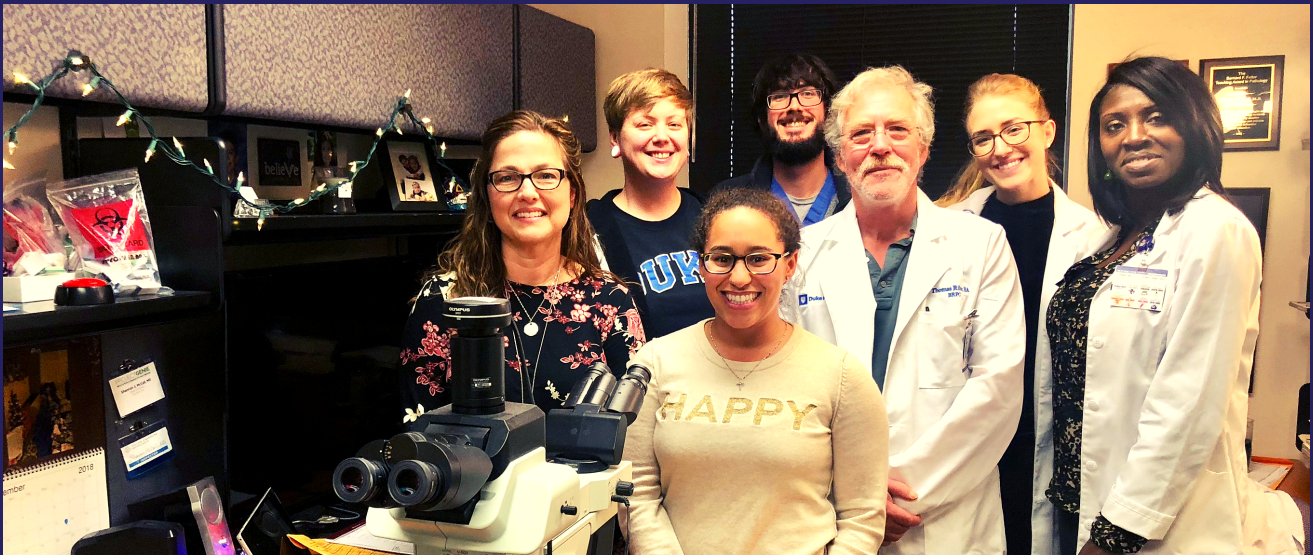


2ND EDITION, WINTER 2018-2019

NEWSLETTER

DUKE CONSORTIUM FOR INFLAMMATORY BREAST CANCER



Message from our Director

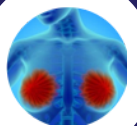
DR. GAYATHRI DEVI

TEXT HERE

Gayathri Devi, PhD
Associate Professor of Surgery and Pathology, Duke University
School of Medicine
Associate Director, Research Education, Department of Surgery
Program Director, Duke Consortium for Inflammatory Breast
Cancer

HIGHLIGHTS OF THIS ISSUE:

MOVING FORWARD
ALL ABOUT ADVOCACY
2018 ACCOMPLISHMENTS
NOTABLE EVENTS
MEET OUR TRAINEES



 **Duke Consortium for
Inflammatory Breast Cancer**
Research Innovation and Clinical Excellence

Moving Forward

BRANDI DUFF

In February of 2017, I was 39 years old and breastfeeding my 15-month-old son when I thought I was starting to have another clogged duct. My breast got warm to the touch, it was reddish-pink, developed a leathery texture, and hurt. After about a week, I couldn't take it anymore, so I made an appointment to see my PCP. I remember saying to her during the exam that I guess I just have mastitis and I know there's a type of breast cancer that has these types of physical symptoms, but she didn't think it was that, right? She didn't think so, but she started me on antibiotics and told me to come back in a couple of days if it got worse.

After two days, my breast was no better and the rash had spread. My PCP ordered a Stat ultrasound and, after lot of tests, I was diagnosed with IBC the following week. I underwent eight rounds of chemotherapy every two weeks and was discharged home from having a modified radical mastectomy on July 21st, my birthday. So many people commented about how bad it was that I had to be recuperating from surgery on my birthday, but I was getting to celebrate my 40th birthday cancer-free!

It's been almost two years since I was diagnosed and I'm doing well. I made a vow to myself that I would do more things that were out of my comfort zone. Last year, I walked the half-marathon at the Donna Marathon for breast cancer in the beginning of February. My goal is to run/walk the same half-marathon early next year.

I shared my story at the Duke IBC Consortium meeting in February and volunteered at the recent fundraiser that happened at the Kendra Scott jewelry store in Durham – both are things I have never done before and never saw myself doing.

This past September, I was one of the models that walked down the pink runway for the Duke Breast Education fundraiser. I'm not used to being in the limelight, but it was fun. I sewed my entire look for the runway, which included wide-leg pants, a racerback top, and even made my own espadrilles. I have altered my own clothes since my second mastectomy.

In my opinion, it's important to fund research in addition to cancer care – with IBC, there is no early.



On cover: Duke Biorepository team, led by Dr. Shannon McCall, is vital to many of our research efforts.

Website

<https://sites.duke.edu/consortium4ibc/>
<http://www.dukecancerinstitute.org/duke-consortium-inflammatory-breast-cancer>

Twitter

@4dukeibc

Email

4dukeibc@duke.edu

Donate

<https://www.gifts.duke.edu/dci?designation=3919557>

THANK YOU to all of the incredible research team members, clinicians, advocates, and especially patients who continue to lead the way towards better treatments and awareness of IBC.



All about ADVOCACY

Margie Scott

CHAIR, CANCER SURVIVOR
SUPPORT MINISTRY
UNION BAPTIST CHURCH
DURHAM, NC



I was diagnosed in 2000 with breast cancer and am now in my 18th year as a survivor. I was pleased that I didn't need chemo or radiation. The cancer appeared as calcifications and there was no lump that I could feel, so I'm thankful I had a regular mammogram – that's where it showed up. After I was diagnosed, I felt like I needed to do something to help. It was something I was called to do – to talk to people, help them get through their journey, let them see that there's hope, and it was not a death sentence. I wanted them to see me and know that it's something that you can overcome. I took that on and never looked back.

I started participating in Relay for Life - I formed a group and did that for about six years. During that time, a lady at our church started a cancer survivor support group. She asked if I would join. I was a little bit hesitant at first, but she was persistent and I joined. I convinced my husband to join as well – he had prostate cancer seven years ago. She and our parish nurse kept the group going for several years until both of them passed. Last year, I decided that I would step up and lead the group, which has been going for at least 10 years now.

We have a small group and people come and go. There are still people who don't want anybody to know they've been diagnosed, but they don't mind coming to us. We are very visible in our church and they know who we are. We do a lot of one-on-one with people and that's great, too.

Margie coordinated an awareness and community engagement event at Union Baptist Church in Durham.

Valerie Worthy, RN

PATIENT NAVIGATOR MANAGER
DUKE CANCER INSTITUTE

In December, it will be 19 years since my breast cancer diagnosis. I was treated at Duke and, while I was in the Infusion Room, I noticed that a lot of African American women were not talking or sharing or talking to each other. When I completed treatment, I began attending a support group for breast cancer survivors, but I noticed there weren't any women that looked like me, which was not only related to race but they weren't in my age group. I decided to start a group myself, which was incredibly difficult because still no one wanted to talk.

My pastor's wife's mother had passed from breast cancer and she had a passion for getting the word out, so our church applied for a Komen grant and got it. We did a lot of educational initiatives out in the community and, through that work, I was able to start a support group that was actually the genesis of Sisters Network Triangle, which I co-founded.

Because of the outreach I was doing for Sisters Network to raise awareness about how breast cancer affects women in the African American community, one of the doctors at Duke called me and said, "We hear you're doing good work in the community and we're starting a patient navigation program. Would you want to be part of this?" My work in the community was the catalyst for my current job.

What I have come to understand is that the common thread for everyone is hope. Everybody is looking for hope. My definition for hope could be different from someone else, but that's okay. I help them journey toward how they define hope.



Abstracts, presentations and trainee honors that highlighted IBC Research and Education

Nov 2018 | Society of Immunotherapy Annual Meeting, Washington, DC
Michael A. Morse, Scott J. Sauer, Myron K. Evans, Mohamed Ibrahim, Xuhui Bao, Pranalee Patel, Gayathri R. Devi. Suppression of immune response by tumor cell-induced XIAP-NF κ B signaling and targeting strategies to overcome immunotherapy resistance.

Nov 2018 | American College of Toxicology Annual Meeting, West Palm Beach, FL

Larisa M. Gearhart-Serna, John B. Davis, Nishad Jayasundara, Mohit Kumar Jolly, Scott J. Sauer, Herbert Levine, Richard Di Giulio, and Gayathri R. Devi. Exposure to a Naturally Occurring Polycyclic Aromatic Hydrocarbon Mixture Triggers an Aggressive Phenotype Enhanced in Estrogen Receptor Positive Breast Cancer Cells. North American Travel Grant.

Nov 2018 | Health and Environment in North Carolina, Durham, NC

Larisa Gearhart-Serna, Brittany Mills, Kate Hoffman, and Gayathri R. Devi. Multilevel Modeling of Sociodemographic Factor Impact on Breast Cancer Incidence in North Carolina. Poster of Distinction Award.

Nov 2018 | AACR Cancer Health Disparity Meeting, New Orleans

Maria Dixon, Kearston L. Ingraham, Seronda A. Robinson, Jodie M. Fleming, Gayathri R. Devi, Holly Hough, Hamzah Kharabsheh, Dana M. Austin, Tia A. Tate, Artis Woodard, Joshua Alexander, Joan P. Packenham, Nadine J. Barrett, Kevin P. Williams. Results from a Town Hall Meeting: Inflammatory Breast Cancer Listening Session led by KOMEN Scholars.

Maria S. Dixon, Lhoucine Chdid, David R. Lamson, Michael Tarpley, Jodie M. Fleming, Jennifer A. Freedman, Gayathri R. Devi, Kevin P. Williams. Identification and functional characterization of a novel GLI1 splice variant in breast cancer. Nadine J. Barrett. North Carolina Central University and Duke Cancer Institute's collaborative cancer research and education program: Connecting cancer disparities translational research, clinical trials operations, and community engagement.

Gayathri R. Devi, Whitney Lane, Holly Hough, Kearston Ingraham, Terry Arnold, Nadine Barrett. Current unmet needs in inflammatory breast cancer/IBC patient care: Analysis of open-ended responses from a community engagement session of clinicians, researchers, advocates, and patients at the Duke Consortium for IBC conference.

Oct 2018 | North Carolina Chapter of the Society of Toxicology Annual Meeting, Durham, NC

Larisa M. Gearhart-Serna, Nishad Jayasundara, Moises Tacam Jr., Richard Di Giulio, and Gayathri R. Devi. Cancer Risk Associated with Aquatic PAH Pollution Reveals Dietary Routes of Exposure and Vulnerable Populations. Graduate Student Platform Award

Oct 2018 | 2nd NCI Symposium on Cancer Health Disparities Meeting, NIH, Bethesda, MD

Gayathri Devi. Adaptation to Immune-Mediated Cell Death Response in Breast Cancer Health Disparity.

Sep 2018 | 6th International Inflammatory Breast Cancer, Madrid, Spain

Gayathri Devi. Multiscale Modeling of the Unique Progression of Inflammatory Breast Cancer.

Sep 2018 | 64th Annual Radiation Research Society Meeting, Chicago, IL

Ashlyn Rickard. Tumor oxygen is predictive of therapeutic response in mice: A novel application of diffuse reflectance spectroscopy.

Aug 2018 | 2018 PRCTRC Scientific Day, San Juan, PR

Ortiz-Soto, G., Acevedo-Díaz A., Rios-Fuller T.J., Suárez-Arroyo I.J., Martínez-Montemayor M.M. Ganoderma lucidum extract decreases cell migration and invasion in triple-negative metastatic breast cancer.

Aug 2018 | International Society of Environmental Epidemiology/International Society for Exposure Science Ottawa, Ontario, Canada

Larisa Gearhart-Serna, Brittany Mills, Whitney Lane, Kate Hoffman, and Gayathri R. Devi. Identifying Geospatial Patterns of Aggressive Breast Cancer Incidence Using North Carolina as a Model.

Jul 2018 | North Carolina IMSD/BioCoRE Symposium, Durham, NC

Larisa Gearhart-Serna, Moises Tacam Jr., Ulises Jair Nino-Espino, Rich Di Giulio, and Gayathri Devi. Exposure to a Complex Endocrine Disrupting Chemical Mixture Activates AhR, Proliferation, and Survival Pathways in Breast Cancer Cells.

Jul 2018 | American Association of Physicists in Medicine Annual Meeting, Nashville, TN

Ashlyn Rickard. Development of a Portable Imaging System for Murine Tumor Hypoxia.

Jun 2018 | NCI Center to Reduce Cancer Health Disparities Annual Workshop, Rockville, MD

Larisa Gearhart-Serna, Moises Tacam Jr., Ulises Jair Nino-Espino, Rich Di Giulio, and Gayathri Devi. Exposure to a Complex Endocrine Disrupting Chemical Mixture Activates AhR, Proliferation, and Survival Pathways in Breast Cancer Cells. Poster Award.

May 2018 | 3rd Puerto Rico Cancer Research Meeting, San Juan, PR
Gayathri Devi. Keynote. Inflammatory Breast Cancer: Unique Disease Biology, Drug Discovery Models and Mechanisms.

Ortiz-Soto G., Suárez-Arroyo I.J., Martínez-Montemayor M. M. The role of Metadherin in Inflammatory Breast Cancer. Best Poster.

Apr 2018 Duke Surgery Research Day, Durham, NC

Jake Ukleja. Development of a Smartphone Application for Longitudinal Investigation of Delays and Barriers to Treatment amongst Inflammatory Breast Cancer Patients.

Jennifer McMains. Duke Multidisciplinary Education and Research in Translational Science Program Survey to Duke Surgery Faculty Reveals Lack of Consensus on Translational Science Definition and Need for Further Training.

Larisa Gearhart-Serna. Estimating Polycyclic Aromatic Hydrocarbon Environmental Chemical Exposure in the U.S. Reveals Potential Vulnerable Populations for Breast Cancer Development.

Maria Dixon. Determining the role of a novel GLI1 Splice variant in breast cancer.

Larisa Gearhart-Serna. Investigating Effects of a Superfund Site Derived Environmental Chemical Mixture in a Tumor Organoid Model Correlating with Human Exposure.

Pranalee Patel. Targeting the DNA Synthesis Pathway with a Novel RR Inhibitor in Breast Cancer.

Whitney Lane.

Apr 2018 | AACR Annual Meeting, Chicago

Maria S. Dixon, Lhoucine Chdid, David Lamson, Jodie Fleming, Jenny Freedman, Gayathri R. Devi, Kevin P. Williams. Determining the role of novel GLI1 splice variants in breast cancer.

Pranalee Patel, Ben Mirman, Renzhi Zhan, Gayathri R. Devi. Targeting ribonucleotide reductase M2 using didox causes inhibition of estrogen receptor-negative, inflammatory breast cancer cell proliferation and tumor emboli formation in culture.

Samantha Bouchal. 2018 Thomas J. Bardos American Association of Cancer Research (AACR) Undergraduate Scholar Award.

Apr 2018 | Translational Sciences Meeting, Washington, DC

Gayathri R. Devi, Jennifer C. McMains, Ranjan Sudan, Laura J. Fish, Stephanie Freel. A survey to inform the efforts of a multidisciplinary education and research program.

Mar 2018 | NCI Geographical Management of Cancer Health Disparities (GMAp) Symposium

Gayathri Devi. Inflammatory Breast Cancer and the Formation of a Consortium.

Maria S. Dixon, PhD. Determining the role of novel GLI1 splice variant in breast cancer.

Jodie Fleming. Race-Associated Breast Cancer Disparities: The Role of CRYBB2 and Its Pseudogene.

Feb 2018 | North Carolina Endocrine Disrupting Chemicals (NC-EDC) Group Meeting, Durham, NC

Larisa M. Gearhart-Serna, John B. Davis, Ulises J. Nino-Espino, Moises Tacam Jr., Nishad Jayasundara, Richard T. Di Giulio, and Gayathri R. Devi. A Superfund Site Derived Environmental Chemical Mixture Increases Cancer Risk and Progression.

NOTABLE EVENTS

Kendra Scott hosts a fundraiser for the consortium in September 2018



Duke IBC Consortium Meeting in September 2018, Madrid, Spain



IBC Community outreach event organized by the Cancer Survivor Support Ministry and Women of Spirit (WOS) at Union Baptist Church in Durham, NC. Sep 24, 2018

Sorority at Duke hosts Consortium for panel

MEET OUR TRAINEES



Left to Right

FIRST ROW

Brittany Mills, Undergraduate Student, Georgia State University
Pranalee Patel, Lab Tech II, Duke University Department of Surgery
Ulises Nino-Espino, Undergraduate Student, Duke University
Dr. Whitney Lane, Surgery Resident, Duke University
Dr. Xuhui Bao, Postdoctoral Associate, Duke University

SECOND ROW

Jenna McMains, Undergraduate Student, East Carolina University
Larisa Gearhart-Serna, Predoctoral Student, Duke University
Dr. Maria Dixon, Postdoctoral Associate, North Carolina Central University
Ben Mirman, Undergraduate Student, Duke University
Gabriela Ortiz-Soto, Predoctoral Student, Puerto Rico
Dr. Yuekun Zhu, Postdoctoral Associate, Duke University
Jake Ukleja, Undergraduate Student, Duke University

THIRD ROW

No idea
Samantha Bouchal, Undergraduate Student, Duke University
No idea
Ashlyn Rickard, Predoctoral Student, Duke University
Moises Tacam Jr., Undergraduate Student, Duke University