# **RESOURCES & ENVIRONMENT (R&E)**

**USC/** **College of Nursing “Boilerplate” Information for Sponsored Award Proposals**

*The following includes ‘boilerplate’ (basic) information about the University of South Carolina (USC) and the College of Nursing (CON):*

* *Use only what you need*. *Include only the information that is pertinent to your proposal* (not the whole thing). Note that there is some information overlap between sections.
* Be sure to add specific department, lab, equipment, and collaboration information as needed for your proposal and edit out what is not relevant to it.
* Other USC units and external institutions/organizations should be able to supply you with their R&E information upon request.
* Overview and contact information about additional CON centers and programs is at: https://sc.edu/study/colleges\_schools/nursing/

*Updated Spring 2025 (Arial 11 pt.)*

# **The University of South Carolina (USC)**

# **The University of South Carolina (USC)** was established in 1801 and is a full-service, state- assisted research university that includes the 358-acre Columbia campus and seven regional campuses, with a total full-time student body population of more than 35,000 in Columbia and 50,000 overall. Located in the capital city of Columbia in the geographic center of the state, USC's main campus is part of a thriving metropolitan area of more than 800,000 inhabitants. USC offers a broad spectrum of educational opportunities with 14 colleges and schools that encompass 324 undergraduate and graduate degree-granting programs. USC confers 25% of all bachelors, graduate, and professional degrees awarded at institutions of higher education in South Carolina.

**USC Research Capacity.** In fiscal year 2024, USC was awarded over $300 million in extramural sponsored award funding, 72% percent of which was for research. USC is listed in the Carnegie Classification of Institutions of Higher Education as a Very High Research Activity University.

The University provides researchers with a full range of grant and contract-related services through its Sponsored Awards Management and Grants and Funds Management offices. USC’s Office of Research Compliance oversees the institutional review processes for human and animal subjects as well as disclosure and management of financial conflicts of interest and assists with scientific misconduct regulation and export controls.

**The SC SmartState Centers of Economic Excellence** **program** was established by the state's General Assembly in 2002 with $180 million of non-tax revenue funds generated from the South Carolina Education Lottery. These funds, along with legislatively mandated dollar-for-dollar matching non-state funds, provide support for hiring world-class researchers who serve as the endowed chairs of the SmartState Centers. The 51 Centers are grouped into six industry- focused Smart Clusters to facilitate engagement with business, students, potential faculty, and the public. Each Center includes one or more endowed chair, research infrastructure, technical staff, and sustainable funding sources. USC is home to 27 SmartState Centers, including 18 that are headquartered at USC's Columbia campus and eight within which USC actively collaborates working with other SC research institutions.

**USC Libraries.** Thomas Cooper, the University’s main library, is centrally located on the Columbia campus, and the School of Medicine library is a 15-minute drive from central campus. Both libraries maintain an extensive collection of health-related resources, including books,

journals, and indices. Access to online databases and full-text journals is available through the Thomas Cooper Library Web page.

**USC’s Division of Information Technology (DoIT)**, under the direction of the Vice President for Information Technology and Chief Information Officer, oversees centralized and distributed computing and telecommunications services for academic, research, and administrative use to meet the needs of USC faculty, staff, and students. DoIT provides the USC community with computing, voice, and data communications, networking, data security, video transport, information technology training, Web services, customer support, desktop and server support, installation and maintenance of IT infrastructure, policies and procedures assistance, PC labs, software licensing and distribution, IT planning, applications development and support, and operational systems. The Columbia campus is covered by wireless service. USC has a licensing agreement with Microsoft that includes 5TB of secure cloud storage space for every faculty and staff member on OneDrive. Microsoft has signed legal agreements with the University that hold them liable for the security and protection of data stored on OneDrive. OneDrive provides USC researchers with the capability to share data and results with external partners by emailing them a link to securely download the data.

**Healthcare Evaluation Systems and Technological Informatics Archive (HESTIA).**HESTIA is a centralized clinical data center used for storing, managing, and analyzing data collected from clinical trials, medical studies, patient records, and other healthcare related sources. It serves as a repository for diverse types of medical information, including patient demographics, medical history, laboratory results, imaging data, and treatment outcomes. HESTIA plays a crucial role in advancing medical research, improving patient care, and driving innovation by providing a centralized platform for managing and analyzing clinical data. The key functions of the core to (1) provide a secure environment for clinical data, (2) organize and manage data efficiently, ensuring data integrity, accuracy and compliance with HIPPA (Health Insurance Portability and Accountability Act), (3) integrate data from multiple sources that enables comprehensive analysis and insights across diverse populations and diseases, (4) provide tools and resources for analyzing the data including statistical analysis, machine learning and Artificial Intelligence algorithms, and data visualization techniques, (5) provide robust security to protect patient data, (6) ensure compliance with university, state, federal, and industry standards governing the collection, storage, and use of clinical data.

**The College of Nursing (CON)**

The College of Nursing, located in the urban setting of the University of South Carolina’s Columbia campus, is housed in the Williams-Brice building, a 50,000 square-foot, six-story facility that has been remodeled over time to maintain state-of-the-art technology to support the College’s mission. This campus houses our lower division BSN cohorts (freshman and sophomores), all graduate nursing programs, research centers, and planned Biobehavioral Research Suites (completed in Spring 2025). The College added a 52,000 Clinical Education campus in the summer of 2024, located five miles away near the Lexington Medical Center, and houses the clinical pre-licensure programs: junior and senior BSN cohorts and the Master’s Entry in Practice Program (MEPN) cohorts.

The CON is one of six health-related colleges including pharmacy, social work, public health, and two schools of medicine (Columbia and Greenville). The faculty has a philosophical commitment to collaborate with other health disciplines. This commitment has been fulfilled through interdisciplinary collaboration in health planning, grant writing, delivering services, and developing educational programs.  The CON offers both graduate and undergraduate programs. Graduate programs include two doctoral programs, the Doctor of Nursing Practice (DNP) degree and the Doctor of Philosophy in Nursing Science degree, and a Master of Science in Nursing (MSN) degree. The College offers a four-year undergraduate program that leads to the Bachelor of Science in Nursing (BSN) degree with an RN/BSN option.  A combined BSN/MSN Education Plan is available for both BSN and RN/BSN. Further, the CON offers the MEPN program for students with a bachelor’s degree in a different discipline. MEPN students graduate with a master’s degree and the preparation to take the NCLEX exam. The CON is known for academic excellence, with the CON NCLEX pass rate in the top 1% in the US, #1 ranking by US News & World Report for four years for best Online Master’s program, #22 best overall graduate programs by US News & World Report; and 95-100% pass rates for Nurse Practitioner certification examinations. In the past several years, the CON has generated $8 - $9 million/year in external grant funding, including NIH, PCORI, HRSA, and other federal, state, and foundations, and has been ranked #28 - #32 in NIH ranking among all Colleges of Nursing in the United States.

At USC College of Nursing, we value each student, staff, and faculty. We embrace inclusivity and a sense of belonging for all. We aim to cultivate and support the values of the College of Nursing: diversity, inclusivity, commitment, caring, integrity, respect, and professionalism. We believe that diversity, inclusive excellence, and equity are necessary to achieve academic and institutional excellence are necessary to achieve academic and institutional excellence.

**College of Nursing Research Resources**

The College of Nursing houses an Office of Research (OR) under the leadership of an Associate Dean for Research. Two Program Coordinators, and two biostatisticians, staff the OR. The two full-time doctoral-prepared statisticians and part-time graduate assistants augment the research capabilities of faculty and graduate students who are conducting research, preparing proposals, and/or developing manuscripts. The OR pre-award staff assists faculty with research proposal development and submission, including budget preparation. The OR also provides assistance to faculty with dissemination activities such as abstract, manuscript, and poster preparation and provides information on funding opportunities.

Faculty have access to retrieval systems containing national census and health data within the University computer system. A variety of packaged computer software (statistical, graphics, word processing, and spreadsheets) are available for faculty use. The campus also provides access to several supercomputer cores for major processing applications. REDCap is a self-service tool available for surveys as well as data acquisition, capture, and management. It is provided to all USC students, staff, and faculty. One of the college’s biostatisticians serves as a resource for assisting students, faculty, and staff with REDCap. REDCap allows for various survey scenarios, including conditional logic, data uploads, and advanced data management and formatting. All data are stored on a secure server and can be exported to formats useful to researchers for statistical analysis.

The College of Nursing Research and Scholarship Council is a standing committee within the faculty governance structure. The Council assumes a key role in carrying out the research mission of the College, including planning an annual conference.

**College of Nursing Business Office.** The CON at USC has a dedicated business office that among other responsibilities, includes pre-award budget review, post award budget tracking along with support for approved grant transaction procurement and salary management.  This dedicated business office is separate from the CON Office of Research with the mission of working with the Office of Research to provide strong internal controls over the pre and post award grant business process.

**CON Biobehavioral Research Suites**

The CON Biobehavioral Research Suites, a state-of-the-art, approximately 15,000 square-foot research space on the first floor of the CON, is expected to be completed in Spring 2025. This space will include: 1) An experimental laboratory (wet bench) space for CON faculty and their research teams to process and store research specimens and to perform experiments related to their research. 2) A clinical research and innovation space to perform clinical research studies. The Suites will also have dedicated parking for participant use.

Experimental laboratory (wet bench).Approximately 1,600 square feet of laboratory space will be located on the first floor of the CON. These laboratory facilities will include all equipment necessary for CON faculty and their research teams to perform biobehavioral research, including freezers (-20°C & -80°C), a refrigerator, water baths, a nanodrop UV spectrophotometer for measurements of RNA to examine purity via 260/280, weights and balances, microcentrifuges, and single and multi-channel pipettes. Equipment will also include a plate reader and a Quant studio real-time and digital PCR for faculty use.

In addition, there will be one chemical fume hood, bench-top autoclave, temperature-controlled rocker, dishwasher, ice machine, and a deionized water supply readily available in the laboratory. There will be a 180-square-foot dedicated clean room that will house one biosafety cabinet. This cabinet will include filtration and will be routinely certified on an annual basis. The lab will also include space for four (4) cubicles for student work, bench space, and an office for the Laboratory Director (TBH).

Clinical Research and Innovation Space

The clinical research and innovation space will house the newest technology and equipment for clinical studies. There are over 2000 square feet available to CON faculty. This includes a spacious patient intake area, a clinical exam suite with space and supplies for phlebotomy and specimen collection, and office space for record retention. The Space will host a community Collaboratory, spaces for physical activity and exercise research, two 20-seat areas for focus groups, interview rooms, conference rooms, and offices for visiting investigators. In addition, we plan to have a space dedicated to pediatric, adolescent, and young adult-focused research.

**The ACORN Center.** The **A**dvancing **C**hronic Care **O**utcomes through **R**esearch & i**N**novation (ACORN Center) is the University of South Carolina’s arm of the Clinical Effectiveness and Patient Safety SmartState Center, which has another arm at the Medical University of South Carolina. The SmartState Centers of Economic Excellence program was established by the state's General Assembly in 2002 with $180 million of non-tax revenue generated from the South Carolina Education Lottery. SmartState research centers (1) expand the state's knowledge base, (2) create public-private partnerships, (3) support startup firms, and (4) help retain highly talented workers to actively support the ongoing development of the knowledge economy. The ACORN Center focuses on innovative, multidisciplinary research to improve health and quality of life among people with chronic conditions. The Center is located within the College of Nursing on the USC Columbia campus and is co-directed by Dr. Cynthia Corbett, Professor, and SmartState Endowed Chair, , and Dr. Lorie Donelle, Emily Myrtle Smith Endowed Professor of Nursing The ACORN Center has grown from 7 core members in 2018 to 15 core and 6 associate members in 2024.The Center also supports several undergraduate and graduate research assistants. To generate interdisciplinary research to improve chronic care outcomes, the Center offers seed grant funding for feasibility and pilot studies. The ACORN Center has three offices, a part-time coordinator, and a part-time research assistant to assist faculty in their research. The coordinator and research assistant have desks in a shared research workspace on the 6th floor in the College of Nursing building, where most ACORN faculty offices are located. Locking file cabinets, hardware (e.g., digital recorders, iPads, and laptops), and software (e.g., Nvivo, Canva Pro) available for research.

**Cancer Survivorship Research Center (CSRC), College of Nursing.** The CSRC is housed within the College of Nursing (CON). It is located on the sixth floor of the College and is co-directed by Dr. Karen McDonnell and Dr. Bernardine Pinto, Inaugural Health Sciences Endowed Professor. The center's mission is to create, expand, and disseminate knowledge addressing survivorship across the cancer continuum. This mission is in keeping with the Center’s vision to conduct research that alleviates the impact of cancer in South Carolina, the nation, and the world. Seven faculty from multiple disciplines comprise the core of the cancer researchers in the CON. Created in 2011, the Center has been renovated to offer maximum support to nursing faculty focusing on cancer research.. Many oncology clinicians participate in the CSRC, and they have an especially strong research relationship with the South Carolina Oncology Associates Cancer Care Center. The CSRC engages both undergraduate and graduate students and recently began awarding dissemination travel grants to graduate students who are presenting at a conference.

**Perinatal, Pediatrics, & Family Research Center.** The Perinatal, Pediatrics, & Family Research Center (PPFRC) is directed by Dr. Robin Dail, Health Sciences Endowed Professor, at the CON. The Mission of PPFRC is to improve health and well-being for families in SC and beyond through research and innovation, leadership, and excellence through collaborative, interdisciplinary research by the members of the PPFRC. The main goals for the PPFRC are to 1) Decrease morbidity and mortality for women in SC and beyond, before and after childbirth, 2) Decrease morbidity and mortality for premature infants and children born in SC from birth to 2 years old, 3) Facilitate the health and wellbeing of families in SC during the child-bearing years with increased access to equitable, quality healthcare through research. The PPFRC personnel include faculty, staff, graduate, and undergraduate student research assistants (GRAs/UGRs), and people not affiliated with USC. The Core Faculty includes 10 researchers within the CON. The PPFRC sponsors faculty speakers nationwide to present their research each month to the PPFRC. These efforts are designed to expand group research knowledge and expertise and to foster research collaboration amongst group members.

**College of Nursing Information Technology Resources and Environment**

The College of Nursing maintains an IT staff of 4 full-time employees dedicated to serving the college community, which includes our research faculty. The nursing IT department has well established and integrated relationships with central IT as well as the greater university IT community. For this R25 proposal, CON IT will provide technology support for the proposed onsite and online sessions**.**

**Network Infrastructure**

The College of Nursing utilizes a robust network infrastructure and Microsoft Active Directory, which is provisioned and managed by the USC Division of Information Technology. All faculty members have direct access to this network on campus and access remotely through a Virtual Private Network (VPN). Duo Mobile multifactor authentication is also required to access the majority of online resources. Secure Wi-Fi is available throughout the Columbia Campus.

**Standard Technology**

Each faculty and staff member at the college is issued a laptop or desktop workstation no older than three years. Each FTE is assigned a network account that provides them access to the enterprise resources, which include 5TB of cloud storage space in OneDrive as well as access to the Microsoft Office 365 suite, Microsoft Teams, and Microsoft OneDrive. Other software is available to our faculty and staff based on need and request. Network printing is available throughout the College of Nursing building.

**Endpoint Security**

All computers are equipped with Microsoft Windows Defender and Spirion, which protect users from threats as well as find any sensitive information that may be stored on the workstations. Each workstation is also secured by Umbrella Roaming Client, which allows security and policy-based protection, including intelligent proxy, to be enforced no matter to which network you are connected. Workstations also have SecureConnector by Forescout installed, which helps protect sensitive information, secure access to resources, and demonstrate compliance through continuous monitoring and automated risk mitigation. Remote support is available through the installed Bomgar client. Bigfix client runs on each workstation to deliver updates, patches, and fixes to machines. Every Windows workstation has whole disk encryption enabled by default through the use of BitLocker technology.

**Online Meetings/Sessions & Video Capture Technologies.** The College of Nursing faculty and staff have several options available to them for the purposes of remote communications, meetings, and interviews.  Video conferencing technology affords the researcher the opportunity to interview study participants who they may otherwise not be able to due to cost or distance restrictions.  There are three technologies at the researcher’s disposal which offer different benefits.

* Microsoft Teams
	+ USC authenticated access to the online platform for management of conferencing sessions
	+ Shareable guest links to non-USC participants
	+ Online recording of meetings and storage behind authentication
	+ Gallery view for moderating/monitoring multiple video feeds at once
	+ Phone Dial in Options (Extra Charge)
	+ Integration with Microsoft Office 365/Teams allows for creating channels that can be private and allow for user
	+ Enhanced collaboration through use of the Teams platform for messaging, file sharing as well as online forms
	+ Live automatic captioning
* Blackboard Collaborate Ultra (mostly geared towards
	+ USC authenticated access to the online platform for management of conferencing sessions
	+ Shareable guest links to non-USC participants
	+ Online recording of meetings and storage behind authentication
	+ Breakout rooms
	+ Phone Dial in Options
* Zoom
	+ Shareable guest links to non-USC participants
	+ Online recording of meetings and storage behind authentication
	+ Breakout rooms
	+ Phone Dial in Options
	+ Gallery view for moderating/monitoring multiple video feeds at once
	+ A key advantage of Zoom is its ability to securely record locally to a desktop computer without recourse to third-party software.
	+ Allows for users to type captions as well as a third-party integration option
	+ Provides a separate audio file from the main video file

**College of Nursing Data Storage**

Research faculty have access to store regular data on a Windows server file share that is centrally managed and backed up at the university enterprise level. If data has PHI, they must utilize a secure/HIPAA-eligible file storage environment, such as FSx, provided by Amazon Web Services (AWS). The University of South Carolina Division of IT has contracted with Amazon Web Services to provide academic units with a secure HIPAA-eligible file storage environment. The College of Nursing utilizes this DOIT/AWS partnered service to store our research data. In addition to the HIPAA eligible service from AWS, the University of South Carolina has implemented additional measures to meet HIPAA compliance. Each workstation that connects to the AWS FSx file share has whole disk encryption enabled through BitLocker, updated Windows 10 installed as well as the standard security and endpoint management software on all USC workstations. A workstation can only connect to our AWS FSx share from within a locked-down subnet in the College of Nursing or through a secure Virtual Desktop. The College of Nursing Technology Center maintains a robust inventory of workstations and users who have access to the secure file share. Users are also required to participate in a HIPAA training session as well as attest to their proficiency.

**College of Nursing Academic Resources**

The College of Nursing has a Local Area Network utilizing Microsoft Active Directory as the directory service.  All faculty members have direct access to this network on campus and access remotely through a Virtual Private Network (VPN).  Each faculty and staff member at the college is issued a laptop no older than three years with a docking station.  Administrative database support is offered for tracking student progress and institutional resources.  In addition to the college intranet, each faculty member has access to the campus network thereby providing access to the Internet. The college uses Microsoft Office 365 and Adobe Acrobat D for its word processing needs.  Microsoft Outlook is the college’s email system and provides email, scheduling, task lists for the faculty remotely or at the college.  The college also has a central data repository in addition to the University mainframe data storage.

The university also provides all faculty, staff, and students with a connection to Microsoft OneDrive for 5 Terabytes of cloud storage each.  There is a Business Associates Agreement in place to hold Microsoft liable for data loss or some breech incidents of data.

All computers are equipped with Symantec Endpoint Protection, FireEye HD incident response software, and Identify Finder software for antimalware and security of data.  Data access is regularly audited, and logs are reviewed for access.

**Online Education & Video Capture Technologies**

The College of Nursing faculty and staff have several options available to them for the purposes of remote communications, meetings, and interviews: Microsoft Teams and Zoom (see College of Nursing Information Technology Resources and Environment for additional details).

The College of Nursing has four state-of-the-art distance learning/conference-enabled, multi-purpose classrooms (seating a total of 700 students) on the two campuses, along with an 80-seat academic collaboratory and a 200-seat auditorium. Additionally, ten video conferencing rooms, set up for a variety of web conferencing protocols, are available on the two campuses. This technology-enabled space affords the ability to offer a wide range of video and data collaboration functions. Web collaboration is possible using Adobe Connect and GoToMeeting, which can provide unlimited on-demand web meetings. Faculty and staff can create virtual conference rooms from any web-connected location. The College utilizes Blackboard as its Learning Management System. The combination of these items provides for an up-to-date teaching-learning environment.

## **College of Nursing Clinical Resources.**

## The Greater Columbia area includes six major hospitals and several state and federal healthcare institutions that provide various teaching and research settings for graduate and undergraduate students. Currently, the College of Nursing has contracts with approximately 500 clinical placement sites in which students may have practicum experiences. Among these are hospitals within a 60-mile radius of the Columbia Metropolitan area, all the mental health facilities of the South Carolina Department of Mental Health, gerontological health care settings, all facilities of the South Carolina Department of Health and Environmental Control, several clinics, and inpatient care facilities of the South Carolina Department of Corrections, urban and rural community health-related agencies, and several physician offices. Area hospitals, including – PRISMA Health Alliance, WJB Dorn Veterans Administration Medical Center, William S. Hall Psychiatric Institute, Medical University of South Carolina Hospitals, and Moncrief Army Hospital – are affiliated with the University of South Carolina School of Medicine and are the major sites for nursing and medical student clinical teaching.

**Practice.** The Office of Practice Innovation, Partnerships and Policy, , guides the development of community partnerships to create opportunities for faculty to practice through the roles of clinician, educator, researcher, consultant, and administrator. The College of Nursing has cultivated interprofessional academic and practice-based partnerships that provide faculty opportunities to serve as model teaching sites for undergraduate and graduate nursing students.