



The Belinda Sue Fund[®] **for Ovarian Cancer Awareness & Research**

2019 Year End Message
January 1, 2020

To Our Many Friends and Supporters,

It has been another terrific year for The Belinda Sue Fund in 2019. Over the past eight years, The Belinda Sue Fund has focused on its primary goal of raising awareness of Ovarian Cancer through its annual Gala, Zoo Walks and Billboard campaign. We believe that we have made a difference in increasing public awareness of this dreaded disease. Saving just one woman's life, via increased awareness, is what we have strived to do and we believe we have been successful.

One of the highlights of 2019 is the development of our partnership with Henry Ford Health System (HFHS), which continues to move in a very positive direction. This partnership will allow us to move to the next level of our mission. While we have been very successful as a grass roots organization over the last eight years, we needed a larger impact to continue our focus to eradicate Ovarian Cancer. By partnering with HFHS, we have the opportunity to develop the leading Ovarian Cancer research and treatment program in Michigan.

HFHS is nearing completion of what will be the most advanced Cancer Center in the state, if not the region. There will be an entire floor devoted to treating Women's Cancers and The Belinda Sue Fund will be a big part of that. Over the years, HFHS has been involved in significant Ovarian Cancer research. Its lead researcher Dr. Ramandeep Rattan, PhD, has made significant strides in the area of translational Ovarian Cancer research.

Dr. Rattan writes: ***“the main interests of the Rattan lab include: elucidation and therapeutic targeting of adipose tissue and ovarian cancer interactions. Adipocytes play an integral role in promotion and spread of ovarian cancer. We are interested in studying the uptake and signaling talk that occurs between the fatty acids released by the adipocytes and ovarian cancer cells, through understanding the role of novel free fatty acid receptors.*”**

Dissecting the metabolic differences between chemo-sensitive and platinum resistant ovarian tumors. We have found methionine metabolism to be

altered in platinum resistant ovarian cancer cells. Currently we are investigating the specific metabolites or sub-pathway that could play a role in mediating chemo-resistance and to use these differences to find a potential therapeutic target unique to chemo-resistant cancer cells.

Role of the metabolic enzyme AMPK in ovarian cancer. AMPK (AMP-activated kinase) is a master regulator of metabolism in all living beings. It is activated by the anti-diabetic drug metformin, which is been extensively studied as a repurposed drug for treatment of various cancers, including ovarian. We have published metformin's ability to inhibit ovarian tumors in vitro and in vivo. We are currently studying the pathological role of AMPK in ovarian cancer using AMPK knockout mice."

An additional, point of note: ***Dr. Rattan recently received a prestigious NIH R01 Research Project Grant for the amazing work she is doing at Henry Ford Hospital. She was also the 2016 recipient of the "Making a Difference" Award***, previously presented by The Belinda Sue Fund to an outstanding clinician or researcher. We are very grateful for Dr. Rattan's work!

As we work closely with HFHS on strategies to grow our presence in the research arena, we hope that many women will be able to avoid the horror of facing the prospect of Ovarian Cancer. We continue to maintain The Belinda Sue Fund name and mission. Dr. Adnan Munkarah, Chief Clinical Officer for HFHS, and former Chairman of HFHS Women's Health, continues to be the clinical leader and manager for the fund working with our new advisory board. While we are not planning on hosting another Gala, we did have a very successful Belinda Sue Fund Detroit Zoo walk this past September. Even with a one-year Zoo Walk hiatus in 2018, we had over 700 walkers and volunteers, representing 40 teams, attend our 2019 Walk. It is truly a remarkable fellowship that brings many together for such an important cause! So please, mark your calendars, on September 27, 2020 for our next Zoo Walk. If you are interested in volunteering for the event, please email us at info@belindasuefund.org.

Another highlight of 2019 was the continued success of another one of our supported researchers, Dr. Sophia George of the University of Miami. You will recall that The Belinda Sue Fund, in partnership with the Mary Jane Welker Foundation, co-funded a seed grant in the amount of \$50,000 and awarded to Dr. George in 2015. Her groundbreaking work resulted in a \$1.5M Department of Defense grant awarded in 2018. Since that award, she continues to advance research focused on developing an early-detection test for Ovarian Cancer.

Dr. George writes, ***"A manuscript was published earlier this year for which I acknowledged funding from your foundation. It highlights understanding the earliest events in fallopian tube cells from women with and without a***

BRCA mutation. Also shows that a master regulator gene coordinates with BRCA1 absence to promote cancer invasion once the tumor is established.

Dr. George continues, “We conduct research to understand the precursor lesion in the Fallopian tube and pathogenesis/progression to ovarian cancer; focused on primary prevention through identification of high-risk individuals and determine factors in hereditary breast and ovarian cancer syndrome carcinogenesis that promote chemotherapy resistance and account for survival differences in patients.”

Dr. George’s exciting work around the involvement of the Fallopian tubes in pre-Ovarian Cancer stages will, hopefully soon, lead to the development of an early-detection test for the disease.

As we move into 2020, we are very excited about the HFHS partnership to move Ovarian Cancer research to a lead role in this market. We are extremely grateful for all of your support of the last eight years, and your continued support of our new partnership in 2020!

If you would like to donate to The Belinda Sue Fund, please click on the following link:
www.belindasuefund.org/donate

I wish you and your family a very Healthy and Prosperous New Year!

Sincerely,



Thomas S. Nantais
Chairman and Treasurer
The Belinda Sue Fund for Ovarian Cancer Awareness and Research, Inc.