**1.0 FACILITIES AND OTHER RESOURCES**

**1.1. Laboratory:** Insert description of PI’s laboratory space, if applicable

**1.2. West Virginia University (WVU):** WVU is a state-supported land-grant institution founded in 1867. The WVU System spans the state, including 518 buildings on 15,880 acres. WVU ranks nationally for prestigious scholarships: 25 Rhodes Scholars, 22 Truman Scholars, 44 Goldwater Scholars, 2 British Marshall Scholars, 5 Morris K. Udall Scholars, 5 USA Today All-USA College Academic First Team Members (and 11 academic team honorees), 22 Boren Scholars, 36 Gilman Scholars, 49 Fulbright Scholars, 3 Department of Homeland Security Scholars, and 28 Critical Language Scholars one Jack Kent Cooke Foundation Graduate Scholar, 5 National Institute of Standards and Technology Fellowships and 4 National Science Foundation Graduate Research Fellowships. WVU has 2,002 full-time faculty and 637 part-time faculty and enrolls 31,287 students within 14 colleges and professional schools.

*Ranked in the highest tier of national doctoral research universities (R1 status) by the Carnegie Foundation for the Advancement of Teaching,* WVU is also the state’s flagship institution for both research and patient care. WVU is one of only 11 schools in the country that are land-grant, doctoral research universities with a comprehensive medical school. WVU faculty conducted research totaling over $143 million annually in sponsored contracts and research grants in 2015.

**1.3. WVU School of Public Health:** The WVU School of Public Health (SPH) is the first of its kind in WV. The school is built upon the strong foundation of the CEPH-accredited Department of Community Medicine and its affiliates. A central mission of the School is to identify and assess sustainable, cost-effective prevention and intervention strategies to address major public health concerns of West Virginians and other rural, underserved populations, with a strong focus on understanding and addressing health disparities. Five academic departments have formed in the WVU SPH, including Biostatistics, Epidemiology, Health Policy, Management & Leadership, Occupational & Environmental Health Sciences, and Social & Behavioral Science. The school employs a total of 54 full and part-time faculty, who perform nationally recognized work in multiple disciplines, including epidemiology, environmental health, community-based interventions, health services, and clinical research. There are currently over 74 Undergraduate, 68 MS/MPH students and 30 PhD students enrolled in the school, with enrollment projected to increase substantially in the next three years with the continuing development of new educational and training programs.

The school includes several active centers, including the Injury Control Research Center, the Office of Health Services Research, the Health Research Center, Public Health Training Center and the West Virginia Prevention Research Center. Fostering a dynamic interdisciplinary research enterprise, the new school has also established strong research and teaching partnerships with multiple state, regional and federal agencies, local, regional, and national organizations, and other entities, and encourages strong engagement in and with the community.

An environment exists for collaboration and interaction among the faculty, with their repertoire of interdisciplinary grants, contracts, and research interests that cross departmental, school, and institutional boundaries. The School also has a working relationship with the West Virginia University Department of Statistics, and with colleagues at the National Institute for Occupational Safety and Health (NIOSH), where there are additional collaborative faculty with great statistical expertise.

*Dr. insert name, the Principal Investigator, is currently a tenured insert title in the Department of xxxx, School of Public Health*, led by Dean Jeff Coben, MD, with over 50 faculty members. An environment exists for collaboration and interaction among the faculty, with their repertoire of interdisciplinary grants, contracts, and research interests that cross-departmental, school, and institutional boundaries.

Department faculty teach and mentor a rapidly growing student cadre in the Bachelor of Science in Public Health (BSPH) program, Master of Public Health (MPH) program, the MS in School Health Education, the PhD in Public Health Sciences, the combined degree programs such as the MD/MPH, and the Occupational Medicine Clinical Residency. Graduate students come from diverse undergraduate majors, including agriculture, biology, chemistry, education, exercise physiology, nursing, nutrition, political science, psychology, sociology, and statistics. The WVU SPH contains over 45,000 square feet of general office space, including the principal investigator’s and other SPH research team offices. Departmental office space contains IBM -compatible computers networked with faculty members and the internet. All full-time office staff are trained to operate in this environment.

**1.4. The School of Public Health Office of Research:** The School of Public Health has a full-time Director of Research, one full-time grant resources specialist and a grants business manager to assist the Principal Investigator with grant administration. These positions also serve as a liaison with the WVU Office of Sponsored Programs as well as the Health Science Center’s Office for Research and Graduate Education. All of the staff members have experience with a variety of funding mechanism and are well versed in the rules and regulations in Research Administration.

**1.5. WVU, Health Sciences Center (HSC):** The WVU HSC Vice President and Executive Dean reports to the President of the University and is responsible for integrating the research mission of the five schools. The Vice President is a point person for interactions with the HSC, WVU Hospitals (WVUH) / Ruby Memorial Hospital, and the physician-practice plan (University Health Associates) and bears responsibility for fiscal oversight. The five schools located within the Health Science Center are; the School of Medicine, School of Nursing, School of Pharmacy, School of Dentistry, and the School of Public Health. Each school has a Dean who reports to the Vice President and who oversees the research missions of their Departments and Centers. The HSC has outstanding research capacity, excellent graduate research training, and significant external research funding. In addition to professional education, each of the Schools at the HSC is involved in graduate training and research. The HSC awards several graduate degrees including the MS, MPH, a joint MD/PhD, and a PhD in Public Health. HSC boasts all of the resources typical of a comprehensive academic medical center, including modern facilities, mainframe and workstation computer resources, telecommunications equipment, library resources, and technical support personnel.

WVU’s Health Sciences campus is a large, modern medical complex located in Morgantown, WV that includes 5 professional schools (Medicine, Dentistry, Nursing, Pharmacy and Public Health); 3 hospitals [WVU Hospital (WVUH)/Ruby Memorial Hospital, Chestnut Ridge Hospital, a behavioral medicine psychiatry facility, and Children’s Hospital (part of WVUH)]; and a Physician Office Center (POC), state-of-the-art Cancer Institute (Mary Babb Randolph Cancer Center), and the WVU Eye Institute.

**1.6. WVU Office of Sponsored Programs (OSP):** The Office of Sponsored Programs' (OSP) mission is to support the West Virginia University community in the acquisition and administration of externally funded projects for research, teaching and service. OSP reviews and submits proposals, negotiates, accepts, and initiates awards on behalf of West Virginia University and the West Virginia University Research Corporation. The OSP is made up of a Director, Pre-Award Management (6 FTE), Award Negotiation Team (3 FTE), Award Initiation Team (6 FTE), and a Sub-Award/Contracts management team (2 FTE).”

**1.7. WVU Research Corporation Office of Research Integrity & Compliance:** Comprehensive services and training related to IRB approval and HIPAA compliance are provided by the WVU Office of Research Integrity and Compliance. Their mission is to foster a culture of integrity and compliance within the University directed at ensuring that participants in the West Virginia University research enterprise internalize and pursue the goal of self-directed responsible conduct of research. Comprised of a Director, Assistant Director, Human Subject Research team (3 FTE), an Animal Studies team, an IRB Coordinator and a Conflict of Interest in Research Officer, they operate as facilitators, educators, and a resource center for the WVU research community.

**1.8. WVU Sponsored Research Accounting (SRA):** Sponsored Research Accounting (SRA) plays an integral role in the institutional research mission by providing service to faculty and staff in the comprehensive financial administration of all sponsored research activity. The SRA office provides services in such areas as: invoicing and billing, financial reporting, accounts receivable management, cash handling, fiscal compliance oversight, award closeout, audit and site review assistance, grants accounting system module maintenance, as well as other areas involving overall project management.

The SRA unit is comprised of four teams serving assigned colleges and departments. Each team is comprised of a Billing Representative and a Financial Representative serving the financial and administrative needs of their assigned areas. In addition to working closely with the academic departments and principal investigators, they also work closely with the Office of Sponsored Programs and their sponsors.

**1.9. Biostatistics Consulting Group (BCG):**The BCG [http://www.hsc.wvu.edu/bcg] is evolving from collaboration with the Bioinformatics / Biostatistics Core and the WVU School of Public Health, and provides biostatistical expertise to the HSC and beyond. The BCG includes Masters and PhD level biostatisticians and provides a range of services and guidance, from grant-writing assistance to general consulting. Biostatistics walk-in clinics for straightforward biostatistical questions are also scheduled regularly.

**1.10. WVU Libraries:** The WVU Libraries encompass seven libraries, including the Downtown Campus Library, Evansdale Library, Health Sciences Library (Morgantown), Law Library, Health Sciences Library (Charleston), the Mary F. Shipper Library at Potomac State College in Keyser, and the Vining Library at the WVU Institute of Technology in Montgomery.

The WVU Health Sciences Center Library supports research in many ways, including an on-site library and through support for core facilities. The HSC Library [http://www.hsc.wvu.edu/library/] exists on the 2nd floor of the WVU HSC and is in close proximity to the investigators. The library contains a collection of more than 250,000 volumes and extensive holdings of research materials. It currently receives more than 2,400 journals. In addition, an extensive collection of electronic research resources including online journals,

**1.11. Computer Equipment and Services:** The West Virginia University School of Public Health (SPH) provides computing systems equipment and management to its five departments, including the Departments of Epidemiology, Social and Behavioral Sciences, Biostatistics, Health Policy, Management and Leadership, and Occupational and Environmental Health Sciences. The School of Public Health is a part of the Robert C. Byrd Health Sciences Center (HSC), which houses the Department of Information Technology Services (ITS). ITS maintains the computing infrastructure for HSC and has specialists in software design and computing, computer support, systems engineering, web design, audiovisual design and production, etc. Staff members are also designated as Computer Support Contacts, a training and support network of technical personnel with software and computer expertise and experience who provide first-point-of-contact technical support to many end users at Health Sciences.

Information Technology Services presently maintains and supports all desk- and laptop computers allocated to faculty and staff, including research personnel, and 15 servers. All key personnel on this grant will have a Dell or comparable Desktop PC and access to all necessary current software, through the SPH (including Microsoft Office suite, Endnote, SPSS, SAS, and other programs). To safeguard its computing systems, both West Virginia University and ITS invoke access restrictions and auditing systems, policy management, as well as enterprise firewalls (the School has redundant PIX firewalls for its server infrastructure). Additionally, regular backups of all systems are maintained, including a combination of on-site and off-site vaulting of backup media.

Peripheral computing equipment located in the School of Public Health includes color LaserJet printers; high-speed, duplexing LaserJet printers; flatbed and hand-held scanners; digital cameras; a digital video recorder; and portable and ceiling-mounted computer video projection systems. The Health Sciences Center also maintains and supports a multimedia work lab. Other computing services readily available within the School or through the Health Sciences Center computing centers include digital imaging services, video digitalization and editing, videoconferencing, and support for interactive, multi-media instructional materials.

All faculty and staff in the School of Public Health, Health Sciences Center have offices that are fully equipped with furniture, local telephone service, and computer resources. They also have access to a conference rooms, computer laboratory space, and additional office space designated for the research assistants within the School. A range of software is available such as Microsoft Office, Endnote, SAS version 9.4 JMP 12, SPSS version 20, AMOS, Redhat, Symantec Ghost, WinZip, and Qualtrics. Publication and printing software includes Adobe Creative Cloud, and Adobe Photoshop/Premier Elements.

**1.12. Institutional Commitment and Support:** The institutional support and commitment to clinical research is evident in a number of ways at WVU. The institution has developed an extensive infrastructure for support of clinical, as well as basic science, research in its attempts to bring parity between basic and clinical research. In addition to the Office of Sponsored Programs and the Office of Research Integrity and Compliance, WVU has specific programs and infrastructure designed to provide support to those conducting clinical trials.

Basic, translational, clinical and epidemiologic investigations are vital activities within the Health Sciences Center and are facilitated by the following research centers and institutes:

Blanchette Rockefeller Neurosciences Institute (BRNI)

Clinical and Pharmacologic Research Center (CPRC)

Injury Control Research Center (ICRC)

Prevention Research Center (PRC)

Heart and Vascular Institute

Center for Advanced Imaging (CAI)

Center for Excellence in Disabilities (CED)

National Institute for Occupational Safety and Health (NIOSH)

Center for Neuroscience

Cancer Institute

Sensory Neuroscience Research Center

West Virginia Clinical Translational Science Institute (CTSI)

West Virginia University Eye Institute

**1.13. WV Clinical and Translational Science Institute (WVCTSI):** Funded by a 5 year, $53 million federal and state grant awarded in 2012, the WVCTSI was to advance the development of research focused on the health issues facing the people and communities of West Virginia -- specifically cancer, cardiovascular disease and stroke, obesity-related diseases and emerging epidemics (addiction).

The WVCTSI has established cross cutting research partnerships among the WVCTSI partnered institutions and collaborating Clinical & Translational Science Award (CTSA) institutions at the University of Kentucky, Ohio State University, and Indiana University to increase our research capacity. The WVCTSI utilizes innovative recruitment, training, and mentoring strategies to develop clinical and translational scientists at each of the WVCTSI institutions.

Participating faculty are provided with research resources that include biostatistics, clinical informatics, and access to a range of pilot funding mechanisms. Furthermore, mechanisms to streamline regulatory processes without compromising human subject protections and to engage communities fully in the research agenda are being developed. Finally, to ensure accountability and quality improvement, a robust evaluation program has been established. Overall, the WVCTSI has developed a strong infrastructure to increase the number of extramural funded clinical and translational researchers and has a well-considered plan for enhancing capacity and productivity over the next five years and beyond. In particular, the WVCTSI provides the infrastructure required to support clinical trials onsite.

**1.14. WVU Health System- Clinical:** The WVU Medicine System includes the WVU Health Sciences Center, J.W. Ruby Memorial Hospital, Chestnut Ridge Hospital, WVU Medicine Children's Hospital, WVU Eye Institute, WVU Cancer Institute, WVU Heart and Vascular Institute, WVU Bone and Joint Hospital, United Hospital Center, UHA Physicians Office Center, Blanchette Rockefeller Neurosciences Institute, Camden Clark Medical Center, Berkeley Medical Center, Reynolds Memorial Hospital, Wetzel County Hospital, Garrett Regional Medical Center, St. Joseph’s Hospital, Jefferson Medical Center, Potomac Valley Hospital, as well as numerous other clinical research centers and institutes, comprising a large and complex primary, secondary, and tertiary care teaching facility.

The WVU Medicine System facilities in Morgantown are within close proximity of the investigator and includes the Schools of Dentistry, Medicine, Nursing, Pharmacy, and Public Health. Because WVU is the state's primary research institution, the physicians represent a comprehensive range of specializations. WVU staff has a sterling reputation for excellent patient care as well as timely delivery of valid and reliable data. Unlike many other academic health centers, WVU provides primary care services to a large, stable population of rural patients. WVU also provides secondary and tertiary care. Their patient population ensures a high degree of follow-up care and study completion that many other clinical trials facilities cannot offer.

**1.15. Shared Resources:** Several well-equipped core facilities are also in place to support basic research at WVU. The core facilities are generally operated on a charge-back basis with a designated individual to run the day-to-day operations. These facilities have both user and service options. In addition, each of the basic science departments and the interdisciplinary research centers in the WVU HSC have centralized common equipment rooms that are dedicated to supporting the faculty’s research needs, with equipment such as scintillation counters, super-speed and ultra-centrifuges with a variety of rotor types, sonicators, FPLC, HPLC and mass spectrometry, which can be used free of charge.

**1.16. MDTV:** Mountaineer Doctor Television (MDTV), located in the Robert C. Byrd Health Sciences Center in Morgantown, WV, was established in 1992 to better serve rural West Virginians through the advancements in technology. MDTV is a secured independent telehealth network delivering telemedicine and videoconferencing services to several facilities throughout the state of West Virginia. The MDTV staff works directly with WVU specialists to help create and establish a variety of sub-specialty telemedicine clinics. These clinics allow patients living in rural communities access to quality healthcare while remaining in their home town. It is a secured independent telehealth network that provides telemedicine, educational and administrative videoconferencing services through two Multipoint Control Units (MCU). We have one 12 port standard definition Codian MCU as well as a brand new 20 port high definition Codian MCU. Both bridges can support H.323 (IP) and H.320 (ISDN) protocols. In addition to 11 telemedicine units and 14 videoconferencing units, MDTV also has Portable H.323 (IP) videoconferencing units that are used primarily for Administrative Videoconferencing or Telemedicine consultations. These units can be transported and utilized anywhere within the Health Sciences Center or the hospital as long as there is a configured network jack. MDTV recently implemented a software based telemedicine / videoconferencing solution called Vidyo. This new service will enhance our current telehealth infrastructure by allowing us to more easily expand our network outreach throughout the state of West Virginia. Our telemedicine providers are now able to utilize desktops, laptops and tablets. Since 1993, MDTV has provided over 20,000 telemedicine consultations.