alcohol-induced over-arousal reflects changes in heart rate, respiration, skin conductance and brain responses that Fink hypothesizes play a crucial role in triggering partner violence.

Fink's study compares the arousing effects of alcohol amid conflict, as well as the different responses in emotion regulation between violent and nonviolent partners.

She's applying rigorous screening, interviewing and coding, precise demographic and psychophysiological data collection and EEG neuroimaging measures to her carefully selected sample.

Current partner violence interventions rarely address alcohol use and can be tainted by cultural assumptions, Fink says. They often focus on males, based on the belief that the male is always the aggressor.

"In fact, there are over 200 studies that show both genders are equally violent," she says. "And when only one partner is violent, it's more often the female. By blending psychology, psychiatry and clinical neurosciences research methods, we have teamed to scientifically dissect this serious public health issue that destroys New Mexico families."

2500 3000 3500 4000 4500

dB change from baseline

٥

Principal Investigator Brandi Fink, PhD Assistant Professor, Department of Psychiatry and Behavioral Sciences

#### Grant Name

Overarousal as a Mechanism Between Alcohol Use and Intimate Partner Violence

#### Grantor

UNM CTSC; National Institutes of Health/ National Center for Research Resources; NIH/National Center for Advancing Translational Sciences

# RESEARCH RESOURCE AN INNOVATIVE TOOL FOR UNDERSTANDING CHRONIC PAIN





Principal Investigators Hugh Martin, MD Chair, Department of Anesthesiology and Critical Care

**Erin Milligan, PhD** Associate Professor, Department of Neurosciences

Jeffrey Norenberg, PhD Professor and Director of Radiopharmaceutical Sciences

#### Grant

UNM Anesthesiology Pain Research Laboratory

Grantor UNM Clinical & Translational Science Center Every creature with a nervous system experiences discomfort from time to time – but severe chronic pain presents a special kind of suffering.

A multidisciplinary team of UNM researchers is tackling this problem with the help of a new, state-of-the-art laboratory that will help them pinpoint how the nervous system responds to potential therapies.

"We want to focus on pain mechanisms," says Hugh Martin, MD, chair of the Department of Anesthesiology and Critical Care, who spearheaded construction of the new facility. "What are the deep-down neuronal injuries when you have a bone spur that constricts a nerve that comes out of the spinal cord?"

The Anesthesiology Pain Research Laboratory is specially equipped to examine the bio-distribution of novel pain drugs, says Erin Milligan, PhD, an associate professor in the Department of Neuroscience. An animal is administered a candidate drug tagged with a radioisotope compound.

Its tissues are sectioned into ultra-thin 5-micron slices that are imaged and digitally stored. When these images are overlaid with a radioisotope image using special software, scientists can create a 3-D picture showing how much of the drug has been absorbed and where in the body it is concentrated.



It's a big step toward developing a competitive program in the hunt for non-opioid alternatives for pain relief, Milligan says. "We don't have anything in the Southwest like that. New Mexico would benefit tremendously from having a pain research center."

This research traditionally has focused on nerve cells and how they communicate with one another, but Milligan is looking elsewhere. She is studying how, in chronic pain patients, pro-inflammatory immune cells flock from the site of an injury to portions of the spinal cord. "These regions in the spinal cord are critical to pain processing," she says.

She is testing BIRT-377, a drug that could block immune cells from triggering the inflammation that drives chronic pain. That's where Jeffrey Norenberg, PhD, comes in. A professor in the College of Pharmacy and an expert in pharmacodynamics, he has patented a radioisotope-tagged version of the drug.

Norenberg is excited by the new lab's technical capabilities. "It's the marriage of the equipment for collecting the slices to the software to the analysis that makes it stateof-the art," he says. "You're not going to see anything like this. That's what makes it a very unique laboratory."

In the new lab, he adds, "We can do noninvasive in vivo imaging using functional probes. We can also drill down to the tissue and even cellular level in this lab. There are certain questions you can only answer when you get into a complex system."

The lab is available to other UNM faculty who are studying neuro-immune conditions, Milligan says. "They are very interested in dovetailing with Hugh's lab. It's going to be a very multidisciplinary research program."

Meanwhile, the insights gained from collaborating with Martin and Norenberg help Milligan connect basic science research to patient needs, she says.

"We don't want to be in an ivory tower," she says. "We really want to be one step from the clinic, all the time. What are the practical clinical problems that are observed in your patients on a routine basis? Hugh's clinical faculty tell me what's practical, what's not practical and what is desperately needed."





### NATIVE WISDOM HELPING TO HEAL HISTORICAL WOUNDS



Decades later, Brave Heart, a research associate professor in the Department of Psychiatry and Behavioral Sciences, is working to help heal American Indians suffering from historical trauma arising from centuries of genocide.

She leads the Iwankapiya-Healing study. Funded by the National Institute of Mental Health, it compares a 12-week course of group interpersonal therapy (IPT) sessions with 12 sessions that combine IPT with the Historical Trauma and Unresolved Grief intervention that Brave Heart developed. The study takes place at a Northern Plains reservation and an urban Southwestern reservation outpatient behavioral health setting.

One example of historical trauma is the government policy, enforced as recently as the 1970s, of forcibly separating American Indian children from their parents and shipping them off to boarding schools. "In the Dakotas, the boarding schools were notoriously abusive or perceived as abusive by people," says Brave Heart, who is Hunkpapa and Oglala Lakota. "What we do is talk about the impact of boarding schools on our people and the traumas that emerge from that."

Exposure to multigenerational trauma leads to heightened risk for a laundry list of emotional problems, Brave Heart says. "PTSD, depression anxiety, difficulty sleeping – all of those kinds of things are framed in reaction to this massive group trauma and how it's been passed on." Addressing this trauma in a therapeutic setting "de-stigmatizes," she says. "It communicates that you're not alone in this."

Participants come to realize that what they're feeling isn't their fault, she says. It also yields understanding – and perhaps forgiveness – for one's parents, grandparents and great-grandparents. "People are more open to looking at what's going on for them now."



Principal Investigator Maria Yellow Horse Brave Heart, PhD Associate Professor, Department of Psychiatry and Behavioral Sciences

Co-Investigator Josephine Chase, PhD Oglala Lakota College

#### Grant Name

*Iwankapiya*-Healing: Historical Trauma Practice and Group IPT for American Indians

#### Grantor

National Institutes of Health/ National Institute of Mental Health HTTLPR

Exons: 1A

# TIME AND TRAUMA **HOW EARLY LIFE STRESS RESHAPES THE BRAIN**

1B

"If you could have the biggest impact in the world," asks Elaine Bearer, MD, PhD, "where would you start?"

Bearer, a professor in the Department of Pathology in the UNM School of Medicine, is answering that question by studying how childhood trauma affects the developing brain. Her research comes amid a virtual epidemic of violence against children.

In 2012, 686,000 American children were victims of maltreatment and more than 1,600 of them died from abuse and neglect, according to the U.S. Department of Health and Human Services.

In animal studies, Bearer showed that adverse experience can permanently affect emotional circuitry. This may result from epigenetic changes, in which gene expression is altered without affecting the inherited DNA sequence. These changes involve a biochemical process called DNA methylation.

Bearer's study suggests persistent stress changes children's brains. "Traumatic experience appears to induce changes in the epigenetic pattern of DNA methylation in the brain," Bearer says.

Bearer focused on methylation of the serotonin transporter gene, extending this analysis to subsets of the 1 billion potential methylation sites in the human genome. Serotonin is a neurotransmitter that plays an important role in regulating emotion.

More than 25,000 methylation sites were significantly altered in children with autism, she found. Many of these changes could be detected in both saliva of living children and the post-mortem brains of children with autism.

"Eight percent of the altered methylation sites found in children correlated with altered sites in the brain," Bearer says. "Saliva gives us a read-out of what's happening in the brain."

The changes indicated abnormal gene expression that could interfere with the development of a young brain.

With these promising findings, Bearer's goal is to discover biomarkers that could help identify traumatized children early and channel them quickly into intervention programs. "I would like to find a way to heal these children," she says.





**Principal Investigator** Elaine L. Bearer, MD, PhD Professor, Department of Pathology

#### **Co-investigator**

Julia Stephen, PhD Adjunct Associate Professor, Department of Neurosciences

#### **Grant Names**

DNA Methylation in Translational Studies of Early Life Stress: A Feasibility Study; Live Imaging of Functional Circuitry in Mouse Models of PTSD

#### Grantor

National Institutes of Health/ National Institute of Mental Health and UNM CTSC

# FROM BENCH TO BEDSIDE COMMERCIALIZING BIOTECHNOLOGY ONE STARTUP AT A TIME

UNM Health Sciences Center researchers continually seek new cures and treatments to improve health and save lives.

One sign of their success is the number of patents they receive: UNM ranks 42d in the world in number of patents issued, with UNM HSC accounting for a large part of the total.

What is often overlooked is the economic empact of that research, which has led to 38 new business startups in New Mexico over the past decade, creating new jobs and boosting the state's economy.

The pace of UNM HSC-related business development has been picking up in recent years, with four new ventures



Elizabeth Kuuttila President and CEO, STC.UNM

being launched in FY 2015, says Elizabeth Kuuttila, president and CEO of STC.UNM, the non-profit corporation chartered by the Board of Regents to promote technology transfer on behalf of the university.

.redit: MarbleStreetStudio.**co**m

Albuquerque's Exovita Biosciences is developing technology pioneered by Kristina Trujillo, PhD, research assistant professor in the Department of Cell Biology and Physiology, that uses exosomes – small, fluid-filled packets – to kill cancer cells without harming healthy cells.

New Mexico-based terraSOL is honing analytical software created by Glen Murata, MD, professor in the Department of Internal Medicine, to improve care for people with chronic diseases.

GHP Development, a Colorado company, has licensed a device developed by Mark Hauswald, MD, professor emeritus in the Department of Emergency Medicine, that allows emergency room patients to safely control how much narcotic pain medication they receive.

A new approach to automated flow cytometry is among several new UNM-developed technologies licensed to ieCrowd, a California biotech development group.

The average salary for employees of these companies is generous – in the \$70,000 to \$80,000 range, Kuuttila says. It doesn't hurt that many of those hired by the firms were educated at UNM.

"It's great for the economy," she says, "and it's great for our students, too."



### THE STIGMA OF MENTAL ILLNESS WHY MILITARY HEALTH CARE PROVIDERS DON'T SEEK HELP

If you were a soldier, how likely would you be to trust the person next to you if you knew he or she had recently been in counseling? If ordered into combat under the command of an officer with an anger problem, would you feel better or more uneasy knowing it was serious enough for him or her to seek counseling?

"Our military forces are highly trained and we don't want to lose them due to stress," says Stephen Hernandez, PhD, RN, assistant professor in the UNM College of Nursing. "But traditionally, there has been a stigma to someone seeking out mental help."

A major in the U.S. Air Force Reserve, Hernandez focuses on military service members' perceptions of stigma and barriers to care associated with seeking mental health services.

An increasing number of research projects have addressed the issue in recent years, he said, but the well-being of medical caregivers themselves has been overlooked. How reluctant are they to seek services when they are overwhelmed, he wondered.

In 2012, Hernandez launched a study that focused on health care providers at multiple Air Force bases. It found officer nursing personnel were significantly more likely than enlisted staff to believe accessing mental health services would be embarrassing, harm their career or cause leaders to blame them for the problem.

Other barriers to seeking care included taking time off from work for treatment and scheduling appointments.

A followup study is already in place. Ultimately, Hernandez says, the goal is to identify effective interventions and decrease stress for medical personnel.



Principal Investigator Stephen Hernandez, PhD, RN Assistant Professor, College of Nursing

#### Grant Name

Stress, Resilience, and Stigma and Barriers to Mental Health Care in Air Force Nursing Staff

#### Grantor

TriService Nursing Research Program

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 Recipient, NIH/NHLBI Vasomotor and endothelial barrier impacts of nanoparticulate-induced serum compositional alterations Mentor: Matthew Campen, PhD



Nathan Bolanos K05 Scholar, NIH/NCI UV risk in childhood and melanoma later in life Mentor: Marianne Berwick, PhD, MPH



Marianne Berwick, PhD, MPH K05 Scholar, NIH/NCI Melanoma Prevention: Using the Sun



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



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



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



Seth Daly, PhD T32 Recipient, NIH/NIAID Anti-virulence strategies targeting Methicillin-resistant Staphylococcus aureus Mentor: Pamela Hall, PhD



**Erica Dashner, PhD** K12 Scholar, NIH *Examining a role for zinc supplementation as a way to attenuate the negative effects of exposure to arsenic and uranium* Mentor: Laurie Hudson, PhD



Vanessa De La Rosa, PhD K12 Scholar, NIH Toxicogenomics and genotoxicity studies to determine how arsenic and uranium exposures among New Mexico Native Americans may lead to increased incidence of cancer and other diseases Mentor: Jim Liu, PhD



Dawn Delfín, PhD KL2 Scholar, CTSC Stem cell adhesion to the extracellular matrix of remodeled, failing hearts Mentors: Matthew Campen, PhD; Carlos Roldan, MD



Darrell Dinwiddie, PhD KL2 Scholar, CTSC GWAS characterization of viral outbreaks in children: genetic biomarkers of rare diseases Mentors: Randall Heidenreich, MD; Scott Ness, PhD



M. Frank Erasmus, PhD Candidate F31 Recipient, NIH Targeting the pre-BCR in precursor B acute lymphoblastic leukemia Mentors: Bridget Wilson, PhD; Tudor Oprea, MD, PhD



Jon Femling, MD, PhD KL2 Scholar, CTSC Translating novel therapeutic pathways against Staphylococcus aureus pathogenesis into patients presenting to the emergency department Mentors: Cameron Crandall, MD; Patti Gravitt, PhD



Anastacia Griego, PhD Candidate F31 Recipient, NIH/NCI Regulation of human papillomavirus replication via cell signaling pathways Mentor: Michelle A. Ozbun, PhD



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



Molly Harmon, PhD Candidate T32 Recipient, NIH Studying the prevalence and underlying mechanisms of

metals-induced oxidation of LDL cholesterol and testing the circulating inflammatory potential in a Navajo community disproportionately affected by uranium mining Mentor: Matthew Campen, PhD, MSPH



Brandi Fink, PhD KL2 Scholar, NIH/NCATS Neuropsychophysiological mediators of the association between alcohol use and intimate partner violence Mentors: Fernando Valenzuela, MD, PhD;



Jennifer Hettema, PhD K23 Scholar, NIH Mentored research on improving alcohol brief interventions in medical settings



**Dallas Benjamin Flies, PhD** T32 Recipient, NIH/NIAID Identification of biomarkers and development of immunotherapeutics for ovarian cancer Mentor: Sarah R. Adams, MD



Joseph Hoover, PhD K12 Scholar, NIH/NIGMS Using public health, resource management and geographic information science to identify contaminated water and land resources on the Navajo Nation Mentor: Johnnye Lewis, PhD



Natalie Fredette, PhD Candidate T32 Recipient, NIH Role of G protein-coupled estrogen receptor in regulation of vascular endothelial and smooth muscle function Mentor: Eric Prossnitz, PhD



Stephanie Jerman, PhD F31 Recipient, NIH OFD1 as constituent of a multimeric protein complex in odontoblast primary cillia Mentor: Angela Wandinger-Ness, PhD



Matt Graus, MS

T32 Recipient, NIH/NIAID Understanding how the fine-scale structures of the cell wall surface of Candida species fungal pathogens controls C-type lectin recruitment on innate immune cells, and how that affects the downstream immune response Mentor: Aaron K. Neumann, PhD



Jaime Javier Juarez, PhD K12 Scholar, NIH Utilizing fabrication and optical interrogation techniques to improve flow cytometry particle detection at the nanoscale and at high speed Mentors: Andrew Shreve, PhD; Keith Lidke, PhD

#### UNM HEALTH SCIENCES TRAINING GRANTS



**Britta E. Lindquist, MD/PhD Candidate** F31 Recipient, NIH/NINDS Studying how adenosine accumulation following spreading depolarization in ischemia contributes to progression of stroke injury Mentor: Bill Shuttleworth, PhD



Mary Beth Logue, Medical Student K05 Scholar, NIH/NCI Skin cancer risk behavior among Native Americans in New Mexico Mentor: Marianne Berwick, PhD, MPH



#### Lindsey Long, PhD K12 Scholar, NIH

The role of histone modification in transcriptional regulation of yeast cell interconversion between quiescence and normal proliferative states and its relevance to stem cell behaviors and cancer Mentor: Mary Ann Osley, PhD



#### Christy Magcalas, PhD Candidate T32 Recipient, NIH/NIAAA How exposure to ethanol and ketamine during adolescence alters glutamatergic receptor function in the frontal cortex and related behavioral outcomes Mentor: Derek Hamilton, PhD



Kristopher D. Marjon, PhD T32 Recipient, NIH Mechanisms of hematopoietic stem/progenitor cell homing and cell adhesion to specific microenvironments Mentor: Jennifer Gillette, PhD



Kristin L. Marquardt, PhD Candidate T32 Recipient, NIH/NIAAA Understanding how prenatal alcohol exposure alters prefrontal cortex and striatal function by using a mouse model of moderate prenatal alcohol exposure paired with in vivo electrophysiology. Mentor: Jonathan Brigman, PhD



#### Martha Martinez Grimes, PhD K12 Scholar, NIH Elucidating the pathogenicity of Candida albicans and determining how vacuolar ATPase contributes to infection and virulence.

Mentor: Karlett Parra, PhD



Levi Maston, MD/PhD Candidate F30 Recipient, NIH/NHLBI Investigating inflammatory mechanisms of that underlie the progression of pulmonary hypertension resulting from long-term exposure to hypoxia. Mentors: Laura Gonzalez Bosc, PhD; Thomas Resta, PhD; Judy Cannon, PhD



**Sowmiya Murali, Medical Student** K05 Scholar, NIH/NCI *Risk factors for ulceration in melanoma* Mentor: Marianne Berwick, PhD, MPH



**Prashant Nighot, DVM, PhD** K01 Scholar, NIH Inflammatory bowel disease



Sarah Pirio Richardson, MD KL2 Scholar, CTSC Using non-invasive transcranial magnetic stimulation, to improve symptoms and quality of life in patients with movement disorders Mentors: Bill Shuttleworth, PhD; Leslie Morrison, MD



**Dominique Price, PhD Candidate** T32 Recipient, NIH/NIAID *Infectious disease, immunology, vaccines and tuberculosis* Mentor: Pavan Muttil, PhD



Danielle Protas, PhD K12 Scholar, NIH The mechanisms of depolarization in spreading depression Mentor: Bill Shuttleworth, PhD



Anita L. Ray, PhD Candidate T32 Recipient The role of inflammation in colorectal cancer and potential immunotherapeutic targets Mentor: Ellen Beswick, PhD



Katelyn Reinhart, PhD Candidate T32 Recipient, NIH Spreading depolarization and the basic physiological mechanisms that contribute to the progression of brain injuries, including stroke Mentor: Bill Shuttleworth, PhD



**Chelsea Saito-Reis, PhD Candidate** T32 Recipient, NIH Role of CD2 in regulating hematopoietic stem cell adhesion and signaling Mentor: Jennifer Gillette, PhD



**Sabrina L. Samudio-Ruiz, PhD** K01 Scholar, NIH Alterations in gene expression, intracellular signaling pathways and DNA methylation associated with the development of platinum resistance in ovarian cancer



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



Joshua Sheak, MD/PhD Candidate T32 Recipient, NIH Investigating the contribution of a novel intracellular signaling pathway to pulmonary hypertension in infants using an animal model of neonatal pulmonary hypertension Mentor: Thomas Resta, PhD



Laurie Steffen, PhD Candidate on Internship K05 Scholar, NIH/NCI Late-stage lung cancer and coping Mentor: Bruce Smith, PhD



**Christina Termini, PhD Candidate** F31 Recipient, NIH Identify the mechanisms and molecules that regulate

hematopoietic stem/progenitor cell (HSPC) adhesion to the microenvironment to provide clinical targets to enhance HSPC transplantation therapies Mentors: Jennifer Gillette, PhD; Angela Wandinger-Ness, PhD



Lauren Topper, PhD Candidate T32 Recipient, NIH/NIAAA Effects of developmental ethanol exposure on neuroinflammation Mentor: C. Fernando Valenzuela, MD, PhD



Christina R. Tyler, PhD F31 Recipient, NIH/NIMH The epigenetic link between environmental exposure and adult-onset depression Mentor: Andrea M. Allan, PhD



Heather Ward, PhD K01 Scholar, NIH *Targeting fibrosis in polycystic kidney disease* Mentor: Angela Wandinger-Ness, PhD



Sonlee West, MD KL2 Scholar, CTSC *Immune response to trauma* Mentors: Arup Das, MD, PhD; Carolyn Mold, PhD



Kirsten White, PhD Candidate K05 Scholar, NIH/NCI *Autophagy and oncogene status in melanoma* Mentors: Marianne Berwick, PhD, MPH; Chien-An Hu, PhD



Claire Wilcox, MD K23 Scholar, NIH Neural mechanisms of change during the treatment of alcohol use disorders Mentor: Michael Bogenschutz, MD



Kayla R. Zehr, PhD Candidate T32 Recipient, NIH/NHLBI How omega-3 polyunstaturated fatty acids mediate dilatory and antioxidant effects in the vasculature and protect blood vessels from xenobiotic-induced oxidative stress and dysfunction. Mentor: Mary Walker, PhD

Unavailable for photos: Christopher Hughes; Jenna Lilyquist, PhD; John Pinner

# **Giving Life to Innova** How Public-Private Partnerships Promote Biotechnology





#### 2015 EXCELLENCE IN RESEARCH AWARDS



Left to right: Vojo Deretic, PhD; Ludmila Bakhireva, PhD, MD, MPH; Richard Larson, MD, PhD; Mark Burge, MD; Corey Ford, MD, PhD; Andrea Allan, PhD; Jennifer Gillette, PhD; Paul B. Roth, MD, MS.

#### Award recipients were recognized for their excellence in research in five categories:

BASIC SCIENCE

CLINICAL SCIENCE

JUNIOR FACULTY

POPULATION SCIENCE

TEAM SCIENCE





#### The Seventh Annual Research Day Awards

Ceremony was held on October 29, 2015. For the Excellence in Research Awards, five colleagues were nominated by their peers and selected by a faculty committee for outstanding contributions in the categories of Basic Science, Clinical Science, Junior Faculty and Population Science. This year, a collaborationfocused award - Team Science - was added.



Mark Burge, MD Clinical Science

Born into a family affected by diabetes (and contracting it himself in college), Mark Burge always knew he would one day study the disease. His research has focused on improving treatments for Type 1 and 2 diabetes since he joined the faculty in 1993. "Everything I've

learned about research and scholarly achievement comes from a small community of phenomenally accomplished academic clinical researchers at UNM," he says.



#### Vojo Deretic, PhD Basic Science

Vojo Deretic pioneered the understanding of autophagy. "Cells actually have a process to cleanse their interiors that we did not know existed just a decade ago," he says. His discoveries may lead to treatments for Crohn's disease, HIV and tuberculosis, among others.

"I am particularly proud of this award," he says. "I'm thankful to our institution and environment here for allowing me to pursue my scientific endeavors to the fullest."



#### Ludmila Bakhireva, PhD, MD, MPH Population Science

Ludmila Bakhireva works to minimize health disparities among vulnerable populations. She has identified biomarkers of prenatal alcohol exposure and is studying the combined effects of alcohol, arsenic and uranium exposure on Navajo children. "These patients

genuinely want to contribute to research," she says. "They see it as an opportunity for change, to have their stories heard, to help their child and to make a contribution to their community."



Andrea Allan, PhD Team Science

"Team-oriented science is fast becoming the norm," says Andrea Allan. "With each of us bringing to a project our expertise, knowledge and curiosity, we broaden our perspective and strengthen our findings." Allan has played a key role in more than a dozen

programmatic initiatives and signature programs in the past decade. Echoing Sir Isaac Newton, she says, "One can see deeper by standing on the shoulders of giants."



#### Jennifer Gillette, PhD Junior Faculty

Jennifer Gillette has focused on bone marrow engraftment and homing of stem cells mediated by CD82 in the short time since she joined UNM in 2010. She is developing translational approaches to expand her research program by partnering with and mentoring

clinician scientists. "I attribute much of my success to the talent, hard work and dedication of the trainees with whom I've been privileged to work," she says.



# BY The Numbers

### **UNM HSC RESEARCH 2015**



\$160,753,570

Total awards in FY 2015



1,178

Total full-time faculty



306

Principal investigators extramurally funded



85

Community research sites in New Mexico



1 of 29

National institutions with both a Clinical and Translational Science Award and a Cancer Center with NCI Comprehensive Designation



38





849

Proposals awarded
Chancellor for Health Sciences	;
Financial Aid	;
Health Sciences Library and Informatics Center	5
Office of Research	5
Animal Resource Facility	;
Biomedical Research Educational Program	;
Clinical & Translational Science Center	;
College of Nursing	5
College of Pharmacy	7
Poison Control	)
School of Medicine	)
Anesthesiology	)
Biochemistry and Molecular Biology	)
Brain and Behavioral Health Institute	)
Cancer Research and Treatment Center40	)
Cell Biology and Physiology42	)
Center for Infectious Disease and Immunity42	)
Continuing Medical Education42	)
Dental Medicine	}
Dermatology43	)
ECHO Institute	;
Emergency Medicine43	;
Family and Community Medicine45	
Internal Medicine	;
Molecular Genetics and Microbiology49	)
Neurology	)
Neurosciences	)
Neurosurgery	
New Mexico Tumor Registry	
Obstetrics and Gynecology51	
Office of the Medical Investigator	
Orthopaedics	2
Pathology	
Pediatrics	ŀ
Pediatrics Center for Development and Disability56	
Pediatrics Prevention and Population Sciences57	'
Psychiatry and Behavioral Sciences	3
Radiology	)
Surgery	)
Undergraduate Medical Education	
UNM Hospital	
UNM Medical Group	)
UNM Sandoval Regional Medical Center	)

# FY 2015 (JULY 1, 2014 - JUNE 30, 2015)

### **CHANCELLOR FOR HEALTH SCIENCES**

### **RICHARD LARSON**

Financial Aid	
UNM Foundation Private Gifts for Research	,.
UNM Foundation Private Gifts for Research	\$317,472
UNM Foundation Private Gifts for Research	\$351,435
UNM Foundation. Private Gifts for Research	\$477,944

### MARY FENTON

HHS/Health Resources and Services Administration ...... \$650,000 ACA-Scholarship for Disadvantaged Students - Allopathic Medicine

HHS/Health Resources and Services Administration ...... \$206,496 ACA-Scholarship for Disadvantaged Students - Medical Laboratory Science

### HEALTH SCIENCES LIBRARY AND INFORMATICS CENTER

### **ANDRAS AMBRUS**

NIH/National Library of Medicine\$7	700
Professional Development Award - Bioinformatics Classes	

#### PATRICIA BRADLEY

Center for Public Service Communications	\$20,000
Native Voices Community Outreach	

NIH/National Library of Medicine ......\$15,000 Maintaining the Health Information Network for New Mexico (Outreach)

#### GALE HANNIGAN

National Network of Libraries of Medicine.....\$8,000 Ps (Partners) for PODS: Engaging School Libraries in Points of Dispensing Disaster Preparedness Activities

#### PHILIP KROTH

HHS/Agency for Healthcare Research and Quality ...... \$193,326 Minimizing Stress, Maximizing Success of Physician's Use of Health Information and Communications Technologies

### **OFFICE OF RESEARCH**

#### **RICHARD LARSON**

Lovelace Respiratory Research Institute ......\$48,957 BSGP Administrative Support Agreement



Lovelace Respiratory Research Institute ......\$9,474 BSGP Administrative Support for Fellowships

#### 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	\$26,050
Veterinary Services	

### **Biomedical Research Educational Program**

#### **RICHARD LARSON**

Lovelace Respiratory Research Institute	\$72,727
BSGP Fellowship Agreement	

Lovelace Respiratory Research Institute ......\$38,355 **BSGP** Fellowship Support

#### **CLINICAL & TRANSLATIONAL SCIENCE CENTER**

#### MARK BURGE

National Institutes of Health ......\$10,514 Iron-Induced Oxidative Stress and Mitochondrial Dysfunction: Effects on Insulin Secretion and Insulin Sensitivity

### **DAWN DELFIN**

American Heart Association	. \$140,000
Stem Cell Adherence to the ECM of Remodeled Heart	

### JON KENNETH FEMLING

Emergency Medicine Foundation......\$50,000 Translating Quorum Sensing Inhibitions to Human S. Aureus Infections

#### **ALBERTA KONG**

ACTION PAC: Adolescents Committed to Improvement of Nutrition & Physical Activity

#### **RICHARD LARSON**

NIH/National Center for Advancing Translational Sciences\$4,941,544
UNM Clinical & Translational Science Center*

NIH/National Institute of General Medical Science ...... \$774,307 Clinical and Translational Research Infrastructure Network IDeA-CTR/CRDEB

National Institutes of Health	. \$129,960
UNM Clinical & Translational Science Center - Supplement	

NIH/National Center for Advancing Translational Sciences ...... \$111,529 Enhancing Clinical Research Professionals' Training and Qualifications

#### SONLEE DENISE WEST

Bio2 Medical \$	152,714
Clinical Trial Agreement (Device)	

#### **ROBERT WILLIAMS**

National Institutes of Health	. \$300,241
ACA-NM CARES HD - Pilot Research Projects	

### **COLLEGE OF NURSING**

#### **BLAKE BOURSAW**

New Mexico Higher Education Department ......\$13,836 Performance-Based Funding Metrics for Higher Education: The Case of New Mexico in FY 17

\* initiated in FY14 and continued in FY15 and part of FY16

### **SALLY COHEN**

American Academy of Nursing......\$90,000 IOM-AAN, ANA, ANF Distinguished Nurse Scholar in Residence

### **EMILY HAOZOUS**

Feinstein Kean Healthcare	\$14,500
Study of Trinity Radiation Doses and Cancer Risks Resulting from	
1945 "Trinity" Atomic Weapon Test	

Social & Scientific Systems\$ Study of Trinity Radiation Doses and Cancer Risks	10,610
	* < 0.00

 Feinstein Kean Healthcare
 \$6,000
 \$6,000

 Study of Trinity Radiation Doses and Cancer Risks

Spirit of EAGLES.....\$2,500 Hampton Faculty Fellows Program Cohort II

### **STEPHEN HERNANDEZ**

### SHANA (SUZANNE) MARIE JUDGE

Robert Wood Johnson Foundation	\$1,278,913
Nursing and Health Policy Collaborative at UNM	

### **AMY JO LEVI**

HHS/Health Resources and Services Administration	\$350,000
ACA-Advanced Education Nursing Traineeships	

HHS/Health Resources and Services Administration	\$350,000
ACA-Advanced Education Nursing Traineeships	

HRSA/Bureau of Primary Health Care	.\$52,261
ACA-Nurse Faculty Loan Program (NFLP) FY 16	

University of California, San Francisco	\$12,272
Early Pregnancy Loss	

#### **JUDY LIESVELD**

Robert Wood Johnson Foundation	\$300,000
Academic Progression in Nursing	

New Mexico Board of Nursing \$	158,771
New Mexico Nursing Education Statewide Planning	

### NANCY MORTON

New Mexico VA Health Care System	\$436,561
VA Nursing Academic Partnerships IPA: Marisa Francis (Years 2-4)	

### BARBARA ANN OVERMAN

El Pueblo Health Services	\$5,784
El Pueblo Health Services	

### NANCY RIDENOUR

City of Albuquerque	. \$133,000
Health Services Coordination	

City of Albuquerque\$6	57,000
Geriatric Education and Health Maintenance Clinic	

#### STEPHEN VAN ROPER

ACE Leadership High School The Board of Architecture, Construction, and Engineering Leadership High School	\$58,319
ABQ Health Partners LLC ABQ Health Partners Contract - BAA	\$54,870
First Nations Community Healthsource Inc	\$52 171



Presbyterian Healthcare Services ......\$29,291 Certified Nurse Practitioner Services

### **COLLEGE OF PHARMACY**

#### **JOE ANDERSON**

New Mexico Department of Health .....\$30,004 Health Systems Data Management and Use of Team-Based Health Care

#### LUDMILA BAKHIREVA

NIH/National Institute on Alcohol Abuse and Alcoholism	. \$569,811
Early Indices of Atypical Neurodevelopment with Fetal Alcohol Expos	ure

University of California, San Diego\$	48,000
Organization of Teratology Information Specialists Research Network	

Texas Department of Health\$	24,000
Texas Office of Prevention of Development Disabilities	

#### **SCOTT BURCHIEL**

NIH/National Institute of Environmental Health Sciences	\$729,080
Synergistic Immunosuppression by PAHs and Arsenite	

#### **MATTHEW CAMPEN**

NIH/National Institute of Environmental Health Sciences	
National Institutes of Health	
University of Washington\$39,405 Cardiovascular Consequences of Immune Modification by Traffic- Related Emissions	
University of Washington	

University of Washington.....\$39,405 Cardiovascular Consequences of Immune Modification by Traffic-Related Emissions

### **CATHERINE CONE**

Sandia Staffing Alliance\$26,641	
Sandia National Laboratories Clinic - BAA	

#### **ESZTER ERDEI**

Black Hills Center for American Indian Health	\$111,167
Complex Metal Exposure and Immune Status on the Cheyenne River	

### LARRY GEORGOPOULOS

New Mexico Heart Institute Radiopharmaceutical Goods and Services	. \$250,000
UNM Medical Group Molina Telephonic MTM Agreement	. \$100,000



### L

LARRY GEORGOPOULOS (CONTINUED) ABQ Health Partners LLC	\$90,000
Cardiac Care Consultants of New Mexico	\$90,000
First Choice Community Healthcare Pharmacist Consultant Agreement - BAA	\$81,060
Translational Radiopharmacy Preparation of 90Y-SirSpheres	\$60,000
New Mexico Health Connections	\$18,000
First Nations Community Healthsource, Inc First Nations Community Healthsource	.\$2,500
PAMELA HALL           NIH/National Institute of Allergy and Infectious Diseases         \$3           Apolipoprotein B and Control of S. Aureus Quorum Sensing	397,470
NIH/National Institute of Allergy and Infectious Diseases	
Sandia National Laboratories	\$45,300
AJNA HAMIDOVIC NIH/National Institutes of Health Intranasal Insulin Treatment for Weight Management During Smoking Ce	
LAURIE HUDSON           NIH/National Institutes of Health         \$3           Arsenic Co-Carcinogenesis with UVR: Nitrosation and Oxidation of Target Picture         \$1	
NIH/National Institutes of Health\$ Zinc Chemoprevention of Arsenic Co-Carcinogenesis	313,325
JOHNNYE LEWIS HHS/Centers for Disease Control and Prevention\$1,0 ACA-A Prospective Birth Cohort Study Involving Uranium Exposure in the Navajo Nation	000,000
HHS/Centers for Disease Control and Prevention\$ Navajo Birth Cohort Study (Mother/Infant Supplement)	360,000
National Institutes of Health\$1	156,241 iunities

### **JIM LIU**

Arsenic Co-Carcinogenesis with UVR: Nitrosation and Oxidation of Target Proteins

NIH/National Institute on Drug Abuse..... \$187,425 Methamphetamine-Induced Alterations in Brain Tissue Oxygenation

National Institutes of Health ......\$52,370 Particulate Cr(VI) Toxicology in Human Lung Epithelial Cells and Fibroblasts

Massachusetts General Hospital ......\$10,000 General Anesthesia and Alzheimer's Disease Neuropathogenesis

National Institutes of Health ......\$9,062 Particulate Cr(VI) Toxicology in Human Lung Epithelial Cells and Fibroblasts

### **RENEE-CLAUDE MERCIER**

TriCore Reference Laboratories
International Health Management Associates, Inc
PAVAN MUTTIL Sandia National Laboratories
JEFFREY NORENBERG inviCRO\$61,856 Task 31: PK/Biodistribution Study
inviCRO\$29,000 Task 32: Plasma Pharmacokinetic Testing Study
DENNIS RAISCH National Institutes of Health
SABRINA SAMUDIO-RUIZ           NIH/National Cancer Institute.         \$129,216           EGF Receptor, DNA Methylation and Platinum Resistance in Ovarian Cancer
SUSAN SMOLINSKE           Denver Health and Hospital Authority         \$18,623           RADARS System Work Order #1         \$18,623
Denver Health and Hospital Authority\$1,562 RADARS System Work Order #2
Denver Health and Hospital Authority\$1,562 RADARS System Work Order #3
<b>GRAHAM TIMMINS</b> NIH/National Institute of Allergy and Infectious Diseases \$188,750 <i>Pyrazinamide Breath Test for TB</i>
Johnson & Johnson\$6,938 An Initial Analysis of MPF Methodology for Sunscreen Assessment
MARY WALKER American Heart Association
CARLA WALRAVEN Durata Therapeutics, Inc
Durata Therapeutics, Inc\$7,500 Acute Bacterial Skin and Skin Practice Pattern Assessment Project - Site 102

### **TRACI WHITE**

Mesilla Valley Hospice ......\$35,152 Mesilla Valley Hospice Pharmacists Clinician Agreement

### KRISTINA WITTSTROM

Sandia National Laboratories	\$2,100
SNL Isotope Request - PRN Services	

### **Poison Control**

#### SUSAN SMOLINSKE

HHS/Health Resources and Services Administration ...... \$115,158 Poison Control Stabilization And Enhancement Program

### SCHOOL OF MEDICINE

#### DAVID PITCHER

New Mexico Department of Health .....\$1,125,355 Sustain Level I Trauma Center Designation & Improve Financial Viability of Trauma Services

New Mexico Department of Health .....\$1,125,355 Sustain Level I Trauma Center Designation & Improve Financial Viability of Trauma Services

### MICHAEL RICHARDS

New Mexico Department of Health .....\$50,000 Locum Tenens Services for Turquoise Lodge Hospital

New Mexico Department of Health .....\$50,000 Psychiatric Services for New Mexico Behavioral Health Institute Patients

#### Anesthesiology

### EUGENE KOSHKIN

Boston Scientific Corporation	\$15,000
UNM Pain Medicine Fellowship	

Medtronic\$	15,000
UNM Pain Medicine Fellowship	

St. Jude Medical	\$15,000
UNM Pain Medicine Fellowship	

### JONATHAN MARINARO

Kindred Hospital (Transitional Hospitals Corp. of NM).....\$64,800 Medical Director

### ISAAC TAWIL

DCI Donor Services	.\$8,240
Medical Director Services	

#### **Biochemistry and Molecular Biology**

### NATALIE ADOLPHI

### JEFFREY GRIFFITH

### CHIEN-AN ANDY HU

Children's National Medical Center.....\$10,117 Role of Cytokines and APOL-1 in the Pathogenesis of Childhood HIV Associated Nephropathy

#### **MEILIAN LIU**

### KRISTINA TRUJILLO

ExoVita BioSciences ......\$24,443 Development of Exosomes from Field-Cancerized Fibroblasts as a Cancer Therapeutic

#### **Brain and Behavioral Health Institute**

### **CLAUDE SHUTTLEWORTH**

### **ROBERT THOMA**

New Mexico Governor's Commission on Disability.....\$50,000 Brain Injury Study on the Veteran Population of New Mexico

### **JOHN WEAVER**

#### YIRONG YANG

Lovelace Respiratory Research Institute ......\$3,600 Exploration of Potential Neuroprotective Effects of Ketamine in Rodents Exposed to Organophosphates

### YIRONG YANG

Lovelace Respiratory Research Institute ......\$1,500 Exploration of Potential Neuroprotective Effects of Ketamine in Rodents Exposed to Organophosphates



### Cancor Posoarch and Troatmont Contor

Cancer Research and Treatment Center
SARAH ADAMSOvarian Cancer Research Fund, Inc.A Combination Therapy for Hereditary Ovarian Cancer
Oxnard Foundation\$80,000 Targeting DNA Repair Pathways to Sensitize Ovarian Tumors to Immune Therapy
Phi Beta Psi Charity Trust
<b>CECILIA ARANA YI</b> New Mexico Cancer Care Alliance
New Mexico Cancer Care Alliance\$100,557 Clinical Trial Agreement - Phase 2
New Mexico Cancer Care Alliance\$86,445 Clinical Trial Agreement - Phase 1
New Mexico Cancer Care Alliance\$85,244 Clinical Trial Subaward - Phase 2
New Mexico Cancer Care Alliance\$85,103 Clinical Trial Agreements - Phase 3
New Mexico Cancer Care Alliance\$54,240 Clinical Trial Agreements - Phase 3 (2099)
WADIH ARAP

#### WADIH ARAP

NIH/National Heart, Lung and Blood Institute	\$366,250
Regulation of the Paracine Angiogenic Function of Cardiac Myocytes by	у
Cardiomyocyte PDGFR-a	

### **MARIANNE BERWICK**

Memorial Sloan Kettering Cancer Center	\$244,632
Personalized Genomic Testing for Melanoma: Maximizing Persona	l Utility and
Research	

NIH/National Cancer Institute	. \$156,292
Melanoma Prevention: Using the Sun	

### **URSA BROWN-GLABERMAN**

New Mexico Cancer Care Alliance Clinical Trial Subaward - Phase 3	\$135,446
New Mexico Cancer Care Alliance Clinical Trial - Phase 3	\$133,889
New Mexico Cancer Care Alliance Clinical Trial Subaward - Phase 2	\$96,000
New Martine Comercial Alliance	405 707

Clinical Trial Agreement - Phase 2



LINDA SUE COOK NIH/National Cancer Institute	309
BARBARA DAMRON Consulate of Mexico in Albuquerque\$36, Ventanilla de Salud Program	,000
New Mexico Department of Health\$5, Master Services Agreement for Native American Cancer Education Project 201	
STEVEN         EBERHARDT           ECOG-ACRIN Cancer Research Group         \$76,           ECOG ACRIN (non-federal)         \$76,	,800
ECOG-ACRIN Cancer Research Group\$75, ECOG ACRIN (federal)	,300
<b>GREGORY GAN</b> Radiological Society of North America	,000
New Mexico Cancer Care Alliance\$78, Clinical Trial Agreement - Phase 2	,447
New Mexico Cancer Care Alliance\$74, Clinical Trial Subaward - Phase 1	,609
<b>DEIRDRE HILL</b> NIH/National Cancer Institute\$75, <i>Biomarkers of Tumor Initiation in Breast Cancer</i>	,500
Group Health Research Institute\$35, Risk-Based Breast Cancer Screening in Community Settings	,607
RICHARD HOFFMAN National Institutes of Health\$10, Treatment Decisions and Patient-Reported Outcomes in Low-Risk Prostate Cancer	,721
HUINING KANG Gabrielle's Angel Foundation\$10, Statistical Methods for Evaluating Cancer Biomarkers	000
<b>ANITA KINNEY</b> National Institutes of Health\$10, Health and Socioeconomic Outcomes for Survivors of Adolescent and Young Adult Cancer	,076
Nancy Floyd Haworth Foundation\$4, Culturally Sensitive Hereditary Breast Cancer Genomic Risk Communication for Hispanic Women	,200
<b>RICHARD LAUER</b> New Mexico Cancer Care Alliance\$96, Clinical Trial Subaward - Phase 2	260
New Mexico Cancer Care Alliance\$93, Clinical Trial Agreement - Phase 2	391
FA-CHYI LEE New Mexico Cancer Care Alliance\$44, Clinical Trial Agreement - Phase 3	,201
<b>YU-SHEN LIN</b> Sandia National Laboratories\$30, Synthesis of Mono-sized Silica Nanoparticles	000

### **CAROLYN MULLER**

NRG Oncology \$3	12,773
NRG (NSABP, RTOG, GOG) (Non-Federal Part)	

NRG Oncology	\$287,773
NRG (NSABP, RTOG, GOG) (Federal Part)	

Gynecologic Oncology Group	\$52,114
Clinical Trial Subaward - Phase 2	

### LAURA NERVI

Consulate of Mexico in Albuquerque	\$36,000
Ventanilla de Salud Program	

Consulate of Mexico in Albuquerque\$	4,000
Ventanilla de Salud Program	

### **SCOTT NESS**

NIH/National Institute of Dental and Craniofacial Research ....... \$163,3502 Mutations and Target Genes in Adenoid Cystic Carcinoma (Administrative Supplement)

### **JANET OLIVER**

NIH/Na	ational Cancer Institute	\$351,785
Integra	ative Cancer Nanoscience and Microsystems Training Center	

### **MICHELLE OZBUN**

American Cancer Society	. \$300,000
Institutional Research Grant	

## RENATA PASQUALINI

Arrowhead Research Corporation Skeletal Muscle-Targeting Peptides	. \$160,000
NIH/National Eye Institute Targeted Modulation of Angiogenesis by VEGER Peptidomimetic Antag	

÷100.000

National Institutes of Health\$56,47	'5
Optical Systems for In-Vivo Molecular Imaging of Cancer	

American Association for Cancer Research ......\$24,380 Octreotide-Targeted Treatment of Neuroendocrine Tumors of the Pancreas

### ERIC PROSSNITZ

NIH/National Institute of General Medical Sciences......\$52,850 New Mexico IDeA Networks of Biomedical Research Excellence

#### **OLIVIER RIXE**

Brigham and Women's Hospital	\$80,400
Brigham and Women's (Alliance for Clinical Trials in Oncology) - Federal	

Brigham and Women's Hospital.....\$64,000 Brigham and Women's (Alliance for Clinical Trials in Oncology) - Non-Federal

### MELANIE ROYCE

NIH/National Cancer Institute	\$1,383,575
Minority-Based Community Clinical Oncology Program	

New Mexico Cancer Care Alliance	\$110,555
Clinical Trial Subaward - Phase 2	
New Mexico Cancer Care Alliance Clinical Trial Agreement - Phase 2	\$103,240



New Mexico Cancer Care Alliance\$95,868 Clinical Trial Agreement - Phase 2
New Mexico Cancer Care Alliance\$84,364 Clinical Trial Agreement - Phase 2
New Mexico Cancer Care Alliance\$82,055 <i>Clinical Trial - Phase 2</i>
New Mexico Cancer Care Alliance\$80,374 Clinical Trial Subaward - Phase 2
MONTASER SHAHEEN New Mexico Cancer Care Alliance\$97,579 Clinical Trial Subaward - Phase 1/2
New Mexico Cancer Care Alliance\$15,000 Clinical Trial Agreement
LARRY SKLAR
NIH/National Cancer Institute\$230,094 Novel DNA Double Stand Break Repair Targeting Therapeutics for Cancer Treatment
ALAN TOMKINSON           NIH/National Institute of General Medical Sciences         \$280,000           Roles of DNA Ligase 1 in Mammalian DNA Metabolism
NIH/National Institute of General Medical Sciences\$238,580 Cellular Functions of Eukaryotic DNA Ligases
Lawrence Berkeley National Laboratory\$86,807 Structural Cell Biology of DNA Repair Machines Project
NIH/National Institute on Aging\$29,000 Fifth US-EU Conference on Repair of Endogenous DNA Damage
CHERYL WILLMAN
NIH/National Cancer Institute\$1,876,081 UNM Cancer Center Support Grant
Memorial Medical Center\$1,356,618 Professional Services
NIH/National Cancer Institute
NIH/National Cancer Institute
NIH/National Cancer Institute
New York University



### **CHERYL WILLMAN (CONTINUED)**

Children's Hospital of Philadelphia ......\$99,196 Testing Targeted Therapy in Philadelphia Chromosome-Like (Ph-like) ALL

NIH/National Cancer Institute ......\$75,000 UNM Cancer Center Support Grant - CTRP Supplement 2014 (Supplement #1)

NIH/National Cancer Institute.....\$50,000 UNM Cancer Center Support Grant-Cancer Clinical Investigator Team Leadership Award (Supplement #4)

University of Colorado - Denver.....\$37,831 Testing Targeted Therapy in Philadelphia Chromosome-Like (Ph-like) ALL

Montefiore Medical Center ......\$19,719 Detection and Characterization of Ph-Like ALL in the E1910 Study

Montefiore Medical Center ......\$19,719 Detection and Characterization of Ph-Like ALL in the E1910 Study

### **BRIDGET WILSON**

NIH/National Institutes of General Medical Sciences	\$2,491,967
Center for the Spatiotemporal Modeling of Cell Signaling	

### **Cell Biology and Physiology**

### OSCAR BIZZOZERO

NIH/National Institute of Neurological Disorders and Stroke ....... \$186,862 Cellular, Molecular and Functional Characterization of Proteasomes in EAE

### LAURA GONZALEZ BOSC

American Heart Association	. \$140,000
Adaptive Immunity in Pulmonary Hypertension	

### HELEN HATHAWAY

### NIKKI JERNIGAN

### NANCY KANAGY

NIH/National Heart, Lung, and Blood Institute	\$377,500
Hydrogen Sulfide Regulation of Vascular Tone and Blood Pressure	

Dialysis Clinic, Inc	. \$372,900
Simulated Sleep Apnea Effects on Renal Function and	
Blood Pressure in CKD Model	

American Heart Association (Western States Affiliate) ...... \$140,000 Impaired Hydrogen Sulfide-Induced Vasodilation in Hypertension

#### **ERIC PROSSNITZ**

NIH/National Cancer Institute	. \$313,325
G Protein-Coupled Estrogen Receptor and Breast Carcinogenesis	

#### **THOMAS RESTA**

NIH/National Heart, Lung, and Blood Institute.....\$31,304 The Role of Adaptive Immunity in Chronic Hypoxia-Induced Pulmonary Hypertension

### **BENJIMEN WALKER**

#### **Center for Infectious Disease and Immunity**

### **JULIE LOVCHIK**

#### **MICHELLE OZBUN**

NIH/National Institute of Allergy and Infectious Diseases	\$271,197
Biology of Infectious Disease and Inflammation	

#### **TERRY WU**

OOD/Defense Threat Reduction Agency	
Sandia National Laboratories Mesoporous Nanoparticle Biodistribution and Efficacy Studies	\$43,571
GlaxoSmithKline PK Study of GSK944 in Fischer 344 Rats	\$29,034
Sandia National Laboratories Mesoporous Nanoparticle Biodistribution and Efficacy Studies	\$28,850
GlaxoSmithKline PK Study of GSK944 in Fischer 344 Rats	\$27,634
GlaxoSmithKline PK Study of GSK944 in Fischer 344 Rats	\$19,242

#### ,

### **Continuing Medical Education**

### WILLIAM RAYBURN

AbbVie	
Celgene Corporation	
Novartis	
Novartis	
Lilly USA, LLC	
Celgene Corporation	
Onyx Pharmaceuticals, Inc\$50,000 A Multiple Myeloma Roundtable	
Abbott Laboratories Inc\$10,000 Nutrition and Aging: From Cells to Body Systems and Populations	
Northern Navajo Medical Center\$1,580 ALSO Course Payment Purchase Order	
Dental Medicine	
GARY CUTTRELL New Mexico Higher Education Department\$1,000,000 UNM Dental Residency Program	
New Mexico Higher Education Department\$1,000,000 UNM Dental Residency Program	
Community Dental Services\$6,918	

Community Dental Services

### VICKI GIANOPOULOS

HRSA/Office of Rural Health Policy	\$500,000
Special Needs Dental Residency Training Program	

### **CHARLES TATLOCK**

New Mexico Department of Health	. \$242,650
Basic Oral Health Services	

### Dermatology

### BARRETT ZLOTOFF

American Medical Group, Inc	\$15,000
Tele-Dermatology Services	

### **ECHO** Institute

### **SANJEEV ARORA**

GE Foundation\$3,000,000	
Leveraging the ECHO Model to Improve Quality in FQHCs and Transform the US	
Healthcare System (Year 1)	

Centers for Medicare and Medicaid Services.....\$2,419,027 ACA-Leverage Innovative Care and Coordination Model: Project ECHO

GE Foundation\$150,000 Project ECHO Developing a Practice Transformation Network to Improve Quality in FQHC's Planning Grant
Seattle Indian Health Board\$150,000 Supporting the Enhanced Implementation of Health and Wellness
American Academy of Pediatrics\$136,988 Enhancing Child and Youth Epilepsy Care via the ECHO Model (FY 15)
American Academy of Pediatrics       \$127,000         ECHO AAP Epilepsy Expansion
New Mexico Department of Health\$120,270 Hepatitis and HIV Clinical Consultant Project
New Mexico Department of Health
Albuquerque Area Indian Health Board, Inc
McCune Charitable Foundation\$50,000 ECHO Community Health Worker Initiative
Blue Cross Blue Shield of NM\$26,693 Supporting New Mexico Clinical Sites' Participation in Project ECHO
University of California, San Francisco\$25,000 Smoking Cessation Leadership Center Collaboration - Justice-Involved Peer Educators
CDC Foundation\$21,550 Project ECHO: Expanding Prevention, Care and Treatment Capacity and Reducing Health Care Costs for Hepatitis C and Other Complex Diseases
MIRIAM KAMAROMY The EMMES Corporation\$199,603 Clinical Coordinating Center for the NIDA Center for the Clinical Trials Network

## **Emergency Medicine**

### JUSTIN BACA

National Institutes of Health\$75	,500
Point-of-Care Tumor Marker Detection for Germ Cell and Epithelial Ovarian	

#### LAURA BANKS

New Mexico Department of Transportation.	. \$200,000
Pedestrian Safety Initiative	



LAURA BANKS (CONTINUED)           New Mexico Crime Victims Reparation Commission         \$75,000           Coordination of Domestic Violence Death Review Team
New Mexico Department of Health\$71,740 Hospital and Health Systems Preparedness Project Addendum
New Mexico Department of Homeland Security & Emergency Management\$33,750 UNM Multi-Hazard Mitigation Planning
New Mexico Department of Health\$21,000 Hospital and Health Systems Preparedness Project
National Association of County and City Health Officials\$15,000 Medical Reserve Corps Volunteer Challenge Award 2014-15
National Association of County and City Health Officials\$3,500 Medical Reserve Corps Volunteer Capacity Building Award 2014-15
DARREN BRAUDE DOD/Department of the Air Force
DOD/Department of the Air Force\$345,457 UNM Educational Services Agreement (Mod 2)
DOD/Kirtland Air Force Base\$298,152 UNM Educational Services Agreement
DOD/Kirtland Air Force Base\$298,152 UNM Educational Services Agreement
DOD/Kirtland Air Force Base
City of Albuquerque\$74,437 Medical Directorship
City of Albuquerque\$74,437 Medical Directorship
City of Albuquerque\$60,000 <i>Medical Directorship</i>
DOD/Kirtland Air Force Base\$27,670 UNM Educational Services Agreement
DOD/Kirtland Air Force Base\$24,063 UNM Educational Services Agreement
City of Albuquerque\$19,056 Paramedic Training Program



City of Albuquerque\$18,609 Medical Directorship
Torrance County\$12,000 Medical Director Services
City of Rio Rancho\$8,000 City of Rio Rancho Fire Department Professional Services
Town of Cochiti Lake\$3,450 Medical Director Services - BAA
Motion Picture Set Medics, LLC\$2,604 Professional Services - BAA
CAMERON CRANDALL Boehringer Ingelheim Pharmaceuticals, Inc
PPD Development\$132,917 Clinical Trial Agreement - Phase 3
Shire Human Genetic Therapies, Inc\$50,400 Clinical Trial Agreement - Phase 3 Supplement
Centers for Disease Control and Prevention\$30,000 IPA-Lynne Fullerton
JOY CROOK U.S. Drug Enforcement Agency
ANDREW HARRELL New Mexico Department of Homeland Security & Emergency Management
U.S. National Park Service\$24,000 Grand Canyon National Park - EMS Medical Services
U.S. Forest Service\$3,125 Wilderness First Aid
STEVEN MCLAUGHLIN New Mexico State Fair
New Mexico Public Safety Department\$48,000 Medical Direction - BAA
City of Rio Rancho\$35,000 Medical Director Services
City of Rio Rancho\$35,000 Medical Director Services
Bernalillo County\$22,370 EMS Refresher Course
New Mexico Donor Services\$19,777 Medical Director Services
DCI Donor Services\$11,537 Professional Services - BAA
Wilderness Medics Inc       \$10,000         Medical Director Services
Valencia Regional Emergency Communication Center\$9,000 Medical Director Services
City of Rio Rancho\$4,000 Professional Services
Carlsbad Caverns National Park\$2,400 Emergency Medicine - Medical Director

### **BRIAN MOORE**

BRIAN MOORE New Mexico Department of Health\$50,000 Statewide Emergency Medical Services Medical Direction Project
New Mexico Department of Health       \$5,000         Statewide Emergency Medical Services Medical Direction Project
ROBERT PERRY           New Mexico Department of Health         \$12,750           Healthcare Preparedness Program
New Mexico Department of Health\$10,750 Healthcare Preparedness Program - Behavioral Health
New Mexico Department of Health\$10,750 Healthcare Preparedness Program - Carrie Tingley
MICHAEL RICHARDS New Mexico Department of Health\$4,550 Rural Trauma Team Development Course Project
<b>ROBERT SAPIEN</b> HHS/Health Resources and Services Administration \$128,933 <i>EMS for Children State Partnership Grant</i>
New Mexico Department of Health\$50,000 School Nurse Behavioral Health Training
New Mexico Department of Health\$10,000 NM Child Fatality Review
PHILIP SEIDENBERG           Siemens Healthcare Diagnostics, Inc
Siemens Healthcare Diagnostics, Inc
Clinical Trial Agreement - Phase 4 Supplement
Clinical Trial Agreement - Phase 4 Supplement STEVEN SEIFERT American College of Medical Toxicology\$5,000
Clinical Trial Agreement - Phase 4 Supplement <b>STEVEN SEIFERT</b> American College of Medical Toxicology\$5,000 Participation in Toxic Patient Registry: Snakebite Registry
Clinical Trial Agreement - Phase 4 Supplement STEVEN SEIFERT American College of Medical Toxicology\$5,000 Participation in Toxic Patient Registry: Snakebite Registry Family and Community Medicine WILLIAM ATHAS New Mexico Department of Health\$30,000
Clinical Trial Agreement - Phase 4 Supplement         STEVEN SEIFERT         American College of Medical Toxicology
Clinical Trial Agreement - Phase 4 Supplement         STEVEN SEIFERT         American College of Medical Toxicology
Clinical Trial Agreement - Phase 4 Supplement         STEVEN SEIFERT         American College of Medical Toxicology
Clinical Trial Agreement - Phase 4 Supplement         STEVEN SEIFERT         American College of Medical Toxicology
Clinical Trial Agreement - Phase 4 Supplement         STEVEN SEIFERT         American College of Medical Toxicology       \$5,000         Participation in Toxic Patient Registry: Snakebite Registry         Family and Community Medicine         WILLIAM ATHAS         New Mexico Department of Health         New Mexico Department of Health         Salid Capacity Building         New Mexico Department of Health         Salid Capacity Building         Salid Capacity Building         New Mexico Department of Health         Salid Capacity Building         Salid Capacity Building         Shear the Resources and Services Administration         Salid Capacity Building         Salid Capacity Building         Shear the Resources and Services Administration         Salid Capacity Building         <
Clinical Trial Agreement - Phase 4 Supplement         STEVEN SEIFERT         American College of Medical Toxicology



### LISA CACARI-STONE

Con Alma Health Foundation	\$74,000
ACA-Policy Implementation Study	

#### **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

### **JENNIFER HETTEMA**

NIH/National Institute on Alcohol Abuse and Alcoholism	. \$156,198
Mentored Research on Improving Alcohol Brief Interventions in Medica	al Settings

National Institutes of Health	\$149,757
Mentored Research on Improving Alcohol Brief Interventions in Medica	l Settings

National Institutes of Health ...... \$143,846 Drug Abuse and HIV Adherence Treatments: A Multi-Level, Comparative Meta Analysis

National Institutes of Health ......\$75,500 Meta-Regression to Identify the Impact of SBIRT Structure and Content on Outcome

National Institutes of Health ......\$47,143 Mentored Research on Improving Alcohol Brief Interventions in Medical Settings

National Institutes of Health ......\$7,571 Drug Abuse and HIV Adherence Treatments: A Multi-level, Comparative Meta-Analysis

### LAUREN HUND

NIH/National Institute of Allergy and Infectious Diseases ......\$33,000 Accurate and Efficient Measures for HIV Incidence

#### **MIRIA KANO**

Colorado Foundation for Public Health and the Environment .......\$24,771 ACA-Building the New Mexico LGBTQ Health Improvement Network: Strengthening Community Health

### ARTHUR KAUFMAN

New Mexico Department of Health       \$426,985         New Mexico Immunization Coalition	\$426,985
Blue Cross Blue Shield of New Mexico \$224,564 <i>Care NM Services</i>	\$224,564
HHS/Health Resources and Services Administration	\$192,406
W.K. Kellogg Foundation\$50,000 Beyond Flexner 2015: Social Mission in Medical Education	.\$50,000



### SARAH LATHROP

New Mexico Department of Health ......\$1,148,361 ACA-New Mexico Emerging Infections Program

#### LAWRENCE LEEMAN

Anonymous Non-Profit Foundation	\$23,920
Early Training Grant	

### **JOHN LEGGOTT**

HHS/Health Resources and Services Administration ...... \$130,000 Physician Assistant In Primary Care (FY 15)

### MARTHA COLE MCGREW

### **JANET PAGE-REEVES**

Bernalillo County.....\$20,600 Office of Substance Abuse Prevention Bernalillo County Program Evaluation

East Central Ministries ......\$5,499 ACA-Culturally Appropriate Options for Diabetes Prevention and Care for Low-Income Latinos

### TASSY PARKER

Molina Healthcare of New Mexico	
Albuquerque Area Indian Health Board, Inc\$52,620 <i>Tribal Solutions</i>	
Albuquerque Area Indian Health Board, Inc\$41,945 Tribal Solutions Grant (NARCH)	
National Institutes of Health\$18,782 Healthy Children, Strong Families: American Indian Communities Preventing Obesity	

### **REBECCA RAE**

Santa Clara Pueblo	\$150,000
Robert Rhyne Jr.	

HHS/Agency for Healthcare Research and Quality	\$291,241
Health Extension Rural Office: Translating Research Into Localities	

#### VALERIE ROMERO-LEGGOTT

HHS/Health Resources and Services Administration	\$730,111
Association of Public and Land-grant Universities	\$5,000
Helene Silverblatt	

### H

HHS/Health Resources and Services Administration	\$306,000
ACA-New Mexico Area Health Education Centers	

### **GREG TAFOYA**

National Congress of American Indians	\$95,672
NARCH VII NCAI with UNM: CBPR Dissemination	

# KRISTINE TOLLESTRUP

HHS/Health Resources and Services Administration \$176,138 New Mexico MCH Public Health Training Institute	;
HHS/Health Resources and Services Administration	i
Tulane University\$92,876 ACA-Region 6 Public Health Training Center	,
NINA WALLERSTEIN National Institutes of Health	
Healthy Native Communities Partnership, Inc\$18,100 Participatory Evaluation Design for the Multi-Sector Leadership Program	1
<b>ROBERT WILLIAMS</b> National Institutes of Health	
National Institutes of Health \$151,332	,

National Institutes of Health ...... \$151,332 Implementing Personal Health Records to Promote Evidence-based Cancer Screening

### **Internal Medicine**

### **ALLEN ADOLPHE**

AbbVie \$7	/82,285
Clinical Trial Agreement - Phase 3 Supplement	

### **RANA AL-SADI**

Crohn's & Colitis Foundation of America......\$90,000 MMP-9 Modulates Intestinal Epithelial Tight Junction Barrier and Intestinal Inflammation (Year 1 - FY 16)

### **CHRISTOS ARGYROPOULOS**

Dialysis Clinic, Inc	)00
Dialysis Clinic, Inc\$90, A Community-Based Study of the Epidemiology of Chronic Kidney Disease in Rural New Mexico	000

### **SANJEEV ARORA**

Merck & Company, Inc	. \$692,253
Clinical Trial Agreement - Phase 3	

AbbVie\$482,15 Clinical Trial Agreement - Phase 3	54
ZymoGenetics, Inc\$383,56 Clinical Trial Agreement - Phase 2	59
Duke Clinical Research Institute\$88,76 Clinical Trial Agreement - Phase 4	54
ICON Clinical Research\$68,37 Clinical Trial Agreement - Phase 4	76
AbbVie\$2,25 Clinical Trial Agreement - Phase 2 Supplement No. 2	50

### EDGAR BOEDEKER

### CRISTIAN GEORGE BOLOGA

### MARK BURGE

Sanofi US Services, Inc	\$3,200
Clinical Trial Agreement - Phase 3 Supplement	

Sanofi US Services, Inc\$3,2	200
Clinical Trial Agreement - Phase 3 Supplement	

### MARCOS BURGOS

### **KATHLEEN COLLERAN**

Novartis Pharmaceuticals Corporation	\$88,972
Clinical Trial Phase 3	

### **RICHARD CROWELL**

Lovelace Respiratory Research Institute	\$50,000
Factors for Epigenetic Silencing of Lung Cancer Genes	

### MICHELLE HARKINS

Novartis Pharmaceuticals Corporation	\$4,964
Clinical Trial Agreement - Phase 3 Supplement	

### THERESA HEYNEKAMP

Cystic Fibrosis Foundation	.\$38,480
CF Care Center Program	

The University of Utah.....\$13,500 Multicenter Validation of Predictive Sputum Biomarkers in Cystic Fibrosis

### MICHELLE IANDIORIO

University of Colorado Denver Anschutz Medical Campus	\$232,250
New Mexico AIDS Education and Training Center	

### PATRICIA KAPSNER

GlaxoSmithKline\$213,915 Clinical Trial Agreement - Phase 4
Cmed Inc\$40,234 Clinical Trial Agreement - Phase 3
Novartis Pharmaceuticals Corporation\$12,660 Clinical Trial Agreement - Phase 3 Supplement
Novartis Pharmaceuticals Corporation\$7,504 Clinical Trial Agreement - Phase 3 Supplement No. 2
Novo Nordisk, Inc\$3,089 Clinical Trial Agreement - Phase 3 Supplement

### **DENECE KESLER**

DENECE         KESLER           HHS/Health Resources and Services Administration         \$224,826           Radiation Exposure Screening and Education Program in New Mexico
Lovelace Respiratory Research Institute
Lovelace Respiratory Research Institute\$6,000 Lovelace Respiratory Research Institute - Consulting Services
Johns Hopkins University\$5,000 Development of a Medical Screening Program for Former LANL & SNL Workers
Honeywell Corporation\$2,500 Honeywell Aerospace of Albuquerque - Clinician Services
IRENA KING Fred Hutchinson Cancer Research Center\$32,007 TREC Coordination Center
WARREN LASKEY DVA/Veteran's Administration Medical Center
New Mexico Department of Health\$37,130 Stroke and STEMI Center Development
New Mexico Department of Health\$15,130 Stroke and STEMI Center Development
SAMUEL LEE Johns Hopkins University
Astellas USA Foundation
Astellas USA Foundation\$2,500 13th Annual Meeting South Central Medical Mycology Group
<b>THOMAS MA</b> National Institute of Diabetes and Digestive and Kidney Diseases \$417,221 <i>Regulation of Intestinal Paracellular Permeability</i>
U.S. Department of Veterans Affairs\$97,736 Intergovernmental Personnel Act - Manmeet Rawat
LANA MELENDRES-GROVES Bayer HealthCare Pharmaceuticals Inc\$30,000 Clinical Trial Agreement - Phase 4
Pharmaceutical Research Assoc \$7.975

Pharmaceutical Research Assoc. \$7,975 Clinical Trial Agreement - Phase 4



POPE MOSELEY Albuquerque Area Indian Health Service
University of Copenhagen\$42,090 Professional Services Agreement
Zenith Administrators\$25,000 <i>Outpatient Professional Services</i>
Zenith Administrators\$25,000 <i>Outpatient Professional Services - BAA</i>
QTC Medical Group\$10,750 Second Medical Opinion Evaluations

#### ORRIN MYERS

National Institutes of Health\$2	22,497
Geographic and Multilevel Influences of Neighborhood and School Environ	ments
on the Development of Obesity Among Children in a Border Community	

### **PRASHANT NIGHOT**

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

### **TUDOR OPREA**

NIH/National Cancer Institute\$1,801,454 Illuminating the Druggable Genome - The Knowledge Management Center	
University of Gothenburg\$25,000 Visiting Scientist Agreement	
National Institutes of Health\$11,665 Structural and Functional Analysis of Glucose Transporters	
KIMBERLY PAGE           NIH/National Institute on Drug Abuse.         \$1,332,959           Acute Hepatitis C Infection in Young Injectors	
NIH/National Institute on Drug Abuse\$884,605 Sexually Transmitted Infections Clinical Trials Group	
National Institutes of Health	
National Institutes of Health	
Centers for Disease Control and Prevention	
National Institutes of Health \$119,766	

Acute Hepatitis C Infection in Young Injectors (Restricted Supplement for AIDS)

National Institutes of Health ..... \$104,000 Sexually Transmitted Infections Clinical Trials Group



National Institutes of Health
National Institutes of Health\$39,492 CIPI: Cambodia Integrated HIV and Drug Prevention Implementation Program
National Institutes of Health\$29,321 CIPI: Cambodia Integrated HIV and Drug Prevention Implementation Program
National Institutes of Health
<b>DOUGLAS PERKINS</b> National Institutes of Health
Los Alamos National Laboratory \$218,756 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
DAVID SCHADE National Institutes of Health
NIH/National Institute of Diabetes and Digestive and Kidney Diseases
National Institutes of Health
National Institutes of Health
National Institutes of Health\$35,485

Hearing Impairment in Long-Term Type 1 Diabetes
National Institutes of Health\$15,384 Residual Beta Cell Function in Patients with Long-Term Type 1 Diabetes

National Institutes of Health ......\$2,000 Type 1 Diabetes TrialNet

### **MARK SHELDON**

GlaxoSmithKline LLC	3,865
Clinical Trial Agreement - Phase 3	

### **AKSHAY SOOD**

Agency for Healthcare Research and Quality	95,123
Miners Colfax Medical Center	46,393
American Thoracic Society Household Air Pollution from Solid Fuel Combustion Smoke and Global He Equality - A Workshop	

### **ELAINE THOMAS**

New Mexico Department of Health	\$67,757
STD Provider Training Project: FY 15	

### MARK UNRUH

Anonymous Non-Profit Foundation	\$1,181,620
Baystate Medical Center	. \$214,607
Dialysis Clinic, Inc DCl Biostatistician	. \$184,574

Dialysis Clinic, Inc
Dialysis Clinic, Inc\$168,814 Acute Kidney Injury Outcomes
Dialysis Clinic, Inc\$139,410 Provider Knowledge, Attitude and Practices Surrounding Conservative Management for Chronic Kidney Disease: A Survey Study
Dialysis Clinic, Inc\$133,926 Clinical Trial Agreement - Phase 2
Dialysis Clinic, Inc\$127,224 Predicting CKD in an Underserved Population
University of Washington
Anonymous Non-Profit Foundation
Anonymous Non-Profit Foundation
Dialysis Clinic, Inc\$5,155 Equipment for Kidneys Research
HEATHER WARD National Institutes of Health
Dialysis Clinic, Inc\$60,000 Repurposing Relaxin to Inhibit Cystogenesis and Progression of Polycystic Kidney Disease
BRUCE WILLIAMS HHS/Health Resources and Services Administration
HHS/Health Resources and Services Administration

New Mexico Department of Health ..... \$316,500 HIV Services Provider Program - BAA

HHS/Health Resources and Services Administration ......\$38,000 Comprehensive HIV Early Intervention Services/ Ryan White Part C Outpatient EIS Program

#### **Molecular Genetics and Microbiology**

### **ELLEN BESWICK**

NIH/National Institute of Diabetes and Digestive and Kidney Diseases....\$27,000 Alteration in CD90+ Stromal Cells in TH1/TH17 Regulation in Crohn's Disease

### 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

### **VOJO DERETIC**

NIH/National Institute of Allergy and Infectious Diseases ...... \$656,042 Autophagy Against Tuberculosis and HIV

NIH/National Institute of Allergy and Infectious Diseases ...... \$399,999 Pattern Recognition Receptors and Autophagy in Mtb Control in AIDS



National Institutes of Health\$25,937 TLR4 Evasion, Bacterial Persistence and Chronic Inflammation
NIH/National Institute of Allergy and Infectious Diseases\$25,937 Pattern Recognition Receptors and Autophagy in Mtb Control in AIDS
MARY ANN OSLEYNIH/National Institute of General Medical SciencesGenetic Analysis of H2B Ubiquitylation in Yeast
NIH/National Institute of General Medical Sciences
<b>MICHELLE OZBUN</b> NIH/National Institute of Dental and Craniofacial Research \$226,500 <i>Targeted Therapy for EGFR Pathway in HPV</i> + <i>HNSCCs</i>
University of Pittsburgh
NIH/National Cancer Institute\$33,885 Regulation of Human Papillomavirus Replication via Cell-Signaling Pathways
National Institutes of Health\$444 Regulation of Human Papillomavirus Replication Via Cell-Signaling Pathways
DAVID PEABODY AgilVax, Inc
<b>XUEXIAN YANG</b> NIH/National Institute of Allergy and Infectious Diseases

#### Neurology

#### **CHRISTOPHER STEWART CALDER**

GBS/CIDP Foundation International\$8,000	
Clinical Trial Agreement - Phase 3	

### **BRUCE FISCH**

	SAGE Therapeutics	\$28,750
	Clinical Trial Agreement - Phase 3	
- C	CORFY FORD	

Novartis
Teva Pharmaceutical Industries\$35,560 Clinical Trial Agreement - Phase 4
University of California, San Francisco\$10,487 Treatment of Multiple Sclerosis with Siponimod Clinical Trial Phase 3 - Subaward



### MOLLY KING

National Institutes of Health ......\$2,058 Insulin Resistance Intervention after Stroke Trial

#### **JIM LIU**

NIH/National Institute of General Medical Sciences ......\$1,048,334 Integrative Program in CNS Pathophysiology Research (COBRE)

### LESLIE MORRISON

University of California, San Francisco...... \$182,577 Clinical Trial Agreement - Phase 3 - The Brain Vascular Malformation Consortium: Predictors of Clinical Course

#### SUROJIT PAUL

NIH/National Institute of Neurological Disorders and Stroke ...... \$330,313 Role of Brain-Specific Tyrosine Phosphatase STEP in Neuroprotection and Death

NIH/National Institute of Neurological Disorders and Stroke ......\$75,500 Role of Brain Specific Tyrosne Phosphatase STEP in Neuroprotection and Death -Administrative Supplement

#### JOHN PHILLIPS

The Mind Research Network	. \$100,745
MRN Medical Director	
The Mind Research Network	\$1,286

MRN Medical Director

### Ranjana Poddar

NIH/National Institute of Neurological Disorders and Stroke ...... \$330,313 Molecular Basis of Hyperhomocysteinemia-Induced Brain Injury in Ischemic Stroke

### STEFAN POSSE

Rigshospitalet	\$19,636
Visiting Research Scientist Summer 2014	
University of Copenhagen Visiting Research Scientist February 2015 - April 2015	\$17,371

National Institutes of Health ......\$3,127 Magnetic Resonance Spectroscopy of Breast Cancer Using Model-Based Localization

#### GARY ROSENBERG

NIH/National Institute of Neurological Disorders and Stroke \$546,112	
Bio-Markers for White Matter Injury in Mixed and Vascular Cognitive Impairment	

NIH/National Institute of Neurological Disorders and Stroke \$327,009 White Matter Hypoxia in Novel Model of MMP - Mediated Inflammation SHR/SP
The Mind Research Network\$142,399 MRN Administrative Operations

U.S.-Israel Binational Science Foundation ......\$21,137 Blood-Brain Barrier Permeability Abnormalities and Post-Stroke Cognitive Decline

Eastern New Mexico Medical Center ......\$10,000 Professional Services

### LAUREL SILLERUD

AMAG Pharmaceuticals, Inc. ..... \$23,100 Ferumoxytol Contrast for the MRI Imaging for Diabetic Osteomyelitis: An Innovative Study Exploring Iron Contrast Agents for Imaging Osteomyelitis in **Diabetic Patients** 

### JENNIFER ANN VICKERS

New Mexico Department of Health ..... \$131,875 Children's Medical Services (FY 15)

#### YI YANG

NIH/National Institute of Neurological Disorders and Stroke ...... \$226,500 Longitudinal Monitoring of Microglia Activation After Stroke with SPION-**Enhanced MRI** 

#### SARAH YOUSSOF

Catalyst Pharmaceutical Partners, Inc.....\$6,401 Clinical Trial Agreement - Phase 4

#### Neurosciences

#### **ANDREA ALLAN**

NIH/National Institute of Environmental Health Sciences ........... \$301,942 Epigenetic Changes in the Glucocorticoid Receptor Gene Due to Arsenic Exposure

Epigenetic Changes in the Glucocorticoid Receptor Gene Due to Arsenic Exposure

#### ERIN MILLIGAN

NIH/National Institute on Alcohol Abuse and Alcoholism ...... \$217,063 Chronic Neuropathic Pain, Glial-Immune Responses and Fetal Alcohol Exposure (MPI)

### **NORA PERRONE-BIZZOZERO**

NIH/National Institute on Drug Abuse. ..... \$404,353 Competing Roles of microRNAs and RNA-Binding Proteins in Drug Addiction

NIH/National Institute on Drug Abuse. ...... \$42,477 Competing Roles of MicroRNAs and RNA-Binding Proteins in Drug Addiction -**Diversity Supplement - Robert Oliver** 

The Mind Research Network	3
Mining the Genomewide Scan: Genetic Profiles of Structural Loss in	
Schizophrenia	

#### DANIEL SAVAGE

NIH/National Institute on Alcohol Abuse and Alcoholism ......\$1,618,836 Fetal Ethanol-Induced Behavioral Deficits: Mechanisms, Diagnoses and Interventions

NIH/National Institute on Alcohol Abuse and Alcoholism ......\$1,528,781 Fetal Ethanol-Induced Behavioral Deficits: Mechanisms, Diagnoses and Interventions

NIH/National Institute on Alcohol Abuse and Alcoholism ...... \$307,647 Fetal Ethanol Effects on Histaminergic Regulation of Neurotransmission

### CARLOS VALENZUELA

NIH/National Institute on Alcohol Abuse and Alcoholism	. \$325,529
Alcohol and Cerebellar Circuits	

NIH/National Institute on Alcohol Abuse and Alcoholism ...... \$144,369 Alcohol Research Training in Neuroscience

### Neurosurgery

### J FRED HARRINGTON

K2M, Inc	. \$152,128
Clinical Trial Agreement - Phase 4	

### **REX JUNG**

Johnson O'Connor Research Foundation	. \$300,000
The Neuroscience of Aptitude	

### **EDWIN NEMOTO**

Rio Grande Neurosciences, Inc.       \$79,408         Animal Studies on Repetitive Mild TBI (KB Invitor Sept 2014)
Rio Grande Neurosciences, Inc\$13,750 Animal Studies on Repetitive Mild TBI (KB Invitor Sept 2014)
Rio Grande Neurosciences, Inc\$13,006 Effect of POEMS on cGMP Response During OGD
Rio Grande Neurosciences, Inc
Rio Grande Neurosciences, Inc

### TAMARA ROITBAK

NIH/National Institute of Neurological Disorders and Stroke ....... \$327,009 In Vivo Inhibition of Specific microRNAs to Support Post-Stroke Revascularization

### **CHRISTOPHER TAYLOR**

### HUY TRAN

University of Cincinnati
University of Cincinnati\$42,576 Ethnic and Racial Variations with Intracerebral Hemorrhage - Administrative - Phase 4
University of Minnesota\$23,746 Antihypertensive Treatment of Cerebral Hemorrhage
HOWARD YONAS Center for Medicare and Medicaid Services\$5,198,471 ACA-Access to Critical Cerebral Emergency Support Services HCIA2
New Mexico VA Health Care System\$177,156 Neurosurgery Services
New Mexico Department of Veterans' Services\$88,578

New Mexico Department of veterans services	
VA Neurosurgery Services Interim Agreement	
New Mexico Department of Veterans' Services	¢ 99 579

New Mexico Department of Veterans' Services	.\$88,578
VA Neurosurgery Services Interim Agreement	
Guadaluna County Hospital	\$45,000

Guadalupe County Hospital Master Services Agreement - ACCESS	.\$45,000
Nor-Lea General Hospital Master Hospital Services Agreement	.\$25,000
Roswell Hospital Corp Clinical Services - ACCESS	.\$25,000

New Mexico Department of Health .....\$16,860 UNM Pain Center Naloxone Co-Prescription Pilot Project

New Mexico Governor's Commission on Disability	\$15,000
Approach for Management of TBI	

#### **New Mexico Tumor Registry**

### **CHARLES WIGGINS**

NIH/National Cancer Institute\$2,860,998 Surveillance, Epidemiology and End Results Program (Task Order 5)		
NIH/National Cancer Institute\$28,121 TOREP- SEER RRSS #14-3 Patterns of Care		
Memorial Medical Center\$20,000 Memorial Medical Center Abstracting Services		
Christus St. Vincent Regional Medical Center		
Christus St. Vincent Regional Medical Center\$15,000 Abstracting at Christus St. Vincent RMC - BAA		
New Mexico Department of Health       \$6,330         Breast and Cervical Cancer Surveillance Project		
U.S. Department of Justice\$2,000 Radiation Exposure Compensation Program		
Obstetrics and Gynecology		
KATE AUSTIN           New Mexico Department of Health         \$140,000           Prenatal Medical Services Project		
New Mexico Department of Health\$54,960 High-Risk Prenatal Care Project		
GENA DUNIVAN		

GENA DUNIVAN Pelvalon\$2,000 Clinical Trial Agreement - Phase 4	
EVE ESPEYAnonymous Non-Profit Foundation\$359,886Fellowship in Family Planning	
First Choice Community Healthcare\$82,530 <i>Midwifery Services</i>	
New Mexico Department of Health\$82,460 <i>High-Risk Prenatal Care</i>	
The University of Utah\$25,164         BLIS: Breastfeeding Levonorgestrel Study	



### YUKO KOMESU

NIH/National Center for Complementary and Alternative Medicine... \$342,864 Brain-Centered Therapy Versus Medication for Urgency Urinary Incontinence: An RCT (MPI)

Research Triangle Institute	. \$231,803
Human Microbiome Study-ESTEEM	

### WILLIAM RAYBURN

Albuquerque Area Indian Health Service	\$87,488
IHS Specialty Services	

### **REBECCA ROGERS**

NIH/National Institute of Child Health and Human Development ... \$306,219 RCT of Hypnotherapy vs. Tolterodine for OAB: Voiding and Brain Activation Changes

### RAMEET HARPAL SINGH

Society of Family Planning\$87,99	12
Perceptions of Non-Surgical Permanent Contraception in India	

New Mexico Department of Health ......\$67,520 Tubal Ligation Sterilization Surgical Procedures

UNM-Sponsored - Bayer Healthcare Pharmaceuticals, Inc. ......\$50,291 PI Initiated - Clinical Trial Agreement - Phase 4

New Mexico Department of Health ......\$1,108 Vasectomy Sterilization Surgical Procedures Project (FY 15 Supplement)

### NANCY SOKKARY

Society of Family Planning	\$30,000
Providing Adolescent Contraception in the Emergency Room	

#### Office of the Medical Investigator

### HANNAH KASTENBAUM

New Mexico Department of Health	\$4,220
New Mexico Violent Death Reporting System (FY 16)	

New Mexico Department of Health .....\$1,055 New Mexico Violent Death Reporting System (FY 15)

### SARAH LATHROP

New Mexico Public Safety Department	\$13,250
2014 Paul Coverdell Basic	

### **KURT NOLTE**

National Association of Medical Examiners	\$198,890
Compensation for Executive Vice President	

**Executive Vice President Services** 



Dawn Delfin, PhD

#### LORI PROE

	Intersociety Council for Pathology Information\$1,000 Medical Student Interest Group
]	ROSS ZUMWALT           DVA/Veteran's Administration Medical Center           Autopsy Services for POWs
	New Mexico Crime Victims Reparation Commission\$53,655 Grief Intervention for Homicide Survivors
	DVA/Veteran's Administration Medical Center\$45,691 Autopsy Services for POWs
	New Mexico Department of Health\$25,000 Public Health Preparedness and Response to Bioterrorism - BT Grant
	New Mexico Department of Health\$21,100 New Mexico Sudden Unexpected Infant Death Registry

### Orthopaedics

### **THOMAS DECOSTER**

Center for Orthopaedic Trauma	\$5,000
Center for Orthopaedic Trauma Advancement - Educational Grant	

DePuy Orthopaedics, Inc	2,000
AONA Course - Toronto	

#### **GEHRON TREME**

DePuy Orthopaedics, Inc\$10,00 AONA Course - New Orleans	0
Synthes, Inc\$10,00 AONA Course - Phoenix	0
DePuy Orthopaedics, Inc\$9,18 AONA Course - Toronto	0
DePuy Orthopaedics, Inc\$4,00 AONA Course - New Orleans	0
DePuy Orthopaedics, Inc\$2,29 AONA Course - Atlanta	5
Synthes, Inc	0

### **DANIEL WASCHER**

Arthrex, Inc\$20,00 Arthrex Sports Fellowship Grant/Educational Grant	00
U.S. Department of Justice\$9,75 Expert Witness (Medeles v. U.S.A.)	30

#### Pathology

### **ELAINE BEARER**

NIH/National Institute of Mental Health	\$562,571
Live Imaging of Brain Circuitry in Mouse Models of PTSD	

### **THERESE BOCKLAGE**

TriCore Reference Laboratories	)5,800
DOUGLAS CLARK TriCore Reference Laboratories\$2,78 Medical Direction	38,864
TriCore Reference Laboratories\$54 Medical Direction	6,152
TriCore Reference Laboratories\$36 Medical Direction	4,101
United Blood Services	:3,695

UNM Medical Group Memorandum of Agreement FY 15	\$154,479
UNM Medical Group Memorandum of Agreement FY 14	\$152,230
UNM Medical Group Memorandum of Agreement FY 13	\$149,980

### VITTORIO CRISTINI

Methodist Hospital Research Institute\$96, Center for Systematic Modeling of Cancer Development	546
Methodist Hospital Research Institute\$34, Center for Oncophysics: PSOC Expansion Project 1	301
NIH/National Cancer Institute\$15,3 Texas Center for Cancer Nanomedicine	343
Methodist Hospital Research Institute\$11,8 Center for Oncophysics: PSOC Expansion Project 6	376

### **KENDALL CROOKSTON**

Blood Systems Foundation ......\$80,299 Transfusion Medicine Fellowship

### **TRACY IRENE GEORGE**

TriCore Reference Laboratories	. \$105,500
Professional Services Agreement Between UNM Regents and TriCore Re	eference
Laboratories/Celgene	

TriCore Reference Laboratories	\$10,252
PSA Seattle Genetics	

### **JENNIFER GILLETTE**

National Institutes of Health \$3	377,500
Functional Role of Tetraspanin CD82 in Hematopoietic Stem Cell Interaction	on

National Institutes of Health ......\$30,479 Spatiotemporal Analysis of CD82-Mediated Integrin Adhesion

National Institutes of Health ......\$4,000 Eighth International Meeting on Tetraspanins and Membrane Scaffolds

Eighth International Conference on Tetraspanins and Membrane Scaffolds

National Institutes of Health ......\$444 Spatiotemporal Analysis of CD82-Mediated Integrin Adhesion (Supplement)

### PATTI GRAVITT

National Institutes of Health ......\$83,254 Vaginal Microbiota, Immune Responses and Vulvovaginal Symptoms During Menopause

### **GLYNNIS INGALL**

Crownpoint Healthcare Facility Laboratory Directorship	.\$26,080
Crownpoint Healthcare Facility Laboratory Directorship FY 15 Mod 1	.\$26,080
Crownpoint Healthcare Facility	\$26,080

Laboratory Directorship FY 15 Mod 2

### SARAH LATHROP

Association of Public Health Laboratories ......\$13,715 Assessing Current Diagnostic Practices Among Clinical Labs in FoodNet Catchment Area

### 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 Nanoplatforms Under Mechanical Forces
National Institutes of Health\$25,000 Mechanisms of Apoptotic Calcium Signaling
Aaron Neumann
National Institutes of Health
American Association of Immunologists\$22,476 Microscale Innate Immune Mechanisms for Recognition of Candida Species Fungal Pathogene
LARRY SKLAR
NIH/National Cancer Institute
National Institutes of Health\$82,875 Detection and Usage of Novel Compounds to Stimulate NLRP3 Inflammasome Activity
ANGELA WANDINGER-NESS NIH/National Institute of General Medical Sciences
Academic Science Education and Research Training
NIH/National Institute of Dental and Craniofacial Research\$444 OFD1 as Constituent of a Multimeric Protein Complex in Odontoblast Primary Cilia - Supplement
COSETTE WHEELER
NIH/National Cancer Institute\$1,374,545 New Mexico HPV Outcomes, Practice Effectiveness and Surveillance
NIH/National Cancer Institute\$1,003,227 New Mexico HPV Outcomes, Practice Effectiveness and Surveillance
GlaxoSmithKline
BRIDGET WILSON
NIH/National Institute of General Medical Sciences
Los Alamos National Laboratory \$113,500 Three-Dimensional Molecular Tracking of IgE-Fc3RI in Live Cells
National Institutes of Health

Color Single-Particle Tracking and Peptidomimetic Inhibition



### **BRIDGET WILSON (CONTINUED)**

MedImmune, Inc	\$12,500
Sponsored Research Agreement: UNM HSC and MedImmune	

## **STEPHEN YOUNG**

nano MR, Inc	\$115,000
Specimen Acquisition Study to Evaluate the NanoMR Pat	hogen Detection System
Life Technologies Corporation	\$30,000
rieparation of microbial Stock	

### **ROSS ZUMWALT**

Lovelace Health System\$2	5,000
Autopsy Services	

### Pediatrics

### **SHIRLEY ABRAHAM**

Oregon Health & Science University\$34,250 Regional Hemophilia Network-Mountain States
University of Colorado - Denver\$32,021 Public Health Surveillance for the Prevention of Bleeding and Clotting
American Thrombosis and Hemostatis Network\$11,250 ATHN Data Quality Counts - BAA
TANYA BAKER-MCCUE           New Mexico Library Foundation         \$1,000           New Mexico Library Foundation Grant         \$1,000
KOH BOAYUE           Children's Hospital of Philadelphia         \$76,150           Clinical Trial Agreement - Non-Industry
St. Baldrick's Foundation\$69,000 St. Baldrick's Infrastructure Development Grant
Children's Hospital of Philadelphia\$37,000 COG Clinical Trial Agreement Subaward - Phases 2 and 3
Children's Hospital of Philadelphia\$10,000 Clinical Trial Agreement- Phase 2
Children's Hospital of Philadelphia\$4,800 Health Effects After Anthracycline and Radiation Therapy: Dexrazone and Prevention of Anthracycline
FRANCINE CAFFEY           New Mexico Department of Health         \$4,774           Summer Asthma Institute Project         \$4,774

### **CAROL CLERICUZIO**

University of California, San Diego Prospective Follow-Up of Pregnancy Exposure to Humira	\$5,000
LORETTA CORDOVA DE ORTEGA New Mexico Department of Health Children's Medical Services Outreach Clinics Project	\$317,555

New Mexico Department of Health ...... \$132,930 Children's Medical Services Outreach Clinics Project - FY 16 - Supplement -Pediatric Cardiology Clinic

New Mexico Department of Health ......\$66,465 Children's Medical Services Outreach Clinics Project - FY 15 - Supplement -Pediatric Cardiology Clinic

TriCore Reference Laboratories\$26,164 Genetic Counseling Services
San Juan Regional Medical Center\$25,000 Professional Services Agreement
Molina Healthcare of New Mexico\$20,000 In-Home Assessments
Taos Clinic for Children and Youth       \$10,000         Professional Services via Telemedicine - BAA
PHC-Las Cruces, Inc\$6,394 Professional Services/Consultations - BAA
Northern Navajo Medical Center\$4,800 On-Site Pediatric Genetic Clinic
Mountain View Regional Medical Center\$2,500 <i>Professional Services</i>
Lordsburg Municipal Schools\$2,397 Professional Services
Ben Archer Health Center, Inc\$550 Professional Service Agreement

### LEA DAVIES

HHS/Health Resources and Services Administration \$333,642	
New Mexico Pediatric Pulmonary Center	
Cystic Fibrosis Foundation	

HHS/Health Resources and Services Administration .....\$25,000 New Mexico Pediatric Pulmonary Center - Administrative Supplement

### WALTER DEHORITY

Duke University
Duke University\$11,951 Clinical Study - Phase 1 - Start-Up
TARA DUPONT
New Mexico Department of Health \$118,000 Developmental Care Continuity Program - Fee-For-Service
New Mexico Department of Health
American Academy of Pediatrics\$12,000 Neonatal Passport
RANDY HEIDENREICH

New Mexico Department of Health	\$116,472
CMS Newborn Screening (FY 16) - BAA	

### SANDRA HEIMERL

HHS/Health Resources and Services Administration ...... \$670,480 New Mexico Leadership Education in Neurodevelopmental Disabilities

#### CARMEN HERRERA

The Weil Foundation\$15,00	00
UNM Pediatric Integrative Medicine in Residency Program	

### LAUREN JANTZIE

Boston Children's Hospital	\$60,219
Mechanisms of Neonatal Erythropoietin Neuroprotection	

### **ALBERTA KONG**

Fluor Federal Solutions, LLC......\$77,376 Medical Services at Albuquerque Job Corps - BAA

### JANE MCGRATH

New Mexico Human Services Department	.\$1,100,000
Envision New Mexico: The Initiative for Child Healthcare Ouality	

New Mexico Human Services Department ...... \$259,817 School-Based Health Center Behavioral Health Quality Improvement (FY 15)

New Mexico Department of Health	. \$193,600
Race to the Top Early Learning Challenge	

W.K. Kellogg Foundation ..... \$125,000 Systems of Support for Breastfeeding in Selected NM Communities

New Mexico Department of Health ..... \$122,857 School-Based Health Center Health Provision in the Schools (FY 15 Supplement)

New Mexico Department of Health ......\$60,000 Envision New Mexico - Newborn Hearing Screening Program Quality Improvement Project

New Mexico Department of Health ......\$58,000 Albuquerque School-Based Health

New Mexico Department of Health ......\$54,596 Analysis of Childhood Obesity Project (FY 15)

New Mexico Public Education Department......\$50,000 GRADS FY 15

New Mexico Department of Health ......\$43,999 **Envision Quality Improvement Project** 

New Mexico Department of Health ......\$40,000 Envision New Mexico - Newborn Hearing Screening Program Quality Improvement Project

Molina Healthcare of New Mexico ......\$20,000 Molina's Envision Quality Improvement Project

State of Colorado Department of Health Care Policy and Financing ... \$16,000 School-Based Health Center Data Analysis

New Mexico Department of Health ......\$15,825 Cuidate Curriculum Project FY 15

New Mexico Department of Health ......\$11,994 **Envision SBHC** 

New Mexico Department of Health ......\$10,800 Albuquerque School-Based Health

STD Screening and Assessment Tools for an Adolescent Population (Yr 1)

### SUSAN MILLER

Bernalillo County......\$4,999 UNM NM-CAPP Child Abuse Prevention

MARCIA MORIARTA           New Mexico Children, Youth and Families Department         \$215,471           Early Childhood Infrastructure Development (FY 15)
New Mexico Children, Youth and Families Department\$93,000 Infant-Parent Psychotherapy (FY 15) - BAA
Utah State University\$45,492 Indian Children's Program - Withdrawn
New Mexico Children, Youth and Families Department\$20,000 Infant-Parent Psychotherapy (FY 15 Supplement) - BAA
New Mexico Children, Youth and Families Department\$5,000 Infant Mental Health Community of Practice
New Mexico Children, Youth and Families Department\$5,000 Infant Mental Health Community of Practice
ROBIN OHLS           National Institutes of Health         \$64,930           Preterm Epo Neuroprotection Trial         \$64,930
CureDM Group Holdings, LLC\$3,000 Developmental of Human Fetal Pancreatic Cell Assays
RENEE RITA ORNELAS           New Mexico Department of Health         \$391,800           Para Los Niños Program         \$391,800
New Mexico Crime Victims Reparation Commission\$23,450 Adolescent Continuity Clinic for Education on Self Safety
LINDA PARHAM University of Southern California\$17,556 Development of Teaching Materials in Support of Sensory Integration and Praxis Test
University of Southern California\$11,705 Development of Teaching Materials in Support of Sensory Integration and Praxis Test
JANET POOLE           Patient-Centered Outcomes Research Institute         \$1,771,785           ACA-Taking Charge of Systemic Sclerosis: Improving Patient Outcomes Through Self-Assessment
HENGAMEH RAISSY National Jewish Health

Vertex Pharmaceuticals Incorporated ......\$26,908 Clinical Trial Agreement - Phase 3



### **HENGAMEH RAISSY (CONTINUED)**

Oregon Research Institute\$13,	142
Adaptation and Evaluation of a Family-Based Mindful Eating Intervention for	
Overweight Adolescents	

AstraZeneca Pharmaceuticals, LP	\$10,110
Clinical Trial Agreement - Phase 3	

Parexel International\$2,9	931
Clinical Trial Agreement - Phase 3 - Supplement	

### **MARY RAMOS**

American Academy of Pediatrics.....\$2,000 Promoting Healthy Eating and Literacy at East San Jose Elementary School

### **ALYA REEVE**

New Mexico Department of Health	\$52,750
Continuum of Care - Mortality	

### **JENNIFER VICKERS**

New Mexico Department of Health	\$968,803
Continuum of Care - Primarv	

### KRISTI WATTERBERG

NIH/National Heart, Lung, and Blood Institute ...... \$373,608 Adrenal Function and Adverse CV Outcomes at Age 6 After Extremely Preterm Birth

NIH/National Institute of Child Health and Human Development ... \$294,683 Cooperative Multicenter Neonatal Research Network

Research Triangle Institute...... \$104,968 Cooperative Multicenter Neonatal Research Network - Capitation

National Institutes of Health ......\$3,760 Effect of Hydrocortisone on the Cardiac Mass of Premature Incubated Infants

### **STUART WINTER**

Children's Hospital of Philadelphia	\$15,000
Clinical Trial Agreement - Phase 3	

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

### **CRAIG WONG**

The Children's Mercy Hospital	.\$69,773
Ckid Clinical	

The Children's Mercy Hospital	\$17,800
Ckid Steering Committee	



### **Pediatrics Center for Development & Disability**

# TANYA BAKER-MCCUE New Mexico Division of Vocational Rehabilitatio

TANYA BAKER-MCCUE
New Mexico Division of Vocational Rehabilitation         \$400,000           DVR Partners for Employment         \$400,000
New Mexico Division of Vocational Rehabilitation
New Mexico Developmental Disabilities Planning Council \$160,000 InfoNet/BabyNet
New Mexico Developmental Disabilities Planning Council\$15,000 School-to-Work Alliance
New Mexico Developmental Disabilities Planning Council\$2,500 NM LEND Legislative Advocacy Seminar
<b>ANTHONY CAHILL</b> New Mexico Human Services Department
HRSA/Maternal and Child Health Bureau
New Mexico Human Services Department
New Mexico Human Services Department
New Mexico Governor's Commission on Disability\$60,000 Support for the Southwest Disability Conference
New Mexico Governor's Commission on Disability\$60,000 Support for the Southwest Disability Conference
New Mexico Developmental Disabilities Planning Council\$10,000 DDPC Stipends
LORETTA CORDOVA DE ORTEGA Qualis Health
Molina Healthcare of New Mexico\$10,000 In-Home Assessments
ANDREW HSI New Mexico Department of Health\$86,500 DDSD FIT
<b>CATHERINE MCCLAIN</b> New Mexico Human Services Department\$2,000,000 Improving Quality (75/25 & 50/50 Medicaid Match) Supporting Child Development Through Evidence-Based Practices
Region IX Education Cooperative\$8,600 CYFD Early Childhood Professional Development
MARCIA MORIARTA           New Mexico Department of Health           Autism Programs - BAA
New Mexico Children, Youth and Families Department
New Mexico Department of Health \$827,000 Race To The Top Early Learning Challenge - BAA
New Mexico Department of Health \$755,969 Administrative Support - Intensity Scale in New Mexico (FY 16)
HHS/Administration for Community Living

HHS/Administration for Community Living
New Mexico Department of Health
New Mexico Department of Health \$416,000 Early Childhood Network - BAA
New Mexico Department of Health \$406,000 Early Childhood Network
New Mexico Children, Youth and Families Department
New Mexico Department of Health
New Mexico Children, Youth and Families Department
New Mexico Department of Health \$127,274 NM SAFE Program
New Mexico Department of Health \$111,607 DDSD Statewide Training Database
New Mexico Department of Health
New Mexico Department of Health
New Mexico Department of Health
Navajo Nation\$76,000 Growing in Beauty Program Therapy Services
New Mexico Department of Health\$76,000 Medically Fragile Case Management Program Contract
New Mexico Department of Health\$35,400 Statewide Transition Coordination
New Mexico Department of Health\$35,400 Statewide Transition Coordination
New Mexico Department of Health\$20,250 Deaf-Blind Match - BAA
New Mexico Department of Health\$19,238 Deaf-Blind Match
New Mexico Children, Youth and Families Department\$16,000 Community of Practice Training - BAA
PAT OSBOURN           New Mexico Public Education Department\$1,439,992           PED Pre-K Race to the Top Early Learning Challenge (FOCUS TQRIS)
New Mexico Public Education Department
New Mexico Public Education Department
New Mexico Public Education Department
U.S. Department of Education\$100,912 Project for New Mexico Children Who Are Deaf-Blind
New Mexico Developmental Disabilities Planning Council\$62,500 Partners in Policymaking
Rio Rancho Public Schools\$33,000 Rio Rancho Public Schools Consultations



Albuquerque Public Schools\$3,630 Albuquerque Public Schools Consultations
Mora Independent Schools\$1,102 Mora Independent Schools Consultations
Pediatrics Prevention & Population Sciences
THERESA CRUZ           New Mexico Human Services Department         \$128,361           Statewide SNAP-Ed Evaluation
Presbyterian Healthcare Services\$89,268 REACH Evaluation
New Mexico Department of Health\$53,000 PRC Sexual Violence Prevention Technical Assistance Project
New Mexico Department of Health\$45,000 PRC Sexual Violence Prevention Technical Assistance Project
<b>SALLY DAVIS</b> HHS/Centers for Disease Control and Prevention\$83,200 Nutrition and Obesity Policy Research and Evaluation in Early Childcare Settings Serving Southwest American Indian and Hispanic Populations
New Mexico Department of Health\$75,000 Teen Outreach Program (FY 15)
United Way\$70,000 Promoting Healthy Lives (ACL Teen Centers)
New Mexico Department of Health\$20,000 Implementing Evidence-Based Recommendations that Promote Healthy Activities
New Mexico Primary Care Association\$15,000 Integrated Medicaid Enrollment
New Mexico Department of Health\$7,275 Implementing Evidence-Based Recommendations that Promote Healthy Activities
<b>GLENDA FALLAS</b> New Mexico Human Services Department
PATRICIA KEANE           New Mexico Human Services Department         \$422,685           CHILE Plus, Social Marketing and Statewide SNAP-ED Evaluation
SHIRAZ MISHRA



### LINDA PEÑALOZA

LINDA PENALOZA           New Mexico Department of Health         \$204,430           Youth Risk and Resiliency Survey Project	
New Mexico Department of Health\$100,869 Youth Risk and Resiliency Survey Project	
New Mexico Department of Health\$74,905 Tobacco Program Evaluation and Support HEART	
New Mexico Department of Health\$50,000 Youth Risk and Resiliency Survey Project	
New Mexico Public Education Department.         \$32,000           ESHE Evaluation         \$32,000	
New Mexico Public Education Department\$32,000 ESHE Evaluation	
New Mexico Public Education Department\$18,093 ESHE Evaluation	
New Mexico Public Education Department\$8,000 ESHE Evaluation	
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ESHE Evaluation	
ESHE Evaluation Psychiatry and Behavioral Sciences CHRISTOPHER ABBOTT The Mind Research Network	
ESHE Evaluation Psychiatry and Behavioral Sciences CHRISTOPHER ABBOTT The Mind Research Network\$177,724 Project 5-Abbott-Multimodal Imaging of Neuropsychiatric Disorders: Mechanisms & Biomarkers (COBRE II) CHERYL AINE The Mind Research Network\$81,754 MDA-Aine-Multimodal Imaging of Neuropsychiatric Disorders:	

### DEBORAH ALTSCHUL

W.K. Kellogg Foundation \$403,487 New Mexico Learning and Evaluation Consortium
New Mexico Behavioral Health Collaborative/Human Services Department
New Mexico Children, Youth and Families Department \$232,333 CYFD System of Care - BAA
San Felipe Pueblo \$110,337 KEYWAH II

### PAMELA ARENELLA

PAMELA AREN ELLA           The Mind Research Network         \$13,000           Effectiveness of Varenicline: Testing Individual Differences	
JERALD BELITZ           HHS/Health Resources and Services Administration         \$122,099           Psychology Internship Expansion Grant	
JEANNE BEREITER           San Felipe Pueblo         \$69,668           San Felipe Home Visiting FY 15	
New Mexico Children, Youth and Families Department\$63,100 Rural Psychiatric Services-Child Fellowship Training	
Anonymous\$28,000 Home Visiting	
MICHAEL BOGENSCHUTZ National Institutes of Health	
New Mexico Children, Youth and Families Department	
CAROLINE ALBERTA BONHAM New Mexico Behavioral Health Collaborative/ New Mexico Human Services Department\$790,377 Behavioral Health Services (FY 15)	
New Mexico Human Services Department	
Albuquerque Area Indian Health Service	
Hidalgo Medical Services	
New Mexico Human Services Department \$142,348 Behavioral Health Services	
New Mexico Human Services Department\$142,348 Behavioral Health Services	
NIH/National Institute on Drug Abuse\$7,500 NIMH Outreach Partnership	
JUAN BUSTILLO The Mind Research Network	
Otsuka Pharmaceutical Development & Commercialization, Inc \$200,000 Clinical Trial Agreement - Phase 1	
University of Texas\$137,610 Clinical Trial Agreement - Phase 4	
The Mind Research Network	
The Mind Research Network	
RICHARD CAMPBELL Albuquerque Public Schools \$101,652 Neuropsychiatric Evaluations - BAA	
ANNETTE SUSAN CRISANTI OptumHealth New Mexico	
•	

OptumHealth New Mexico	.\$37,291
OptumHealth - Adult Transformation: Healthy Homes	

### **ERIK ERHARDT**

### DAVID GRAEBER

Bernalillo County Juvenile Detention Center ......\$76,530 Professional Services

### PAULA HENSLEY

INNO Clinical Outcomes LLC	. \$178,400
Clinical Trial Agreement - Phase 1	
INNO Clinical Outcomes LLC	. \$118,608

Clinical Trial Agreement - Phase	2
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### BRIAN ISAKSON

OptumHealth New Mexico	\$39,320
Veterans First Jail Diversion Project	

OptumHealth New Mexico\$25,0	000
Military, Veteran and Family Support Services	

OptumHealth New Mexico .....\$25,000 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	\$12,081
RAISE Extension - Part II	

Feinstein Institute for Medical Research	\$8,338
RAISE Extension - Part I	

### **RASHMI SABU**

HHS/Substance Abuse and Mental Health Services Administration.. \$399,769 Addressing Childhood Trauma through Intervention, Outreach and Networking

### JULIE GRIFFIN SALVADOR

New Mexico Children, Youth and Families Department	\$147,413
Communities of Care (CYFD SOC Expansion) FY 16 - BAA	

New Mexico Children, Youth and Families Department ...... \$110,157 Communities of Care (CYFD SOC Expansion) FY 15 - BAA

OptumHealth New Mexico .....\$34,690 Treatment for Pregnant and Postpartum Women

OptumHealth New Mexico .....\$28,100 NIDA Total Community Approach

#### HELENE SILVERBLATT

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

#### **ROBERT THOMA**

### MAURICIO TOHEN

Dartmouth College \$170,	377
Clozapine for Cannabis Use Disorder in Schizophrenia	

The Peak at Santa Teresa, Inc.	\$25,000
Telemedicine Services	

### **CLAIRE ELIZABETH WILCOX**

#### MARIA YELLOW HORSE BRAVE HEART

### Radiology

### LOREN KETAI

NIH/National Center for Complementary and Integrative Health .... \$179,929 Brain-Centered Therapy vs. Medication for Urgency Urinary Incontinence: An RCT - MPI

### **REED SELWYN**

X-Ray Associates of New Mexico	\$55,000
Medical Physicist Services	

### **PHILIP WIEST**

U.S. Department of Veterans Affairs\$1,283,245 Radiological and Nuclear Medicine Diagnostics and Therapy Services
U.S. Department of Veterans Affairs
New Mexico Department of Health\$83,018 Breast and Cervical Cancer Early Detection Program
New Mexico Department of Health\$20,000 Breast and Cervical Cancer Early Detection Program
U.S. Department of Veterans Affairs\$7,318

Radiological and Nuclear Medicine Diagnostic and Therapy Services

#### Surgery

### **ARUP DAS**

NIH/National Institute of Environmental Health Sciences \$3	39,750
Inflammatory Chemokines: A Novel Target in Early Diabetic Retinopathy	
New Mexico VA Health Care System\$	41,420

### **THOMAS HOWDIESHELL**

Astute Medical Inc	.\$35,000
Clinical Trial Agreement - Phase 4	



### **MARCO RICCI**

Intra-Aortic Balloon Pump Review & Consultation

#### **JOHN RUSSELL**

New Mexico Donor Services ......\$30,000 **Organ Procurement Services** 

### **ANIL SHETTY**

New Mexico Department of Health .....\$3,000 CMS Cleft Palate Clinics

### **TIMOTHY WINTER**

Jaeb Center for Health Research ......\$32,371 Amblyopia Treatment Study (ATS18)

### **Undergraduate Medical Eduation**

### PAMELA DEVOE

American Association of Medical Colleges .....\$2,000 Does Near-Peer Tutoring Facilitate Medical Student Learner Self-Efficacy?

### UNIVERSITY OF NEW MEXICO HOSPITAL

### **STEVE MCKERNAN**

City of Albuquerque Assertive Community Treatment Program - FY 15 - BAA	\$713,300
City of Albuquerque Gang Prevention Program - BAA	\$183,000
City of Albuquerque Primary Care Program - BAA	\$161,970
New Mexico Children, Youth and Families Department	\$54,000
Albuquerque Area Indian Health Service	.\$25,000
Albuquerque Health Services Opioid Treatments (Emergency Medicating Agreement)	.\$25,000

#### **RODNEY MCNEASE**

Albuquerque Public Schools\$8	,000,
Behavioral Health Assessment and Treatment for Students	



#### UNIVERSITY OF NEW MEXICO MEDICAL GROUP

#### **ANTHONY MASCIOTRA**

New Mexico Children, Youth and Families Department	. \$179,910
Professional Services - BAA	

Albuquerque Area Indian Health Service .......\$25,000 **Provider Services Agreement** 

### UNM SANDOVAL REGIONAL MEDICAL CENTER

#### **KEVIN ROGOLS**

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

# RESEARCH MEANS HOPE



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### **RESEARCH ANNUAL REPORT 2015**

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