

# RESEARCH EDUCATION CORE



## SPRING HIGHLIGHTS



*Kimberly Fung, PhD, Hunter College, celebrating after successfully defending her dissertation*



*Aishe Bhimla, PhD, Temple University, preparing to defend her dissertation virtually*

Mentors and trainees came together during the winter to participate in various activities supported by the Temple University, Fox Chase Cancer Center and Hunter College (TUFCCC/HC) Partnership.

**Trainee accomplishments:** We are very proud of our TUFCCC/HC trainees as they embark on their next journey. A number of trainees successfully defended their dissertations and earned their doctorate degrees or were accepted into masters programs. One trainee was named valedictorian! Congratulations to our trainees!

**Summer Cancer Research Institute (SCRI):** The Research Education Core is excited to welcome our 2020 cohort to the SCRI! We have developed a unique virtual program for this year’s SCRI. Trainees will be welcomed by REC staff and mentors on June 8th and will participate in SCRI activities across an 8-week period. We also highlight our 2019 cohort in a special ‘Where are they now?’ section.

**REC Webinar Series:** On February 20th, 2020, Amanda Purdy, PhD, Director of Academic Affairs at Fox Chase Cancer Center presented our third webinar of the REC Webinar Series entitled “Presentation Skills: How to Craft Effective Presentations.”

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# CAREER PROGRESSION

## Congratulations to our new doctors!



### Aisha Bhimla, PhD, MPH - Temple University

Aisha Bhimla successfully defended her dissertation titled "Perceived and Objective Neighborhood Characteristics Associated With Physical Activity Among Asian Americans Residing in Philadelphia County" on March 31st, 2020 under the mentorship of Grace Ma, PhD. This study examined how the built environment, specifically neighborhood walkability and the proximity to physical parks and recreational facilities were associated with physical activity behavior, specifically active transportation and leisure-time physical activity. She studied 240 Asian Americans, mainly immigrants, residing in Philadelphia neighborhoods. Aisha will begin her postdoctoral training in May at the Center for Asian Health with Dr. Grace Ma.

*"It has been truly my pride and joy of mentoring Aisha Bhimla in her doctoral education and professional career development over the past five years. Aisha always has the drive to succeed and is open-minded, willing to learn, accountable, and hard working. Aisha has demonstrated her creativity, thinking outside of the box to explore new ways of conducting research or program development. Aisha is an initiative taker, demonstrating a great willingness to take initiative for positive change."* - Grace Ma, PhD



### Gamage Aruggoda, PhD - Hunter College

On November 13th, 2019, Gamage Aruggoda, successfully defended her dissertation on "HuR ubiquitination by BRCA1/BARD1 and its Role in Controlling Gene Expression during DNA Damage Response" under the mentorship of Frida Kleiman, PhD. Gamage is working on how ubiquitination of the RNA binding protein HuR by the tumor suppressors BRCA1/BARD1 regulates gene expression during the progression of the DNA damage response. This work evaluated a new mechanism by which BRCA1/BARD1 might control HuR functions and localization, resulting in changes in mRNA stability and expression of genes involved in DNA damage response and cancer. Gamage is currently teaching at Mercy College in New York.



*"Being a first generation in this country, Gamage represents an inspiring example for members of her generation and those that will follow. Her example proves that hard work and education are the keys to accomplishing your dreams. Her research and teaching positions have prepared her to value the hard work of an entire team, how to report results and those of the people under her supervision, and to efficiently interact with and mentor junior trainees. In a few words, all these experiences have prepared her to fulfill her career goals. She is hard working and enthusiastic."* - Frida Kleiman, PhD



### Kimberly Fung, PhD - Hunter College

Kimberly Fung successfully defended her dissertation entitled "Positron Emission Tomography and Near-Infrared Fluorescence Imaging of Cancer" on December 9, 2019 under the supervision of Dr. Brian Zeglis. Her research focused on the development of antibody-based imaging agents to improve diagnostic imaging of breast and ovarian cancer in mice. In late May, Kimberly will start a new position as Scientific Associate at IMPRINT Science.

*"Kimberly's defense was a testament to her creativity and perseverance. She worked on some remarkably challenging projects across her five years in my laboratory, but she ultimately was able to overcome the obstacles in her way and do some really wonderful science!"* - Brian Zeglis, PhD

# CAREER PROGRESSION

## Congratulations to our new doctors!



### Trisheena Harricharran, PhD - Hunter College

On March 23rd, 2020, Trisheena Harricharran, successfully defended her dissertation under the guidance of Olorunseun Ogunwobi, PhD. Trisheena's dissertation was titled "Oxytocin receptor and microRNA-198 signaling as mechanisms of chemoresistance in pancreatic cancer" Trisheena study aimed to determine the role of miR-198 regulation of Hepatocyte growth factor receptor in pancreatic cancer chemoresistance and to investigate the role of oxytocin (OXT) and oxytocin receptor (OXTR) in pancreatic cancer chemoresistance as well as assessed the clinical relevance, in terms of overall survival and disease-free months, of OXT and OXTR genetic alterations in PC and HCC cases by analyzing information regarding these alterations from The Cancer Genome Atlas (TCGA). Trisheena plans to pursue an academic career in translational science.



*"Despite caring for a family with two young children, Trisheena was able to publish her work and complete her PhD. As a graduate student, Trisheena was always willing to accept constructive feedback. That made her a pleasure to work with." - Olorunseun Ogunwobi, MD, PhD*



## COPING WITH COVID-19

The world is currently facing a truly unprecedented situation with the novel coronavirus [COVID-19] pandemic. The Research Education Core hopes our trainees, mentors, and their loved ones are staying safe and healthy during this time. Our hearts go out to anyone who has been impacted by this virus. During this time, many people may experience strong emotions including fear and anxiety. Thus, it is important to take care of your mental health as well as your physical health.

Here are some tips for coping with stress surrounding COVID-19:

- Take a break from watching, reading, and listening to the news as well as social media.
- Take deep breaths, stretch, perform yoga, or meditate. There are a number of yoga and meditation videos on YouTube!
- Try to eat healthy, well-balanced meals – explore some new recipes!
- Exercise regularly - the American College of Sports Medicine website [acsm.org] features a number of workout routines and videos that can be done at home.
- Get plenty of sleep!
- Avoid consumption of alcohol or other substances
- Make time for activities you enjoy or start a new hobby!
- Connect with others. A phone call or video chat can help decrease feelings of social isolation.

For more tips on coping with stress, visit [cdc.gov/coronavirus](https://www.cdc.gov/coronavirus).

*Thank you front line workers*

# 2020 SUMMER CANCER RESEARCH INSTITUTE



We are excited to welcome the 2020 Summer Cancer Research Institute (SCRI) cohort!

The chosen students from Temple University and Hunter College were selected from a highly competitive pool of 165 applicants! Trainees have research interests that span from basic cancer science to population-based research.

The team at the Temple University/Fox Chase Cancer Center and Hunter College [TUFCCC/HC] Summer Cancer Research Institute are committed to ensuring the safety and well-being of our trainees and mentors during this uncertain time surrounding the COVID-19 pandemic. Due to restrictions set in place by the Center for Disease Control [CDC], the State of Pennsylvania and Temple University Health System [TUHS], this year's SCRI will take place virtually.

The REC team is working to develop an online curriculum consisting of meetings, seminars, and training demonstrations for this cohort. Trainees will be matched with mentors from Temple University or Hunter College who have projects that can be completed remotely or that can offer opportunities for in-person hands-on training once restrictions have been removed.

The SCRI program is scheduled to run for 8-weeks with a tentative start date of June 8th, 2020.

## WELCOME NEW TRAINEES!

### HUNTER COLLEGE

STEPHANIE CHOW - NUTRITION & DIETETICS

WINTERLYN GRACE GAMOSO - NUTRITION & DIETETICS

ANGELINE LOOR - BIOLOGY

FATIMA GALAL EL-DIN - BIOCHEMISTRY & ARABIC

CHRISTOPHER CHINO-MARIN - BIOCHEMISTRY

JESUS LOPEZ - BIOLOGY

### TEMPLE UNIVERSITY

ARIANNA VALERI - NEUROSCIENCE & BIOLOGY

DIBA ATAR - BIOENGINEERING

ESPERANCE TOVI - BIOINNOVATION

PRIYA NIGAM - NEUROSCIENCE



## TRAINEE ACCOMPLISHMENTS



Ahmet Doymaz has been named Hunter College's Valedictorian! As a trainee, Ahmet worked with Drs. Frida Kleiman and Carmen Sapienza on their project to examine the role of epigenetic factors and the microbiome in colon cancer disparities between African Americans and Caucasians. Ahmet will be graduating this year with a bachelor's degree in Biology. In addition Ahmet scored in the 100th percentile for the MCAT! Congratulations on this remarkable achievement!



Tyrell Mann-Barnes, Temple University, was accepted to the University of Pennsylvania's MPH program. Tyrell graduated from Temple University in 2019 with a bachelor's degree in Biology. Since graduation, Tyrell has been working as a Research Project Associate at the Center for Asian Health studying HIV, cancer and minority health. Congratulations Tyrell and good luck at UPenn!

# MENTOR SPOTLIGHT: FRIDA KLEIMAN, PHD

Dr. Frida Kleiman is a professor of Biochemistry in Hunter College's Chemistry Department. Her research examines mRNA processing and its effect in controlling gene expression during the DNA damage response for diseases such as cancer and Alzheimer's. Most recently, Dr. Kleiman has been collaborating with Temple University Professors, Carmen Sapienza, PhD, and Jean-Pierre Issa, MD, to examine the role of epigenetic factors and the microbiome in explaining observed colon cancer disparities between African Americans and Caucasians. It is hypothesized that racial differences in colon cancer incidence and outcomes are due to environmental and/or genetic differences between the two groups, with research showing that African American patients appear to have a distinct mutation profile. To test their hypothesis, Dr. Kleiman, Dr. Sapienza, and Dr. Issa will compare levels of DNA methylation in the normal colon mucosa of cancer patients and controls stratified by race, as well as identify race-associated and cancer-associated markers in the microbiome. Because of her background as a female scientist from Latin America, Dr. Kleiman is in a unique position to understand and provide support for the development of junior and mid-career colleagues. For the past three years, Dr. Kleiman has coordinated the Support of Competitive Research (SCORE) program at Hunter College to increase the research competitiveness of faculty at under-resourced institutions with a heavy demand on training and graduating students from underrepresented groups in biomedical research. Since she began coordinating SCORE, Hunter College has received 13 SCORE grants from faculty across all disciplines! In the past 14 years, Dr. Kleiman is proud to have trained eight graduate students, who all successfully defended their thesis and have landed academic positions, as well as 45-undergraduate students.

Dr. Kleiman has had two recent publications, which can be found at <https://bit.ly/2xqhAbk> and <https://bit.ly/2Yj9Nac>.



*Frida Kleiman, PhD  
Hunter College Professor*

## BIostatISTICS & BIOINFORMATICS CORE



*Karthik Devarajan, PhD presents to  
SCRI trainees on Introduction to  
Biostatistics*

The BBC has been hard at work this past year providing support on experimental designs and data analysis plans for protocols and grants, as well as conducting data analyses for various publications! The BBC assisted trainee Rishi Jain, MD on several applications for funding, including an American Cancer Society Institutional Research Grant (IRG) pilot proposal and U54 pre-pilot application, and supported trainee Erin Tagai, PhD on her recently submitted K01 grant application. The BBC also participated on a number of software developments, including a deep learning analysis using data from The Cancer Genome Atlas (TCGA) and the Microbiome Explorer built on the R studio statistical analysis platform. Lastly, the BBC has been actively participating in the education and training of students. Each week, the core holds a two-hour interactive seminar during which they provide educational presentations or updates on their research, followed by a group discussion. Seminar topics have included the analysis of genomic data in cancer health disparities as well as covering statistical concepts and experimental design for trainees.

# 2019 SUMMER CANCER RESEARCH INSTITUTE

## Where are they now?

Gaitree Boojraj graduated with a bachelor's degree in Biology from Hunter College in May, 2019. After graduating, she accepted a full time position as a Medical Practice Associate at Columbia University Irving Medical Center in New York City. Gaitree has begun the process of applying to medical school.

Anna O'Neil [Galuz] graduated with a bachelor's degree in Mathematics from Hunter College in May, 2019, and was accepted into the Biological Sciences graduate program at Hunter College. She has been working in Dr. Olorunseun Ogunwobi's lab and is preparing to take the MCAT.

Safiyah Samad will be graduating from Hunter College this May with a bachelor's degree in Biology with departmental honors. During the past year, Safiyah has been sharpening her research skills, and she is a co-author on a paper with her SCRI mentor Dr. Whelan! To view Safiyah's article please visit: <https://bit.ly/3fvV2H6>

Both Jen Muse and Melissa Driscoll are graduating with a Masters in Nutrition from Hunter College this May! During the past year, Jen and Melissa continued to work with their mentor, Dr. Carmen Sapienza, on their master's capstone, which was based on the research they conducted during the 2019 SCRI.

Oluwatoyin 'Toyin' Odumuwagon is continuing his Master's in Biological Sciences, with a planned completion date in 2021. He received a 2019 pre-pilot award from the TUFCCC/HC SPEECH Cancer Health Disparities Pilot Research Program for his research project "Oxytocin as a biopsychosocial modulator in hepatocellular carcinoma".

Yu Qing Xu will be graduating from Hunter College with a bachelor's degree in Behavioral Neurobiology this May! She is in the process of applying to medical schools.

Daniel Wiese has been very active while continuing his doctoral training in Health and Medical Geography from Temple University. He has published two papers as first author, as well as presented his SCRI research at a number of conferences! To view Daniel's article please visit: <https://bit.ly/2yqcwEp>

Brynna Izquierdo will be graduating with an MPH from Temple University College of Public Health this May. Brynna plans to take her knowledge and skills from the SCRI to pursue a career as a cancer researcher.

Timmy Lin will be graduating with an MPH from Temple University College of Public Health this May. Since the completion of the 2019 SCRI, Timmy has continued working with Dr. Grace Ma at the Center for Asian Health and currently has two manuscripts under internal review for publication! After graduation, Timmy plans to apply to PhD programs in Cancer Epidemiology.



## KEY DATES TO REMEMBER



### AACR THE SCIENCE OF CANCER HEALTH DISPARITIES IN RACIAL/ETHNIC MINORITIES & THE MEDICALLY UNDERSERVED

OCTOBER 2-5, 2020 | MIAMI, FLORIDA

Abstract Submission Deadline: July 17th, 2020

For more information please visit:

<https://bit.ly/3aYpuX0>

### AMERICAN PUBLIC HEALTH ASSOCIATION ANNUAL - CREATING THE HEALTHIEST NATION: PREVENTION VIOLENCE

OCTOBER 24-28, 2020 | SAN FRANCISCO, CA

Registration will open on July 1st, 2020

For more information please visit:

<https://bit.ly/2W9RWRI>

# REC WEBINAR SERIES

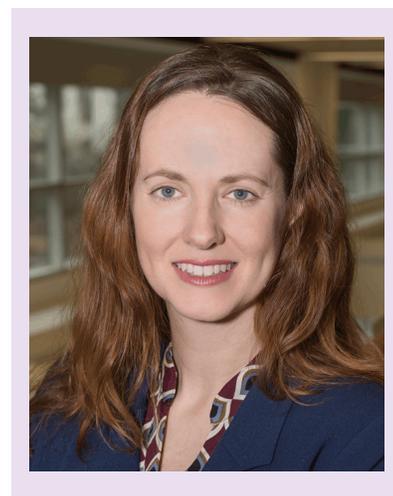


Trainees, mentors and guests came together on February 20th, 2020 for the 3rd REC webinar featuring Amanda Purdy, PhD.

Dr. Purdy is the Director of Academic Affairs at Fox Chase Cancer Center. She received her doctorate degree in cell biology from the University of Colorado, Boulder and completed a postdoctoral fellowship in cancer immunology at Fox Chase Cancer Center. More recently, Dr. Purdy has turned her focus to developing unique and impactful training programs for students and professionals interested in science and medicine.

Dr. Purdy's webinar on 'Presentation Skills: How to Craft Effective Presentations' provided trainees with various skills to effectively engage an audience. The webinar provided important tips on slide design, strategies for delivering content, and advice on how to avoid common presentation mistakes.

To view this presentation please visit: <http://bit.ly/PurdyWebinar>



*Amanda Purdy, PhD  
Fox Chase Cancer Center*

## MARK YOUR CALENDARS:

The next webinar is scheduled for June 11th at 12:00 PM.

Dr. Marsha Zibalese-Crawford will present on  
Community Based Participatory Research.

To join: <https://zoom.us/j/3516184907>  
+1 646 558 8656 | Meeting ID: 351 618 4907

 @DrPurdySpeaks

## Research Education Core Leaders:

Carolyn Fang, PhD - Fox Chase Cancer Center

Olorunseun Ogunwobi, MD, PhD - Hunter College

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

Taylor Kazaoka, MPH - [taylor.wood@fcc.edu](mailto:taylor.wood@fcc.edu)

Cristina Zambrano, BA - [Cristina.Zambrano61@myhunter.cuny.edu](mailto:Cristina.Zambrano61@myhunter.cuny.edu)

## SPEECH

Synergistic Partnership  
for Enhancing Equity in  
Cancer Health

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TWITTER (@REC\_U54)

INSTAGRAM (U54\_REC\_SCR)

# SPRING CANCER AWARENESS MONTHS

## MARCH

Colorectal Cancer

Kidney Cancer

Multiple Myeloma

HPV Awareness Day [March 4th]

## APRIL

Testicular Cancer

Esophageal Cancer

Head & Neck Cancer

## MAY

Melanoma & Skin Cancer

Brain Cancer

Bladder Cancer