

# 2024 COLLABORATIVE RESEARCH PROJECTS

As Health Partners, The University of Washington School of Medicine and Gonzaga University are **collaborating** to improve regional health and prosperity by transforming medical education, **research** and innovation.



# Joint Research Opportunities

## Gonzaga and UWSOM Students and Faculty Learn Together

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### Summer Biomedical Research Program

Each summer, a number of Gonzaga undergrad students in varying health science-related majors spend a summer at the UWSOM in Seattle, experiencing research among UW graduate and post-doc students and principal investigators. This year, eight students were placed in a variety of labs, including Molecular Engineering & Sciences, Bioengineering, Microbiology, the Institute for Stem Cell and Regenerative Medicine, and Allergy & Infectious Disease.

One junior, human physiology major Greta Crumley studied alongside Fatma Inanici in UW's Amplifying Movement and Performance Lab. [Read Greta's full story here.](#)



**“This summer experience has motivated me to continue pursuing research alongside my aspirations of becoming an emergency medicine physician because of the impact it can make in people’s lives. I am so appreciative to the UW-GU Health Partnership for giving me this opportunity, and I look forward to applying this experience towards my future endeavors.”**  
**-Greta**





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### McKinstry Fellowship Program

Through the McKinstry Fellowship, students and faculty members work on interprofessional teams to advance health-related research. In 2025, three Gonzaga faculty members continued their work with support of this program.

Clint Wutzke, human physiology at GU, and Darryl Potyk, associate dean at UWSOM, continued work on the influence of cognitive impairment on control of posture and standing balance. One UWSOM student and one GU undergraduate participated.

Sarah Matousek, who is joint faculty for Gonzaga and for UWSOM, brought GU and UW students together in clinical work in Grand Coulee, Washington, to explore the links between chronic illness and mental health, particularly in rural communities. Medical students in UW's Targeted Rural and Underserved Track (TRUST) program mentored Gonzaga students in their work. [See story here.](#)

Andrea Bertotti, sociology at GU, assessed the extent to which reproductive justice is taught and learned in medical schools, especially in programs focused on rural health. Two UWSOM students and two GU undergraduates participated.



**UW**  
SCHOOL OF  
MEDICINE  
**GU**

## 2024 Research Highlights

**58**

### **UWSOM & GU STUDENT RESEARCHERS**

17 medical students, 25 GU undergrads, and 16 DNAP students presented their research.

**37**

### **RESEARCH PROJECTS**

**13** clinically-based projects  
**10** public health initiatives  
**14** basic science projects

**27**

### **FACULTY PRECEPTORS**

Research preceptors included core and community MD, DO, and PhD faculty who provided mentorship and support to students.

**100%**

### **COLLABORATION**

To foster a robust health partnership research environment in Eastern & Central Washington.

### **GU Students | UW Preceptors**

#### **The Association between Ground Reaction Forces and Torque Production in People with Parkinson's Disease**

Student: Kate Barnett, Gonzaga

Preceptors: Clinton Wutkze, PhD, Gonzaga University &  
Darryl Potyk, MD, UW School of Medicine

Location/Affiliation: McKinstry Fellow

#### **Creating Lipopolysaccharide Knockout Mutants in *P. Aeruginosa***

Student: Ainsley Brockman, Gonzaga

Preceptor: Joseph Mougous, PhD, UW

Location/Affiliation: Seattle, Summer Research Program,  
Mougous Lab, UW Medicine

#### **Effects of Prostaglandin D2 During Helminth Infection**

Student: Claire Charvet, Gonzaga

Preceptor: Elia Tait Wojno, PhD, UW

Location/Affiliation: Seattle, Summer Research Program,  
Wojno Lab, UW Medicine

#### **Determining How Alternative Splicing in TDP-43 Correlates with ALS/FTLD-related Physiological and Behavioral Changes**

Student: Kennedy Child, Gonzaga

Preceptor: Martin Darvas, PhD, UW

Location/Affiliation: Seattle, Summer Research  
Program, Darvas Lab, UW Medicine

# UW Medical Students | GU Preceptors

### **Novel DNzyme Constructs: Disrupting BRAF Expression for Therapeutic Advancement**

Student: Maddie Bruner

Preceptor: Shannen Cravens, PhD

Affiliation: Gonzaga University, Department of Chemistry & Biochemistry

### **The Influence of a Cognitive Dual Task on Walking Function in People with Parkinson's Disease**

Student: Mikala Haas-Greenwood

Preceptors: Clinton Wutkze, Gonzaga University & Darryl Potyk, UW School of Medicine

Affiliation: Department of Human Physiology, Gonzaga University, McKinstry Fellows

### **Systematic Review of How Safety and Risks Associated with Intrauterine Contraception Methods are Evaluated**

Student: Elyssa Shoup

Preceptor: Andrea Berotti, PhD

Dual Affiliation: Gonzaga University, Department of Sociology, and UW School of Medicine, Department of Family Medicine

# COMMUNITY-BASED RESEARCH COLLABORATIONS

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## **Lurbinectedin in Relapsed Extensive-Stage Small Cell Lung Cancer**

Location: Cancer Care Northwest, Spokane

Student: Courtney Collins, UW School of Medicine, Spokane

Preceptor: Jessica Hellyer, MD

## **Surveillance Outcomes after Surgical Resection of Non-Small Cell Lung Cancer**

Location: Sacred Heart/Holy Family Medical Center, Spokane

Student: Parveer Kaur, UW School of Medicine, Spokane

Preceptor: Alexi Matousek, MD

## **The Effects of Intraoperative Ketamine & NSAIDS Use on Surgical Recovery Quality**

Location: Providence Sacred Heart Medical Center, Spokane

Student: Matt Lumsden, UW School of Medicine, Spokane

Preceptor: Karen Colorafi, PhD, MBA, RN, Gonzaga DNAP Faculty

## **The Forgotten Joint Score in Patients Undergoing Direct Anterior Hip vs. Kinematically Aligned Medial-Pivot Knee Arthroplasty: Do They Equilibrate?**

Location: Spokane Joint Replacement Center

Student: Abby Manning, UW School of Medicine, Spokane

Preceptor: David F. Scott, MD



# Public Health Collaborations

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## **Increasing Awareness of Resources for Substance Use Disorder Recovery in Wenatchee, WA**

Student: Isaiah Banken, UW School of Medicine

Preceptor: Brian Derrick, DO

## **Mental Health Education and Resources: Newport, Pend Oreille County, WA**

Student: Craig Glasser, UW School of Medicine

Preceptor: Jeremy Lewis, MD

## **Evidence for a School-Based Intervention to Increase Childhood Vaccination Rates in Grand Coulee, WA**

Student: Lydia Larson, UW School of Medicine

Preceptor: Andrew Castrodale, MD

## **Education on the Impact of Housing on Health in Clarkston, WA**

Student: Pearl Griffiths, UW School of Medicine

Preceptor: Carson Seeber, MD

## **Reducing Emergency Department Utilization with Mobile Outreach Programs in Yakima, WA**

Student: David Lindgren, UW School of Medicine

Preceptor: Kristi Trickett, DO

## **Elderly Heat Stroke Prevention in Deer Park, WA**

Student: Nadina Mrkaljevic, UW School of Medicine

Preceptor: Leah Kobes, MD

## **Improving the Ocular Health of Migrant Field Workers in Moses Lake, WA**

Student: Mahimna Pandya, UW School of Medicine

Preceptor: Ryan Tolley, DO

## **Care Navigation – Beyond Harm Reduction: A Pilot for the Most Vulnerable Populations in Ellensburg, WA**

Student: Ryan Wendt, UW School of Medicine

Preceptor: John Merrill-Steskal, MD

## **Providing at Home Strategies to Protect Respiratory Health During Wildfire Season in Deer Park, WA**

Student: Kenyon Wilson, UW School of Medicine

Preceptor: Shelby Rush, MD

