

Below is information about some additional University facilities. Read through them carefully and include only those resources that are directly applicable to your proposed work. Add information about how the facility will directly impact your research.

Andrew Weil Center for Integrative Medicine

The Andrew Weil Center for Integrative Medicine is leading the transformation of health care by training a new generation of health professionals and by empowering individuals and communities to optimize health and wellbeing through evidence-based, sustainable, integrative approaches. It is the global leader in innovative integrative education, evidence-based clinical practice, and influential research since its establishment in 1994. Founded and directed by Dr. Andrew Weil, who holds the Lovell-Jones Endowed Chair in Integrative Medicine and serves as Clinical Professor of Medicine and Professor of Public Health at the University of Arizona, the Center has gained international recognition for its pioneering work. With over two decades of experience, they are trailblazers in online learning, offering certification programs that propel professional development in integrative medicine. Their graduates have empowered more than 8 million patients to actively engage in their health.

The Andrew Weil Center for Integrative Medicine, nestled in Tucson, AZ, serves as both their home and a beacon of integrative health. Their consultative practice directly serves patients, offering a diverse range of therapies that bridge conventional and complementary approaches to healing. Their complex of buildings is constructed as health-promoting workspaces, embodying their commitment to integrative medicine in both form and function. They envision a world where the word integrative is dropped from integrative medicine and it becomes just good medicine.

Their research activities seamlessly integrate complementary therapies with conventional medicine, with a special focus on education and corporate health. Under the guidance of Dr. Esther Sternberg, they investigate the intricate mind-body connection and its application within the realm of integrative medicine, including their collaboration with the University of Arizona through the Institute on Place and Wellbeing. Institute on Place, Wellbeing & Performance The University of Arizona Institute on Place, Wellbeing, and Performance (IPWP) leverages knowledge and evidence through research and design to achieve tangible results optimizing and maximizing people's productivity, creativity, and wellbeing from employer and consumer perspectives. It seeks to redefine human health to fully encompass the role of the built and green environment in health and wellbeing, through research, education, practice, and policy change. An interdisciplinary institute at the University of Arizona, the IPWP links expertise of the University of Arizona College of Medicine - Tucson, the Arizona Center for Integrative Medicine, and the University of Arizona College of Architecture, Planning, and Landscape Architecture, actualizing the university's commitment to a vision of human health that fully encompasses the role of the built and natural environment in health, wellbeing and healing. Through cutting edge research, the IPWP is taking person-centered health to the next frontier - person and place-centered health and wellbeing.

The IPWP's multi-disciplinary team carries out research to quantify stress, health, and wellbeing outcomes in real-time and real place, in built environments including office spaces and healthcare facilities. State-of-the-art technologies such as non-invasive micro-devices and analytic algorithms developed at the University of Arizona collect data used to help occupants and employers maximize health and wellbeing, creativity, and productivity in optimized work environments. Supporting improvement through economic analyses, they then help organizations calculate return on investment of interventions that support sustainable human health and wellbeing.

The Institute's thought leader teams offer consulting services and training opportunities to partner with organizations seeking to create an atmosphere of wellbeing for their employees, clients, and visitors. Applying the concepts developed through research and curricula, the Institute's teams work with individual organizations to discern their specific needs, and to tailor design and health and wellbeing solutions to fit their requirements, optimizing worker wellness and satisfaction. The IPWP teams work with practitioners, community, corporations, and government agencies to implement these principles in the design of the built and natural environment. Services available include: design guidance for the objective of wellbeing; studies in pre- and/or post-occupancy outcome measures and biometrics of human health and wellbeing in office spaces, schools, residential, healthcare and other environments; integrative clinic design and consultation for the development of sustainable integrative clinic business models; return on investment analyses of sustainable design for wellbeing; training of executives, human resources professionals and other personnel in employee wellbeing;

nutrition consultation and training to use nutrient-dense, delicious food for prevention and treatment of specific health concerns, and for overall health and wellness; and integrative medicine training options, to include preventive and lifestyle medicine, for individuals within an organization, as well as health care and human resources professionals.

Asthma & Airways Disease Research Center

The Asthma & Airway Disease Research Center is an interdisciplinary Center of Excellence at the University of Arizona College of Health Sciences dedicated to research, clinical care, medical education, and community service in the areas of adult and pediatric pulmonary medicine. As one of the university's first Centers of Excellence, the Asthma & Airway Disease Research Center has built an international reputation over the past three decades in researching and treating asthma, chronic obstructive pulmonary disease, sleep apnea, and other major respiratory diseases.

The mission of the Asthma & Airway Disease Research Center is to understand the causes of respiratory disease, to improve the lives of people suffering with these illnesses, and to find cures for respiratory diseases that plague the citizens of our nation and world. They strive to fulfill their mission by conducting innovative research in basic science, clinical advancements, drug development, and alternative therapies, with particular emphasis on the biology, genetics, epidemiology, prevention, and treatment of asthma, chronic obstructive pulmonary disease, and obstructive sleep apnea; providing state-of-the-art medical care in adult and pediatric pulmonary clinics and intensive care units at Banner University Medical Center in Tucson, Arizona; and imparting comprehensive education to health care professionals and undergraduate, graduate, and post-graduate medical students to arm them with the best knowledge and tools to serve patients with respiratory and related disorders.

The Asthma & Airway Disease Research Center is dedicated to furthering medical advancements among a multitude of respiratory diseases with internationally recognized clinical investigators leading groundbreaking research studies. Research is a vital piece of the Center and is crucial to the development and expansion of the knowledge in fighting respiratory disease.

Arizona Center for Accelerated Biomedical Innovation

Over the past few years, the concept of translational research has emerged as an important bridge between basic and applied research, integrating the two for greater good. The Arizona Center for Accelerated Biomedical Innovation (ACABI) represents a new approach to integration, linking research, medicine, and business to rapidly bring vital innovation to patient care. The mission of ACABI is to serve as a novel creativity engine, an inventor's workshop and a means of tackling unmet medical needs, to develop practical solutions that may be brought into the real world as true innovations. To accomplish that mission, ACABI focuses its vision on three operational targets: 1) working to resolve unmet needs, primarily biomedical, surfaced through close work with physicians and medical experts at the University of Arizona and Banner University Medical Center, distilling those needs into discrete, addressable problems; 2) identifying enhanced uses for technologies developed by the University of Arizona and collaborating partners, amplifying the utility of these discoveries through novel solutions that can be rapidly implemented in the clinical world; 3) working with industry, especially the biomedical industry, with an end goal of commercialized innovation: creative solutions that become actual tools in medical care. They link industry, academic and medical expertise to solve problems and enrich existing products and services with new technologies.

Arizona Center on Aging

The Arizona Center on Aging, established in 1980, became one of the Board of Regents approved Centers of Excellence within University of Arizona Health Sciences in 1991. The mission of the Arizona Center on Aging is to promote healthy and functional lives for older adults through comprehensive programs in research, education and training, clinical care, and community engagement.

The Center exists to improve quality of life and to extend the lifespan of older adults. They aspire to eradicate the diseases and conditions that occur in advanced age, and to unleash the unparalleled wisdom, energy, and experience of older adults. The Center seeks to promote health and foster resilience in aging, and increase recognition of the unparalleled wisdom, energy, and experience of older adults for the benefit of the world. They believe they can best accomplish their mission through equal collaboration among scientists, clinicians, educators, health policy leaders, and the community. They strive to move discoveries from the lab to

the community, and to bring questions and observations from real people into the lab where they can be solved.

The Center provides geriatric education and training for health care professionals and care partners across the state to build a workforce that is prepared to provide the best of care for older adults. They develop new ways of delivering healthcare that promote independence and healthy aging. Finally, they are committed to sharing these essential discoveries through education and outreach.

Arizona Telemedicine Program

The Arizona Telemedicine Program is a large, multidisciplinary, university-based program that provides telemedicine services, distance learning, informatics training, and telemedicine technology assessment capabilities to communities throughout Arizona. It was funded in 1996 by the Legislature of the State of Arizona and mandated to provide telemedicine services to a broad range of healthcare service users including geographically isolated communities, Indian tribes, and Department of Corrections rural prisons. The program has succeeded in creating partnerships among a wide variety of not-for-profit and for-profit health care organizations and has created new interagency relationships within the state government. Functioning as a "virtual corporation," the Arizona Telemedicine Program is creating new paradigms for health care delivery over the information superhighway. It is recognized as one of the premier programs at the University of Arizona College of Medicine and has received numerous awards at the national level for its research and innovations.

The goals of the telemedicine program are to 1) advance telemedicine and telehealth capabilities in Arizona to improve access to healthcare for, and enhance healthcare delivery to, medically underserved populations throughout the state; 2) promote the use of broadband telecommunications for the delivery of healthcare via telehealth technologies and for distance learning in healthcare; 3) provide healthcare organizations and professionals throughout Arizona with information, training, and expertise in the field of telemedicine; 4) provide telehealth education for trainees and students throughout the University of Arizona and encourage them to pursue degrees in the healthcare provider professions and to subsequently practice healthcare in underserved rural Arizona communities; 5) encourage and support current physicians, nurses, and other healthcare professionals to establish and retain practices in rural and urban medically underserved areas; 6) support improved health outcomes in medically underserved communities by providing, and facilitating, the delivery of timely and up-to-date healthcare education and information; 7) serve as a test bed to evaluate the effectiveness of state-of-the-art telemedicine technologies, broadband telecommunications, and services; 8) publish and present, regionally and nationally, meaningful and timely telehealth content; 9) develop and grow an online community of people interested in telemedicine and telehealth; and 10) be an innovative leader in the field of telemedicine.

BIO5 Institute

The BIO5 Institute at the University of Arizona brings together world-class researchers and innovators from five core disciplines - agriculture, engineering, medicine, pharmacy and science - to collaborate for the purpose of solving today's most complex and critical problems, including how to prevent, treat and ultimately cure diseases that affect millions of people worldwide; how to address the growing environmental concerns threatening our planet; and how to ensure food security and nourish an expanding global population. The BIO5 Institute envisions a future where collaborative, interdisciplinary research is the driving force behind innovation and real-world impact. As a pioneering institute, they propel bioscience forward, fostering an environment where diverse minds converge to solve complex challenges. Their commitment is to lead transformative research, translating discoveries into real-world applications that shape the future of bioscience locally and globally.

BIO5's goals include 1) fostering collaborative projects that address major challenges in the biosciences, biomedicine, and biotechnology and forge significant progress on novel treatments for asthma, cancer, valley fever, diabetes, sudden cardiac death, malnutrition, infectious disease, and Alzheimer's and other age-related brain diseases; 2) strengthening and expanding translational research by recruiting the best and brightest faculty to Arizona and supporting projects that will advance the development of new medicines, devices, diagnostics, and nutritional and therapeutic strategies; 3) engaging and training future generations of scientists by maintaining successful outreach and internship programs to promote experiential learning and STEM proficiency in the state; 4) expanding shared resources in computational biology, imaging, high throughput screening, genomics, proteomics and cell analysis across all life science disciplines to expedite

large-scale, team science grants that will boost federal research funding, serve as a resource for local industry, and create new services and companies in Arizona; and 5) promoting an entrepreneurial culture in which scientists work across disciplines to accelerate commercial translation of research breakthroughs.

Biorepository

The Biorepository serves as the coordinated infrastructure for the standardized collection, processing and banking, and allocation of high-quality biospecimens. The Biorepository is responsible for providing full-service biospecimen banking operations including specimen collection and processing, storing and maintenance of up-to-date specimen inventory and specimen distribution. The mission of the Biorepository is to serve as a standardized and regulatory-compliant; privacy protected biorepository and centralized resource to foster and promote interdisciplinary research and collaborations. Its vision is to provide the necessary resources and expertise to advance scientific research to solve critical health care problems and build healthier communities.

Biosphere 2

Biosphere 2, a campus of the University of Arizona, engages in world-class environmental research, education, and entrepreneurship leading to solutions for humanity's grand challenges of climate change, biodiversity loss and sustainable development, on Earth and beyond. The core research facility of the Biosphere 2 campus is the world's largest indoor controlled environment for ecological and climate change research across multiple biomes. The campus also boasts a growing number of specialized research spaces, including facilities dedicated to development of co-located food and photovoltaic energy production and a human-habitat analog for the Moon and Mars that emphasizes research on life support systems and astronaut training. The mission of Biosphere 2 is to advance understanding of the natural human-made ecosystems through integrated research and development of scalable interventions that increase the resilience and sustainability of Earth systems and human societies. They foster research in their unique facilities, conduct interdisciplinary science education, and lead in developing solutions for the planet and beyond.

The University of Arizona Biosphere 2 consists of a unique large-scale experimental apparatus housing seven model ecosystems, a team of multidisciplinary scientists, a broad science education and public outreach program, and a modern conference center. The seven model ecosystems are 1) a mature rain forest with over 90 tropical tree species, 2) a 2600 m³ ocean, 3) forested swamps dominated by mangrove trees, 4) a tropical savanna grassland, 5) a 1400 m² coastal fog desert, 6) three desert hillslope grass-shrubland landscapes, and 7) Biosphere 2, its campus, and associated buildings and facilities serve as a 162,000 m² model city and urban ecosystem. The Biosphere 2 Science Program addresses societal grand challenges related to water, environmental and energy management through design of large-scale experimentation in each of these model ecosystems. These experiments support the development of computer models that simulate the biological, physical and chemical processes to predict ecosystem response to environmental change. In return, these coupled-systems model simulations inform scientists about the next level of experimentation needed to advance understanding of these complex systems' responses that can be tested against observations in natural systems.

Center for Applied Genetics and Genomic Medicine

The goal of the Center for Applied Genetics and Genomic Medicine (TCAG²M) is to apply genetics and genomic biology to improve healthcare delivery for the people of Arizona. TCAG²M supports outstanding translational and clinical research into the etiology of disease and the development of new approaches to manage these conditions in the clinic. To achieve this goal, TCAG²M has created divisions in cancer genetics, cardiopulmonary genetics, genetic consultation and counseling, community engagement, genome technologies and innovation, pharmacogenomics, and population genetics to advance their translational and clinical agenda.

The Center is headquartered at University of Arizona Health Sciences and is tightly connected to the health science colleges in Tucson and Phoenix, as well as various colleges and core facilities throughout the University. TCAG²M facilitates precision health at the University of Arizona in several key ways: 1) bringing clinicians and researchers together to foster collaborative research programs; 2) sponsoring regular seminars to inform researchers, students, clinicians and the public about recent advances in precision health; 3) supporting educational programs in genetic counseling; 4) encouraging strong core facilities to foster genetics and genomics research, including the University of Arizona Genetics Core and the University of Arizona

Biorepository; and 5) working with industry leaders to advance precision health research at the University of Arizona.

iCAMP-A iCAMP-A is an interdisciplinary research and development collaboration between a host of productive, exciting, creative teams from Podiatric & Vascular Surgery, Orthopedics, Nursing, Geriatrics, Anthropology and Engineering at the University of Arizona, College of Medicine, Department of Surgery, Division of Vascular Surgery. iCAMP brings together a core team of clinicians, research scientists and biomedical engineers along with dedicated resources and infrastructure. The team shares a common vision to advance objective, innovative and practical interventions coupled with outcomes evaluation using human motion assessment in many unique areas of clinical medicine.

Center for Advanced Molecular and Immunological Therapies

The Center for Advanced Molecular and Immunological Therapies (CAMI) will be a national biomedical research hub in Phoenix to unravel the complexities of the immunology of cancers, infectious diseases and autoimmune conditions. Researchers and physician-scientists are increasingly using precision medicine to develop new cell- and gene-based therapeutical options for diseases, building on the idea that the most effective defense against health issues is the body's natural immune system. CAMI will accelerate the pursuit of therapies already underway at the University of Arizona Health Sciences, open new doors of discovery and advance precision medicine to improve health outcomes for people across Arizona and around the world. CAMI will serve as the anchor for an innovation district that will establish the Phoenix Bioscience Core (PBC) as a center of research, startup activity and corporate engagement. CAMI will be joined at the PBC by the University of Arizona Office for Research, Innovation and Impact.

The new seven story, 200,000-square-foot building complex is being designed to house 40 principal investigator-led research groups. Student education will be prioritized in learning spaces dedicated to academic programs that will allow CAMI faculty and researchers to mentor and train the next generation of scientists. Life sciences innovation centers contribute significant positive financial impact: launching new companies, attracting new corporate operations, creating jobs in a rapidly expanding economic sector and enhancing educational opportunities – all of which benefit local municipalities and state governments.

Center for Biomedical Informatics and Biostatistics

The Center for Biomedical Informatics and Biostatistics (CB2) builds a data-driven learning health system, advances precision medicine analytics, and translates Big Data science and genomic discoveries to clinical care. The goal of the University of Arizona Center for Biomedical Informatics and Biostatistics (CB2) is to advance the University of Arizona Health Sciences' clinical research enterprise and mission with informatics, tools, clinical data sources, and shared human and technical resources. CB2 has a dual mission of promoting research and offering services and tools in the fields of biomedical informatics and biostatistics. Over 20 staff biostatisticians, bioinformaticians, and biomedical informaticians work synergistically to conduct biostatistical studies, epidemiological analyses and research design as well as biomedical informatics analyses that comprise data from expression arrays analyses, high-throughput sequencing, proteomics, clinical warehouse, tissue specimen management systems, clinical trial management systems, and other biomedical data sources. CB2 research hosts statisticians, clinical informaticians, and computational biologists that advance data science methods and tools to discover better treatments, predict response to therapy or disease progression, and intervene in clinical care. University of Arizona Health Sciences resources CB2 to promote research aligned with key developmental areas: precision medicine, cancer research, health equity and diversity, and population science.

Clinical Data Archive The Clinical Data Archive (CDA) contains data extracted from numerous source systems including HIPAA-compliant electronic health record information from the Banner University Medical Center - Tucson. The electronic health record information from Banner University Medical Center - Tucson is from November 1, 2013 to September 30, 2017. Examples of data available include demographics, encounters, laboratory test results, medications (2013-2017), diagnoses (ICD-9), procedures (CPT and ICD-9), problem lists (2013-2017), allergy information (2013-2017), and clinical narratives (procedures, discharge, encounters, pathology).

REDCap Vanderbilt University, with collaboration from a consortium of institutional partners and funding from the National Institute of Health (NIH), developed a software toolset and workflow methodology for electronic collection and management of research and clinical trial data. REDCap (Research Electronic Data Capture) is

a secure, web-based application that is flexible enough to be used for a variety of types of research. REDCap provides an intuitive user interface that streamlines project development and improves data entry through real-time validation rules (with automated data type and range checks). REDCap also provides easy data manipulation (with audit trails for reporting, monitoring and querying patient records) and an automated export mechanism to common statistical packages (SPSS, SAS, Stata, R/S-Plus). In addition to traditional data capture functionality, REDCap's survey capabilities are a powerful tool for building and managing online surveys. The research team can create and design surveys in a web browser and engage potential respondents using a variety of notification methods. All data collection projects rely on a thorough, study-specific data dictionary, defined by all members of the research team in an iterative, self-documenting process. This iterative development and testing process results in a well-planned and individualized data collection strategy.

The REDCap electronic data management system at the University of Arizona is housed on two virtual servers: one supporting database services and the other web services. Hardware is located in the University of Arizona's Information Technology Services Center (UITs). The space is temperature controlled and physically secured within a keyless entry area. Hardware management and support is provided by UITs. The database server is located behind a firewall and the web server is in a DMZ. REDCap software support is provided by the University of Arizona Center for Biomedical Informatics and Biostatistics. All web-based information transmission is password protected and encrypted in transit. Administration of REDCap is managed through Virtual Servers located at the University of Arizona College of Medicine.

REDCap was developed specifically around HIPAA-Security guidelines and is recommended to University of Arizona researchers by both their Privacy Office and Institutional Review Board. REDCap has been disseminated for local use at more than 2300 other academic/non-profit consortium partners in over 100 countries. Vanderbilt leads the REDCap Consortium, which currently supports more than 410,000 projects and 523,000 users. More information about the consortium and system security is available at <https://projectredcap.org/>.

Center for Disparities in Diabetes, Obesity and Metabolism

The Center for Disparities in Diabetes, Obesity and Metabolism serves as a nucleus for interdisciplinary research that forms the foundation for translation of biomedical research to advanced, evidence-based clinical care in the community. A major focus of the center is to facilitate development of innovative approaches to delivery of care and prevention, serving a diverse population in one of the most high-risk yet underserved regions in the nation. A primary objective of the center is to create a biobank and research registry that is focused on obesity and type 2 diabetes risk in the Latino population, while also creating a biobank registry with patient bio-specimens that would be accessible to other studies focusing on other aspects of health of importance to the local community and the Hispanic/Latino population.

The goals of the Center are to 1) facilitate biomedical research opportunities for Latino patients who receive care at partner clinic site; 2) encourage the increase of research with a focus on the Latino population across the university; and 3) facilitate collaborative and transdisciplinary research projects across health sciences and community partners focused on understanding and improving health among Latinos. The objectives are to 1) create basic, translational, and community research resources in diabetes, obesity, and metabolism; 2) provide infrastructure to facilitate an increase in research with a focus on the Latino population and 3) combine University of Arizona Health Sciences with community partners to foster collaborative research projects focused on understanding and improving health among Latinos.

Center for Firefighter Health Collaborative Research

The Center for Firefighter Health Collaborative Research works with firefighters and fire departments to study the occupational health risks that firefighters face. Their research gathers data that will inform decisions, practices, and policies to keep firefighters safer and healthier. The Center builds on years of firefighter health research conducted by Zuckerman College of Public Health faculty in close collaboration with fire departments, research that has already had a lasting positive impact on firefighter health.

Center for Innovation in Brain Science

The mission of the Center for Innovation in Brain Science (CIBS) is to create innovations in brain science of the future for those who need a cure today. CIBS was created to address the challenge that in the

21st century there is not a single cure for a single neurodegenerative disease with a vision of vibrant brains that last a lifetime. CIBS strongly believes that scientific innovation is strongest when it is supported by a diverse workforce in an environment that fosters multiple and sometimes competing perspectives.

CIBS is using its expertise in translational neuroscience to discover and develop novel therapeutics that address serious unmet medical needs and change the outcome for millions of people and their families living with debilitating neurodegenerative diseases. It is rapidly advancing programs across a wide range of neurodegenerative diseases: Alzheimer's, Parkinson's, Multiple Sclerosis, and Amyotrophic Lateral Sclerosis (ALS). The CIBS collaborative research model integrates discovery, translational and clinical science that enables it to validate targets and generate novel therapeutic candidates selective for proteins that play critical roles in neurodegenerative disease pathways.

Center for Sleep, Circadian & Neuroscience Research

Sleep and circadian sciences are biological functions that constitute a core determinant of all domains of health, across the life span, in each individual and across all populations, including minorities, the elderly, children, pregnant women, and individuals of low socioeconomic status. An estimated 50 to 70 million Americans chronically suffer from a sleep or circadian disorder. As such, the disruption of sleep directly and adversely impacts health and well-being. Along with a highly collaborative and inter-disciplinary group of researchers they are performing high quality research that is helping advance sleep and circadian science in many fronts.

The University of Arizona Health Sciences Center for Sleep, Circadian & Neuroscience Research brings together researchers from three colleges within the health sciences (Medicine, Nursing, and Public Health) belonging to various departments (Medicine, Psychiatry, and Physiology). Collaborators from the Colleges of Education, Psychology, and Agriculture (Nutritional Sciences) also contribute to the mission of the center. Besides the four areas of emphasis set by the Senior Vice President of University of Arizona Health Sciences office, Neuroscience, population health and outcomes, precision science, and health disparities, the center focuses across the translational spectrum from knowledge generation to dissemination and implementation science.

The center consists of a free-standing sleep and circadian sciences research center with a total of 2,700 sq. ft., 4-patient bedrooms that can be used as interview or examination rooms during the day, and sleep studies (polysomnography) at night. State of the art sleep diagnostic hardware and software, specialized equipment for performing sophisticated measurements and novel therapies, as well as a shared 1,000 sq. ft. conference room with audio-visual equipment for videoconferencing enable the conduct of high-quality research. The bedrooms are furnished with Sleep Number beds that adapt to patient's comfort needs and one of the larger bedrooms is furnished with an additional bed to enable the conduct of pediatric polysomnography that would allow the parent to sleep in the same bedroom if research study protocol allows for the same.

Clinical and Translational Sciences Research Center

The Clinical and Translational Sciences Research Center (CATS) provides help to facilitate clinical research by providing investigators with a specialized facility, personnel and advice. The CATS Research Center opened its doors in January of 2008 and currently occupies more than 7,000 square feet divided into two spaces. The main space is dedicated to adult populations and the smaller space is set aside for pediatric populations. The research center is in the University of Arizona Health Sciences building near Banner University Medical Center main campus. This allows for convenient use of hospital resources including clinical laboratories, radiology, and other clinical departments.

CATS provides a wide range of resources and services to accommodate the needs of a particular study or participant visit. Services include exam rooms, infusion rooms, phlebotomy, specimen processing and/or shipping, EKGs, recruitment assistance, consenting, and study coordination.

Collaboratory for Metabolic Disease Prevention and Treatment

The Collaboratory for Metabolic Disease Prevention and Treatment (or simply, Collaboratory), is a unification of relevant research and operational components of the College of Public Health, College of Medicine-Department of Family and Community Medicine, Arizona Cancer Center, the College of Agriculture and Life Sciences-Department of Nutritional Sciences, and the College of Nursing. The mission of the Collaboratory is to create an interdisciplinary environment where individuals who pursue basic clinical and

translational research can interact and stimulate novel, interdisciplinary research that fosters development of programs that impact individuals. The focus is on promoting the training of health care professional, future prevention researchers and public health ambassadors to support the vision and mission of the Collaboratory; building health promotion in the places where Tucsonans live, learn, work, worship and play; developing programs that meet individual, group and community-identified wellness needs; targeting health literacy as central to achieve necessary gains in behavioral change; and addressing the special needs of children, elderly and the underserved.

The Collaboratory is located in the Hebert K. Abrams Public Health Center, a Pima County-owned building adjacent to Banner University Medical Center-South Campus. The 4-story building includes 189,000 sq. feet of space including a Family Medicine Clinic, WIC Clinic, and Diabetes Care Center. Occupants have access to 15 conference rooms that can seat from 12 to 120 people. Each room has audiovisual and internet capacity, two have telemedicine capacity. Outside the building, there are bike storage lockers available at no charge for occupants. Free parking is provided for all staff and visitors which is ample to meet the needs of participants and staff.

The Collaboratory is located within 7 miles (15-minute drive) from the University of Arizona campus. The location of the center is in a high need, underserved area of Tucson whose residents suffer a disproportionate burden of chronic disease. South-side residents have been under-represented in University studies, in part because of difficulty getting to main campus, a reluctance to leave the community, and parking and navigation issues once on campus. The location of the Collaboratory on the Banner University Medical Center-South Campus supports participation of area residents in research and education initiatives. Furthermore, the location of the Collaboratory in the Abrams Public Health Center brings clinicians and scientists together fostering collaborative research and enhanced educational opportunities. This provides access to health care providers to support recruitment efforts. In addition, the Collaboratory is located in close proximity to community-based settings including El Rio Community Health Center, the Mulcahy YMCA, and Kino Sports Complex (the largest professional sports and entertainment venue of its kind in Pima County hosting professional baseball and soccer leagues) frequented by the Latino community in Tucson, AZ.

Collaboratory faculty offer expertise and services important to patient care, student training, research, and evidence-based community programs. The Collaboratory provides a full complement of measurement modalities to cover all types of body measurements and body composition assessment from simple anthropometric measurements to assessment of total body and segmental measurement of bone, fat and lean tissue using state of the art dual-energy X-ray absorptiometry (DXA) technology and peripheral quantitative computed tomography (pQCT). There is a BSL-2 approved laboratory for performing phlebotomy and processing whole blood and other biospecimens and a fully equipped exercise laboratory where exercise and stress testing can be performed. It also provides support to local and national researchers studying human lifestyle behaviors related to cancer prevention and control including diet, physical activity, tobacco, quality of life, sun safety and sleep. There is a large repository of printable versions of valid and reliable questionnaires for assessing human behaviors; guidance for investigators seeking to use proprietary instruments; support for bilingual (English and Spanish) questionnaires and assessments; expertise in Qualtrics and REDCap platforms and implementation of online surveys and management of study data collection.

College of Health Sciences

The mission of the College of Health Sciences is to improve the knowledge, health and wellness of the diverse Arizona communities by innovatively educating the next generation of adaptive health care professionals and contributing to the body of clinical translational research in society. The College of Health Sciences was established in 2023 as the sixth college at the University of Arizona Health Sciences. With a focus on graduate programs, the college is committed to training students and developing a workforce of health professionals to serve the needs of Arizona's communities with compassionate and culturally sensitive care through inclusive and innovative translational research as scientists. The college offers five graduate-level degree programs: Midwifery, Physician Assistant, Doctor of Physical Therapy, Genetic Counseling, and Clinical Translational Sciences.

College of Veterinary Medicine Doctor of Veterinary Medicine Program

The Kemper and Ethel Marley Foundation Doctor of Veterinary Medicine (DVM) Program in the College of Veterinary Medicine is educating the future leaders of tomorrow while preparing graduates for today's

challenges. The transformational educational experience encourages collaboration and creates a culture of innovation. Located at the base of the Catalina Foothills in Tucson, Arizona, the campus serves as the primary facility during the first two years of preclinical education and offers cutting-edge spaces for student support and laboratory instruction. Additional collaborative centers, such as the Campus Agriculture Center, the Health Science Innovation Building, the mobile surgery unit, and clinical affiliate sites, enhance clinical, surgical and professional veterinary skills training. The three-year, nine-semester, continuous program produces high-demand veterinarians ready to contribute to the well-being of their communities through their service. The curriculum structure provides a robust hands-on education and allows students to graduate and earn salaries sooner than their peers.

Comprehensive Pain and Addiction Center

Drug overdose deaths in the U.S. reached their highest point ever recorded last year, with more than 100,000 deaths over 12 months according to data from the Centers for Disease Prevention and Control. At the same time, the American Chronic Pain Association reports that 1 in 3 people are living with chronic pain, and 1 in 10 people suffer from high impact pain that prevents them from participating in work and family life. Pain is among the most common reasons adults seek medical care and is associated with decreased quality of life, increased isolation, anxiety, depression, risk of opioid dependence and poor mental health.

The University of Arizona Health Sciences Comprehensive Pain and Addiction Center (CPAC) strives to create an environment that embraces preclinical and clinical research that addresses chronic pain and addiction while educating all health care providers and students across Arizona; design new legislation that helps prevent future addiction crises while developing innovative technology to predict those at risk of substance misuse and prevent opioid-induced deaths; build a clinical center that provides state-of-the-art and affordable care to all Arizonans suffering from chronic pain and addiction; and train and prepare future physicians to adequately manage both chronic pain and substance use disorders.

Data Science Institute

The Data Science Institute facilitates collaboration across an increasingly diverse and active Data Science community by providing workforce development, essential technological assistance, and training to university partners. The Data Science Institute aims to foster the next generation of data-driven research by encouraging university-wide interdisciplinary collaboration, gaining external visibility, developing industry alliances, and increasing funding for research at the University of Arizona.

The Data Science Institute embodies seven pillars of Data Science excellence at the UA: Mathematics, Computer Science, Statistics, Information Sciences, Engineering, Interdisciplinary Collaborations, and Innovation. By connecting University of Arizona researchers and aligning institutional expertise, computational resources, and infrastructure, the Institute enables investigators to ask more complex questions and achieve outcomes not easily attainable as individual investigators or within purely disciplinary teams. The Data Science Institute provides initial support to University of Arizona research projects by funding part-time graduate students, postdoctoral fellows, technical staff, and computational infrastructure – all working to start new collaborations or broaden existing collaborations.

University of Arizona DataLab The University of Arizona DataLab with the Data Science Institute and the Institute for Computation & Data-Enabled Insight at the University of Arizona, serves as a vibrant center for fostering interdisciplinary research in artificial intelligence (AI) and the wide field of data science. It offers a collaborative environment where researchers and students from diverse disciplines come together to explore, analyze, and extract insights from complex datasets. Through interdisciplinary workshops, consultations, and a range of tools and resources, the DataLab empowers researchers, students, and industry partners to harness the potential of AI and data-driven discovery. The advantages of the DataLab are 1) improved research by helping researchers to explore new ideas and develop innovative solutions to complex problems leading to breakthroughs in areas like healthcare, finance, and social science; 2) innovation by encouraging innovation and entrepreneurship by providing a space to explore new ideas and develop new applications; 3) industry partnerships by facilitating partnerships with industry partners that lead to new research opportunities, funding, and internships; and 4) career opportunities by providing hands-on experience in data science which can improve job prospects.

Global Health Institute

The Global Health Institute provides a comprehensive and integrated focal point for innovative public health education, training, collaborative research and advocacy through domestic and global collaboration. The Global Health Institute is dedicated to addressing global health disparities and offering solutions through education, research, and health diplomacy by training a strong and culturally competent workforce. The goals of the institute are to provide meaningful applied global educational opportunities that equip students locally and globally with the skills and tools necessary to become globally minded and culturally competent public health professionals capable of addressing any global public health challenge and to catalyze global health activities at the University of Arizona through domestic and international collaboration aimed at education, collaborative research, training and public health outreach. The vision of the institute is to empower, inspire, and educate the next generation of globally minded public health professionals who are committed to innovation, excellence, collaboration, and social justice. They aim to advance the field of global health through cutting-edge inter-professional education, research, interdisciplinary partnerships, and a deep dedication to addressing health disparities and promoting equity worldwide.

Health Equity Research Center

The mission of the University of Arizona Health Equity Research Center (HERC) is to conduct high quality, multidisciplinary research to better understand and alleviate health inequities faced by underserved and vulnerable populations in the American Southwest. Their focus is on communities at greatest risk where the unequal burden of disease is due to race, ethnicity, gender, education, socioeconomic status, disability, phenotypic and genotypic characteristics, geographic location, sexual orientation, or cultural and religious beliefs. Their vision is to promote health equity through the advancement of empirically guided, sustainable programs and interventions that promote health through community engagement.

Health Sciences Innovation Building

The Health Sciences Innovation Building (HSIB) is a nine-floor, 220,000-square-foot facility that opened in 2019. It is a cutting-edge platform to build and foster collaborations among multidisciplinary teams of health professionals, trainees, and faculty in medicine, nursing, pharmacy, and public health. In addition to providing world-class spaces for simulation practice, clinical skills learning, and community interaction on the University of Arizona Health Sciences campus in Tucson, this building serves as the vanguard for inter-professional health education in the U.S.

Arizona Simulation Technology and Education Center The Arizona Simulation Technology and Education Center (ASTEC) is located inside the Health Sciences Innovation Building on the University of Arizona Health Sciences campus. ASTEC is a 35,000 sq. ft. facility that provides interprofessional learning opportunities in a high-tech, realistically simulated environment. ASTEC engages learners at all levels of healthcare education utilizing high-fidelity simulation technology with innovative methods of experiential learning theory. The facility is equipped with a 6,000 sq. ft. Sim Deck that includes six patient rooms, three of which can be converted to any type of hospital environment and three that represent an operating room, intensive care unit, and labor and delivery suite, each equipped with hospital-grade gases. These rooms, along with a simulated pharmacy, surround a 3,000 sq. ft., two-story multipurpose area that can be utilized for any large-scale training event, including a variety of procedural-based training stations. This area also includes a thirty-foot projector-based wide area virtual environment and a professional sound and light stage. A centralized control room operates the entire floor including the operation of all human patient simulators and the audio-visual controls for the learner management system. Also included on the floor is a synthetic cadaver and 3D immersive anatomy lab, two debriefing rooms and a large flexible classroom.

The remaining areas of ASTEC include a 2,000 sq. ft. workshop that operates as an innovation space for simulation technology development. This space includes fully equipped casting and molding technologies, high-end 3D printing/scanning for patient specific anatomic models, and rapid prototyping of procedural models for training events. It is also equipped with space for virtual, augmented, and mixed reality technologies, motion analysis studies, and electrical and mechanical engineering needs including the testing and design of optic technologies. Adjacent to the workshop is a separate wet and dry research lab that can be designated for specific research projects, especially those that require greater privacy and/or minimal distractions. These innovation areas will complement the greater simulation center's educational and research mission for use with both internal and external collaborations.

Institute for Computation & Data-Enabled Insight

The Institute for Computation and Data-Enabled Insight integrates data and computation capabilities, enabling faculty, students, and partners to harness the technologies of the Fourth Industrial Revolution to unlock new career opportunities, new discoveries, and new research possibilities for a better future. They approach their work through the lens of grand challenges related to the University's Strategic Plan, applying artificial intelligence, machine learning, internet of things, data science, and other technologies toward solutions.

They harness the power of data and computation to transform knowledge generation for a better world. Their mission is to accelerate breakthrough discoveries and expand impact by University of Arizona faculty, staff, and students by cultivating trustworthy information capabilities and a culture of interdisciplinary collaboration. The goals of the Institute are 1) to bring focus and capacity to computing, artificial intelligence, and machine learning; 2) convene networks of experts from different disciplines to tackle grand challenges such as climate change, precision healthcare, and cybersecurity, enabling transformational tools for scientific discovery and truly personalized learning; 3) deliver a collaborative, agile ecosystem for research computing and data management at scale; 4) recruit the best and brightest next-generation faculty to University of Arizona; 5) train faculty and researchers through micro-courses, certifications, and other programs designed to transform individual discovery and research success through new tools and collaboration; and 6) create the workforce of the future, supporting programs that ensure every University of Arizona student possesses data acumen; that is, they have the skills to make sound decisions with data.

Office of Research, Innovation & Impact

The Office for Research, Innovation and Impact (RII) advances the world-class research enterprise at the University of Arizona, a top-ranking public institution with over \$955M in annual research expenditures. The university's bold, forward-thinking innovators are focused on transformational discoveries and inventions that address the world's most complex, pressing challenges. RII supports researchers with resources, training, and specialized facilities, and fosters collaboration across disciplines through university institutes and centers. Through an unwavering commitment to the land-grant mission, they stimulate economic development, societal impact, and improved life and health in Arizona and beyond. By providing hands-on research opportunities, direct access to faculty and professional mentorship, and programs that help encourage an entrepreneurial mindset, they prepare students to leave the University of Arizona and thrive.

Research Development Services Research Development Services (RDS) is an integral part of the research services provided by the Office for Research, Innovation and Impact. The mission of RDS is to help University of Arizona researchers and scholars identify funding opportunities, form effective teams, and craft winning proposals, with the ultimate goal of increasing the quality and quantity of externally funded research and scholarly activity at the university. Their goal is to help the University of Arizona community grow research collaborations that address grand challenges and contribute to the flourishing of all life. To accomplish this, the University of Arizona aims to reach \$1 billion annually in research expenditures. The university achieved \$954 million in FY2023, which places it among the top 4% of public universities in the nation.

RDS works with researchers from early career to senior experts as they strategize, find, and attain funding, from small, limited projects to multi-year, multi-institution interdisciplinary endeavors. RDS has experts dedicated to helping connect community partners, national security entities, and corporations with University of Arizona researchers, equipment, and workforce.

RDS consults with faculty and researchers regarding near-, medium-, and long-term funding strategies; consults with faculty and researchers regarding fit with funder and solicitation; and supports faculty members and researchers or teams of faculty members with the planning and execution of funding proposals ranging from single-investigator to multi-investigator/multi-institution efforts by providing strategic guidance, document review, technical editing, proposal management, and additional services. In addition, RDS disseminates information of interest to University of Arizona faculty via a weekly newsletter, manages limited submissions, assists with proposal collection and review of internal funding programs, presents seminars and workshops on grantsmanship-related topics, and supports faculty members with the development of honorific nominations.

Tech Launch Arizona Tech Launch Arizona (TLA) brings together the University of Arizona community and local and regional ecosystems with the goal to make a better world. They do this by moving inventions

stemming from university research and technological innovation into the marketplace where they can create lasting social and economic impact.

Tech Launch Arizona provides a full range of intellectual property (IP) services to the faculty, researchers, and staff of the University of Arizona. They work with inventors to protect various types of IP, enabling all stakeholders, the inventors as well as the university, to benefit from these discoveries. TLA markets University of Arizona inventions, finds great companies to take them forward, and works collaboratively with all parties to develop fair licensing strategies. They are driven by a commitment to fairness and the desire to see every invention realize its maximum potential to contribute to a better world. They offer a full range of services, people and resources to help University of Arizona inventors who wish to launch a startup to commercialize inventions. With a full team of experienced mentors and entrepreneurs, they support academic entrepreneurs through all the phases leading to the launch of a startup.

Sarver Heart Center

The Sarver Heart Center was founded as the University Heart Center in 1986 with the goal of preventing and curing cardiovascular disease through research, education, and patient care. Renamed in 1998 in recognition of generous support from the Sarver family, the Center is composed of more than 160 physicians and scientists with national and international reputations. Their goal is to bring together scientists from complementary backgrounds and expertise to work collaboratively toward a future free of heart disease, vascular disease, and stroke. With the focus on state-of-the-art approaches including genomics, imaging, modeling, advanced cell and molecular biology and biophysics, together with their human cardiac biorepository, the Center is equally likely to take discoveries from the bedside to the bench and back to the bedside in the form of precision medicine.

Working toward a future free of heart disease, vascular disease and stroke, the Center's scientist and physician members collaborate with the goal of applying new findings from the basic sciences to the clinical arena as quickly as possible. Equipped with several state-of-the-art research laboratories, the Center recruits world-class faculty and researchers to help in the discovery of the scientific advances of the future under the Molecular Cardiovascular Research Program which was established in 2006. At that time, the University of Arizona College of Medicine's Medical Research Building opened, providing a place where basic scientists are studying the molecular mechanisms underlying cardiovascular disease with the goal of developing new preventive and therapeutic approaches. They are developing approaches to utilize patient blood samples in the basic science setting to study more precise treatments for each patient's health condition.

SensorLab - Healthcare Technology Innovation Lab

The SensorLab, funded by the University of Arizona Strategic Plan, is a Health Sciences initiative bringing students, faculty, industry and community partners together to advance novel human-centered hardware and software sensor systems. These systems detect, monitor, analyze and provide real-time feedback relating to human physiology and behavior. The mission of the SensorLab is to create an engaging and inspirational environment with access to equipment and expertise that encourages creativity and innovation.

The SensorLab connects researchers across disciplines, within health sciences and beyond, to develop an array of technologies and digital solutions with health applications (e.g., artificial intelligence (AI), virtual reality (VR), mobile apps). The SensorLab is outfitted with flexible wearable sensors, environmental monitoring, 360 video and audio recording, XR, coupled with analytical tools and multi-modal feedback capabilities. These include gold-standard state-of-the-art sensor systems and development platforms to push forward the next generation of sensor-based investigation and discovery.

Their services include two main categories: (1) Equipment/sensor loaning (sensor and related equipment for shared use) and (2) Dedicated Space/Rooms (space configured and prepared for research using a variety of sensors). Depending on users' requirements and needs, the level of involvement with the SensorLab ranges from loaning of sensor hardware to involvement in the design, proposal and the development of sensor-based research.

Southwest Environmental Health Sciences Center

The Southwest Environmental Health Sciences Center (SWEHSC) is a collaborative and interdisciplinary research center, which is actively investigating the health effects of environmental agents and

serving as a resource for the community. The mission of SWEHSC is to facilitate and implement innovative research aimed at understanding the mechanisms underlying environmental health science risks and disease among people living in arid environments experiencing climate change.

The strategic vision of SWEHSC is to facilitate and implement innovative research and community engagement aimed at understanding the mechanisms underlying environmental health risks and disease among people living in arid environments undergoing climate change. The objective is to bring interdisciplinary scientists together to study environmental effects on the health and welfare of unique populations in the Southwest United States, including Native American, Latinx, and rural communities, and, more broadly, the 2.1 billion people globally who live in arid lands. To the latter point, the desert Southwest is a unique arid environment in the U.S. with conditions that mirror many other global desert climates. As climate change increases the burden on human health through water and respiratory exposures due to drought, wildfires, and decreasing water supply, the arid Southwest serves as the proverbial 'canary in the coal mine' for the resulting health effects.

University Analytics & Institutional Research

University Analytics & Institutional Research (UAIR) is committed to providing data that empowers campus decision makers, informs policy and practice, and tells the Arizona story. UAIR is a division of the Office of the Chief Information Officer and the facilitator of the University's Enterprise Data Warehouse. They empower University of Arizona decision makers to leverage data, information, and analytics to inform policies and practices to benefit students and institutions on campus. UAIR oversees and maintains systems and services that support transactions, operational, and strategic goals of the University of Arizona. Through collaboration with stakeholders and data stewards, they facilitate access to high-quality data sets while developing and refining research questions using responsible practices in business intelligence and data science. They also serve to interpret data and analysis results for appropriate use, facilitate educational opportunities to enhance data literacy on campus, and provide for the accreditation and licensing data needs of the University.

Staff includes data analysts, scientists, engineers, developers, and customer support specialists dedicated to developing and implementing best practices in data warehousing for the University of Arizona. Their mission is to provide data that empowers campus decision-makers, informs policy and practice, and tells the Arizona story with a vision to enhance the University's strategic goals through data tools and analytic services built on accuracy, dependability, and system improvements. Their values are rooted in ethical data practices which recognize the impact and consequences of data and algorithms on policy decisions. They respect the rights of the individuals whose data is housed in their systems. They are intent on protecting privacy and maintaining confidentiality when collecting, analyzing, and disseminating information.

Interactive Fact Book Serving as an important historical document for the institution, the University of Arizona Interactive Fact Book provides a comprehensive and focused snapshot of data for the institution's core reporting areas, including student, employee, finance, and research. UAIR has mined, validated, presented, and published the Interactive Fact Book data in a dynamic format that allows users to filter aggregate totals based on their specific population(s) of interest while fulfilling an overall mission to uphold the value of data transparency for constituents across local, state, national, and global communities; support departments and colleges with their reporting requirements; inform decision-making across campus; and ensure the highest level of data integrity and comprehension.

University Animal Care

University Animal Care (UAC) manages multiple centralized animal facilities at the University of Arizona and oversees the campus wide animal care and use program. UAC provides assistance to scientists, physicians, staff, and students who have received Institutional Animal Care and Use Committee (IACUC) approval to perform research, testing, or educational studies on animal subjects. It ensures humane and appropriate animal care and use by providing for the animals' daily needs, veterinary care, and monitoring the use of the animals by principal investigators, technical personnel, and students. UAC is devoted to maintaining a safe environment that minimizes the risk of disease or injury to the animals and the personnel who work with them. UAC maintains accreditation by AAALAC International, the gold standard for animal care and use programs. In collaboration with the Institutional Animal Care and Use Committee, UAC meticulously monitors and ensures full adherence to all federal, state, and local laws, regulations, and policies that govern the ethical

treatment, use, and housing of animal subjects in research, testing, and education.

University Animal Care is unwavering in its dedication to providing exemplary animal care while upholding the highest standards of ethical and legal compliance. They prioritize the well-being of the animal residents, ensuring their physical and emotional needs are met with the utmost diligence. They take pride in offering immaculate and secure housing for the animal inhabitants, coupled with a continuous supply of fresh sustenance and water. The facilities are designed to mirror the comfort and security these creatures deserve. Animal Welfare Program The Animal Welfare Program (AWP) oversees animal activity at the University of Arizona and serves as the administrative and regulatory support for the Institutional Animal Care and Use Committee (IACUC). The IACUC is charged with the protection of animal research and teaching subjects and is responsible for reviewing and approving all activities utilizing vertebrate animals for research, teaching and testing, ensuring compliance with federal animal welfare regulations, inspecting animal facilities and investigator laboratories, investigating animal concerns, and overseeing training and educational programs.

University of Arizona Arthritis Center

The University of Arizona Arthritis Center (UAAC) is dedicated to making a difference in the lives of patients through research ranging from molecules to people, by empowering patients to take charge of their lifestyles and by educating providers/clinicians and scientists to develop and apply novel and more effective therapies. Dedicated to eradicating arthritis as a cause of human suffering through biomedical and clinical research, education, and patient care, UAAC was one of the first to employ a multi-disciplinary approach to combat arthritis, rheumatic, and bone-related diseases. Research areas at the UAAC include basic and translational research on the mechanisms of osteoarthritis, rheumatoid arthritis, systemic lupus erythematosus, scleroderma, and other rheumatic diseases, innovative surgical techniques, tissue engineering techniques to regenerate muscular skeletal tissue, the development of artificial joints, major new treatments in osteoarthritis, vasculitis and other related diseases, and reduction of costs related to arthritis care.

University of Arizona Cancer Center

The University of Arizona Cancer Center is the only National Cancer Institute (NCI)-Designated Comprehensive Cancer Center headquartered in Arizona and one of only 57 such centers in the United States. With more than a dozen research and education offices throughout the state, the center's mission is to alleviate the burden of cancer in Arizona, particularly in underserved populations, including Hispanics and Native Americans

The mission of the University of Arizona Cancer Center is to alleviate the burden of cancer, particularly in Hispanics and Native Americans, through transdisciplinary discoveries and translation, compassionate care, and training of individuals who will help erase inequities through science, engagement, respect, and conviction. The vision of UACC is to be a regional resource and national model for overcoming cancer risks, improving treatments, training talented scientists and providers, and engaging communities through a shared determination to discover, innovate, and remove social inequities.

UACC currently has more than 170 members and three established scientific research programs. The Cancer Biology Program discovers and understands how cancer develops and metastasizes at the most fundamental levels. The Prevention and Control Program is comprised of a team focused on early detection, reducing cancer rates, behavioral interventions, and supportive care. The Clinical and Translational Oncology Program brings together basic and clinical scientists to translate discoveries into new ways of diagnosing or treating cancer. Seven shared resources support research at the center including metabolomics/analytical chemistry; behavioral measurement and interventions; biostatistics and bioinformatics; experimental mouse; flow cytometry and human immune monitoring; tissue acquisition and cellular/molecular analysis; and microscopy. Members, trainees, and the community also engage with vibrant Community Outreach and Engagement and Cancer Research Training and Education initiatives at the center.

The University of Arizona Cancer Center's 70 research laboratories and more than 280 nationally and internationally renowned physician and scientist members work to bring the power of research to cancer prevention and treatment through a direct link between the latest research discoveries and patient care. UACC is a leader in research on women's cancers (breast, ovarian), men's cancers (prostate), gastrointestinal cancers (colon, pancreas, and liver), lymphoma and skin cancers and is home to one of the largest Cancer Prevention and Control Programs among the nation's comprehensive cancer centers, with leading prevention research in breast, colon, lung, prostate, and skin cancers. With primary locations in Tucson, UACC has more

than a dozen research and education offices in Phoenix and throughout the state. Additionally, the center's leaders are partners with the Cancer Moonshot, directing funding toward research that will benefit Native Americans. With 22 federally recognized tribes in Arizona, UACC is in a unique position to serve indigenous and Hispanic populations that is higher than the national average.

Behavioral Measurement and Interventions Shared Resource For over 30 years, the University of Arizona Cancer Center's Behavioral Measurement and Interventions Shared Resource (BMISR) has provided support to University of Arizona researchers investigating human lifestyle behaviors related to cancer prevention and control, including diet, physical activity, tobacco exposure, quality of life, sun-safety, sleep and symptom management. BMISR is a unique resource that provides investigators one access point to several research services ranging from study design consultation to intervention delivery to data analysis.

BMISR continues to be a leader in the development of diet and activity data collection mobile health (mhealth) technologies. They utilize smart phone applications and other mhealth tools to improve data quality and ease respondent burden and offer training on the use of these eplatforms for real-time data capture. BMISR can use smart phone photographs to enhance diet recall interviews. In addition, BMISR has ActiGraph accelerometers for the collection of physical activity measures. The accelerometers are small and provide a minimally invasive tool for direct measure of physical activity and can connect via bluetooth for real-time data capture. BMISR has the Actigraph software tools to analyze activity data collected with the Actigraph devices and will provide training on accelerometer use.

BMISR provides access to state-of-the art questionnaires and a selection of validated instruments for behavioral research. Services include assessment of a comprehensive list of modifiable behaviors that are known to inform cancer risk such as physical activity, diet, solar protection, sleep, cancer screening, sexual practices, and tobacco use.

Office of Community Outreach and Engagement (COE) The University of Arizona Office of Community Outreach and Engagement (COE) is charged with building sustainable partnerships between the University of Arizona Cancer Center and communities for a cancer-free Arizona. Their mission is to bridge the University of Arizona Cancer Center and communities in Arizona to ensure excellence in multidisciplinary, culturally relevant research, cancer prevention, and treatment through advocacy and communication. COE respects and embraces the cultural diversity of the people of Arizona; values inclusivity and shared input; and is committed to a healthier Arizona.

University Library System

The University of Arizona Libraries are enterprising partners in advancing the University's priorities. They cultivate an environment that promotes inquiry, creative endeavor, scholarly communication, and lifelong learning. Their resources, services and expertise enrich the lives of Arizonans and contribute to an expanding global academic community. The Libraries are the intellectual crossroads of the university, enabling innovative interdisciplinary research, scholarship and creative endeavor. The University Library System has five library locations – Main Library, Albert B. Weaver Science-Engineering Library, Fine Arts Library, Arizona Health Sciences Library, and Special Collections – and contains 8,670,393 print volumes, electronic books and journals, 68,974 videos, 64,427 audio recordings, 274,562 maps and one of the finest 20th century photography collections in the world. Included in the comprehensive collections are books, periodicals, microforms, maps, government publications, manuscripts, and non-book media. The library's basic holdings cover all fields of instruction. The library receives the publication of many American and foreign scientific societies and institutions and is a regional depository for United States government publications. The University of Arizona Libraries Special Collections, housed in the Main Library, provides primary research materials chiefly in the fields of Literature, Arizona and Southwestern History, and the Sciences.

The Main Library, opened January 1977, occupies approximately 300,000 square feet with seating for approximately 1700 people. The Main Library Information Commons has computer labs with technology help and collaborative workspace. The five library locations make available group study rooms, presentation practice rooms, viewing rooms, individual study carrels, short-term check out study carrels, and lounge areas.

Albert B. Weaver Science-Engineering Library The Albert B. Weaver Science-Engineering Library contains materials on the life and physical sciences, engineering and technology, and military sciences. In addition, the Science-Engineering Library is home to collections in photography and the fine arts including visual arts, architecture, sculpture, illustration, design, drawing, painting, printing, and decorative arts. It hosts a number of

technology-rich collaborative spaces, including group study rooms, the university's first collaborative learning classroom, a seed library, and a makerspace with 3D printing.

Arizona Health Sciences Library Arizona Health Sciences Library (AHSL) is the largest, most comprehensive health sciences library in Arizona, providing access to essential medical information, participating as instructors in the curriculum of the colleges, and working in partnership with researchers and clinicians to advance health information literacy. The library also provides spaces for small group collaboration and quiet study. AHSL's primary clientele are the students, faculty, and staff associated with the University of Arizona Health Sciences. In 2007, AHSL opened a facility on the Phoenix Biomedical Campus to support the University of Arizona College of Medicine–Phoenix.

AHSL is active statewide, working with health professionals and public libraries, health departments, and community groups to improve access to high-quality health information. They are a member of the National Network of Libraries of Medicine and the National Library of Medicine, serving as the designated health resource library for Arizona. AHSL is also a founding member of the Arizona Health Information Network (AZHIN), a consortium of health-related organizations in Arizona. AZHIN works to make high-quality online resources more accessible to health care providers across the state.

University of Arizona Research Data Repository (ReDATA) The University of Arizona Research Data Repository (ReDATA) serves as the institutional repository for non-traditional scholarly outputs resulting from research activities by University of Arizona researchers. Depositing research materials (datasets, code, images, videos, etc.) associated with published articles and/or completed grants and research projects into ReDATA helps University of Arizona researchers ensure compliance with funder and journal data sharing policies as well as university data retention policies. ReDATA is designed for materials intended for public availability and all published material will receive a Digital Object Identifier (DOI) for citation purposes. Depositing data in the repository will make data citable and FAIR; make data discoverable (e.g., Google Dataset Search and Web of Science); and ReDATA offers free personalized data curation services that helps the researcher comply with university policies and helps make research more reproducible.