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| **Facilities and Resources** |

The following facilities and resources are available to Dr. Ayers, which will contribute to the success of her research and career development.

**The University of Arkansas for Medical Sciences (UAMS)**

UAMS is the only medical, nursing,pharmaceutical, and public health education university in Arkansas. It is also the state’s largest, most comprehensive facility for medical treatment and biomedical research. UAMS is part of the University of Arkansas system and has an enrollment of more than 2,500 students in five colleges (Medicine, Nursing, Pharmacy, Public Health, and Health Professions) and a Graduate School. Matrixed into the colleges are seven institutes of excellence: Cancer, Myeloma, Aging, Psychiatric Research, Eye, Spine & Neurosciences, and Translational Research. UAMS employs over 10,000 individuals, including nearly 1,000 physicians that provide medical care to patients at UAMS and its affiliates, Arkansas Children’s Hospital, and the VA Medical Center. Outreach efforts include eight Area Health Education Centers (AHECs) across the state and eight satellite Centers on Aging. UAMS also provides an interactive video infrastructure throughout the region. Also, UAMS has the largest biomedical library in the state. It serves students and faculty on all UAMS campuses by providing access to collections of basic and applied science and clinical materials. Library acquisitions include monographs, periodicals, documents, audiovisual materials, and computer software. The library’s website is a gateway to their holdings, which include more than 4,000 eJournals, many online databases, thousands of eBooks, and online request service for interlibrary loan and electronic document delivery services. The library is staffed by 13 full-time faculty members and 25 support staff.

**Research Support Services and Infrastructure**

UAMS is the state’s largest research institution and manages more than $125 million in extramural research and programmatic funding each year. UAMS offers several key administrative and research support services to assist investigators. The UAMS Institutional Review Board (IRB) has been fully accredited by the Association for the Accreditation of Human Research Protection Programs (AAHRPP) since 2005. The office is responsible for ensuring the rights and welfare of all human subjects’ research conducted by UAMS research programs. The Office of Research Compliance coordinates UAMS’ comprehensive research compliance program and offers compliance consultations and program reviews for the entire research community. They offer tools and templates to researchers who request assistance with assessment and evaluation of their research processes.

Additionally, a free 28 credit hour Certified Research Specialist program (CRS) is offered that includes CITI human subject protection training, and modules on research ethics, misconduct, research protocols, record keeping, regulatory compliance, research billing and grant management distant education through webinars, and workshops. The department includes four research compliance analysts, a research compliance education specialist, and the UAMS research compliance officer. The UAMS Office of Research and Sponsored Programs (ORSP) provides support during the acquisition, performance, and administration of programs and projects funded by extramural sources. The Office of Research Regulatory Affairs (ORRA) includes a staff of 11 regulatory specialists and research administrators that assist with regulatory submissions to federal agencies, quality assurance and monitoring, research agreements, including material and data transfer, and other research support services. The Office of Clinical Programs Education supports research enhancement activities that include online staff training, continuing education, and consultation.

**UAMS Center for Pacific Islander Health (CPIH)**

The CPIH is a multi-disciplinary center thatfocuses on research, community programs, training, and policy to address the health disparities and inequities faced by Pacific Islanders. Dr. McElfish (mentor) is the CPIH director and she has committed the resources of CPIH (see letters of support). The CPIH is a reflection of the needs of the growing Pacific Islander population in the Southern and Midwestern US, and builds upon the existing community health and research work UAMS has done, and continues to do, with Pacific Islanders in the region. The CPIH is currently collaborating with academic and community partners to conduct research projects that engage the Pacific Islander stakeholders as equal partners in research.

The CPIH offers unique resources that will facilitate the success of this study. Of most significance to the project, the CPIH has a Cultural Competency and Linguistic Translation Core, a Community Engagement Core, and a Methodology Core that will provide services that are critical to the project’s success. In addition to CPIH faculty, the CPIH supports 28 staff members, including academic and community researchers, project managers, a communications manager, an evaluation manager, an administrative assistant, and a budget manager. The CPIH contributes to the proposed project’s success by providing: **(1)** an existing infrastructure with shared cores and highly qualified staff to support the project; **(2)** expert academic and community co-investigators that have produced prior research and needs assessments on Pacific Islander health; and **(3)** strong collaborative relationships with Pacific Islanders and multi-sector stakeholders throughout the region.

**Cultural Competency and Linguistic Translation Core (CLT Core)**

The CLT Core within the CPIH works to integrate Pacific Islanders’ input and cultural values into clinical treatment and research projects to help ensure the integration of cultural and scientific expertise. The CLT core includes five full-time bilingual Pacific Islander project managers and research coordinators, two academic researchers, a dietitian, a registered nurse, and two bilingual Pacific Islander community health workers. The CLT Core will advise project investigators on appropriate community members to approach specific issues and facilitate stakeholder relationships and communication. The CLT Core will work with the Methodology Core and Community Engagement Core to integrate stakeholder involvement in the development of culturally-appropriate methods and measures, and culturally-tailored recruitment, retention, data collection, and dissemination strategies. The CLT Core will contribute to the adaptation process and ensure the intervention is linguistically and culturally appropriate. Eight CLT Core members are trained to collect biomedical specimens and facilitate the consent process. Dr. McElfish and the CLT Core will ensure culturally appropriate methods for recruitment, retention, data collection, and dissemination. The CPIH CLT Core will contribute to the study’s success by providing the expertise that strengthens the research processes.

**Community Engagement Core (CE Core)**

The CE Core within the CPIH is committed to nurturing productive partnerships with a broad group of academic and community stakeholders that are committed to using a collaborative approach to prevent chronic disease and improve health equity in Pacific Islander communities. Dr. McElfish leads the CE Core that includes three full-time Pacific Islander project managers and coordinators and two Pacific Islander community co-investigators. The CE Core works closely with the community advisory board (CAB) and will help keep stakeholders engaged in all phases of the project. The CE Core helps coordinate and support effective communication between the CAB, investigators, and study staff. CE Core communication strategies are based on a commitment to transparency and inclusive dialogue. The CPIH CE Core will contribute to the study’s success by ensuring Pacific Islanders are engaged in all phases of the study.

**Methodology Core**

The Methodology core within the CPIH consists of a six highly qualified academic and community investigators who provide ongoing methodological support and expertise in health literacy, data management, biostatistics, community-engaged research (CEnR) methods, social network analysis, and qualitative methods. Members of the Methodology Core will be responsible for data collection and management, IRB processes, and evaluation. The team works closely with the CLT Core and CE Core to ensure that project teams select culturally relevant variables and measures to ensure meaningful data, and they work to implement strategies to protect study participants and communities from unintended harm and stigma. The CPIH Methodology Core will contribute to the study’s success by developing and evaluating key approaches and methods, and ensuring methods and measures are consistent and useful to multiple stakeholders.

**FACILITIES and Central Resources at UAMS**

**Office Space and Equipment**

The OCHR and CPIHoffices occupy 5,400 square feet on the fourth floor of UAMS NW. All faculty and staff have ~150 square foot offices with access to a copier, scanner, fax, and other office necessities. Each office can be securely locked and includes a desk, phone, locking file cabinets, bookcases, and several include conference tables. All offices have wiring for high-speed internet access. The staff can also access the internet through the campus’ wireless network. The close proximity of staff offices promotes rapid communication and will ensure minimal exposure of protected documents. Project meetings will occur in the CPIH’s ~350 square foot conference room. Off-site investigators will call the CPIH dedicated conference call line. The CPIH has an additional large workspace, a kitchen, and three research storage areas that include refrigerators to store medical testing supplies. The CPIH has access to all UAMS NW facilities, including 23 group education rooms, a library and computer lab, and two large conference rooms that each accommodate more than 200 people. The conference rooms have audiovisual equipment, including ceiling projectors that can be used to project videoconferences, DVDs, and PowerPoint presentations onto a 110” tab-tensioned screen. These rooms are wired to hold videoconferences and can accommodate additional audiovisual equipment as needed. Project meetings can utilize the UAMS videoconference system to connect investigators at different locations. The rooms are also well suited for holding large community meetings, interactive training sessions, and board meetings. The OCHR and CPIH also have access to three UAMS NW vans –2005, 2011, and a 2015 Dodge Caravan. Each van seats seven people. These facilities and resources will contribute to the project’s success by ensuring project personnel has access to space and functional equipment needed to conduct all work and activities outlined in the proposal.

**Computer and Technology Support**

All faculty and staff use Dell E6540 laptops, docking stations, and externalmonitors. The E6540 laptops have a memory upgrade, a processor upgrade, and a larger hard-drive to ensure there will be enough RAM, processing power, and file storage available to run multiple software applications. The E6540 laptops have a 9-cell battery to enable staff to work in multiple off-site locations where power sources may not be available. The data collection team and field staff will also have access to 35 13” Apple iPads for data entry. All computers have Windows 10 Professional, Microsoft Office products, and various software including SAS, SPSS, and Adobe Creative Suite that allows investigators and administrative staff to perform job-specific tasks. UAMS investigators and staff have access to a shared drive, and all files on personal computers and the shared drive are backed up nightly to a protected server. All academic and community investigators and staff will stay connected through a SharePoint site that provides a secure, yet widely accessible, platform to distribute and store documents, such as meeting agendas, minutes, and curricula. We will also use SharePoint’s shared calendar function to post information about all meetings and events.

Furthermore, SharePoint allows users to exchange and store documents during the collaborative adaptation process. UAMS information technology (IT) staff maintain all computers and drives and provide technical support for the network, computers, and other technologies. The department currently has 167 employees, including six IT specialists that serve at the UAMS NW campus. Staff will have access to equipment that can be checked out through the UAMS NW IT department, including additional laptop computers and several digital multimedia LCD projectors. These technologies and IT support will contribute to the project’s success by assuring all investigators and staff have tools for optimal communication and production.

**Data Management and Storage**

UAMS Primary Data Center provides five servers that this project will utilize. The UAMS Primary Data Center is a state-of-the-art data center located on campus. It has the following, approximately 3,500 square feet of raised floor space and redundant **(1)** air handlers; **(2)** uninterruptible power supplies (UPSs); **(3)** connectivity to the main campus; and **(4)** generators. UAMS has two additional, geographically separated data centers for load-balancing and disaster recovery. In total, the three data centers host ~500 physical server machines running ~750 logical (or virtual) servers; ~50 physical servers are virtual machine hosts. The Primary Data Center houses the majority of servers, the primary storage area network (SAN) with a total of 1.2 petabytes of storage, and the mainframe. The power supplies are protected by multiple generators, including primary and backup. The secondary data center is the disaster recovery data center, which houses the backup SAN, COLD secondary servers, and passive nodes of active/passive clusters. It secures cooling with two UPSs and an emergency generator.

The third data center is the load-balanced data center, which houses the second node of multi-server load-balanced systems. It provides cooling, in-cabinet UPSs, and an emergency generator. UAMS has implemented network and SAN redundancy across three core network switches (one per data center).

Data will be entered into designated computers and uploaded through a designated secure connection. The research team will use the Comprehensive Research Informatics Suite (CRIS) for this data capture and data management. CRIS is a comprehensive set of open-source software tools for electronic management of clinical trials and associated data. CRIS supports data submission, validation, annotation, filtering, and extraction, as well as study oversight, auditing, and reporting.

Quality control of the data entry process is facilitated by institution range and logic checks. We have00 completed required documentation and testing to be compliant with the 21 CFR part 11 guidelines. All components of the UAMS CRIS system are web-based, enabling sharing and integration of clinical research information for single- and multi-site trials.All applications are integrated into a portal that allows a single point of access with a registered UAMS username and password. All CRIS applications reside on a cluster server with failover capability behind the UAMS firewall and thus have the benefit of high security, fire protection, and routine backup. CRIS includes applications for the following:

**Subject Registration**

The subject registration application, [C3PR,](https://cabig.nci.nih.gov/tools/c3pr) enables efficient and streamlined registration of participants into clinical trials. It captures the consent signed date, eligibility criteria, screen failures, stratification, randomization, and amendments. Clinical workflows are enabled by both subject-and study-centric views into the registration process. It also enables multi-site clinical trials where registration information is entered locally at affiliate sites and completed by the coordinating site. Registration data can be pulled from the UAMS Medical Center to minimize manual data entry and enhance data quality.

**Study Calendar Management**

[Patient Study Calendar](https://cabig.nci.nih.gov/tools/PatientStudyCalendar) (PSC) is a standards-compliant application for creating and managing subject activities and study calendars. It provides the ability to create and edit study calendar templates, generate and view prospective calendars of subject activities, track activities in real-time, and manage subject calendars as they change during a study. PSC accommodates all types of studies and facilitates the management of the screening process, registration, active monitoring, and long-term follow-up.

**Participant Recruitment**

[UAMS TrialSearch](http://www.uamshealth.com/?id=5340&sid=1) is an application that allows users to search actively enrolling protocols at UAMS based on disease, investigator name, treatment, sponsor, or a keyword.

Tracking Regulatory Events: UAMS EventTracker is an application for tracking key regulatory dates such as IRB submissions and approvals.

**Reporting**

Several reports have been created to easily retrieve data, such as enrollment by investigator and staff workload.

**Electronic Data Capture**

CRIS also integrates OpenClinica & LimeSurvey for [electronic data capture](http://tri.uamsweb.com/research-resources-services-directory/biomedical-informatics-data-services/electronic-data-capture/).

The resources outlined above will contribute to the project’s success by providing the research team with hardware and software systems needed to support the study’s data collection and management plans.

**Transparency**

My mentoring team has over ten years of experience conducting rigorous clinical trials with Pacific Islanders and stakeholders communities involved at every step of the scientific process. We have developed a formal study protocol to guide all aspects of the research. Within the study protocol is the data management plan which addresses: collecting data, organizing data, handling data, describing data, preserving data, and sharing data.

**Laboratory Resources**

Not applicable.

**Equipment**

Not applicable.

**Animal**

Not applicable

**Other Resources at UAMS**

**Translational Research Institute (TRI)**

The NIH [Clinical and Translational Science Award](https://www.ctsacentral.org/) program, along with a significant UAMS commitment, enabled the creation of the TRI in 2009. The TRI provides innovative resources and key infrastructure to support research activities. Expert staff help investigators navigate UAMS’ research infrastructure and facilitate access to UAMS and TRI resources, ensuring that researchers receive timely and appropriate support. To address health disparities, the institute fosters long-term partnerships with communities to guide the development of meaningful research projects. In other words, the TRI is helping “translate” our most relevant knowledge and discoveries to the clinics and people who need it most. TRI will provide shared core resources that will strengthen the project. Specifically, the TRI has a Community Engagement Core, a Biomedical Informatics Core, and a Biostatistics Core that will provide expertise and service to support the proposed work.

The Community Engagement Core provides community-based public health and participatory research-related resources, and assists with the integration of community-based public health and CEnR into teaching, service, and research programs. Eight faculty and staff within the Core provide consulting on CEnR, assistance establishing functional linkages, and access to a variety of equipment available for short-term use. The Biostatistics Core, through the TRI, is jointly administered by the Colleges of Medicine and Public Health. While administered by two colleges, the unit functions as one department. The department has ten full-time faculty members, 11 faculty members with secondary or adjunct appointments, and seven research associates with master’s degrees in biostatistics. Also, the TRI supports a Biomedical Informatics Core that can provide support in managing the data collection and database for the project. The Biomedical Informatics Core has six full-time faculty, a post-doctoral fellow, three FTE of administrative staff, and three information technology (IT) staff. They work closely with UAMS Information Technology (IT) and share in the oversight of IT staff working on joint initiatives. The TRI’s shared core resources will contribute to the project’s success by providing the study team with expertise and consulting in biostatistics, biomedical informatics, and community engagement.

**UAMS Center for Health Literacy**

The Center for Health Literacy (CHL) is dedicated to improving individual, provider, systems, and community health literacy at the local, state, and national level to improve health outcomes and population health. The CHL provides services and training, research, and policy initiatives to improve literacy on the individual, organization, community, and health systems levels. The CHL works with health care providers, health agencies, individuals in communities, and researchers throughout the region. The CHL faculty and staff will provide resources and assistance that helps study staff develop consent materials that are easier for Pacific Islanders to understand. The CHL will contribute to the study’s success by providing expertise in developing materials that use understandable language and concepts.

**Arkansas Center for Health Disparities Research (ARCHD)**

ARCHDdevelops research intended to improve access to quality prevention and healthcare programs for racial and ethnic minorities to reduce health disparities. The ARCHD focuses on chronic disease disparities with an emphasis on cardiovascular disease, diabetes, obesity, and cancer. The ARCHD serves as a resource and collaborative partner to the campus community with expertise in engaging academic and community partners in research and programs to address health disparities. The ARCHD Research Core focuses its efforts on working to increase the capacity of UAMS departments, centers, partnering institutions, and communities to engage in health disparities research. They serve as a resource for documenting community needs and assets, assisting with the identification of academic and community partners, and providing consultation on community research and dissemination methods. The ARCHD Community Engagement Core works with investigators and staff to develop multi-sector community partnerships that will positively affect communities by enhancing their trust in UAMS by providing a mechanism for their voices to play a role in research and dissemination. They help research teams increase access to and participation in UAMS research, health services, and service-learning partnerships. The ARCHD will contribute to the study’s success by providing expertise and consulting in health disparities research.

**Community Advisory Board (CAB)**

The study team has worked and will continue to work closely with a CAB comprised of 20 stakeholders, including Marshallese patients, family members, community members, community-based organizations, faith-based organizations, and health service providers. Led by Dr. McElfish, the CPIH CE Core will facilitate CAB meetings quarterly throughout the funding period. The CAB has and will continue to provide in-depth input on the interview guide and protocol to ensure logistical and cultural continuity. The community co-investigators and CAB members will also be deeply involved in drafting and revising other study materials for recruitment, retention, and dissemination. The CAB will contribute to the study’s success by engaging an inclusive group of Marshallese stakeholders with expertise that will help ensure all aspects of the study are culturally appropriate and supported by the Marshallese community.

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| Table 1. CAB Members |  |
| **Member** | **Sector** |
| Anna Norris | Marshallese community leader: Arvest Bank |
| Carmen Chong Gum | Marshallese community leader: RMI Consulate |
| Gomez Zackious | Marshallese community leader: Springdale Police Department |
| Jameluit Kabau | Marshallese church: Christian Fellowship |
| Joe Kaminaga | Marshallese health care provider: Arkansas Department of Health |
| Moutina Momo Milne | Marshallese caseworker/interpreter |
| Pastor Billy Tatios | Marshallese church: New Hope |
| Pastor Datsun Imakita | Marshallese church: King's Cathedral |
| Primrose Jones | Marshallese health care provider: Community Clinic |
| Lee Kendall | Marshallese family representative |
| Ricktag Iban | Marshallese church: Anij Emman Assembly of God |
| Rillan Kaisha | Marshallese social services caseworker/interpreter |
| Robert Aini | Springdale Police Department and Marshallese family representative |
| Terriko Lokebol | Dentist and Marshallese family representative |
| Terry Takamaru | Community health worker and family/Marshallese community representative |
| Sammie Mamis | Community health worker and family/Marshallese community representative |
| Winea Timos | Community health worker and family/Marshallese community representative |
| Walter Clanre | Community health worker and family/Marshallese community representative |
| Sharlynn Lang | Community health worker and family/Marshallese community representative |
| Albious Latior | Marshallese community leader |