The CTSC provides a multitude of services to plan and support faculty development.

Chairs and deans can guide faculty interested in developing careers as translational scientists through the following resources.

I. Where to Find Information

The Office of Research supports research conducted by our HSC investigators and partners, locally and globally. Information can be found relating to HSC leadership, core facilities, collaboration and utilization, and collaborative grants on the Office of Research's About page: https://hsc.unm.edu/research/about/

The Office of Research has an Office of Research Communication webpage to help keep the UNM research community informed and updated. The HSC Office of Research is now offering one convenient location to find all the latest news, compliance issues, conferences, funding opportunities and any other research related information. This website includes information about traditional and non-traditional funding. For more information: https://hsc.unm.edu/research/news/

The Clinical and Translational Science Center (CTSC) offers a multitude of assets and resources that are openly available to investigators and researchers. This infrastructure enables more rapid scientific discovery to enhance human health. The CTSC website provides information about programs, services, funding, and training offered through this department, as well as information about CTSC-hosted events, meetings and seminars. For more information: https://hsc.unm.edu/ctsc/

II. Assessment and Development of Individual Development Plans (IDPs)

Faculty interested in translational science career development should complete a self-assessment using the Needs Assessment tool: https://ctsctrials.health.unm.edu/redcap/surveys/?s=JDJJLNKA48.

The Needs Assessment tool incorporates material from several sources. We encourage faculty to review them in order to address a wide range of career paths:

- Clinical Research Appraisal Inventory (CRAI): https://hsc.unm.edu/research/brep/common/docs/mcdp/mcdp-crai.pdf
- Individual Inventory and Needs Analysis (IINA) http://hsc.unm.edu/research/brep/common/docs/mcdp/mcdp-mac-iina-2011.doc

Needs Assessment results are evaluated by CTSC staff. After receiving their results, faculty should meet with their chair, division head, or dean to produce an Individual Development Plan (IDP).

The IDP is an essential tool to aid mentored faculty in:

- assessing current skills and strengths;
- making a plan for developing skills that will help meet professional goals; and
- communicating with mentors about evolving career objectives, experience, and skills.

The IDP template is available here: https://hsc.unm.edu/medicine/education/reo/_docs/graduate/idp-template.docx

The Needs Assessment is based on the Clinical Research Appraisal Inventory, which assesses the confidence of learners in performing different aspects of clinical research. The KL2 Needs Assessment has been shared with – and customized for – other programs such as the Autophagy Inflammation and Metabolism Center (Deretic). The KL2 leadership is able to share and consult with departments to establish an effective tool for all new faculty.

To learn more about faculty assessment and development, contact KL2 Program Lead Matt Campen, PhD at 505-925-7778 or at mcampen@salud.unm.edu.

III. Training Opportunities

Faculty who are developing their skills can access a variety of CTSC trainings that are fast, flexible and freakin' awesome.

The table below shows the monthly schedule for our live trainings. Visit the CTSC training catalog for access to our full catalog of live, asynchronous, and on-demand offerings: https://hsc.unm.edu/ctsc/training/index.html

Training	Mon	Tues	Wed.	Thurs	Fri
CTSC Database Overview			1st Wed.		
AHRQ Grant Orientation		3rd Tues.			
Good Clinical Practice: Fundamentals			1st Wed.		
Good Clinical Practice: Best Practices in Informed Consent			2nd Wed.		
Good Clinical Practice: Reporting and Conduct			3rd Wed.		
Good Clinical Practice: Dealing with FDA			4th Wed.		
NIH Grant Orientation	1st Mon.				
PCORI Grant Orientation		4th Tues.			
Responsible Budgeting for Clinical Trials				4th Thurs.	
HRSA Grant Orientation				2nd Thurs.	
SBIR/STTR Grant Orientation		2nd Tues.			
Practical Team Science				3rd Thurs.	
FDA Audits			4th Wed.		
REDCap Basics	*Always available on demand.*				
REDCap Beyond the Basics					
E-Consenting with REDCap					
Commercialization for Clinical Researchers					
Communicating Science (an Alda Center workshop)					

On-Demand CTSA Consortium Trainings

In addition to our in-house opportunities, the CTSC also offers trainings developed by other CTSA institutions:

CD2H Labs	How to Write a Manuscript
Monitoring and Reporting Safety	Step By Step Guidance for Sponsors-Investigators to a Successful IND Submission
Developing a Community Advisory Board for Research Toolkit	ReGARDD (Regulatory Guidance for Academic Research of Drugs and Devices)
Project Management in Clinical Research Managing Communication and Conflict	All About Consents
Qualitative Research Office Hours	IRB Best Practices for Follow-on Submissions
Data Best Practices	Recognizing Unconscious Bias
Large Scale Network Phenotype Development, Evaluation & Characterization	Supporting Yourself and Your Trainees During the Coronavirus Pandemic
Metasharing for Biobanks - CD2H	Stress Management and Wellness for Scientists
Planning for Data Collection	Leadership and Management Styles Panel
CIRTification for Human Research Protections	Becoming A Resilient Scientist: Setting Reasonable Expectations And Healthy Boundaries For Ourselves And With Our Supervisors

Other Educational Opportunities

Faculty have access to several academic educational opportunities:

Certificate in Clinical and Translational Science (CCTS)

The CCTS program is designed to meet the needs of a variety of learners who are seeking exposure to clinical and translational research competencies, but who are not interested in or ready for a Master's program. The program incorporates 10 domains of study, including: Research Design, Measurement (Qualitative and Quantitative), Biostatistics, Epidemiology, Biomedical Informatics, Cultural Competence, Grantsmanship, Scientific Writing, and Ethics and Regulatory Compliance. This one-year program is open to students seeking a graduate degree in a basic science, public health, medical, clinical, engineering or social science discipline (M.D., Ph.D., Pharm.D., Sc.D.). Individuals who have already completed graduate training in these areas and are receiving additional training at UNM (i.e. post-doctoral and clinical fellows), or are currently employed at UNM as junior faculty, are eligible to participate.

For more information about the Certificate in Clinical and Translational Science program, contact the School of Medicine Research Education Office at 505-272-1887 or SOMREO@salud.unm.edu.

Master's of Science in Clinical Research (MSCR) with a concentration in Clinical Research

The MSCR incorporates the same domains of study as the Certificate in Clinical and Translational Science and adds a year of mentored development. This program is directed at learners who have earned a terminal degree (e.g., Ph.D., M.D., Pharm.D. Sc.D.) The multidisciplinary degree program provides the didactic and experiential learning necessary to conduct extramurally-funded clinical and translational research. Completing the MSCR requires 50% release time for two years.

For more information about the MSCR program, contact the School of Medicine Research Education Office at 505-272-1887 or SOMREO@salud.unm.edu.

BIOM 556: Grantsmanship of Clinical and Translational Research
This course is available to graduate students, post docs and faculty. It is directed at researchers who have little to no prior computational experience. This semester-long course offers grant preparation fundamentals focused on writing and submitting a competitive research or fellowship application that meets prevailing guidelines, addresses an important hypothesis-driven research question and is responsive to critical feedback and review. Instructor permission is required to register.

For more information, contact Kimberly Page, PhD, MPH at pagek@salud.unm.edu.

K-Award Grant Writing Course
This course is directed at postdoctoral fellows and faculty level candidates submitting an NIH K grant or equivalent award. Participants in this course will work through conceptualizing, developing, and submitting a responsive NIH Career Development (K) award or equivalent. Topics include: NIH structure and review process, mentoring, specific aims, working with a statistician, K Award components, approach, career development plans, biosketches, and responding to reviewer critiques.

This course has not yet been formalized for delivery. For more information on course content, contact Larissa Myaskovsky, PhD, FAST at LMyaskovsky@salud.unm.edu.

Clinical and Translational Investigator Program (CTIP)
This program is directed at postdoctoral fellows, junior faculty and CTSC-affiliated scholars (including KL2 Mentored Career Development scholars and Master of Science in Clinical Research students). The monthly Clinical and Translational Investigator Program (CTIP) is a unique two-year curriculum designed to provide a supportive environment for developing clinical and translational competencies in an informal and collegial atmosphere.

For more information, contact CTIP coordinator Regis Lacher at rlacher@salud.unm.edu.

Data Carpentry Workshop
Attendees to this annual workshop (November 16-19, 2021) will develop the fundamental data skills needed to conduct research. Its target audience is researchers who have little to no prior computational experience, and its lessons are domain specific, building on learners' existing knowledge to enable them to quickly apply skills learned to their own research. Participants will be encouraged to help one another and to apply what they have learned to their own research problems.

For more information, visit https://nmcarpentries.github.io/2021-11-15-unm-online/.

IV. Pilot Funding

Faculty interested in preparing for a future grant submission have access to several pilot funding opportunities to support creation of preliminary data. Funds range from $3,750 to $100,000.

CTSA Funds

Contact: Christy Anderson, CTSC Pilot Administrator, chanderson@salud.unm.edu

Funding Opportunity	Description
Clinical and Translational Pilot Project Award ($10,000 to $25,000)	Supports pilot projects that utilize the CTSC infrastructure to produce preliminary data for competitive NIH grant proposals in clinical and translational research.
Linking Clinical Trials to Drug Discovery and Repurposing Award ($5,000 to $50,000)	Supports projects that address two or more of the following goals: 1) develop cell-based assays for use in high-throughput screening; 2) to use these cell-based assays for the identification of drugs for clinical re-purposing efforts; and, 3) to utilize these previously FDA approved drugs in new clinical trials.
Innovation & Commercialization Award ($5,000 to $25,000)	Supports innovative, high-risk/high-reward pilot projects to produce preliminary data for competitive NIH proposals through an SBIR/STTR mechanism in clinical and translational research.
CTSC / DCI Kidney Pilot Project Award ($10,000 to $25,000)	Supports pilot projects that will exemplify the Dialysis Clinic, Inc. (DCI) mission of developing clinical and translational research with an emphasis on kidney disease, hypertension, and/or kidney transplantation.
Targeted Pilot Project Award in Autophagy ($10,000 to $20,000)	Supports pilot projects that exemplify the UNM Autophagy, Inflammation, and Metabolism Center of Biological Research Excellence (CoBRE) mission to stimulate autophagy-based research and utilization of the AIM research cores. The aims for this project are: 1) Establish a nationally recognized AIM CoBRE to pioneer the study of autophagy and its connections with inflammation and metabolism as a basis of disease; 2) Develop a critical mass of investigators within AIM's research scope, establish mentoring infrastructure to enable junior faculty career development, and provide mentoring support for investigators to achieve independent NIH funding; and 3) Establish scientific cores to enable present and future cohorts of mentored PIs, as well as the scientific community at UNM HSC and New Mexico.
Wicked Problems: Target Pilot Project Award ($10,000 to $25,000)	Supports pilot projects that target wicked problems and address challenges related to wicked problems as defined by The National CTSA Network.
CTSA Inter-Institutional Pilot Project Award: UNM HSC, UK, UAMS, UI, KUMC & UU Health ($25,000 per institution)	Supports pilot projects that promote inter-institutional collaboration across six institutions in the CTSA consortium.
New Mexico Alcohol Research Center P50 (up to $40,000)	Supports new clinical pilot research projects that exemplify the NMARC mission with one clinical and two preclinical projects led by investigators new to the Fetal Alcohol Spectrum Disorders research field. The aims are: 1) Accelerate progress on each on NMARC's three strategic objectives; 2) Catalyze the expansion of NMARC's research capacity and capabilities; 3) Enhance our capability to disseminate knowledge about FASD through seminars, symposia and community outreach activities; and 4) Increase the number of undergraduate and graduate students, fellows and residents training in the FASD research field.

Center for Brain Recovery and Repair P20 (up to $40,000)	Supports new clinical pilot research projects that exemplify the CBRR mission within Brain and Behavioral health, specifically survivors of stroke and traumatic brain injury in New Mexico. The aims include: 1) Develop an interdisciplinary community of investigators focused on developing effective on interventions that promote cellular repair of damaged brain, and promote recovery of function; and 2) Focus on moving laboratory discoveries about brain repair mechanisms into clinical application by establishing a core with cutting edge facilities for clinical and preclinical interventions and assessments.
Center for Metals in Biology and Medicine P20 (up to $40,000)	Provides support for two pilot research projects per year, which exemplify the UNM CMBM mission of extending results from the laboratory to identify solutions for impacted communities and biomedical problems with a goal of working with community partners to help New Mexico make more progress towards innovative interventions and health equity. Aims include: 1) Create a strong community of independent investigators with common research goals related to metals in medicine and biology; 2) Establish centralized research Integrative Molecular Analysis Core Facility by integrating existing UNM-Health Science Center (HSC) scientific resources and building innovative facilities to improve bioanalytical chemistry research training and productivity for PIs, as well as to bolster research quality and depth for our institute; and 3) Create a unique “Metals in Biology and Medicine” program that has clear T0-T4 translational value.
Brain and Behavioral Health Mini-Grants (up to $3,750)	Provides mini-grant support for research projects in the area of brain and behavioral health to help access UNM Core Resources in Domenici Hall, including facilities and services for rodent behavioral testing, animal PET/MRI, optical and electrophysiology, cell and molecular, image analysis, neuropsychological testing and human subjects’ clinical assessment.
Mountain West Clinical Translational Research Infrastructure Network (CTR-IN) Multi-Site Pilots (up to $60,000)	Provides support for multi-site clinical and translational (CTR) research with the expectation that the project will yield key preliminary data and capacity building to facilitate a large-scale multi-site extramural grant application or other extramural grant funding opportunities. Projects must include CTR-IN partner institutions in at least three and preferably five to seven of our MW states involving at least 3 partner universities. Projects must involve human subjects and do not support pre-clinical research.
Mountain West Clinical Translational Research Infrastructure Network (CTR-IN) Community-Engaged Research Pilot Grant (up to $60,000)	The purpose of this funding opportunity is to increase the number of community-engaged pilot projects across the CTR-IN network. This funding opportunity is particularly directed towards faculty who have already established relationships with community partners to engage in research with those communities. The goal of this community-engaged project is to generate key preliminary data and evidence of robust community-engaged research to support and inform a competitive “R-level” grant application to NIH or other extramural funding sources. Projects must involve community-engaged human subjects’ research.
Mountain West Clinical Translational Research Infrastructure Network (CTR-IN) Single Site Pilots (up to $60,000)	The purpose of this funding opportunity is to provide promising early career and / or other mid- level to senior investigators with support to obtain the key preliminary data that will support and inform a competitive “R-level” grant application to NIH or other extramural funding sources. Projects must involve human subjects.

Signature Program Funds

Contact: HSC-OfficeofResearch@salud.unm.edu

Cardiovascular & Metabolic Disease ($4,500 - $27,200).	The CVMD primarily uses annual strategic pilot funding to advance the research opportunities and capabilities of the UNM HSC members. Funds can be used for studies or equipment to support the key CVMD research areas. These competitive applications are subjected to a peer-review and reporting process. Approximately 7 applications are reviewed and 3 awarded annually. CVMD encourages research teams to seek pilot funding for multi-PI and multi-disciplinary large scope grants. Should a single pilot request the full amount, it is expected that outcomes from such an application would entail extramural funding of larger scope, such as a Center grant, Program Project (P01) application, or American Heart Strategic Network award.
Infectious Diseases & Immunity (up to $25,000)	The Infectious Diseases & Immunity Research Program was created to develop and enhance collaborative programs among researchers, physicians, and businesses in New Mexico that address the threat of infectious and immunologically mediated diseases in New Mexican populations and the world. Our researchers study epidemiologic issues and basic host-pathogen mechanisms. We continue to develop new vaccines, therapeutics and diagnostics, and test the preventive, therapeutic and diagnostic efficacy of these discoveries in clinical trials.
Environmental Health Signature Program and Superfund Research Center Pilot Project Award ($10,000 to $25,000)	Supports pilot projects that exemplify the Superfund Research and Training Center and the Environmental Health Signature Program (EHSP) mission on regionally relevant environmental public health effects of metals and metal mixtures, with an emphasis on health disparities in affected tribal communities. The aims are: 1) Understand mechanisms whereby exposures to U and associated metal-mixtures move through the environment, and result in exposures that reprogram systemic immune functions; 2) Develop, collaboratively with stakeholders, interventions that build on Aim 1 to reduce community risks, ensure interventions are both scientifically sound and consistent with cultural beliefs, sustainable, and cost-effective; and 3) Design and implement stakeholder-informed multi-modal translation strategies to reduce metals exposures that is relevant to our broad audience and their diverse cultures.

RAC Funds

Contact: Meggan Gould, Research Allocations Committee Chair, meggould@unm.edu

Funding Opportunity	Description
SOM Research Allocation Committee (RAC) Project Award (up to $25,000)	Supports SOM Faculty in pilot projects of scientific merit; to produce preliminary data that leads to grant submissions and extramural funding. Application for extramural funding is expected to be submitted within 12 months of award end date.

Cancer Center Funds
Contact: UNMCC-PilotProgram@salud.unm.edu

The University of New Mexico Comprehensive Cancer Center (UNMCCC) provides funds to its members through multiple pilot grant award mechanisms with the purpose of supporting the acquisition of cancer relevant preliminary data that will lead to external grant funding and published work by Cancer Center members.

American Cancer Society — Institutional Research Grant ($30,000)	American Cancer Society — Institutional Research Grant The University of New Mexico (UNM) has been issued an Institutional Research Grant (IRG) by the American Cancer Society (ACS) for the period of January 1, 2018 to December 31, 2021. The purpose of this grant is to increase the base of cancer-related research at UNM through pilot awards to faculty members campus-wide. Junior faculty members with appointments in all Schools and Colleges of UNM are eligible for research support through the ACS IRG. On Hold until Renewal
Shared Resource Pilot Grant (up to $10,000)	The primary purpose of this pilot grant award mechanism is to provide funds for the use of UNM Comprehensive Cancer Center Shared Resources to promote cancer-relevant projects that are related to the goals of the Cancer Center Research Programs and Tumor Focused Clinical Working Groups. It is also intended to support the acquisition of preliminary data that will lead to external grant funding and published work. Awards will be made to projects that will use the UNM Cancer Center Shared Resources: Analytical & Translational Genomics, Animal Models, Behavioral Measurement & Population Sciences, Bioinformatics, Biostatistics, Flow Cytometry & High Throughput Screening, Fluorescence Microscopy & Cell Imaging, Human Tissue Repository & Tissue Analysis.
Postdoctoral Fellow and Graduate Student Matching Pilot Grant (up to $25,000)	The primary purpose of this pilot grant award program is to support postdoctoral fellows and graduate students who are carrying out cancer-focused research that advances the goals of the UNM Comprehensive Cancer Center (UNMCCC) Research Programs and Clinical Working Groups.
Research Project Support (up to $100,000)	The intention of these pilot awards is to enable UNMCCC members to develop preliminary data necessary for the submission of cancer-relevant external funding applications to the NCI, other NIH institutions, or other peer-reviewed funding sponsors. Priority will be given to projects which promote inter- and/or intra-programmatic collaborations and/or have the potential to lead to translation of our science to the clinic or population. Applicants should include a plan and timeline for submitting an extramural grant application that will be based upon data generated with the support of the pilot grant.
Focused Interactive Groups (FIGs) for the Development of Large, Programmatic Grant Applications (up to $200,000)	The primary purpose of this award mechanism is to assist groups of Cancer Center investigators in the development of cancer-relevant collaborative projects that will be competitive for extramural funding as large multi-PI R01, P01 or SPORE grants or other similar sized extramural grant opportunities. Pilot projects must be a multidisciplinary collaboration

	between two or more Cancer Center members that links together existing areas of research strength and expertise within the Cancer Center and focuses on a problem that is related to the strategic goals of the Center and its research programs and clinical working groups.
Developmental Funds Mechanism to Support Investigators with the Resubmission of Grant Applications with Scores Near the Pay Line (up to $100,000)	The primary purpose of this developmental funds pilot program mechanism is to support UNM Comprehensive Cancer Center (UNMCCC) investigators with the resubmission of grant applications that received initial scores near to the pay line (25th percentile or less).
Developmental Funds Mechanism for Investigators who's Recently Awarded External Grant Applications Were Significantly Cut (up to $100,000)	The primary purpose of this developmental funds pilot program mechanism is to support UNM Comprehensive Cancer Center (UNMCCC) investigators whose recently funded, cancer-focused external grant applications had significant cuts (cut of 10% or greater) to the requested budget.
Translational Research Seed Funding (up to $25,000)	The specific intent of the Translational Research Seed Funding is to support collaborations between research investigators and clinicians. These collaborations should focus on developing preliminary data that will enable the submission of competitive cancer-relevant external funding applications or clinical trial proposals to the NCI, other NIH institutions, or other peer-reviewed funding sponsors.

V. Core Facilities

Contact: George Garcia - CTSC Research Concierge at 505-272-3183 or HSC-CTSCResearchConcierge@salud.unm.edu

Few academic health centers of our size are fortunate enough to have both a Clinical and Translational Science Award and a Cancer Center with comprehensive designation from the National Cancer Institute. These serve as the foundation of our ability to conduct cutting-edge research with an eye toward meeting the specific needs of our communities. Our School of Medicine includes a centralized core facility that offers a multitude of assets and resources that are openly available to investigators and research teams to assist them design, conduct, and manage clinical research studies to achieve effective clinical and translational outcomes. Specific shared resources include:

Clinical & Translational Science Center

- Clinical Research Unit: A sophisticated clinical research unit that supports inpatient, outpatient, and pediatric research through a wide range of nursing and research coordinator services;
- Community Engaged Research Core: An innovative community engagement and qualitative research core that supports academic and community stakeholders to engage in mutually beneficial partnerships for effective clinical and translational research;
- Community Health Network: A Community Health Network to provide an innovative, efficient and accessible enrollment approach to research and clinical trials to diverse and rural populations throughout New Mexico;
- Translational Laboratory: A translational lab that provides state-of-the-art equipment, technologies and resources for investigators to perform immunodiagnostic and chemical assays on research samples in a manner that assures strict quality control and reports results in a timely fashion;

- Informatics Core: Biomedical informatics tools that harness the research potential of medical records, provide secure storage for human subjects' data, and improve research efficiency;
- Biostatistics, Epidemiology, and Research Design Core: A biostatistics support shared resource that provides all HSC researchers ready access to appropriate expertise in study design, basic data management, and quantitative data analysis;
- Regulatory Knowledge and Support Unit: A regulatory support unit to assist investigators in developing regulatory and clinical strategies and fulfilling regulatory requirements for clinical research programs along the continuum of clinical, translational, and community research;
- Drug Discovery & Repurposing Core: And a large-scale drug discovery program that provides unique resources for rapidly translating existing drugs for use in new clinical trials;

Comprehensive Cancer Center

- Analytic & Translational Genomics Shared Resource: A Genomics shared resource that provides access to next generation sequencing assays, microarrays, and other genomics technologies coupled with expert bioinformatics analysis. Contact: Scott Ness PhD - SNess@salud.unm.edu
- Flow Cytometry and High Throughput Screening Resource: A Flow Cytometry research facility that brings together the necessary tools for UNM scientists to perform fluorescent cell analysis, sorting, and High Throughput Screening that also provides instrumentation, service, training, computational resources and technical expertise workshops. Contact: Jennifer Gillette PhD - JGillette@salud.unm.edu
- Florescence Microscopy Shared Resource: A Fluorescence Microscopy Shared Resource that provides UNM researchers access to state-of-the art instrumentation for multiple fluorescence and transmitted light microscopy techniques. Diane Lidke PhD - DLidke@salud.unm.edu

Other Shared HSC Core Resources:

- Electron Microscopy Facility: An HSC Electron Microscopy Facility that is open to staff, students, faculty and others who would like to use the equipment for research, whether they prepare and image their own samples or ask the facility for assistance. Contact: Tara G. Ooms Konecny, DVM, DACLAM - tkonecny@salud.unm.edu
- Animal Resource Facility: An Animal Resource Facility that provides the best possible animal care and to assist investigators in fulfilling their obligation to plan and conduct animal research in accord with the highest scientific, humane, and ethical principles. Contact: Victoria Sugita - VSugita@salud.unm.edu
- Human Tissue Repository and Tissue Analysis Shared Resource: A Human Tissue Repository that facilitates the acquisition, storage, and distribution of high-quality human tissue samples to UNM researchers for use in scientific investigations while observing appropriate ethical, scientific, and legislative principles and regulations. Contact: tissuebank@salud.unm.edu

VI. Facilitation of Collaboration

Several activities are available to encourage collaboration:

The CTSC-sponsored Synergy meetings are designed to enhance UNM's translational mission. The series will bring together basic, clinical and translational researchers, and shared resource directors to advance projects from bench to bedside and to promote the application of UNM technology to clinical and translational investigations. For more information: https://hsc.unm.edu/ctsc/events/meetings.html

The annual BioVenture Partnership event provides opportunities for learning and networking between New Mexico's "bio" companies, investors/angels, and UNM faculty and inventors. For more information: https://hsc.unm.edu/ctsc/events/bioventure.html

The annual Health Hackathon stimulates innovation in health care by bringing together diverse teams from across UNM and the community to seek solutions for pressing health care challenges. Winning teams can apply for grants of up to $10,000. For more information: https://hsc.unm.edu/ctsc/events/hackathon.html

Our Biodesign course brings together 15-30 graduate level students yearly to collaborate in teams to address biomedical challenges.

VIVO is a research-focused discovery tool that enables collaboration among scientists across all disciplines. For more information: https://vivo.health.unm.edu/

Signature Programs

Signature Programs at the HSC bring together researchers and clinicians in focused areas. Each program was formed to promote academic interest, collaboration and networking around specific themes. Taken individually, each program focuses on research from bench to bedside. All have successful collaboration platforms and training or mentorship opportunities.

Environmental Health Sciences

Matthew Campen, PhD, MSPH, mcampen@salud.unm.edu

The Environmental Health Signature Program performs basic and translational research on regionally relevant environmental public health issues that address the overall health needs of unique Southwestern communities while contributing to our understanding of global environmental health issues. This program is focused on finding new solutions to the complex environmental health issues, such as exposures to arsenic, uranium mine wastes, and air pollution, and other health disparities that affect New Mexicans. Collaborations with University of New Mexico and Health Sciences faculty aim to develop health interventions that are community-driven, culturally relevant, and sustainable for diverse peoples across New Mexico. EHSP members specifically study environmental health issues affecting people living in New Mexico, the Four Corners Region, and the U.S.-Mexico Border. Importantly, environmental health research at UNM involves extensive collaborative initiatives with many Native American communities and the Navajo Nation. These efforts led to the CDC-funded Navajo Birth Cohort Study, to assess the impact of uranium mining and residual contaminants on neurodevelopmental outcomes.

Cardiovascular & Metabolic Disease
Meilian Liu, PhD, MeilianLiu@salud.unm.edu
The Signature Program in Cardiovascular and Metabolic Disease includes basic, clinical, and translational research, as well as population-based outcomes research and community outreach activities. The program's mission is to support and enhance the activities of investigators at the University of New Mexico Health Sciences Center who are pursuing important, clinically relevant research questions focusing on Cardiovascular and Metabolic Disease. This program aims to enhance the collaborative inter-disciplinary scientific interactions within the institution, to increase the level of junior faculty mentorship and support and to promote the development of new areas of research strength.

Cancer
Carolyn Muller, MD FACOG CMuller@salud.unm.edu
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.

Infectious Diseases & Immunity
Thomas Byrd, MD, tbyrd@salud.unm.edu
The Infectious Diseases & Immunity Research Program was created to develop and enhance collaborative programs among researchers, physicians, and businesses in New Mexico that address the threat of infectious and immunologically mediated diseases in New Mexican populations and the world. Our researchers study epidemiologic issues and basic host-pathogen mechanisms. We continue to develop new vaccines, therapeutics and diagnostics, and test the preventive, therapeutic and diagnostic efficacy of these discoveries in clinical trials. The program has a global reach, and collaborate with many organizations to fight diseases, including Duke University, Lovelace Biomedical and Environmental Research Institute and Lovelace Respiratory Research Institute, Los Alamos National Laboratory, National Center for Genome Resources, Research Center of Excellence at University of Texas Medical Branch, and the National Institute of Allergy and Infectious Diseases.

Child Health Research
Kristi Watterberg, MD, KWatterberg@salud.unm.edu
The Child Health Research signature program's enterprise is to improve the health and well-being of New Mexican children through research. We are particularly committed to identifying and fostering the investigation of health issues paramount to New Mexican youth that transcend program specific health foci, including adverse childhood experiences, social determinants of health, and health disparities. By facilitating research collaborations in child health across UNM and HSC schools, departments, and programs, as well as communities, we serve to increase the number, quality, relevance, and impact of scholarly works. Our work also facilitates the dissemination and

implementation of evidence-based child health practices in clinical and community settings across New Mexico. A current CHSP area of focus is the systematic collection of formative data focused on adverse childhood experiences that can be used to generate and support extramural programmatic or center grant applications. This includes data from a stakeholder engagement process, as well data harmonization efforts focused on gathering standardized child health clinic and program informatics and standardized measures of the prevalence of adverse childhood experiences across UNM health clinics and programs. The CHSP is funded with tobacco settlement revenue from the State of New Mexico.

Brain and Behavioral Health
Ludmila Bakhireva, MD, PhD, MPH, LBakhireva@salud.unm.edu | Kiran Bhaskar, PhD, KBhaskar@salud.unm.edu
The UNM Brain and Behavioral Health Institute (BBHI) is a signature program under the HSC Office for Research. BBHI's vision is to become the leading center in the Southwestern and Rocky Mountain States region for brain and behavioral health, through research, education, and community partnership. The programmatic goals for BBHI are 1) to facilitate or establish effective partnerships between the BBHI and communities throughout New Mexico; 2) develop major new, interdisciplinary brain and behavior research programs; 3) promote cutting-edge neuroscience and behavioral research.

Journal clubs based around each signature program meet regularly to facilitate educational and research collaborations.

Biochemistry & Molecular Biology Thursdays, 12:00-1:00, BRF 218 Contact: Dr. Raj Shah, vshah@salud.unm.edu	Cardiovascular Physiology Thursdays, 9:30-10:30, Fitz 205 Contact: Dr. Jay Naik, JNaik@salud.unm.edu
Cell & Molecular Basis of Disease (CMBD) Offered as BIOM 525 in Spring Terms Wednesdays, 12:00-12:50, Domenici Center Education Building 1735 Dr. Kiran Bhaskar, KBhaskar@salud.unm.edu	Host/Pathogen Tuesdays, 9:00-10:00, NRPH B28 Contact: Dr. Aaron Neumann, AKNeumann@salud.unm.edu or Dr. Pam Hall, PHall@salud.unm.edu
Immunology Tuesdays, 10:00-11:00, Fitz 389 Contact Dr. Paul Mrass, PMrass@salud.unm.edu	Neuroscience Fridays, 9:00-10:00, Fitz 243 Dr. Russell Morton, RAMorton@salud.unm.edu
Signal Transduction & Trafficking (STAT) Wednesdays, 12:00-1:00, CRF 204 Contact: Dr. Bridget Wilson, bridgetw@unm.edu	Translational Science Offered as BIOM 527 Restriction: Must be Doctor of Medicine or Ph.D. Biomedical Sciences, permission of department

Seminars on a variety of topics meet regularly to advance faculty skills and experience:

BSGP careers outside academia Contact: Dr. Judy Cannon jucannon@salud.unm.edu	Cardiovascular Physiology Contact: Dr. Jay Naik, JNaik@salud.unm.edu
Careers in Translational Science Contact: Dr. Corey Ford, cford@salud.unm.edu	Cellular & Molecular Basis of Disease Contact: Dr. Jason Weick, JPWeick@salud.unm.edu
Tuesday Autophagy, Inflammation, & Metabolism Seminar (TAIMS) Contact: Dr. Shaina Aguirre, svaguirre@salud.unm.edu	T32 Infectious Disease & Inflammation Program Contact: Dr. Martha Vigil, mcvigil2@salud.unm.edu
Neuroscience Dr. Russell Morton, RAMorton@salud.unm.edu	Pharmaceutical Sciences & Toxicology Contact: Dr. Matt Campen, mcampen@salud.unm.edu
RNA Club Contact: Dr. Rebecca Hartley, rhartley@salud.unm.edu	Virology Contact: Dr. Michelle Ozbun, mozbun@salud.unm.edu

For more information on the signature programs and journal clubs:
https://hsc.unm.edu/medicine/education/reo/events/

VII. Mentored Career Development

KL2 Program

Contact: Dr. Matt Campen at mcampen@salud.unm.edu.
The KL2 program equips a cohort of independent faculty with the training and support needed to conduct exceptional clinical and translational research. KL2 Scholars receive training and mentorship in multi-disciplinary, team-based, and patient-oriented clinical and translational research. KL2 Scholars become leaders and innovators in their respective professional fields and departments. The goal of this program is to foster the discipline of clinical research and, by increasing clinical research capacity, to expedite clinical and translational research.

The Clinical and Translational Science Center (CTSC) continues to accept applications from highly qualified candidates from across the country each year. At any given time, each the Centers of Biomedical Research Excellence (COBREs) at UNM is hosting four program mentees.

Diversity Training Grants

Contact: CTSC Director Richard Larson, MD, PhD at rlarson@salud.unm.edu
CTSC Diversity Supplements provide funding of up to $100,000 in salary support over two years to improve the diversity of the research clinical and translational science workforce by recruiting and supporting graduate and health professional students, post doctorates and/or investigators developing independent research careers from diverse backgrounds, including those from groups that have been shown to be underrepresented in health-related research.