

IBC HIGH TEA EDUCATIONAL EVENT

To Teach • To Treat • To Beat

IBC Advocates, Patients & Caregivers



The 2019 **IBC High Tea Educational event** was held **Friday, November 8, 2019** to honor the IBC patients, advocates, and caregivers. This event, which occurs every fall, was different than in previous years. We were honored to have Dr. Woodward present a short educational presentation to inform patients on the latest updates in IBC research. The high tea was streamed on Facebook to give more patients access to the information presented. Patients found that connecting to others was very valuable as a support mechanism. Allowing patients the ability to meet others allowed patients to gain **practical and hopeful insights** by talking with others who were going through similar issues. Approximately 25 patients, caregivers, and advocates attended the high tea, along with program staff and faculty. This allowed informal and casual interactions of mutual benefit in a relaxed setting. We would also like to thank the drug company, Lilly Oncology, who attended the event and provided a very successful painting activity for this event. We look forward to seeing everyone again at this event next year.

Mrs. Carter Lee, one of the patients who has attended the IBC tea for a few years, shared her experience on the event as follows, **"My daughter and I have always enjoyed attending the IBC Tea.** It is a delightful opportunity for the patients and the IBC doctors, researchers, and staff to enjoy each other's company. The IBC Department prepares all sorts of small delicacies and a tasting of varietal teas. Often there is a fine arts dimension to the event – painting or a musical presentation. And, of course, **we love hearing... research updates in the IBC Department.** **The IBC Department is the most thoughtful and generous to have this special event for their patients."**



Photo Courtesy: Larry Coffey and Megumi Kai

November 9, 2019 – Boot Walk to End Cancer



The Annual Boot Walk to End Cancer, sponsored by MD Anderson Cancer Center held on Saturday, November 9, 2019, was very successful. Thanks to your support, the 2019 Boot Walk to End Cancer raised over \$2 million! All of the funds raised have been allocated to urgently needed cancer research at our institution. Team "IBC Wranglers," a 69-member team led by Drs Angela Alexander and Wendy Woodward, **raised a total of \$58,815**. We would like to thank all our advocates, patients, caregivers, and IBC team members, for the exceptional response and support to advance IBC research! In addition to the individual fundraisers, we received a **matching grant of \$5,000 from Terry Arnold's IBC Network Foundation** for which we are immensely grateful. The money raised is used solely to support the IBC research program, including support for patients partaking in clinical trials.

We are happy to report that our **IBC Wranglers team ranked among the top three (3) fundraising teams** at MD Anderson. **Dr. Ueno was the among the Top 10 fundraisers** across the institution, thanks to the extraordinary efforts of one of his patients, Mrs. Ellen Bowen, who hosted an event for the IBC Network Foundation raising >\$13,000, and specifically requested that the funds to be used to further Dr. Ueno's research. Multiple other team members were ranked among the top 100 fundraisers, including Wendy Woodward, Jie Willey, Terry Arnold, Angela Alexander, Chandra Bartholomeusz, and Bisrat Debeb.

The program also appreciates the strong support from Forrest Smith's **Team Cathy-IBC Fighters, who also raised \$27,010**, which was added to the previously established Cathy Rain Smith IBC account. Many such generous donations over the years demonstrate a commitment from our program advocates to support our united goal of ending IBC forever.

The theme of our boot award (see picture above) was 'Finding color in the darkness.' This is an excellent description of IBC research because IBC is a heavy/dark diagnosis. Through the help of research and clinical trials, the overall survival of patients with IBC has increased, and there is much hope from the ongoing progress as a result of patient-centered science.

Again, we thank everyone for their hard work towards this cause. We'd love to have you join us this year as we begin to plan for the **next Boot Walk scheduled on Saturday, November 7, 2020**. If you were not on the team last year but would like to participate in future events, please contact us at ibcp@mdanderson.org, and we will follow up with you on how you can help.



Photo Courtesy: Larry Coffer



Mr. Forrest Smith (Right picture), dedicated team leader of "Team Cathy – IBC Fighters," formed a team in honor of his wife Cathy, who battled IBC for years. He also established a donor fund in her name to accelerate research into IBC. This year's Boot Walk efforts will add to that fund, and we want to congratulate Team Cathy on their overall team fundraising, reaching >\$27,000.

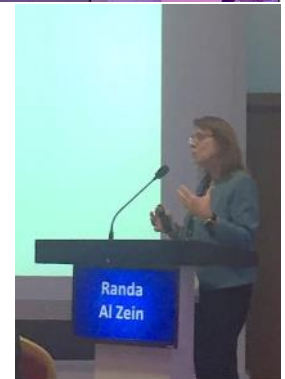
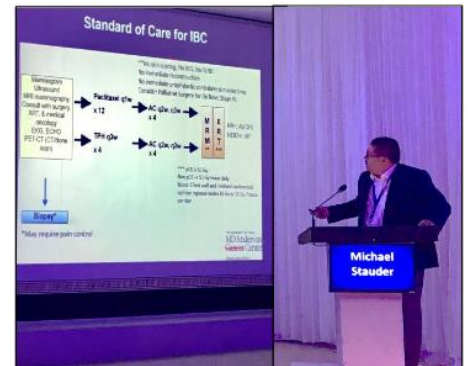
International Workshop on IBC

On September 25-26, 2019, Dr. Michael Stauder and Dr. Randa El-Zein attended the 1st International IBC Workshop in Tunisia on our behalf. Michael Stauder, MD, radiation oncologist, presented on unique considerations for radiation in IBC. He presented the current radiation therapy protocols followed at MDACC for the management of IBC. He discussed the success observed using the 66 Gy hyperfractionated dose versus the standard doses.

Randa El-Zein, MD PhD, presented on IBC epidemiology in North America vs. North Africa, through her talk titled "Epidemiology of Inflammatory Breast Cancer in the USA," where she presented the epidemiology of IBC in the US. She highlighted the importance of administering an extensive risk factor questionnaire to better understand the modifiable factors contributing to the development of the disease and identify measures to address these risk factors. Reproductive factors regarding the age of first birth and breastfeeding were discussed. Comparisons between findings in the MDACC cohort and the North African cohorts were discussed (table left).

Variables	North Africa	MDACC
Age @ Diagnosis	45y	52y
Age @ Menarche <12	56%	20%
Diagnosis during pregnancy	13%	1%
Mean age @ 1 st birth	23y	23y
Having >1 child	62%	80%
BMI ≥ 30 Kg/m ²	42%	50%

Misdiagnosis of IBC is an international issue that needs to be addressed. We shared the efforts that the Morgan Welch Research Program and Clinic are doing in terms of increasing awareness of IBC in the medical community.



Hangzhou International Symposium of Oncology

The IBC program is committed to helping patients and physicians worldwide know how to treat IBC properly. Our Research Nurse Manager, Jie Willey, represented the IBC Program in China to attend the Hangzhou International Symposium of Oncology on October 19-20, 2019. Jie, along with several other MD Anderson faculty, was invited, speakers. Jie presented a talk entitled "Inflammatory Breast Cancer: Our Experience and Our Program." We want to thank Jie for sharing the message that IBC has specific needs, and multi-disciplinary care is critical to improvements in patient outcomes.



On October 25, 2019, Jie did a presentation on "Inflammatory Breast Cancer: Our Experience and Our Program" at the 4th Hospital of Hebei Medical School, Hebei Provincial Cancer Hospital in Shijiazhuang, Hebei Province, China. This visit resulted in the partnership and participation of Hebei Provincial Cancer Hospital in IBC Connect. They have been actively involved in the quarterly IBC case discussions and IBC Webinar.



Recent Awards and Grants

We congratulate the following individuals who have been recognized for their significant accomplishments in IBC research:

Bisrat Debeb received a 4-year grant of \$792,000 from the **American Cancer Society (ACS)** to further his laboratory's work in the area of IBC brain metastasis. The project is titled "**Novel Mechanisms of Brain Metastasis in Aggressive Breast Cancer.**" The aims of the grant are to understand the specific mechanisms of how aggressive breast cancers including IBC spread to the brain and what drives this metastatic dissemination, so that brain metastases can be halted.

Chandra Bartholomeusz received internal funding of \$75,000 for the project titled "**Drug Discovery of Potent Inhibitors of Maternal Embryonic Leucine Zipper Kinase as Targeted therapies for Triple Negative Breast Cancer.**" This work nicely complements our ongoing clinical trial of a MELK inhibitor.

Wintana Balema received the **Cancer Biology Program Travel Award** of \$500 to participate at **SABCS**.

9th Annual Postdoctoral Science symposium for Basic Science Category

- **Dr. Yating Cheng (1st Place)**- Mentor: Maggie Wang
- **Dr. Maria Gagliardi (3rd Place)**- Mentor: Chandra Bartholomeusz
- **Dr. Emily Villodre (3rd Place)**- Mentor: Bisrat Debeb

Dr. Jangsoon Lee and the EDGE team received a **DOD award** for the project titled "**Development of a Novel Tumor-targeting and Penetrating Nanosystem for Breast Cancer Therapy.**" Dr. Lee works in **collaboration with EnduRx Pharma** on a preclinical studies in models of TNBC and IBC. The promise of novel nanotechnology approaches the team are working on, include revolutionizing treatment regimens by replacing them with ones that are more effective and less toxic, and may one day impact survival. The overarching challenge is to eliminate the mortality associated with metastatic breast cancer and our team is excited to partner with industry in such projects.

Dr. Bora Lim received the a grant as a co-PI from the **Chan Zuckerberg Initiative - Human Breast Cell Atlas Seed Network**. This 3 year grant, collaborating with Dr. Nicholas Navin’s laboratory seeks to develop understanding of cell types and states in the breast using cutting edge single-cell technologies including genomic profiling at a single cell resolution.

The Houston Zeta Tau Alpha Alumnae Association has continued their annual support of our program through their Fellowship awards. This year’s winners are listed below:

THE 7TH ANNUAL HOUSTON ALUMNAE ASSOCIATION OF ZETA TAU ALPHA FELLOWSHIP AWARD IN INFLAMMATORY BREAST CANCER RESEARCH <i>Awarded To</i>	
	<p>Emily Schlee Villodre, Ph.D. Postdoctoral Fellow Department of Breast Medical Oncology Abstract: NDRG1-EGFR axis in inflammatory breast cancer tumorigenesis and brain metastasis Authors: Emilly S Villodre, Xiaoding Hu, Richard Larson, Bedrich L Eckhardt, Yun Gong, Lei Huo, Juhee Song, Savitri Krishnamurthy, Xiaoping Su, Nuhad Ibrahim, Naoto T Ueno, Debu Tripathy, Wendy A Woodward, Bisrat G Debeb</p>
	<p>Hui Gao, Ph.D. Sr. Research Scientist Department of Hematopathology -Research Abstract: Peripheral T cell clonality and exhaustion as novel biomarkers for anti-PD-1 (pembrolizumab) maintenance therapy in patients with metastatic inflammatory breast cancer (mIBC) and non-IBC triple-negative breast cancer (mTNBC) Authors: Hui Gao, Kumiko Kida, Evan N. Cohen, Angela Alexander, Bora Lim, Charla Parker, Sanda Tin, Vicente Valero, Debu Tripathy, Alexandre Reuben, Naoto T. Ueno, James M. Reuben</p>
	<p>Xiaoding Hu, Ph.D. Postdoctoral Fellow Breast Medical Oncology - Research Abstract: Decorin-mediated suppression of tumorigenesis and skin invasion in inflammatory breast cancer via inhibition of the E-cadherin/EGFR axis Authors: Xiaoding Hu, Emilly S Villodre, Richard Larson, Omar M Rahal, Xiaoping Wang, Savitri Krishnamurthy, Debu Tripathy, Naoto T. Ueno, Wendy A Woodward, Bisrat G. Debeb</p>

Recent Publications

Comparison of molecular profile in triple-negative inflammatory and non-inflammatory breast cancer not of mesenchymal stem-like subtype was selected by Editorial Manager for publication.
Authors: Yohei Funakoshi, Maggie Wang, Hiroko Masuda, and Takashi Semba.
<https://doi.org/10.1371/journal.pone.0222336>

IBC Program Presentations (September 2019 – November 2019)

Contemporary Surgical Management of IBC

*Anthony Lucci, MD, Professor
Mediget Teshome, MD, Assistant Professor
Breast Surgical Oncology and Surgical Oncology
Division of Surgery*

Identifying targets to overcoming MEK inhibitor resistance in triple-negative breast cancer.

*Maria Gagliardi, Ph.D.
Postdoctoral Fellow, Breast Medical Oncology*

Involution and IBC: Insights from the normal breast

*Wendy Woodward, MD
Professor, Deputy Director of Morgan Welch
Inflammatory Breast Cancer Research Program*

Peripheral T cell clonality and exhaustion as novel biomarkers for anti-PD-1 (pembrolizumab) maintenance therapy in patients with metastatic inflammatory breast cancer (mIBC) and non-IBC triple-negative breast cancer (mTNBC)

*Evan N. Cohen, Ph.D.
Instructor, Hematopathology – Research*

Enhanced Drug-Development Guidance and Evaluation (EDGE) Preclinical Solutions and Project update

*Jason Lee, Ph.D.
Sr. Research Scientist, Breast Medical Oncology*

Decorin-mediated suppression of tumorigenesis and skin invasion in inflammatory breast cancer via inhibition of the E-cadherin/EGFR axis

*Xiaoding Hu, Ph.D.,
Postdoctoral Fellow, Breast Medical Oncology*

Role of maintenance immunotherapy in metastatic breast cancer

*Naoto T. Ueno, MD, Ph.D., FACP
Professor, Executive Director of Morgan Welch
Inflammatory Breast Cancer Research Program*

Targeting in MAPK in breast cancer, clinical perspective.

*Bora Lim, MD.
Assistant Professor, Breast Medical Oncology*

Updates on ongoing immunotherapy trials in IBC

*Angela Alexander, Ph.D.
Coordinator, Clinical Studies, Breast Medical Oncology*

Guest Speaker



Using the GEMF Shared Resource to Assist with Understanding Inflammatory Breast Cancer

*Jan Parker-Thornburg, Ph.D., M.Ed.
Professor, Department of Genetics, Co-Director
Genetically Engineered Mouse Facility*

Newsletter Committee

Hope Murphy	Angela Alexander
Marcy Sanchez	Swetha Bopparaju
Naoto Ueno	Jie Willey

Current Clinical IBC Trials Open for New Patient Enrollment

Neoadjuvant (newly diagnosed):

2016-0177 – A randomized phase II study of neoadjuvant Carboplatin/Paclitaxel (CT) versus Panitumumab/Carboplatin/Paclitaxel (PaCT) Followed by anthracycline-containing regimen for newly diagnosed primary triple-negative inflammatory breast cancer

2016-0537 - A phase 1b study of neratinib, pertuzumab and trastuzumab with taxol (3HT) in metastatic and locally advanced breast cancer, and phase II study of 3HT followed by AC in HER2 + primary IBC, and neratinib with taxol (NT) followed by AC in HR+ /HER2- primary IBC

2018-0002 - Phase II study of combination ruxolitinib (INCB018424) with preoperative chemotherapy for triple-negative inflammatory breast cancer

Adjuvant (after surgery and radiation):

2016-0096 – A phase II study of anti-PD1 (Pembrolizumab) in combination with hormonal therapy in patients with hormone-receptor (HR)-positive localized inflammatory breast cancer (IBC) who did not achieve a pathological complete response (pCR) to neoadjuvant chemotherapy

2018-0550 - Atorvastatin in triple-negative breast cancer (TNBC) patients who did not achieve a pathologic complete response (pCR) after receiving neoadjuvant chemotherapy, a multicenter pilot study

Radiation:

SWOG1706 - A phase II randomized trial of olaparib administered concurrently with RT vs. RT alone for inflammatory breast cancer

Metastatic IBC:

2014-0034 – A phase II study using T-VEC for inflammatory breast cancer (IBC) or non-IBC patients with inoperable local recurrence

2014-0533 – A phase II study of anti-PD1 (MK-3475) therapy in patients with metastatic inflammatory breast cancer (IBC) or non-IBC triple-negative breast cancer (TNBC) who have achieved clinical response or stable disease to prior chemotherapy.

2016-1096 – A Phase I Study of OTS167PO, a MELK inhibitor, to Evaluate Safety, Tolerability, and Pharmacokinetics in Patients with Advanced Breast Cancer and Dose-Expansion Study in Patients with Triple Negative Breast Cancer.

2016-0890 – A phase II study of triple combination of Atezolizumab, Cobimetinib, and Eribulin (ACE) in patients with chemotherapy-resistant metastatic inflammatory breast cancer

2018-0493 – An open-label, multicenter, phase 1b/2 Study of Rebastinib (DCC-2036) in combination with paclitaxel to assess safety, tolerability, and pharmacokinetics in patients with advanced or metastatic solid tumors

Current Clinical IBC Lab Studies:

Currently, we have 10 open clinical IBC laboratory studies which collect blood and tissue for analysis of host and tumor biology and clinical correlates.

If you are interested in learning more about our clinical trials, or lab studies, please email the

Morgan Welch Inflammatory Breast Cancer Research Program and Clinic directly at ibcp@mdanderson.org.

We are happy to provide general information and eligibility guidelines for our clinical trials and laboratory studies.

Facebook Live

Monthly live chats with Drs Naoto Ueno and Angela Alexander are informal opportunities to learn about new discoveries, treatments and ongoing research that relates to IBC and metastatic breast cancer. Questions received beforehand or during the video are addressed by the panelists. Follow our Facebook page for event notifications and/or contact us at ibcp@mdanderson.org to receive an email notification.

 Facebook: www.facebook.com/InflammatoryBreastCancer  Twitter: www.twitter.com/InflammatoryBCa