

## **Institute for Collaboration in Health, Intervention, and Prevention (InCHIP), University of Connecticut**

**Overview.** InCHIP 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 InCHIP researchers design, implement, and evaluate theory-based, but highly practical interventions to change unhealthy behaviors. InCHIP currently has a portfolio of approximately \$50.6 million in active external funding, across all years, devoted to health behavior research. More than 250 InCHIP affiliated faculty members, at the UConn 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 Institute provides to its 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 InCHIP nationally- and internationally-renowned health researchers from a variety of disciplines; and more.

Supporting its multidisciplinary research, InCHIP'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. InCHIP's ability to support so many health researchers and their teams in a single building greatly facilitates interdisciplinary collaboration.

InCHIP's dedicated research space in the Ryan Building in Storrs, CT, 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 InCHIP'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 InCHIP Lecture Series; supports real-time webcasting to computers worldwide; and can be reserved for large research projects. In addition, in Storrs InCHIP provides conference spaces for research meetings and presentations that are outfitted with advanced multimedia equipment and, because InCHIP's extramural funding is increasingly international in scope, InCHIP 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 InCHIP'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 InCHIP 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 InCHIP to individuals at remote international sites, such as InCHIP's clinical partners in Africa.

In addition to our facilities in Storrs, InCHIP has research space at 1 Constitution Plaza in Hartford, CT, located a few miles from Hartford Hospital which will be conveniently located for access by minority, low income, and urban research participants who can attend research appointments using public transportation.

InCHIP 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.

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

To enable InCHIP researchers to work more efficiently and cost-effectively, InCHIP 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, InCHIP 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 InCHIP 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.

InCHIP's in-house IT consultants are responsible for maintaining and repairing computer equipment, administering the InCHIP datacenter, and directing all IT-driven research initiatives. InCHIP'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 InCHIP'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). InCHIP 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). InCHIP'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.

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