2025 ANNUAL

Cancer Health Equity Center of Excellence (CHECoE)
CANCER DISPARITIES RESEARCH SYMPOSIUM

TUESDAY | APRIL 22ND
9:00AM-4:30PM

Rutgers Cancer Institute
195 Little Albany Street | New Brunswick, NJ

RWJBarnabas HEALTH

RUTGERS HEALTH
Rutgers Cancer Institute

NCI Designated Comprehensive Cancer Center

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This event is partially funded by the Cancer Research Training and Education (CRTEC) department and the Scholars and Early Stage Advancement (SEA) Initiative at Rutgers Cancer Institute, NIH 3P30CA072720-24S2.

Welcome

A message from the CHECoE Director

Welcome to the Cancer Health Equity Center of Excellence (CHECoE) Annual 2025 Cancer Disparities Research Symposium! It's a pleasure to have you here with us today. The Symposium Planning Committee and I are excited to share an informative and engaging experience here at Rutgers Cancer Institute.

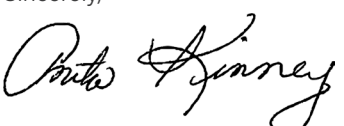
Your presence is invaluable as we work to foster collaboration and open communication between researchers and community members to advance cancer health disparities research. Throughout the day, you'll have the opportunity to exchange knowledge, explore innovative approaches to community engagement, attend presentations, hear inspiring messages from our keynote speakers, and connect with each other during interactive discussions. We hope you leave feeling energized and motivated in your work to address cancer health disparities.

I would like to extend my deepest gratitude to the Symposium Planning Committee for their unwavering dedication and hard work in organizing this event. Your time, effort, and leadership have been crucial in bringing this symposium to life, and it has been an honor to work alongside such a talented group to develop the agenda and select our speakers.

A special thank you goes to our keynote speakers, whose insights and expertise will undoubtedly inspire and challenge us all to think critically about the work ahead. We are deeply grateful for your contributions.

Finally, I would like to thank every participant and speaker for your invaluable contributions. We sincerely appreciate the time and effort you've put into submitting abstracts, and we recognize the importance of your enthusiasm for today's discussions. As we network throughout the day, I look forward to personally welcoming and connecting with you.

Sincerely,



Anita Kinney, PhD, RN
Professor, Department of Biostatistics and Epidemiology
School of Public Health
Director, Cancer Health Equity Center of Excellence
Associate Director for Population Science and Community Outreach
Rutgers Cancer Institute
Director, ScreenNJ

About the Cancer Health Equity Center of Excellence (CHECoE)

The Cancer Health Equity Center of Excellence is a formal partnership between the Rutgers School of Public Health and the Rutgers Cancer Institute, which will serve as a catalyst for training and education, research, community engagement, and public policy advocacy surrounding cancer health equity in one of the nation's most ethnically and racially diverse states.

View our Fact Sheet

Advancement and impact drives everything we do at the Cancer Health Equity Center of Excellence. Our goal is to contribute in a lasting and meaningful way for all communities throughout the state, to build strong community partnerships and reduce cancer health disparities. This impact report unequivocally demonstrates our dedication to cancer health equity and our strong efforts in research, community outreach and engagement, training and education, and public policy advocacy and communication with all the communities across our catchment area of New Jersey. Our hope is to build upon our successes each year to make the Cancer Health Equity Center of Excellence the leading center in the nation for achieving cancer health equity.

Visit our impact report.

We Are Guided by Our Aims

Established in 2019, the aims of the CHECoE were guided by our mission of advancing the achievement of equitable access, improved health care quality, and better outcomes across the cancer continuum through prevention, early detection, treatment, survivorship, and end-of-life care. We do this through research, education and training, community outreach and engagement, and public policy advocacy.

Aim 1

Assess and monitor New Jersey's cancer burden, disparities, and risk factors to identify and prioritize catchment area needs.

Aim 2

Conduct education programs and promote the implementation of policies and evidence-based strategies to reduce the catchment area's cancer burden across its diverse populations.

Aim 3

Catalyze impactful research that addresses the catchment area priority cancers, risk factors, and disparities.

Cancer Disparities Research Annual Symposium
Cancer Health Equity Center of Excellence
2025 Planning Committee Members

Anita Kinney, PhD, RN
Professor, Department of Biostatistics and Epidemiology
School of Public Health
Director, Cancer Health Equity Center of Excellence
Associate Director for Population Science and Community Outreach
Rutgers Cancer Institute
Director, ScreenNJ

Sarah J. Scharf, DrPH, MPH
Executive Director
Cancer Health Equity Center of Excellence
Rutgers Cancer Institute
Deputy Director, ScreenNJ

Antoinette (Nan) Stroup, PhD
Professor of Epidemiology
Department of Biostatistics & Epidemiology
Rutgers School of Public Health
Director, New Jersey State Cancer Registry
Rutgers Cancer Institute

Denalee O'Malley, PhD, LSW
Rutgers State University of New Jersey
Rutgers Robert Wood Johnson Medical School Department of Family Medicine and Community Health

Evelyn Arana, DrPH
Assistant Professor
Department of Medicine
Rutgers Cancer Institute

Sunita Chaudhary, Ph.D.
Associate Professor of Surgery
Rutgers Robert Wood Johnson Medical School
Interim Associate Director for Education and Training
Director, Research Education
Rutgers Cancer Institute

Daniel Herranz, PharmD, PhD
Associate Professor
Pharmacology
Rutgers Cancer Institute

Jian Cao, PhD
Associate Professor
Department of Medicine
Rutgers Cancer Institute

Yonaira M. Rivera, PhD, MPH
Assistant Professor
School of Communication & Information
Rutgers University

Tamara Horn
Program Manager – Administration
Cancer Health Equity Center of Excellence
Rutgers Cancer Institute

Theresa R. Lofton
Program Coordinator
Cancer Health Equity Center of Excellence
Rutgers Cancer Institute

Jasmine Bagner
Staff Assistant
Cancer Health Equity Center of Excellence
Rutgers Cancer Institute

Agenda

9:00am – 9:30am	Registration & Continental Breakfast		
9:30am – 9:50am	Welcome and CHECoE Progress Updates	Speaker: Anita Kinney	
9:50am – 10:00am	Overview of STRIDE Dashboard	Speaker: Daniel Pearson	
10:00am – 11:00am	Insights from Basic and Translational Cancer Disparities Science	Moderator: Dani Herranz	
11:00am – 12:00pm	Learning from African Genetic Variation to Improve Cancer Health Outcomes for All	Keynote Speaker: Tim Rebbeck	
12:00pm – 1:00pm	Break	Lunch Provided in Atrium	
1:00pm – 1:45pm	Patient Engagement in Research: A Road to Equity	Keynote Speaker: Beverly Canin	
1:45pm – 2:45pm	Community Voices Panel featuring Community Cancer Action Board Rutgers Cancer Institute (CCAB) Members	CCAB Moderator: Yakima Deloatch	
2:45pm - 3:00pm	Break		
3:00pm – 4:00pm	Key Research Areas in Population & Clinical Disparities Science	Moderator: Denalee O'Malley	
4:00pm – 4:30pm	Closing Remarks and Evaluation		

About Dr. Anita Kinney

Anita Kinney, PhD, RN

Professor, Department of Biostatistics and Epidemiology
School of Public Health
Director, Cancer Health Equity Center of Excellence
Associate Director for Population Science and Community Outreach
Rutgers Cancer Institute
Director, ScreenNJ

Dr. Anita Kinney has been an actively funded investigator in cancer prevention and control for over 25 years. Her research brings a combination of behavioral science, clinical, and epidemiologic perspectives to address unsolved cancer problems and health disparities in diverse populations and settings. Her overarching research goal is to understand variation in cancer risk, determinants of risk and outcomes, and to use this information to develop effective interventions that facilitate informed decision-making, positive changes in health behaviors, and guideline-concordant genomic care delivery that leads to better outcomes. Much of Dr. Kinney's research has focused on documenting determinants of interest, access and use of genomic tests, and related health services in diverse populations, and using this information to better understand and address health disparities. She has also had considerable experience leading and collaborating on large community-based and population-based randomized trials that have developed and implemented effective interventions to promote cancer risk assessment, risk reduction, screening and care delivery in average-risk and high-risk populations, and appropriate translation of genetic discoveries into clinical practice. Further, Dr. Kinney has pioneered effective culturally targeted and telehealth genetic risk communications, behavior change, and genomic testing interventions in cancer survivors and their relatives. This research has helped shape health policy and clinical guidelines. In addition, she has developed and tested effective health promotion interventions in cancer survivors incorporating genomic and other biomarkers to better understand biobehavioral mechanisms underlying intervention effects and improve cancer care delivery.

For full profile and biography information, **click here.**

Keynote Speaker

Learning From African Genetic Variation to Improve Cancer Health Outcomes For All

Timothy R. Rebbeck, PhD
Vincent L. Gregory, Jr. Professor of Cancer Prevention
Epidemiology, Harvard T.H. Chan School of Public Health
Department of Epidemiology
Director of Zhu Family Center for Global Cancer Prevention
Epidemiology, Harvard T.H. Chan School of Public Health

After spending 20 years at the University of Pennsylvania, Dr. Timothy Rebbeck joined the Dana-Farber Cancer Institute and the Harvard T.H. Chan School of Public Health in 2015 as the Vincent L. Gregory, Jr. Professor of Cancer Prevention. He is the founding director of both the Zhu Family Center for Global Cancer Prevention at Harvard T.H. Chan School of Public Health and the Center for Global Health Equity at Dana-Farber Cancer Institute. Dr. Rebbeck's research focuses on understanding the causes and prevention of cancer, with a particular emphasis on cancer genetics, prostate cancer disparities, and global health equity. He leads large-scale international studies and consortia that have identified genetic, molecular, and epidemiological factors influencing cancer risk, prevention, and disparities. Notably, he heads the international Men of African Des cent and Carcinoma of the Prostate (MADCaP) network and several consortia studying hereditary cancer risks and prevention. Additionally, he directs the NCI-funded African Cancer STARS training program, which supports the career development of African cancer researchers and project managers. Dr. Rebbeck has mentored over 65 trainees, many of whom now hold academic positions, and has maintained continuous funding from the NIH since 1994.

For full profile and biography information, **click here.**

Keynote Speaker

Patient Engagement in Research: A Road to Equity

Beverly Canin
Survivor and Patient Advocate

Beverly Canin was diagnosed with breast cancer in 2000. She has nearly 25 years' experience as a cancer patient advocate with interest in breast cancer prevention and risk reduction, decision making, patient/provider communication, survivorship, health disparities, research translation/implementation and clinical trials. She serves or has served on the Board of Directors or advisory committees of national, regional, statewide and international cancer organizations. She is a National Breast Cancer Coalition (NBCC) Project LEAD graduate (class of 2003). She has been a peer reviewer as well as collaborator on research submitted to or funded by the Department of Defense Breast Cancer Research Program (DoDBCRP), NCI, Patient Centered Outcomes Research Institute (PCORI) and the National Institute on Aging (NIA). She is co-author on numerous publications. Since 2011, she has been a patient advocate/research partner member of the Cancer and Aging Research Group (CARG). She helped create and chaired for six years Stakeholders for Care in Oncology Research for our Elders (SCOREboard), an advisory group of older cancer patients, their caregivers and patient advocates formed in 2013 under a PCORI grant. Currently, she co-chairs CARinG SCOREboard, engaged in the first year renewal of a 5-year NCI/NIA grant to CARG for development of a national infrastructure for cancer and aging research. She also co-chairs GOTO SCOREboard, advisory group to a project which is exploring the value of geriatric assessment in 5 clinical trials - each focused on a different cancer type - under a five-year Rising Tide Foundation (RTF) Geriatric Oncology Therapy Optimization Program (GOTO) award to CARG.

STRIDE Dashboard Speaker

Utilizing STRIDE Data for Cancer Health Equity Research

Daniel Pearson, MA
Manager, Catchment Data & Surveillance
Cancer Health Equity Center of Excellence
Rutgers Cancer Institute

Daniel Pearson is the Manager for Catchment Data and Surveillance at Rutgers Cancer Institute's Center for Cancer Health Equity (CHECoE), where he coordinates the collection, organization and evaluation of the center's catchment area and outreach activities data and fulfills custom data requests for research program members.

At CHECoE, Daniel developed the STRIDE Dashboard, an interactive data dashboard (built with R Shiny) committed to facilitating and supporting research relevant to the cancer center catchment area. STRIDE includes system-wide clinical trials enrollment and tumor registry data, while aggregating publicly available data sources including cancer rates, risk factors, screening, demographics, socioeconomic and environmental impact, among others. He also participates in the Catchment Area Research and Data Science (CARDS) group, which brings together professionals from NCI-designated cancer centers to share catchment data resources and solve common data science problems.

For more information and to access the STRIDE- Interactive Data Dashboard, **click here.**

Antoinette (Nan) Stroup, PhD
Professor, Department of Biostatistics and Epidemiology
Professor of Epidemiology
Department of Biostatistics & Epidemiology
Rutgers School of Public Health
Director, New Jersey State Cancer Registry
Rutgers Cancer Institute

Dr. Antoinette Stroup earned her BS and MS degrees from the University of Utah in Salt Lake City and her PhD from the University of California, Berkeley in Epidemiology. She is a Professor of Cancer Epidemiology in the Department of Biostatistics and Epidemiology at the Rutgers School of Public Health; and is the Director of the Cancer Epidemiology Services (CES) and New Jersey State Cancer Registry at the New Jersey Department of Health. As Director, Dr. Stroup manages and oversees all administrative and operational aspects of the State's population-based cancer surveillance system and research-related activities (e.g., protocol development, institutional review board compliance, patient contact) through the CES Cancer Research Program.

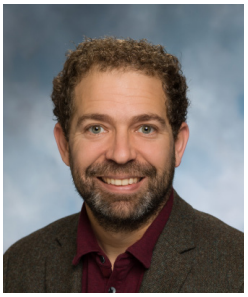
With more than 15 years of experience in cancer surveillance and cancer registry management, Dr. Stroup has received funding for over 40 cancer research studies, covering a wide array of research topics for a variety of cancer types including breast, prostate, cervical, colorectal, ovarian, and liver cancers as well as cancers among adolescents and young adults. Her current research projects include multi-registry collaborations studying risk and outcomes among Latino and Asian race and ethnic subgroups with breast, colorectal and cervical cancer and African-American men with prostate cancer.

Dr. Stroup is also the Assistant Director of Research and Catchment Data at the Community Outreach and Education Center of Excellence, working closely with Dr. Kinney and Community Outreach and Education team to ensure that research conducted by the Cancer Institute addresses the catchment area priorities for cancer, risk factors, and disparities.

For full profile and biography information, **click here.**

Moderators

Insights from Basic and Translational Cancer Disparities Science



Daniel Herranz, PhD
Associate Professor
Pharmacology
Rutgers Cancer Institute

Dr. Herranz joined Rutgers Cancer Institute in 2017, having previously been a Postdoctoral Fellow in Dr. Adolfo Ferrando's laboratory at Columbia University. In his time with Rutgers Cancer Institute, Dr. Herranz has led a successful laboratory that specializes in oncogenic and tumor suppressor enhancers and cancer metabolism and epigenetics in leukemia. He has published high-impact studies in Blood Cancer Discovery, Blood, Blood Neoplasia or Leukemia, among other journals. He is currently a multi-R01 funded investigator and has received numerous distinctions, including the American Association for Cancer Research (AACR) NextGen Star or the Leukemia & Lymphoma Society Scholar Award. Dr. Herranz has further previously served as a Community Outreach and Engagement (COE) Program Liaison for the Cancer Pharmacology (CP) Research Program, and was recently nominated as the new Associate Director for Shared Resources at Rutgers Cancer Institute.

For full profile and biography information, **click here.**

Moderating the following selected abstract presenters:

1. **Trends In Guideline Concordant Care For Ovarian Cancer**
   Speaker: Aliza Leiser, MD & Jessie Hollingsworth, MD
2. **Mechanistic basis for aggressive disease presentation in Adult T-cell Leukemia patients diagnosed in North America**
   Speaker: Advaitha Madireddy, PhD
3. **Non-Invasive Detection of Bladder Cancer Biomarkers From Urine And Blood Using An Ultra-Sensitive Crispr-Based Detection System**
   Speaker: Sumayya Sattar, PhD
4. **Targeting HPV with Diverse TCRs: A Path Toward More Equitable Cell Therapy**
   Speaker: Christian Hinrichs, MD & Jian Cao, PhD

Full abstracts available in Featured Abstracts section.

Moderators

Key Research Areas in Population & Clinical Disparities Science

Denalee O'Malley, PhD, MSW

Rutgers State University of New Jersey
Rutgers Robert Wood Johnson Medical School Department of Family Medicine and Community Health

Denalee M. O'Malley, Ph.D., M.S.W., is an Assistant Professor and the Interim Section Chief in the Department of Family Medicine and Community Health's Research Division at Rutgers Robert Wood Johnson Medical School. She is also an Associate Member of the Rutgers Cancer Institute. She is an oncology social work researcher who specializes in using mixed methods to inform intervention development and care model redesign to improve care quality. She has cultivated strong content expertise in cancer prevention and control and primary care, working at multiple levels (e.g., patients, clinicians, clinical teams, organizations) using participatory engaged research processes. Dr. O'Malley is contact Principal Investigator for Advancing Care Coordination to Enhance Shared Care for Complex Cancer Survivors in Primary Care (1U01CA290653-01), which uses mixed methods approach to tailor and test a care coordination health system intervention to improve cardiovascular disease risk management for 'complex' cancer survivors. She also leads, "Optimizing Colorectal Cancer Screening among Patients with Diabetes in Safety-net Primary Care Settings: Targeting Implementation Approaches" (K99 CA256043/R00CA256043). She completed the Institute for Implementation Science Scholars Program at Washington University in Saint Louis. Dr. O'Malley has participated in the design and delivery of individual and small group interventions (e.g., eHealth, small group facilitation, and psychosocial care) across several primary care and cancer survivorship focused research projects. She has collaborated on several NIH-funded (e.g., NCI, NIDA, NHLBI) implementation science projects to assess and intervene at multiple levels to translate evidence-based practices into real-world care delivery settings.

For full profile and biography information, **click here.**

Moderating the following selected abstract presenters:

1. **An Investigation of Health Disparities in Health-Related Quality of Life in Adult Survivors of Childhood Cancer**
   Speaker: Anusha Ramji, MS
2. **Sociodemographic Disparities in Cigarette Relighting**
   Speaker: Maryam Mirza, PhD
3. **Exploring Sources of Financial Toxicity in Patients with Hematologic Malignancies**
   Speaker: Josephine (Jojo) Zhang
4. **Leveraging Spatial Analysis and Community Partnerships to Address Environmental Drivers of Lung Cancer Disparities in Philadelphia**
   Speaker: Tesla DuBois, MS

Full abstracts available in Featured Abstracts section.

Moderators

Community Voices Panel

Yakima Deloatch

CCAB Member
Consultant
Speaker
Author

Yakima Deloatch is a relentless advocate, entrepreneur, keynote speaker, and author, whose tenacity and resilience mirror that of a phoenix—rising, reinventing, and soaring higher with every challenge. As a breast cancer survivor and mentor, she is dedicated to empowering others through advocacy, storytelling, and community-building. She has shared her journey on Dr. Oz, ABC News, The Wendy Williams Show, and other major media platforms while using her social media presence to highlight fellow survivors, educate on breast health and lymphedema care, and amplify the mission of impactful organizations. Her latest venture, The Pink Escape, is a luxury travel community where breast cancer survivors and their friends celebrate life, resilience, and sisterhood.

With over 15 years of expertise in partnerships, marketing, and brand development, Yakima has executed high-impact events for brands like Samsung, AWS, and LinkedIn and led one of New Jersey's largest Making Strides Against Breast Cancer walks. She is a master at fostering relationships, securing sponsorships, and creating transformative experiences that leave a lasting impact. Whether she's advocating for survivors, inspiring audiences as a keynote speaker, or curating unforgettable travel experiences, Yakima continues to uplift and empower—proving that even after the fire, the phoenix always rises stronger.

For full profile and biography information, **click here.**

Presenters

Insights from Basic and Translational Cancer Disparities Science

Targeting HPV with Diverse TCRs:
A Path Toward More Equitable Cell Therapy

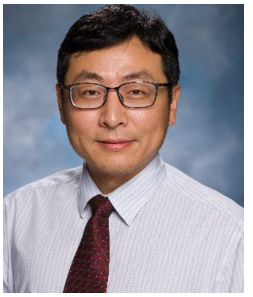
Christian Hinrichs, MD

Co-Director of the Duncan and Nancy MacMillan Cancer Immunology and Metabolism Center of Excellence (CIMCoE) and Chief of the Section of Cancer Immunotherapy, Rutgers Cancer Institute

Dr. Hinrichs is a physician-scientist who has pioneered cell therapy for HPV-associated cancers and other epithelial cancers. He is known for the discovery of tumor-infiltrating lymphocyte therapy for the treatment of HPV-associated cancers, which was the first cell therapy to cause durable, complete responses in epithelial cancers.

He also has discovered gene-engineered TCR-T cell therapies targeting HPV antigens and has demonstrated the safety and clinical activity of these treatments. His current laboratory research is focused on T cell receptor discovery, next-generation therapeutic approaches, and mechanisms of response to immunotherapy.

For full profile and biography information, **click here.**



Jian Cao, PhD

Assistant Professor
Department of Medicine
Rutgers Cancer Institute

Dr. Cao is an Assistant Professor in the Cancer Metabolism and Immunology (CMI) research program at the Rutgers Cancer Institute. His research centers on the epigenetic regulation of cancer immunity. His team uses bioinformatics and high-throughput screening to identify key epigenetic regulators of anti-tumor immune responses, validating their roles through cell-based assays and animal models. The ultimate goal is to develop novel strategies to enhance anti-tumor immunity. Dr. Cao collaborates closely with Dr. Hinrichs to develop innovative TCR-T cell therapies and to address mechanisms of treatment resistance.

For full profile and biography information, **click here.**

Presenters

Insights from Basic and Translational Cancer Disparities Science

Mechanistic basis for aggressive disease presentation in Adult T-cell Leukemia patients diagnosed in North America

Advaitha Madireddy, PhD

Assistant Professor
Department of Pediatric Hematology/Oncology
Robert Wood Johnson Medical School
Rutgers Cancer Institute

My research program is focused on understanding the molecular mechanisms in our cells that encounter and overcome the effects of endogenous and exogenous genotoxins. Built at the crossroads of DNA replication and DNA repair, our research identifies and examines genomic hotspots of instability, known as fragile sites, to understand the contribution of instability arising from these regions to different cancer-predisposition syndromes, virus-mediated disorders, and healthy human cells. Through our studies, we try to understand the process of age-associated mutagenesis and understand how deficiencies of specific genes and the associated processes can drive pathogenic outcomes. Importantly, since mechanisms driving age-associated mutagenesis are difficult to study given the human life span, our studies on cancer predisposition and premature aging disorders, such as Fanconi anemia and Xeroderma pigmentosum, give us accelerated insights into the age-associated mutagenesis process. We are employing a highly specialized assay called the single molecule analysis of replicated DNA (SMARD) and other cutting edge tools and interdisciplinary approaches to test our hypotheses.

For full profile and biography information, **click here.**

Non-Invasive Detection Of Bladder Cancer Biomarkers From Urine And Blood Using An Ultra-Sensitive Crispr-Based Detection System

Sumayya Real, PhD

Assistant Professor of Medicine
Division of Medical Oncology
Rutgers Cancer Institute
Robert Wood Johnson Medical School

Dr. Sumayya is a highly motivated postdoctoral scientist with an excellent background in cancer and molecular biology. She has completed her PhD from India in cancer biology. Her main research interest includes molecular analysis of cancer associated genes to explore their potentiality as molecular biomarkers for early screening, diagnosis, and prognosis of cancer. Her research is centered around the utility of cell-free nucleic acids as biomarkers and CRISPR-based non-invasive diagnosis. Her long-term research goals involve becoming an independent researcher and developing a comprehensive panel of non-invasive cancer biomarkers which would translate into better clinical outcome of cancer patients.

Presenters

Insights from Basic and Translational Cancer Disparities Science

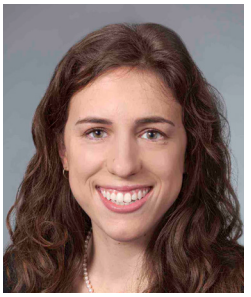
Trends In Guideline Concordant Care For Ovarian Cancer

Aliza Leiser, MD, FACOG, FACS

Gynecologic Oncologist
Associate Professor
Rutgers Robert Wood Johnson Medical School

Dr Leiser is a Gynecologic Oncologist at Rutgers Cancer Institute of New Jersey since 2014 and an Associate Professor of Obstetrics and Gynecology at Rutgers RWJ Medical School. Dr Leiser maintains a robust surgical practice and has a particular interest in ovarian cancer. She is PI on multiple trials for ovarian cancer within the GYN Disease Site Group. Currently she is focused on building an Ovarian Cancer Center of Excellence at CINJ. To that end, she has been developing clinical and translational initiatives and collaborations with both Rutgers researchers and outside partners. These include Natera Inc. for an early cancer detection test, a cfDNA mathematical modeling study with Rutgers Camden and NK cell study with Rutgers Newark. She was recently awarded the Rutgers Busch Biomedical grant to research novel oncogenic drivers in high grade ovarian cancers using long read sequencing. It is her strong belief that all ovarian cancer patients should have access to top notch and cutting-edge care at a high-volume cancer center. As the abstracts submitted to this meeting show, it is critical to understand the current status of guideline concordant care and define areas for improved delivery.

For full profile and biography information, **click here.**



Jessie Hollingsworth, MD

Fellow, Gynecologic Oncology
Rutgers Cancer Institute

Dr. Hollingsworth is a Gynecologic Oncology fellow at Rutgers Cancer Institute. She is currently working with Dr. Cristina Montagna to better understand how HPV integrations lead to cervical cancer. Her additional interests include resident education and palliative care. Through research and advocacy, she is committed to advancing equitable healthcare solutions that improve early detection, treatment access, and survivorship for all women affected by ovarian cancer.

Presenters

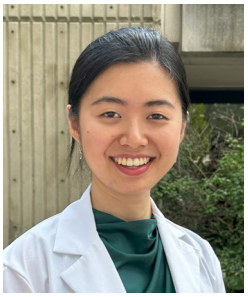
Key Research Areas in Population & Clinical Disparities Science

Leveraging Spatial Analysis and Community Partnerships to Address Environmental Drivers of Lung Cancer Disparities in Philadelphia

Tesla DuBois, MS

Senior Clinical Data Scientist
Sidney Kimmel Comprehensive Cancer Center at Jefferson

Tesla DuBois is a Senior Clinical Data Scientist at the Sidney Kimmel Comprehensive Cancer Center at Jefferson, where she supports the Clinical Trials Organization with data science tools that enhance operations and advance research. She is also a doctoral student in Medical Geography at Temple University, studying the geospatial drivers of cancer disparities using advanced spatial methods. Her background in education research, program evaluation, and nonprofit leadership deeply informs her approach to place-based health research, with a focus on translating findings into community-engaged public health solutions.



Exploring Sources of Financial Toxicity in Patients with Hematologic Malignancies

Josephine (Jojo) Zhang, BS

MD Candidate 2027
Robert Wood Johnson Medical School

Josephine Zhang is a third-year medical student at Rutgers Robert Wood Johnson Medical School. Prior to medical school, she earned her bachelor's degree from the Johns Hopkins University and completed a research year studying liver cancer at Stanford University. She now works with Dr. Biren Saraiya at the Rutgers Cancer Institute to investigate the impact of financial toxicity on patients with hematologic malignancies. Her work aims to improve how clinicians understand the cancer patient experience and better inform how healthcare teams can achieve greater equity in patient care.

Presenters

Key Research Areas in Population & Clinical Disparities Science

An Investigation of Health Disparities in Health-Related Quality of Life in Adult Survivors of Childhood Cancer

Anusha Ramji, MS
Research Teaching Specialist IV
Rutgers Cancer Institute

Anusha V. Ramji (she/her/hers) received her Master of Science degree in Mental Health Studies from King's College London. As a Research Teaching Specialist IV, she has been part of Dr. Devine's Research Program at Rutgers Cancer Institute for the past 1.5 years. Her research interests encompass the mental health of child, adolescent, and young adult (CAYA) cancer survivors and the psychosocial aspects of cancer survivorship in this group.

Sociodemographic Disparities in Cigarette Relighting

Maryam Mirza, PhD
Postdoctoral Associate
Rutgers Cancer Institute

Maryam Mirza is a Postdoctoral Associate at the Rutgers Cancer Institute, where she applies her skills as a health economist to advance research at the intersection of cancer prevention and economics. She earned her PhD in Economics from the University of Illinois Chicago. Prior to her current position, Dr. Mirza worked as an Assistant Scientist at Johns Hopkins University, focusing on the economics of tobacco taxation, especially in low- and middle-income countries. In her current role, Dr. Mirza supports Dr. Carolyn Heckman and her team by applying economic principles related to consumers, manufacturers, and community preferences in efforts to control tobacco use and prevent skin cancer.

Community Cancer Action Board

About the Community Cancer Action Board (CCAB)

The purpose of the Rutgers Cancer Institute Community Cancer Action Board (CCAB) is to build and foster partnerships between cancer researchers and community outreach staff and New Jersey communities. The CCAB provides input from community thought leaders and patient advocates to ensure community outreach and engagement, and research activities are informed, promote health equity and strengthen local capacity, and are responsive to community needs.

Equally, the reciprocal flow of information between researchers and outreach staff and the community build trust and mutual understanding between communities and researchers, and help ensure that values, and cultural differences among persons and communities are respected. The CCAB is a vital part of the effort to reduce the cancer burden in New Jersey communities by Rutgers CINJ and the Center for Cancer Health Equity.

If you would like to be a member of the CCAB, please contact cancerhealthequity@cinj.rutgers.edu.

For more information about out CCAB, **click here.**

Community Cancer Action Board

Community Voices Panel

Alka Agrawal

Owner of EBC Radio

As the Owner of EBC Radio since 1999, I have been deeply involved in building the first all-Indian commercial radio station in the tri-state area. With expertise in business development, marketing, and public relations, I've grown EBC's listenership to approximately 500,000 in the region and brought EBC Radio to recognition by Arbitron rating.

For the past 20 years, I have been elected to the Board of Directors of the Asian Indian Chambers of Commerce. As an active member of the South Asian-American community, I work with small businesses and corporate clients, continuously expanding my commitments to new endeavors.

Additionally, I serve as an Advisory Board member of the SKN Foundation and Rutgers CINJ Cancer Community Action Board (CCAB). In the past, I have also served on the advisory boards of the United Way of Central Jersey, NJSBDC of Rutgers, and Santander Bank.

Having lost my mother and sister to cancer, I am a passionate advocate for health education, firmly believing in its importance for the early detection of chronic diseases. My vision is to pass on our culture and heritage to the next generation through EBC Radio.

For more information about out EBC Radio, **click here.**

Frances Munet-Vilaró, PhD, PN

Professor Emerita
Rutgers University School of Nursing

Dr. Munet-Vilaró graduated from Catholic University of Puerto Rico with a bachelor's degree in nursing (BSN), completed a master's in nursing (MS) as a Clinical Nurse Specialist (CNS) in pediatrics at the University of Florida and a doctoral degree at the University of Washington School of Nursing, Seattle. She was a Robert Wood Johnson Foundation Nursing Research Scholar at the University of California in SF where she conducted post-doctoral research in psychoneuroimmunology. She taught nursing at the undergraduate and graduate programs at UMDNJ and Rutgers University School of Nursing, conducted research and has published on the socio-cultural factors impacting the health and illness events of Latina families. She is currently a consultant in various research projects and community-based programs in NJ. Dr. Munet-Vilaró is a Professor Emerita at Rutgers University School of Nursing.

Community Cancer Action Board

Community Voices Panel

Robin Dubin, MBA

Executive Director and Co-Founder
AliveAndKickn

Robin Dubin is the Executive Director and co-founder of AliveandKick'n, a leading patient advocacy organization dedicated to Lynch syndrome and hereditary cancer predispositions. With an MBA in Finance from NYU Stern and a Master of Health Care Innovation from the University of Pennsylvania Perelman School of Medicine, Robin brings a unique blend of financial acumen, healthcare expertise, and patient-centered advocacy to her work.

Since 2012, she has led AliveandKick'n, shaping its mission to empower Lynch syndrome patients through education, advocacy, and access to resources. As both an entrepreneur and a caregiver to her husband, David Dubin—a three-time cancer survivor—and their two Lynch-positive sons, she has a deep personal commitment to advancing research, improving clinical outreach, and ensuring that hereditary cancer patients receive the care and support they need.

Robin has spent over 25 years in the healthcare sector, leveraging her expertise to expand outreach, education, and collaboration across clinical, research, and public health communities. She continues to drive strategic initiatives that bridge the gap between patients, healthcare providers, and researchers, advocating for greater awareness, early detection, and policy advancements in hereditary cancer.

Jimmie Staton

Community Scientist Graduate

Mr. Jimmie Staton, is a 3-year member of the CCAB who is passionate about engaging in and speaking on behalf of his community; especially when it comes to advocacy. He is also a Community Scientist graduate who actively engages with researchers and to offer insight on how best to connect with community members. Mr. Staton is a dedicated father who is the current President of the Parent Teacher Organization has been recognized as a Community Champion for his outstanding and long standing advocacy. Mr. Staton can be counted on to be vocal presence whenever he is takes the opportunity in his community.

Identification and Characterization of Cell-Free RNA From Liquid - Liquid Biopsy Of Cancer Patients

Mrunmai Niljikar[1], Angelica Barreto-Galvez[1], Julia Gagliardi[1], Aastha Juwarwala[1], Carolina Plasencia[1], Bing Xia, PhD[1,2], Jian Cao, PhD[1,3], B. Hilda Ye, PhD[4], Advaitha Madireddy, PhD[1,5]

[1]Rutgers Cancer Institute, New Brunswick, NJ, USA; [2]Department of Radiation Oncology, Rutgers University, New Brunswick, NJ, USA; [3]Department of Medicine, Robert Wood Johnson Medical School, Rutgers University, New Brunswick, NJ, USA; [4]Department of Cell Biology, Albert Einstein College of Medicine, Bronx, NY, USA; [5]Department of Pediatrics Hematology/Oncology, Robert Wood Johnson Medical School, Rutgers University, New Brunswick, NJ, USA

Background

Adult T-cell Leukemia/Lymphoma (ATLL) is an aggressive malignancy associated with Human T-cell Lymphotropic Virus Type-1 (HTLV-1) infection. HTLV-1 is endemic to Japan, the Caribbean basin, South America, Eastern Europe and certain areas of Africa1. Although ATLL is not endemic to the U.S., the New York metro area has the largest ATLL case cluster due to its unique immigration makeup. Importantly, non-Hispanic blacks, the second largest under-represented minority in North America, experience the highest incidence of ATLL and worst overall outcome among all race/ethnic groups2, leading to significant disparities in health care. Moreover, North American ATLL patients (NA-ATLL) exhibit chemo-refractory disease and decreased overall survival compared to other ATLL patients3-5. There are currently no effective therapies for ATLL, including the most aggressive forms seen in NA-ATLL6. Thus, there is an urgent need to understand the mechanisms underlying the unique biology of NA-ATLL to identify new therapeutic targets that could improve overall survival for these patients. While there is no clear understanding of mechanisms that sustain the unique cellular state in NA-ATLL, recent studies have reported novel loss-of-function mutations in the E1A binding protein (EP300) in NA-ATLL patients7, which correlate with increased predisposition for chromothripsis8. Still, the role of EP300 has been historically understudied due to a lack of well-annotated cohorts of EP300-mutated patients and the absence of EP300 inhibitors. Our studies leveraging a unique collection of NA-ATLL biospecimens6 and a novel EP300-specific PROTAC degrader7, have now unveiled critical insights. We find that reduced EP300 activity is linked to severe dysregulations in DNA replication dynamics, characterized by defective replication fork protection, and the accumulation of cytosolic DNA, which induces cellular toxicity. Moreover, pilot studies show that reduced EP300 is associated with dysregulations in the electron transport chain, indicative of mitochondrial dysfunction and increased oxidative stress. Overall, our studies have revealed that elevated endogenous replication stress in the absence of EP300 drive persistent unresolved genomic instability in Na-ATLL, offering novel therapeutic avenues for treatment.

Acknowledgement

The authors acknowledge financial support from New Jersey Commision for Cancer Research, New Jersey Alliance for Clinical and Translational Sciences, R35GM149224 (SD) and support from lab members and CINJ.

Correspondence: subhajyoti.de@rutgers.edu

Featured Abstracts

Insights from Basic and Translational Cancer Disparities Science

Non-Invasive And Ultra-Sensitive Detection Of Cancer Biomarkers In Cell-Free Rna Using Rocbd

Real Sumayya Abdul Sattar[1], Pratyush Venkatesh[1], Luisa Quezada Ziesse1, Sophia Bhalla1, Saum Ghodoussipour[1], Subhajyoti De[1*]

[1]Rutgers Cancer Institute of New Jersey, Department of Pathology and Laboratory Medicine, New Brunswick, NJ, USA.

Abstract

Liquid biopsies offer significant advantages over solid biopsies due to their non-invasive nature and ability to provide real-time monitoring of tumor progression. Cell-free RNA (cfRNA) is abundantly present in circulation and can indicate real-time gene expressions of cancer biomarkers, offering multiple unique advantages for cancer diagnosis. We developed Rapid Oncogenic cfRNA Biomarker Detection (ROCBD), a CRISPR-Cas12a-based novel, ultra-sensitive, rapid, and flexible cancer biomarker detection method. It involves collection of body fluid such as blood and/or urine samples from cancer patients under an IRB approved protocol, cfRNA isolation and quantification, amplification of Cas12a target by qPCR or RT-RPA, followed by CRISPR-Cas12a reaction and optical readout. As proof-of-concept, we show its potentials to detect multiple targets including common cancer biomarkers (e.g. CEA) from blood and urine of cancer patients. ROCBD is compatible with both PCR based and isothermal amplification methods and could achieve detection limits relevant for clinical settings. The entire process can be completed in less than an hour. ROCBD detected cancer associated CEA expression in blood and urine of bladder patients. A subset of the patients, who had no detectable residual tumor burden during clinical management but tested positive in the ROCBD assay, later relapsed. ROCBD can facilitate development of cost-effective, sensitive, and rapid applications for early cancer detection and clinical management.

Acknowledgement

This work was supported by NIH grant number R35GM149224 (S.D.).

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Expanding TCR-T Therapy to Address HLA-Linked Disparities in Cancer Treatment

Jian Cao Ph.D. and Christian Hinrichs M.D.

[1]Rutgers Cancer Institute, Rutgers the State university of New Jersey, New Brunswick, NJ, USA.

Abstract

Human papillomavirus (HPV) is a leading cause of cervical, anogenital, and oropharyngeal cancers. We have developed TCR-T cell therapies targeting HPV-16 E6 and E7 presented by HLA-A*02:01, achieving promising clinical outcomes in trials. However, this HLA allele is significantly more prevalent in individuals of European descent (~50%) compared to African Americans (~20%) and Asian Americans (~20–30%), creating a substantial barrier to access. This limitation further reinforces disparities in precision cancer treatment—compounding longstanding social and socioeconomic inequities in cancer care. To address this gap, we have screened tumor-infiltrating lymphocytes (TILs) from HPV-associated tumor biopsies and identified dozens of E6- and E7-specific TCRs with a broad range of HLA restrictions, including both class I and class II molecules. Several of these TCRs have demonstrated robust tumor-killing activity in vitro and in vivo. With the TCRs already characterized in our studies, we have the potential to significantly expand population coverage—potentially doubling the number of African American patients eligible for TCR-T therapy. By extending the reach of adoptive T cell therapies beyond HLA-A*02:01, this work directly supports efforts to reduce cancer disparities by ensuring that next-generation immunotherapies are designed with equity and inclusivity at their foundation.

Featured Abstracts

Insights from Basic and Translational Cancer Disparities Science

Trends In Guideline Concordant Care For Ovarian Cancer

Anusha Adkoli MD, Dirk Moore PhD, Aliza Leiser MD FACOG FACS

Rutgers Cancer Institute of New Jersey

Purpose

It is widely accepted that non guideline concordant cancer care is associated with worse ovarian cancer outcomes and survival. A decade ago, a series of studies reported that many women with ovarian cancer are treated by doctors and hospitals that see few cases of the disease and lack expertise in the complex surgeries and chemotherapies that can prolong life. Significant predictors of whether women receive guideline concordant therapy and have better outcomes include treatment by a Gynecologic Oncologist and treatment in a high-volume center. Several organizations including SGO, ACOG and NCCN have consistently recommended that care be provided by a Gynecologic Oncologist.

Methods

Women with primary ovarian cancer diagnosed from 2010-2024 will be identified from NCDB. Patient level data will be abstracted; facility ID and type, facility location, age, race, insurance status, area based metrics, urban rural designation, comorbid disease burden, year of diagnosis, surgical procedures using site specific codes, time elapsed time from diagnosis to first surgery and/or chemotherapy, receipt of multiagent chemotherapy, Guideline concordant care will be defined as receipt of guideline concordant surgery, initiation of surgery and/or chemotherapy within 30 days from time of diagnosis and receipt of multi agent chemotherapy. Receipt of guideline concordant care as well as types of surgical procedures and residual disease (used by investigators as potential indications of Gyn Oncology level care) will be compared. Analyses will be performed to examined associations between patient, disease, treatment and facility level factors and receipt of both overall and modality specific guideline concordant care and changes over time.

Results/Conclusion

Ongoing, anticipate initial results by June 2025 This work will detect disparities in care if present, and lay the groundwork for making change to deliver equitable ovarian cancer care.

Featured Abstracts

Key Research Areas in Population & Clinical Disparities Science

Leveraging Spatial Analysis and Community Partnerships to Address Environmental Drivers of Lung Cancer Disparities in Philadelphia

Tesla DuBois[1], Caroline Burkholder[2], Shannon Lynch[3]

[1]Temple University, Department of Geography, Environment, and Urban Studies; [2]Temple University, Office of Sustainability; [3]Fox Chase Cancer Center, Office of Community Outreach and Engagement

Background

This study aims to examine the role of environmental factors in explaining neighborhood-level disparities in lung cancer (LC) mortality in Philadelphia, and to translate these findings into community interventions and policy engagement.

Methods

A spatial analysis was conducted using age-adjusted neighborhood-level LC mortality data, smoking prevalence, and environmental exposures, including radon, fine particulate matter, traffic-related air pollution, and proximity to industrial emissions to assess the extent to which environmental factors are associated with neighborhood-level LC mortality, independent of smoking prevalence. Neighborhoods where environmental factors appear to be driving high LC mortality were identified.

Results

Smoking rates alone account for 28% of the variation in LC mortality between neighborhoods, and an additional 16% is explained by environmental factors with two neighborhoods appearing particularly impacted. A project was launched to engage with community partners around assessing and understanding environmental cancer risks. A policy initiative was undertaken to assess policy gaps related to environmental risk factors. Partnerships between the Temple University Office of Sustainability, Fox Chase Cancer Center, the Network for Public Health Law, and 10 community organizations have been established and strengthened through engagement in this work.

Discussion

This project illustrates how geospatial analysis can be used not only to identify cancer disparities within a single city and identify possible contributors, but also how those findings can be used to inform community-engaged interventions, foster interdisciplinary collaboration, and support policy advocacy to address environmental risk factors.

Acknowledgement

Funding for this work was provided by Temple University's Office of Sustainability and Second Nature Inc.

An Investigation Of Health Disparities In Health-Related Quality Of Life In Adult Survivors Of Childhood Cancer

Anusha V. Ramji, MS, Angela Senger, MS, MCM, & Katie A. Devine, PhD, MPH (Rutgers Cancer Institute).

Background

With increasing incidence and reduced mortality due to improved cancer treatments, the number of childhood cancer survivors continues to rise, with a critical focus being their health-related quality of life (HRQoL). This study investigated if there are differences in HRQoL based on social determinants of health (SDOH), sociodemographic factors, and unmet needs. Adult survivors of childhood cancer (N = 124) completed a cross-sectional Qualtrics survey online. SDOH included different sources of insecurity—i.e., food, housing, transport, access to medical care, and home services like gas/electricity/water—adapted from the National Health Interview Survey and financial situations. Items from the Childhood Cancer Survivor Study Needs Assessment Questionnaire measured unmet coping, healthcare, and fiscal needs (CCSS-NAQ; Cox et al., 2013). Sociodemographic factors included ethnicity, gender, race, and sexual orientation. The Patient-Reported Outcomes Measurement Information System (PROMIS) 29+2 was used to compute HRQoL. There were no significant differences in HRQoL by gender, race, ethnicity, and sexual orientation. HRQoL was statistically significantly lower ($p < .001$) among participants who reported (a) any unmet needs, (b) poorer financial situations, and (c) experiencing any form of insecurity. Additional support through survivorship care is warranted for this subset of childhood cancer survivors experiencing health disparities. Identifying and addressing higher unmet needs, worse financial situations, and experiences of any form of insecurity might greatly enhance their HRQoL.

Acknowledgement

This study was funded by the New Jersey Pediatric Hematology/Oncology Research Center of Excellence.

Featured Abstracts

Key Research Areas in Population & Clinical Disparities Science

Examining Intentions to Use FDA-Authorized E-Cigarettes Among U.S. Adults Who Smoke Cigarettes

Maryam Mirza PhD[a], Michelle Kennedy, MPH[b], Anna Mitarotondo[a], Daniel Gundersen, PhD[b,c], Marisa Tomaino[b], Olivia Wackowski, PhD, MPH[b,c], Michael B. Steinberg, MD, MPH[b,d], Carolyn J. Heckman, PhD[a,d]

Background

Limited research on cigarette relighting (i.e. smoking, extinguishing, saving, and later relighting) suggests it is prevalent and associated with attempting to save money on cigarettes, nicotine dependence, difficulty quitting, and toxicant exposures. This study's objective is to investigate potential sociodemographic disparities associated with relighting.

Methods

The study utilized nationally representative survey data from 2,028 US adults who smoke. Quantile regression methods were employed to analyze associations of age, annual household income, race and ethnicity, education, geographic region, sex, and smoking behavior with relighting frequency across three quantiles (0.25, 0.50, and 0.75) of relighting frequency.

Results

Approximately 69% of people who smoke cigarettes reported having relit a cigarette in the past month. Among them, approximately 42% relit at least once a day, 23% relit several times a week, 10% relit weekly, and 13% relit less frequently. Various sociodemographic factors, such as race and ethnicity, sex, and smoking history, are significantly correlated with relighting frequency across all quartiles. Although Black and Hispanic people who smoke are more likely than not to relight cigarettes, white people who smoke tend to relight their cigarettes more often. Though more likely to relight than not, females who smoke, relight less frequently than males who smoke. Current daily smoking and a longer smoking history were also associated with higher frequency of relighting. Furthermore, higher educational attainment correlates negatively with relighting frequency, particularly at low and median quantiles of relighting frequency. Similarly, higher income and age negatively correlate with relighting frequency at the median quantile.

Conclusions

Sociodemographic factors are significantly associated with relighting frequency. Further research is necessary to explore potential links between sociodemographic factors, relighting, nicotine dependence, impact on treatment and cessation efforts, toxicant exposure, and potential health risks. Cessation efforts may benefit from consideration of relighting and its frequency among specific subgroups of people who smoke.

Funding source

Rutgers Cancer Institute; bRutgers Institute for Nicotine and Tobacco Studies; cRutgers School of Public Health; dRobert Wood Johnson Medical School R01CA260831.

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Featured Abstracts

Key Research Areas in Population & Clinical Disparities Science

Exploring Sources Of Financial Toxicity In Patients With Hematologic Malignancies

Shelby Hinchman[1], Paulina Marino[1], Matthew Silverman[1], Josephine Zhang[1], Myneka Macenat[2], Jeanne Ferrante[2,3,] Denalee O'Malley[3], Biren Saraiya[1,2]

Robert Wood Johnson Medical School[1], Rutgers Cancer Institute[2], Department of Family Medicine & Community Health[3]

Background

The purpose of this study is to identify the mechanisms in which patients battling hematologic malignancies experience Financial Toxicity (FT) through the financial burden and distress that results from cancer treatment. Hematologic malignancies are associated with increased need for specialized facilities, physical incapacity due to hospitalization, and complications that impair employment and income.

Methods

A total of 17 patients were recruited for qualitative semi-structured interviews. Inclusion criteria: receiving care at Rutgers Cancer Institute (New Brunswick) or University Hospital (Newark), age 18 or older, and fluency in English. Individuals participated in an audio recorded interview where they identified direct and indirect costs of cancer care, explained interactions with healthcare providers about financial concerns, and completed brief quantitative FT screening surveys. Interviews were transcribed and thematically analyzed.

Results

Common themes included: Limited access/knowledge regarding financial support resources, including a desire for physicians to focus on health outcomes and disregard cost of treatment (9/17), but desire for follow up with social workers following brief interactions regarding finances (12/17); Emotional toll of financial concerns regarding insurance and savings, stress, depression, reduced resources for non-medical expenses, and strained relationships.

Conclusions: Patients report gaining value from social work services but often lack longitudinal access to these services. Improved screening is necessary to integrate FT support into routine management of hematologic malignancies. Further analysis including patients, caregivers, and stakeholders will allow us to create strategic interventions to screen, prevent and treat FT.

Acknowledgement

Funding: 2020 Cancer Health Equity Grant.

Additional Abstracts

Weight Loss Intervention In Early-Stage Hormone Receptor Positive /HER2 Negative Breast Cancer Using A Dual GIP/GLP1 Receptor Agonist

Coral Omene[1], Mridula George[1], Shicha Kumar[1], Maria Kowzun[1], Firas Eladoumikdachi[1],Lindsay Potdevin[1], Jonathan Smith[1], Kathleen Toomey[2], George Raptis[2], Lori Schleischer[2], Trishala Meghal[2], Gerardo Capo[2], Dirk Moore[1], Eileen White[1], Joshua Rabinowitz[3], LydiaLynch[3], Yibin Kang[3], Kellen Olszewski[3], Adana Llanos[4], Elisa Bandera[1], Anita Kinney[1], Deborah Toppmeyer[1], Shridar Ganesan[1]

[1]Rutgers Cancer Institute, New Brunswick, NJ, [2]Robert Wood Johnson Barnabas HealthSystem, NJ, [3]Ludwig Cancer Research, Ludwig Princeton Branch, Princeton, NJ, [4]Columbia University Irving Medical Center, New York, NY

Background

Obesity creates a mitogenic microenvironment and promotes tumorigenesis. Obesity at the time of breast cancer (BC) diagnosis and following treatment is associated with poorer BC survival, particularly for hormone receptor positive (HR+)/human epidermal growth factor receptor 2 negative (HER2-) BC. Obesity disproportionately affects Black women 57.2% vs. 38.2% Non-Hispanic White women, with central obesity and higher adiposity being associated with higher all-cause and breast cancer-specific mortality among Black BC survivors. Tirzepatide, an analogue of gastric inhibitory polypeptide (GIP), and a dual GIP and GLP-1 Receptor Agonist, a first -in-class new drug, demonstrated substantial and sustained reductions in body weight (up to 21%). We hypothesize that tirzepatide will result in ≥5% in body weight reduction in obese patients during the adjuvant treatment of HR+/Her2- BC.

Trial Design

Single arm, phase II, non-randomized trial with weekly administration of tirzepatide for two years during the adjuvant treatment of early-stage HR+/HER2- BC.

Eligibility:

BMI ≥30 kg/m2 or ≥27 kg/m2 with at least one weight related comorbidity. We will enroll 20 Black and 20 Non-Black BC patients at the Rutgers Cancer Institute/RWJ Barnabas Health System. This will enrich the cohort of trial participants with the Black population that has an established disparity in HR+/Her2- breast cancer and obesity related outcomes.

Specific Aims: Primary endpoint: determine how many patients achieve a 5% or more body weight reduction at the end of study treatment. Secondary endpoints: safety/tolerability and the feasibility based on discontinuation rates. Assessment of 1) different obesity measurements

(BMI, Waist/Hip Ratio and waist circumference) 2) 3-year invasive disease-free survival, 3- year distant relapse-free survival, 3) changes in obesity related metabolic markers and ctDNA. Exploratory objectives include investigations of adipokines and their receptors, metabolomic pathways and immune cell metabolism.

Statistical Methods: We will carry out a 5 percent level one-sided test of proportions in a single-arm study. With 40 patients, we have 80 percent power to detect an increase from 0.42 (the derived estimated proportion with weight loss exceeding 5 percent with standard therapy) to 0.617 in patients treated with tirzepatide.

Results

Clinical trial in progress (NCT06518837). Results will be presented at a future date.

Conclusion

Successful outcomes from this trial would demonstrate that tirzepatide can lead to substantial weight loss, significant improvement in cardiometabolic health and reduce the risk of BC recurrence for HR+/HER2- breast cancer. The exploratory objectives may provide biological insights and targets for treatment especially as it relates to breast cancer disparities.

Grant Support

Ludwig Institute for Cancer Research/The Hilton Foundation. Contact information: Coral Omene, MD/PhD.

Correspondence: email: co273@cinj.rutgers.edu

Additional Abstracts

Prevalence of Cancer Risk Factors Among Volunteer Firefighters by Age and Comparison with US Workers from the Behavioral Risk Factor Surveillance System

Patel, Shikha[1], Metlitz, Samantha P[1], Lubina, Katherine A[1], Edwards, Derrick L[2], Koeppel, Maria DH[3], Burgess, Jefferey L[4], Graber, Judith MPatel, Shikha[1], Metlitz, Samantha P1, Lubina, Katherine A[1], Edwards, Derrick L[2], Koeppel, Maria DH[3], Burgess, Jefferey L[4], Graber, Judith M[1]

[1]Department of Biostatistics and Epidemiology, School of Public Health, Rutgers, The State University of New Jersey, Piscataway, NJ, USA, [2]Counseling & Psychology, Tennessee Technological University, Cooksville, TN, USA, [3]Center for Fire, Rescue, and EMS Health Research, NDRI-USA, Inc, Leawood, KS, USA [4]Department of Community, Environment, and Policy, Mel and Enid Zuckerman College of Public Health, University of Arizona, Tucson, AZ, USA

Background

Firefighters have an increased risk for cancer compared to the general population. Volunteer firefighters make up 65% of the fire service and have a higher prevalence of cancer-associated behaviors such as alcohol and tobacco use, and obesity than the general population. However, the degree to which these patterns differ across the working lifetime is unknown. This study compares the prevalence of cancer risk factors within age-groups among New Jersey (NJ) participants in a study of volunteer firefighters and in the NJ general population.

Methods

From 2019-2023, active volunteer firefighters aged >18 enrolled in the Firefighter Cancer Assessment and Prevention Study (CAPS), a partner of the Fire Fighter Cancer Cohort Study. The enrollment survey collected information on demographics (e.g. age, sex, race-ethnicity), health behaviors, and years in the fire service. Participants were grouped by age (18-30; 31-54; >55) and prevalence was estimated for smoking status, smokeless tobacco use, hazardous drinking, low-levels of routine physical activity, and obesity (BMI >35 kg/m2) and compared by age group to sex- and race-ethnically similar working population of NJ participants in the 2022 NJ Behavioral Risk Factor Surveillance System (BRFSS) using 95% confidence intervals. Demographic and firefighting predictors for obesity and hazardous drinking were assessed using logistic regression and compared between age-groups and populations.

Results

Of the 249 volunteer firefighters included in this study, 31.7% were 18-35 years old, 34.9% were 36-55, and 33.3% were over 55. We will present the prevalence of cancer risk factors among each age-group for volunteer firefighters and the NJ general population.

Conclusion

This study will show whether the variation of cancer risk factors that occurs by age among NJ volunteer firefighters is similar or different to that of the general population. It can provide useful information for guiding cancer risk reduction programs among the volunteer fire service.

Additional Abstracts

Shared Clinical Decision Making To Improve The Uptake Of The 9vHPV Vaccine Among Mid Adult Veterans

Patricia Goyer, DNP, ANP-BC, OCN
& Alberto Sarmiento, PhD, RN, AGPCNP-BC

Veterans Affairs New Jersey Health Care System

Background

Veterans have a high risk of human papillomavirus (HPV) infections and low vaccination rates which may lead to HPV-associated cancers in the future. For adults ages 27-45, the US DHHS recommends SCDM with respect to the 9vHPV vaccine to reduce the incidence of oncogenic HPV infections.

Purpose

The aim of this quality improvement project was to engage veterans, ages 27-45, in shared clinical decision making (SCDM) about the 9vHPV vaccine with their patient aligned care team (PACT) and influence vaccine rates. Moreover, gain insights into the veteran's knowledge, attitudes and beliefs (KABs) regarding HPV and the vaccine.

Methods

A comparative analysis between a vaccination alert with SCDM and the current clinical practice for the 9vHPV immunization was conducted. Additionally, veterans were interviewed regarding their KABs about HPV and the vaccine.

Data Analysis

Descriptive statistics and Chi Square Test of Independence between vaccinated status and time were utilized. Qualitative analysis identified themes regarding the veteran's KABs regarding HPV and the vaccine.

Results

Vaccination status and SCDM were significant and related to one another based on an alpha value of 0.05, $x2(1) = 14.13$, $p < 0.001$.The qualitative findings identified four themes from the interviews :HPV awareness, understanding cancer prevention, decision influencers & barriers and vaccine apathy. The responses were linked with the veteran's sociodemographic data; average participant's age (37 years), race (white 40%), marital status (married 42%) and education (< bachelor's degree 60%).

Implications

This initiative provided evidence that engaging mid-adult veterans with SCDM will break down barriers and improve the uptake of the HPV vaccine. Thereby decreasing the potential for HPV infections and preventing the future burden of HPV- associated cancers. Addressing the veteran's perspectives regarding HPV and the vaccine will improve awareness, influence decision making, overcome stigmas and impact HPV related vaccine apathy.

Additional Abstracts

Examining Intentions to Use FDA-Authorized E-Cigarettes Among U.S. Adults Who Smoke Cigarettes

Julia Chen-Sankey,[1,2] Kathryn La Capria,[1] Hao Liu,[2,3] Fan Ling,[3] Jessica King Jensen,[1,4], Olivia A. Wackowski[1,2] Andrea Villanti[1,2]

[1]Rutgers Institute for Nicotine & Tobacco Studies, New Brunswick, NJ, [2]Rutgers School of Public Health, Piscataway, NJ, [3]Rutgers Cancer Institute of New Jersey, New Brunswick, NJ.[4]Rutgers Robert Wood Johnson Medical School, Department of Family Medicine & Community Health, New Brunswick, NJ

Background

The U.S. FDA has authorized 34 e-cigarette products as appropriate for the protection of public health. FDA-authorized e-cigarettes (FAEPs) could serve as a harm reduction tool for adults who smoke cigarettes by reducing exposure to harmful chemicals and facilitating a transition away from combustible tobacco use. This study examined intentions to use FAEPs among adults who smoke cigarettes.

Methods

We conducted a nationally representative online survey in 2024 with U.S. adults who smoke cigarettes (n=2,612; ages 21-70) using YouGov panels. Participants first read a summary about FAEPs (detailing the FDA authorization purpose and process), followed by questions about FAEPs. We assessed the weighted prevalence of intentions to use FAEPs in general and specifically for smoking cessation. We also examined how these intentions were correlated with sociodemographic characteristics and tobacco use behaviors.

Results

Approximately half of the participants reported being at least "somewhat interested" in using FAEPs in general (53%) and as a tool for quitting smoking (53%). Those who were younger (ages 21-54) and Hispanic reported higher intentions to use FAEPs in general and to quit compared to those who were older (ages 55-70) and non-Hispanic White, respectively. Those who had higher socioeconomic statuses (measured by family income, subjective financial status, and education achievement) reported higher intentions to use FAEPs in general and to quit than their counterparts. Those who smoked cigarettes daily reported lower intentions to use FAEPs than those who smoked less frequently. Finally, those who made a recent quit attempt reported higher intentions to use FAEPs in general and to quit than those who had not attempted to quit.

Discussion

Successful outcomes from this trial would demonstrate that tirzepatide can lead to substantial weight loss, significant improvement in cardiometabolic health and reduce the risk of BC recurrence for HR+/HER2- breast cancer. The exploratory objectives may provide biological insights and targets for treatment especially as it relates to breast cancer disparities.

Funding source

Rutgers Cancer Health Equity Center of Excellence (CHECoE) Pilot Award

Additional Abstracts

Engaging Volunteer Firefighters In Cancer Prevention; The Cancer Awareness, Prevention, And Education Toolkit

Metlitz, Samantha P[1]; Edwards, Derrick L[2]; Lubina, Katherine A[1]; Koeppel, Maria DH[3]; Loucks, Trenton J[2]; Graber, Judith M[1]

[1]Rutgers, The State University of New Jersey, Department of Biostatistics and Epidemiology, Piscataway, New Jersey; [2] Tennessee Tech University, Counseling & Psychology, Cookeville, Tennessee; [3]Center for Fire, Rescue, & EMS Health Research, NDRI-USA, Leawood, Kansas

Background

Firefighters have an increased risk for some types of cancer. The Lavender Ribbon Report (LRR) was created to address this cancer risk among volunteer firefighters by outlining 11 evidence-based cancer prevention best practices. In the US 65% of firefighters serve as volunteers, mainly in rural and suburban communities. However, the degree to which volunteer firefighters know about or practice these recommendations is unknown. To help address this gap, the Cancer Assessment and Prevention Study (CAPS) used surveys of firefighters as well as fire department leadership (one/fire department) to characterize volunteer firefighter cancer prevention knowledge and practices. The results showed that knowledge and practice of the LLR best practices for cancer prevention varies considerably among firefighters. CAPS researchers then engaged with fire service partners to review currently available resources for cancer prevention among volunteer firefighters. Using the resources and results of the surveys, CAPS researchers developed the online Cancer Awareness, Prevention, and Education (CAPE) Toolkit for Volunteer Firefighters - www.capecancerprevention.org - to facilitate cancer prevention education and increase uptake of recommended best practices. The CAPE website includes a page, presentation, standard operating procedure, poster, and other resources for each LRR best practice. CAPS is rolling out this toolkit and will administer post surveys to determine the effectiveness of the toolkit in promoting knowledge and practice of cancer prevention best practices. This toolkit provides a way to overcome resource barriers volunteer fire departments face by providing an easily accessible cancer prevention resource.

Funding: Federal Emergency Management Agency (FEMA) EMW-2021-FP-00416

Expanding Colorectal Cancer Screening Access In Underserved Urban Communities: A Student-led FIT Kit Distribution Initiative

Jack Hemphill1,2, Beverly O'Shea3, Brandi Blackshear1,2, Allison Marcucci1,2, Maya Iglesias2, Gabrielle Gracias2, Shanik Quirola2, Lauren Seo2, Miraj Ahmad2, Atharv Jayprakash2, Steve Levin3, Ethan Halm1,2

Rutgers Office of Population Health1, Rutgers Health Service Corps2, Eric B Chandler Health Center3

Background

Colorectal cancer remains a leading cause of cancer-related mortality in the United States, with significant disparities in screening rates among underserved urban populations. Barriers such as language, financial constraints, and limited healthcare access contribute to these disparities. In collaboration with the Rutgers Office of Population Health and the Rutgers Health Service Corps (RHSC), this student-led initiative aimed to improve colorectal cancer screening accessibility by distributing at-home fecal immunochemical test (FIT) kits to low-income patients at the Eric B. Chandler Health Center in New Brunswick, NJ.

From May 2024 to January 2025, a team of over 10 students (pre-health undergraduate, graduate, and health professions) and three staff members distributed 1,531 FIT kits. Physicians at the health center placed FIT kit orders, which students then assembled, included bilingual physician-signed heads-up letters, and mailed directly to eligible patients. A team of six Rutgers Robert Wood Johnson Medical School students reviewed electronic health records to track completion rates. Of the 1,531 kits distributed, 27% (n=406) were completed. Demographic analysis showed that 64% (n=976) of recipients identified as Hispanic, and 22% (n=339) as Black or African American. Among completed tests, 7% (n=29) returned positive results, emphasizing the need for timely follow-up care.

This initiative demonstrates the potential of student-led programs to increase colorectal cancer screening rates through institutional partnerships and student engagement. Preliminary findings suggest that this model may enhance early detection and intervention in underserved communities. Future efforts will focus on evaluating the impact of follow-up reminders, adherence to follow-up care if there is a positive result, and the long-term sustainability of the program to expand its reach and impact.

Additional Abstracts

Identification and Characterization of Cell-Free RNA From Liquid - Liquid Biopsy Of Cancer Patients

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Background

Circulating cell-free RNA present in blood and other body fluids originates from hematopoietic and other tissue types. cfRNA is derived from transcribed gene regions, and thus carries information about the ongoing bioprocesses in their respective tissues of origin. However, isolation and characterization of cfRNA from biofluids is non-trivial. We present an integrated workflow to isolate and characterize cell-free RNA from serum or urine taken from cancer patients. cfRNA was isolated from 8 ml serum (or 8 ml urine) of cancer patients, quantified, analyzed by qPCR and then sequenced. The cfRNA isolated from patient-derived blood and urine had concentration of 2 ng/ml to 8.6 ng/ml, and 2 ng/ml to 74.8 ng/ml, respectively. All the RNA samples were free from genomic contamination. The RNA Integrity Number (RIN) for cfRNA samples in our cohorts varied from 2.4 to 6 suggesting sufficient integrity for downstream analysis. An in house RNA sequencing pipeline was used to map the reads to the transcribed regions of the human genome, and for visualizing this alignment, identifying splicing patterns, and annotating oncogenic genomic variants in these regions. According to Gene Set Enrichment Analysis, cfRNA sequencing accurately identified ~19,000 genes. It also found mutations, cancer-specific fingerprints, and transcript isoforms, which could be utilized for tracking cancer-associated biomarkers for cancer detection and monitoring.

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Patterns Of Care And Clinical Factors Associated With Patient Selection For Crs-Hipec In Patients With Ovarian Cancer

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Purpose

Ovarian cancer is conceptualized as a peritoneal surface disease. Given this, the concept of treating the peritoneal surfaces with chemotherapy has been of long-standing interest. Hyperthermic intraperitoneal chemotherapy (HIPEC) has been investigated to improve the efficacy of conventional IP chemotherapy. A large Phase III trial established the utility of HIPEC in interval CRS. Further prospective trials are underway both within the USA and international sites. Many large centers offer HIPEC for patients undergoing CRS as part of their standard of care which makes access to this treatment imperative. NCDB enables evaluation of demographic factors that may contribute to lack of access to HIPEC. Identification of these trends in care is the first step towards solutions in making access more equitable.

Methods

Patients with ovarian cancer undergoing CRS with or without HIPEC will be identified through 2021 from NCDB. Demographic, tumor specific and outcome data will be examined. Multivariate logistic regression analysis will be performed to determine the patient cohort most likely to receive CRS with or without HIPEC. Kaplan Meier will be used to estimate survival outcomes

Preliminary Results

N=463 patients received CRS+ HIPEC and chemotherapy administered before and/or after surgery. N= 133, 518 received chemotherapy and CRS only. Patients were excluded if they did not receive chemotherapy, surgery, or sequence unknown. No statistically significant difference in insurance status was seen in patients who did or did not receive HIPEC. Median income was higher in patients who received CRS+HIPEC. Distance to care center showed difference in one tailed test.

Conclusion

Next steps include trend test for income quartiles, histogram for distances and evaluation of other variables including age, race, urban and rural classification, facility type.

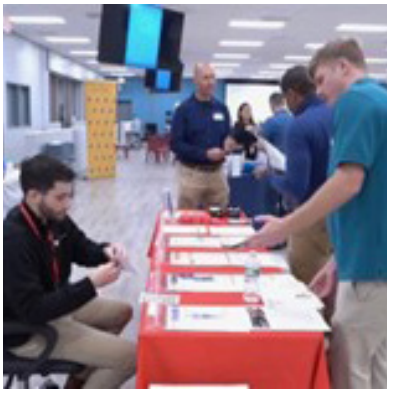
CHECoE in the Community

Enhancing
Community
Outreach

Get Involved

If you are a community member, student researcher, or patient advocate, we welcome your voice at the Cancer Health Equity Center of Excellence. From our Community CARES program to our Community Scientist program, we are actively working to expand our network of community members with a passion to reduce the cancer burden.

Join us



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How Community-Research Collaboration Can Help You

Engaging communities is beneficial to your work and produces the following likely outcomes:

- More relevant research questions
- Greater recruitment success
- Increased external validity
- Greater retention of participants
- Enhanced understanding of findings

How the CHECoE Team Can Help You

We facilitate community-researcher dialogue to help enhance your research by:

- Helping researchers obtain feedback from community members that produces more impactful science
- Assisting researchers to effectively disseminate research to relevant communities
- Supporting researcher access to New Jersey (catchment area) data

CHECoE Facilitates Opportunities for Engaging with Community Members

- Community Scientist Training Program graduates
- Community Science Cafés
- Community Cancer Action Board meetings
- Catchment Area and COE Research Program Integration meetings
- Works in Progress meetings

This resource is designed to help you engage in bi-directional conversations with community members, enhancing your research no matter where your work falls in the cancer research continuum. Download the guide by visting:

go.rutgers.edu/ResourceGuide

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