

# Previously Funded Proposals CHER Pilot Award



**Institute for Clinical and  
Translational Research**  
UNIVERSITY OF WISCONSIN-MADISON

## Collaborative Health Equity Research Pilot Awardees 2023-2024

Of Note: This year's CHER Pilot Award consists of 2 tracks, which combine the previous CHER Pilot Award (for Assistant Professors and their faculty mentors) and the previous Advancing Health Equity and Diversity (AHEAD) Pilot Award (for Postdoctoral Scholars and their faculty mentors). Because the 2 awards are now combined, this document lists recent awardees of those previously separate awards.

Year	Principal Investigator/s	PI/Scholar Affiliation	Title
2024 CHER	PI: Jill Denson Mentor: Pajarita Charles	SMPH Department of Pediatrics	Where do the Babies Go? Infants of Incarcerated Mothers and their Caregivers
2024 CHER	PI: Krisjon Olson Mentor: Catherine Allen	SMPH Department of Pediatrics	Feasibility and Acceptability of Congenital Heart Disease Survivor Transition Readiness
2024 AHEAD	Scholar: Lupe Aguilera Mentor: Kristen Sharp	SMPH Dept of Obstetrics and Gynecology	Multigenerational Medical Record Data Linkages for an Analysis of the Healthcare Use and Health Outcomes of Siblings of Stillborn Babies – A Comparative Design, Wisconsin and Utah
2024 AHEAD	Scholar: Trisha Chanda Mentor: Lonnie Berger	College of Letters and Science, Institute for Research on Poverty	Healthcare Coverage in Nontraditional Families in Wisconsin: An Assessment of Needs and Challenges
2024 AHEAD	Scholar: Lauren McLester-Davis Mentor: Carey Gleason	SMPH Department of Medicine	Tribal Institutional Review Boards: A Model for Indigenous Health Equity
2024 AHEAD	Scholar: Colette Nickodem Co-Mentor: Jessica Hite Co-Mentor: Nasia Safdar	School of Veterinary Medicine Department of Pathobiological Sciences	Linking On-Farm Occupational Exposures to Shifts in Antimicrobial Resistance and the Microbiome of Underserved Farmworkers
2023 CHER	PI: Daniel Grupe Mentor: Mike Koenigs	College of Letters and Science Center for Healthy Minds	Community-engaged Adaptation of a Well-being Intervention to Support Successful Reentry Following Incarceration
2023 AHEAD	Scholar: Asma Ali Mentor: Betty Chewing	SMPH, Department of Family Medicine and Community Health	Developing the RAMADAN Instrument: Recognizing Access and Management Associated Diabetes Adversities in Nationwide Muslims in the US (RAMADAN)
2023 AHEAD	Scholar: David Mallinson Mentor: Lonnie Berger	SMPH, Department of Family Medicine and Community Health	Racial and Geographic Disparities of Prenatal Care Coordination in Wisconsin
2023 AHEAD	Scholar: Clayton Marcinak Co-Mentor: Syed Nabeel Zafar Co-Mentor: Noelle LoConte	SMPH Department of Surgery	Identifying Mechanisms Underlying Neighborhood Disadvantage-Associated Disparities in Outcomes After Complex Cancer Surgery

### UW ICTR Partners

School of Medicine & Public Health • School of Nursing • School of Pharmacy • School of Veterinary Medicine • School of Education • College of Engineering • Marshfield Clinic

2112 Health Sciences Learning Center • 750 Highland Avenue • Madison, Wisconsin 53705 • 608-263-1018 • info@ictr.wisc.edu



## 2024 CHER Awards

### ***Where Do the Babies Go? Infants of Incarcerated Mothers and Their Caregivers***

PI: **Jill Denson, PhD** – SMPH, Department of Pediatrics

Mentor: **Pajarita Charles, PhD** – College of Letters and Science, Department of Social Work

**Collaborators:** UW Prevention Research Center, JustDane, FREE, Foundation for Black Women's Wellness, Regal Aspire, Essentially Empowered, Project Respect

**Summary:** The incarceration rate of US women has grown faster than that of men for several decades. About 80% of these women are of childbearing age. A large proportion of women are incarcerated for non-violent drug-related and property offenses, often linked to substance use disorders. Studies have found that babies born to mothers in prisons are more likely to be preterm, be of low birthweight, and be admitted to the hospital. Early separation from the mother can disrupt an infant's early biological rhythms, dyadic regulatory processes and can lead to inconsolable crying, tantrum behavior, eating and sleeping difficulties, clinging behavior, withdrawal, and irritability. This in turn can create challenges for caregivers of the infant. In addition to these immediate, short-term effects, adverse childhood experiences, preterm birth, and low birthweight have been linked to negative long-term development, health and other outcomes across the life course. There is a dearth of literature on who cares for the babies of incarcerated mothers after they are separated from their mother and little is known about the characteristics of caregiver arrangements or the transitions that infants, mothers, and caregivers experience. While this study is largely exploratory, we hypothesize that mothers, babies and caregivers experience trauma and significant challenges related to the birth, separation, and placement process of newborns delivered during maternal incarceration.

This community-engaged project will use semi-structured interviews of formerly incarcerated mothers and caregivers of newborn infants born to incarcerated mothers, to examine the processes used to place newborn infants with a caregiver, along with the incarcerated mother's ability to determine caregiver arrangements and to stay involved with their baby's ongoing care.

### ***Feasibility and Acceptability of Congenital Heart Disease Survivor Transition Readiness***

PI: **Krisjon Olson, PhD** – SMPH, Department of Pediatrics

Mentor: **Catherine Allen, MD** – SMPH, Department of Pediatrics

**Collaborators:** Conquering Congenital Heart Disease (CHD) Wisconsin Chapter, Adult Congenital Heart Association (ACHA), UW Waisman Center – Youth Health Transition Initiative (YHTI), ACHD STRONG Survivorship Advisory Board, ACHD STRONG Provider Advisory Board

**Summary:** While people are now surviving into adulthood with congenital heart disease (CHD), complications from procedures and surgeries undertaken in infancy and childhood are at a 25-year high. More than 10% of costs in the American healthcare system can be attributed to CHD, and half of patients face disabilities in their lifetime. Even worse, patients with disabilities face a greater risk of being lost in the transition from pediatric to adult care, a health disparity identified by our team and others. We urgently need interventions to address escalating costs, structural disparities, and reduce the 63% of patients lost in the transition from pediatric to adult care.

Transition tools are proven to bridge the pediatric-adult divide in patients with medical complexity by

#### UW ICTR Partners

School of Medicine & Public Health • School of Nursing • School of Pharmacy • School of Veterinary Medicine • School of Education • College of Engineering • Marshfield Clinic

# Previously Funded Proposals CHER Pilot Award



Institute for Clinical and  
Translational Research  
UNIVERSITY OF WISCONSIN-MADISON

improving care integration and coordination. However commonly used tools have not been adapted for use in patients with CHD or disabilities. Patients told us they find themselves in a disability-health paradox: aging into a healthcare system not designed for them. The proposed research tests high-quality transition education through a supported decision-making paradigm endorsed by patients and families. The tool flags a significant obstacle for adolescent patients identified in our prior research: a narrowing social network as they get older. Instead of traditional confidence measures, our tool assesses the intensity of patient support needs. Patients and their families can also prioritize their own areas of interest to generate action toward transition between ages 12-26.

## 2024 AHEAD Awards

### ***Multigenerational Medical Record Data Linkages for an Analysis of the Healthcare Use and Health Outcomes of Siblings of Stillborn Babies – A Comparative Design, Wisconsin and Utah***

Scholar: **Lupe Aguilera, PhD** – SMPH, Department of Obstetrics and Gynecology

Mentor: **Kristen Sharp, MD** – SMPH, Department of Obstetrics and Gynecology

**Collaborators:** Hope After Loss Clinic, Stillbirth Advocacy Working Group-USA, Wisconsin Stillbirth Service Program, Utah Population Database

**Summary:** We intend to create cross-state comparable datasets of mother-child linked Electronic Medical Records to analyze the childhood health outcomes of siblings of stillborn babies by leveraging two pre-existing datasets-the Wisconsin Stillbirth Service Program (WiSSP) data and the Utah Population Database (UPDB). By some estimates, 52-70% of stillbirth parents have a pregnancy within 12-months after their loss and 57% of stillbirths are second or higher births. Despite this evidence suggestive of family-level effects of stillbirth (e.g., parents and siblings of stillborn babies), extant research narrowly focuses on birth outcomes in subsequent pregnancies, leaving out children born before a fetal loss. Well-documented parental long-term consequences of stillbirth, alongside recent findings of greater odds of stillbirth among first-, second-, and third- degree relatives of stillbirth parents point to a major gap in our understanding of the life course health outcomes of children born before or after a stillborn sibling. One major exception in longer-term childhood health outcomes among siblings of stillborn babies includes evidence on an association with childhood leukemia among next-born siblings; this suggests siblings may be affected by other diseases. The parenting and health dynamics in families that have experienced the silent loss or invisible death of their stillborn baby may present unique circumstances. Parents going through the bereavement process may benefit from existing parenting support programs, such as home visiting. Given that stillbirth occurs more commonly among those with low socioeconomic status, some racial/ethnic groups, and across nativity subgroups, questions pertaining to disparities in children's health are quite pressing. Expanding upon the WiSSP data with the inclusion of mother-child medical records and matched case controls will present a unique basis for understanding and addressing any unmet needs of Wisconsin families following the devastating experience of a loss. Supplementing our analyses with the rich UPDB data allows us to cross-reference our findings and control for essential state-level context with side-by-side analyses. Ultimately, our primary research objective is to contribute context-specific evidence on the long-term health outcomes (leukemia) and healthcare use of siblings of stillborn babies throughout childhood, and when possible, adolescence and adulthood.

#### UW ICTR Partners

School of Medicine & Public Health • School of Nursing • School of Pharmacy • School of Veterinary Medicine • School of Education • College of Engineering • Marshfield Clinic

2112 Health Sciences Learning Center • 750 Highland Avenue • Madison, Wisconsin 53705 • 608-263-1018 • info@ictr.wisc.edu

# Previously Funded Proposals CHER Pilot Award



Institute for Clinical and  
Translational Research  
UNIVERSITY OF WISCONSIN-MADISON

## ***Healthcare Coverage in Nontraditional Families in Wisconsin: An Assessment of Needs and Challenges***

Scholar: **Trisha Chanda, PhD** – College of Letters and Science, Institute for Research on Poverty  
Mentor: **Lonnie Berger, PhD** – College of Letters and Science, School of Social Work

**Collaborators:** UW Extension – Covering Wisconsin, UW Survey Center, Wisconsin Administrative Data Core

**Summary:** Health insurance is essential in ensuring both financial and physical wellbeing of Americans, but the extent and adequacy of healthcare coverage varies greatly by race, ethnicity, and income. In Wisconsin, a state with higher rates of insured than the national average, poor and near-poor households are much more likely to be uninsured at least part of the year than non-poor households (5.7% and 6.1% vs 2.8%, respectively), and Black and Hispanic households have lower rates of coverage than their White counterparts. Further, employment-based private health insurance remains the most common type of healthcare coverage both in Wisconsin and the country, making family structures and life events a potentially important determinant of health insurance coverage, posing challenges for groups among whom nontraditional forms of family are more common. We have little empirical evidence, however, on how family structure is associated with healthcare coverage, which could at least partly be attributed to the complexities of linking large-scale insurance coverage data to individual family structures and history. The purpose of this project is to study healthcare coverage in economically vulnerable families with nontraditional household structures by combining data from several unique sources, such as primary surveys and administrative records on earnings and program participation. As part of the study, this grant proposes to field a survey instrument which will collect data on health insurance coverage and its association with healthcare consumption and financial wellbeing among low income, racially diverse, nontraditional families in Milwaukee County, Wisconsin.

## ***Tribal Institutional Review Boards: A Model for Indigenous Health Equity***

Scholar: **Lauren McLester-Davis, PhD** – SMPH, Department of Medicine  
Mentor: **Carey Gleason, PhD** – SMPH, Department of Medicine

**Collaborators:** Oneida Nation, Earthjustice, University of Minnesota – Duluth, UW Green Bay, Iowa State University, Cornell University, Like the Tree Consulting – American Indian Child Resource Center

**Summary:** Tribal Institutional Review Boards (IRBs) oversee research on Tribal Nation land and with the Tribal Nation's citizens, including non-human relatives. Tribal IRBs were created by individual Tribal Nations to address gaps in mainstream ethical practices of research occurring with IPs. Non-Tribal IRBs have been historically unsuccessful in preventing research-related harms to Tribal Nations, which have aided in minimizing participation of IPs in research and perpetuating health disparities for IPs. Of 574 federally recognized Tribal Nations in the United States, there are only 15 IRBs officially run by Tribal entities. To aid in the creation of more Tribal IRBs and ensure research is directed, controlled, and utilized by Tribal Nations, the Collaborative Research Center for American Indian Health (CRCAIH) created a Tribal IRB "Toolkit" for starting a Tribal IRB. Enrolled citizens of the Oneida Nation of Wisconsin have been utilizing the CRCAIH "Toolkit" since the fall of 2022 to create an Oneida Tribal IRB.

### UW ICTR Partners

School of Medicine & Public Health • School of Nursing • School of Pharmacy • School of Veterinary Medicine • School of Education • College of Engineering • Marshfield Clinic

2112 Health Sciences Learning Center • 750 Highland Avenue • Madison, Wisconsin 53705 • 608-263-1018 • info@ictr.wisc.edu



We propose to use AHEAD Pilot Award funding to catalyze Oneida's Tribal IRB creation efforts. Our overarching hypothesis is that creation of an Oneida Tribal IRB will ensure research sovereignty and equitable partnerships between the Oneida Nation and health equity researchers. Our specific objectives for this pilot project are to aid in the creation of the Oneida Nation Tribal IRB and conduct community gatherings based in TBPR.

## ***Linking On-Farm Occupational Exposures to Shifts in Antimicrobial Resistance and the Microbiome of Underserved Farmworkers***

Scholar: **Colette Nickodem, MPH, PhD** – School of Veterinary Medicine, Department of Pathobiological Sciences

Co-Mentor: **Jessica Hite, PhD** – School of Veterinary Medicine, Department of Pathobiological Sciences

Co-Mentor: **Nasia Safdar, PhD** – SMPH, Department of Medicine

**Collaborators:** UW Survey of the Health of Wisconsin, Marshfield Clinic Research Institute, UW Extension

**Summary:** Farm work is one of the most physically demanding occupations with safety risks from equipment injuries and health risks from chemical and biological exposures. Immigrants make up 70% of the agricultural workforce and are disproportionately burdened with occupational health complications. Exposures to antimicrobials and biocides, that are commonly used in crop and livestock production, contribute to nuances in the human microbiome. These chemicals and zoonotic pathogens can be transferred via direct contact or on airborne particles to the oral or nasal cavity, leading to the gut. The human gut is responsible for the biotransformation of xenobiotics, including antibiotics and environmental pollutants. These on-farm exposures result in a significant reduction in microbial diversity causing a shift towards opportunistic and antimicrobial resistant (AMR) pathogens. Although the downstream impacts from farm-related microbiome changes are not well characterized, they likely disproportionately affect minority populations. These exposures are compounded by substandard living conditions, low wages, and a lack of healthcare access, common in rural and migrant populations. Research identifying farm-related microbiome change are needed to identify protective interventions to reduce health inequalities faced by vulnerable farm worker populations. We will investigate links between on-farm exposures and AMR pathogenic infections in underserved farm workers using a population-based survey (the Survey of Health of Wisconsin, SHOW) and biospecimens from an ancillary microbiome study (Winning the War on Antibiotic Resistance, WARRIOR). We hypothesize that increased exposure to antimicrobials biocides, and livestock will significantly reduce microbial diversity, shifting the microbiome toward opportunistic pathogens. These occupational and environmental exposures will be compounded by at-home exposures, related to housing characteristics and socio-economic factors, resulting in higher rates of GI infections and other health complications in foreign-born agricultural workers compared with US-born workers.

To investigate these hypotheses, we will obtain participant stool and nasal swab samples from the WARRIOR project for whole metagenomic sequencing at the UW-Biotech Center. Whole metagenomic data will be combined with SHOW participant data (demographics, social and built environment, occupation, chemical and animal exposure) to build structural equation models for identification of practices associated with increased risk of exposure on farms. We will then collaborate with the National Farm Medicine Center and UW-extension to engage with farm workers to develop and evaluate on-farm interventions for reducing chemical and pathogen exposures.

### UW ICTR Partners

School of Medicine & Public Health • School of Nursing • School of Pharmacy • School of Veterinary Medicine • School of Education • College of Engineering • Marshfield Clinic





## 2023 CHER Awards

### ***Community-engaged Adaptation of a Well-being Intervention to Support Successful Reentry Following Incarceration***

PI: **Daniel Grupe, PhD** – College of Letters and Science, Center for Healthy Minds  
Mentor: **Mike Koenigs, PhD** – SMPH, Department of Psychiatry

**Collaborators:** Nehemiah Center for Urban Leadership Development, Just Mindfulness, UW South Madison Partnership, Wisconsin Network for Research Support (WINRS), Healthy Minds Innovations

**Summary:** An estimated 50% of incarcerated individuals have a current or past mental health diagnosis, and experiences of trauma are nearly universal. Mental health inequities among justice-involved individuals persist following reentry into the community due to a lack of effective, culturally relevant, and accessible mental health care and support. Individuals with untreated mental health problems encounter greater barriers to successful reintegration, such as maintaining stable housing and employment, and subsequently are more likely to be reincarcerated. Mindfulness-based interventions provide an innovative, strength-based approach to supporting mental health and well-being during reentry, standing in contrast to deficit narratives that dominate the reentry landscape. To date, however, there has been no empirical research on the adaptation and evaluation of evidence-based mindfulness interventions for the reentry context and population.

We hypothesize that an adapted version of the Healthy Minds Program (HMP), an evidence-based intervention developed by scientists at the UW-Madison Center for Healthy Minds, will have high acceptability and feasibility for the reentry period under specific conditions: 1) Adapted in a trauma-sensitive way in collaboration with formerly incarcerated individuals; 2) Offered in a group setting to leverage peer support, along with a customized meditation app to support practice outside of class; 3) Co-facilitated by an expert mindfulness teacher and an individual with lived experiences of incarceration and successful reentry.

This project represents the first adaptation and preliminary evaluation of an evidence-based mindfulness intervention adapted not only for, but with formerly incarcerated individuals. The authentic and equitable engagement of community partners, particularly those with lived experiences of incarceration, provides a necessary foundation for a strength-based approach to support mental health and well-being during reentry.

## 2023 AHEAD Awards

### ***Developing the RAMADAN Instrument: Recognizing Access and Management Associated Diabetes Adversities in Nationwide Muslims in the US (RAMADAN)***

Scholar: **Asma Ali, PhD** – SMPH, Department of Family Medicine and Community Health  
Mentor: **Betty Chewing, PhD** – School of Pharmacy

**Collaborators:** Muslim Community and Health Center (MCHC)

**Summary:** Over 3.45 million Muslims live in the US, and their number is expected to double by 2050. Muslims face healthcare disparities and come from diverse racial, ethnic backgrounds. Of American Muslims, about 28% are Asian, 20% are Black, and 58% are immigrants. American

#### UW ICTR Partners

School of Medicine & Public Health • School of Nursing • School of Pharmacy • School of Veterinary Medicine • School of Education • College of Engineering • Marshfield Clinic

# Previously Funded Proposals CCOR Pilot Award



Institute for Clinical and  
Translational Research  
UNIVERSITY OF WISCONSIN-MADISON

Muslims are more likely to have incomes under \$30,000 compared to other Americans. One important pillar of Islam is fasting for a month (Ramadan) every year. From dawn to sunset, Muslims do not take anything by mouth including medications. Previous research in Muslim majority countries showed that 79% of Muslims with type 2 diabetes fast for at least 15 days during Ramadan. However, less than 50% adjust their medication regimen, and severe hypoglycemic events were significantly more frequent during Ramadan than other months. Preliminary findings from our research with US Muslims with type 2 diabetes, showed that participants are not receiving support from clinicians about safe fasting, although they explicitly communicated preferences of fasting. Participants self-adjusted medication regimens as clinicians dismissed their requests. Participants reported suffering diabetes complications while fasting because they did not know the right way to take medications during Ramadan. Some feared an overdose given the short period between breaking and starting the fast. Fasting and diabetes management may be more problematic in the US. Some participants avoided discussing fasting and diabetes management with clinicians as they assume clinicians will not understand their preferences. Furthermore, some participants tend to stop healthy habits like exercising during Ramadan. Clinicians lack patient-centered approaches to assist their quality care for Muslim patients with diabetes choosing to fast during Ramadan. Tackling this problem is an essential step toward improving diabetes health outcomes, quality of life, and health equity in American Muslims. Ignoring this issue will only increase health disparities and lead to burdening the healthcare system with costs of uncontrolled diabetes and complications.

We aim to develop a patient-centered survey instrument to help clinicians identify barriers to diabetes self-management during Ramadan. This research will build on collaborations with a community organization and findings of an ongoing current project. This research will improve understanding the patient's perspective of challenges to manage diabetes. We will also identify best timing, modalities, and settings for use of the assessment tool.

## ***Racial and Geographic Disparities of Prenatal Care Coordination in Wisconsin***

Scholar: **David Mallinson, PhD** – SMPH, Department of Family Medicine and Community Health  
Mentor: **Lonnie Berger, PhD** – College of Letters and Science, School of Social Work

**Collaborators:** Wisconsin Administrative Data Core – Big Data for Little Kids, Wisconsin Department of Health Services

**Summary:** Wisconsin is home to extreme racial and geographic disparities in adverse birth outcomes. Relative to non-Hispanic white infants, non-Hispanic Black infants are twice as likely to experience preterm birth or low birth weight. Additionally, the rates of preterm birth and low birth weight are disproportionately greater in Wisconsin's most urban and most rural counties relative to its more moderately populated regions.

One intervention that is designed to improve birth outcomes is Prenatal Care Coordination (PNCC), a Wisconsin Medicaid program that directs pregnant beneficiaries to tailored medical, educational, and social services. Enrollment eligibility is intentionally broad so that it can reach populations that are disproportionately at risk of adverse birth outcomes, and prior research indicates that PNCC reduces the risks of preterm birth and low birth weight. However, it is uncertain whether program outreach and impact varies by race and place. The purpose of this project is to investigate racial/ethnic and geographic variation in the receipt and impact of PNCC.

### UW ICTR Partners

School of Medicine & Public Health • School of Nursing • School of Pharmacy • School of Veterinary Medicine • School of Education • College of Engineering • Marshfield Clinic

2112 Health Sciences Learning Center • 750 Highland Avenue • Madison, Wisconsin 53705 • 608-263-1018 • info@ictr.wisc.edu

# Previously Funded Proposals CCOR Pilot Award



Institute for Clinical and  
Translational Research  
UNIVERSITY OF WISCONSIN-MADISON

## ***Identifying Mechanisms Underlying Neighborhood Disadvantage-Associated Disparities in Outcomes After Complex Cancer Surgery***

Scholar: **Clayton Marcinak, MD** – SMPH, Department of Surgery

Co-Mentor: **Syed Nabeel Zafar, MD, MPH** – SMPH, Department of Surgery

Co-Mentor: **Noelle LoConte, MD** – SMPH, Department of Medicine

**Collaborators:** Wisconsin Surgical Outcomes Research Program (WiSOR)

**Summary:** Gastrointestinal cancers remain a major cause of death in the United States, accounting for over 160,000 deaths annually. Socioeconomic status has long been known to contribute to health outcomes in many diseases, including cancer. Beyond patient-level socioeconomic factors, neighborhood-level disparities are increasingly recognized as having both direct and indirect effects on cancer outcomes. In recent years, a validated and widely available metric for neighborhood disadvantage known as the Area Deprivation Index (ADI) has allowed for increased investigation into these neighborhood-level disparities. Calculated at the level of census block group, ADI provides a composite measure of an area's disadvantage by incorporating data regarding employment levels, housing occupancy, poverty, and education attainment. In a recent analysis using ADI, we demonstrated that patients undergoing surgery for pancreas cancer from the most disadvantaged neighborhoods had three times greater odds of a major postoperative complication compared to those from the least disadvantaged neighborhoods. Patients from disadvantaged neighborhoods also exhibited a nearly three times greater odds of postoperative readmission after hospital discharge. The potential mechanisms underlying these observed differences, however, remain unknown.

We hypothesize that potentially modifiable factors exist that contribute to this observed disparity in patients with gastrointestinal malignancies from disadvantaged neighborhoods. In this proposal, we aim to identify these factors so that they may be addressed through targeted interventions in the future. A better understanding of the modifiable factors could aid in development of preoperative mitigating strategies, especially during neoadjuvant treatment.

### UW ICTR Partners

School of Medicine & Public Health • School of Nursing • School of Pharmacy • School of Veterinary Medicine • School of Education • College of Engineering • Marshfield Clinic

2112 Health Sciences Learning Center • 750 Highland Avenue • Madison, Wisconsin 53705 • 608-263-1018 • [info@ictr.wisc.edu](mailto:info@ictr.wisc.edu)