

Morgan Welch Inflammatory Breast Cancer Research Program 10th Anniversary Conference – February 11-12, 2017: The Future of Inflammatory Breast Cancer



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The 2017 Morgan Welch Inflammatory Breast Cancer Research Program 10th Anniversary Conference: The Future of Inflammatory Breast Cancer was held February 11–12, 2017 in Houston, Texas at the University of Texas MD Anderson Cancer Center South Campus Research Building (SCRB). The two-day meeting was targeted to clinical investigators, practicing physicians, basic researchers, and patient advocates to enhance their knowledge and to facilitate collaboration to accelerate clinical trial development that is beneficial for patients with IBC. This was a CME-credited International Conference with multiple international IBC speakers.

Issue 11: June 2017



We are especially grateful to the Honorable State Representative Sarah Davis, Honorable US Congressman John Culberson, and former Senator Honorable Tim Jennings, for taking the time out of their busy schedules to show their support at the conference. We are thankful for their kind words and commitment to the Morgan Welch Inflammatory Breast Cancer Program.

We are also extremely grateful and thankful to our sponsors for their generosity and interest in the conference, *Amgen, Inc, AstraZeneca, Eisai, Inc, Genomic Health, Inc., The IBC Network Foundation, Incyte Corporation, OncoTherapy Science, Inc, and TherimuneX Pharmaceuticals*. Their contributions and support for this conference helped give organization and structure to the program.



Additionally, we were delighted to have opened the conference to abstract submissions. Thirty-three abstracts were submitted, six of these are of ongoing trials, and five of the 33 were selected for Oral Presentations. There were many interesting presentations and posters that provided a great atmosphere for discussions, interactions, and networking.

Special speakers were, *Ethan Dmitrovsky, Sandra Bishnoi, Massimo Cristofanilli, Randa El-Zein, Savitri Krishnamurthy, Sofia D. Merajver, Wendy Woodward, Fedor Berditchevski, Steven Van Laere, Lajos Pusztai, Gayathri Devi, Francois Bertucci, Roberto Wurth, James Reuben, Terry Arnold, Lorenzo Cohen, Mary Dev, Simona Shaitelman, Mark Schaverien, Angela Alexander, Alexandra Smith, Joan Lewis-Wambi, Anna Weiss, Xiaoping Wang, Mohit Kumar Jolly, Balamurugan Kuppusamy, Robert J. Schneider, Anthony Lucci, Kenneth van Golen, Bisrat Debeb, Beth Overmoyer, (Huong) Carissa Le-Petross, Michael Stauder, Mediget Teshome, and Vicente Valero*. Without their scientific contributions and input, the conference would not have been successful.



We also presented our first 2017 Morgan Welch Inflammatory Breast Cancer Ambassador Award to Dr. Massimo Cristofanilli. Dr. Cristofanilli was the original co-founder of the Morgan Welch Inflammatory Breast Cancer Program. We are honored to recognize him for his vision and past efforts for making this program what it is today.

Thank you to our Program Planning Committee Members who helped put this conference together, *Felisha Estelle, Anthony Lucci, Wendy Woodward, Savitri Krishnamurthy, James Reuben, Randa El-Zein, (Huong) Carissa Le-Petross, Naoto Ueno, and Vicente Valero*. It is because of their dedication and hard work we were able to make this conference run smoothly and effectively for all.

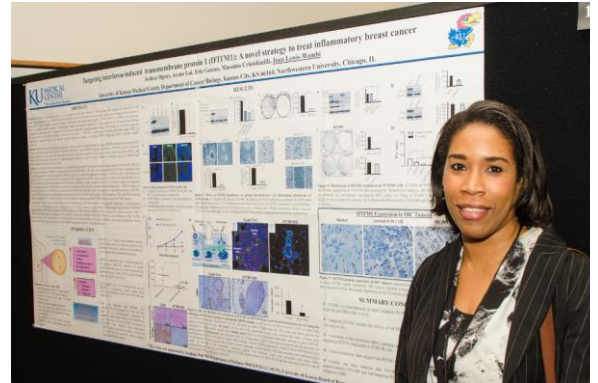
Abstracts/Posters Presented at the 2017 Morgan Welch Inflammatory Breast Cancer Research Program 10th Anniversary Conference: The Future of Inflammatory Breast Cancer:

Targeting interferon-induced transmembrane protein 1 (IFITM1): A novel strategy to treat inflammatory breast cancer

Authors: Joan Lewis-Wambi

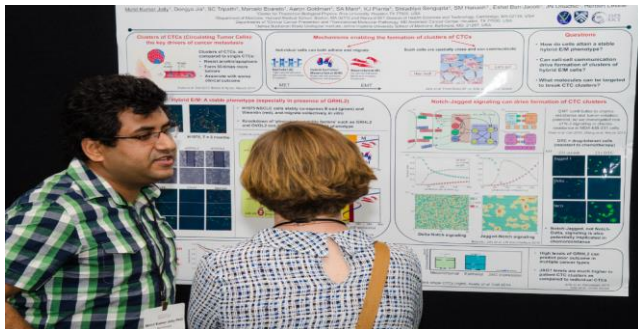
Resection of the primary tumor significantly improves median overall survival in patients with stage IV de novo inflammatory breast cancer

Authors: Anna Weiss, Rhiana S Menen, Heather Y Lin, Yu Shen, Simona Shaitelman, Wendy Woodward, Vicente Valero, Naoto Ueno, Isabelle Bedrosian, Gildy Babiera



The EGFR signaling promotes inflammation and cancer stem-like activity in inflammatory breast cancer

Authors: Xiaoping Wang, Monica E. Reyes, Dongwei Zhang, Yohei Funakoshi, Adriana P. Trape, Yun Gong, Takahiro Kogawa, Bedrich L. Eckhardt, Hiroko Masuda, David A. Pirman, Jr., Peiying Yang, James M. Reuben, Wendy A. Woodward, Chandra Bartholomeusz, Gabriel N. Hortobagyi, Debu Tripathy, and Naoto T. Ueno



Inflammatory Breast Cancer: a model for investigating cluster-based dissemination

Authors: Mohit Kumar Jolly, Marcelo Boareto, Bisrat G Debeb, Nicola Aceto, Mary C Farach-Carson, Wendy A Woodward, Herbert Levine

The transcription factor CEBPD promotes multiple pathways that contribute to the malignant features of inflammatory breast cancer (IBC) cells and can be downregulated by HDAC-inhibitors

Authors: Balamurugan Kuppasamy, Saadiya Sehareen, Shikha Sharan, Savitri Krishnamurthy, Wendy A Woodward, Naoto T Ueno, and Esta Sterneck

Recent Awards and Grants

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

Angie Torres Adorno, Ph.D. Candidate, Breast Medical Oncology, was selected by the Student Scholarship Committee and the GSBS Deans as one of the recipients of this year's T.C. Hsu Memorial Scholarship

Maggie Wang, Ph.D., Research Scientist, Breast Medical Oncology, received the National Cancer Institute (NCI) R01 Grant Award

Grant Title: Enhancing anti-EGFR therapeutic efficacy in inflammatory breast cancer

Collaborators: Maggie Wang, Naoto Ueno, Wendy Woodward, Walter Hittelman, Bora Lim, Savitri Krishnamurthy, and Jianhua Hu

Jihyun Park, Ph.D., Postdoctoral Fellow, Breast Medical Oncology, received the American Association for Cancer Research (AACR) AACR-Aflac, Inc. Scholar-in Training Award

Title: PEA-15 regulates epithelial-mesenchymal transition and invasive behavior through its phosphorylation in triple negative breast cancer

Collaborators: Jihyun Park, Evan Cohen, Guarav Chauhan, Jangsoon Lee, Naoto Ueno, Debu Tripathy, James Reuben, Chandra Bartholomeusz

Renae Deneb Van Wyhe, MBA, Research Medical Student, Breast Radiation Oncology, received the American Radium Society 2017 Young Oncologist Essay Award

Wendy Woodward, MD, Breast Radiation Oncology and Vicente Valero, MD, Breast Medical Oncology, received a \$100,000 donation from the IBC Network Foundation via a special event hosted by the Carter Lee Family. This special fundraising dubbed "Alligators' Hunt for Hope" was held in February 2017.

Xiaoping Maggie Wang, Ph.D., Research Scientist, Breast Medical Oncology, received the DoD Breast Cancer Research Program Breakthrough Award Level 2

Proposal Title: Enhancing Anti-EGFR Therapeutic Efficacy in Inflammatory Breast Cancer via Targeting Inflammatory Pathways

Collaborators: Maggie Wang, Naoto Ueno, Wendy Woodward, Walter Hittelman, Bora Lim, Savitri Krishnamurthy, and Jianhua Hu

Omar Rahal, PhD, Postdoctoral Fellow in Experimental Radiation Oncology, received the Susan G. Komen PDF Basic/Translational and Clinical Grant Award. Omar is pursuing his training in the laboratory of **Dr. Wendy Woodward, MD/PhD**, Breast Radiation Oncology.

Grant Title: Improving radiotherapy efficacy in IBC by targeting the tumor microenvironment

THE ZETA TAU ALPHA HOUSTON ALUMNAE ASSOCIATION FELLOWSHIP IN INFLAMMATORY BREAST CANCER RESEARCH

Awarded To



Bisrat Debeb, DVM, PhD, Assistant Professor, Breast Medical Oncology
Abstract: miR-141-Mediated Regulation of Brain Metastasis From Breast Cancer
Authors: Basra G. Debeb, Lara Lacerda, Simone Anfossi,, Parmeswaran Diagaradjane, Richard A. Larson, Khoi Chu...Wendy A. Woodward

Sangeetha Reddy, MD, MSci, Fellow, Cancer Medicine
Abstract: Immune Characterization of Inflammatory Breast Cancer and Correlation to Pathological Complete Response
Authors: Sangeetha M. Reddy, Jennifer A. Wargo, Alexandre Reuben, James Reuben, Wendy Woodward, Naoto Ueno, Elizabeth A. Mittendorf, Savitri Krishnamurthy



Recent Publications

Impact of Androgen Receptor Expression in Flouxymesterone-Treated Estrogen Receptor-Positive Metastatic Breast Cancer Refractory to Contemporary Hormonal Therapy. Breast Cancer Research and Treatment November 2016, Volume 160, Issue 1, pp 101-109

Miho Kono, Takeo Fujii, Genevieve Ray Lyons, Lei Huo, Roland Bassett, Yun Gong, Meghan Sri Karuturi, Debu Tripathy, and Naoto T. Ueno.

Androgen receptor function and androgen receptor-targeted therapies in breast cancer: A review. JAMA Oncology Published online March 16, 2017. doi:10.1001/jamaoncol.2016.4975

Miho Kono, Takeo Fujii, Bora Lim, Meghan Sri Karuturi, Debu Tripathy, Naoto T. Ueno.

Mesenchymal stem cells and macrophages interact through IL-6 to promote inflammatory breast cancer in preclinical models. Oncotarget 2016; 7:82482-82492. doi: 10.18632/oncotarget.12694

Adam Wolfe, Nicholas Trenton, Bisrat Debeb, Richard Larson, Brian Ruffell, Khoi Chu, Walter Hittelman, Micahel Diehl, Jim Reuben, Naoto Ueno, Wendy Woodward

Early clinical development of epidermal growth factor receptor targeted therapy in breast cancer. Expert Opin Investig Drugs. 2017 Apr;26(4):463-479. doi: 10.1080/13543784.2017.1299707. Epub 2017 Mar 8.

Naoko Matsuda, Bora Lim, Maggie Wang, Naoto Ueno

Discovery of a potent inhibitor of MELK that inhibits expression of the anti-apoptotic protein Mcl-1 and TNBC cell growth. [Bioorg Med Chem](#). 2017 May 1;25(9):2609-2616. doi: 10.1016/j.bmc.2017.03.018. Epub 2017 Mar 10.

Ramakrishna Edupuganti, Juliana M. Taliaferro, Qiantao Wang, Xuemei Xie, Eun Jeong cho, Fnu Vidhu, Pengyu Ren, Eric V. Anslyn, Chandra Bartholomeusz, and Kevin N. Dalby

Inflammatory Breast Cancer: a model for investigating cluster-based dissemination. BioRxiv 2017 March doi: <https://doi.org/10.1101/119479>

Mohit Kumar Jolly, Marcelo Boareto, Bisrat G Debeb, Nicola Aceto, Mary C Farach-Carson, Wendy A Woodward, Herbert Levine

IKK inhibition by BMS-345541 suppresses breast tumorigenesis and metastases by targeting GD2+ cancer stem cells. Oncotarget. 2017; 8:36936-36949. doi: 10.18632/oncotarget.16294

Venkata Lokesh Battula, Khoa Nguyen, Jeff Sun, Mary Kathryn Pitner, Bin Yuan, Chandra Bartholomeusz, Numsen Hail and Michael Andreeff

Immune and molecular determinants of response to neoadjuvant chemotherapy in inflammatory breast cancer. 2017 ASCO Annual Meeting. Abstract no. 11501 J Clin Oncol 35, 2017 (suppl; abstr 11501)

Sangeetha Meda Reddy, Jennifer Ann Wargo, Alexandre Reuben, Michael T. Tetzlaff, Jason Roszik, James M. Reuben, Wendy A. Woodward, Naoto T. Ueno, Savitri Krishnamurthy, Elizabeth Ann Mittendorf

Poor prognosis of patients with triple-negative breast cancer can be stratified by RANK and RANKL dual expression. Breast Cancer Res Treat. 2017 Jul;164(1):57-67. doi: 10.1007/s10549-017-4233-5. Epub 2017 Apr 17.

Monica E. ReyesTakeo FujiiDaniel BranstetterSavitri KrishnamurthyHiroko MasudaXiaoping WangJames M. ReubenWendy A. WoodwardBeatrice J. EdwardsGabriel N. HortobagyiDebu TripathyWilliam C. DougallBedrich L. EckhardtEmail authorNaoto T. Ueno

Histone deacetylase inhibitor enhances the efficacy of MEK inhibitor through NOXA-mediated MCL1 degradation in triple-negative and inflammatory breast cancer. Clin Cancer Res. 2017 May 2. pii: clincanres.2622.2016. doi: 10.1158/1078-0432.CCR-16-2622

Angie M Torres-Adorno, Jangsoon Lee, Takahiro Kogawa, Peter Ordentlich, Debu Tripathy, Bora Lim and Naoto T. Ueno

Circulating tumor cells (CTCs) are associated with abnormalities in peripheral blood dendritic cells in patients with inflammatory breast cancer. Oncotarget. 2017 May 30;8(22):35656-35668. doi:

10.18632/oncotarget.10290. PMID:27374101

Mego M, Gao H, Cohen EN, Anfossi S, Giordano A, Tin S, Fouad TM, De Giorgi U, Giuliano M, Woodward WA, Alvarez RH, Valero V, Ueno NT, Hortobagyi GN, Cristofanilli M, Reuben JM.

Circulating Tumor Cells (CTC) Are Associated with Defects in Adaptive Immunity in Patients with Inflammatory Breast Cancer. J Cancer. 2016 Jun 3;7(9):1095-104. doi: 10.7150/jca.13098. eCollection 2016.

PMID: 27326253

Mego M, Gao H, Cohen EN, Anfossi S, Giordano A, Sanda T, Fouad TM, De Giorgi U, Giuliano M, Woodward WA, Alvarez RH, Valero V, Ueno NT, Hortobagyi GN, Cristofanilli M, Reuben JM.

News/Events

SAVE THE DATE(S):

BOOT WALK

to #endcancer®

Register Donate Volunteer

Houston Boot Walk
Saturday, Nov. 11 | 1:00 p.m.
Texas Medical Center

Help end Breast Cancer please click on the link below. Our team name is "IBC Wranglers." MD Anderson Boot Walk to End Cancer (<https://www.mdanderson.org/bootwalk>).



Fund Raising Tools Now Available – donate using credit card; customize your personal page or just use the standard template that MD Anderson provides; add contacts to the address book; send mass emails out in one submit; send follow-ups; thank you letters.



Komen Houston Race for the Cure
Saturday, Oct. 7 | 8:00 a.m.
Sam Houston Park – Downtown Houston

Morgan Welch Inflammatory Breast Cancer and Breast Medical Oncology will be collaborating together to help bring awareness to Breast Cancer. Be a part of the team and join us in our walk with Susan G. Komen in October. Please, sign up at <http://komen-houston.org>.

Quarterly Oral Presentations

JNK Contributes to TNBC Aggressiveness through Promoting CSC Phenotype and Tumor-Microenvironment Cross-Talk

*Xuemie Xie, Ph.D., Research Scientist
Breast Medical Oncology*

Modulating tumor microenvironment to improve radiation treatment of Inflammatory Breast Cancer (IBC)

*Omar Rahal, Ph.D. Postdoctoral Fellow
Experimental Radiation Oncology*

Update on Surgical IBC Core

*Anthony Lucci, MD, Professor
Breast Surgical Oncology*

Ongoing and Upcoming Research Projects in Debeb's Laboratory

Bisrat Godefay Debeb, DVM, Ph.D., Assistant Professor, Breast Medical Oncology

Determination of the Efficacy of TIG1-targeted Therapy using Nanoparticle-delivered siRNA in Inflammatory Breast Cancer Update on Research Match Project

*Xiaoping (Maggie) Wang, Ph.D., Research Scientist, Department of Breast Medical Oncology
Jun Zhao, Ph.D., Instructor, Department of Cancer Systems Imaging*

EDGE Preclinical Project Update

*Jangsoon Lee, Ph.D., Senior Research Scientist
Morgan Welch IBC Program and Clinic
Breast Medical Oncology*

Updates on Xenograft models of IBC

*Bedrich Eckhardt, Ph.D., Research Instructor
Morgan Welch IBC Program and Clinic
Breast Medical Oncology*

Research Match Update: Novel proximity extension assay for serum/plasma protein biomarker characterization of Inflammatory Breast Cancer

*Evan Cohen, Ph.D., Postdoctoral Fellow
Hematopathology Research*

Upcoming clinical trials in IBC at MDACC and translational research opportunities

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

EPHA2-targeted therapy enhances the cytotoxicity of eicosapentaenoic acid against triple-negative inflammatory breast cancer

*Angie M. Torres-Adorno, B.S., Ph.D.,
Candidate/Graduate Research Assistant
Department of Breast Medical Oncology*

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

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

Metastatic IBC:

2013-0007 - A phase II study of Denosumab to define the role of bone related biomarkers in breast cancer metastasis

2014-0464 - A phase II study of BIBF 1120 (Nintedanib) for Patients with HER2 normal metastatic inflammatory breast cancer

2014-0034 - A phase II study using T-VEC as a single agent 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.

Current Clinical IBC Lab Studies

2006-1072 - IBC Registry

PA12-0097 - Prognostic utility of CTCs assessed by Adnagen Technology and Clinical Outcome of Patients with Stage III Breast Cancer

PA14-0778 - Gene profiles in androgen-receptor-positive CTC in patients with metastatic breast cancer

PA15-0499 - Tissue biomarker study of T-DM1 and/or Pertuzumab resistant or refractory breast cancer

PA15-1026 - Department of Breast Medical Oncology University Blood Bio-Repositories

PA16-0507 - Monitoring of CTCs in newly diagnosed metastatic breast cancer

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 lab studies.

Find us on

