

Carson Karakis
Carson.karakis@icahn.mssm.edu

EDUCATION

Icahn School of Medicine at Mount Sinai, New York, NY
Doctor of Medicine (MD) Expected May 2029

The Ohio State University, Columbus, OH May 2024
Bachelor of Science in Neuroscience
Major: Neuroscience; Minor: Business
GPA: 4.00/4.00
Relevant Coursework: *Cell Biology, Evolutionary Biology, General Chemistry, Organic Chemistry, Molecular Neuroscience, Biochemistry, Neuroanatomy and Neurophysiology*

HONORS & AWARDS

The Ohio State University
Deans List
Distinguished Undergraduate Teaching Assistant May 2023
Robert F. Gagel/Margo Cox Endowment Fund April 2022, 2023
Sons and Daughters Scholarship Aug 2020

Boy Scouts of America Nov 2019
Eagle Scout, Boy Scouts of America

RESEARCH EXPERIENCE

The Ohio State University, Columbus, OH May 2023 – July 2025
Translational Research Assistant

- Created, Maintained, and performed cell-based assays on multiple cell cultures and for downstream analysis.
- Performed cell-based assays to investigate the role of IWS1 in metastatic ability of liposarcoma.
- Conducted remote clinical data review to support ongoing projects and publications.
- Assisted in preparing manuscripts, abstracts, and reports through literature review, data organization, and scientific writing.

CLINICAL EXPERIENCE

Medcare, Columbus, OH

Emergency Medical Technician - Basic

Aug 2024 – May 2025

- Provided safe and efficient interfacility patient transports, ensuring continuous monitoring and care for stable and critical patients.
- Collaborated with paramedics during emergency response calls to assist with basic life support interventions under their guidance.

LEADERSHIP AND TEACHING EXPERIENCE

The Ohio State University, Columbus, OH

Nov 2022 – Feb 2023

Mount Scholars Legacy Week Advisor

Nov 2023 – Feb 2024

- Led a group of first year students to complete a service project for the community
- Continuously provided conflict resolution to maintain productivity

Wexner Medical Center Emergency Department, Columbus, OH

May 2023 – May 2024

CPR Outreach Intern

- Provided the general public with knowledge on how to perform hands only CPR
- Coordinated events with the surrounding community

Wexner Medical Center, Columbus, OH

Aug 2023 – Dec 2023

Ambassador

- Greeted and assisted visitors, providing a positive and welcoming atmosphere.
- Provided information and directions to patients and visitors

The Ohio State University, Columbus, OH

July 2022 – May 2023

Chimes Junior Honorary Secretary

- Served as secretary for a student-led philanthropy group, responsible for maintaining accurate and up-to-date records of meetings, events, and financial transactions.

Managed the group's volunteer program, recruiting and training volunteers and coordinating volunteer schedules.

The Ohio State University, Columbus, OH

Dec 2022 – May 2023

General Chemistry Head Teaching Assistant

- Assisted professors in the delivery of undergraduate general chemistry course, leading discussion sections, grading exams and assignments, and providing one-on-one tutoring for students.

Akron General Medical Center, Columbus, OH

May 2021 – Dec 2023

Volunteer

- Completed a transfer project for all of the physical physician files to be electronically scanned and organized on the hospital's servers.
- Demonstrated strong organizational and interpersonal skills while managing administrative tasks and providing exceptional customer service

North Community Counseling Center, Columbus, OH

Aug 2021 – Jan 2022

Marketing Volunteer

- Managed the design and distribution of a pole to gather data on
- Collaborated with a cross-functional team to plan and execute fundraising events

The Ohio State University, Columbus, OH

July 2021 – Dec 2022

General Chemistry Teaching Assistant

- Provided support to undergraduate students in the general chemistry laboratory course by demonstrating laboratory techniques, monitoring safety procedures, and grading lab report quizzes.

The Ohio State University, Columbus, OH

Nov 2020 – Feb 2021

Recruitment, Outreach and Welcome Committee Member

- Served as an advisor to a student-led organization, providing guidance and support to the executive board, facilitating meetings, and assisting with event planning and fundraising.

PRESENTATIONS

Karakis C. The Effects of IWS1 on the Invasion and Migration Potential of a Gastric Adenocarcinoma Cell Line. Presented at: CREATES Symposium; July 2023; The Ohio State University, Columbus, OH.

Karakis C, Goryunova M, Titerina EK, Sp N, Pollock RE, Beane JD. Establishment of in vitro models of invasive dedifferentiated liposarcoma using cell lines derived from patient samples. Presented at: Spring Undergraduate Research Festival; 2024; Ohio.

PROCEEDINGS PUBLISHED

Goryunova M, He Y, **Karakis C**, Titerina EK, Salazar-Puerta AI, Tahara S, et al. Molecular docking and biological evaluation of a novel IWS1 inhibitor for the treatment of human retroperitoneal liposarcoma. Sci Rep. 2025;15(1):22965.

Dunlop HM, Chick RC, **Karakis C**, et al. Persistent poverty impacts survival and National Comprehensive Cancer Network guideline–concordant care for patients with melanoma. J Clin Oncol. 2024;42(16_suppl):1598. doi:10.1200/jco.2024.42.16_suppl.1598

Titerina EK, Goryunova M, Sp N, **Karakis C**, Sarchet P, Pollock RE, Croce CM, La Ferlita A, Beane JD. Targeting small non-coding RNAs to treat dedifferentiated liposarcoma. Ann Surg Oncol. 2024;31(Suppl 1):1-294. doi:10.1245/s10434-024-15179-y

Goryunova M, He Y, Sp N, Titerina EK, Tahara S, **Karakis C**, La Ferlita A, Sorkin M, Kim A, Zhu H, Hadad CM, Pollock RE, Beane JD. Abstract 2088: Targeting transcriptional factor IWS1 as a potential treatment of advanced dedifferentiated liposarcoma. Cancer Res. 2024;84(6_Suppl):2088. doi:10.1158/1538-7445.AM2024-2088

Titerina EK, Goryunova M, Sp N, **Karakis C**, Sarchet P, Pollock R, La Ferlita A, Beane J. Targeting small non-coding RNAs to treat dedifferentiated liposarcoma. Presented at: The 49th Annual Zollinger Visiting Professorship and the 29th Annual Department of Surgery Research Conference; May 2, 2024; Columbus, OH.

Titerina EK, Goryunova M, Sp N, **Karakis C**, Chick R, Sarchet P, Pollock RE, La Ferlita A, Beane JD. Targeting small non-coding RNAs to treat dedifferentiated liposarcoma. Presented at: Society of Surgical Oncology Annual Meeting, Sarcoma Parallel Session; March 21, 2024; Atlanta, GA.

Titerina EK, Goryunova M, Sp N, **Karakis C**, Sarchet P, Pollock RE, Croce CM, La Ferlita A, Beane JD. Small non-coding RNAs as novel therapeutic targets for dedifferentiated liposarcoma. Presented at: 14th Annual Steps for Sarcoma Walk and Fundraising Event; September 12, 2023; Columbus, OH.

SKILLS

Laboratory Procedures: Confocal microscopy, Cell Culturing, Cloning, CRISPR-Cas9 gene editing, Western blotting, RT-PCR, Transwell Migration and Invasion assays, and Lentiviral Transfection.

Language: Proficient in English. Beginner verbal and Intermediate written communication skills in Spanish

Computer: Intermediate in Microsoft Office Suite. Novice in ImageJ and Prism.

REFERENCES

References can be provided upon request