JOSHUA J. COOK

Highest Degree Earned: Two Concurrent Master's Degrees **Current Positions:** NIH T35 Graduate Research Fellow, Adjunct Professor

Location: Pensacola Metropolitan Area or Remote Contact: jcook0312@outlook.com (or scan below)

Portfolio of Work: https://joshua-j-cook-portfolios.netlify.app/



PROFESSIONAL PROFILE

- Dedicated and analytical professional with a strong foundation in data science and clinical research. Over 7 years of experience in Biomedical Science, 3+ years in Clinical Research, and 2+ years in Data Science. Proven ability to synthesize complex data, develop predictive models, and drive impactful research projects. Certified in Project Management and Clinical Research Coordination, with a commitment to advancing healthcare through innovative data analysis and evidence-based approaches.
- Currently working part-time as a NIH Graduate Research Fellow at the University of South
 Carolina Big Data Health Science Center and in higher education as an Adjunct Professor at
 the University of West Florida while actively pursuing a full-time data science position. I aim
 to utilize my diverse knowledge of the biomedical sciences, clinical research, and data
 science to become an impactful member of a team within the healthcare, clinical research, or
 public health sectors.
 - Proficient and effective science communicator and professor (both oral and written), frequently teaching, explaining, and presenting complex information and industry jargon to audiences of various backgrounds (scientific and nonscientific). I deeply acknowledge the importance of teaching and of mentorship and thus aim to honor my own mentors by continuing to guide others to the best of my ability.

Last Updated: August 13th, 2024

EDUCATION

University of West Florida (UWF) | 2024-Present

Graduate Certifications | Advanced Data Science, Health Informatics, Business Foundations

University of South Carolina (USC) | 2024-Present

NIH T35 Graduate Research Fellow | Big Data Health Science (BDHS)

University of West Florida (UWF) | 2024

Master of Science (M.S.) | Data Science (DS), Analytics & Modeling

Wake Forest University (WFU) | 2023

Master of Science (M.S.) | Clinical Research Management (CRM), Clinical Operations

University of West Florida (UWF) | 2021

Bachelor of Science (B.S.) | Biomedical Sciences, Kugelman Honors 4-Year Pathway | Magna Cum Laude (cGPA 3.72/4.0)

University of West Florida (UWF) | 2019

Associate of Arts (A.A.) | Magna Cum Laude (cGPA 3.72/4.0)

Florida Virtual School Full-Time (FLVS-FT) | 2016

High School Diploma | Scholars Designation (cGPA 3.92/4.0)

SKILLS & CERTIFICATION (Ranked: beginner -> intermediate -> experienced)

Biomedical Sciences

General Skills	Laboratory Safety & Biohazardous Material Management	Experienced *Certified, UWF, 2024
	Biomedical Responsible Conduct of Research (RCR)	Experienced *Certified, CITI, 2018-2021
	Pipetting (Micro and Serological)	Experienced
	Top Balances (Standard and Analytical)	Experienced
	Centrifuges (Standard and Mini)	Experienced
	Research Documentation (Physical and Digital)	Experienced

^{*}Top rated skills according to colleagues on LinkedIn

	Autoclave	Experienced	
	Animal Care (M. musculus)	Experienced	
Protein Analysis	Bradford Assay	Experienced	
	Protein Normalization	Experienced	
	Western Blotting	Experienced	
	Enzyme-Linked Immunosorbent Assay (ELISA)	Intermediate	
	Luminex® MAGPIX® Multiplexing	Intermediate	
DNA Analysis	DNA Isolation	Intermediate	
	Polymerase Chain Reaction (PCR)	Intermediate	
	Electrophoresis (Agarose and SDS-PAGE)	Intermediate	
Cell Culture	Aseptic Technique	Experienced	
	Bacterial Culture (E. coli)	Intermediate	
	Immortal Cell Lines (C2C12, H9C2, SH-SY5Y)	Intermediate	
	Human Mesenchymal Stem Cells (MSCs)	Intermediate	
Cellular Analysis	Microscopy (Light and Fluorescent)	Experienced	
	Complete Blood Cell (CBC) Count	Experienced	
	Total Nucleated Cell (TNC) Count	Intermediate	
	In-vitro Differentiation (Adipocyte, Chondrocyte, Osteoblast)	Intermediate	
	Staining (Gram, Alizarin Red, Alcian Blue, Oil Red O)	Intermediate	

Clinical Research

General Skills Good Clinical Practices (GCP)* Experienced
Certified, NIH NIDA,

10Apr2021-10Apr2024

Protecting Human Research Experienced

Participants (PHRP) *Certified, NIH, 2018-2024

JOSHUA J. COOK

Information Privacy Security & Experienced

HIPAA Adherence *Certified, **CITI**, 2018-2021

Experienced Clinical Research/Clinical Trial

Certified, ACRP CCRC, Coordination 16SEPT2023-16SEPT2025

Patient Communications* Experienced

Medical Records Management **Experienced** (AllScripts/PACS/Athena)*

Experienced Social & Behavioral Research

*Certified, **CITI**, 2024-2027

Experienced Data and Safety Monitoring in

Human Subjects Research *Certified, CITI, 2024

Intermediate

*Certified, ACRP-PM, Management Project Management 10OCT2023-15NOV2025

> Study Design/Protocol Writing Experienced

Institutional Review Board

(IRB) Regulatory Affairs (local Experienced

and central)

closeout)

Project Lifecycle Regulatory Affairs (Startup, conduct, Intermediate

FDA Regulatory Affairs (IND,

Beginner NDA, BLA, IDE)

Procedures Sterile Technique Intermediate

> Phlebotomy/Blood Processing Intermediate

> Intermediate

Shipping Dangerous Goods

*Certified, Mayo Clinic, (SDG) 20OCT2023-20OCT2025

Clinical Trial Management Intermediate Technology

Systems (CTMS)(CRIO) *Certified, CRIO, 2022

Electronic Data Capture (EDC) (Biolinica, iMedidata, iMednet,

Clindex, Castor)

Intermediate

Data Science

Undergraduate Algebra, Mathematics & Statistics Experienced Trigonometry, Calculus

> ANOVA (1-way, 2-way, Experienced nonparametric methods)

> > JOSHUA J. COOK

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Homogeneity of Variance

(HoV)

Experienced

Normality/QQ Plots Experienced

Pairwise Comparisons (ex:

Tukey's HSD), Linear

Contrasts

Chi-squared

Experienced

Intermediate

Simple/Multiple Linear

Regression (SLR, MLR)

Intermediate

Beginner

Time Series Analysis (TSA)

Machine Learning (ex: decision

trees, random forest, XGBoost)

Intermediate

Deep Learning (CNN) Beginner
Multivariate Analysis Beginner

Linear Mixed Models (LMM) Intermediate

Programming & Database

Research Electronic Data

On the Control of the Control o

Capture System (REDCap)

Experienced

Qualtrics Intermediate

Structured Query Language

(SQL)

Beginner

Statistical Analysis System

(SAS®)

Intermediate

R (Base, tidyverse, gt,

gtsummary, gtextras,

markdown, knitr, quarto)

Intermediate

Python (Base, numpy, pandas,

matplotlib, scikit-learn)

Intermediate

Beginner

GitHub/Git *jjc54 (Joshua J. Cook,

M.S., ACRP-PM, CCRC)

(github.com)

Microsoft Excel, PowerBI Beginner
Microsoft Power Query (DAX) Beginner
Microsoft Power Automate Beginner

Other

Language English Experienced

Teaching FERPA Intermediate

*Certified, EverFi, 2018

Software Microsoft Windows Experienced

Apple MacOS Experienced

Microsoft 365 (OneDrive,

Outlook, OneNote, Sway, Word, PowerPoint, Teams, Experienced

Forms)

Google G Suite (Gmail, Calendar, Drive, Meet) Experienced

Canvas by Infrastructure Intermediate
WebEx/Zoom Experienced

PubMed/Zotero/EndNote Experienced

PROFESSIONAL EXPERIENCE

University of South Carolina (USC)

Big Data Health Science Center (BDHSC)

NIH T35 Graduate Research Fellow | May 2024-Present

The NIH-funded T35 Research Traineeship Program is designed specifically for master's and pre-dissertation doctoral students in physical and/or quantitative sciences from across South Carolina and the United States (https://bigdata.sc.edu/t35-program/). The program was designed to provide formal didactic training and experiential learning using ongoing NIAID-funded Big Data research projects that utilized one or more of five large existing data sources: NIH COVID-19 Cohort Collaborative (N3C) synthetic data, SC statewide HIV data, SCCOVID-19 data, VA system-wide HIV data, and VA COVID-19 data. The summer term was focused on learning hard skills while the year-long fellowship is meant to serve as a research-intensive mentorship program with the aim of publishing a public health paper.

This full-time research training program allowed participants to build their professional skills and network by working alongside established clinical scientists on one or more Big Data Health-related studies. In addition to learning first-hand about the process of conducting research related to Big Data Health Science, participants had opportunities to attend seminars and lectures and actively participated in ongoing discussions of current and future research activities. They also had the opportunity to present their research at national and/or local conferences in the year following the traineeship.

<u>Leadership</u> – Bankole Olatosi, Ph.D. (PI), Neset Hikmet, Ph.D. (PI), Xioming Li, Ph.D. (Co-I), Swann A. Adams, Ph.D. (Mentor), Audrey Auen, MPH (Coordinator).

- Qualifications Graduate-level education and experience in data science and clinical research.
- <u>Formal Courses</u> EPID 749 Intro to Infectious Disease Epidemiology, HSPM 791 Applying Analytics to Big Data, ITEC 781 Intro to AI and Informatics I, ITEC 782 Intro to AI and Informatics II.
- Extracurricular Activities Biweekly journal club. Attendance at the American Association for Cancer Research (AACR) Cancer Disparities Progress Report 2024 Webinar. CITI certifications for Gender and Sexual Minorities (GSM) in Human Subjects Research (HSR) and Artificial Intelligence (AI) and Human Subject Protections.
- <u>Primary Responsibilities</u> Weekly mentor meetings and presentation. Initial literature review and topic selection with research mentor. Data extraction, transformation, and loading (ETL) of a large dataset (CDC BRFSS) into R. Data cleaning and management processes within R. Reporting with Quarto, initial variable selection and consolidation, geocoding and mapping, model building. Abstract and manuscript drafts in progress for 2024-2025.
- <u>Key Accomplishments</u> Presentation of journal club and current research project literature review (see below). Two technical papers on methods submitted and accepted to the Western Users of SAS Software (WUSS) and the Southeast SAS Users Group (SESUG) 2024 conferences.

University of West Florida (UWF)

Department of Biology

Adjunct Professor | Jan2024-Present

Fall 2024 Adjunct Appointment:

- PCB3097L CRN 80398 Intro to Human Anatomy Lab Anatomy
- PCB3097L CRN 80436 Intro to Human Anatomy Lab Anatomy
- PCB3097L CRN 80557 Intro to Human Anatomy Lab Anatomy
- <u>Leadership</u> Peter Cavnar, Ph.D. (Department Chair), Karen Pritchard, Ph.D. (Intro to Human Anatomy Laboratory Coordinator), Rodney Guttmann, Ph.D. (Faculty Mentor).
- Qualifications Top rating on previous semester review form (1 satisfactory and eligible to be rehired). Graduate-level education and experience in biology, anatomy & physiology, cell & molecular biology, and genetics.
- <u>Instruction</u> Direct instruction of biology undergraduate and non-major undergraduate students with the aid of undergraduate- and graduate- level teaching assistants (TAs).

Spring 2024 Adjunct Appointment:

- BSC1086L CRN 10239 A&P II lab
 - Anatomy & Physiology II Laboratory
 - SAI Overall Assessment of Instructor = 91% (Excellent/Very Good/Good).
- BSC2011L CRN 10260 Biology II Lab
 - o Biology II Laboratory
 - SAI Overall Assessment of Instructor = 88% (Excellent/Very Good/Good).
- BSC2011L CRN 10261 Biology II Lab
 - o Biology II Laboratory
 - SAI Overall Assessment of Instructor = 100% (Excellent/Very Good/Good).
- BSC2011L CRN 10263 Biology II Lab
 - o Biology II Laboratory
 - SAI Overall Assessment of Instructor = 73% (Excellent/Very Good/Good).
- BSC2011L CRN 10264 Biology II Lab
 - o Biology II Laboratory
 - SAI Overall Assessment of Instructor = 93% (Excellent/Very Good/Good).
- <u>Leadership</u> Peter Cavnar, Ph.D. (Department Chair), Sarah Tominack, Ph.D. (Biology Laboratory Coordinator), Erica Taylor, Ph.D. (Anatomy & Physiology Laboratory Coordinator), Rodney Guttmann, Ph.D. (Faculty Mentor).
- Qualifications Graduate-level education and experience in biology, anatomy & physiology, cell & molecular biology, and genetics.
- <u>Key Accomplishments</u> Top rating on semester review form (1 satisfactory and eligible to be rehired).
- <u>Instruction -</u> Direct instruction of 150 biology undergraduate and non-major undergraduate students with the aid of undergraduate- and graduate- level teaching assistants (TAs).

Andrews Research & Education Foundation (AREF)

Research Department

Research Quality Analyst | Feb2023-Dec2023

Responsible for data literacy, quality/risk management, regulatory affairs, solutions development, and clinical studies development which aim to generate ethical, sustainable, and well-supported research activity.

- <u>Leadership</u> Jen Mostert, CPA (Executive Director), Achraf Cohen, Ph.D. (Lead Statistician), Steve E. Jordan, M.D. (Primary Investigator).
- Qualifications Previous work experience and undergraduate research internship which included both certification and on-the-job trainings in the daily operations, management, and oversight of clinical trials (see professional experience). Education

- in Clinical Research Management and Data Science. Promoted from previous position (listed below).
- <u>Data Literacy:</u> Responsible for the management of team data collection plans, data quality assurance, data analysis and validation, and data dissemination methods. Aids in the organization's ability to make data-informed decisions that improve success.
- Quality/Risk Management: Responsible for physician and team member education and mentoring related to the facilitation of Good Clinical Practices (GCP), Good Documentation Practices (GDP), and Good Clinical Data Management Practice (GCDMP) for clinical professionals involved in research studies. Aids in the organization's ability to mitigate risk by ensuring quality through adequate training and use of data in decision making.
- <u>Clinical Studies Development:</u> Responsible for enhancing collaboration with team, physician, and industry partners to develop research ideas and protocols. Supports the organization by developing standard operating procedures (SOPs), assessing study timelines and forecasts, and overseeing investigator and fellow needs for research development.
- Regulatory Affairs: Serves as a liaison with Institutional Review Boards (IRBs) for developing studies and Statistical Analysis Plans (SAPs) and varying peer-reviewed journals to facilitate manuscript publications. Involved in regulatory and grant applications through the Florida Department of Health (DoH), U.S. Food & Drug Administration (FDA), National Institutes of Health (NIH), and other supporting agencies.
- <u>Solutions Development:</u> Responsible for providing time-efficient and scientifically-sound solutions to research, data, quality, and business problems posed by AREF and all involved stakeholders.
- <u>Key Accomplishments</u> Successful startup and closeout of 30+ clinical and 5+ benchtop and research studies (publications in progress, see below). Direct training and mentoring of 70+ undergraduate- and graduate-level research interns, resulting in several medical/graduate school matriculations and residency program acceptances (orthopedic and radiology), multiple internship extensions and hires as part-time research assistants or specialists. Publication in Arthroscopy. Best paper award and presentation at the 2023 WUSS annual conference. ACRP certification as a Project Manager (ACRP-PM) and Certified Clinical Research Coordinator (CCRC). Paper and presentation at the 2023 PharmaSUG annual conference. Awarded the 2023 Association of Clinical Research Professionals (ACRP) Clinical Research Leadership Scholarship. Publication in the Journal of Cartilage & Joint Preservation (JCJP). Renewal and increase of annual grant funding based on study enrollment and conduct efforts (see below).

Clinical Research Coordinator (CRC) | May2021-Feb2023

Responsible for the primary coordination and operations of 35+ active clinical research studies within the areas of orthopedic sports medicine and regenerative medicine under one executive director and several primary investigators.

- <u>Leadership</u> Jen Mostert, CPA (Executive Director), Achraf Cohen, Ph.D. (Lead Statistician), Steve E. Jordan, M.D. (Primary Investigator).
- <u>Qualifications</u> Previous work experience and undergraduate research internship which included both certification and on-the-job trainings in the daily operations, management, and oversight of clinical trials (see professional experience).
- Clinical Operations Responsible for study initiation, recruitment, enrollment, coordination, quality assurance, close out, data analysis, and manuscript writing. Study designs include both descriptive (case reports/series, surveys), and analytical (experimental randomized controlled trials (RCTs), observational (cohort, case-control). Conduct subject consent, enrollment/treatment, and follow up visits. Lead experiments within the Andrews Center for Regenerative Medicine focusing on quantitative and qualitative analysis of human stem cell products (MSCs/HPCs) and platelet rich plasma (PRP). Oversee daily operations of research site including regulatory management, subject file management, and site communications. Facilitate physician and administration communication. Direct training and management of research assistants and interns (both undergraduate and graduate levels).
- <u>Key Accomplishments</u> Direct hiring before undergraduate graduation. Successful startup of 20+ and closeout of 5+ benchtop and clinical research studies (publications in progress, see below). Successful training of several dozen research interns, resulting in multiple internship extensions and one hire as a part-time research assistant. Represented AREF at the 2022 American College of Sports Medicine (ACSM) Annual Meeting and World Congresses in San Diego, CA. Awarded the inaugural AREF Scholarship for dedication and work-ethic. Renewal and increase of annual grant funding based on study enrollment and conduct efforts (see below). Promotion received Feb2023.

University of West Florida

Departments of Chemistry, Tutoring & Learning Services, Biology, and Research Administration and Engagement (ORAE)

Chemistry Success Leader | Aug2019-Dec2020

Led weekly workshops to reinforce material learned during previous lecture and provide an open learning opportunity for undergraduate students.

- <u>Courses</u> General Chemistry I (Aug2019-May2020), General Chemistry II (Jun2020-Aug2020)
- <u>Preparation</u> Completed leadership trainings in preparation for mentoring students enrolled in general chemistry. Attended weekly meetings with chemistry professors to prepare for weekly materials. Attended weekly general chemistry I/II lectures to review relevant material.
- <u>Sessions</u> Hosted Success Sessions immediately following lectures to groups of 30-60 students aimed at reviewing material and helping students master application

- problems via in-class worksheets and quizzes. Worked out problems with class on chalk board. Graded quizzes. Assisted in lecture exam proctoring. Hosted WebEx and Canvas Conference sessions during COVID-19 courses.
- <u>Key Accomplishments</u> Increased retention rates among general chemistry students despite COVID-19 pandemic; data for the program pending publication.

Peer Academic Coach | Jan2020-May2020

Met weekly with students from diverse backgrounds to provide academic coaching and goal setting.

- <u>Preparation</u> Completed trainings on FERPA, academic resources, active-listening, autism spectrum disorder, and myUWF Navigate & Accommodate applications for student reports. Met biweekly with TLR staff to train and update on academic coaching progress.
- <u>Sessions</u> Met weekly with students for academic coaching and support in person, and through Zoom sessions during COVID-19 courses.
- <u>Key Accomplishments</u> Aided half a dozen students throughout the academic year, preventing them from dropping courses and reducing stress during the COVID-19 pandemic.

Undergraduate Teaching Assistant (TA) | Aug2019-May2020

Assisted instructors in weekly lab setup, experimentation, cleanup, and student examination.

- <u>Courses -</u> Concepts in Human Physiology Lab (Jan2020-May2020), Genetics Lab (Aug2019-May2020), Biology I Lab (Aug2019-Dec2019)
- <u>Preparation</u> Completed annual laboratory safety training in preparation for TA position. Met weekly with lab coordinators, lab instructors, and other teaching assistants to review and prepare for the weekly labs.
- <u>Sessions -</u> Assisted instructors in weekly Genetics, Biology I, and Human Physiology labs in lab setup, experimentation, cleanup, and examination. Graded homework, quizzes, and exams. Assisted in lab exam proctoring. Managed Canvas by Infrastructure software for grades, attendance, and course content. Assisted in lab WebEx sessions during COVID-19 courses.
- <u>Key Accomplishments</u> Provided students with key laboratory skills, successfully completed lab courses during the COVID-19 pandemic.

Lead Clinical Research Coordinator (CRC) | Aug2018-Aug2019

Aided the director and Principal Investigator in the coordination and management of a recently initiated clinical research site out of the University of West Florida.

• <u>Leadership</u> - Rodney Guttmann, Ph.D. (Principal Investigator), Kristina Robison, M.S. (Director)

- <u>Preparation Completed undergraduate research internship which included both certification and on-the-job trainings in the daily operations, management, and oversight of clinical trials (see research experience).</u>
- <u>Clinical Operations</u> Responsible for subject recruitment, study enrollment, subject follow-ups. Oversaw regulatory documentation, FDA compliance, Institutional Review Board (IRB) compliance, and adverse event reporting (AE/SAE) alongside site personnel and medical doctors. Further developed initial clinical research management and oversight systems as undergraduate research interns were onboarded (subject medical charts, standard operating procedures (SOPs), electronic data capture systems (EDC), clinical trial management systems (CTMS)). Assisted in consenting, screening, and enrollment process. Directed medical specimens and study drug dispensing. Aided in study closeout. Responsible for training of research interns.
- Responsible Studies (per Delegation of Authority):
 - Sponsor: Otsuka Pharmaceuticals. A Phase 3, 12-Week, Multicenter, Randomized, Double-blind, Placebo-controlled, 2-Arm, Fixed-dose Trial to Evaluate the Efficacy, Safety, and Tolerability of Brexpiprazole (OPC-34712) in the Treatment of Subjects With Agitation Associated With Dementia of the Alzheimer's Type. (NCT03548584)
 - Sponsor: Avanir Pharmaceuticals. A Phase 3, Multicenter, Randomized, Double-blind, Placebo-controlled Study to Assess the Efficacy, Safety, and Tolerability of AVP-786 (Deuterated [d6]-Dextromethorphan Hydrobromide [d6-DM]/Quinidine Sulfate [Q]) for the Treatment of Agitation in Patients With Dementia of the Alzheimer's Type. (NCT02442778)
 - Sponsor: Avanir Pharmaceuticals. A Phase 3, Multicenter, Long Term, Extension Study of the Safety and Efficacy of AVP-786 (Deuterated [d6] Dextromethorphan Hydrobromide [d6-DM]/Quinidine Sulfate [Q]) for the Treatment of Agitation in Patients With Dementia of the Alzheimer's Type. (NCT02446132)
- <u>Key Accomplishments</u> Presented research at state local (UWF), state (FCHC), and regional (SRHC) research conferences. Trained four undergraduate research interns. Successfully initiated and closed three clinical research studies within the area of CNS disorders.

ACADEMIC RESEARCH EXPERIENCE

University of South Carolina

Big Data Health Science Center (BDHSC)

Research Fellow | May2024-Present

Assisted 2 Principal Investigators in big data studies. One is focused on assessing cervical cancer disparities within the LGBTQ+ community utilizing the Centers for Disease Control (CDC) Behavioral Risk Factor Surveillance System (BRFSS) survey data. Another is focused on studied the effects and factors of long COVID-19.

- <u>Leadership</u> Swann A Adams, M.S., Ph.D., FACE (Principal Investigator), Bankole Olatosi, Ph.D. (Principal Investigator).
- <u>Preparation</u> Graduate-level education and experience in data science and clinical research.
- Research Methods *In progress*.
- Key Accomplishments Abstract acceptances at SESUG and WUSS 2024.

University of West Florida

Departments of Mathematics and Statistics, Movement Sciences and. Health, Research Administration and Engagement (ORAE), and Biology

Post-Graduate Researcher/Graduate Research Assistant (RA) | Aug2023-Present Assisted Principal Investigator in several data science research projects focusing on using historical clinical trials data to predict future trial probability of success given protocol, study, and results data, and developing a reproducible statistical methodology for use in consensus statements, which are common in high-risk clinical research studies.

Key Research Projects: "Prediction of Clinical Trial Enrollment Rates" and "Statistical Considerations in the Development of a Consensus Statement."

- <u>Leadership</u> Achraf Cohen, Ph.D. (Principal Investigator).
- Preparation Enrolled in Data Science master's degree, member of UWF CSDA.
- Research Methods Developed predictive models to assess the probability of success of a proposed clinical trial given protocol characteristics using historical data. Analyzed the iterative nature of consensus statement building and the necessity for clear statistical considerations in both the design and interpretation phases to ensure the validity of the consensus statement.
- <u>Key Accomplishments</u> Awarded UWF Graduate Student Travel Grants. Placed 1st overall in the inaugural UWF 3MT competition. First Place Student Poster Competition at the 2024 Conference on Statistical Practice (CSP). Placed 8 / 30 in the annual USC National Big Data Health Science Student Case Competition. Paper/presentation acceptances (4) to the 2024 PharmaSUG Conference, with New Professional Scholarship. Awarded the Boyd Harshbarger Travel Award at the Southern Regional Council on Statistics (SRCOS) 2024 meeting.

Undergraduate/Graduate Research Assistant (RA) | Jun2019-Jun2022 Assisted Principal Investigator in several research projects focusing on Alzheimer's Disease (AD) pathology and metabolic diseases such as Non-alcoholic Fatty Liver Disease (NAFLD).

<u>Manuscript Submission (Accepted 04Apr2022):</u> "Endurance exercise-mediated metabolic reshuffle attenuates high-caloric diet-induced non-alcoholic fatty liver disease (ANNHEPATOL-D-22-00103R1)"

<u>Undergraduate Honors Thesis (Accepted 21Apr2021):</u> "Endurance exercise attenuates hypercaloric diet-induced hepatic steatosis by metabolic reprogramming."

- <u>Leadership</u> Youngil Lee, Ph.D. (Principal Investigator), Yongchul Jang, Ph.D. (Post-Doctoral Student)
- <u>Preparation</u> Maintained UWF laboratory safety training safety certifications. Shadowed post-doc student, upper-classman undergraduate students, and PI to learn lab protocols. Participated in weekly lab meetings and literature presentations.
- <u>Lab Maintenance</u> Restocked reagents, stock solutions, and lab materials. Responsible for lab cleaning. Maintained stocks of wild type and transgenic mice (*M. musculus*).
- Thesis Research Methods Conducted exercise training on mice. Harvested postmortem samples of liver, heart, brain, and skeletal muscle tissue from mice. Prepared for protein quantification through western blotting by measuring total protein concentration using the Bradford Assay. Normalized tissue samples in preparation for western blotting. Performed western blotting experiments and ImageLab data analysis to determine specific protein concentrations for samples. Engaged in scientific writing for undergraduate honors thesis and subsequent publication.
- Other Research Methods Assisted in cognitive assessment of mice via Barnes Maze Testing and Open Field Testing. Shadowed PI directly during cell-culture study. Assisted in the growth and differentiation of purchased cardiac (H9C2 *R. norvegicu*), neural (SH-SY5Y *H. sapiens*), and skeletal muscle (C2C12 *M. musculus*) immortal cell lines. Treated groups within the three lines with different treatments over the course of 24-, 48-, and 72-hour periods. Lysed and collected cellular contents for western blot analysis. Performed western blot analysis on cultured cells following standard procedures.
- <u>Key Accomplishments</u> Acceptance of undergraduate honors thesis by the UWF Kugelman Honors Program. Presentation of thesis work at local (UWF) and regional (SEACSM) research conferences. 2021 OUR Spring Symposium People's Choice Award for thesis presentation. Successfully trained several lower classman students in lab protocols and experiments for other projects. Thesis work accepted for publication within the Annals of Hepatology (2022).

Intern Clinical Research Coordinator (CRC) | May 2018-Aug 2018
Facilitated daily clinical trial operations under direct supervision of clinical trials director and Principal Investigator at a recently initiated clinical research site.

Key Research Project: "Clinical Trials at the University of West Florida: Advocating for Sponsorship in Undergraduate Clinical Research."

- <u>Leadership</u> Rodney Guttmann, Ph.D. (Principal Investigator), Kristina Robison, M.S. (Director)
- <u>Preparation</u> Completed certifications in Good Clinical Practices (GCP), Protecting Human Research Participants (PHRP), and many other documented trainings required for ethical clinical research.
- <u>Clinical Operations</u> Trained by Director and PI in daily operations of clinical research sites, including subject recruitment, subject follow-ups, regulatory documentation, FDA compliance, IRB compliance, and adverse event reporting. Aided in implementation of clinical research management and oversight systems for new site startup.
- <u>Key Accomplishments</u> Presentation of research project at local conference (UWF). Hired as a part-time employee after the conclusion of summer internship (<u>see professional experience</u>).

Undergraduate Research Assistant (RA) | Aug2019-Dec2019

Initiated independent student-lead project aimed at gaining exposure to large-scale data analysis with PI supervision and regulation.

<u>Key Research Project: "Organizing and Evaluating Drug Recalls by the U.S. Food and Drug Administration."</u>

- <u>Leadership</u> Rodney Guttmann, Ph.D. (Principal Investigator)
- <u>Preparation</u> Formed an interdisciplinary team of students from the UWF Departments of Biology and Mathematics. Obtained source data sets from the U.S. Food and Drug Administration through website database and openFDA, and Elasticsearch-based API maintained by the FDA for archival records.
- Research Methods Performed qualitative data analysis using MAXQDA 2018 software for importing and auto coding all relevant lines of data and computing frequency charts for coding numbers. Used frequency charts to compile graphical data for presentation. Produced a Word Cloud from isolated drug recall explanations given by the FDA using MAXQDA coding.
- <u>Key Accomplishments</u> Presentation of research project to Kugelman Honors staff and at a national research conference (NCHC).

Undergraduate Research Assistant (RA) | Jan2018-Mar2019

Assisted Principal Investigator in current research project focusing on the identification of bacteriophage specific and selective for Alzheimer's Disease-associated metabolites.

Key Research Project: "Phage-Based Biomarkers in Alzheimer's Disease."

• <u>Leadership</u> – Rodney Guttmann, Ph.D. (Principal Investigator)

- <u>Preparation</u> Maintained UWF laboratory safety training safety certifications. Shadowed upper-classman undergraduate students, and PI to learn lab protocols. Participated in weekly lab meetings.
- <u>Lab Maintenance</u> Restocked reagents, stock solutions, and lab materials. Responsible for lab cleaning.
- Research Methods Panned several libraries of bacteriophage against metabolites found in Alzheimer's Disease samples (i.e., tau, Amyloid Beta) using enzyme-linked immunosorbent assays (ELISA). Confirmed specificity and selectivity of phage via bacterial culture and sequencing.
- <u>Key Accomplishments</u> Presentation of research project at local conference (UWF).

RESEARCH DOCUMENTATION

Publications

- Cook, J. Bringing Order to Chaos: Open-Source Tools for Data Integration and Visualization. 2024 PharmaSUG Conference Proceedings. 22May2024.
- Cook, J. An introduction to Quarto: A Versatile Open-source Tool for Data Reporting and Visualization. 2024 PharmaSUG Conference Proceedings. 22May2024.
- Lafler, K., Lafler, R., Cook, J., Sloan, S. Benefits, Challenges, and Opportunities with Open-source Software (OSS) Integration. 2024 PharmaSUG Conference Proceedings. 22May2024.
- Cook, J., Lafler, K. Quarto 1.4: Revolutionizing Open-source Dashboarding Capabilities. 2024 PharmaSUG Conference Proceedings. 22May2024. *Recipient of Best Paper Award
- Cook, J., Cohen, A. Interfacing with Large-scale Clinical Trials Data: The Database for Aggregate Analysis of ClinicalTrials.gov. 2024 PharmaSUG Conference Proceedings. 22May2024.
- Anz, A., Cook, J., Branch, E., Rahming, C., Ostrander, R., Jordan, S. Cells Remain Viable When Collected with an In-line-suction Tissue Collector from Byproducts of Anterior Cruciate Ligament Reconstruction Surgery. *Arthroscopy, Sports Medicine, and Rehabilitation (ASMAR).* 12Dec2023.
- Cook, J. A Dash of SAS®, a Pinch of R: Cooking up Dashboards Using Two Very Different Programming Languages. 2023 WUSS Conference Proceedings. 02Nov2023. *Recipient of Best Paper Award

- (MANUSCRIPT SUBMITTED OCT2023) Parsa, A., Cook, J., Forutan, H., Sayyed Hoseinian, S., Anz, A. Effectiveness of Orthobiologic Interventions in Patients with Greater Trochanteric Pain Syndrome; A Systematic Review and Meta-Analysis. Archives of Bone and Joint Surgery. TBD.
- Cook, J., Truett, J. Making Publication Metric Tracking Easy: Using a Reproducible, Integrated System of R and Microsoft Power BI® to Ease the Pain of Assessing Publication Metrics. 2023 PharmaSUG Conference Proceedings. 17May2023.
- Branch, E., Cook, J., Cohen, A., Plummer, H., Emami, A., Truett, J., Anz, A. Platelet Rich Plasma is similar to Platelet Rich Plasma Plus Hyaluronic Acid for the Treatment of Knee Osteoarthritis at 2 Years: A Randomized Controlled Trial. *Journal of Cartilage & Joint Preservation*. 18Mar2023.
- Cook, J., Wei, M., Segovia, B., Simpson, J., Taylor, S., Kim, S., Cosio-Lima, L., Koh, Y., Lee, Y. Endurance exercise-mediated metabolic reshuffle attenuates high-caloric dietinduced non-alcoholic fatty liver disease. *Annals of Hepatology*. 28Apr2022.

Presentations

- Cook, J., Korver, D., (04Aug2024), Oral and Poster Presentation (Cook, J., Korver D.). Quarto: A Multifaceted Publishing Powerhouse for Medical Researchers. *posit::conf* 2024, Seattle, WA.
- Cook, J. (13Aug2024), Oral Presentation (Cook, J.). Identifying Voter Behavior. *Joint Statistical Meetings (JSM), Portland, OR.*
- Cook, J., Adams S., (15Jun2024), Journal Club Presentation (Cook, J.). Unveiling the Gaps: Understanding Why LGBTQ Individuals Face Barriers to Cancer Screening. *USC NIH T35 Fellowship Program Journal Club, Columbia, SC.*
- Cook, J., Jimenez, A., Cohen, A., (03Jun2024), Poster Presentation (Cook, J.). Harmonizing Healthcare: The Art and Statistics of Consensus Building. 2024 Southern Regional Council on Statistics Summer Research Conference, Clemson, SC.
- Cook, J., (22May2024), Water Cooler Chat. Bringing Order to Chaos: Open-Source Tools for Data Integration and Visualization. 2024 PharmaSUG, Baltimore, MD.
- Cook, J., (22May2024), Oral Presentation. An introduction to Quarto: A Versatile Opensource Tool for Data Reporting and Visualization. 2024 PharmaSUG, Baltimore, MD.
- Lafler, K., Lafler, R., Cook, J., Sloan, S., (22May2024), Roundtable Discussion. Benefits, Challenges, and Opportunities with Open-source Software (OSS) Integration. 2024 PharmaSUG, Baltimore, MD.

- Cook, J., Lafler, K., (22May2024), Oral Presentation (Cook, J.). Quarto 1.4:
 Revolutionizing Open-source Dashboarding Capabilities. 2024 PharmaSUG, Baltimore, MD. *Recipient of Best Paper Award
- Cook, J., Cohen, A., (22May2024), Oral Presentation (Cook, J.). Interfacing with Large-scale Clinical Trials Data: The Database for Aggregate Analysis of ClinicalTrials.gov. 2024 PharmaSUG, Baltimore, MD.
- Cook, J., Robison, K., Guttmann, R., (18Apr2024), Oral Presentation (Cook, J.). Informed Consent in the Age of Artificial Intelligence: A Leap Forward for Clinical Research. 2024 UWF Symposium, Pensacola, FL.
- Cook, J., Cohen, A., (18Apr2024), Virtual Presentation (Cook, J.). Predicting Paths to Success: The Future of Clinical Trial Design. 2024 UWF Symposium, Pensacola, FL.
- Cook, J., Cohen, A., (18Apr2024), Oral Presentation (Cook, J.). Predicting Paths to Success: The Future of Clinical Trial Design. 2024 UWF Symposium, Pensacola, FL.
- Cook, J., Shah, S., Hernandez, J., Basili, S., Cohen, A., (18APR2024), Poster Presentation (Cook, J.). From Classroom to Clinic: Applying Linear Mixed Models to Understand Real-World Medical Research Data. 2024 UWF Symposium, Pensacola, FL.
- Cook, J., Jimenez, A., Cohen, A., (18Apr2024), Poster Presentation (Cook, J.). Harmonizing Healthcare: The Art and Statistics of Consensus Building. 2024 UWF Symposium, Pensacola, FL.
- Cook, J., Cohen, A., (09Apr2024), Oral Presentation (Cook, J.). Data-Driven Probabilistic Models of Clinical Trial Timelines. 2024 Conference of Florida Graduate Schools (CFGS) State 3-Minute Thesis (3MT), Pensacola, FL.
- Cook, J., Cohen, A., (14Mar2024), Oral Presentation (Cook, J.). Data-Driven Probabilistic Models of Clinical Trial Timelines. 2024 Conference of Southern Graduate Schools (CSGS) Regional 3-Minute Thesis (3MT), Greenville, SC.
- Cook, J., Jimenez, A., Stillman, J., Cohen, A., (27Feb2024), Poster Presentation (Cook, J.). Statistical Considerations in the Development of a Consensus Statement. 2024
 Conference on Statistical Practice (CSP), New Orleans, LA. *Recipient of Best Poster Award
- Cook, J. (16Feb2024), Oral Presentation (Cook, J.). The Argo Formula: Crafting Medical Professionals Equipped for the Data-Intensive Clinical Research Frontier. 2024 UWF Biology Seminar Lecture, Pensacola, FL.

- Lafler, K., Lafler, R., Cook, J., Wade, A., Sloan, S. (01Nov2023), Panel Discussion. Benefits, Challenges, and Opportunities with Open-Source Software (OSS) Integration. 2023 WUSS Conference, San Diego, CA.
- Cook, J. (01Nov2023), Oral Presentation (Cook, J.). A Dash of SAS®, a Pinch of R: Cooking up Dashboards Using Two Very Different Programming Languages. 2023 WUSS Conference, San Diego, CA. *Recipient of Best Paper Award
- Cook, J., Cohen, A. (05Oct2023), Oral Presentation (Cook, J.). Prediction of Clinical Trial Enrollment Rates. 2024 UWF Local 3-Minute Thesis (3MT), Pensacola, FL. *Recipient of Best Overall Award
- Jordan, S., Ostrander, R., Kindle, B., Hackel, J., Cook, J., Maggi, E., Plummer, H., Anz, A., Branch, E. (31Jul2023), Oral Presentation (Branch, E.). Preoperative Platelet Rich Plasma Injections Decreases Inflammatory and Chondrodegenerative Biomarkers in Patients with Acute Anterior Cruciate Ligament Tears and Reconstruction: A Pilot Study. 2023 American Orthopaedic Society for Sports Medicine (AAOSM) Annual Meeting, Washington, DC.
- Cook, J., Truett, J. (17May2023), Oral Presentation (Cook, J.). Making Publication Metric Tracking Easy: Using a Reproducible, Integrated System of R and Microsoft Power BI® to Ease the Pain of Assessing Publication Metrics. 2023 PharmaSUG Conference, San Francisco, CA.
- Cook, J. (25Oct2022), Oral Presentation (Cook, J.). SAS® Student Showcase. 2022 SouthEast SAS® Users Group (SESUG) Conference, Mobile, AL.
- Cook, J., Wei, M., Segovia, B., Cosio-Lima, L., Simpson, J., Taylor, S., Koh, Y., Kim, S., Lee, Y. (04Jun2022), Poster Presentation (Cook, J.). Endurance exercise-mediated metabolic reshuffle attenuates high-caloric diet-induced non-alcoholic fatty liver disease. 2022 American College of Sports Medicine (ACSM) Annual Meeting and World Congresses, San Diego, CA.
- Cook, J. (21Apr2022), Oral Presentation (Cook, J.). Research Efforts at the Andrews Research & Education Foundation (AREF). 2022 UWF Cell Biology Lecture, Pensacola, FL.
- Cook, J., Wei, M., Segovia-Ruiz, B., Cosio-Lima, L., Lee, Y. (15Apr2021), Virtual Thesis Presentation (Cook, J.). Endurance exercise prevents metabolic distress-mediated hepatic senescence via enhancing lipid oxidation and inhibiting lipogenesis. 2021 UWF OUR Spring Symposium. *Recipient of People's Choice Award
- Davis, B.E., Wei, M., Cook, J., Segovia-Ruiz, B., Lee, Y. (15Apr2021), Virtual Presentation (Davis, B.E.) The effect of pharmacological memetic of exercise on high fat-induced cardiac myocytes injuries. 2021 UWF OUR Spring Symposium.

- Cook, J., Wei, M., Segovia-Ruiz, B., Cosio-Lima, L., Lee, Y. (18-19Feb2021), Virtual Presentation (Cook, J.). Endurance exercise prevents metabolic distress-mediated hepatic senescence via promoting autophagy. 2021 American College of Sports Medicine Southeast Chapter (SEACSM) Annual Meeting.
- Cook, J., Lee, Y. (04Aug2020), Virtual Presentation (Cook, J.). Exercise-based Regulation of Blood Sugar, and its Implications in Neurological Diseases. 2020 UWF HMCSE SURP Symposium.
- Cook, J., Wei, M., Segovia-Ruiz, B., Hayslip, M., Quintin, S., Jang, Y., Lee, Y. (15Apr2020), Oral Presentation (Cook, J.) Exercise-induced neuroprotection against combinatory effects of metabolic distress and Alzheimer's Disease. 2020 UWF OUR Spring Symposium.
- Summers, E., Slobodian, A., Cook, J., Noll, A., Robison, K., Guttmann, R. (15Apr2020), Oral Presentation (Summers, E., Slobodian, A.) Consenting Dementia Patients in Clinical Trials at UWF. 2020 UWF OUR Spring Symposium.
- Cook, J., Borelli, A., Summers, E., Guttmann, R. (08Nov2019), Poster Presentation (Cook, J.). Organizing and Evaluating Drug Recalls by the U.S. Food and Drug Administration. 2019 National Collegiate Honors Council Conference (NCHC), New Orleans, LA.
- Cook, J., Summers, E., Noll, A., Robison, K., Guttmann, R. (18Apr2019), Poster Presentation (Cook, J.). Clinical Trials at the University of West Florida: Advocating for Sponsorship in Undergraduate Clinical Research. 2019 UWF OUR Spring Symposium, Pensacola, FL.
- Frazier, D., Cook, J., Khan, A., Hayslip, M., McDowell, E., Sisskin, E., Guttmann, R. (18Apr2019), Poster Presentation (Frazier, D.). Phage-based biomarkers in Alzheimer's disease. 2019 UWF OUR Spring Symposium, Pensacola, FL.
- Cook, J., Summers, E., Noll, A., Robison, K., Guttmann, R. (29Mar2019), Poster Presentation (Cook, J.). Clinical Trials at the University of West Florida: Advocating for Sponsorship in Undergraduate Clinical Research. *Southern Regional Honors Council* (SRHC) Conference, Memphis, TN.
- Cook, J., Summers, E., Guttmann, R. (09Feb2019), Round-table Discussion. Clinical Trials: A Guide to Understanding Them. 2019 Florida Collegiate Honors Council (FCHC) Conference, Orlando, FL.

- Cook, J., Robison, K., Guttmann, R. (10Aug2018), Poster Presentation (Cook, J.). Clinical Trials at the University of West Florida. 2018 UWF HMCSE SURP Symposium, Pensacola, FL.
- Brock, O., Hayslip, M., Cook, J., Summers, E., DiMercurio, A., Lockhart, B., Guttmann, R. (19Apr2018), Poster Presentation (Brock, O.) Phage-Based Biomarkers in Alzheimer's Disease. 2018 UWF OUR Spring Symposium, Pensacola, FL.

Clinical Study Involvement

Therapeutic Area	Indication Group(s)	Role(s)	Number of Studies	Involvement	Phase(s)
Orthopedic Sports Medicine	Connective Tissue Injury	CRC/Research Quality Analyst	40+	3 years	III/IV
Regenerative Medicine	Stem Cell and Platelet Rich Plasma (PRP) Therapy	CRC/Research Quality Analyst	15+	3 years	I/II
Neurology	Alzheimer's Disease (AD)	CRC/Intern	2	1.5 years	III

Funding

- T35 Short-Term National Research Service Award (NRSA)(within USC T35 Program) |
 National Institutes of Health (NIH) | May2024-Aug2025 (\$30,000)
- Regenerative Medicine Grant (within AREF) | State of Florida Department of Health (DoH) | 2023-2024 (\$2,500,000), 2022-2023 (\$1,000,000), 2021-2022 (\$500,000)
- UWF OUR Virtual Travel Award | PI: Youngil Lee, Ph.D. | Jan-May2021 (\$500)
- UWF OUR Project Award II | PI: Youngil Lee, Ph.D. | Jan-May2021 (\$500)
- UWF OUR Project Award I | PI: Youngil Lee, Ph.D. | Aug-Dec2020 (\$500)
- UWF Kugelman Honors Thesis Grant | PI: Youngil Lee, Ph.D. | Aug-Dec2020 (\$1,500)
- UWF OUR Project Award | PI: Youngil Lee, Ph.D. | Jan-May2020 (\$500)
- UWF OUR Project Award | PI: Rodney Guttmann, Ph.D. | Aug-Dec2019 (\$500)
- UWF OUR Project Award | PI: Rodney Guttmann, Ph.D. | Aug-Dec2018 (\$500)

Training Programs

- USC NIH T35 Fellowship Program | PI: Swann A. Adams, M.S., Ph.D., FACE, Bankole Olatosi, Ph.D. | May2024-Present
- UWF OUR Summer Undergraduate Research Program (SURP) | PI: Youngil Lee, Ph.D. | May-Aug2020
- UWF OUR Summer Undergraduate Research Program (SURP) | PI: Rodney Guttmann, Ph.D. | May-Aug2018
- UWF OUR Works! Federal Work-Study Program | PI: Rodney Guttmann, Ph.D. | Jan-May2018
- UWF OUR Explorers Shadow Program | PI: George Stewart, Ph.D. | Jan-May2017

EXTRACURRICULAR ACTIVITES

Professional Memberships

- Pensacola Young Professionals (PYP) Leadership Board | Co-Chair, Quality of Life | Mar2024-Present
- SouthEast SAS® Users Group (SESUG) | Co-chair, Visualizations and Reporting | Mar2024-Present
- PYP Mentor Pensacola | Mentee | Nov2023-Present
- PYP | Member | Oct2023-Present
- UWF Computational Statistics and Data Analytics Lab (CSDA) | Post-Graduate Member, Member | Aug2023-Present
- Western Users of SAS® Software (WUSS) | Member | Jul2023-Present
- PharmaSUG | Member | Mar2023-Present
- WFU Biomedical Student Ambassador | Student Ambassador | Spring 2023
- Healthcare Information and Management Systems Society (HIMSS) | National, Regional Student Member | Oct2022-Oct2023
- UWF Graduate Student Advisory Board (GSAB) | Member | Oct2022-Present
- Southeast SAS® Users Group (SESUG) | Member, Co-Chair, Data Visualization and Reporting | Aug2022-Present
- UWF Industry Mentoring in Stem (IMSTEM) Program | Mentor | Aug2022-Present
- Association of Clinical Research Professionals (ACRP) | Member | Aug2021-Present
- UWF Sustained Alumni | Member | May2021-May2022
- American College of Sports Medicine (ACSM)/Southeast Chapter (SEACSM) | National, Regional Member | Feb2021-Jan2022; Apr2022-Apr2023
- Florida Undergraduate Research Leadership Summit (FURLS) | Member | Feb2021-May2021
- UWF American Physician Scientist Association (APSA) | Founding Member, Outreach Coordinator | Sept2020-May2021
- UWF Muslim Student Association (MSA) | Member | Jan2020-May2021

- UWF Alpha Epsilon Delta | Member, Volunteer Coordinator | Aug2020-May2021
- UWF American Medical Women's Association (AMWA) | Member | Feb2019-Jun2019
- UWF Kugelman Honors Program | Member, Peer Mentor | Aug2017-May2021, Aug2019-May2020
- UWF TRiO Leadership Council | Council Member | Jan2017-Oct2017
- UWF TRiO Student Support Services (SSS) | Member | Aug2016-May2021

Community Service

- Southern Regional Council on Statistics (SRCOS) | SURE Graduate Student Mentor | June2024 (5 hours)
- PharmaSUG Annual Conference 2024 | Volunteer | May2024 (5 hours)
- American Statistical Association (ASA) Two-Year College DataFest 2024 | Judge | Apr2024 (2 hours)
- UWF Symposium 2024 | Volunteer | Apr2024 (2 hours)
- Kim Kline Campaign | Volunteer | Feb2024-Present (30 hours)
- West Panhandle Regional Science & Engineering Fair 2024 | Judge | Jan2024 (3 hours)
- WUSS Annual Conference 2023 | Volunteer | Nov2023 (4 hours)
- PharmaSUG Annual Conference 2023 | Volunteer | May2023 (12 hours)
- SESUG Annual Conference 2023 | Volunteer | Aug2022 (3 hours)
- Baptist Medical Park Surgery Center | Volunteer | Mar2021-May2021 (50+ hours)
- UWF Symposium 2019-2021 | Volunteer | 2019-2021 (6 hours)
- UWF Science Olympiad Competition 2020 | Volunteer | 2020
- Pensacola Habitat for Humanity | Volunteer | Feb2020-May2021
- American Association of Retired Persons (AARP) MentorUP Event | Event Contact | Sept2018-Jan2020 (Annual/Biannual Events; 5 hours)
- Keep Pensacola Beautiful | Volunteer | Sept2017-Sept2019
- Pensacola American Cancer Society | Volunteer | Sept-Oct2017
- Pensacola Waterfront Rescue Mission | Volunteer | Sept2017
- Ronald McDonald House Charities of Northwest Florida (RMHC-NWFL) | Volunteer | 2013-2017 (100+ hours)

Medical Shadowing

- Woodlands Medical Specialists | Jennifer Miley, M.D. (Primary Care/Family Medicine) | Dec2020-Jan2021 (60+ hours)
- Woodlands Medical Specialists | Hillary Hultstrand, M.D. (Primary Care/Family Medicine) | Dec2020-Jan2021 (40+ hours)
- West Florida Hospital Medical Center Clinic (MCC) | Ethan Gore, M.D. (Neurology) | Dec2020-Jan2021 (70+ hours)

HONORS & AWARDS (*merit-based, ⁱgraduate-level)

- * iBoyd Harshbarger Travel Award | Southern Regional Council on Statistics (SRCOS) | Summer 2024
- $\bullet \quad ^{*\, i} PharmaSUG$ Best Paper Award (Data Visualization and Reporting) | PharmaSUG | Spring 2024
- **iUWF Outstanding Graduate Student Award (Data Science) | UWF | Spring 2024
- *iUWF John C. Pace Graduate Scholarship | UWF | Spring 2024
- **iUWF Graduate Student Travel Award | UWF | Spring 2024
- *iCSP First Place Student Poster Competition (Overall) | CSP | Spring 2024
- *iPharmaSUG New Professional Scholarship | PharmaSUG | Spring 2024
- *iPlaced Top 10 (8/30) | USC National Big Data Science Student Case Competition | Spring 2024
- *iWUSS Best Paper Award (Open Source) | WUSS | Fall 2023 *iUWF Graduate Student Travel Award | UWF | Fall 2023
- *iUWF 3-Minute Thesis (3MT) 1st Place Overall Award | UWF | Fall 2023
- *iWUSS Student Scholarship | Western Users of SAS® Software (WUSS) | Fall 2023
- *iPharmaSUG Student Scholarship | PharmaSUG | Spring 2023
- *iACRP Clinical Research Leadership Scholarship | ACRP | Spring 2023
- *iWhataburger Family Foundation Scholarship | Whataburger Family Foundation | Spring 2023
- *Academic Student Grant | SouthEast SAS® Users Group (SESUG) | Fall 2022
- *iRobert W. Nolan Scholarship | Fleet Reserves Association (FRA) Education Foundation | Fall 2022
- *iWhataburger Family Foundation Scholarship | Whataburger Family Foundation | Fall 2022
- *iUWF Post-baccalaureate Education Grant | UWF | 2021-2022
- *iWhataburger Family Foundation Scholarship | Whataburger Family Foundation | Spring 2022
- *Andrews Research & Education Foundation Scholarship | AREF | 2021-2022
- *UWF OUR Spring Symposium People's Choice Award | UWF OUR | 2021
- *UWF Selig Leadership Scholarship | UWF Kugelman Honors Program | 2020-2021
- *UWF Honors Tuition Waiver Scholarship | UWF Kugelman Honors Program | 2019-2020
- *UWF John C. Pace Scholarship | UWF Kugelman Honors Program | 2019-2020
- *UWF Department of Biology Scholarship | UWF Department of Biology | 2019-2020
- *UWF Bookstore Scholarship | UWF | 2019-2020
- *UWF John C. Pace Honors Leadership Award | UWF Kugelman Honors Program | 2019-2020
- *Whataburger Family Foundation Scholarship | Whataburger Family Foundation | 2018-2019, 2019-2020
- *The Dream Scholarship | UWF | 2017-2018, 2018-2019
- *Florida Medallion Scholars Award | Florida Student Scholarship Grant Programs | 2016-2021
- *The President's Volunteer Service Award | President's Council on Service and Civic Participation | 2016