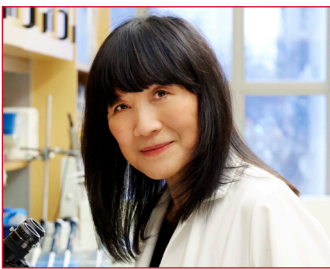


## Read what Patients and Researchers are saying about The Leukemia & Lymphoma Society's impact.



### After being diagnosed with a rare stomach cancer called GIST, **Leslie Donigan** lost hope.

Leslie was told her cancer was terminal. Then her doctor prescribed a medication discovered for blood cancer – and it worked. Leslie was treated with imatinib (Gleevec®), a drug developed by LLS-funded researcher **Brian Druker, MD**, OHSU Knight Cancer Institute and approved to treat patients with chronic myeloid leukemia. The treatment that saved her life resulted directly from blood cancer research funded by LLS. Imatinib has also been approved to treat skin cancer, and more than 10 other cancers and diseases. Leslie and her husband Jim, a lymphoma survivor, credit LLS and its trailblazing blood cancer research with saving both their lives.



### **Selina Chen-Kiang, PhD**, discovered a life-changing drug that works for both blood and breast cancers.

Dr. Chen-Kiang is a renowned professor of pathology, laboratory medicine, and immunology at Weill Cornell Medicine, and has received multiple LLS grants over the past 17 years. While her work is focused on the blood cancers myeloma and lymphoma, Chen-Kiang's discovery that a targeted drug was effective in blocking an enzyme responsible for cell division, including the proliferation of cancer cells, helped lead the way to that therapy, palbociclib, receiving FDA approval in 2015 for breast cancer. With LLS support, Chen-Kiang is continuing to test palbociclib's effectiveness in treating patients with mantle cell lymphoma.



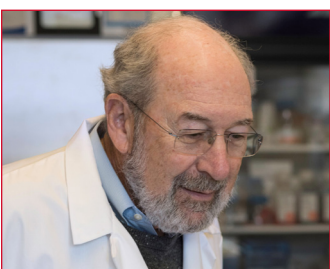
### **Emily Dumler**, a 32-year-old mother of three young children, was diagnosed with a blood cancer, non-Hodgkin lymphoma, in August 2013.

After a whirlwind of intense treatments including chemotherapy, a stem cell transplant and months of hospitalization, Emily relapsed soon after each treatment and was given a devastating prognosis—doctors said she had six months to live. Emily received a glimmer of hope when doctors told her of a potential new treatment - she became the third patient in the world enrolled in a clinical trial for a lifesaving treatment using CAR T-cell immunotherapy made possible by LLS funding. The revolutionary therapy was a success. Emily has been in remission for more than two years. This CAR T-cell immunotherapy approach, FDA-approved in 2017, is currently being tested on solid tumors.



### LLS grant recipient **Benjamin Ebert, MD, PhD**, discovered mutations in the blood, known as CHIP, opening up the possibility of preventative medicine for those at risk.

Dr. Ebert is chair of medical oncology at Dana-Farber Cancer Institute, who studied the blood from normal healthy volunteers. His lab discovered that mutations in the blood of normal individuals, known as CHIP, are associated with a higher probability of developing blood cancers later in life. Ebert's lab was first to demonstrate that these mutations are associated with the development of cardiovascular disease. The discovery opens up the possibility of preventative medicine to identify people at risk of developing disease years before it occurs and ultimately, developing treatments that mitigate the risk.



### LLS funded the work of **Ron Levy, MD** of Stanford University as he developed a vaccine that is injected directly into the cancer tumor, with a combination of two drugs which stimulate the immune system to kill the cancer cells.

Lab tests show the vaccine completely eradicated tumor cells in mice. A clinical trial, launched in January 2018, is testing the approach in lymphoma patients. The experimental vaccine also shows potential utility in breast, colon and melanoma cancer cells. Dr. Levy, a National Academy of Science Member since 2008, was the first to show that antibodies targeting lymphoma could control the disease. His foundational work resulted in the FDA-approval of the first antibody to treat cancer, known as rituximab, in 1997. Rituximab is now used as standard therapy to treat many lymphomas and is also approved to treat rheumatoid arthritis. According to Levy, *"The Leukemia & Lymphoma Society is dedicated to solving blood cancers and so am I. We will work together to get this done."*