

CYRIL MALIAKAL

maliakc@mskcc.org | cmaliakal0@gmail.com | 908-591-0800 | www.linkedin.com/in/cyril-maliakal

EDUCATION

University of Illinois at Urbana-Champaign (UIUC) Aug 2022 - May 2026
Bachelor of Science in Chemistry and Integrative Biology GPA: 3.74

Research Experience

Sloan-Kettering Institute, Molecular Pharmacology Program, Dr. Heller Lab, September 2026 - Present
Research Technician
New York City

- Working on a project to develop carbon nanotube sensors for use as in Machine Perception Liquid Biopsy (MPLB)

Memorial Sloan Kettering Cancer Center, Dermatology Department, Dr. Rajadhyaksha Lab, May 2025 - May 2026
Intern
New York City

- Worked on a pilot study to integrate skin tape strips and reflectance confocal microscopy to improve noninvasive diagnostic techniques for melanoma
- Performed imaging procedures and analysis using reflectance confocal microscopy, and skin tape strip procedures using D-Squame Skin Tape Strips
- Optimized a method to extract RNA from D-Squame Skin Tape Strips

Quantitative Multiscale Imaging Group, UIUC, September 2024 - May 2026
Research Assistant
Urbana-Champaign, IL

- Investigating DNA methylation in mouse and pig models to improve early Alzheimer's Disease diagnostic technology
- Input and analyze DNA mass spectrometry data
- Collect samples from specimens

Evolution of Intelligent Systems Lab, UIUC, September 2023 - September 2024
Research Assistant
Urbana-Champaign, IL

- Investigating cell morphology + myelin in the cerebral cortex
- Complete cerebral cortex image analysis identifying cell types and sizes
- Input data for use in supervised deep learning for brain mapping

Work Experience

School of Integrative Biology, UIUC, August 2025 - May 2026
Laboratory Prep Staff
Urbana-Champaign, IL

- Set up lab equipment and prepare material used in various biology lab courses including genetics, ecology, physiology, and evolution three times a week

Hendrick House Residence Hall, July 2023 - May 2024
Resident Advisor
Urbana, IL

- Responsible for a floor of 31 students
- Provided opportunities for students to meet their physical, social, and personal needs (~ 15 hours/week)
- Planned events for residents (e.g. Winter Formal and Spring Formal)
- Wrote incident reports, event proposals, event reports, and maintenance requests
- Maintained on-call shift and desk shift logs
- Coordinated emergency response to a building-wide flood

Marshalls Department Store, August 2025 - May 2026
Merchandise Associate
Urbana-Champaign, IL

- Provided customer service
- Worked the cash register
- Completed pricechecks and merchandise recovery

Volunteer Work

Carle Foundation Hospital, Student Leader and Volunteer

August 2023 - May 2026

Urbana, IL

Compassionate Visitor Department, Student Leader

- Head of a team of 15 student volunteers since May 2025
- Facilitate beneficial patient-volunteer interactions
- Supervise volunteer trainings, schedules, and accountability
- Visit patients regularly to provide support and companionship

Volunteer

- Volunteer for Comfort Cart, Emergency Department, Cardiovascular ICU, Labor and Delivery, and Volunteer Services

Zarephath Health Center, Volunteer

June 2024 - August 2024

Somerset, NJ

- Shadow physicians + nurses in treating patients
- Take patient vitals + prepare them to see the doctor
- Complete clerical work

Sr. Pat's Kids Camp for Pediatric Cancer and Blood Disorder Patients, Assistant Counselor

July 2024

Esopus, NY

- Monitor campers at different activity rotations, particularly in activities with a higher risk of injury (e.g., swimming, bike riding)
- Night Duty: assist campers who need support from an adult between 10pm and 7am
- Ensure all campers receive their daily medications from the camp nurses at the proper time

Activities

Circular Fashion Exposition 8: Upholding Avant Garde

September 2025 - December 2025

- A Lexicon to Those Who Lead, Model

Urbana-Champaign, IL

- Walked the CFE 8 Runway showcasing an outfit designed by Roger Holben depicting the role of the media in the lives of leaders

No Strings Attached Acapella, Social Chair and Member

August 2022 - May 2024

Urbana-Champaign, IL

Social Chair

- Managed internal and external social interactions
- Mediated and mitigate conflicts between members
- Organized internal and external social events (e.g. dances and formals)
- Served on the disciplinary board
- Created document outlining the role of Social Chair

Member

- Voice Part: Tenor 1, Tenor 2, Baritone
- Released 1 Album (*Totality*), 1 EP (*Syncopation*), 2 singles (*Euphoria Medley* and *Orange Colored Sky Legacy*) and a music video (*Somebody That I Used To Know*)
- Awarded Third Place in ICCA 2024 Great Lakes Quarterfinal competition
- Hosted campus wide Acapella show in October for all UIUC Acapella groups, a spring show, and perform at various events throughout the year

Saint John's Catholic Newman Center 10:30 AM Traditional Choir,

August 2022 - May 2026

Tenor

Urbana-Champaign, IL

- Provide Music for Mass on Sundays and religious holidays
- Perform in an annual Christmas concert
- Organize social events for tenor section

*Westfield, NJ***Leadership Positions**

- Senior Patrol Leader (June 2021 - June 2022)
- Assistant Senior Patrol Leader (June 2019 - June 2020)
- Scribe (June 2018- June 2019, June 2020- June 2021)

Eagle Scout Project: Medicinal Practices of the 19th and Early 20th Centuries

- Studied and catalogued medicinal bottles from the late 19th and early 20th century
- Created a video archives describing the bottles and their uses
- Research used for the Plainfield Public Library exhibit *Beef, Iron and Wine: Late 19th and Early 20th Century Pharmacy & Medicine in Plainfield, NJ*

SKILLS

Laboratory

DNA Extraction, RNA Extraction, Reflectance Confocal Microscopy, NanoDrop, Qubit, Agarose Gel Casting, Pipetting, Spectrophotometry, Animal care, PCR, Gel Electrophoresis, CRISPR, Image Analysis, ELISA assays

Clinical

Skin Imaging Techniques (RCM), D-Squame Skin Tape Application and Removal, Vitals, Patient Communication

**Coding Languages/
Softwares**

Python, R, ImageJ, Fiji

Publications

Imaging transcriptomics in basal cell carcinoma: Coupling in vivo tumor morphology with gene expression

- [10.1016/j.xjidi.2026.100519](https://doi.org/10.1016/j.xjidi.2026.100519)
- [Jacobsen, Kevin, et al. "Imaging transcriptomics in basal cell carcinoma: coupling in vivo tumor morphology with gene expression." JID Innovations \(2026\): 100519.](#)