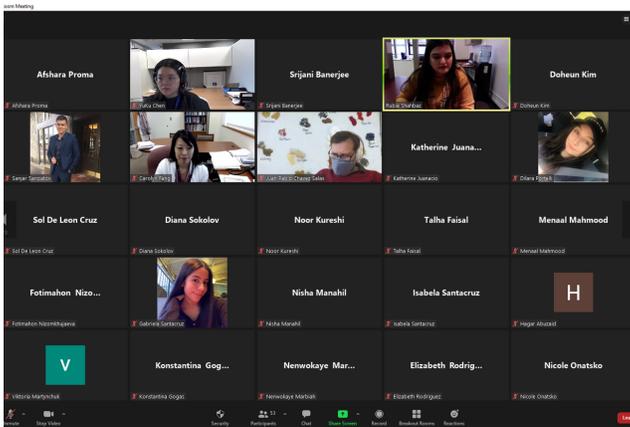


# RESEARCH EDUCATION CORE



## FALL HIGHLIGHTS



The Research Education Core hosts an SCRI Info Session via ZOOM

Mentors and trainees came together during the Fall to participate in various activities supported by the Temple University, Fox Chase Cancer Center and Hunter College (TUFCCC/HC) Partnership. One of these events was the Summer Cancer Research Institute (SCRI) Information Session Series presented by the Research Education Core to prospective applicants for the upcoming SCRI 2022.

**Scientific Conferences:** From October 6th to October 8th, several trainees and mentors attended the virtual 14th American Association for Cancer Research (AACR) Conference on The Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved.

**Trainee accomplishments:** Congratulations to our U54 trainees who received awards at the ABRCMS 2021 Virtual Conference! In addition, a huge congratulations to SCRI alum and U54 trainee Sophia Varriano on being awarded an iCURE postdoctoral fellowship at the NCI-NIH. The REC also checked in on previous SCRI alums to recap their journeys thus far.

**REC Webinar Series:** The Research Education Core hosted Dr. Andrew Wolfe for its Fall Webinar.

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# 14TH AACR CONFERENCE ON THE SCIENCE OF CANCER HEALTH DISPARITIES IN RACIAL/ETHNIC MINORITIES AND THE MEDICALLY UNDERSERVED



The 14th American Association for Cancer Research (AACR) Conference on The Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved took place virtually from October 6-8, 2021.

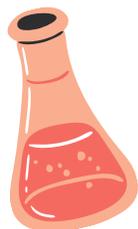
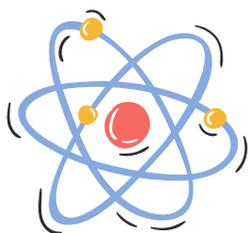
The goal of this conference is to not only advance the understanding of cancer health disparities occurring in the United States, but also to eliminate these disparities through innovative research techniques and coordinated efforts of academia, industry, government, and the community. For two days, attendees learned about ground-breaking research to reduce health disparities across different communities.

Several trainees and mentors from the TUFCCC/HC Partnership presented posters on topics including treatment adherence, colorectal cancer screening, community-based intervention, and biological pathways contributing to cancer outcomes.

Lin Zhu presented her poster titled *“Demographic and psychosocial predictors of regular monitoring for chronic hepatitis B among Asian Americans”*. The study highlighted chronic hepatitis B management in Asian Americans because Asian Americans are 8-13 times more likely to develop liver cancer caused by chronic hepatitis B (CHB) and experience a 60% higher death rate than non-Hispanic whites. There has been strong evidence that shows doctor visitation for CHB monitoring every six months is effective to prevent liver cancer. It was estimated that only 33% of Asian Americans with hepatitis B are diagnosed, 36% of diagnosed are linked to care, and 18% of diagnosed received treatment.

Aisha Bhimla presented *“Factors Associated with Hepatitis B Medication Adherence Among Underserved Chinese and Vietnamese Americans”*. Aisha's study aims to examine the sociodemographic and Information Motivation Behavioral (IMB) related psychosocial factors, specifically knowledge-information, motivation, and behavioral skills on self-efficacy as predictors of low versus medium/high medication adherence among a sample of Chinese and Vietnamese HBV+ patients.

For more information on our trainees' abstracts please visit: <https://bit.ly/3q9I489>





# TRAINEE AWARDS AND ACCOMPLISHMENTS



*Sophia Varriano, PhD  
SCRI 2016 Alum*

As a first-generation college graduate, Sophia obtained her Bachelor of Science in Biology at the Macaulay Honors College at College of Staten Island. She then enrolled in the Molecular, Cellular, and Developmental Biology Ph.D. Program at The Graduate Center of the City University of New York, where she joined Dr. Frida Kleiman's laboratory at Hunter College.

In 2016, Sophia had the opportunity to participate in the first cohort of the Summer Cancer Research Institute (SCRI) where she worked with Dr. Jean-Pierre Issa and Dr. Carmen Sapienza to study DNA methylation patterns to explain racial disparities in colon cancer incidence and mortality among African American and Caucasian American groups. During the past few years, Sophia has been a recipient of several honors and awards including a RISE fellowship (2016-2021), the Gertrude B. Elion Award for Female Student in the Chemistry Department (2018 and 2019), and Yale Ciencia Academy Fellow (2019). She then received the U54 Pre-Pilot award for her thesis work titled "The Role of Estrogen Receptor Alpha in Regulating Messenger RNA 3' End Processing and Controlling Gene Expression in Breast Cancer Cells" (2020-2021)

Sophia obtained her Ph.D. in September for her thesis work as a recipient of an iCURE postdoctoral fellowship at NCI-NIH. Sophia now works in Dr. Christine Heske's research group within the Pediatric Oncology Branch at the Center for Cancer Research (CCR) and investigating how to target biological vulnerabilities in tumor metabolism and DNA repair in neuroblastoma.

Congratulations Sophia!



*"My long-term goals involve translating basic research into a clinical setting, integrating fundamental concepts to better understand disease development and progression, and identify potential bio-markers/therapeutic targets to develop more effective treatments for patients. None of this would be possible alone... I would like to thank my mentor Dr. Frida Kleiman for equipping me with the skills to be an independent scientist and building my resilience and teaching me to navigate the obstacles along the way, while still maintaining an enthusiasm and passion for pursuing our project goals. I'd like to extend my appreciation to my lab mates and to all of the lab members at Belfer Research Building's 4th floor. I'm proud of the community and support group we've built together, we always find ways to inspire each other and keep us going, I wish you all the best in your endeavors."*

*~Sophia Varriano*

# TRAINEE AWARDS AND ACCOMPLISHMENTS



*Jen Muse, MS, RD, CDN  
SCRI 2019 Alum*

Jen Muse graduated from Hunter College in 2020 with her Master's Degree in Nutrition. She was a trainee in the 2019 Summer Cancer Research Institute where she worked in Dr. Carmen Sapienza's Lab. She is endlessly grateful to Dr. Carmen Sapienza, for inspiring her interest in research, and opening the door for her current pursuits.

Jen currently serves as the manager of the Mount Sinai Physiolab, where she is part of a team conducting fitness, metabolic, nutrition and body composition assessments designed to provide personalized health and wellness recommendations. In addition, she is an associate researcher within the Charles Bronfman Institute for Personalized Medicine, investigating the compensatory mechanisms that prevent weight gain in individuals with high genetic obesity risk.



Melissa Driscoll is a Summer Cancer Research Institute Alumna (SCRI 2019) where she worked in the Sapienza Lab. She would like to thank her mentor, Dr. Carmen Sapienza for all his guidance, encouragement and expertise not only during her time at the Summer Cancer Research Institute, but up to this day. Melissa graduated with her Master's Degree in Nutrition from Hunter College in May 2020 and has been a practicing Registered Dietitian Nutritionist (RDN) since June 2020. She is currently a clinical dietitian in radiation oncology at the Imbert Cancer Center and in a long-term care facility. She hopes to continue moving forward in oncology nutrition.



*Melissa Driscoll, MS, RD, CDN  
SCRI 2019 Alum*



*Areebah Rahman*

A huge congratulations to our trainees Areebah Rahman and Guercie Guerrier on winning awards at the Annual Biomedical Research Conference for Minority Students (ABRCMS) 2021 Conference hosted virtually on November 10-13, 2021. Areebah and Guercie are both U54 trainees under the mentorship of Dr. Grace Ma.

Areebah is an awardee in the Neuroscience category and Guercie received an award in the Social and Behavioral Sciences and Social Health category. The Annual Biomedical Research Conference for Minority Students (ABRCMS) is one of the largest communities of underrepresented minorities in science, technology, engineering and mathematics. Students attend this conference to present their research, enhance professional development skills, explore graduate schools, and network. Research faculty and program directors play an essential role in mentoring students and learning strategies for facilitating student success.



*Guercie Guerrier*

To learn more about ABRCMS please visit: <https://bit.ly/3ebRzOw>



# MENTOR SPOTLIGHT:

Dr. Kelly A Whelan is Assistant Professor of Cancer and Cellular Biology at the Fels Cancer Institute for Personalized Medicine. She is also co-Director of the Fels Cancer Research Undergrad Underrepresented Minority Program and advocate for increasing diversity, equity, and inclusion in the biomedical sciences.

Dr. Whelan received her Bachelor's degree in Biology from Rosemont College in 2003. She started her career in biomedical sciences as a research technician at the Wistar Institute in the lab of Shelley L. Berger before entering Drexel University College of Medicine's biomedical graduate studies program with a focus in Molecular Cell Biology and Genetics in 2006. After earning her PhD, Dr. Whelan worked under Drs. Hiroshi Nakagawa and Anil Rustgi at University of Pennsylvania for her postdoctoral studies which were supported by NIH T32, F32, and K01 awards. Dr. Whelan notes that her postdoctoral fellowship was transformative, helping her to find her passion for translational research in the field of esophageal biology. Dr. Whelan initiated her independent research program at Temple University in 2017. The Whelan lab interrogates human subject-derived tissue specimens to define clinically-relevant research questions related to esophageal biology under homeostasis and in the context of widely prevalent esophageal diseases, including cancer and eosinophilic esophagitis. To address these questions, Dr. Whelan's research team employs a multidisciplinary experimental approach coupling biochemistry and molecular biology techniques with murine models, patient-derived 3D organoids and patient tissues with associated clinical data.

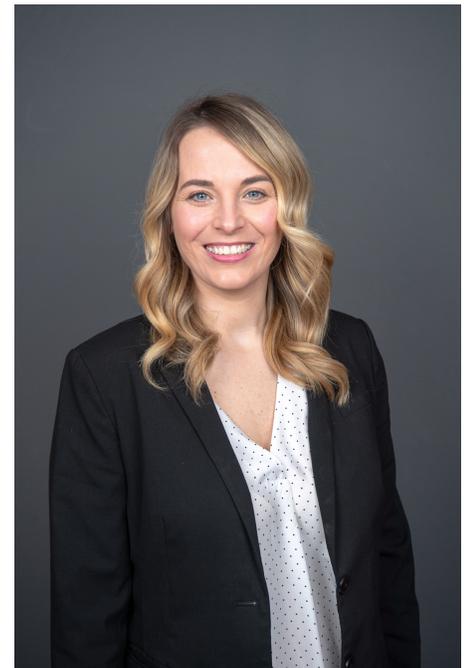
Recent work from Dr. Whelan's research team includes:

1. Kabir MF, Karami A, Cruz-Acuna R, Klochkova A, Saxena R, Mu A, Murray MG, Keith K, Madzo J, Huang H, Jelinek J, Karakasheva T, Hamilton KE, Muir AB, Tetreault MP, Whelan KA. Single cell transcriptomic analysis reveals cellular diversity of murine esophageal epithelium and age-associated mitochondrial dysfunction. *BioRxiv*. 2020. <https://www.biorxiv.org/content/10.1101/2021.02.08.430312v1>

2. Reichenbach ZW, Murray MG, Saxena R, Farkas D, Karassik E, Klochkova A, Patel K, Tice C, Gang J, Hall TM, Parkman HP, Tetreault MP, Whelan KA. *Adv Cancer Res*. 2019; 144:95-135.

Dr. Whelan is the proud mom of two humans, Kaeley and Jack, and 3 pups, Rory, Diesel (both St. Bernards) and Liberty (Newfoundland). When she's not cleaning up after them, Dr. Whelan enjoys hot yoga and reading by the pool.

The REC would like to thank Dr. Whelan for her unwavering support and mentorship to U54 trainees.



*Dr. Kelly Whelan*



# SUMMER CANCER RESEARCH INSTITUTE NOW ACCEPTING APPLICATIONS!

Applications for the 2022 Summer Cancer Research Institute (SCRI) are currently open!

The SCRI Program is an 8-week intensive summer program that takes place at the Temple University and Fox Chase Cancer Center campuses. SCRI is supported by the National Cancer Institute U54 and the TUFCCC/HC SPEECH Partnership. Undergraduate and graduate students, currently enrolled at Temple University or Hunter College, who are interested in pursuing biomedical, clinical or population-based cancer research are welcome to apply.

## Participants will benefit from:

- Hands-on research training
- Mentorship from established investigators
- Participation in cancer seminars and skill-building workshops
- Written and oral science communication
- All participants will receive a stipend of \$3,000. Hunter College trainees will receive housing and transportation to Philadelphia.

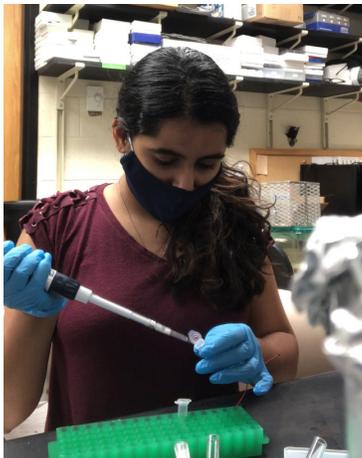
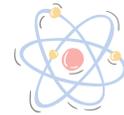
Program Dates: June 6, 2022 - July 29, 2022

Application Deadline: January 21, 2022

Applications can be accessed at: <https://bit.ly/3qQ4ls5>

## Applicant Checklist:

- Two **optional** letters of recommendations (faculty, advisors, TAs, or letters from work and volunteering positions are all acceptable)- it is recommended that you reach out to your recommenders well in advance to notify them that you are expecting a letter from them. The following link should be shared with recommenders for their submission: <https://forms.gle/hYYvSjpW5B72KcDu9>
- A resume or CV
- Unofficial Transcripts (if your grades are not yet in, please let Rubia and Yuku know)



## INTERESTED IN BEING A MENTOR FOR THE SUMMER CANCER RESEARCH INSTITUTE?

The Research Education Core is currently seeking mentors for the 2022 SCRI program! SCRI trainees work full-time (40 hrs/week) for an 8-week period over the summer. Trainees are supported through the TUFCCC/HC SPEECH Partnership grant.

If interested, or for more information, please contact Carolyn Fang, PhD ([carolyn.fang@fcc.edu](mailto:carolyn.fang@fcc.edu)) or Olorunseun Ogunwobi, MD, PhD ([ogunwobi@genectr.hunter.cuny.edu](mailto:ogunwobi@genectr.hunter.cuny.edu)).

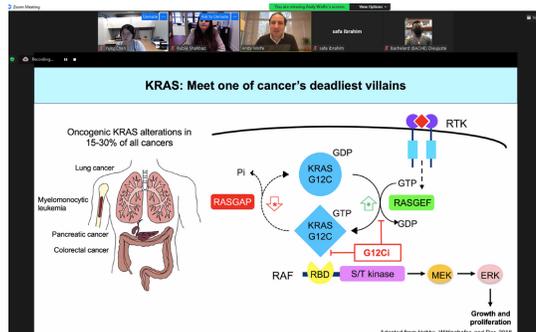
# REC WEBINAR SERIES

The Research Education Core hosted Hunter College's Dr. Andrew Wolfe for its Fall Webinar. Dr. Wolfe's research focuses on understanding why so many cancers recur after seemingly successful treatment, increasing equity in cancer therapeutics, and gaining a deeper understanding of how tumors depend on driver oncogenes to reprogram their growth, metabolism, and survival signals. Understanding mechanisms by which pancreatic cancers, lung cancers, and leukemias develop resistance to targeted therapies is instrumental to developing innovative approaches that can improve patient outcomes.

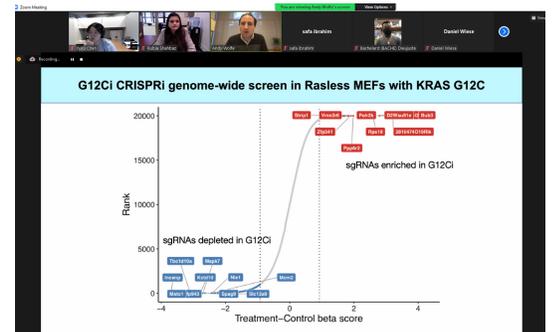
In this webinar, Dr. Wolfe discussed underlying cell biology of deadly KRAS-driven diseases, such as pancreatic cancer and lung adenocarcinoma, as well as innovative ways of targeting mutant KRAS to understand mechanisms of therapeutic resistance.



*Dr. Andrew Wolfe*



*Dr. Wolfe introduces KRAS and the KRAS mechanism*



*CRISPRi data on KRAS*

## Research Education Core Leaders:

Olorunseun Ogunwobi, MD, PhD - Hunter College  
Carolyn Fang, PhD - Fox Chase Cancer Center

For questions regarding the Research Education Core and any upcoming events, please contact one of our program coordinators:

Rubia Shahbaz, BA - [rs1650@hunter.cuny.edu](mailto:rs1650@hunter.cuny.edu)  
Yuku Chen, MPH - [Yuku.Chen@fccc.edu](mailto:Yuku.Chen@fccc.edu)

## SPEECH

**Synergistic Partnership  
for Enhancing Equity in  
Cancer Health**

SPEECH is a comprehensive regional cancer health disparity partnership between Temple University/Fox Chase Cancer Center and Hunter College (TUFCCC/HC), the U54 grant funded by the National Cancer Institute. The purpose of SPEECH is to reduce cancer health disparities among underserved minority populations in Pennsylvania-New Jersey-New York City (PNN) region, through cancer disparities research, community outreach, and career development for underrepresented early stage investigators and students.

FOLLOW US ON



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# FALL CANCER AWARENESS MONTHS

## SEPTEMBER

Uterine Cancer  
Leukemia  
Lymphoma  
Ovarian Cancer  
Prostate Cancer  
Thyroid Cancer

## OCTOBER

Breast Cancer  
Liver Cancer

## NOVEMBER

Pancreatic Cancer  
Lung Cancer  
Stomach Cancer  
Honoring Caregivers