## The Judith A. Lese Breast Cancer Foundation, Inc.

100% of contributions are disbursed



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

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## BREAST CANCER AWARENESS MONTH

Dear Foundation Friends,

Fall is here and our special designated month to raise awareness and raise funds and raise advocacy skills starts today. Of course, each of you makes this awareness month occur each and every month of the calendar year by supporting our mission. With your continual effort and participation by contributing time, talents and financial contributions to The Judith A. Lese Breast Cancer Foundation we work twelve months a year in our pursuit of education and cure for breast cancer.

Please note: WALK to WIN-the battle against breast cancer, our 15th annual fall fundraiser event is on Sunday, October 29. Our location is in Bethesda at the Bethesda Crescent Trail. Again, we are most fortunate to have this fundraising event sponsored by Foundation's friend, John Cho. Kirk Radish, Foundation's graphic designer, has created another fabulous design for this year's shirts. Please join us, bring friends and relatives and have others sponsor you on this morning's event. The flyer enclosed has the registration information and as always the flyer is on our website. Our 16th annual Foundation's July Fundraiser dinner will be held on Wednesday, July 11, 2018. Mark your calendars and know how much we look forward to you being with us.

At our 15th annual fundraiser dinner in July 2017, guests had the wonderful opportunity to be provided education and awareness information about the newer trends, procedures and technology currently used at Sibley and other Radiology Departments in treatments for breast cancer. Dr. Victoria Croog's topic was: Survivorship After Radiation Treatment. We are most grateful for this educational, uplifting and truly informative talk by Dr. Croog, M.D., Radiation Oncologist at The Sullivan Center for Breast Health. All were delighted to have had this opportunity to learn from Dr. Croog. I am most appreciative for her time and support to our Foundation.

Another implementation of an idea for growing and increasing Foundation's fundraising efforts-please share our mission with another-pass it forward! The hope is that YOU will give the printed envelope included in each mailing envelope to another to support growth of Foundation's new fundraising effort. We are entering our 16th year as a result of YOUR generosity, your commitment and belief in our mission. We are able to provide support for breast cancer research, purchase technology and other requested specific medical supports and continually grow and become aware of accurate information and care as a result of The Judith A. Lese Breast Cancer Foundation's work. Remember, 100% of contributions are disbursed!

In this mailing, I have included a written update (provided by JHU Development Office) about the researcher we have supported for years at Johns Hopkins University-Dr. Leisha Emens. Your monies are helping to bring change and positive outcomes.

As always, I want to grow Foundation with broadening opportunities for all types of support. Help us raise funds! Help us grow the monies contributed. Help us with all your creative and skillful ways, with your knowledge and your resources. Please share your ideas, your availabilities, your contacts, yes and always yourselves so that we CAN do more of all the good accomplished thus far and all we continually we want to achieve.

To our Foundation's supporters who work for the Federal Government, once again we are part of this year's Combined Federal Campaign (CFC) of the National Capital Area. Our 5-digit CFC code is 53302. Please consider us when making your annual pledge. Thank you.

YOU MAKE THE DIFFERENCE so THAT FOUNDATION CAN MAKE A DIFFERENCE in this battle against breast cancer! From the bottom of my heart, I express my deepest of gratitude for each of you and your participation in our Foundation!

Looking forward to seeing ALL and ALL those you invite and bring to join us at the WALK to WIN-the battle against breast cancer four weeks from today-RAIN or SHINE!

With warmest regards, Judith A. Lese, Founder and CEO

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## STING and Immune Checkpoint Blockade Combination Improves Treatment Response

With the support of the Breast Cancer Research Foundation, Dr. Emens and her team have been able to examine to what extent pre-existing antigen tolerance influences the efficacy of a potent STING-activating agent, called ADU S-100, against HER-2<sup>+</sup> breast tumors. Her team found that the agent caused lasting tumor clearance in antigen intolerant – or immune competent – mice, while the same efficacy was not seen in antigen *tolerant* mice, for whom the agent resulted in tumor clearance in only 10% of the animals. In an effort to find a way to improve treatment efficacy in the tolerant mouse group, Dr. Emens and her team discovered that modulating the signaling of certain receptors, such as PD-L1, in combination with the administration of ADU S-100, enhanced the ability of the agent to clear tumors, increasing the clearance level from 10% of the mice to 40%. These findings indicate for the first time that combining STING agonists, like ADU S-100, with immune checkpoint blockade such as PD-L1 could allow clinicians to overcome immune tolerance to induce tumor regression and improve treatment outcomes for patients receiving immunotherapy.

While STING-activating approaches alone have already shown efficacy in melanomas, colon tumors, breast tumors, and pancreatic tumors in mice, the advances revealed in Dr. Emens' most recent work have defined an important role for STING signaling in promoting adaptive tumor immunity, allowing patients' immune systems to recognize tumors as dangerous and take steps towards defeating them. The use of STING agents to promote the priming of tumor-specific immune cells represents a potentially novel cancer therapy approach. ADU-S100 in particular has been evaluated in preclinical models as an intratumoral injection (STINGIT), as part of

certain vaccines (STINGVAX), and in combination with radiation therapy. However, these previous studies are limited by the absence of tumor-specific immune tolerance in the models utilized.

A unique strength of Dr. Emens' model is the ability to evaluate the impact of immune tolerance on cancer immunotherapy strategies, and develop strategies for overcoming this tolerance. These findings have implications for future clinical studies of ADU-S100-based therapies in cancer patients, where established immune tolerance to tumor antigens presents a major challenge to the efficacy of immunotherapies. A clinical trial testing single agent intratumoral ADU-S100 in advanced cancer patients with solid tumors and lymphomas is already underway, but Dr. Emens' data supports combining ADU S100 with relevant immune checkpoint modulation, such as PD-L1, to boost its clinical efficacy, ensuring that more patients with difficult cancers have the opportunity to benefit from the promise of immunotherapy.