The Judith A. Lese Breast Cancer Foundation, Inc.

100% of contributions are disbursed

Est. 2003

"in the pursuit of education and cure for breast cancer"

EXECUTIVE BOARD

Judith A. Lese, M.Ed.
Founder and CEO

Laurence S. Lese, J.D.
Vice-President

Jay E. Hagler, M.A.
Treasurer and Secretary

MEDICAL ADVISORY COUNCIL

Nancy Davidson, M.D.
Senior Vice President, Director and Professor
Clinical Research Division
Fred Hutchinson Cancer Research Center

Colette M. Magnant, M.D. F.A.C.S.
Breast Surgeon

Pouneh Razavi, M.D.
Director of Breast Imaging,
Sibley Memorial Hospital and Suburban Hospital

Frederick P. Smith, M.D.
Medical Oncologist
Chevy Chase, Maryland

Irene Gage, M.D.
Emeritus

LEGAL COUNSELORS

Reid Avett, Esq.
Womble Bond Dickinson (US) LLP
Washington, DC

Patrick McPherson, Esq.
Duane Morris LLP
Washington, DC

501(c)(3) Organization
Fed. ID 20-0061083

JALBCF # 25-25

EVERY MONTH IS BREAST CANCER AWARENESS MONTH

May 20, 2025

Dear Foundation Friends,

My thoughts and hopes are always that you, your family and friends have had healthy and productive lives personally and professionally. May 2025 be comprised of the specific meaningful activities, involvements and goals set by each of you, each day. Our Executive and Medical Advisory Boards remain totally focused on our mission working "in the pursuit of education and cure for breast cancer"! We appreciate YOUR continued commitment, support and generosity to The Judith A. Lese Breast Cancer Foundation. We disburse 100% of all monies raised to fulfill our commitment to utilize the monies predominantly for breast cancer research and clinical trials, breast cancer education and health care resources.

Our 2024 Foundation disbursements were:

- The Fred Hutchinson Cancer Center, Seattle, Washington for support of researchers Jennifer Specht, MD, Cecilia Yeung, MD and Lynn Symonds, MD.
- The Kimmel Cancer Center Johns Hopkins, Baltimore for continued support of researcher Cesar Santa-Maria, MD-Clinical Trials.
- The Jackson Laboratory, Bar Harbor, Maine for support of research on Triple-Negative Breast Cancer.
- The Jonsson Comprehensive Cancer Foundation, U.C.L.A. for continued Breast Cancer research of Dennis Slamon, MD.
- The Sullivan Breast Center, Sibley Memorial Hospital, Washington, D.C. to establish a fund with The Sibley Memorial Hospital Foundation for acquisition of an Ultrasound machine.

The three educational documents in this mailing were specifically created for us by the Fred Hutchinson Cancer Center. I want to express my gratitude to Fred Hutch for these documents. Education is Knowledge! Additionally, I wanted to share the following message we received from them:

Thanks to the generous support from The Judith A. Lese Breast Cancer Foundation, Fred Hutch researchers have unlocked new and exciting research questions to pursue this year. They will investigate innovative biomarkers that could unlock the secrets of how breast cancer tumors resist immunotherapies. By developing cutting-edge tests and expanding their collection of biopsy samples, these researchers aim to supercharge the effectiveness of immunotherapy, enhancing its tumor-killing power. These new insights gleaned from the "battlefield" between the tumor and the immunotherapy can be leveraged to cure more breast cancer patients and bring hope to countless lives.

Warmly,

Mallory Smith, PhD
Assistant Director Foundation Relations
Philanthropy
Fred Hutchinson Cancer Center

Last fall, Larry and I visited with the researchers at Fred Hutch that our Foundation supports. We know that the end of breast cancer will be the result of outcomes and discoveries from research. Yes, we are part of that mission with our commitment to RESEARCH.

For our June 25th Annual Fundraiser Dinner I requested the title and related funding support description for our Guest Speaker Dr. Cesar Santa-Maria. With great pleasure I share the following response from Dr. Santa-Maria:

> It is with great pride that I introduce myself as the June 25, 2025 Guest Speaker. I am from Johns Hopkins-Sidney Kimmel Cancer Clinic. My presentation title and funding support description are as follow: "Modern Breast Cancer: the Important Role of Clinical Trials", and the Foundation contributed once again to me to be applied towards my clinical trials on developing (1) new treatments for breast cancer and (2) optimizing and personalizing treatment for breast cancer. While treatment for breast cancer has come a long way, we still have a long way to go to make breast cancer a thing of the past. One of the main types of treatments I focus on developing immunotherapy-based treatment strategies using medications that stimulate the immune system such as antibodies and vaccines. The other major area of my research focus is developing methods of tailoring therapy to optimize existing therapy whether it be by cutting back on the amount of chemotherapy needed (i.e., avoiding overtreatment) or testing new promising therapies in patients not expected to do well with current standard treatments (i.e., avoiding undertreatment). Philanthropy plays a crucial role in funding research and modernizing oncology care.

Laurence Lese, Vice-President: On March 27, 2025, Duane Morris, our trademark and intellectual property counsel, notified us that our declaration of use and incontestability under Sections 8 and 15 of the Trademark Act that Duane Morris had filed with the U.S. Patent and Trademark Office has been accepted. Thus, our trademark remains registered, thereby reducing the number and type of challenges that can be made against our registration because our trademark is now incontestable.

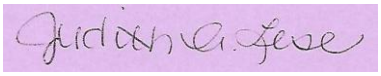
Jay Hagler, Treasurer: I'm proud to announce that we will be participating in the 2025 Combined Federal Campaign (CFC). This has been a major source of donations to our Foundation; we were first accepted to participate in 2013. Thank you to all the federal employees who have generously supported us.

Jay Hagler, Secretary: I would like to thank Stepanie Lemke, our Webmaster. If you have not gone online lately, please do so (**www.judithalese.org**). There is new information and content that we hope you will be interested in. Also, there are copies of all our upcoming event flyers and all educational materials that have been provided to you over the years.

I invite all, as always, to share ideas, initiatives and opportunities for growing the Foundation's Fundraising in support of accomplishing our mission. Looking forward again to our Fundraisers with: 1 - Kendra Scott in October and December; 2 - California Pizza Kitchen in October and next January 19, 2026; and 3 - our WALK TO WIN the battle against breast cancer on October 26th. Please be sure to retain the flyers included in this mailing as to future fundraising events, and to provide us with your email addresses to allow us to contact you. Always check our website for other postings! Special gratitude to each giving from their hearts and sharing by contributing their skills, time and expertise.

We are a GRASSROOTS section 501(c)(3) non-profit. Our commitment to fulfilling our mission in supporting research and clinical studies, promoting breast cancer education and resource care are far reaching. Yes, with your help we can grow!

With my deepest gratitude to each of YOU and for each of YOU!



Judith A. Lese
Founder and CEO

The Judith A. Lese Breast Cancer Foundation, Inc.

Est. 2003

"in the pursuit of education and cure for breast cancer"

Cordially invites you to our

2025 Fundraiser Dinner Banquet

Guest Speaker

Cesar A. Santa-Maria, MD, MSCI
Associate Professor of Oncology
Director, Breast Cancer Trials, Breast and Gynecological Malignancies Group
Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins
Baltimore, MD

Wednesday, June 25, 2025

Maggiano's Little Italy
5333 Wisconsin Avenue, NW
Washington, DC 20015

Gabbiano and Francesca Rooms, Second Floor

6:15 pm Meet and Greet (Charge/Cash Bar)	7:00 pm Welcome/Dinner	7:50 pm Program/Guest Speaker	8:30 pm Dessert

Discounted parking rates with validated tickets for Chevy Chase Pavilion Garage

Select Contribution Tier plus $65 Per Person (non-deductible); Each Additional Dinner Guest is $65

Please RSVP by Saturday, June 21, 2025

Contribution Tiers

(fully deductible, except for $65 dinner cost)

Greater than $5,000	Foundation Tier + $65 dinner cost
$5,000	Trustee Tier + $65 dinner cost
$2,000	Guardian Tier + $65 dinner cost
$1,000	Sustainer Tier + $65 dinner cost
$500	Shielder Tier + $65 dinner cost
$200	Protector Tier + $65 dinner cost

The Judith A. Lese Breast Cancer Foundation, Inc.
16012 Chester Mill Terrace, Silver Spring, MD 20906
Phone: 240-970-5278
501(c)(3) organization-non-endowed / Fed. ID No. 20-0061083
Email: LeseCancerFdn@aol.com/ **Website:** www.judithalese.org

The Judith A. Lese Breast Cancer Foundation, Inc.

16012 Chester Mill Terrace, Silver Spring, MD 20906 / Phone: 240-970-5278
501(c)(3) organization-non endowed / Fed ID No. 20-0061083
Email: LeseCancerFdn@aol.com / **Website:** www.judithalese.org

2025 Fundraiser Dinner on June 25, 2025 at Maggiano's Little Italy, Washington, DC

Please RSVP by Saturday, June 21, 2025

Contributor's receipt for your personal records

Check Date: _____ Check No: _____ Check Amount: _____ Memo: _____

Please detach at this line and return lower portion

Please send check to: The Judith A. Lese Breast Cancer Foundation, Inc.
16012 Chester Mill Terrace, Silver Spring, Maryland 20906

Please make check payable to: The Judith A. Lese Breast Cancer Foundation, Inc.

		Contribution Tiers		Check Off Amount
Contribution	Deductible (a tax receipt will be mailed to you)	Foundation	>$5,000	
		Trustee	$5,000	
		Guardian	$2,000	
		Sustainer	$1,000	
		Shielder	$500	
		Protector	$200	

Item	Deductibility Status	Dinner Attendees	Attendee Names ($65/person)	Amount	Total
Dinner	Not Deductible	Self		$65	
		Guest		$65	
		Guest		$65	
		Guest		$65	
		Guest		$65	
		Guest		$65	
			Total Check Amount =		

The minimum contribution is $265, which includes $65 for the dinner (plus $65 per guest to cover dinner expense).

Sorry, I am not able to attend the dinner. Please accept my contribution of enclosed: $_____

Your Contact Information:

Name: _____ Phone Number: _____

Address: _____

E-Mail: _____

New Discoveries, New Possibility

Fueling world-changing advances in breast cancer research

Breast cancer can take several forms, depending on its molecular makeup. And that means clinicians need just as many methods for treating it. Thanks to our donor community, cancer researchers at Fred Hutch Cancer Center and UW Medicine continue to break new ground in understanding the various drivers of breast cancer — and uncovering new approaches to overcome them.

Generous philanthropic support continues to fuel innovative research throughout our labs that may one day improve outcomes for the more than 300,000 people who are diagnosed with breast cancer every year. From identifying links between obesity, recurrence, and metastasis to improving the effectiveness of immunotherapies, our researchers are making life-changing discoveries.

Beyond 50

As we mark our 50th Anniversary in 2025, Fred Hutch is looking beyond what's possible today to a new era of discovery. With your partnership, our Campaign for Fred Hutch will transform the pace and scale of innovation so we can redefine cancer and infectious disease for generations to come.

Assessing Additional Risks for Patients with Metabolic Syndrome

Dr. Christopher Li

Metabolic syndrome, or MetS, is a combination of conditions such as obesity and high blood pressure that can lead to heart disease and diabetes. We've learned in recent years that it's also associated with poor outcomes for patients with breast cancer, but researchers had yet to investigate which subtypes of the disease are affected.

Now, thanks to recent discoveries from Fred Hutch and UW Medicine researchers led by **Christopher Li, MD, PhD,** we're starting to gather more detailed information about MetS and breast cancer. And that insight could help us determine who's at greater risk and one day know how to adjust treatment accordingly.

Dr. Li, who holds the Helen G. Edson Endowed Chair for Breast Cancer Research and specializes in identifying breast cancer risk factors, set out to investigate the relationship between MetS and cancer recurrence and mortality across four subtypes of the disease. His team's conclusions may be most notable for the connections they *didn't* find: With one exception, MetS does not appear to increase a patient's risk of recurrence or dying specifically from breast cancer.

That exception, though, is a potentially serious one. Patients with MetS and the less-common HR-/HER2+ breast cancer have a *three times* greater risk of recurrence. Although the first-line treatment for this subtype, trastuzumab, is very effective, it is also associated with serious cardiac side effects, particularly for individuals with hypertension, diabetes, and obesity. Unfortunately, but predictably, when these patients are taken off of trastuzumab because of those side effects, their risks of recurrence and death increase.

While the results are just an early step in better understanding the relationship between MetS and breast cancer, they highlight the ongoing importance of managing other health conditions during breast cancer treatment.

Fred Hutch is an independent, nonprofit organization that also serves as the cancer program for UW Medicine. Fred Hutch is proud to raise funds that fuel the adult oncology program on behalf of both Fred Hutch and UW Medicine.

UW Medicine

Sparing Patients Unnecessary Treatment

In addition to the more than 300,000 people who will be diagnosed with invasive breast cancer this year, another 50,000 will be diagnosed with a precursor condition called DCIS. And although less than half of those with DCIS would progress to invasive breast cancer, national guidelines call for treating all of them as if they will.

In other words, this year more than 25,000 people will undergo unnecessary, potentially life-altering breast cancer treatment, up to and including mastectomy. Researchers led by surgeon **Sara Javid, MD,** and radiologist **Habib Rahbar, MD** — both of Fred Hutch and UW Medicine — are working to spare them that experience.

The pair have been investigating noninvasive methods for spotting early signs that DCIS will progress to invasive breast cancer so they can determine who needs more aggressive treatment. And earlier this year, they published the results of a six-year study that shows MRI has potential for doing just that.

The study was small, with just 56 participants. But its enrollment criteria were less strict than similar studies conducted elsewhere, allowing for a potentially more representative cross-section of patients with DCIS — and therefore stronger data. Drs. Javid and Rahbar are pursuing multiple follow-up trials to further examine MRI's effectiveness for identifying cases of DCIS more likely to progress and ultimately equip oncologists everywhere with tools to head off unnecessary treatment.

Exploring Treatments for Rare Breast Cancer

Although immunotherapies called ICIs have been transformative for some cancers, their benefits for other tumor types, including breast cancer, have been more limited. However, recent research has shown that ICIs have potential as a treatment for metaplastic breast cancer (MpBC), which is rare, highly aggressive, and difficult to treat. Before we can explore that further, though, we need to identify genomic vulnerabilities within these tumors.

Shaveta Vinayak, MD, a UW Medicine researcher, and **Jennifer Specht, MD,** a breast oncologist at Fred Hutch and UW Medicine, may be closing in on a few. The pair recently examined tumors — as well as the surrounding immune cells that they corrupt and recruit for defense — from 13,500 patients with breast cancer.

And last December they reported that the immune environment around the tumors from patients with MpBC are well equipped to shut down *other* immune cells that could attack the cancer cells. However, they also identified genomic changes in the tumors that are different from patients with non-MpBC, including a handful that could be targeted with ICIs to overcome that immune suppression. These provocative findings could lead to future trials with immunotherapies and offer new treatments for patients with this most aggressive form of breast cancer.

"Over the last 50 years, we've seen a 58% decrease in breast cancer mortality thanks to the inroads we've made in understanding the pathways that drive breast cancer. And that understanding has led to new, more precise interventions. Philanthropy drives those discoveries. Donor support is more important than ever for fueling early-stage research with the potential to change lives."

— Nancy Davidson, MD, medical oncologist, executive vice president of Clinical Affairs, and Raisbeck Endowed Chair for Collaborative Research, Fred Hutch

Philanthropic support advances early-stage research that can lead to treatment-defining breakthroughs. To learn more about discoveries like these, **please contact Mallory Smith, PhD at 206.667.5265** or **msmith8@fredhutch.org.**

Fred Hutch Cancer Center

2025-2026 Research Goals

Building on lessons learned with new tools

Drs. Specht and Yeung made early observations that CAR T cells (*i.e.,* the engineered cells that are designed to attack the tumor as an immunotherapy treatment) may become “exhausted,” resulting in diminished elimination of tumors. To better understand why CAR T cells become “exhausted”, the researchers need to better understand what types of CAR T cells successfully invade the tumor and what their function is.

With continued support from the **Judith A. Lese Breast Cancer Foundation,** they have plans to investigate a new assay that will be an extension of the two assays that they recently developed (See *Research Progress Report*). This new assay aims to quantify/measure CAR T cell genetic programming transcripts inside tumor samples.

Additionally, they plan to expand their current work evaluating breast tumor spatial transcriptomics to analyze CAR T cell invasion into tumor biopsies that were collected from a different breast cancer study conducted at FHCC lead by Dr. Specht.

Genomic analysis of breast cancers help predict treatment outcomes

Drs. Specht, Yeung, and Symonds examined the whole genomes of breast cancers, focusing on patients with hormone receptor positive, human epidermal growth factor receptor 2 negative (HR+/HER-) breast cancers which are generally associated with a more favorable prognosis. While most patients with this common type of breast cancer have a very good prognosis, there are a subset who have poorer outcomes with higher risk of breast cancer recurrence and death. They hypothesized that, by looking at the whole genomes of these cancers before treatment, there may be some features to help cancer doctors differentiate among those tumors with excellent or poor outcomes.

They examined the whole genome of many different (HR+/HER-) breast cancers, which are represented in the circus plots below (**Figure 1**). The breast cancer on the left shows a stable genome with few mutations. In contrast, the breast cancer on the right shows a significantly abnormal genome with lots of chromosomal rearrangements and many alterations to the DNA sequence. Significant genomic alterations like these are associated with more aggressive tumors and potentially poorer response to therapy and worse long-term survival.

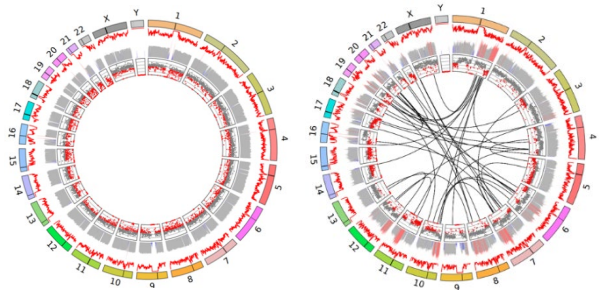


Figure 1. Two HR+/HER- breast cancer genomes represented as circus plots with the chromosomes numbered along the outer, color-coded ring.
Left: This cancer does not have significant genome rearrangements (no.interconnecting.lines.in.the.center) and only has minor changes in its DNA sequence (small.flecks.of.red–blue.in.the.grey.center.ring).
Right: This cancer has many genomic rearrangements (middle.lines) and significant changes in the DNA sequence (red.and.blue.sections.in.the.otherwise.grey.ring).

Spatial transcriptomics: A new tool to study breast cancer

Spatial transcriptomics have opened a vast new world in biomedical research. This technique can visualize up to 477 RNA markers and 54 protein markers in each cell of a microscope slide (of a tumor biopsy, for example).

In this study, the researchers performed spatial transcriptomics on breast cancer tissue, visualizing 377 different RNA markers and painting a complex (literal) picture of the genetic programming in each cell (**Figure 2**). The data is then interpreted by an AI algorithm which categorizes each cell into different types and color coded (left panel). A close-up section (shown in right panel) shows cells overlaid by small color dots (the different RNA markers).

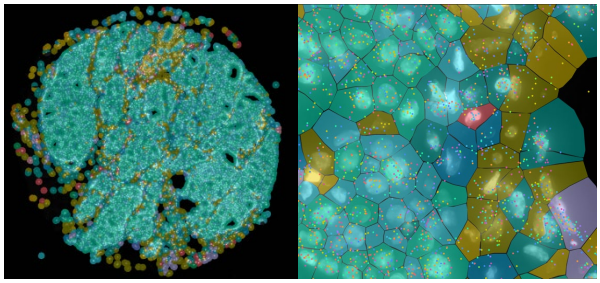


Figure 2. Breast cancer tissue under a microscope which has been categorized and color-coded by cell types, as determined by spatial transcriptomics. Each cell's nucleus is visible underneath in white.

Developing new assays understand immunotherapy side effects

As more cancer patients receive immunotherapy treatments (such as CAR-T and TCR-Ts), we observed a small fraction of patients that experience skin or gut inflammation. To understand why patients are getting these symptoms and to examine how the therapy may or may not be contributing to these bad side effects, we developed two assays using archived patient tissue samples. While the first assay (left) can be done quickly with no specialized equipment, the second assay (right) uses quantitative fluorescence and antibodies to detect the immunotherapy cells and signals. These assays **(Figure 3)** measure WPRE (a signal for the CAR-T or TCR-T cell) combined with CD3 (signal for a T cell), allowing us to find where these genetically-modified therapeutic T cells are and if they are coming into contact with cancer cells or if they are instilling unintended side effects.

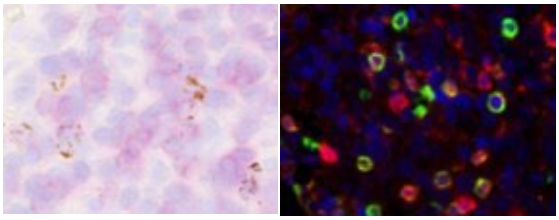
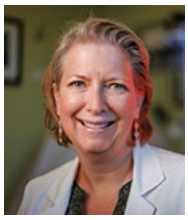


Figure 3. Assay 1 (left) shows CD3 T cells in pink, and the WPRE in brown showing CAR-T/TCR-T. Assay 2 (right) visualizes cell nuclei (blue), CD3 T cells (red), CAR-T/TCR-T (green), and where these cells interact together (slightly yellow).

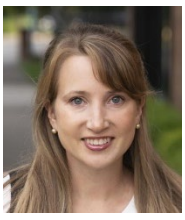
Taken together, the generous funding from the Lese Foundation continues to aid in developing techniques to understand how breast cancer evades therapy and more importantly, offers critical strategies to foster improvements in our therapeutic approaches to improve outcomes for patients with breast cancer.

Meet the Researchers



Jennifer Specht, MD, is a board-certified medical oncologist who specializes in all stages of breast cancer with expertise in triple-negative breast cancer. At Fred Hutch, she leads the Phase 1 Breast Cancer Program. Her research interests include breast cancer genetics, immunotherapy, and molecular imaging to better understand breast cancer biology. She holds the Jill D. Bennett Endowed Professorship in Breast Cancer at UW Medicine.

Cecilia Yeung, MD, is a clinical pathologist, professor, and medical director of Clinical Testing Labs at Fred Hutch and an associate professor in the Department of Laboratory Medicine and Pathology at UW Medicine. Her expertise in molecular pathology has led to novel molecular diagnostic platforms that improve the speed, accuracy and cost of diagnostic tools.



Lynn Symonds, MD, is a medical oncologist who sees patients at the Breast Health Clinic at Fred Hutch and an assistant professor in the Division of Hematology and Oncology at UW Medicine. During her fellowship, she conducted research at Fred Hutch under the advisement of metastatic breast cancer researcher, Dr. Cyrus Ghajar.

KENDRA SCOTT

Kendra Scott (Bethesda Row)

Fundraiser Events* to Benefit

The Judith A. Lese Breast Cancer Foundation

October 3 - 5, 2025 from 10 am to 8 pm

December 12 - 14, 2025 from 10 am to 8 pm

4835 Bethesda Avenue, Bethesda, MD

Mention our Foundation so we get the donation

[Note: Judith A. Lese will be there on both Saturdays (October 4 and December 13) to greet all from noon to 5 pm]

You can also shop online (www.kendrascott.com):

October 3 (12 am) to October 5 (11:59 pm)

promo code for Oct 3-5: ***GIVEBACK-JIBZX***

December 12 (12 am) to December 14 (11:59 pm)

promo code for Dec 12-14: ***GIVEBACK-JICBD***

*Kendra Scott will donate 20% of event sales to benefit The Judith A. Lese Breast Cancer Foundation

---

The Judith A. Lese Breast Cancer Foundation, Inc.

Email: LeseCancerFdn@aol.com / **Website:** www.judithalese.org

California Pizza Kitchen

Breast Cancer Awareness
Fundraiser Events* to Benefit

The Judith A. Lese Breast Cancer Foundation

October 10 - 12, 2025 from 11 am to 10 pm

January 19, 2026 from 11 am to 10 pm

7101 Democracy Boulevard, Bethesda, MD
(Westfield Montgomery Mall)

Mention our Foundation so we get the donation

Website: https://www.cpk.com/locations/california-pizza-kitchen-bethesda [promo code of "BACK20%]

Dine in, Take out, Pick up (301-469-5090)

*The Judith A. Lese Breast Cancer Foundation will receive 20% of sales if you mention our name when you order

---

The Judith A. Lese Breast Cancer Foundation, Inc.

Email: LeseCancerFdn@aol.com / **Website:** www.judithalese.org