Equitable Precision Oncology

ANNUAL REPORT OF 2022
From the Director

The University of Illinois Cancer Center, in partnership with our excellent UI Health and Mile Square Federally Qualified Health Center (FQHC) network, have provided preventive and clinical services for nearly 1 million patient visits. This includes screening and navigation for more than 30,000 patients for cancers. We have implemented evidence-based prevention programs in our community by recognizing social and biological determinants of health and onboarding solutions to the barriers caused by these factors. The enduring pandemic has taken a toll on many in our community, but it has only strengthened our resolve to serve as a national model in cancer health equity. Our success is rooted in the exceptional team of researchers, clinicians, nurses, pharmacists, trainees, community health workers, volunteers, and donors who focus on health equity.

I am proud to work with exceptional colleagues from our community, university, and clinics. The Cancer Center continues to grow and serve; including a 2-fold increase in clinical trial accruals, launch of drug discovery efforts, onboarding new leadership including a Deputy Director to spearhead clinical and translational research, a significant expansion of shared resources to support spatial and computational initiatives, and increased policy outcomes that derive from a world-class team of community engagement experts. Together, the Cancer Center leadership, members, and staff strive each day to discover and advance the best personalized treatment options for all patients. Our mission goes far beyond providing oncology care to include positioning the Cancer Center, and donors who focus on health equity.

I look forward to working closely with UIC Vice Chancellor for Health Affairs Dr. Barish, University of Illinois College of Medicine Dean and Interim UI Hospital and Clinics CEO, Dr. Rosenblatt, and UIC Chancellor and donors who focus on health equity. Together, the Cancer Center leadership, members, and staff strive each day to discover and advance the best personalized treatment options for all patients. Our mission goes far beyond providing oncology care.

I view our greatest asset as the ability to hear the voice of our community and then bring innovators and catalysts of change to develop solutions in response. Using this approach, collectively we will reduce the cancer burden in Cook County and beyond.

I look forward to working closely with UIC Vice Chancellor for Health Affairs Dr. Barish, University of Illinois College of Medicine Dean and Interim UI Hospital and Clinics CEO, Dr. Rosenblatt, and UIC Chancellor Miranda to support the University of Illinois Cancer Center as a national model in cancer health equity. Our success is rooted in the exceptional team of researchers, clinicians, nurses, pharmacists, trainees, community health workers, volunteers, and donors who focus on health equity.

Jan Kitajewski, PhD

From the Vice Chancellor for Health Affairs

The University of Illinois Hospital & Health Sciences System (UI Health) continues to make exceptional progress to benefit the health of our communities near and far. We remain committed to the pursuit of health equity through increasing our clinical capacity and meeting the needs of many underserved communities by providing access to high-quality healthcare, research and innovation that can enhance their health and well-being.

Within the past year, UI Health has celebrated profound advances in our clinical and patient services through the opening of the Specialty Care Building, the S5th & Pulaski Health Collaborative, the Auburn-Gresham Healthy Lifestyle Hub and our new hospital welcome atrium. The completion of these projects enables a beneficial environment in providing equitable cancer care – specifically addressing the needs of increased colorectal and prostate screening and surgical oncology procedures. We aim to continue this positive momentum with an integrated approach in partnership with the University of Illinois Cancer Center through additional future projects including the Drug Discovery and Cancer Research Pavilion and the Clinical Decision Unit. We are confident that the increased footprint for innovation and research will translate to increased capacity and discovery for cancer patients.

At UI Health, our committed clinicians, researchers, and educators comprise one of the nation’s strongest and most diverse academic healthcare teams. In fact, it is through the exceptional interdisciplinary approach at UI that we can harness the talent and expertise of a diverse group of health professionals.

This approach enables our clinical trials to meet the needs of our patient population and necessary cancer prevention efforts to better address the risk factors of our local communities.

As you will read throughout this report, we continue to foster greater alignment and collaboration among diverse disciplines in the pursuit of new knowledge and discoveries that impact the spectrum of cancer care and services for patients. With significant investment from the Office of the Vice Chancellor for Health Affairs, we support the continued pursuit of NCI designation, and know that close partnerships among the University of Illinois Hospital and Clinics, our Mile Square Health Center, UIC’s health sciences colleges and the wider community will greatly benefit this application and the Cancer Center of the future.

Thank you for your support. We look forward to another tremendous year as we pursue health equity for communities across the state and beyond.

Robert A. Barish, MD, MBA

Jan Kitajewski, PhD
SWEENEY BASIC SCIENCES PROFESSOR
DIRECTOR, UNIVERSITY OF ILLINOIS CANCER CENTER
DEPARTMENT HEAD, PHYSIOLOGY AND BIOPHYSICS
UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE

The University of Illinois Cancer Center welcomes Chancellor Marie Lynn Miranda to UIC

Robert A. Barish, MD, MBA
VICE CHANCELLOR FOR HEALTH AFFAIRS
UNIVERSITY OF ILLINOIS CHICAGO
Making a Difference: The University of Illinois Cancer Center

Where we and our partners, UI Health and its Mile Square Health Center network of Federally Qualified Health Centers have a presence, late-stage cancer incidence rates dropped in Cook County over three decades.

There is much more work to be done.

Cook County, which includes Chicago and surrounding suburbs, is home to more than 5.2 million residents, 58% of whom are racial and ethnic minorities.

Community outreach and engagement in underserved communities drive the science at the Cancer Center. The diversity of our clinical trial participants – 79% are African American or Latino – will lead to lifesaving precision oncology and scientific discoveries that benefit all Illinois communities and beyond.
Community Outreach and Engagement

Community outreach and engagement is the heart and the center of our mission at the University of Illinois Cancer Center. The goal of our Office of Community Engagement and Health Equity (CEHE) is to ensure real, bidirectional partnerships between communities and our scientists, who are driven to ensure our science addresses cancer among local communities, including what the community prioritizes, and that our advances in care are consistently accessible to our communities.

Under the auspices of our Community Advisory Board and senior leadership, this vibrant, deeply experienced team:

• Monitors the priorities, needs and assets of communities
• Enhances our local infrastructure for community health - including providing resources and building capacity of community agencies and under-resourced health clinics
• Partners in delivering comprehensive access to high quality care at our Federally Qualified Health Centers (FQHCs) and safety-net hospitals
• Leverages data to advocate for policies that address structural drivers of health disparities

Community Outreach and Engagement Aims

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<th>1</th>
<th>Define and monitor the cancer burden within the catchment area to inform the development and implementation of research and community responsive interventions that address the needs of the catchment area and beyond.</th>
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<td>Promote and conduct community-informed evidence-based outreach and education, facilitated through community and academic partnerships that translate into and inform research.</td>
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<td>3</td>
<td>Inform and foster community-engaged research across the Cancer Center’s basic, clinical, and population science programs, including disseminating actionable information to researchers, clinicians, and community stakeholders.</td>
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<td>4</td>
<td>Support the development, implementation, and dissemination of policy and advocacy initiatives that advance cancer health equity for the Cancer Center’s catchment area and beyond.</td>
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INVESTMENTS IN

| 11 | Organizations including |
| 2 | Safety Net Hospitals |

LAB MIXERS

Community members and cancer survivors engage with lab scientists and students to address research-related questions.

Community Outreach and Engagement

View the videos here:

Released clinical trials patient education video

ENGLISH

ESPAÑOL

8 Community Advisory Board Members

34 Partnerships with community clinics and safety-net hospitals to build capacity and increase screening services

50,000 Listeners reached through monthly bilingual radio programming (English and Spanish)
27 undergraduate students completed the NCI U54 Chicago Cancer Health Equity Collaborative (ChicagoCHEC) Summer Program

The University of Illinois Cancer Center’s Cancer Research Training and Education Coordination (CRTEC) team ensures equity and diversity are at the forefront of designing and building pipeline programs to train diverse cancer researchers, from middle school students to early-stage investigators.

The goal is to educate, support, and retain trainees from underrepresented minority groups to address the needs of our patient population.

The Cancer Center Training and Education Leadership Council comprises key institutional leaders from the major University of Illinois Chicago Colleges involved in cancer research. The group meets quarterly to advise on strategic direction, priorities, resource allocation, integration with other noteworthy campus initiatives, and development and implementation of new programs.

Nursing students, Juanita Darby and Asha Solomon Sathishkumar Mathew completed research projects with Ardhith Doorenbos, PhD, RN (UIC College of Nursing) focused on a pain intervention clinical trial. Juanita was a trainee on a NIGMS T34 Bridges to the Baccalaureate and Asha received the Dean’s award for her research.

Christina Nowicki, a doctoral student and her Cancer Center member mentor, Ece Mutlu, MD, MS, received the 2022 GRASP Advocate Choice Award at ASCO’s annual meeting.

Two Cancer Federation, Inc. scholarships awarded to Clarissa Gomez, undergraduate research assistant in the lab of Cancer Center member Alexandra Naba, PhD, and Katarina Valjic, PhD student in the lab of member Angela Tyner, PhD.

Cancer Health Equity Summer Scholars (CHESS)

17 high school students participated in researchHStart and CHESS summer research programs.

Connor Roche (presenting left), who was mentored by Cancer Center member Larisa Nonn, PhD, completed the researchHStart program earning the award for Best Oral Presentation for the project “Vitamin D Deficiency Results in an Increase in Androgen Activity in Prostate Cancer Cells.”

Two ESIs, Abiola Ibraheem, MD, and Ryan Nguyen, DO, selected for the prestigious Robert A. Winn Diversity in Clinical Trials Career Development Award

Cancer Education and Career Development Program T32 trainees Jennifer Sanchez-Flack, PhD, MPH, and Natalicio Serrano, PhD, accepted into the Society of Behavioral Medicine Diversity Institute for Emerging Leaders.

The CRTEC team attended the Black Men in White Coats Youth Summit to promote Cancer Center education and training programs. Black Men in White Coats is a campaign to increase the number of Black men pursuing careers in the medical industry. Adonis Coleman (pictured above, right) is a Bridges to the Baccalaureate (B2B) trainee mentored by Cancer Center member Paul Grippo, PhD. Coleman, through the National Institute of General Medical Sciences funded T34 B2B program, graduated from Chicago’s Malcolm X College and transferred to UIC for a bachelor degree program in Nursing.

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Screening to Survivorship

The partners vital to a patient’s cancer journey connect through the University of Illinois Cancer Center. Many of our members are physician scientists who provide clinical care at UI Health, the academic health enterprise at UIC that includes a hospital, outpatient clinics, and the Mile Square Health Center network of Federally Qualified Health Center (FQHC) sites.

Cancer Genetics & Family History

Supporting research and clinic programs to increase access and use of cancer genetic services and to enhance family history documentation to aid in cancer risk assessment.

Survivorship

Partnering with UI Health, Mile Square FQHCs, Wellness House and others to support survivorship services, programs, clinics and research for people navigating life with cancer.

Young and A Survivor • YAAS!

Our Young And A Survivor project supports women under the age of 45 with breast cancer.

Top 5 Diagnosed Cancers (UI Health, 2021 latest available)

- **Prostate**
- **Breast**
- **Lung**
- **Colon**
- **Liver**

Patients Screened for Cancer at UI Health
Research

The research enterprise at the University of Illinois Cancer Center is committed to bringing scientific discoveries from laboratories to the diverse communities we serve so the impact of our research to prevent, screen and treat cancer will reduce cancer health disparities throughout Illinois and beyond.

More than 250 Cancer Center members are spread across the University of Illinois Chicago (UIC), which ranks among the top National Institutes of Health-funded Minority Serving Institutions, and two regional UIC health sciences campuses in Rockford and Peoria.

With expertise in basic sciences, translational, clinical, and population health, our members take a multidisciplinary approach to solving the unique cancer challenges faced by our communities in early detection, cancer care and survivorship. Our members are scientifically aligned with three research programs (Cancer Biology, Translational Research, and Cancer Prevention and Control) and they are supported by six cancer-focused shared resources.

The Cancer Center developed its unique “Community to Bench” foundational model to maximize input from communities. The model is specifically designed to make communities the bedrock from which evidence-based, cutting-edge research is driven based on the stated needs of communities. With an evidence-based approach to community engagement, the Cancer Center aims to identify those needs and develop pragmatic research and patient navigation to improve health outcomes for all of our patients.

$33 Million in peer-reviewed research grants held by Cancer Center members

16 Colleges

2,821 Faculty Members

31,683 Students

$4 Million American Cancer Society grant funds Illinois Cancer Health Equity Research (I-CHER) Center

Renewal of NCI-funded Chicago Cancer Health Equity Collaborative (ChicagoCHEC) – a continuing partnership of the Cancer Center with two other Chicago institutions

Prestigious American Cancer Society Institutional Research Grant to fund 4 pilots per year to elevate junior faculty

DISCOVERY: Novel mechanisms (Akt1 & HK2) suppress breast cancer metastasis.

160 Intervventional Trials Open for Enrollment

23 Investigator Initiated Trials Open for Enrollment

33% Increase in Treatment Trial Accruals

79% Clinical Trial Participants who are African American or Latino

Research

ADDRESSING CANCER BURDEN THROUGH RESEARCH

Later-stage lung cancer diagnoses in our communities

leads to community education and patient navigation

to low-dose CT screening

and culturally tailored patient navigation to treatment and clinical trials

$33 Million

$4 Million

DISCOVERY: Neighborhood food environment and bile-acid mediated colorectal cancer disparities.


CANCER BIOLOGY Understanding tumor initiation, progression and metastasis.

TRANSLATIONAL RESEARCH Translating discoveries into clinical care.

CANCER PREVENTION & CONTROL Understanding multi-level determinants of cancer risk, causes and outcomes.

U2D2 University of Illinois Cancer Center-UCentre Drug Discovery Program

Later-stage lung cancer diagnoses in our communities

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ChicagoCHEC

CANCER BIOMarkers OF MICROBIOME

PNAS

American Cancer Society Institutional Research Grant to fund 4 pilots per year to elevate junior faculty.
Policy and Advocacy

In support of the Illinois Cancer Partnership’s development of the 2022–2027 Illinois Comprehensive Cancer Control Plan, the University of Illinois Cancer Center had leadership roles and collaborated with the Illinois Department of Public Health’s Comprehensive Cancer Control Program to develop and implement an engagement strategy for community and legislative members.

The plan is meant to serve as a “road map to guide cancer prevention, screening, treatment, and survivorship activities throughout Illinois.” To raise awareness of the plan among Illinois Legislators, the Cancer Center collaborated with the UIC Vice Chancellor for Health Affairs and the American Cancer Society to file Illinois House Resolution 0675 (Illinois Cancer Control Plan), which was subsequently adopted on March 15, 2022.

The Cancer Center also supported the American Cancer Society Cancer Action Day in Illinois and advocated for the following policies:

- Family and Medical Leave Insurance Act (SB 835/HB 5029): Creates a state-run insurance program that allows Illinois workers to use up to 26 weeks of job-protected leave a year for their own or a family member’s illness
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Funding for cancer prevention and screening programs such as the Illinois Breast and Cervical Cancer Program (IBCCP), which provides free breast and cervical cancer screenings to uninsured and underinsured people in Illinois, as well as programs for prostate, lung, and colorectal cancer screening.

Funding for the Illinois Community-Based Assister Program to help Illinoisans enroll in health insurance.

Philanthropy

Philanthropic donations in 2022 not only had immediate impact on the lives of individuals in Illinois but advanced scientific discoveries bringing us closer to future cures for all.

Donors helped us address access barriers by centering the community voice and lived experiences in Cancer Center outreach, screening and treatment programs; conduct community-informed research programs to drive equity in precision cancer care; and innovate workforce training and education assuring career pathways for all so that future scientists and clinicians reflect our national diversity.

Richard Warnecke, PhD and Barbara Warnecke

Growing up in loving homes of modest means, Barbara and the late Richard “Dick” Warnecke, PhD, each learned an important lesson about lending a hand to those less fortunate. “It was just part of our DNA,” Barbara Warnecke said of the couple’s lifelong charitable giving.

To that end, the Warneckes joined like-minded donors at the University of Illinois Cancer Center in establishing a gift fund to address inequities in breast cancer health outcomes and to honor the late Cancer Center director, Gary D. Kruh, MD, PhD, who died in 2011. They later established the Dr. Gary D. Kruh Endowed Fund to provide for the medical treatment of uninsured and underinsured patients at high risk for breast cancer. Annual support from the endowment impacts the lives of many women and Barbara Warnecke plans to continue contributing to grow this legacy.

Richard Warnecke, who died in 2022 at age 84, and his research were foundational to the Cancer Center, where he served as associate director of the Population Sciences, Cancer Control and Education Program and as a mentor to many.

IGNITE: The Campaign for UIC concluded in 2022 raising $803.4M against a goal of $750M through the generous philanthropic support of donors like you.

Your support enables the Cancer Center to accelerate ongoing work toward our vision to be a national leader in addressing the cancer challenges of the 21st century, reflecting the University of Illinois Cancer Center’s distinct abilities to elucidate and reduce disparities and improve cancer health outcomes for all people.
When you make a gift to the University of Illinois Cancer Center, your support has a tremendous impact on cancer research and patient outcomes.

With your help, we are committed to ensuring that our research and cancer center activities are aligned with the needs and priorities of community stakeholders including patients, survivors, families, and advocates.

www.cancer.uillinois.edu

To sign up for our newsletter email us at cancernews@uic.edu