Please Note: This document has been prepared to help Investigators think about resources available to their study. Investigators should edit each paragraph to fit the resources needed in their study. Investigators will need to request similar descriptions from off-campus sites where research will occur.

Facilities and Other Resources

Michigan State University:

Michigan State University (MSU) was founded in 1855 and is the only land-grant university in Michigan. It is classified as a research-intensive American Association of Universities institution. The campus is located in East Lansing, four miles east of Lansing, the state capital and fourth largest city. MSU enrolls more than 50,000 students in 17 colleges that offer more than 200 programs of study. In addition, approximately 5,600 faculty/staff members are engaged in teaching, research, and service. As part of the land-grant mission for research, MSU is committed to fostering leadership in knowledge development and practical applications of theoretical knowledge. Biomedical research through community-based health care systems is identified as a foremost research priority with an emphasis on primary health care.

The facilities and other resources available to the PI and the research team at the primary performance site include everything needed to undertake and complete the proposed research project successfully. The intellectual environment is rich with other extramurally funded investigators who are doing work that is complementary to what is proposed here. These facilities, together with those described for the other project/performance sites (see following descriptions), collectively provide a scientific environment that is strongly supportive of the proposed research and, therefore, success of the project.

Michigan State University Resources:

Vice President for Research and Graduate Studies (VPRGS): This office, under the direction of Dr. Stephen Hsu, provides key resources and support for faculty research. The VPRGS maintains a Web site with current information about research resources, funding opportunities, research literature, and database links. Locally, the VPRGS sponsors the Community of Science Expertise database, linking campus faculty to others on and off campus who share similar research interests. A reading room of current grant-related publications and other research resources is maintained on the web site. The office develops and maintains files on sponsored research activities and on potential sources of support for research and is responsible for assuring conformance with human subject protection policies, intellectual integrity, and conflict of interest. All research faculties at MSU have access to these resources.

MSU Institution Review Board (IRB): The MSU IRB operates to protect the rights and welfare of people who volunteer to participate in human subject research and is HRPP accredited. The IRB is responsible for reviewing all research for ethical standards, scientific merit, and regulatory compliance. IRB
members include faculty and physicians of several disciplines as well as community representatives. The IRB staff is available to give guidance and to facilitate review of research studies. The MSU IRB Federal-wide Assurance number is 00004556.

**MSU Analytical Core Facilities:**

The Genomics Technology Support Facility (GTSF) is a service whose mission is to provide the analytical research tools and bioinformatics resources for Genomic, Proteomic, Mass Spectrometric, Genetic and Structural Biological research at Michigan State University.

**Genomics Core:** The Genomics core provides small scale to genome size high throughput DNA sequencing. The core also provides custom spotted microarrays and has full resources for Affymetrix gene chip analysis. A partial list of equipment with the core includes a Roche/454 GS FLX sequencer; an Illumina/Solexa Genome Analyzer; an ABI 3730xl high through-put capillary DNA sequencer; two ABI 3100 capillary DNA analyzers (used for sequencing and fragment analysis); two Biomek FX and a BioMek 2000 for liquid handling, clone preparation, cherry picking and plasmid purification; an Autogen PI-50a DNA Isolation System for purification of genomic DNA from plant, fungi, and mammalian tissue; a GeneMachines Mantis colony picker; fourteen PE9700 thermocyclers; an Agilent Bioanalyzer for RNA and DNA evaluation; an ABI fully automated 7900HT Sequence Detection System for Q-PCR or SNP analysis; a GeneMachines Omnigrid 100 array printer for custom microarray production; An Agilent G2505B and two Affymetrix 428 microarray scanners; and a complete Affymetrix GeneChip system with 7G scanner.

**Illumina Genome Analyzer II (GAIi) (Solexa)** This ultra high-throughput sequencing system supports a wide range of genetic analysis applications from resequencing to de novo assembly, transcriptome profiling to the study of regulatory mechanisms. Powered by Illumina Sequencing technology, the Genome Analyzer generates gigabases of data per run with the highest percentage of perfect reads. The Genome Analyzer system is powered by Illumina Sequencing technology, which uses a massively parallel sequencing-by-synthesis four-dye approach to generate billions of bases of high-quality DNA sequence per run.

**Macromolecular Core:** The Macromolecular Core is equipped with equipment to analyze proteins, peptides, DNA, carbohydrates and small molecules. Peptide and DNA synthesis is available. The Macromolecular Structure Core (MSC) synthesizes oligonucleotide and peptides, and analyzes proteins, peptides, carbohydrates, and other small molecules.

**Proteomics Core:** The Proteomics Core has at its disposal three state of the art mass spectrometers (LC-MS); two Thermo linear ion-trap (LTQ) mass spectrometers and one Thermo Fourier Transform Ion cyclotron resonance linear ion-trap (LTQ-FT) mass spectrometer capable of parts per billion accuracy. Two of the mass spectrometers are interfaced to Waters nano-acquity ultra performance liquid chromatography instruments. These UPLCs provide enhanced peptide separation which allows us to process much more complex mixtures of proteins.
**Mass Spectrometry Facility:** The Mass Spec Facility performs small molecule and metabolomic studies. A JEOL double-focusing magnetic sector instrument with direct probe sample insertion is used for small molecule characterization. The JEOL HX-110 operates in both positive or negative FAB (fast atom bombardment) mode with MS/MS linked scans and high resolution capabilities for formula confirmation (4 decimal places). The JEOL AX505H is an EI (electron impact) capillary GCMS analysis instrument that has high resolution capabilities.

**Flow Cytometry Core:** This facility has available two flow cytometers—the Vantage SE TurboSort™ for cell sorting and an LSRII for cell analysis only. The Vantage is equipped with a high speed macro sort head capable of sorting cells from bacteria to plant protoplasts in size and from low to high speeds as dictated by the cells being sorted. The machine is equipped with 3 lasers. The LSR II uses only digital DIVA data collection. The LSR II can be used for multiplex bead array assays since it is equipped with an enclosed flow cell. Software for data analysis is available for cell cycle analysis (Modfit), and phenotyping (WinList 6, FCSExpress 3, and FlowJo). A large variety of methods for the study of plant and animal cells may be executed on these machines. Studies of cellular DNA can be done to determine DNA content and presence or absence of aneuploidy and polyploidy.

**Bioinformatics Core:** GTSF has a staff of three Bioinformatics specialists who support the work of the other cores, and distribute and maintain bioinformatics and sequence analysis software. These individuals are also available on a fee for service basis for computation analysis, design and maintenance of relational databases, websites, and program development.

**The GTSF Nuclear Magnetic Resonance Imaging facility.** A positron emission tomography (PET) cyclotron used for detecting cancer and health research, is housed in the Radiology building, which recently completed a 17,000 square foot addition and also boasts a full range of imaging instrumentation.

**Additional Basic Science Labs:**

The Center for Advanced Microscopy offers flow cytometry, electron microscopy, X-ray diffraction, and an advanced optics facility. There are three Confocal Laser Scanning Microscopes at the Center for Advanced Microscopy, a Zeiss LSM Pascal, a Zeiss 510 Meta ConfoCor3 LSM, an Olympus FluoView 1000 LSM and a Meridian InSIGHT.

The Immunopathology Core Laboratories provide routine and state-of-the-art technical support and information to all the biomedical and biological sciences including basic histology services, frozen tissue techniques, routine electron microscopy with imaging and analytical capabilities, molecular morphology and digital imaging, cellular and molecular analysis, immunologic assays ELISA, specialty techniques such as immunogold labeling, and customized assays.

The Institute for Environmental Toxicology has faculty members representing thirty departments, institutes and centers within seven colleges including the Department of Pharmacology and Toxicology. This department alone occupies 30,000 square feet in the Life Sciences building and is supplied with major equipment including preparative centrifuges, recording spectrophotometers, high-performance liquid chromatographs with variable and fixed detectors, infra-red spectrophotometers and other
equipment for measuring a wide variety of biological and molecular parameters. It also has specialty rooms such as radioimmunoassay, tissue culture, and histopathology preparatory facilities.

**MSU Clinical Research Laboratories:**

The Cytogenetics Laboratory, a division of the Department of Pediatrics and Human Development, includes a molecular DNA testing laboratory, a biochemical prenatal screening laboratory, a complete genetic counseling service as well as a full service cytogenetic laboratory that conducts an array of testing procedures and chromosome analyses including fluorescent in-situ hybridization, or FISH.

The Prenatal Screening Laboratory has 20 years of experience in immunoassays. It is CLIA certified and CAP inspected with capability to perform radioimmunoassay, enzyme linked immunoassays and some chemiluminescent assays as well as acrylamide and agarose gel electrophoresis and isoelectirc focusing in acrylamide and agarose gels.

The Histotechnology and Electron Microscopy Laboratories, in the Department of Pathology, provide an array of technologies for complete morphological studies.

University Laboratory Animal Resources (ULAR) is a AALAC accredited, campus-wide organization that provides support for research involving animals including acquiring laboratory animals, providing animal care (specimens or colonies) such as feeding, bedding, equipment, cage washing, trucking, etc. 365 days a year, training investigators, and providing diagnostic services, surgical facilities, and a resource library. It is responsible for a wide variety of animals from fish and frogs to goats and guinea pigs. All animals are acquired legally and cared for in a humane way. All animal care and use at MSU conforms to the standards in “The Guide for Care and Use of Laboratory Animals”, DHEW publication number NIH 78-23 (Revised 1996), and to the “Guiding Principles for the Care and Use of Animals” of the American Physiological Society. Training programs are designed to ensure that every person involved with the care of animals is aware of the established standards and regulations. Supervisors in ULAR are certified as Animal Technologists by the American Association for Laboratory Animal Science, and include veterinarians with animal science specialization. ULAR facilities include animal rooms that meet NIH standards, options for group-housing and for floor housing of animals, surgical suites, and special equipment. Michigan State University is registered with several different state and federal agencies as a research and teaching facility. MSU adheres to these agencies' regulations and maintains the highest standards of animal care at all campus facilities.

**MSU Computing, Statistical Technology & Library Resources Support:**

The High Performance Computing Center (HPCC) was established in 2005 to facilitate discovery by students, faculty, and staff at MSU through the use of high performance computing. The HPCC mission is to provide high quality, high performance computing services to the research community at MSU.

The Academic Technology Services (ATS) provides many of the core computing and technology services essential to research and learning at MSU. IT operates MSU’s data network, connecting people via wired and wireless connections across the campus and to the global internet. ATS also provides MSU’s
online identity infrastructure, supports campus network file storage, and delivers messages daily to nearly 150,000 MSU e-mail accounts.

The Center for Statistical Training and Consulting (C-STAT) is a professional service and research unit at MSU which is aimed to support research and provide training and consulting in statistics for faculty, staff and graduate students. C-STAT provides expertise in all phases of research projects including planning, analysis, and reporting. The consulting, instructional, and infrastructural activities are designed to work together to support statistics from the inception of research to the final analysis of research results. CSTAT supports researchers who are designing experiments or surveys, preparing grant applications, deciding which statistical software to use, planning or implementing statistical analysis, analyzing or interpreting results, documenting statistical results, and responding to reviewers.

The mission of the MSU Libraries is to connect the users with information, ideas, and each other. The Libraries have a critical teaching role in the University, ensuring that professionals in every field have well-honed information literacy skills. Through the World Wide Web, MSU Libraries deliver vast amounts of information directly to users wherever they are in the world including reports, journal articles, e-books, and more. MSU Library holdings include close to 5 million volumes; over 1 million microforms; and over 38,000 journals, of which 85% of these subscriptions are available online. The holdings within the Government Documents Library in the Main Library Location contain over 3 million documents in paper, microformat, and electronic formats of publications of the United States government, the Canadian government, the State of Michigan, the United Nations, and many other international intergovernmental organizations. The MSU Libraries are ranked among the top 30 research collections in North America. Open 24 hours, the Main Library for MSU has the largest computer lab on campus with more than 500 computers available for student use as well as wireless access throughout the building. The MSU Libraries are committed to the University’s land-grant missions, with resources available to all citizens of the state through interlibrary loan and individual borrowing privileges. The Distance Learning Services (DLS) unit serves students and faculty working from locations outside of East Lansing, filling requests for copies of MSU-owned materials and facilitating interlibrary loans for materials help elsewhere. The MSU Libraries initiated the development of MelCat, a statewide catalog and resource-sharing system. Through nationally-recognized digitization projects, the Libraries at MSU make unique collections freely available on the web to scholars all over the world.

The MSU Technologies (MSUT) Office encourages innovation, enhances research, and facilitates economic development through protecting and commercializing the university’s intellectual property (IP) for the benefit of the faculty, staff and students, the university, and the state of Michigan. The MSUT office provides in-house IP protection and commercialization services to transfer IP created on the MSU campus into practical use to benefit the public as quickly and effectively as possible.

Information Support Services: Health Information Technology (HIT) is responsible for providing technology infrastructure for the MSU human health areas. This includes the College of Nursing, College of Human Medicine, College of Osteopathic Medicine, Olin Student Health Center, and all health-related departments. They deliver effective information technology (IT) solutions such as telecommunications
services, systems development, network and server application services, web and graphic design, and end-user support. HIT also plays a key role in establishing and maintaining IT projects plans, policies, and initiatives across the wider university community. HIT provides access to a growing collection of online resources for the university healthcare community and our worldwide audience. Resources include distance learning courses, database design, specialized programming, and innovative projects in instructional technology. HIT will provide the day-to-day computer support for this project. MSU Information Security and Messaging manages cyber security by conducting regular IT infrastructure testing. This team assesses and corrects computer vulnerabilities in order to protect sensitive information. All computer servers are backed up on the HIT network on a daily basis.

**Michigan State University Clinical and Translational Science Institute (MSU-CTSI):** In August, 2008, the MSU-CTSI was established to serve as an anchor for a successful Clinical and Translational Science Award from the National Institute of Health. The MSU-CTSI was designed to be flexible and responsive to the needs of academic investigators and community health care providers; to facilitate team research, in collaboration with community health care providers; and to nurture the next generation of clinical and translational researchers. All MSU faculty members or members of partner institutions involved in clinical and translational research and/or teaching may participate in and derive support from the MSU-CTSI.

**Biomedical, Research and Informatics Center (BRIC)** was established at MSU in July 2001, the service unit within CTSI, and has supported over 150 clinical research protocols to date. The mission of BRIC has two principal elements:

1.) To support the development of funded research by MSU investigators in the Colleges of Human Medicine, Natural Science, Nursing, Osteopathic Medicine, Social Science, and Veterinary Medicine; The primary targeted funding sources are NIH and other Federal funding sources. Research targeting other funding sources is also supported.

2.) To support the execution of large scale studies by providing state-of-the-art research informatics solutions.

BRIC can assist researchers by creating a data management plan. The data management plan will provide details as to how the researcher’s data will be managed, encrypted, and backed up. Long term projects can utilize a member of BRIC’s staff as a co-investigator for continued informatics support. Use of BRIC’s services strengthens proposals and contributes to the success of a researcher.

Vanderbilt University (VU), with collaboration from Clinical & Translational Award (CTSA) consortium of institutional partners, has developed the Research Electronic Data Capture (REDCap) for electronic collection and management of research and clinical trial data.

The REDCap system provides secure, web-based applications that are intuitive web-based interface for users to enter data and flexible enough to be used for various research areas. The use of study-specific data dictionaries, adaptive logic, and real time validation rules features in REDCap with assistance from the BRIC informatics team results in well-planned data collection strategy for individual research studies.
Because REDCap is web-based, users with appropriate permissions can access the system from anywhere in the world with an Internet connection.

The REDCap system also provides the standard export mechanism to a variety of types of common statistical packages (SPSS, SAS, Stata, R/S-Plus). This allows the Principal Investigator (PI) to generate data that are truly independent of the data entry method, thus generating usable, collaborative datasets, and outcome analysis.

REDCap was designed specifically around HIPAA-Security guidelines. MSU REDCap servers are housed in a HIPAA class server room with key card and passcode access protection. All web-based information transmission is encrypted and will be using Secure Hypertext Transfer Protocol (HTTPS) which employs SSL (Secure Sockets Layer) encryption technology. SSL creates the secure connection and HTTPS transmits the data securely. REDCap currently supports 240+academic/non-profit consortium partners and over 26,000 research end-users (www.project-redcap.org).

Office of Clinical Research (OCR): The mission of OCR is to assist researchers with the development, implementation, management, and completion of industry and government-funded clinical research (i.e., clinical trials, investigator-initiated research, etc.) conducted through MSU and its community partners, to expedite the research administration process, and to facilitate research compliance. The office was created in the fall of 2006 in response to the ever-increasing complex process of clinical research in a world of more restrictive funding and progressively more stringent regulatory compliance requirements. The office, which is now part of the MSU-CTSI, focuses on serving the need for enhanced support of clinical and translational research. Representing the University’s investment in clinical research and trial management, the staff have extensive knowledge in the intricacies of both internal and external clinical research processes and requirements, on both federally and industry-sponsored research projects.

Health & Risk Communication Center (HRCC): The HRCC is located in the College of Communication Arts and Sciences at MSU with a collection of over 20 faculty members who engage in communication-based education, outreach, and research related to risk reduction and health promotion. The Center supports trans-disciplinary communications research and activities that promote healthy lifestyle choices, address environmental risk factors, and maintain food security. The team at HRCC includes experts in the areas of health and risk communication, mass media, new technology, interpersonal communication, family communication, and intercultural communication. The team uses message production and evaluation, statistical methods, focus groups, and surveys to study topics related to environmental justice, international health, food safety, organ donation, HIV-AIDs prevention, and obesity and alcohol reduction.

The primary objectives of the HRCC are:

- To apply theory-driven communication expertise across all phases of the public communication campaign process, including formative research, message design, message dissemination, and summative evaluation.
To ensure that health and risk messages are culturally sensitive and appropriate to audience health literacy levels.

To facilitate the development and conduct of grant projects in the health and risk communication domains and to bring our expertise to interdisciplinary grant teams.

To provide consultation to organizations seeking to create and disseminate health and risk messages to audiences.

To create interdisciplinary ties with faculty at MSU and other institutions to facilitate research, teaching, and mentoring of students in health communication-related areas.

To provide evidence-based recommendations from HRCC team projects to practitioners and consumers.

**Michigan State University College of Nursing:**

The College of Nursing (CON) is located proximal to the Colleges of Human Medicine, Osteopathic Medicine, and Veterinary Medicine. The dean of the college is Dr. Randolph Rasch. The Bott Building for Nursing Education and Research supports the College of Nursing’s goal to become a leader in research. The building itself is three stories, and 50,000 square feet. The structure has earned recognition from the U.S. Green Building Council due to its use of geothermal energy for heating and cooling, and is the first of its kind on campus. It was constructed in part by using a $7.45 million dollar contribution from the National Institute of Health's National Center for Research Resources. In addition, $10.15 million dollars in non-federal funding from The Timothy and Bernadette Marquez Foundation and over 1,000 other beneficiaries contributed to the completion of this building. The second and third floors of the building are solely dedicated to nursing research, and provide ample space for students and faculty researchers to complete work.

Externally funded research in the CON focuses on health status and health outcomes research related to individuals and families within a community context. Collaborative, interdisciplinary research projects are implemented between the CON and the colleges of Engineering, Natural Science, Education, Social Science, Departments of Probability and Statistics, Epidemiology, and Extension Service. Current sources of research funding include the National Cancer Institute, United States Department of Agriculture, University of Michigan Subaward, Translational Sciences Institute, NIH, NIH-NCI, NIH-NHLBI, MCUAAAR, Susan G. Komen Mid-Michigan, and the Sparrow Center for Innovation and Research. Specific research grants include: Girls on the Move Intervention, Pink Impact: Breast Care at MSU, Home-Based Symptom Management via Reflexology for Advanced Breast Cancer Patients, Using SMART Design to Improve Symptom Management Strategies Among Cancer Patients, Barriers and Facilitators for Adoption of a High Nutrient Density Diet to Reduce Colorectal Cancer Risk in Women, Hopelessness in Racial Minority Patients with Coronary Heart Disease, Improving Adherence to Oral Cancer Agents and Self Care of Symptoms Using an IVR, Tools for Teen Moms: Reducing Infant Obesity Risk, and Identify Effective Intervention Components to Prevent Obesity: A Factorial Design.

**Michigan State University College of Nursing Resources:**
Office: All Bott Building key personnel have assigned private office space within their college/department, offering approximately 110 square feet of work space. Each office is equipped with a desk, a task chair, two 2-drawer file cabinets, a bookcase, overhead storage, a telephone, and hardwired high-speed access. Research space for the project manager and other project staff will be provided within the Center for Nursing Research, Scholarship & Innovation (CNRSI), near the Nursing PI office. This office space is equipped with one 2-drawer file cabinet, overhead storage, and a telephone. The CNRSI also contains six private rooms dedicated for completion of telephone interviews and four conference rooms. Other office resources include, fax machines, copy machines, and scanners.

Computer: Key personnel working on a project have desktop computers in their offices. Each computer contains Windows, virus protection software, and Office Professional. All computers are password protected, and have secure hardwired or wireless access to the internet through MSUnet. Skype for Windows (business version) telecommunication software is on hand to facilitate communication between MSU staff and staff at each performance site. “Touch Down” stations are provided for faculty/staff who attend meetings, periodically work with the within the CNRSI, and need access to work space between meetings. Touch down stations are equipped with basic software packages including Microsoft Office, Microsoft Outlook, Internet Explorer, Google and Adobe programing, as well as, various specialty statistical software packages such as SAS, SPSS, Stata, Mplus and Stat Transfer. There are several conference rooms available for faculty to utilize with a wide variety of technology capabilities including those that may be used to perform conference or video calls with distant sites or staff members. College of Nursing faculty and students are also supported by the Academic Technology Coordinator who is available to assist associates with any technology needs, and is a vast resource. The combination of these information technologies contributes to the potential for success by assuring both efficient data collection and optimal communication among members of the research team.

Data &Safety Monitoring: The CNRSI has an Internal Data Safety and Monitoring Subgroup, who has responsibility for the development and implementation of the data safety and data monitoring. Regular data and safety monitoring meetings are conducted for all funded clinical trials. Committee members include the Research Center Coordinator, Associate Dean for Research, two nursing research faculty and a statistician. In addition, the CNRSI ensures that secure policies and procedures are in place for grants management. Assistance with assessments of minority recruitment, accrual rates, retention, and attrition review is a part of these activities.

Additional Support: The CNRSI facilitates research and scholarly endeavors of faculty and doctoral students. The support staff includes the Associate Dean for Research, biostatistician supports, Research Coordinator, Grants Administrator and Research Secretary. Researchers also have access to a statistician, editor, research assistants, and student aides for assistance.

Pre-Award Support: Pre-award support includes proposal planning meetings with the Associate Dean and Research Administrator. Various templates are available to help prepare proposal applications. The faculty will meet to discuss an explicit timeline for project completion, organize the research and grant planning budget, and Internal and External review of the proposals.
- Two internal reviews by senior funded researchers of the college and two external reviews by nationally funded researchers or those with a program of research, will be completed for each proposal, providing valuable criticism before submission. The Research Administrator can identify and contact reviewers if needed.

Mentor meetings occur between the researcher and the appropriate mentor to provide further assistance and support.

Post-Award Support: Post-award activities include start-up, quarterly, and close-out meetings that are scheduled between the Research Administrator and researcher. Start-up meetings are scheduled within 30 days of receiving an award and review the project budget, protocol for hiring research staff, and basic office orientation. Quarterly meetings further detail budget and spending in relation to funding, required compliance auditing including HIPPA and IRB training, data safety and monitoring, and progress reports of submission due dates. Close-out meetings will review spending in order to estimate whether funding will be fully utilized, and to determine a final submission due date. The Research Administrator is available for further support regarding budget management, contractual staff and consultants, requesting space, travel, and equipment purchases. Storage is provided for non-active research files until the discard date. Secure electronic file space is available on campus through BRIC, if using BRIC for data management, or through HIT. Both BRIC and HIT provide backup and intrusion protection. The Research Administrator can assist with requesting a HIT share drive if needed.

Statistician: Available for funded and unfunded research projects to assist with design, data collection, measurement methods, analytic planning, analysis and interpretation, and preparing sample size estimates. Also, active participation in research dissemination through the development of publications and presentations. Other activities may include assisting with quality assurance for data safety and monitoring on funded NIH grants. Available for classroom seminars or teaching in statistics and/or research methods.

Manuscript Review & Academic Editor: Senior faculty are available to review Manuscripts. The Academic Editor provides individual and team support for the College of Nursing faculty members and doctoral students to edit and produce documents including, but not limited to, grant applications, publications, and manuscripts in a meticulous manner while increasing visibility and preserving the author’s intended meaning. In addition, this position provides content-related support to graduate nursing courses, curriculum, and research activities which adhere to editorial standards as well as the College of Nursing standards and protocol. The Academic Editor will regularly consult with the Nursing Research Center staff to receive and distribute pertinent information related to research publications.

Please note: For Early Stage Investigators (ESIs), describe institutional investment in the success of the investigator, e.g., resources for classes, travel, training; collegial support such as career enrichment programs, assistance and guidance in the supervision of trainees involved with the ESI’s project, and
availability of organized peer groups; logistical support such as administrative management and oversight and best practices training; and financial support such as protected time for research with salary support. See http://grants.nih.gov/grants/new_investigators/.

Facilities and Other Resources:

Insert other applicable or pertinent information to your research. Describe these areas. State how they will contribute to the success of your project.

Laboratory - [discuss or indicate “Not applicable”]
Animal - [discuss or indicate “Not applicable”]
Clinical - [discuss or indicate “Not applicable”]
Other Resources - [discuss or indicate “Not applicable”]

Recruitment Sites:

Insert description regarding your recruitment sites.

The environment, facilities and resources described above position this team well to carry out the activities listed below according to the timeline identified.

Project Timeline:

<table>
<thead>
<tr>
<th>Quarters:</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>