UNIVERSITY OF MINNESOTA
ROBERT J. JONES URBAN RESEARCH AND OUTREACH-ENGAGEMENT CENTER
(uroc) 2023 REQUEST FOR PROPOSALS

PROPOSAL FACE PAGE

Project Title: Impacts of Multilevel Factors and Systemic Racism on Sedentary Behavior Among Black Older Adults with Type 2 Diabetes

Applicant Name:
Full Name: Mary O. Whipple

Title: Assistant Professor

Phone Number: 612-625-4470

E-mail: whipp042@umn.edu

Department: Adult and Gerontological Health Cooperative Unit

College: School of Nursing

Dean: Connie White Delaney

Dean’s e-mail: delaney@umn.edu

Proposed Amount: $15,000

Project Timeline: Expected start date 02/01/2024

Research Priority Area(s): Systems and systemic racism

Is this a new or ongoing project? New
EXECUTIVE SUMMARY

Almost 20% of Minnesotans over age 65 have type 2 diabetes (T2D) and as a result, a greatly increased risk of cardiovascular disease. Black Americans are 60% more likely to be diagnosed with T2D and 2 times more likely to die from T2D than non-Hispanic White Americans. Inequities related to lack of access to nutritious food, recreational facilities, healthcare, systemic racism, and chronic stress have all been linked to this increased risk. Recent research has demonstrated that sedentary behavior (SB, i.e., sitting or lying and using a small amount of energy) has significant detrimental effects on health beyond those of not achieving physical activity guidelines. However, this work has primarily focused on young, healthy, White adults. Negative daily experiences (e.g., racism, discrimination) may be linked to increased SB and could be a target for intervention. Previous research has demonstrated relationships between racial discrimination and microaggressions and increased SB in middle-age African American adults, but these studies are limited by the assessment of racism on an individual level. Understanding the relationship between systemic racism and SB in Black older adults with T2D could lead to the development of specific strategies to reduce SB in this population. The proposed project seeks to address these key gaps through an explanatory sequential mixed methods study of N=30 Black adults aged 55 and older with T2D. We will address the following specific aims: 1) Evaluate cross-sectional relationships between SB and multilevel factors (i.e., individual, relationship, community, and societal) in Black older adults with T2D and 2) Explore Black older adults’ experiences with and perceptions of SB in their daily lives using in-depth semi-structured qualitative interviews guided by the COM-B model (i.e., capability, opportunity, motivation). This work is in alignment with the “Systems and Systemic Racism” research priority of the Robert J. Jones Urban Research and Outreach-Engagement Center and will provide a starting point for ongoing conversations about the content and structure of culturally sensitive and effective interventions, with the goal of supporting Black older adults in the Twin Cities in their efforts to manage T2D and prevent cardiovascular complications.
PROPOSAL NARRATIVE

Project Background & Aims

Over 380,000 Minnesotans – almost 20% of Minnesotans over age 65 – have type 2 diabetes (T2D)\(^1\) and as a result, a greatly increased risk of cardiovascular disease (CVD).\(^2\) **Black older adults bear a disproportionately high burden of T2D and CVD.** Black Americans are 60% more likely to be diagnosed with T2D and 2 times more likely to die from T2D than non-Hispanic White Americans.\(^3\) Inequities related to lack of access to healthcare, racism, and chronic stress have all been linked to this increased risk.\(^4\) Despite advancements in the management of CVD, striking disparities persist among racial and ethnic groups in Minnesota.\(^5\) The **disparate burden** faced by Black Minnesotans with T2D makes attention to preventing or delaying the development of T2D and associated cardiovascular complications, essential.

High amounts of sedentary behavior (SB) (i.e., sitting or lying with low levels of energy expenditure) have significant detrimental effects on health\(^6,\)\(^7\) but most studies have focused on young, White adults.\(^8\) **Negative daily experiences** (e.g., discrimination) may be linked to increased SB and could be a target for interventions. For example, racial discrimination and microaggressions have been linked to increased SB in middle-age African American adults\(^9\) but this work has been limited to individual measures of racism. Understanding the relationship between multilevel factors, systemic racism, and SB is an important next step.

The proposed project seeks to address these key gaps through an explanatory sequential mixed methods study of \(N=30\) Black adults aged 55 and older with T2D. Guided by the Center for Chronic Disease Reduction and Equity Promotion Across Minnesota (C2DREAM) conceptual model, social-ecological framework,\(^10\) and COM-B model,\(^11\) we will address the following **specific aims**:

**Aim 1:** Evaluate cross-sectional relationships between SB and multilevel factors (i.e., individual, relationship, community, and societal) in Black older adults with T2D.

**Aim 2:** Explore Black older adults’ experiences with and perceptions of SB in their daily lives using in-depth semi-structured qualitative interviews guided by the COM-B model (i.e., capability, opportunity, motivation).

The **overarching goal** of this application is to work with older Black Minnesotans with T2D to understand how racism and discrimination at multiple levels influence SB. This work is in alignment with the “**Systems and Systemic Racism**” research priority of the Robert J. Jones Urban Research and Outreach-Engagement Center (UROC) and will be a starting point for ongoing conversations about the content and structure of interventions to support Black older adults in the Twin Cities in their efforts to prevent complications of T2D.

Participants will be asked to complete a baseline visit, wear an activity monitor, and participate in an interview. After obtaining written informed consent, information on medical history and sociodemographic characteristics will be obtained via self-report. Participants will be asked to complete questionnaires to understand factors that may be related to SB (Table 1).

<table>
<thead>
<tr>
<th>Individual</th>
<th>Relationship</th>
<th>Community</th>
<th>Societal</th>
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<tbody>
<tr>
<td>Age, race, gender</td>
<td>Physical Activity and Social Support Scale</td>
<td>Income, housing status</td>
<td>Access to Health Services</td>
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<td>Diabetes Complications Index</td>
<td>Racial Microaggression Scale</td>
<td>Neighborhood Deprivation Index</td>
<td>Health Insurance Coverage</td>
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<td>PROMIS Global Health-10</td>
<td>Everyday Discrimination Scale</td>
<td>Food Insecurity</td>
<td>Health Literacy</td>
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Participants will then be asked to wear a uniaxial accelerometer (activPAL) for 7 days to assess SB. Finally, participants will be invited to complete a semi-structured interview guided by the COM-B model. The COM-B model includes the multifaceted domains of capability (C), opportunity (O), and motivation (M), all associated with health behavior (B).\textsuperscript{11} We will explore these domains during the interview to gain a deeper understanding of SB as a foundation for developing interventions.

**Project Significance & Innovation**

The proposed research is **innovative** because we will investigate relationships between racism and discrimination at multiple levels and SB among Black older adults with T2D. Black older adults living in urban areas face significant inequities in the management of T2D.\textsuperscript{3} This work will enable us to collaborate with older Black Minnesotans in the Twin Cities to understand their experiences with racism and SB. As a result, it will be more relevant to Black older adults, one of the populations most affected by T2D and its complications.

**Community-Based Approach**

In preparation for this study, we have established a small community advisory board (CAB) ($n=5$). We will expand the CAB to ~8 individuals prior to implementation of the study. The CAB will meet quarterly to process, evaluate, and inform each step of the research process. We have sought funding through the Center for Chronic Disease Reduction and Equity Promotion (C2DREAM) to support the proposed project. C2DREAM funding would provide support to pay our CAB members and study participants. UROC funding would enable us to hire a dedicated graduate research assistant, allowing us to intensify our focus on the experiences of Black older adults with diabetes who have had structural racism and discrimination. We view this work as an opportunity to learn from and with Black older adults and are committed to being flexible as seek to learn more about the needs of this population of older adults with T2D.

**Project Limitations/Alternative Plans**

There are potential challenges to completing the proposed study. First, recruitment may be slower than anticipated. To support timely enrollment, we have established numerous recruitment methods (e.g., flyers, community events) and are prepared to expand our efforts as needed. With guidance from our CAB, we have tried to eliminate barriers to participation such as location of visits. Second, we recognize that the volume of questionnaires may be burdensome. We have carefully selected measures that address the study aims and chosen short versions, when possible. Third, funds for participant remuneration will be provided via C2DREAM or PI start-up funding. These strategies have been informed by our CAB and we will be flexible as needed to reduce participant burden.

**Project Timeline & Work Plan**

**Table 2.** Key research milestones by month.

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<td>Dissemination (community and via scientific journals/presentations)</td>
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References


Mary Whipple, PhD, RN, PHN, Principal Investigator (0.45 academic months, 0.15 summer months contributed effort). Dr. Whipple will be responsible for the scientific management of the project, including achieving study goals, design, implementation, and evaluation. Dr. Whipple will also be responsible for the coordination of the overall direction of the project, budgetary and administrative oversight, addressing participant concerns, manuscript preparation, and dissemination of findings both academic publications and presentations and community events.

Graduate Research Assistant (1.13 academic months, 1.05 summer months). This individual will be responsible for recruitment, data collection, scheduling, and communication with study participants under the supervision of the PI. This individual will also participate in quarterly check-in meetings with other grantees to discuss progress, challenges, and opportunities.

We have sought additional funding through the Center for Chronic Disease Reduction and Equity Promotion (C2DREAM) to support the proposed project (submitted Oct 2, 2023). C2DREAM funding would provide support to pay our CAB members and study participants and hire an undergraduate research assistant. Regardless of receipt of the C2DREAM funding, the PI has start-up funds available to support participant and CAB member payments, but additional funding is needed to support research assistant effort.
Mary Whipple, PhD, RN, PHN, FSVM is an Assistant Professor in the University of Minnesota School of Nursing and a Building Interdisciplinary Research Careers in Women's Health (BIRCWH) K12 scholar. She is also Affiliate Faculty at the Robert J. Jones Urban Research and Outreach-Engagement Center. Dr. Whipple received her PhD from the University of Minnesota School of Nursing in 2019 and completed a post-doctoral fellowship in the Division of Geriatric Medicine at the University of Colorado in 2021 before joining the faculty in the School of Nursing in 2022. Her research focuses on understanding the effects of sedentary behavior on cardiovascular health among older adults, with a particular emphasis on individuals with type 2 diabetes and peripheral artery disease. Dr. Whipple's primary goal is to help historically minoritized groups of older adults identify and implement practical strategies to manage their chronic conditions and live healthy, active lives.

Dr. Whipple has actively engaged in developing expertise in community-engaged work with Black older adults through her affiliation with UROC as part of her BIRCWH project (STEP Up T2D), the establishment of a Community Advisory Board for the proposed project, and additional training. For example, she has participated in multiple seminars over the past year to help support further development of her knowledge of community-based work, including the Community Engaged Dissemination Community of Practice (6 sessions; Jan-Jun 2023), the Community Based Participatory Research Fundamentals Community of Practice (3 sessions, Aug 2023) and the Use of Race in Research Across the Translational Spectrum Symposium (Oct 2023). She will continue to seek out opportunities to engage with and learn from individuals and groups working in this space, including her mentor, Dr. Siobhan McMahon. Dr. Whipple is committed to devoting the time and effort needed to build relationships and conduct meaningful work in partnership with the community.
Curriculum Vitae

MARY O. WHIPPLE
Adult and Gerontological Health Cooperative
University of Minnesota School of Nursing
5-140 Weaver Densford Hall
308 Harvard St SE
Minneapolis, MN 55455
(612) 625-4470
whipp042@umn.edu

Education
PhD, University of Minnesota, Minneapolis, MN. Nursing
Minor: Gerontology
August 2019

BSN, Summa cum laude, University of Minnesota, Minneapolis, MN. Nursing
With High Distinction
May 2014

BA, Magna cum laude, Luther College, Decorah, IA.
Biology and Psychology
May 2009

Licensures and Certifications

Licenses
Registered Nurse, CO Board of Nursing License.
(Licensure/Certification Number: #RN.1675996)
2021 - Present

Registered Nurse, MN Board of Nursing License.
(Licensure/Certification Number: #R221200-3)
2014 - Present

Certifications
Public Health Nurse, MN Board of Nursing Certificate.
(Licensure/Certification Number: #22474)
2014 - Present

Basic Life Support for Healthcare Providers, American Heart Association.
2011 - Present

2012 - 2021

Researcher Management and Leadership Training Certificate, University of Colorado Anschutz Medical Campus.
February 2020

Fellowships, Residencies, and Visiting Engagements

Fellowship
Postdoctoral Fellowship, Aurora, Colorado
September 2019 - December 2021
University of Colorado Anschutz Medical Campus,
Geriatric Medicine, School of Medicine  
Research focus: Diabetes, cardiovascular disease, and aging

**Academic Appointments**
Robert J. Jones Urban Research and Outreach-Engagement Center  
Affiliate Faculty  
University of Minnesota  
School of Nursing: Assistant Professor  
University of Colorado Anschutz Medical Campus  
School of Medicine, General Internal Medicine: Adjoint Faculty  
University of Colorado Anschutz Medical Campus  
College of Nursing: Adjunct Faculty

**Other Professional Positions**
University of Colorado Anschutz Medical Campus  
School of Medicine, Geriatric Medicine: Postdoctoral Research Fellow  
University of Minnesota  
School of Nursing: Graduate Research Assistant  
Mayo Clinic  
Division of General Internal Medicine: Certified Clinical Research Coordinator  
University of Minnesota  
Program in Health Disparities Research: Undergraduate Research Assistant  
Luther College  
Biology: Laboratory/Teaching Assistant for General Biology, Human Physiology, and Biostatistics

**Current Membership in Professional Organizations**
American College of Sports Medicine  
American Diabetes Association  
Associate Member, Society for Vascular Medicine  
American Heart Association  
Sedentary Behavior Research Network
Society for Vascular Nursing 2017 - Present

Legacy Affiliate, National Harford Center of Gerontological Nursing Excellence 2015 - Present

Gerontological Society of America 2014 - Present

Midwest Nursing Research Society 2013 - Present

HONORS AND RECOGNITION

University of Minnesota

Excellence in Advancing Nursing Science Award, American Association of Colleges of Nursing Nominated 2019

Student Poster Travel Award for the 43rd Midwest Nursing Research Society Annual Meeting, School of Nursing, University of Minnesota 2019

Lois and George Warp Fellowship in Nursing Research, School of Nursing, University of Minnesota 2018

Patricia A. Robertson Scholarship, School of Nursing, University of Minnesota 2018

Rahr Fellowship in Nursing Research, School of Nursing, University of Minnesota 2018

Delphi Fredlund Fellowship in Public Health Nursing, School of Nursing, University of Minnesota 2017

Marilee A. Miller Fellowship in Educational Leadership, School of Nursing, University of Minnesota 2017

Katharine Densford Dreves Scholarship, School of Nursing, University of Minnesota 2016

Marilee A. Miller Fellowship in Educational Leadership, School of Nursing, University of Minnesota 2016

Outstanding Graduate Nursing Student Award, School of Nursing Alumni Society, University of Minnesota 2016

Shelley Joseph-Kordell Scholarship, Center on Aging, University of Minnesota 2016

Student Poster Travel Award for the 40th Midwest Nursing Research Society Annual Meeting, School of Nursing, University of Minnesota 2016

Nottage Fund for Graduate Nursing Education Scholarship, School of Nursing, University of Minnesota 2015

Student Poster Travel Award for the 39th Midwest Nursing Research Society Annual Meeting, School of Nursing, University of Minnesota 2015

M and M Fellowship in Gerontological Nursing, School of Nursing, University of Minnesota 2014
Minnesota Hartford Center of Gerontological Nursing Excellence Nursing Education Scholar, School of Nursing, University of Minnesota 2014-2015

Student Poster Travel Award for the 38th Midwest Nursing Research Society Annual Meeting, School of Nursing, University of Minnesota 2014

Audrey Windemuth Scholarship, School of Nursing 2013

Sigma Theta Tau International Honor Society of Nursing, Zeta Chapter, University of Minnesota 2013

Audrey Windemuth Scholarship, School of Nursing 2012

Dean’s List, University of Minnesota 2012

2012-2014

Mary Hensler Spurzem Scholarship, School of Nursing, University of Minnesota 2011

External Sources

Blue Ribbon Peer Reviewer, Vascular Medicine 2022

Fellow-in-Training Travel Grant, Peripheral Vascular Disease Council, American Heart Association 2022

National Conference on Women's Health and Sex Differences Travel Award, Ludeman Family Center for Women's Health Research 2022

Finalist, Jay D. Coffman Young Investigator Award, Society for Vascular Medicine 2022

Blue Ribbon Peer Reviewer, Vascular Medicine 2021

Blue Ribbon Peer Reviewer, Vascular Medicine 2020

Outstanding PhD Instructor/Fellow, Colorado Nutrition and Obesity Research Center (NORC), University of Colorado Anschutz Medical Campus 2020

PhD Dissertation Award, Gerontological Nursing Science Research Interest Group, Midwest Nursing Research Society 2020

Best Overall Presenter Award, Society for Vascular Nursing 37th Annual Conference 2019

Elva Walker Spillane Scholarship, Minnesota Gerontological Society 2015

Patricia G. Archbold Predoctoral Scholar Award, National Hartford Center of Gerontological Nursing Excellence 2015-2017

Beta Beta Beta Biological Honor Society, Luther College Chapter 2008

Psi Chi Psychology Honor Society, Luther College Chapter 2008

David and Julie Larson Scholarship for Excellence in Biology, Luther College 2006-2009
Coca-Cola First Generation Scholar, Coca-Cola Corporation 2005-2009
Dean’s List, Luther College 2005-2009
Regent Scholarship, Luther College 2005-2009
Weston Noble Vocal Scholarship, Luther College 2005-2009

RESEARCH, SCHOLARSHIP, AND CREATIVE WORK

Grants, Contract, Awards: External Sources

Award: Sex Differences in the Effects of Breaking Up Sedentary Behavior on Vascular Function Among Older Adults with Type 2 Diabetes
Project Investigators: Whipple, Mary O.
Status: Funded
Sponsoring Organization: Building Interdisciplinary Research Careers in Women’s Health (BIRCWH) K12 Scholar Training Program/NIAMS
Institution: University of Minnesota
Award Dates: July 16, 2023 - July 15, 2026
Funded Amount for Entire Grant Period: $395,701.00

Award: Cocoa Flavanols to improve walking performance in PAD: The COCOA PAD II Trial
Project Investigators: McDermott, Mary M. (Principal), Whipple, Mary O. (Site Co-I)
Status: Funded
Sponsoring Organization: NIH/NIA
Award Dates: July 1, 2021 - June 30, 2026

Award: PROmote Weight Loss in Obese PAD Patients to PreVEnt Mobility Loss: The PROVE Trial
Project Investigators: McDermott, Mary M. (Principal), Whipple, Mary O. (Site Co-I)
Status: Funded
Sponsoring Organization: NIH/NHLBI
Award Dates: June 1, 2019 - May 31, 2025

Award: Associations between WEARable fitness trackers, physical activity, and sedentary behavior across the lifespan: The WEAR IT! Study
Project Investigators: Martin, Christie (Co-Principal), Whipple, Mary O. (Co-Principal)
Status: Funded
Sponsoring Organization: School of Nursing Foundation
Institution: University of Minnesota
Date Proposal Submitted: 2023
Award Dates: March 1, 2023 - April 30, 2024
Funded Amount for Entire Grant Period: $2,500.00

**Award: Relationship Between Sedentary Behavior, Glucose Tolerance, and Microvascular Function in Older Women with Type 2 Diabetes**
Project Investigators: Whipple, Mary O. (Principal), Sokol, Ronald
Status: Funded
Sponsoring Organization: MicroGrant, Colorado Clinical and Translational Sciences Institute
Institution: University of Colorado Anschutz Medical Campus
Award Dates: April 1, 2020 - March 31, 2024
Funded Amount for Entire Grant Period: $20,000.00
  Includes no-cost extension

**Award: Participation and Outcomes of Supervised Exercise Therapy for Peripheral Artery Disease: 2017-2023**
Principal Investigator: Whipple, Mary O.
Status: Accepted
Sponsoring Organization: SOCIETY FOR VASCULAR MEDICINE, INC
Award Dates: June 21, 2023 - August 25, 2023

**Award: Intermittent Pneumatic Compression for Disability Reversal in PAD: The INTERCEDE Trial**
Project Investigators: McDermott, Mary M. (Principal), Whipple, Mary O. (Site Co-I)
Status: Funded
Sponsoring Organization: NIH/NIA
Award Dates: May 1, 2021 - April 30, 2023

**Award: Prolonged Sedentary Behavior in Older Women with Type 2 Diabetes: A Program of Research to Understand Knowledge, Engagement, and Relationship to Cardiometabolic Risk**
Project Investigators: Whipple, Mary O. (Principal)
Status: Funded
Sponsoring Organization: Loan Repayment Program (Clinical Research), NIH/NINR
Institution: University of Colorado Anschutz Medical Campus
Award Dates: July 1, 2020 - June 30, 2022
Funded Amount for Entire Grant Period: $11,207.00

**Award: Understanding the Role of Knowledge, Mood, and Sense of Meaning in Sedentary Behavior Engagement Among Older Women with Type 2 Diabetes**
Project Investigators: Whipple, Mary O. (Principal)
Status: Funded
Sponsoring Organization: Junior Faculty Research Development Award, Ludeman Family Center for Women's Health Research
Institution: University of Colorado Anschutz Medical Campus
Award Dates: September 1, 2020 - August 31, 2021
Funded Amount for Entire Grant Period: $25,000.00
   No-cost extension through 12/31/2021

**Award: Physiologic Effects of Prolonged Sedentary Bouts Among Older Women with and Without Type 2 Diabetes**
Project Investigators: Whipple, Mary O. (Postdoctoral Fellow), Schwartz, Robert
Status: Funded
Sponsoring Organization: Integrative Physiology of Aging T32
Institution: University of Colorado Anschutz Medical Campus
Award Dates: September 1, 2019 - August 31, 2021
Funded Amount for Entire Grant Period: $103,008.00

**Award: Relationship Between Sedentary Behavior, Glucose Tolerance, and Microvascular Function in Older Women with Type 2 Diabetes**
Project Investigators: Whipple, Mary O. (Principal)
Status: Funded
Sponsoring Organization: Small Grants Program, Division of General Internal Medicine
Institution: School of Medicine, University of Colorado Anschutz Medical Campus
Award Dates: December 1, 2019 - November 30, 2020
Funded Amount for Entire Grant Period: $22,500.00
   No-cost extension through 11/30/2021

**Award: Role of Diabetes and Sedentary Time in Outcomes of Structured Exercise Therapy for Peripheral Artery Disease**
Principal Investigator: Whipple, Mary O.
Status: Closed
Sponsoring Organization: Ruth L. Kirschstein National Research Service Award (F31), National Institute of Nursing Research, National Institutes of Health
Sponsoring Organization Reference ID: 5F31NR016614-03
Award Dates: May 29, 2017 - August 28, 2019
Funded Amount for Entire Grant Period: $95,422.00

**Award: Diabetes and Sedentary Time in Outcomes of Exercise in PAD**
Principal Investigator: Whipple, Mary O.
Status: Closed
Sponsoring Organization: Midwest Nursing Research Society (MNRS) & Council for the Advancement of Nursing Science (CANS)
Award Dates: April 15, 2017 - April 14, 2019
Funded Amount for Entire Grant Period: $5,000.00
   No-cost extension through 04/14/2019

Award: Barriers to Physical Activity and Association with Geriatric Syndromes in Older Adults with Peripheral Artery Disease
Principal Investigator: Whipple, Mary O.
Status: Closed
Sponsoring Organization: Patricia G. Archbold Predoctoral Scholar Award, National Hartford Center of Gerontological Nursing Excellence (NHCGNE)
Sponsoring Organization Reference ID: #15-506
Award Dates: July 1, 2015 - June 30, 2018
Funded Amount for Entire Grant Period: $100,000.00
   No-cost extension through 06/30/2018

Pending/Submitted:

Pending/Submitted:

Award: Collaborative Solutions to Breaking Up Sedentary Behavior Among Black Older Adults with Type 2 Diabetes
Project Investigators: Whipple, Mary O.
Status: Currently Under Review
Sponsoring Organization: Center for Chronic Disease Reduction and Equity Promotion Across Minnesota (C2DREAM)/NIMHD
Institution: University of Minnesota
Date Proposal Submitted: October 2, 2023
Funded Amount for Entire Grant Period or Proposed Grant Period:
$50,000.00

Other Grants, Awards, Gifts, or Endowment Earnings (Internal Sources)

Award: Sex Differences in the Effects of Breaking Up Sedentary Behavior on Vascular Function Among Older Adults with Type 2 Diabetes
Project Investigators: Whipple, Mary O. (Funded: 24%)
Status: Funded
Sponsoring Organization: Women's Health Research Program Seed Grant for Interdisciplinary Research on Aging in Women
Institution: University of Minnesota
Date Proposal Submitted: 2022
Award Dates: January 1, 2023 - July 15, 2023
Funded Percent Effort: 24%
Funded Amount for Entire Grant Period or Proposed Grant Period:
$35,000.00
   Bridge funding to support effort/project development prior to BIRCWH start date
Publications

Asterisk(*) - indicates co-first author
Underline - indicates student author

Peer-Reviewed Journal Article


Vincent, A., Whipple, M. O., McAllister, S. J., Aleman, K., & St. Sauver, J. L.


Vincent, A., Clauw, D. J., Oh, T. H., Whipple, M. O., & Toussaint, L. L. (2014). Decreased physical activity attributable to higher body mass index influences fibromyalgia symptoms. *PM&R, 6*(9), 802-807. doi: 10.1016/j.pmrj.2014.02.007


Toussaint, L. L., Vincent, A., Whipple, M. O., McAllister, S. J., Finnie, D.,


**Non-Peer-Reviewed Journal Article**


**Book Chapter**


**Editorial**


**Publications Submitted or in Progress**

*Asterisk(*) - indicates co-first author
Underline - indicates student author

**Peer-Reviewed Journal Article**

Kajencki, M., Turcott, L., Claar, M., & Whipple, M. O. Maximizing control of chemotherapy-induced nausea and vomiting with pharmacological interventions and complementary and alternative medicine in pediatric oncology: A scoping review. [Submitted:2023]

**Book Chapter**


**Invited Presentations, Posters, and Exhibits**

*Underline* indicates student presenter

**Podium**


Whipple, M. O., Jutkowitz, E. "How gerontologists view evidence," Biological Interest Group Minnesota Philosophy of Science Center, University of Minnesota, Minneapolis, Minnesota. (April 2017). *Invited.*

**Poster**


**Presentation/Talk**


Whipple, M. O. "Is sitting really the new smoking? Understanding the relationship between sedentary behavior and health," ARROW Electronics on behalf of the Ludeman Family Center for Women’s Health Research University of Colorado Anschutz Medical Campus, Aurora, Colorado. (March 2022). *Invited.*

Whipple, M. O. "Is sitting really the new smoking? Understanding the relationship
between sedentary behavior and health," AMG National Trust on behalf of the Ludeman Family Center for Women’s Health Research Medicine Cabinet University of Colorado Anschutz Medical Campus, Aurora, Colorado. (July 2021). *Invited.*

**Whipple, M. O.** "Is sitting really the new smoking? Understanding the relationship between sedentary behavior and health," Ludeman Family Center for Women’s Health Research Medicine Cabinet University of Colorado Anschutz Medical Campus, Aurora, Colorado. (January 2021). *Invited.*

**Whipple, M. O.** "Is a postdoc right for me?," Organization of PhD Students in Nursing Lunch and Learn University of Minnesota, Minneapolis, Minnesota. (March 2020). *Invited.*

**Whipple, M. O., Finlay, J., Jutkowitz, e.** "How gerontologists at the University of Minnesota view evidence," Center on Aging Lunch and Learn University of Minnesota, Minneapolis, Minnesota. (February 2017). *Invited.*

**Whipple, M. O., (Panelist)** "A Panel Presentation of NRSA Application Tips," Office of Nursing Research and Scholarship, School of Nursing, University of Minnesota, Minneapolis, Minnesota. (December 2015). *Invited.*

### Presentations, Posters, and Exhibits

*Underline* - indicates student presenter

#### Podium


**Whipple, M. O., Salisbury, D. L., Brown, R. J.L., Treat-Jacobson, D.** "Poor response and nonresponse to clinically available supervised exercise therapy for peripheral artery disease in the Twin Cities," 2023 School of Nursing Research
Day University of Minnesota, Minneapolis, Minnesota. (April 2023). Peer-reviewed/refereed.

Whipple, M. O. "Understanding the complex relationships between sedentary behavior, mood, and meaning salience among older women in the moments of daily life," 2022 School of Nursing Research Day University of Minnesota, Minneapolis, Minnesota. (2022). Peer-reviewed/refereed.


Whipple, M. O., Burt, M., Schorr, E., Treat-Jacobson, D. J. "Experience with a peripheral artery disease rehabilitation-embedded research study during year 1 of Medicare reimbursement," Society for Vascular Nursing 37th Annual Conference, National Harbor, Maryland. (June 2019). Peer-reviewed/refereed. Received Best Overall Presenter Award


Kane, R. L., McCreedy, E., Xu, D., **Whipple, M. O.** "Gerontologists reflect on evidence: Results and themes from a mixed-methods study in a Midwestern state – Patterns in how different disciplines regard evidence," Gerontological Society of America 2016 Annual Scientific Meeting, New Orleans, Louisiana. (2016). Peer-reviewed/refereed.


Peer-reviewed/refereed.


Poster


Whipple, M. O., Pinto, A. J., Rafferty, D., Scalzo, R. L., Abushamat, L. A., Schauer,


**Whipple, M. O.**, Salisbury, D. L., Brown, R. J., Treat-Jacobson, D. J. "Sex


Harris, M., Bailey, L., Oosterhouse, K., Whipple, M. O. "Interests and priorities of student members of the gerontological nursing science research interest group," Midwest Nursing Research Society 45th Annual Conference (virtual meeting). (2021). Peer-reviewed/refereed.


Whipple, M. O., Schorr, E., Talley, K. M. C., Lindquist, R. A., Bronas, U. G., Wolfson, J., Treat-Jacobson, D. J. "Are there medical and physical differences between women and men with peripheral artery disease at the time of referral for supervised exercise therapy?" Women’s Health Research Day Center for Women’s Health Research, University of Colorado Denver Anschutz Medical Campus, Aurora, Colorado. (October 2019). Peer-reviewed/refereed.

Whipple, M. O. "Association between patterns of sedentary behavior and physical function among older adults with peripheral artery disease," 2019 School of Nursing Research Day University of Minnesota, Minneapolis, Minnesota. (April 2019). Peer-reviewed/refereed.


Whipple, M. O., Treat-Jacobson, D. J. "Going beyond claudication: A qualitative investigation of barriers to exercise for older adults with peripheral artery disease and diabetes," 2016 School of Nursing Research Day University of Minnesota,
Minneapolis, Minnesota. (April 2016). *Peer-reviewed/refereed.*


Solberg Nes, L., Ehlers, S. L., Whipple, M. O., Vincent, A. "Self-regulatory fatigue in chronic multi-symptom illnesses: Scale development and validation,” American Psychosomatic Society 70th Annual Scientific Meeting, Athens,


Presentation/Talk

Rogers, C., (Panelist), Whipple, M. O., (Panelist), Leavitt, M. A., (Panelist), Acosta, L., (Panelist), Petrovsky, D., (Moderator) "Leadership in professional organizations: A workshop for graduate students, early career nurses, and mentors," National Hartford Center for Gerontological Nursing Excellence 2022 Leadership Conference (virtual meeting). (October 2022).

Whipple, M. O. "Understanding sedentary behavior, mood, and meaning salience among older women in the time of COVID-19," Investigations in Metabolism, Aging, Gender, and Exercise (IMAGE) Scientific Advancement University of Colorado Anschutz Medical Campus, Aurora, Colorado. (March 2021).

Whipple, M. O. "Prolonged sedentary behavior in older women with and without type 2 diabetes: Knowledge, engagement, and relationship to cardiometabolic risk," Investigations in Metabolism, Aging, Gender, and Exercise (IMAGE) Scientific Advancement University of Colorado Anschutz Medical Campus, Aurora, Colorado. (May 2020).

Whipple, M. O. "Prolonged sedentary behavior in older women with and without type 2 diabetes: Knowledge, engagement, and relationship to cardiometabolic risk," Exercise and Metabolism (EXAM) Journal Club University of Colorado Anschutz Medical Campus, Aurora, Colorado. (December 2019).

Whipple, M. O., (Panelist) "F31/TL1 Application Tips," Office of Nursing Research and Scholarship, School of Nursing, University of Minnesota, Minneapolis, Minnesota. (November 2019).

Whipple, M. O., (Speaker) "Commencement Remarks on Behalf of the DNP and PhD Graduates," Spring Commencement School of Nursing, University of Minnesota, Minneapolis, Minnesota. (May 2019).

Media Contributions

"Voices of Aging Podcast: Cardiovascular Health Among Older Adults," University of Minnesota Aging Studies Interdisciplinary Group October 2022
TEACHING

Scheduled Teaching

Nurs Care of Families I Honors: NURS 3802H: Spring 2022
Honors: Nurs Theory & Research: NURS 4205V: Spring 2022
Senior Proj in the Nurs Major: NURS 4777W: Fall 2022
Dev Resch Propls in Nurs or HS: NURS 8153: Fall 2022
Honors: App Res/Resear Utiliza: NURS 4404V: Fall 2023

Instructional Activity

University of Minnesota

Workshop, CPDN X501: Writing Your Journal Article in 12 Weeks, Co-Facilitator May 2023 - August 2023

Guest Lecture, DIvE3 Presentation: Communicating Your Work: From the Editor's View, School of Nursing, University of Minnesota May 2023

Guest Lecture, Mini Medical School: Creating Pathways to Healthy Aging April 2023

Guest Lecture, NURS 1031: Nursing Research March 2023

Guest Lecture, NURS 8195: Mixed Methods and Integration of Data Types March 2023

Guest Lecture, DIvE2 Presentation: Overcoming Imposter Syndrome & Assuming a New Professional Role, School of Nursing, University of Minnesota May 2022

Guest Lecture, Developing an Individual Development Plan and Maximizing Your Doctoral Experience, NURS 8180: Professional Development Seminar, School of Nursing, University of Minnesota September 2018

Guest Lecture, Developing an Individual Development Plan and Maximizing Your Doctoral Experience, NURS 8180: Professional Development Seminar, School of Nursing, University of Minnesota September 2017

Guest Lecture, Tips to Maximizing Your Doctoral Experience, NURS 8180: Professional Development Seminar, School of Nursing, University of Minnesota September 2016
Guest Lecture, Key Concepts: Nursing Research, Problems, Questions, and Hypotheses, NURS 4205V: Honors Nursing Research and Theory, School of Nursing, University of Minnesota  
February 2016

Guest Lecture, How to Maximize Your Doctoral Experience, NURS 8180: Professional Development Seminar, School of Nursing, University of Minnesota, Panelist  
September 2015

College of Nursing, University of Colorado

Course, NURS 3667: Nursing Care of the Older Adult, College of Nursing, University of Colorado, Instructor  
August 2021 - October 2021

Course, NURS 3667: Nursing Care of the Older Adult, College of Nursing, University of Colorado, Co-Teacher  
March 2021 - May 2021

CURRICULUM DEVELOPMENT ACTIVITIES

Curriculum Development Activities

University of Minnesota

Development of a new evidence based practice, theory, and research course for the MN program to align with the new AACN Essentials (collaboration with Erica Timko-Olson)  
November 2022 - Present

Development of 8153: Developing Research Proposals in Nursing  
June 2022 - Present

PROFESSIONAL DEVELOPMENT ACTIVITIES

University Teaching/Learning Program, "Early Career Teaching and Learning Program," Center for Educational Innovation, University of Minnesota, Minneapolis, Minnesota  
September 2022 - May 2023

Workshop, "Building A Publishing Pipeline: Concrete Strategies For Increasing Your Writing Productivity," National Center for Faculty Development and Diversity/Center for Women's Health Research  
February 14, 2023

Workshop, "Write Winning Grants - Career Development Awards," Center for Translational Science Institute, University of Minnesota  
January 2023

Workshop, "Every Semester Needs A Plan," National Center for Faculty Development and Diversity/University of Minnesota School of Nursing  
January 30, 2023
Workshop, "CPDN X501 - Writing Your Journal Article in 12 Weeks," School of Nursing, University of Minnesota, Minneapolis, Minnesota  
May 2022 - August 2022

Workshop, "Write Winning Grants," Center for Translational Science Institute, University of Minnesota  
February 2022

Training, "T32 Team Science Training," Department of Medicine, University of Colorado Anschutz Medical Campus  
2019 - 2021

Workshop, "Qualitative Research Workshop," Adult and Child Consortium for Health Outcomes Research and Delivery Science (ACCORDS), University of Colorado  
March 2020

Seminar, "Faculty Seminar: Grant Writing Symposium," Office of Research Development and Education, University of Colorado Denver  
October 2019

Workshop, "Write Winning Grants," Center for Translational Science Institute, University of Minnesota  
January 2019

ADVISING AND MENTORING

Undergraduate Students Activities

Other Advising Activities

University of Minnesota

Student Mentorship.  
Madeleine Kajencki  
Focus: Literature review and publishing  
Reader, Undergraduate Honors Thesis.  
Allison Cheng  
Thesis: Examining Nursing Response and Patient Factors that Impact Hypoglycemia Treatment Recovery in Hospitalized Pediatric Patients  
Reader, Undergraduate Honors Thesis.  
Maura Talwalkar  
Thesis: The Relationship Between Change in Walking Ability and Health-Related Quality of Life Following Supervised Exercise Therapy for Peripheral Artery Disease  
Reader, Undergraduate Honors Thesis.  
Megan Driscoll  
Reader, Undergraduate Honors Thesis.  
Melissa Florey  
2023 - Present  
2023

2023

2023

2023

2023

2023
Thesis: Examining Whether Emotional Eating, Fruit and Vegetable Intake, and Wellbeing in Adolescents Intersect: A Mediation Analysis
Reader, Undergraduate Honors Thesis. Mia Sparrow
Thesis: Depression and Suicidal Ideation among Somali and Oromo Students in Minnesota: Associations with Perceived Discrimination and Supportive Teachers

Luther College
Mentorship. Rylea M Ranum
Focus: Systematic review of the literature

Graduate Student Activities

DNP Advisees
Emily Wolf 2023 - Present
Jaden Witt 2023 - Present

Professional Student Activities

Other Advising Activities

Minneapolis Veterans Affairs Healthcare System
Mentorship. Rebecca JL Brown, PhD, MEd, RN
Focus: Publishing

University of Colorado Anschutz Medical Campus
Mentorship. Ana Pinto, PhD
Focus: Qualitative interviewing
Mentorship. Kristina Chapman, BS
Focus: Clinical research

SERVICE

Service to the Discipline/Profession/Interdisciplinary Area(s)

Ad Hoc Reviewer
Journal of Gerontological Social Work 2023 - Present
BMJ Open 2021 - Present
Geriatric Nursing 2021 - Present
Journal of Gerontological Social Work  
2021 - Present

Pediatric Obesity  
2021 - Present

Journal of Vascular Nursing  
2020 - Present

US Department of Veterans Affairs Rehabilitation R&D  
2023

SPIRE Editorial Review Panel (RRD6-Chronic Medical Conditions and Aging), Appointed

Diabetic Medicine  
2020 - 2021

Journal of Aging and Physical Activity  
2019

**Associate Editor**

Vascular Medicine  
2023 - Present

**Editorial Board Member**

Western Journal of Nursing Research  
2022 - Present

Vascular Medicine  
2020 - Present

**Liaison**

American Heart Association Cardiovascular Disease in Older Populations Committee, Appointed  
July 1, 2023 - June 30, 2025

**Member**

European Independent Foundation in Angiology/Vascular Medicine Academy-International Teaching Panel  
2022 - Present

Communications Committee, National Hartford Center of Gerontological Nursing Excellence  
2017 - Present

Practice and Research Committee, Society for Vascular Nursing  
2017 - Present

Newsletter Taskforce, Emerging Scholar and Professional Organization, Gerontological Society of America  
2015 - 2016

**Chair**

Gerontological Nursing Science Research Interest and  
2019 - 2021
Implementation Group, Midwest Nursing Research Society

**Reviewer**

- Midwest Nursing Research Society Annual Meeting 2019 - Present
- Society for Vascular Medicine Vascular Scientific Sessions 2023
- Vascular Medicine Journal Creager Prize Selection Committee 2023
- Gerontological Society of America Annual Meeting 2016 - 2021
- American Geriatrics Society Annual Meeting 2018
- International Association for Gerontology and Geriatrics World Congress 2017

**Student Co-Chair**

- Gerontological Nursing Science Research Interest Group, Midwest Nursing Research Society 2018 - 2019

**Service to the University/College/Department**

**University of Minnesota**

- Member, Graduate Admissions and Progressions Committee 2022 - Present
- Member, Honors Committee 2022 - Present
- Member, Awards Committee 2017 - 2019
- Advisory Committee Member, Aging Studies Interdisciplinary Graduate Group 2015 - 2019
- Co-Chair, Organization of PhD Students in Nursing 2015 - 2017
- Member, Medical Reserve Corp June 2023 - Present
- Reviewer, Council of Graduate Students 2017 - 2019
Public and External Service

Presenter, Minneapolis Community Education "Nurse Talks" 2022 - Present
October 9, 2023

Review Committee, Research Agenda Priorities Request for Proposals
Robert J. Jones Urban Research and Outreach-Engagement Center (UROC)

RE: Dr. Mary Whipple’s Application for UROC Research Agenda Priorities Funding

Dear Review Committee,

I enthusiastically support Dr. Mary Whipple in her application for funding through the UROC Research Agenda Priorities Request for Proposals. Dr. Whipple has been an assistant professor in the University of Minnesota School of Nursing since January 2022 and she is developing a focused and highly fundable program of research centered on care of older adults with type 2 diabetes, with a special emphasis on women and historically minoritized individuals in Minnesota.

Black and African American Minnesotans face significant inequities in the management of type 2 diabetes, and as a result are much more likely than their White peers to experience severe complications of diabetes. Lack of access to nutritious food, green space, healthcare, systemic racism, and chronic stress have all been linked to this increased risk. In her proposal, “Impacts of Multilevel Factors and Systemic Racism on Sedentary Behavior Among Black Older Adults with Type 2 Diabetes,” Dr. Whipple seeks to examine factors at the individual, community, and organizational levels that influence sedentary behavior and complications of diabetes. In the proposed study, Dr. Whipple will work closely with her Community Advisory Board and mentors to understand how discrimination, neighborhood structure, and sense of belonging may be linked to sedentary behavior and, consequently, if they could be targeting in future interventions.

Dr. Whipple receives 75% protected time for research through her Building Interdisciplinary Research Careers in Women’s Health (BIRCWH) K12 award (07/16/2023-07/15/2026). The proposed study is directly relevant to her BIRCWH project, which seeks to understand the effects of breaking up sedentary behavior on blood pressure and vascular function among older adults with diabetes. As a result, I can confirm that Dr. Whipple will be able to dedicate adequate time and effort to the proposed work. In particular, the support of a graduate research assistant provided by this funding mechanism would help ensure the successful completion of the study and provide a graduate student with a valuable opportunity to collaborate with and learn from Black older adults with diabetes living in the Twin Cities metro area.

In summary, the School of Nursing strongly supports Dr. Whipple’s application for funding as part of the UROC Research Agenda Priorities Request for Proposals and is committed to ensuring she has the resources needed to successfully complete the proposed work.

Sincerely,

Connie White Delaney, PhD, RN, FAAN, FACMI, FNAP
Professor & Dean | University of Minnesota School of Nursing
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