



2023 Spring Edition

RESEARCH EDUCATION CORE NEWSLETTER *Spring Highlights*



SPEECH

Synergistic Partnership
for Enhancing Equity in
Cancer Health



TEMPLE HEALTH The City University of New York

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U54 trainees and mentors have been busy this spring, participating in various activities supported by the Temple University, Fox Chase Cancer Center, and Hunter College (TUFCCC/HC) Partnership.

Trainee & Faculty Accomplishments: Both trainees and faculty members have seen a lot of growth over the past five years. U54 members have continued to advance their careers through research, education, grants, and work opportunities, some of which are highlighted in this issue.

U54 Impact: As Cycle 1 of the U54 grant comes to a close, we are eager to highlight the accomplishments of the TUFCCC/HC Partnership.

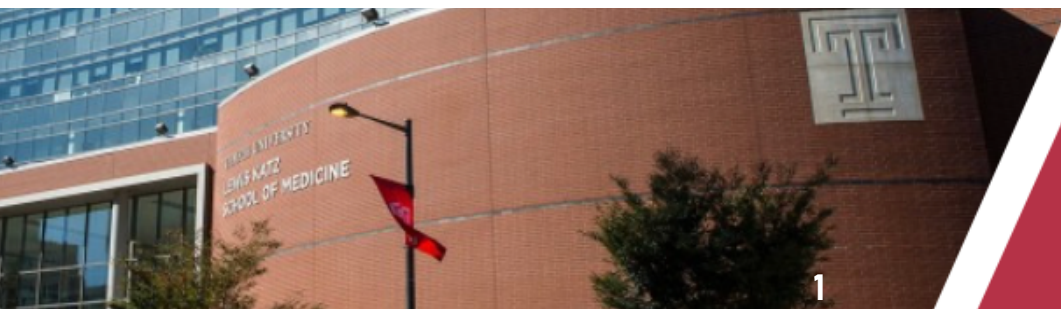
Core Highlights: The Partnership would not be successful without the dedication of its cores. The REC is proud to highlight the accomplishments of the PEC, COC and BBC.

Summer Cancer Research Institute: As summer approaches, final preparations for the SCRI 2023 are being made. We are excited to introduce the 2023 cohort! Thank you to the TU/FCCC mentors who will be welcoming the new trainees into their labs in June. We are expecting a productive and collaborative summer.

5TH ANNUAL SPEECH REGIONAL CANCER HEALTH DISPARITY CONFERENCE

The purpose of the 5th Annual SPEECH Regional Cancer Health Disparity Conference is to promote the advancement of research in cancer health disparities and support the development of outstanding underrepresented minority (URM) and diverse students and trainees who are committed to careers in cancer research and to collaboratively engage the community in enhancing the quality and feasibility of these efforts. The conference is being held at Temple University Lewis Katz School of Medicine's Medical Education and Research Building.

Thank you to all abstract submitters! The SPEECH Conference features 62 poster presentations from 14 different institutions, ranging from topics related to basic cancer research, cancer health disparity research, and population research. In addition, the SPEECH Conference will be hosting over 200 attendees to participate in various activities including a speaker session, a keynote address, networking opportunities, and an interactive mentor training workshop on *Mentoring Across Diversity*.



20
23

HUNTER COLLEGE TRAINEE ACHIEVEMENTS



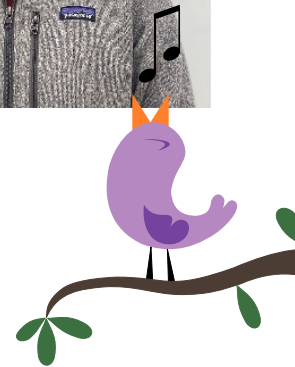
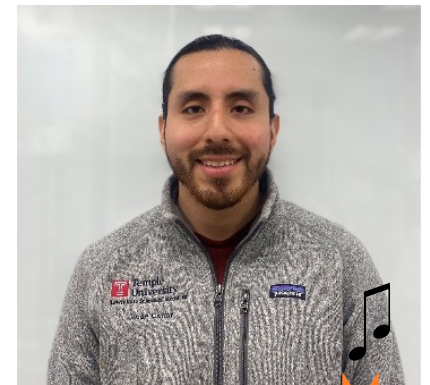
George Annor, PhD:

After obtaining his undergraduate degree in Biochemistry from the University of Ghana and his master's degree in Molecular Biology at the University of Gothenburg, George Kwakye Annor joined the Biochemistry PhD program at Hunter College, where he became an official member of the Bargonetti Lab in 2018. He successfully defended his PhD thesis on May 20, 2022, and accepted a postdoctoral research fellow position at the NIH/NCI, where he has been working since August 2022.

Jorge Canar, PhD(c):

After earning his undergraduate degree at Hunter College, Jorge Canar was accepted into a PhD program at Temple University.

"As a trainee of the U54 program, I have become more confident in my ability to think critically and propose ideas to my fellow peers. I'm currently conducting my PhD thesis project under the mentorship of Dr. Ana Gamero to characterize the function of STAT2 as a tumor promoter in inflammation-driven cancers. The support I have received from faculty at Temple University and Hunter College is immeasurable. I'm grateful for their scientific feedback to my dissertation research project that helped me be elevated to PhD candidacy."



- Recipient of the AACR Minority Scholar in Cancer Research Award
- Pre-pilot project funded under U54, first-author publication
- MD student at Touro College, Class of 2024

Cristina Zambrano

- Recipient of RISE Fellowship
- Recipient of Gertrude B. Elion Award
- Obtained PhD in Chem.
- Post-doc fellowship at NIH/NCI on ped. cancer

**Sophia
Varriano, PhD**

- Best Pres. Award at 2019 SPEECH conf.
- Valedictorian, Hunter College 2020
- Fulbright Scholar, 2020
- MD/PHD Candidate at Weill Cornell Medicine

Ahmet Doymaz

- Obtained external funding, NIH/CRCHD CURE Diversity Suppl.
- Pilot project funded under U54
- Obtained adjunct faculty position at HC

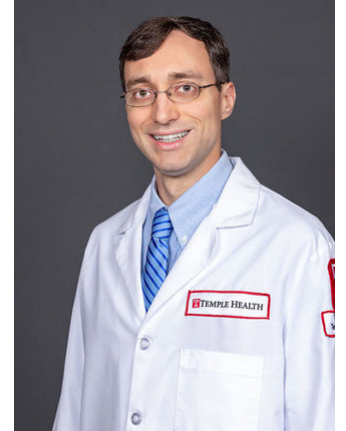
**Cicely
Johnson, PhD**



TEMPLE UNIVERSITY FOX CHASE CANCER CENTER TRAINEE ACHIEVEMENTS

Zachary Wilmer Reichenbach, PhD:

"I really appreciate the opportunity afforded to me by the U54 grant. It provided the seed to grow a project and obtain some additional funding in the area of esophageal cancer disparities. We are continuing to collect data and look forward to more grant submissions in the coming months. Without U54 support, these advancements in our knowledge, as well as my career, would not have been possible and for that, my fellow researchers and I remain exceedingly grateful."



Jason Scott Wasserman, PhD:

"Having recently defended my doctoral dissertation, I am excited to continue my search for a postdoc position with the intention of pursuing a career in academia. My experience as a PhD Student at Temple University and as a U54 pre-pilot awardee and trainee not only reinforced these intentions, but also made me a competitive candidate for travel awards and conference presentations."

Dr. Wasserman defended his thesis in April 2023.



Areebah Rahman

- MARC Scholar, 2020
- Best Pres. Award at ABRCMS, 2021
- Recipient of the Diamond Award, 2022
- Accepted into Brown-NIH PhD Program in Neuroscience



Tyrell Mann-Barnes

- Trained and published on LGBT cancer disparities
- Research Associate position at District Attorney's Transparency Analytics Lab
- MPH Student at Univ. of Pennsylvania



Jayashri Ghosh, PhD

- Obtained assistant professor position at TUFCCC
- Pilot studies funded under U54
- Obtained NIH R21 funding as PI
- Co-Leader for CRC Proj.



Lin Zhu, PhD

- Obtained tenure-track assistant professor position at TUFCCC
- Obtained NIH R03 funding as PI
- Recipient of Community Service Excellence Award
- Co-Leader for PEC

CONGRATULATIONS TO OUR PARTNERSHIP LEADERS!

Fox Chase Cancer Center's **Camille Ragin, PhD, MPH, Associate Director of Diversity, Equity, and Inclusion**, was appointed chair of the Minorities in Cancer Research (MICR) Council for the American Association for Cancer Research (AACR) at the AACR Annual Meeting 2023, which was held April 14-19 at the Orange County Convention Center in Orlando, Florida.



Fox Chase Cancer Center's **Carolyn Fang, PhD** was announced as the winner of a \$100,000 PA Breast Cancer Coalition grant! Dr. Fang plans to use the funding to address barriers to cervical cancer screening with the goal of reducing cancer disparities in the Latino community.

Hunter College professor and Breast Cancer Research Foundation researcher **Jill Bargonetti, PhD** has been featured on BCRF's official podcast, "Investigating Breast Cancer." On the episode, Dr. Bargonetti discusses the unique complexities of triple-negative breast cancer that can make this subtype more challenging to detect, diagnose, and treat. Dr. Bargonetti's research into TNBC, various biomarkers, and more has put her at the forefront of discovering not only how these different variables might interact, but also how we might develop novel strategies to accurately identify and destroy these cancerous cells. Her grant is supported by The Estée Lauder Companies Inc.



IMPACT & OVERALL ACCOMPLISHMENTS

Planning & Evaluation Core

Collaboration

- 108 Cross-institution collaborative research projects conducted by U54 investigators
- 98 Cross-institution collaborative research projects funded/awarded to U54 investigators
- 152 Cross-institution collaborative research proposals submitted by U54 investigators

Publications & Presentations

- 249 publications
 - 102 directly supported by U54 and 147 indirectly supported by U54
- 444 presentations
 - 323 of 444 presentations by U54 trainees as 1st author/presenter

Faculty Advancement

- 84 TUFCCC/HC multidisciplinary faculty investigators engaged in U54 funded research, programing, and mentorship
 - 50% faculty are URM
- 52 multidisciplinary faculty recruited or their career advancement supported (e.g. tenure, promotion)
 - 33 junior faculty and 19 mid- or senior level faculty

Trainee Advancement

- 7 advanced into graduate programs for Master's degrees
- 31 received Master's degrees
- 26 advanced to doctoral programs
- 21 received doctoral degrees
- 8 advanced into postdoc positions
- 8 advanced to new junior faculty positions
- 40 advanced into industry positions
- 24 received external awards or honors
- 14 minority ESIs advanced in career

Grants

- 46 externally funded grants, directly supported by U54
- 49 internally funded grants, directly supported by U54
- 29 grants submitted (pending or not funded), directly directly supported by U54
- 5 grants funded indirectly advanced by SPEECH
- 29 grants submitted (pending or not funded), indirectly advanced by U54 SPEECH

COMMUNITY OUTREACH CORE HIGHLIGHTS



The Community Outreach Core (COC) has proven to be a successful method of raising awareness and increasing knowledge of colorectal cancer prevention in underserved African American, Asian American, and Hispanic American Communities. The COC has effectively engaged with more than 50 diverse community-based organization partners, trained 41 community health workers (CHWs) to deliver educational HBV/HCV, colorectal and lung cancer workshops within underrepresented African American, Hispanic American, and Asian American populations, hosted 56 well-attended Outreach Education sessions, held 30 community health fair events and city-wide bus campaigns, distributed almost 6,100 copies of cancer education materials, and provided cancer education interventions for 1,200 individuals.

The success of the COC's interventions culminated in a 2022 publication in the journal *Nutrients*. The findings of the article, *Reducing Liver Cancer Risk through Dietary Change: Positive Results from a Community-Based Educational Initiative in Three Racial/Ethnic Groups*, contributed significantly to the growing body of literature on liver cancer and viral hepatitis prevention, dietary behavioral changes, and racial/ethnic disparities.

Stay Connected with the COC!



@knowcancernocancer



@knowcancer

Outstanding Community Engagement Awards

The TUFCCC/HC Regional Cancer Health Disparity Partnership proudly recognizes the **Arthur Ashe Institute for Urban Health, Voces Latinas, Pennsylvania United Chinese Coalition, Puerto Rican Unity for Progress, and Greater Philadelphia Health Action, Inc.** as recipients of the Outstanding Community Engagement Awards for 2023.

We are proud to acknowledge and commend their continued dedication and outstanding contributions to reducing cancer disparities and improving the health of our communities. Thank you for your amazing work!



BIostatISTICS & BIOinformatics CORE OVERVIEW

The Biostatistics & Bioinformatics Core has excelled in providing expertise in experimental design, statistics, bioinformatics, genomics and mixed methods analyses, enhancing and accelerating high-quality cancer health disparities research in underserved African-, Asian- and Hispanic American communities in Philadelphia, New Jersey and New York City. BB Core supported grant submissions that will generate over 11 million dollars in sustainable support over the coming years.

Core Leaders:



Eric A. Ross, PhD, ScM
AVP Biometrics and Information
Sciences Director
Biostatistics/Bioinformatics and
Population Studies Facilities
Fox Chase Cancer Center



Konstantinos Krampis, Ph.D.
Associate Professor, Biology
Associate Professor, Computer
Science
Hunter College

Highlights from BB Core:

"We developed Machine Learning/Artificial Intelligence (ML/AI) with applications to cancer and genomic data analysis taught at Hunter College (BIO 48002), with all the lectures available as Zoom recordings." -Dr. Krampis

"Two PhD, one Master's, and two undergraduate students at Hunter College have been trained to perform research and contribute towards the development of the AI/ML pipelines. This work has resulted in three abstracts submitted to conferences, by the students, who also participated in summer internships at Temple University." -Dr. Krampis

NEW PROJECTS IN THE U54

Prostate Cancer

Leaders: Drs. Hiroshi Matsui, Olorunseun Ogunwobi, and Stefania Gallucci

Examined the large-scale generation of immunotherapeutic exosomes stimulated by self-assembling peptides in donor dendritic cells for prostate cancer treatment.

Genetic Testing

Leaders: Drs. Tracey Revenson, Sarah Bauerle Bass, and Hall

Examined the role of medical mistrust in genetic testing disparities among cancer patients using a mixed-methods study to develop targeted messages to influence uptake.

Anticancer Activity

Leaders: Drs. Mandë Holford, Joan Font-Burgadam and Roland Dunbrack

Developed AlphaFold2 custom pipeline for the structure prediction of 1151 teretoxin sequences recently identified.

SNAPSHOT OF THE RESEARCH EDUCATION CORE

The Research Education Core has diligently supported educational activities that enhance the training and mentorship of a diverse workforce to meet the nation's cancer research needs.

Over the past 5 years, the REC has supported co-mentorships of nearly 200 trainees including:

- 5 early stage investigators on externally funded grants
- 19 early stage investigators on U54 funded pilot studies
- 30 pre-doctoral trainees on U54 funded pre-pilot studies
- 68 Summer Cancer Research Institute (SCRI) Scholars



SCRI 2019 Cohort



SCRI 2021 Cohort



SCRI 2022 Cohort



SCRI 2020 Cohort



Overall, SCRI participants have been satisfied with their experience and, according to survey data, have shown higher levels of understanding cancer research biology and interest in pursuing a career in the field.

"I am very grateful and appreciative of this program and what it has given me. I have an endless amount of knowledge that I did not have beforehand. This was a great and fun experience."
-SCRI 2019 Trainee

"SCRI has given me the opportunity to explore my interests in the gut microbiome, genetics, and cancer. I will continue working with Dr. Sapienza to write my Capstone paper. I've also learned several tips on how to effectively market myself, write abstracts, and present, all of which are skills that I will carry with me throughout my academic and professional career."
-SCRI 2020 Trainee

"The SCRI helped me gain some great experience with several lab techniques and I will be able to take this experience to help me when starting my PhD."
-SCRI 2021 Trainee

"I am glad to have spent my summer with some amazing people. The educational and professional experience it has given me was incredible. This program will most definitely help me in the future due to the lessons I learned along the way."
-SCRI 2022 Trainee

THANK YOU, MENTORS!

The U54 Partnership would not be successful without the dedication and enthusiasm of all our committed mentors. We want to recognize and thank you all for your continued support to your mentees' growth and the partnership as a whole.

Hunter College Mentors:

Andrew Wolfe, PhD, Anita Nirenberg, PhD, RN, Brian Zeglis, PhD, Chun Pan, PhD, Dana Sylvan, PhD, Diego Loayza, PhD, Donna Nickitas, PhD, RN, Frida E. Kleiman, PhD, Hiroshi Matsui, PhD, Jennifer Ford, PhD, Jill Bargonetti, PhD, Joel Erbllich, PhD, Khursheed Navder, PhD, Konstantinos Krampis, PhD, Lynn Francesconi, PhD, May May Leung, PhD, RD, Mandë Holford, PhD, Ming-Chin Yeh, PhD, Olorunseun Ogunwobi, MD, PhD, Oyewole Oyekoya, PhD, Sarit A. Golub, PhD, SJ Dodd, PhD, Shipeng Sun, PhD, Tracey Revenson, PhD, Weigang Qiu, PhD

Temple University Fox Chase Cancer Center Mentors:

Alison Brecher, PhD, Ana Gamero, PhD, Antonia Giordano, PhD, Bradley Collins, PhD, Bojana Gligorijevic, PhD, Carolyn Fang, PhD, Camille Ragin, PhD, Carmen Sapienza, PhD, Cherie P. Erkmen, MD, Christian Hurtz, PhD, Edna Cukierman, PhD, Eric Ross, PhD, Grace X. Ma, PhD, Glenn Rall, PhD, Hasan Raza Kazm, PhD, Igor Astsaturov, MD, PhD, Jayashri Ghosh, PhD, Jennifer Reese, PhD, John Karanicolas, PhD, Jonathan Soboloff, PhD, Joseph Testa, PhD, Kelly Whelan, PhD, Kevin Henry, PhD, Linda Fleisher, PhD, MPH, Lucia Borriello, PhD, Margie Clapper, PhD, M. Raza Zaidi, PhD, Michael Hall, MD, Minhuyen Nguyen, MD, Nora Engel, PhD, Robin Taylor Wilson, PhD, Sanjeevani Arora, PhD, Sarah Bass, PhD, Seonhee Kim, PhD, Shannon Lynch, PhD, Suzanne M. Miller, PhD, Swayam Prabha, PhD, T. Dianne Langford, PhD, Teh Lin, PhD, Tomasz Skorski, MD, PhD, DSc, Xavier Graña, PhD, Yin Tan, MD, MPH, Yuwaraj Kadariya, MD, PhD

SUMMER CANCER RESEARCH INSTITUTE 2023

Welcome, New Trainees!



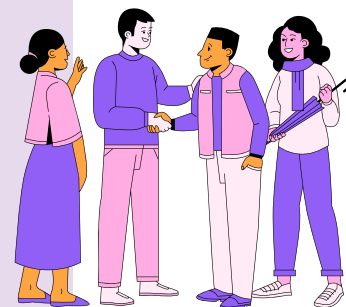
Hunter College Trainees:

Amanda Pisciotta*
 Brandon Arroyo
 Divina Twum
 Elesha McGrath
 Emily Chan
 Hannahlisa Smith
 Jocelin Guevara
 Leuna Sarah*
 Nadine Osorio
 Sophia Pisarevskiy*
 Tanvir Raihan

**not pictured*

Temple University Trainees:

Alexandra Marie Reyes
 Armaan Kalim
 Chinelo Okigbo
 Ramneek Kaur
 Taegen Swanson
 Zayd Haydar



We received a total of 189 applications for the 2023 SCRI Program. A Selection Committee comprised of 26 reviewers from Temple University, Fox Chase Cancer Center and Hunter College participated in the review of student applications. Ultimately, 17 students were selected for this highly competitive program.

The 2023 curriculum includes exciting lectures ranging from cancer biology, to resume building, to career pathways in research. The summer will conclude with a Mini-Symposium on July 28th, during which students will present their research projects.

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), funded by the National Cancer Institute grants U54 CA221704 and U54 CA221705. 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.



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:

Yuku Chen, MPH - Yuku.Chen@fccc.edu
Emily Kaminsky, MS - Emily.Kaminsky@hunter.cuny.edu

Stay Connected!



@REC_U54



TUFCCC_HC Research
Education Core



@u.54_rec_scri_

Spring Cancer Awareness Months

March

Colorectal Cancer
Kidney Cancer
Multiple Myeloma

April

Esophageal Cancer
Head and Neck Cancer
Testicular Cancer

May

Bladder Cancer
Brain Cancer
Melanoma and Skin Cancer
National Cancer Research Month



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