**The George Washington University**

**Milken Institute School of Public Health**

**FACILITIES AND OTHER RESOURCES**

The George Washington University (GWU) was created in 1821 through an Act of Congress, fulfilling George Washington’s vision of an institution in the nation’s capital. George Washington University is the largest institution of higher education in the District of Columbia, with more than 25,000 students from all 50 states, DC, and more than 130 countries studying toward a variety of degrees in disciplines ranging from forensic science and creative writing to international affairs and computer engineering, as well as medicine, public health, law, and public policy. George Washington University consists of three campuses (Foggy Bottom and Mount Vernon in Washington, DC, and the Virginia Science and Technology Campus in Ashburn, Virginia) and several graduate education centers in the DC metropolitan area and Hampton Roads, Virginia.

*“Our University actively engages Washington, DC, and the world. Our location in the heart of Washington places us at the core of US government, policy and law. We sit where the worlds of science, technology, media and the arts converge. Our students and faculty have the unparalleled opportunity to study and work alongside leaders and practitioners in every discipline, to take part in the interchanges that shape our community and the world.”* [*http://www.gwu.edu/gw-overview*](http://www.gwu.edu/gw-overview)

**Milken Institute School of Public Health**

**Leadership and Institutional Commitment to Research Resources:** Established in July 1997, Milken Institute School of Public Health (Milken Institute SPH) at the George Washington University brought together three longstanding university programs in the schools of medicine, business, and education. Milken Institute SPH named **Dr. Lynn Goldman** from Johns Hopkins University as **Dean** in 2010. With the hire of Dean Goldman, Milken Institute SPH created a *Strategic Plan*that includes bold new commitments to research. Milken Institute SPH named its first **Associate Dean of Research, Dr. Kimberly Horn,** in June 2012. Milken Institute SPH comprises six departments. More than 1,700 students from almost every US state and 39 countries are pursuing undergraduate, graduate, and doctoral-level degrees in public health at the school. *Our student body is one of the most ethnically diverse among the nation's private schools of public health*. Milken Institute SPH offers over 30 degree options, including an array of joint degree programs, allowing students to couple a law degree with the Master of Public Health (MPH), or to combine an MPH with a medical degree or MA in International Affairs. An MPH/Physician's Assistant program (the first in the world) is available at GW. Milken Institute SPH also offers an interdisciplinary DrPH degree as well as PhDs in Epidemiology and Public Health Policy. Milken Institute SPH also offers an online Master of Public Health program, ***MPH@GW***, and an online Executive Master of Health Administration, MHA@GW, which allow students to pursue their degree from anywhere in the world. The public health programs at Milken Institute SPH have full accreditation from the Council on Education for Public Health. The program in Health Services Administration is fully accredited by the Commission on Accreditation of Healthcare Management Education.

**Office of Research Excellence:** The Associate Dean of Research at the Milken Institute School of Public Health developed a decentralized model with school-level administrators conducting pre award (proposal submission) functions when requested by departmental chairs and departmental administrators. The formation of these services included hiring a Senior Research Operations Director and creating Pre Award Specialist positions in the Dean’s Office. The Office of Research Excellence (ORE) provides an easy, hands-on, personable interface with departments and PIs to provide supplemental pre award services. It ensures high quality service to all investigators. The shared services model provides school-level Pre Award Specialists when departmental resources are not adequate to submit a proposal, including when late breaking opportunities transpire. The shared services team is a highly responsive team, with quick turnarounds for assigning team members to PIs and for completing the work.

**Milken Institute School of Public Health’s Impact on Public Health, Education, Training, and Research:** Milken Institute School of Public Health is a magnet for top scholars and a catalyst for the study and advancement of a wide spectrum of community, social and scientific initiatives. Departments are actively engaged in cutting-edge research, partnering with prestigious institutes and foundations. Faculty and students enjoy collaborative partnerships, integrating research and teaching in every activity, and inquiry and dialogue as two sides of a single purpose. The number of tenured and tenure-accruing SPH faculty is on the rise – all hired after national searches.

Milken Institute School of Public Health researchers are at the leading edge of new discoveries. Faculty and researchers would not be able to complete this important work without the generous funding of such prestigious organizations as the National Institutes of Health, Centers for Disease Control and Prevention, Patient-Centered Outcomes Research Institute (PCORI), National Endowment for the Humanities, National Science Foundation, Russell Sage Foundation, Robert Wood Johnson Foundation, and Bill & Melinda Gates Foundation, among many others.

Milken Institute School of Public Health also serves as the home of the Commission to Build a Healthier America, STOP Obesity Alliance, Geiger Gibson Program in Community Health Policy, and Aligning Forces for Quality, a major national program funded by the Robert Wood Johnson Foundation that aims to raise the overall quality of health care, reduce racial and ethnic disparities, and provide models for national reform. Milken Institute SPH was also awarded the prestigious Medical Education Partnership Initiative (MEPI) award to be a coordinating center, in addition to a $4.6M award from the Health Resources and Services Administration (HRSA) to build curriculum and training programs for Health Information Technology workers. These partnerships and programs provide pathways for our faculty and student body to work on the high-level public health initiatives that have an impact on communities across the country and overseas.

**The Department of Epidemiology and Biostatistics’** mission is to provide outstanding educational and professional opportunities that will help our students become skilled public health leaders and practitioners; to develop a nationally recognized research program in epidemiology and biostatistics; and to foster synergistic partnerships with organizations and communities that will improve public health in the Washington, DC area and beyond. The department is chaired by Alan E. Greenberg, MD, MPH, who was appointed in 2005. Before joining the SPH, Dr. Greenberg served as a USPHS Commissioned Corps Officer at the Centers for Disease Control and Prevention from 1985-2005, where he provided scientific leadership to the CDC’s domestic and international HIV epidemiologic research program. Dr. Greenberg currently serves as the Director of the District of Columbia Center for AIDS Research (DC CFAR). The Department is comprised of 33 faculty, 29 staff, and 183 students.

The Department engages in many research activities through the Center for HIV/AIDS Epidemiology, Biostatistics, and Public Health Laboratory Research, George Washington University Biostatistics Center, and Biostatistics and Epidemiology Consulting Service (BECS). The Department also houses Biostatistics Core services for the District of Columbia Center for AIDS Research (DC CFAR), and for GWU researchers at the Clinical and Translational Science Institute at Children's National (CTSI-CN).

Department faculty members have an extensive portfolio of research projects in their areas of expertise: applied biostatistics, behavioral epidemiology, cancer epidemiology, chronic disease epidemiology, clinical trials, health disparities in minority communities, HIV/AIDS/hepatitis/sexually transmitted disease epidemiology, geographic information systems (GIS), infectious disease epidemiology, public health microbiology and virology, and reproductive health epidemiology. Funding agencies have included the Centers for Disease Control and Prevention, National Institutes of Health, Health Resources and Services Administration, District of Columbia Department of Health, Patient Centered Outcomes Research Institute, Cepheid, and Elizabeth Glaser Pediatric AIDS Foundation.

**The Department of Environmental and Occupational Health’s** overarching mission is to reduce hazards and optimize public health for all by focusing on the environment and the workplace. The department is chaired by Melissa J. Perry, ScD, MHS (appointed in 2011 from Harvard University), and is composed of 59 faculty, 14 staff, and 70 students. The Department aims to achieve this mission by generating new knowledge, educating future leaders, and translating knowledge into practice and policy.

The scope work ranges from local to global, with research and training projects spanning from the greater Washington DC metropolitan area to multiple continents, including projects in Asia, Africa, Europe and Latin America, demonstrating the Department’s global focus. Faculty in the Department hold a diverse portfolio of research from numerous funding agencies, which has included the Department of Defense, National Institute of Environmental Health Sciences, NIH-National Cancer Institute, Centers for Disease Control and Prevention, CPWR, NIH-Fogarty International Center, NASA, NIH-National Institute of Allergy and Infectious Diseases, National Science Foundation, Canadian Institutes of Health Research, Robert Wood Johnson Foundation, US Army Medical Research and Material Command, USDA, and Pew Charitable Trust.

**The Department of Exercise and Nutrition Sciences** prepares students for the health and wellness careers that will make the greatest impact on the future of public health. The Department is chaired by Loretta DiPietro, PhD, MPH, who was appointed in 2008. Dr. DiPietro came to the SPH from Yale University School of Medicine, where she was associate professor of epidemiology and public health and a fellow at the John B. Pierce Laboratory. The department is comprised of 20 faculty, 3 staff, and 169 students.

The Department’s Bachelor of Science (BS) programs provide a thorough background in human biology and physiology and the ways in which exercise can prevent or reverse many non-communicable diseases. The BS program’s 4 tracks prepare students for advanced degrees in medicine, nursing, physical therapy, dietetics, or exercise physiology. Graduate students are offered Master of Science (MS) programs in clinical exercise physiology and in strength & conditioning, respectively. Recent additions are the Master of Public Health (MPH) program in physical activity in public health and the MPH in public health nutrition. Finally, the Department’s Graduate Certificate program trains students to develop and evaluate public health programs with regard to physical activity, health promotion, and disease prevention.

**The Department of Global Health** offers exciting and diverse programs of study preparing students to address today's global health challenges in the real world. The Department is chaired by James M. Tielsch, PhD, who was appointed in February 2013. Dr. Tielsch was recruited from the Johns Hopkins Bloomberg School of Public Health. The Department is comprised of 14 full- and part-time faculty, multiple secondary appointments, and over 15 adjunct faculty, 4 staff, and over 70 students.

The Department educates students in three concentrations: global health communications, global health policy, and program design, management, and evaluation. The department collaborates with the Department of Environmental and Occupational Health to offer a program in global environmental health. The curriculum provides a rigorous foundation in public health principles, core global health concepts, and emphasizes interdisciplinary research and practice methodologies.

Areas of research expertise within the Department of Global Health include maternal, newborn, and child health, malnutrition, infectious disease, chronic disease, environmental health, health diplomacy and governance of international health systems, demography, medical anthropology, health systems analysis, global health economics, program evaluation, humanitarian emergencies, and global public health communication. Faculty in the Department hold a diverse portfolio of research from numerous funding agencies, including the National Institutes of Health, the World Health Organization, United Nations Foundation, John Snow, Inc., the Bill & Melinda Gates Foundation, as well as other foundations. The department is also home to the Journal of Health Communication, one of the most respected journals in that field.

**The Department of Health Policy and Management** is a leading research and practice-oriented academic health policy and management department in the Milken Institute School of Public Health at the George Washington University. In addition to training doctoral and masters' students, we conduct innovative research and analyses to advance health policy scholarship in a cross-cutting and real context. The Department is comprised of about 40 regular faculty, more than 100 research staff and more than 100 graduate students. Our faculty includes some of the nation's best known and respected experts, with backgrounds in health services research, economics, health law and policy, medicine, public health, health management and public policy, who collaborate and work in a transdisciplinary fashion. The Department has been rated as one of the top ten academic health policy units in the nation, according to US News and World Report. We take pride in conducting research and analyses that are rigorous and innovative but that are also accessible and pertinent to ongoing policy and management issues confronting the nation and the world.

Research activities within the Department of Health Policy and Management are dedicated to providing policymakers, public health officials, health care administrators and advocates, and the public with the information and ideas they need to understand and improve access to quality, affordable health care and population health. The faculty in the department hold a diverse portfolio of research from numerous funding agencies, including the National Institutes of Health, Centers for Disease Control and Prevention, Agency for Healthcare Research and Quality, Patient-Centered Outcomes Research Institute, Centers for Medicare & Medicaid Services, Health Resources and Services Administration, Robert Wood Johnson Foundation, Commonwealth Fund, Rockefeller Foundation, Elizabeth Glaser Pediatric AIDS Foundation, District of Columbia Department of Health, , American Geriatrics Society, Emergency Medicine Foundation, RCHN Community Health Foundation, Commonwealth Fund, Henry J. Kaiser Family Foundation, and many others. We produce research papers that are published in peer-reviewed journals such as the New England Journal of Medicine, Health Affairs, American Journal of Public Health, and many others, as well producing policy reports and briefs for funders, many of which are disseminated on the internet by the funders or on our own website. Some of our faculty also provide strategic and technical advice to clients to help them understand the evolving world of health policy. Given our location in Washington, DC, we often work with and advise federal agencies, Congress and the White House on health policy and management issues.

To help guide our research, we have research centers and programs that focus on certain key areas of domestic and global health policy and management, including the Center for Health Policy Research, the Health Workforce Research Institute, the Jacobs Institute for Women's Health, the Geiger Gibson Program in Community Health, the Hirsh Health Law Program and the Global Health Security Program. To aid the conduct of research we have access to full medical and university libraries and a panoply of computer facilities, including a server dedicated to the use of personal health data that maintains HIPAA and FISMA-level standards of security. Finally, as part of a broader academic complex, we have access to resources and colleagues in other departments of the Milken Institute School of Public Health (which includes departments of epidemiology/biostatistics, prevention and community health, exercise and nutrition sciences, global health and environmental and occupational health) as well as colleagues in our medical, nursing, public policy, law and business schools, so that we can collaborate on projects which require additional expertise or resources.

**The Department of Prevention and Community Health’s** mission is to use state-of-the-art scientific approaches to develop, implement, and evaluate innovative and theoretically-based interventions to promote health and well-being. The department is chaired by Rajiv N. Rimal, PhD, who has more than 20 years’ experience in health promotion, evaluation, and program development. The department comprises 32 faculty, 20 staff, and 203 students.

The Department educates students in four inter-related areas (Health Promotion, Maternal and Child Health, Public Health Communication and Marketing, and Community-Oriented Primary Care) and conducts research and scholarly activities in these and many other areas. In collaboration with other departments at the GW SPH, other schools at The George Washington University, and the broader public health community, the Department strives to produce and share knowledge; develop, implement, and evaluate state-of-the-art community health programs; communicate health information to the public; and integrate research into public health education and practice. In addition to educational activities, the Department pursues these objectives by establishing practice-academic partnerships, conducting peer-reviewed evaluation and policy research, and making significant scholarly contributions to the evidence base of public health. The Department also has a PhD program in Social & Behavioral Sciences and a DrPH program in Health Behavior.

Faculty in the department hold a diverse portfolio of research from numerous funding agencies, including the National Institutes of Health, Centers for Disease Control and Prevention, National Institute on Drug Abuse, Department of Defense, American Heart Association, Robert Wood Johnson Foundation, Bloomberg Family Foundation, Centers for Medicare and Medicaid Services, UNICEF, USAID, and state governments. Current initiatives at the department include the Center for Health and Health Care in Schools, the Center for Social Well-Being and Development, the Avance Center for the Advancement of Immigrant/Refugee Health, the Prevention at Home project, and the Sumner M. Redstone Global Center for Prevention and Wellness. The faculty in the department work in the United States and various countries in Asia, Africa, South America, and Europe.

**Laboratory:** Central to GW’s research investment is the recently completed Science and Engineering Hall (SEH) which positions George Washington University to attract the world’s best faculty and brightest students. SEH meets the needs of the university's growing research portfolio and will serve as a hub for discovery, providing new opportunities for cross-disciplinary collaboration. SEH's unparalleled location and state-of-the-art facilities enable students and faculty to strengthen existing partnerships and forge new ties with influential scientific and technical organizations. Indeed, SEH exemplifies GW's long-term commitment to educate the next generation of innovators, as well as support our faculty as they develop knowledge that will help improve the lives of millions worldwide.

The new complex is located between 22nd, 23rd, H, and I Streets NW – literally 0.7 miles to the gates of the White House. The building includes functions from the School of Engineering and Applied Science, as well as the Columbian College of Arts and Sciences’ physical science departments, including Biological Sciences, Physics, Chemistry, and Hominid Paleobiology. Other laboratory researchers, including those from Milken Institute School of Public Health, will soon be located in the new complex.

The Milken Institute of Public Health will occupy the seventh floor of the (SEH) where it is building out labs, classrooms, state of the art teaching labs, conference and study spaces. The architecture firm is Ballinger from Philadelphia; the contractor is Clark Construction along with Boston Properties and GW as partners with a projected finish date of June 2016. The Medical School and the Biology Department Greenhouses will be located on the 8th floor and will progress on the same schedule. The seventh and eighth floors are targeting LEED Gold certification making it GW’s ninth LEED gold project.

The public health floor has 15,260 square feet of lab space, a 1,700 square foot teaching lab in addition to a 1,000 Square foot multifunctional interactive 30-seat classroom, 3 conference rooms, 90 cubicles for lab researchers and post doc staff and 26 faculty offices. The labs will support the many research projects in the school including virology, environmental and occupational health, analytical chemistry, and the new Antibiotic Research Center. In addition to specialized equipment within the large labs, there will be a BSL 3 lab on the east side and a DNA sequencing core on the south east corner of the space.

The building was designed with collaboration in mind. Each floor has shared common areas outside the labs where there are also banks of workstations. Tables and chairs dot common areas where students and researchers can meet. A spiral staircase will link the public health floor with the medical floor encouraging workflow between the two schools. The seventh floor also has an outdoor terrace with green roof with capacity for 30 people that can be accessed from the West Side. The views across the city from the seventh floor are inviting. These labs will add a whole new dimension to the work of the Milken Institute School of Public Health.

The Exercise and Nutrition Sciences department has two fitness testing facilities, one located in Washington DC near the Foggy Bottom campus (DC Lab) and one in Ashburn Virginia on the Virginia Science and Technology Campus (VTSC Lab). Both labs offer top-of-the-line exercise and clinical equipment for body composition, weight-loss and fitness testing. See more at: <http://publichealth.gwu.edu/departments/exercise-and-nutrition-sciences/lab-facilities#sthash.UqKeGl0U.dpuf>

**Clinical:** N/A

**Animal:** N/A

**Computer:** *Hardware and Software:*

GWU is well connected to research and education communities. The wireless access service, Eduroam, is a secure, worldwide roaming access service developed for the international research and education community. It allows users from member institutions to connect to the Internet when visiting other participating institutions. GWU is also part of the Internet2Network, which is a computer networking consortium led by members from research and education communities, industry and government. It gives our researchers the ability to use ultra-high-speed networking speeds when working with large dataset transfers that are used in much of our current research.

The Milken Institute School of Public Health has a fully staffed IT unit that includes a director, network, and technical support staff to assist users with all projects and support requests. The Director of the IT unit, **Regina Scriven**, was appointed in 2012. The IT capabilities at GWU are comprehensive and will allow for any requirements of data collection and analysis to be fulfilled.

The Milken Institute SPH’s hardware offerings include Window PCs and Mac workstations, dedicated research Application and File servers as well as printers, FAX machines, high-speed photo copiers, overhead and data show projectors. Access to these resources is via high speed wired and wireless network links. There are dedicated resources for data storage, data transfer and sharing and data backup and redundancy.

The software offerings at Milken Institute SPH are also comprehensive. Our capabilities will allow for any required references retrieval, any other data retrieval or exchange, and online databases access. All faculty, staff, and students have access to electronic mail and collaboration software. Milken Institute SPH faculty and staff members also have access to licenses that include an extensive range of word processing, analytic, graphics, mapping, and presentation software such as, SPSS, Stata, SAS, Atlas.Ti, MPlus, Adobe Creative Suite, Nvivo, Qualtics, and ArcGIS.

**StrongBox**is a customized applications and data storage system that supports research and applied research instruction of Milken Institute School of Public Health faculty and their graduate students and post-docs. Researchers use the system to (a) store and preserve their research data for future research and “training” sets for students; (b) work with both small and large-scale research datasets, and (c) collaborate more effectively on research with colleagues and students across schools and departments.

Specifications:

* (2) 128GB RAM, dual Intel Xeon E5-2650 2.00GHz, 20M Cache, 8.0GT/s QPI, Turbo, 8C processors servers, (1) 36T SAN Storage
* Number of software packages - 10
* Type of interface - VPN and Onsite network access
* Number of registered users - 115

**Office**: The Milken Institute School of Public Health building opened in the spring of 2014. Located on Washington Circle at 24th Street and New Hampshire Avenue, the building features more than 115,000 square feet of floor space for state-of-the-art classrooms, research labs, departmental offices, and conference rooms. Integrating all of the school’s departments, Environmental and Occupational Health, Epidemiology and Biostatistics, Exercise and Nutrition Sciences, Global Health, Health Policy and Management, and Prevention and Community Health, the building includes seven floors above grade and two below. The building houses more than 300 full- and part-time faculty and staff, and the school’s on-campus graduate and undergraduate students. The

building was constructed using a range of green and sustainable materials, and earned a Platinum certification under the Leadership in Energy and Environmental Design (LEED) Green Building Rating System.

The Milken Institute SPH building provides a venue for conferences and workshops for faculty, students, and partners. The first floor features an auditorium seating 227 people, a convening center with four connecting rooms, and a pre-conference space for receptions and snack breaks. In addition, the building includes two large 90-seat lecture classrooms, a 75-seat executive case room (featuring computer plug-in capacity and tiered audio-equipped seating), 14 classrooms seating 20-50 students each, and seven conference rooms for use by faculty. All of these amenities are intended to enhance learning and interaction between faculty and students. It also serves as a central location for continued research and collaboration with a wide variety of government and non-governmental organizations.

**Other: *CORE FACILITIES***

**Colonial One**. For research needs that use high-performance computing for data analysis, GW recently implemented the new shared high-performance computing cluster named Colonial One, which is implemented and managed by professional staff in the Research Services Group within the Division of Information Technology, assisted by GW-sponsored computational staff in the Computational Biology Institute and the Columbian College of Arts and Sciences. Access to Colonial One is open to the GW community. Colonial One is housed in one of GW's two enterprise-class datacenters and is located on the Virginia Science and Technology Campus. The datacenter features professional IT management by GW’s central Division of IT - including 24-hour on-premise and remote environment monitoring with hourly staff walk-throughs; redundant power distribution including UPS (battery) and generator backup; redundant cooling systems utilizing a dedicated chilled water plant and a glycol refrigeration system; and direct network connectivity to GW’s robust 100 Gigabit fiber optic network.

Located on the Virginia Science and Technology Campus in one of GW’s two enterprise-class data centers, Colonial One is housed in an optimal facility featuring:

* Professional IT management by the Division of IT, including 24-hour on-premise and remote environment monitoring with hourly staff walkthroughs.
* Redundant power distribution, including UPS (battery) and generator backup.
* Redundant cooling systems using a dedicated chilled water plant and a glycol refrigeration system.
* Direct network connectivity to GW's robust 100-Gigabit fiber optic network.

**Colonial One’s initial compute capacity features a total of 2,924 CPU cores and 1132,288 CUDA cores in the following compute node configurations:**

* 64 CPU nodes featuring dual Intel Xeon E5-2670 2.6GHz 8-core processors with varying ranges of RAM capacity (64GB, 128GB, and 256GB nodes).
* 79 CPU nodes featuring dual Intel Xeon E5-2650v2 2.6GHz 8-core processors with 128GB of RAM each.
* 32 GPU nodes featuring dual Intel Xeon E5-2620 2.0GHz 6-core processors with dual NVIDIA K20 GPUs, 128GB of RAM.
* 1 Large-Memory node featuring four Intel Xeon E7-8857v2 3.0GHz 12-core processors with 2TB of RAM.
* FDR Infiniband network interconnect featuring 54.5 Gbps total throughput, with 2:1 oversubscription per compute node.

The Colonial One cluster has both a primary storage system and a high-speed scratch storage system connected to the Infiniband network fabric. Both are accessible throughout the entire cluster, and remote file transfer services are provided through dedicated login nodes.

* Dell NSS primary storage with 120 TB of usable capacity.
* Dell / Terascala Lustre HSS high-speed scratch storage with 250TB of usable capacity.

**Biostatistics and Epidemiology Consulting Service (BECS**)**:**BECS is embedded in the Milken Institute SPH Department of Epidemiology and Biostatistics and provides biostatistical, epidemiological, and study design support for health-related research projects. The BECS is directed toward providing for statistical needs of small- to medium-sized observational, epidemiological, and laboratory studies as well as small clinical trials. Priority services of the BECS are: pre-award consultation on best practices for biostatistical methods, sample size selection, and study design for health-related grant proposals, and pre-award statistical analysis assistance (by faculty and/or graduate students in biostatistics and epidemiology) of preliminary data to support a grant application.

**Sequencing Core Facility:** The George Washington University School of Public Health Next Gen Sequencing (NGS) Core provides Illumina high-throughput sequencing on the MiSeq and NextSeq instruments. Additional sequencing-related services to be offered by the Core will include: initial consultation, library preparation and validation, sample QC, sequencing, data retrieval and processing. NGS applications include DNA Seq (Whole genome sequencing, exome capture and ChIP sequencing) as well as RNA Seq (Whole transcriptome with rRNA depletion and Transcriptome sequencing with polyA pull down).

***OTHER RESOURCES:***

**Communications:** The Milken Institute School of Public Health of Communications assists faculty with promoting their research findings, generating media coverage of their studies and reports, and establishing them as the go-to experts in specific fields or on particular public health topics. The office is led by Stacey DiLorenzo, MS, who joined Milken Institute School of Public Health in 2012 from Johns Hopkins Bloomberg School of Public Health. Faculty members at Milken Institute SPH coordinate with the Office of Communications in advance of publicizing studies, reports, and commentary on public health topics in order to ensure production of quality press releases and other promotional materials. The office assists faculty by arranging interviews with reporters and news outlets (and performing follow-up), instructing faculty in interview techniques, and holding regularly scheduled media training sessions that prepare faculty members to communicate effectively with media- be it in print, by phone, or in front of a TV camera. In addition to outside media sources, the Office of Communications disseminates information about research activities within the school and at the all-university level via the Milken Institute Faculty/Staff Newsletter, website, Research Accelerator blog and GW Today, the University’s official on-line news source (<http://gwtoday.gwu.edu/>).

**Library Facilities:**The University has an extensive network of libraries, databases, computer facilities, and other resources located on and off campus that are available to researchers. Our network of on-campus libraries includes the Eckles (main) Gelman, Himmelfarb, joint Milken Institute SPH and the Medical School, plus Virginia Sciences and Technology libraries. Faculty, staff, and students also have access to eight additional branches located throughout the Washington, DC metropolitan area – including the Library of Congress, the libraries of the National Institute of Health, and the National Library of Medicine – that permit inter-library loans.

**Meeting and Conference Facilities:** The University campus provides several large auditoriums, meeting rooms, and access to hotels for our school to host meetings and conferences. The GW School of Media and Public Affairs building features a 258-seat auditorium designed to attract media events and a modern newsmaker studio for faculty members to hold media interviews. In addition, the building is equipped with a fiber optic network, Internet access, and a teleconferencing classroom. State-of-the-art technology is also found in the Media Center, which is equipped for print, broadcast, and on-line media projects. The Cloyd Heck Marvin Center is the George Washington University’s campus community center, regularly used by Milken Institute SPH faculty and staff for meetings and events. It offers programs, services, and facilities for students, faculty, staff, alumni, and university guests. The Center’s wide range of facilities includes dining locations, a theatre, lounges, study rooms, conference and meetings rooms, and is home to Colonial Central, GWorld, the GW Bookstore, and STA Travel.

**Scientific Environment**

The George Washington University is at a critical juncture. Having evolved into one of the nation’s leading universities, George Washington University completed a comprehensive strategic planning initiative captured in the new ***Vision 2021*** report. There are an almost infinite number of opportunities for investing our resources in the coming decade. This plan focuses on areas where George Washington University has a comparative advantage and avoids expenditures on endeavors for which other universities are better positioned. The George Washington University initiated its purposeful transition toward becoming a viable research institution by recruiting its 16th **President,** **Dr. Steven Knapp,** from Johns Hopkins University in 2007 with the goal of increasing the institution’s preeminence in research. In 2009, Dr. Knapp appointed **Dr. Leo Chalupa** as the University’s first **Vice President for Research**. Dr. Chalupa immediately created GW’s Research Enhancement Unit, one of the primary goals of which is to increase students’ and faculty members’ capacity to conduct research by providing the necessary training, environment, support, and information to enable them to further develop their skills and pursue research opportunities. With more than 100 centers and institutes and cutting-edge research in science and technology, health, public policy, global security, and the arts and humanities, research and innovation are driving forces at GW. At present, GW holds over $200M in research funding. *Research is a centerpiece of the new* ***Vision 2021*** *strategic plan, with an anticipated investment up to $243M in coming years.*

**Research Enhancement Unit:** This is a unit within the Office of the Vice President for Research, created by Dr. Leo Chalupa to support research at GW. The goal is to grow research through proactive activities that lead to extramural funding and the elevation of GW's stature as an institution of research excellence. The Unit helps to build collaborative interdisciplinary research teams, commonly referred to as team science. The staff assist with proposal development for large multi-investigator program project and center grants, and develop research infrastructure by facilitating dialogue among investigators across disciplines. The unit also provides educational development seminars and workshops for junior investigators.

**The Clinical and Translational Science Institute at Children’s National (CTSI-CN):** The CTSI-CN is a partnership between Children’s National Medical Center and The George Washington University to accelerate the translation of research and dialogue into improved child, family, and community health by fostering collaborative investigations.

CTSI-CN provides members with access to:

* Education opportunities such as career development support, training opportunities, seminars, and symposia;
* Research resources that include free consultations for CTSI-CN services, reduced rates for NIH-sponsored and pilot research support, and letters of support for grant applications;
* Collaboration opportunities to participate in interdisciplinary research and exposure to national opportunities available through CTSA institutions;
* Funding for pilot award recipients and KL2 Scholars;
* Membership in the Society for Clinical and Translational Science; and
* Information about current research, upcoming events, and grant opportunities through weekly e-digests and quarterly newsletters.

Led by Principal Investigator Lisa Guay-Woodford, MD, at Children’s National Medical Center and Co-Principal Investigator Vincent Chiappinelli, PhD at The George Washington University, the Clinical and Translational Science Institute at Children’s National was awarded a Clinical and Translational Science Award (CTSA), funded by the National Center for Advancing Translational Sciences (NCATS) in the summer of 2010. The CTSI-CN is the first children’s hospital-led clinical and translational science initiative to join the prestigious consortium of CTSA-funded institutions.

**Early Stage Investigator (For eligible PIs applying for R01s)**

At the George Washington University’s Office for the Vice President for Research (OVPR), research and innovation are driving forces advancing GW as an academic institution and society as a whole. The Office of the Vice President for Research works diligently to strengthen existing initiatives and expand into new multidisciplinary fields. GW has more than 100 centers and institutes and research in cutting edge projects in science and technology, health, public policy, global security, and the arts and humanities.

**Resources for Career Development:** OVPR provides faculty with guidance and training to successfully apply for research grant funding. The research salons that are provided are designed to connect and engage GWU faculty from diverse disciplines in collaborative intellectual and scholarly exchange around research-themed issues, questions and challenges. Pre-award grant development Boot Camp is one of those offerings presented twice annually.

Under the leadership of Associate Vice President for Research, Dr. Jennifer Wisdom, and in tandem with the schools’ Associate Deans for Research, Research Enhancement provides faculty with guidance and training to successfully apply for research grant funding. Regular or research faculty and research scientists eligible to serve as PI and their graduate students may request services from Research Enhancement.

**Collegial Support and Peer-Organized Groups:** Research Enhancement provides faculty with guidance and training to successfully apply for research grant funding. Regular or research faculty and research scientists eligible to serve as PI and their graduate students may request services from Research Enhancement. The GW Milken Institute School of Public Health (GW SPH) demonstrates its commitment to Early Stage Investigators (ESI) by fostering an environment rich in resource development and mentorship. The GW SPH is committed to supporting cross-disciplinary collaboration that promotes a foundation of new and exciting intellectual endeavors for its ESIs.

The GW SPH Associate Dean of Research, Dean Horn, and the SPH Research Committee proposed a new GW SPH Research Advancement Program in Spring 2014. A centerpiece of the research resources provided by GW SPH, the overall purpose of the program is to enhance the research excellence across all departments in the School. The multi-component program facilitates the achievement of two of the School’s strategic research objectives: To foster a culture of research excellence through capacity building, collaboration, and collegiality; and to increase and reward externally funded research conducted at the GW SPH. We also believe that fulfillment of these two objectives will advance a third strategic research objective: To enhance the scholarly output of the Milken Institute SPH.

With extensive input from the GW SPH Research Committee, faculty, students, and School-wide leadership, the program includes eight primary components: (1) an intensive Boot Camp; (2) PI Summits; (3) on-going special topics Seminar Series; (4) a Facilitating Funds Program; (5) a tailored Mentoring Program; (6) Network Events; (7) Scientific Writing and Presentation Workshops; and (8) streamlined Motivation and Incentive Mechanisms.

**Financial Support:** The components are being gradually rolled out. As part of the Facilitating Funds component, in Spring 2014 we launched the inaugural Springboard Grants Program, Pathways to NIH Funding, with the goal of rapidly growing the research success of our faculty through competitive, externally funded grants. The initial Springboard Pathways RFA was focused specifically on developing grantsmanship in pursuit of NIH R21 and R01 funding. Full-time active status faculty in the Milken Institute SPH were eligible to apply; this included regular and research track faculty at the rank of assistant, associate and full professor. This unique program provides awardees with simultaneous grantsmanship training paired with intensive tailored mentoring, led by Associate Dean Horn. The expected outcome is a highly vetted, competitive NIH proposal. Applications were reviewed by a select group of GW SPH senior faculty and three awardees were selected. Learn about the first three Springboard Grants recipients who were awarded collectively, $150,000 for the one-year program ($50K/awardee). See: http://publichealth.gwu.edu/content/three-milken-institute-sph-faculty-receive-first-springboard-grants. To date, these three awardees are actively engaged in the program, have pilot studies underway, and are submitting proposals.

*Please add information of “major equipment” already available in relation to the proposed research project.*

List major items of equipment already available for this project and, if appropriate, identify location and pertinent capabilities or list in a separate “Equipment” document.