

RESOURCES

Center for Health, Intervention, and Prevention (CHIP)

University of Connecticut

Overview. University of Connecticut's Center for Health, Intervention, and Prevention (CHIP) is a multidisciplinary research center dedicated to the study of the dynamics of health risk behavior and the processes of health behavior change in individuals and targeted at-risk populations. A number of CHIP researchers design, implement, and evaluate theory-based, but highly practical interventions to change unhealthy behaviors. CHIP currently has a portfolio of approximately \$50.6 million in active external funding, across all years, devoted to health behavior research. More than 250 CHIP affiliated faculty members, at the University of Connecticut and other institutions, perform such research.

Resources. To foster the development and dissemination of new knowledge and theory-based state-of-the-art health behavior change interventions, the Center provides to its Principal Investigators (PIs), professional research staff, and graduate students: access to exceptional facilities; cutting-edge information technology resources; assistance identifying funding opportunities and assembling multidisciplinary teams to respond to proposals; consultation in statistics and methodology; expert pre-submission reviews of external grant applications; opportunities to compete for internal funding to support pilot projects, grant writing, and other scholarly activities; consultation in dissemination and implementation of proven interventions; exceptional pre- and post-award grants management services; a bi-weekly lecture series that brings to CHIP nationally- and internationally-renowned health researchers from a variety of disciplines; and more.

Supporting its multidisciplinary research, CHIP's 15,000-square-foot facility houses more than 55 faculty, post-docs, research associates, and graduate students from a wide variety of disciplines including Allied Health, Anthropology, Communication Science, Geography, Human Development and Family Studies, Kinesiology, Nursing, Nutritional Sciences, Psychology, Sociology, Statistics, and related fields. CHIP's ability to support so many health researchers and their teams in a single building greatly facilitates interdisciplinary collaboration.

CHIP's dedicated research space in the Ryan Building in Storrs includes a focus group room, a lab and observation room, a video control room, 10 small interview rooms, and 3 conference rooms that can be outfitted for small group research. Advancing CHIP's mission to promote collaboration and dissemination of its research, its facility in Storrs also includes a large, long-distance learning media classroom that seats up to 60 people for the CHIP Lecture Series; supports real-time webcasting to computers worldwide; and can be reserved for large research projects. In addition, in Storrs CHIP provides conference spaces for research meetings and presentations that are outfitted with advanced multimedia equipment and, because CHIP's extramural funding is increasingly international in scope, CHIP provides international video- and phone conferencing capability, using Skype, Microsoft Lync 2013 (video and audio), and site-to-site audio/video conferencing equipment. Both Skype and Lync are accessible to CHIP's collaborators worldwide, as these technologies require access only to a computer and the Internet and do not require costly, specialized equipment. Videoconferencing is very time- and cost-effective as it minimizes travel and permits rapid and effective communication and decision-making among individuals at multiple sites simultaneously. Equipment that CHIP makes available for meetings and presentations includes LED projectors, Polycom Soundstation pods, Skype Speakerphones (USB), high-definition digital camcorders, and more. This equipment can also be used to facilitate the dissemination of breaking research findings and the provision of training in interventions developed at CHIP to individuals at remote international sites, such as CHIP's clinical partners in Africa.

In addition to our facilities in Storrs, as of January 2015, CHIP will have research space at 1 Constitution Plaza in Hartford, which will be conveniently located for access by minority, low income, and urban research participants who can attend research appointments using public transportation.

CHIP has a collaborative arrangement with UConn Digital Media Center which provides design expertise to researchers interested in developing and using interactive technologies to expand their research capabilities. Interactive media applications available include animations, web-based 3D interactive graphics, and Virtual Reality (VR) environments and simulations. The Digital Media Center can develop research stimuli, which can test health behavior change hypotheses in immersive virtual settings, perform health behavior change

interventions, and collect intervention outcome data, and the Digital Media Center also does work on phone app development. UITS at UConn also provides services for the development of apps.

CHIP also has a small onsite library that provides convenient access to CHIP's health behavior resources and electronic research media. Additionally, CHIP researchers, students, and staff members have access to the University of Connecticut Library and interlibrary loan.

To enable CHIP researchers to work more efficiently and cost-effectively, CHIP provides its PIs with dedicated support from 10 onsite professional staff members, who have expertise in Information Technology, pre- and post-award financial management, human resources, communications and information dissemination, and a range of other administrative services.

Information Technology Support. Consistent with its mission, CHIP offers advanced information technology resources to support the development of theory-based knowledge and cutting-edge, technology-driven health behavior change interventions, including:

1. Virtual machine services, which allow researchers to host server-based interventions, have access to centralized data collection services, and explore new innovations in information technology to supplement their research objectives.
2. Virtual PC Services, which allow researchers and their computers to have easy access to CHIP network resources from virtually anywhere in the world;
3. Highly-dynamic web-based survey technology;
4. Access to Audio-Computer Assisted Interviewing (ACASI) data collection methodologies and technical support;
5. A variety of statistical software packages.

CHIP's in-house IT consultants are responsible for maintaining and repairing computer equipment, administering the CHIP datacenter, and directing all IT-driven research initiatives. CHIP's IT consultants are available onsite to provide researchers with immediate technical assistance as needed, design information systems, translate health behavior change research objectives into IT system requirements, provide project management support, purchase IT equipment, implement data protection and security, and review IT aspects of grant applications for feasibility and for budgetary purposes.

Significant care is taken to ensure the safety and security of sensitive data within CHIP's computer network. All servers and workstations are behind a network firewall, which restricts access to the computers from outside of the CHIP network. Server and workstation machines are protected using Microsoft Forefront Endpoint Protection (MFEP) and Windows Server Update Services (WSUS). CHIP research data is protected using a multi-layered approach. Multiple short-term disk-based storage solutions are in place. One is located in our data center and the other is housed offsite in a separate building on campus. This provides safe, secure and fast recovery of data. In addition to that storage is our Dell Tape library for longer term storage and archiving. Locally, we have a tertiary storage array for creating images of servers and data. The final layer of protection is the snapshot system that is built into our Equilogic Storage Area Network (SAN). CHIP's recent expansion of server virtualization technologies has also reduced the costs of IT equipment, co-location, cooling, and energy. At the workstation level, we have implemented network-wide Bitlocker to secure hard drives and prevent data theft.

CHIP's website effectively links researchers, students, and the community to CHIP resources and events; provides a venue for affiliates to disseminate their research and intervention materials; and extends CHIP's international reach. Included on the CHIP website is a Digital Library that provides access to the CHIP Lecture Series and scholarship tools developed at CHIP.