LETTER FROM THE PRESIDENT, MARY JEFFERY

As a mother of four teenagers, I could write this Outlook message in a shorthand of four emojis... 🙌👏★★❤️.

Here’s the longhand! The thumbs up/clapping hands represent our gratitude for your participation and generosity. 2017 was BCA’s most successful year yet. You may have attended our luncheon in October, our Medical Symposium or the Holiday Boutique or another event, or contributed to our annual appeal. For that we thank you. Your support is advancing innovative, novel research and the work of brilliant surgical fellows. We are the only breast cancer organization funding some of these critical efforts and, with a gold rating from GuideStar, you can be assured BCA uses your contributions wisely. Our grants, which you can read about in detail in this issue, total $1,779,500 and include:

- Five exceptional projects grants and five young investigator grants at top research organizations, five surgical fellows, and more than a quarter million dollars in education and outreach, helping women who might not otherwise have access to healthcare.

This news fills me with tremendous gratitude and hope, which leads me to the star. No sooner had our incredible teams of volunteers and experts made our grant decisions, than my phone rang and a friend told me her breast cancer had reoccurred. And so our work continues. We are filled with hope for all those dealing with breast cancer. This hope is fueled by the knowledge that the work BCA supports is leading to breakthroughs and better outcomes. At a recent site visit, a woman served by our education and outreach efforts told the committee that she knows our financial support saved her life!

Lastly, the heart symbolizes the promise of the year ahead. We launch into the new year with so many impactful BCA events... Medical Symposia in Westchester and Washington, DC, the Junior Fashion Show, the Golf Outing, the Annual Luncheon and Fashion Show and so much more! Of course the heart also carries wishes for a happy Valentine’s day or, as we like to say, will you BCA mine? If you haven’t had an opportunity to join us or contribute to our annual appeal, contact us. We’d love to hear from you and have you be a part of BCA.

Thank you again and here’s to 2018,

Mary K. Jeffery
Xandy Duffy received her Juris Doctor from Seton Hall Law School in 2001 and her Bachelor of Arts from Mount Holyoke College in 1994. Xandy worked at New Jersey law firms Fein, Such, Khan & Shepard and Durkin & Boggia, concentrating on estates and trusts and real property. Xandy was admitted to the Connecticut State Bar in 2001 and served as a Court Clerk for the Stamford Superior Court. Xandy grew up in Upper Montclair, New Jersey and has lived in Stamford and Riverside for the past 16 years, where she has raised her four children and worked in the community with the Junior League of Greenwich and the Breast Cancer Alliance.

Barbara Rodkin received a BA from Rutgers University, a MA from NYU and completed additional graduate work at the University of Minnesota in psychology, child development, education, and assessment. Barbara worked with children and their families in both clinical and educational settings in the many cities she and her family have lived (NY, Boston, Sarasota, Omaha, Minneapolis, Greenwich). In addition she was involved with community activities in these cities: Chairing Omaha’s United Way campaign, National Council of Jewish Women board, Crisis Nursery, Gulfcoast Community Foundation, Rutgers University, and local food banks to name a few. From these varied experiences Barbara’s interest in improving the well-being, health and lives of those in need kept growing. Barbara and her family moved to Bedford and then Greenwich in 2000 where she became involved in local activities including the Breast Cancer Alliance. Currently Barbara and her husband Gary live between Greenwich and Sarasota. They have 2 grown children. She looks forward to her involvement with this wonderful organization, learning and hopefully making a small impact.

Jane Weitzman was the executive vice president of Stuart Weitzman and the founding vice president of Stuart Weitzman Retail. She spearheaded philanthropy for the company by generating funds to support breast and ovarian cancer research and awareness. Her efforts were brought to life through innovative charity events such as the Stuart Weitzman Celebrity Breast Cancer Auction. Jane is president of the Jewish Book Council. She serves on the board and executive committees of UJA-JCC Greenwich, and 70 Faces Media. She is a Vice-President of the American Jewish Join Distribution Committee, where she chairs the archives committee and serves on the Chairman’s Council of Boston Children’s Hospital. She and her husband Stuart have two daughters, Elizabeth and Rachael, and a granddaughter, Eva.
WE ARE PLEASED TO SHARE OUR GRANTEESEE FOR 2018:

EXCEPTIONAL PROJECT GRANTS

Regina Barzilay, PhD
Massachusetts Institute of Technology
“Using deep learning for risk assessment from mammogram images”
Walsh Family Grant

Leif Ellisen, MD, PhD
Massachusetts General Hospital
“Expressed gene fusions as frequent drivers in hormone receptor positive breast cancer”

Peter Gann, MD, SCD
University of Illinois
“Using computer vision to quantify intra-tumor heterogeneity and its relation to treatment outcome in breast cancer”

Marcia Haigis, PhD
Harvard Medical School
“Examining the role of ammonia in breast cancer”

Christopher Klebanoff, MD
Memorial Sloan Kettering Cancer Center
“Generation of a library of T-cell receptors targeting the cancer-germline antigen CT83, a promising immunotherapy target for patients with triple negative breast cancer”
Deborah G. Black Memorial Grant

YOUNG INVESTIGATOR GRANTS

Paolo Dalerba, MD
Columbia University
“The role of SOX10 as a predictor of survival outcomes in familial breast cancer patients”

Eugen Dhimolea, PhD
Dana Farber Cancer Institute
“Dissecting mechanisms of chemoresistant adaptation in breast tumors using co-clinical models”

Andrew Elia, MD, PhD
Massachusetts General Hospital
“Ubiquitin ligases in hereditary breast cancer”

Shom Goel, MBBS, PhD
Dana Farber Cancer Institute
“Immunologic mechanisms of resistance to CDK4/6 inhibition in breast cancer”

Pedram Razavi, MD, PhD
Memorial Sloan Kettering Cancer Center
“Dissecting the molecular landscape in metastatic breast cancer”
Supported by Tami Eagle Bowling and Friends

BREAST SURGERY FELLOWSHIPS

Lisa Chapa, MD
Mount Sinai Beth Israel and Mount Sinai West
Debbie Taylor Breast Surgery Fellowship

Yi Huang, MD
Yale School of Medicine
Mitchell Family Breast Surgery Fellowship

Anita Mamtani, MD
Memorial Sloan Kettering Cancer Center
Jane and Alan Batkin Breast Surgery Fellowship

Heather Feld Portaro, MD
Rutgers Cancer Institute of New Jersey
Rodkin Family Breast Surgery Fellowship

Michael Zeidman, MD
Icahn School of Medicine at Mt. Sinai

EDUCATION AND OUTREACH GRANTS

• Cancer Support Team
• Gilda’s Club Westchester
• Greenwich Hospital
• Griffin Hospital
• Hartford Hospital
• Hospital of Central Connecticut
• Middlesex Hospital Cancer Center
  Masin Family Grant
• Norma F. Pfriem Breast Cancer Center at Bridgeport Hospital
• Norwalk Hospital
• Open Door
• St. Vincent’s Hospital
• Stamford Hospital Foundation
• Witness Project
• Yale - New Haven
Yi Huang, MD, completed her undergraduate studies at Massachusetts Institute of Technology, and went on to receive her medical degree at New York University School of Medicine. She is finishing her final year of general surgery training at Northwell North Shore-Long Island Jewish in Long Island, NY. This year, she will further her surgical training as the Breast Cancer Alliance Fellow with the Breast Surgery Division at Yale School of Medicine.

Anita Mamtani, MD, received her medical degree from the Jefferson Medical College at Thomas Jefferson University and is currently Chief Resident in General Surgery at the Beth Israel Deaconess Medical Center at Harvard Medical School. Anita has completed a research fellowship at Memorial Sloan Kettering Cancer Center in breast surgical oncology. Her research interests include management of the axilla, surgery after neoadjuvant therapy, and tailoring of treatment approach to biology-distinct subsets of disease. Upon completing her residency, she will be completing a clinical fellowship in Breast Surgery at Memorial Sloan Kettering Cancer Center.

Heather Feld Portaro, MD, is thrilled to have matched with Rutgers Cancer Institute of New Jersey for a one-year breast surgical oncology fellowship funded by the Rodkin Family Fellowship at Breast Cancer Alliance. Dr. Portaro, a graduate of Rutgers New Jersey Medical School and a member of Alpha Omega Alpha Honor Medical Society, initially became interested in breast surgical oncology while on a surgical rotation during her third year of medical school. She enjoyed working with breast cancer patients, and her experiences as a general surgery resident at Rutgers Robert Wood Johnson Medical School have deepened her interest in the field. She observes that breast oncology is a field that often employs a multidisciplinary approach, providing individualized care that takes into account all aspects of the patient.

Michael Zeidman, MD, is 32 years old, and from Long Island. At the age of nine, he began his singing and acting career, appearing on numerous sitcoms and commercials. He also starred in two Broadway shows, Tommy and Les Miserables. After high school, he transitioned to a career in medicine, and completed his undergraduate degree at Stonybrook University with a major in biology. He went on to complete his medical degree at Northeast Ohio Medical University, graduating with both AOA and Gold Humanism distinction. Michael is currently in his chief year of general surgery at Montefiore Medical Center, and he is excited to be a breast surgery fellow this coming year at the Dubin Breast Center at Mount Sinai.

Lisa Chapa, MD, completed her General Surgery residency at Baylor Scott & White Hospital in Temple, Texas after completing both her undergraduate degree and medical school education at Texas A&M University. Lisa is a life-long Texas resident and is looking forward to her year of fellowship training in New York City at Mount Sinai Beth Israel. In her spare time, she enjoys performing at local coffee shops with her band and reading dystopian literature.
National Breast Cancer Awareness Month is always a time of motivation and inspiration at Breast Cancer Alliance.

On Thursday, October 5, BCA presented GoForPink! The day began with the raising of our flag at Greenwich Town Hall, preceded by an address by both First Selectman Peter Tesei and Dr. Barbara Ward of Greenwich Hospital. In partnership with Junior League Greenwich and Richards, BCA co-hosted breakfast and conversation with Dr. Marisa Weiss, founder of breastcancer.org. This free event, open to the public, educated our local community and brought critical awareness to the disease. Eager shoppers rounded out their day buying from, and dining at, local merchants. Many stores and restaurants boasted special offers or discounts, and donated a portion of their proceeds to Breast Cancer Alliance.

On Thursday, October 26, over 1,000 guests gathered at the Hyatt Regency Greenwich to “rise, fight and inspire” at the 22nd Annual Breast Cancer Alliance Luncheon & Fashion Show, raising over $1.5MM. “Real dollars from donors like you are making doctors smarter, tougher, and detection better. I beat breast cancer because of funding,” said Hillary Corbin, co-chair of the event (along with Gretchen Bylow and Jordan Rhodes) and a breast cancer survivor.

This year’s keynote speaker was Amy Robach, news anchor for ABC’s “Good Morning America.” Robach credits her mammography for saving her life.

At each table, the woman who had her most recent mammogram was the recipient of the beautiful centerpiece, further driving the importance of early detection home. As tradition would have it, 13 inspiring women who have been touched by breast cancer modeled the latest fashions from longtime sponsor, Richards, to a teary, cheering standing ovation, followed by a stunning runway show by Oscar de la Renta.

Another emotional highlight was the announcement of The Deborah G. Black Memorial Research fund, established by a gift from the late Debbie Black, beloved board member, president and co-chair of the research grants committee. The announcement was made by her children, Heather and Taylor. “We are honored that the Deborah G. Black Memorial Research Fund will continue our mom’s work on behalf of the BCA for years to come,” they said. To learn more about how you can contribute to Debbie’s endowment, or invest yourself in our Three Girls Society for BCA’s legacy, email Yonni Wattenmaker, Executive Director, at yonni@breastcanceralliance.org.
OCTOBER SNAPSHOT

www.breastcanceralliance.org
BREAST CANCER ALLIANCE GRANT RECIPIENT:
GEORGEPLITAS, MD, ASSISTANT MEMBER, BREAST SERVICE, DEPARTMENT OF SURGERY, JEANNE A. PETREK JUNIOR FACULTY CHAIR; MEMORIAL SLOAN KETTERING CANCER CENTER

The immune system has evolved the ability to detect, eradicate, and institute long-term protective responses against infections. Concomitantly, mechanisms have also evolved to protect people from misdirected immune responses. Such mechanisms include limiting inflammation to prevent collateral damage and the creation of checkpoints to prevent the immune system from mistakenly identifying one’s self as a bacteria or virus and attacking it. When these protective mechanisms break down, the clinical consequences are devastating, with the most well recognized example being autoimmune disease.

Despite how effective the immune system is at protecting us against pathogens, breast cancer progresses largely unhindered in the face of a completely normal, healthy immune system, even in situations where immune cells can be found in abundance within tumors. In addition to the failure of the immune system to prevent cancer progression, immunotherapy — defined as the use of medications to stimulate the immune system to kill tumors — has been of minimal benefit to breast cancer patients as well. This is in stark contrast to other cancer types, such as melanoma, for which dramatic life-saving responses have been observed with a variety of immunotherapy modalities. These observations suggest that anti-tumor immune responses in those with breast cancer are actively being suppressed, and that reversing this suppression is an obstacle that must be overcome in order to extend the life-saving benefits of immunotherapy to breast cancer patients.

Assistant Professor Dr. George Plitas of the Breast Service, Department of Surgery, Memorial Sloan Kettering Cancer Center hypothesized that the natural, protective immune mechanisms that have evolved to protect us against autoimmunity might also be protecting breast cancer against the immune system. The rationale for this was simply that tumors are more like normal tissue than an infection, which would allow cancer to exploit the protective mechanisms that prevent autoimmunity to hide from the immune system. To explore this hypothesis, Dr. Plitas began to study a subset of immune cells known as regulatory T (Treg) cells, which have been shown to play a central role in preventing autoimmunity. He joined the laboratory of Dr. Alexander Rudensky, the Chair of Immunology at the Sloan Kettering Institute, whose work has largely defined the role of Treg cells in preventing autoimmune reactions. Dr. Plitas used mouse models of Treg cell function to begin to draw an association between Treg cells and tumor growth. Specifically, he was able to temporarily remove Treg cells from mice with breast cancer. When he did so, he noticed a dramatic reduction in both tumor growth in the breast and an almost complete elimination of breast cancer metastases to the lung (Figure 1). However, Dr. Plitas also observed that if Treg cells were removed from mice with breast cancer for too long, the mice would begin to get sick secondary to autoimmunity.

One of the main themes of Dr. Rudensky’s work regarding Treg cells is the context-specific properties of Treg cell mediated suppression of immune responses. In other words, the way Treg cells can limit...
inflammation to a viral infection in the lung is very different from how they can suppress autoimmune responses in the pancreas — context matters. With this understanding, Dr. Plitas rationalized that the way Treg cells suppress immune responses in tumors may be very different from how they are able to prevent autoimmunity elsewhere in the body. Knowing what these differences are could open the possibility of specifically eliminating Treg cells in tumors and not in normal tissues and therefore sparing patients the likely devastating side effects of indiscriminate Treg cell targeting. The promising findings thus far, and the potential of developing Treg cell-based immunotherapy for breast cancer patients, have pushed the research efforts into human tissues. The first step was to confirm that Treg cells actually did exist in human breast cancers. Using breast cancer samples from the operating room as well as samples of normal breast tissue from women undergoing prophylactic surgery, and peripheral blood, Dr. Plitas was able to analyze the immune cells in these specimens using a technique called flow cytometry and discovered that Treg cells greatly preferred to accumulate in cancerous versus normal tissue, validating that removing them from tumors could be a promising immunotherapy for breast cancer (Figure 2).

Dr. George Plitas hypothesized that the natural, protective immune mechanisms that have evolved to protect us against autoimmunity might also be protecting breast cancer against the immune system.

One question, however, still remained: How does one get rid of Treg cells in tumors, but not in normal tissue? To find the answer to this question, Dr. Plitas isolated very pure populations of Treg cells from cancers, normal breast tissue, and circulating blood, and performed an analysis called RNAseq on the isolated cells. RNAseq sequences all the RNA in cells. RNA is the blueprint for all the proteins made in a cell, so that defining or sequencing RNA generates a list of everything important a cell makes. Comparing RNA from tumor, normal, and blood Treg cells, Dr. Plitas was able to identify a set of genes that was highly specific for Treg cells resident in tumors, but not elsewhere (Figure 3). One of these genes is for a protein called Chemokine Receptor 8 (CCR8). This particular protein seemed promising for further study because it was very highly expressed by Treg cells in tumors, but minimally expressed in normal tissue and blood. Dr. Plitas validated this finding again using flow cytometry and observed the same findings as predicted by RNAseq: a preferential expression of CCR8 by tumor resident Treg cells and not by other cells in the tumor microenvironment (Figure 4).

Based on these findings, Dr. Plitas has initiated a research effort to develop an antibody against CCR8 in the hope that it may safely lead to the depletion of tumor-specific Treg cells when administered to patients with breast cancer. Based on all his research, such depletion could eliminate the body’s existing tumor-specific immune evasion and lead to a naturally occurring anti-tumor immune response that could eliminate breast cancer throughout the body. This research would not be possible without the collaborative efforts of scientists and physician-scientists who are able to bridge the gap between the laboratory bench and patient care.

Figure 2. Treg cells accumulate in human breast cancers. Flow cytometry was performed on immune cells isolated from human breast cancers (tumor), normal breast parenchyma (NBP, normal breast tissue), and peripheral blood mononuclear cells (PBMC, circulating blood). The findings of this analysis revealed that Treg cells accumulate more densely in cancers compared with normal tissues. These findings could lead to a promising immunotherapy for breast cancer.

Figure 3. Treg cells in tumors are distinct from normal tissues. Because Treg cells are essential for preventing autoimmunity, a method to selectively target Treg cells in tumors needs to be developed. To determine tumor-specific Treg cell features, Treg cells were isolated from tumor, normal breast tissue, and blood for RNA sequencing analysis. Comparing the gene expression profiles between these cells revealed that a protein called Chemokine Receptor 8 (CCR8) was preferentially expressed by Treg cells in tumors.

Figure 4. Treg cells residing in tumors preferentially express CCR8. Immune cells isolated from human breast cancers (tumor), normal breast parenchyma (NBP), and peripheral blood mononuclear cells (PBMC) were analyzed by flow cytometry to determine CCR8 expression. The findings revealed that Treg cells preferentially express CCR8 (illustrated by the shifting of the curves in the figure panels to the right) compared to other immune cells. These findings validate the potential of CCR8 as a means to selectively target Treg cells in tumors.
ONE WOMAN’S STORY:
CYNTHIA BESTEMAN

I am Cynthia Besteman. I am 52 years old, and I live in New York City. When I was younger it would not have occurred to me that, at this age, I could make a pivotal change in my career and undertake something completely new, not remotely related to anything I had done before. However, that is exactly what happened. Not by choice, but due to an unexpected development in my life six years ago. It could have devastated me (and did for a time) but instead led me down a new path to what has become my passion.

After graduating from the University of Oregon in theater, I went to New York as an actor with the Circle in the Square Theatre's Professional Actor Training Program. I performed for several years, including in a Tony-nominated play. I eventually decided I needed a more sustainable career and became a successful Manhattan real estate broker for many years.

My life changed when, at the age of 46 I was diagnosed with breast cancer. It was a shock, as I had led a healthy lifestyle and there was no breast cancer that we knew of in our family. After opting for a lumpectomy, radiation and a five year Tamoxifen regimen, I pulled myself together and decided I would clean up everything in my life that felt unhealthy.

“Theater's Professional Actor Training Program. I performed for several years, including in a Tony-nominated play. I eventually decided I needed a more sustainable career and became a successful Manhattan real estate broker for many years.

In a short time, Violets are Blue has started to receive notice and awards. In 2016 Organic Spa magazine rated my non-aluminum deodorant as one of their top three, Health magazine featured my body scrub as their number one choice, and this same scrub was named Best in Show at the Indie Beauty Expo. Violets Are Blue was also named Best Brand With a Mission at the Consciously Green Beauty Awards and last year Anthropologie began carrying my products online and now features my deodorant in its stores around the country. We are also located in Credo Beauty, an amazing Green Beauty store located around the country and in January 2018 we will be launching online with Nordstrom. Violets Are Blue products are also in spas and stores around the country as well as in Canada and Hong Kong. Most importantly, Violets Are Blue has now donated to over 200 women and as the company grows we hope to expand our donation program.

It took me a while to consider my cancer as a gift, but that is what it truly turned out to be. It led me to start a business about which I am passionate, one which benefits all women who use them, cancer patient or not. The emails I receive weekly help me keep going when the growth of the business gets overwhelming.
Breast Cancer Alliance
Carnival Day
Walk-in’s are welcome, but for advance tickets go to:
http://weblink.donorperfect.com/kidsforacause2018

Take action against breast cancer
Thursday, April 19, 2018
12:00pm Lunch
12:30pm Panel Discussion
The Cosmos Club
2121 Massachusetts Ave, NW
Washington, DC

Save These Dates

Hot Topics in Breast Cancer:
Medical Symposium
Dr. Orli Etingin, Weill Cornell
Dr. Sylvia Formenti, Weill Cornell
Dr. Lee Jones, Memorial Sloan Kettering
Dr. Elisa Port, Mt. Sinai
Adam Yala, MIT
For tickets go to:
http://weblink.donorperfect.com/NYMedicalSymposium

Junior Fashion Show
Sunday, April 22, 11:30am
Richards
Greenwich, CT
http://weblink.donorperfect.com/juniorfashionshow2018

5K Run/Walk for Hope and Run/Walk Where You Live!
Sunday, May 6
Richards, Bruce Park & Greenwich Avenue
Greenwich, CT and Where You Live!
For details and to register or donate visit:
https://www.flipcause.com/secure/cause_pdetails/Mjc1NTM=

Golf Outing
Tuesday, May 22, 11am
GlenArbor Golf Club
Bedford Hills, NY
http://weblink.donorperfect.com/bcagolf2018

Genetic Testing • Screening • Lifestyle Prevention
Wednesday, April 25, 2018
9:30am Breakfast
10am Panel Discussion
Old Oaks Country Club
3100 Purchase Street
Purchase, NY

Sponsored By:
Genetic Testing • Screening • Lifestyle Prevention

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Genetic Testing • Screening • Lifestyle Prevention
Annual Benefit Luncheon and Fashion Show
Tuesday, October 30
11:00 am
Hyatt Regency Greenwich