



Andy Hill Cancer Research Endowment (CARE) Fund

ANNUAL REPORT

JULY 2017 - JUNE 2018



Andy Hill CARE Fund
Washington's Cancer Research Endowment

EXECUTIVE Summary



Washington State is home to world-class cancer research and care centers for children and adults. Our researchers and clinicians are on the leading edge of developing and applying new techniques for the prevention, diagnosis and treatment of cancer and the care of cancer patients throughout Washington. In addition to some of the world's best cancer researchers, we also have some of the most innovative and influential technology and life sciences companies.

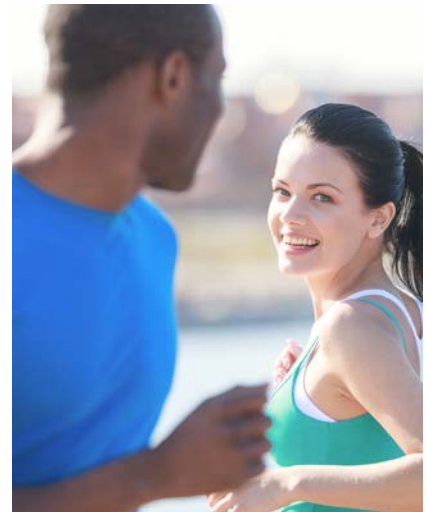
With the establishment of the Andy Hill Cancer Research Endowment (CARE) Fund (Chapter 43.348 RCW), the State is enriching this ecosystem with sustained investment in cancer research, prevention and care, with the aim of reducing long-term health costs, saving lives and relieving pain and suffering. The CARE Fund is an opportunity to cross sector lines and invest in the best science and technology with the greatest potential to improve health outcomes and cure cancer.

CARE has made exciting headway in establishing this important and powerful resource for cancer research. The following annual report outlines key progress to-date, as well as the significant and immediate return on investment from CARE's inaugural grant awards, which helped support the recruitment of seven world-class Distinguished Researchers to Washington State. The initial \$3.5 million investment by CARE leverages more than \$20 million committed by non-state resources to match state funding.

Beyond leveraging matching funds, these grantees will attract top scientists and additional research dollars to Washington, and further enhance the cancer research environment. Immediate job creation has already been realized and potential commercialization activities will create even more new jobs and generate new revenue for the state. Most importantly, these world-class cancer researchers will advance cancer research and improve health outcomes in our state. There is high potential for breakthroughs in cancer research, as well as innovative and cross-sector collaborations that

could lead to the next big discovery. In 2018, the CARE Fund also launched its Breakthrough Research Program, which funds innovative cross-disciplinary research and collaborations that address critical problems or aim to find the next big discovery in cancer research. This program has enormous potential for return on investment of CARE Fund dollars to Washington State in the form of matching funds, job creation and new research funding secured. CARE Fund grants support cancer research efforts that have the potential to transform cancer prevention and treatment practices, and change lives.

The initial \$3.5 million investment by CARE leverages more than \$20 million in non-state match funding.



BACKGROUND

Information

The Andy Hill CARE Fund was authorized by Senate Bill 6096 and signed into law by Governor Inslee in 2015. The law ([Chapter 43.348 RCW](#)) enables the State to provide up to \$10 million annually for 10 years to fund cancer research in Washington State.

The Fund is built on a public-private partnership model and incentivizes additional investment by requiring private or other non-state resources to match state funding.

The CARE Fund's objectives as enumerated in the Revised Code of Washington are to:

Optimize the use of public funds by giving priority to research utilizing the best science and technology with the greatest potential to improve health outcomes

Increase the value of our public investments by leveraging our state's existing cancer research facilities and talent, as well as clinical and therapeutic resources

Incentivize additional investment by requiring private or other non-state resources to match public funds

Create jobs and encourage investments that will generate new tax revenues in our state

Advance the biotech, medical device and health care information technology industries in Washington

In February 2017, the CARE Board developed and published an [Inaugural Plan](#) outlining high-level strategies for the initial launch of the following two major funding priorities:

1. Recruiting world-class distinguished cancer researchers to Washington State from around the globe
2. Advancing transformational research efforts that will lead to breakthroughs in the prevention, treatment and cure of cancer, generating or accelerating the next big discovery in cancer research

The Inaugural Plan also outlined strategies for engaging a Program Administrator to manage the operations, administration and implementation of CARE priorities.

In June 2017, Empire Health Foundation (EHF) was selected to serve as Program Administrator. EHF is responsible for working with expert scientific review and advisory committees. The committees work independently of the Board to conduct grant evaluations and provide recommendations to the CARE Board.

Empire Health Foundation is a private Spokane-based health foundation responsible for the stewardship of philanthropic assets totaling approximately \$80 million. EHF invests in ideas and organizations that improve access, education, research and policy to result in a measurably healthier region. EHF is committed to reducing, and ultimately eliminating, disparities that adversely impact marginalized or under-resourced children, families and communities.

CARE FUND

Board

The Andy Hill CARE Fund Board, appointed by the Governor, includes:

J. ELAINE-MARIE ALBERT, MD, MHA

Seattle Children's Hospital

Appointed from nominations submitted by the speaker of the House of Representatives

LESLIE ALEXANDRE, DrPH

Life Science Washington

Appointed from nominations submitted by representatives of businesses or industries engaged in the commercialization of life science research or cancer research

FREDERICK APPELBAUM, MD

Fred Hutchinson Cancer Research Center

Appointed from nominations submitted by Fred Hutchinson Cancer Research Center, Seattle Cancer Care Alliance and Seattle Children's Research Institute

THOMAS BROWN, MD, MBA

Swedish Cancer Institute

Appointed from nominations submitted by entities or systems that provide health care delivery services

DAVID BYRD, MD

University of Washington

Appointed from nominations submitted by the presidents of the University of Washington and Washington State University

WEIHANG CHAI, PhD

Washington State University

Appointed from nominations submitted by the presidents of the University of Washington and Washington State University

CAROL DAHL, PhD

The Lemelson Foundation

Appointed from nominations submitted by representatives of businesses or industries engaged in the commercialization of life sciences research or cancer research

STEVEN HARR, MD

Formerly, Juno Therapeutics

Appointed from nominations submitted by the president of the Senate

JAMES HENDRICKS, PhD

Seattle Children's Research Institute

Appointed from nominations submitted by Fred Hutchinson Cancer Research Center, Seattle Cancer Care Alliance and Seattle Children's Research Institute

EUNICE HOSTETTER

American Cancer Society Cancer Action Network

Appointed from nominations submitted by patient advocacy organizations

JENNIFER KAMPSULA WONG, JD

American Cancer Society Cancer Action Network

Appointed from nominations submitted by patient advocacy organizations

Organizational affiliations are for identification purposes only.

START UP PHASE: Building the Foundation

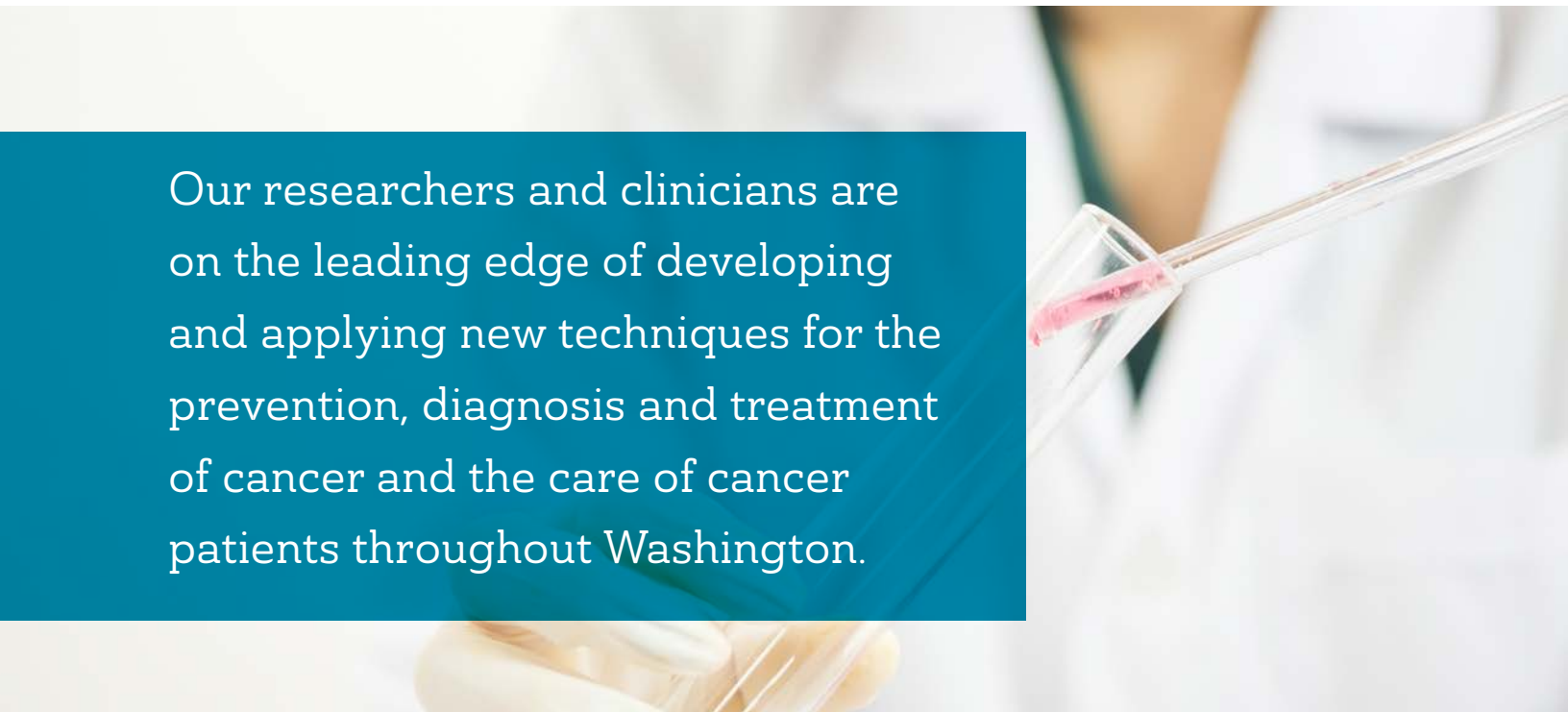
This year, the Andy Hill CARE Fund laid the underpinning for a healthy, thriving and impactful future in cancer research. A summary of several key start-up accomplishments is listed below:

- Established the CARE team to staff the ongoing administration and implementation of CARE priorities
- Developed all necessary policies and procedures (e.g., grant award agreements, matching fund and allowable cost policies, intellectual property and grant payback policies, confidentiality policies, etc.)
- Engaged the American Association for the Advancement of Science to provide independent expert scientific review evaluations and recommendations
- Developed CARE brand, logo and website
- Developed all grant program materials, including program announcements, requests for proposals, application and budget templates, reporting expectations and policies and procedures to facilitate the orderly process of grant application, review, selection and performance
- Developed ongoing communication strategies and management of all outreach efforts to a variety of stakeholders and audiences
- Developed conflict of interest policies, procedures and practices
- Developed and customized an on-line grants management system
- Established the Fund account and continue to provide the full accounting cycle for CARE through financial statements
- Selected an investment management firm for the Fund
- Ongoing financial administration, analysis and coordination of investment management activities on behalf of CARE
- Ongoing strategic support and engagement of the CARE Board, as well as relationship building and outreach to key audiences

CARE Fund launched its Distinguished Researchers grant program that resulted in the recruitment of seven world-class researchers to Washington.



Distinguished Researchers Program



Our researchers and clinicians are on the leading edge of developing and applying new techniques for the prevention, diagnosis and treatment of cancer and the care of cancer patients throughout Washington.

Cancer research breakthroughs occur through the work of talented and well-resourced scientists. The CARE Fund supports recruitments of distinguished researchers from around the world to bring their best-in-class talent to research organizations and companies in Washington.

Top scientists also move the research economy forward, creating laboratory and other jobs, raising awareness of cancer research and bringing in additional research funding to the state. Recruitment at a mid- to senior-level has a demonstrated return on investment in terms of cancer research progress, job creation and additional research funding.

To add value to recruitment packages that bring leading cancer researchers to Washington, CARE's **Distinguished Researchers Program** provides

a dollar-for-dollar match, up to \$500,000 per recruitment, for Washington research institutions, organizations and commercial entities. CARE grant funds may be used for recruitment efforts and project expenses, such as salaries and equipment costs, associated with advancing the scholar's research.

CARE awarded \$2 million to its first cohort of Distinguished Researchers in December 2017 and \$1.5 million to its second cohort in June 2018.

IMMEDIATE Impact

The CARE Fund awarded the first and second cohorts of Distinguished Researchers grants in December 2017 and June 2018, respectively.



Leveraged \$

Seven \$500,000 grants have been awarded to three different Washington institutions as part of CARE's Distinguished Researchers program. The \$3.5 million in awards of state funds to support recruitment and start-up packages will be matched by more than \$20 million in non-state funds committed by the host organizations.



Economic Development

Beyond leveraging of dollars, these grantees will attract top scientists and additional research dollars to Washington and further enhance the cancer research ecosystem. Immediate job creation has already been realized, and potential commercialization activities will create even more new jobs and generate new revenue for the state.



Breakthrough

These world-class cancer researchers will carry the potential to advance cancer research and health outcomes in our state. There is high potential for breakthroughs in cancer research, as well as innovative and cross-sector collaborations that could lead to the next big discovery.

Grant applications for the recruitment of Distinguished Researchers were independently reviewed by the American Association for the Advancement of Science (AAAS), and those researchers recommended for funding were approved by the CARE Board. Distinguished Researchers in the first cohort were recruited from California Institute of Technology (Caltech), Columbia University, Massachusetts General Hospital and University of California at San Francisco. Distinguished Researchers for the second cohort were recruited from University of Queensland, University of Pittsburgh and Singapore Immunology Network.

“This incredibly experienced and internationally-recognized group of researchers will advance cancer research in our state.”

-Eunice Hostetter, Secretary of the CARE Board and the Washington State Lead Ambassador for the American Cancer Society Cancer Action Network

GRANTEE

Highlights

Four Distinguished Researchers were awarded in the first cohort (December 2017):



DR. HEATHER GREENLEE

Fred Hutchinson Cancer Research Center

Dr. Greenlee is a Doctor of Naturopathic Medicine (ND) with a doctorate in epidemiology. As a population scientist, her research focus is primarily on cancer survivorship with an emphasis on the issue of obesity in cancer survivors – a research topic with high significance. Her research portfolio currently includes funded studies examining a dietary intervention among Hispanic women with breast cancer and studying factors associated with cardiovascular outcomes in breast cancer survivors. Her behavioral intervention research on cancer survivorship in racial and ethnic minority populations was deemed to have high significance and high potential for translation into patient care.



DR. MARK HEADLEY

Fred Hutchinson Cancer Research Center

Dr. Headley's novel research program demonstrates strong potential for high impact in understanding the biology of lung metastasis. His research program, focused on interactions between the pulmonary immune environment and burgeoning metastases to the lung, has yielded a recent first-author publication in the journal *Nature*, an indication that this research focus is an important area with high significance. His work seeks to clarify the mechanisms by which myeloid immune cells variably promote or defend against cancer. These findings from which have significant translational potential and are anticipated to guide a new generation of metastasis-targeted interventions.



DR. JAMES HEATH

Institute for Systems Biology

Dr. James Heath has been recruited as President of the Institute for Systems Biology (ISB) after spending the past 15 years directing large National Cancer Institute funded programs as a Professor at the California Institute of Technology. He has a track-record of success in academics, teaching, administration and entrepreneurship. His laboratory works to develop new technologies enabling novel cancer immunotherapies. His record of high-impact productivity across a broad spectrum of scientific domains relevant to cancer research is exceptional.



DR. LEV SILBERSTEIN

Fred Hutchinson Cancer Research Center

Dr. Silberstein's work focuses on secreted factors that regulate the behavior of normal and malignant stem cells in the bone marrow. His research program has translational implications for addressing the important clinical problems posed by bone marrow failure, myelodysplasia and related syndromes.

GRANTEE

Highlights

Three Distinguished Researchers were awarded in the second cohort (June 2018):



DR. GEOFFREY HILL
Fred Hutchinson Cancer Research Center

Dr. Hill, a physician-scientist, is a world leader in the field of Bone Marrow Transplantation (BMT) and Graft Versus Host Disease (GVHD). Dr. Hill's research will focus on better understanding GVHD pathogenesis with regard to innate and cellular immunity. Dr. Hill's successful innovation in the field of stem cell transplantation indicate a very high potential for success in his proposed research, which will greatly impact understanding and treatment of GVHD and will be highly significant for patients receiving allogeneic hematopoietic cell transplantation (allo-HCT).



DR. THOMAS KENSLER
Fred Hutchinson Cancer Research Center


Dr. Kensler is a researcher with expertise in carcinogenesis and chemoprevention. His research focuses on chemoprevention as an opportunity to reduce cancer risks associated with environmental exposures to carcinogenic agents that cannot be avoided. This is a significant problem since, in the United States and internationally, environmental pollution disproportionately affects individuals who live in economically disadvantaged areas where generally, efforts to reduce exposure are more difficult and cancer burden is higher. Dr. Kensler was recently awarded the prestigious National Cancer Institute Outstanding Investigator Award for his seminal discoveries and contributions to the field of carcinogenesis and chemoprevention.



DR. EVAN NEWELL
Fred Hutchinson Cancer Research Center

Dr. Newell is an emerging leader in the field of immune cell characterization with a stellar publication record. He has pioneered a technology that includes CyTOF with heavy-metal tagged antibody staining that could have major implications in understanding immunity and cancer. Dr. Newell's research is based on innovative techniques and will yield an unprecedented in-depth characterization of epitope usage by T-cell populations in cancer and chronic infections, which can potentially lead to novel discoveries in the field of cancer immunology.

Breakthrough Research Program

A photograph of a male scientist with grey hair and a beard, wearing glasses and a white lab coat over a blue shirt. He is focused on his work in a laboratory setting, with various pieces of equipment and glassware visible in the background. The image is partially obscured by a teal text box on the left.

Cancer research breakthroughs occur through the work of talented and well-resourced scientists.

The CARE Fund sets the stage for novel research efforts that can generate or accelerate the next big discovery in cancer research.

CARE's Breakthrough Research Program provides funding for innovative, cross-disciplinary research and collaborations that aim to find the next big discovery in cancer research. We believe that research environments that foster communication and collaboration across research teams, disciplines, institutions and sectors have a higher likelihood of transformational breakthroughs that will have a tremendous impact in the cancer research field in Washington and beyond. CARE intends to match contributions of research groups, partnerships or collaborations aimed at solving critical challenges in cancer research, allowing them to more rapidly pursue

their best ideas. This program will provide grants up to \$750,000 in the first year for research planning and feasibility studies. Projects that demonstrate significant potential for solving a critical problem or achieving a transformational breakthrough in cancer research will be eligible to receive up to \$3 million per year for four additional years. In the first round of the Breakthrough Research grant opportunity, 11 of the 17 applicants who submitted a Letter of Interest were invited to submit a full proposal. The CARE Board is scheduled to award the first Cancer Breakthrough Research grants in December 2018.

LOOKING Forward



With continued success in identifying matching funds and soliciting excellent research proposals, **the CARE Fund is projected to fund 15 Distinguished Researchers and up to three Breakthrough Research Projects by 2020.**

Since Fiscal Year (FY) 2016, a total of \$14 million has been appropriated to the CARE Fund. CARE anticipates that all of the appropriated public funds will be expended or committed by June 30, 2019.

For each CARE grant awarded, there is an enormous potential for return on investment in the form of matching funds and jobs as well as economic benefits from commercialization and new research funding to Washington State. More importantly, in addition to the direct financial and economic return on investment,

CARE grants will fund cancer research efforts that have the potential to transform cancer prevention and treatment practices, improving health outcomes for Washingtonians and people all over the world. The significance of that transformation in health and wellness is virtually beyond measure.

The CARE Fund will continue to track progress of grantee institutions in an effort to evaluate and measure impact and return on investment from CARE grants.

In the next phase of strategic planning, CARE will identify strategies for maximizing funding for cancer research, prevention and care from sources other than the endowment.

FINANCIAL Summary

Financial Summary (Unaudited) - Fiscal Year 2018 (July 1, 2017 - June 30, 2018)

Revenues	
State Appropriation ¹	\$5,000,000.00
Interest Income	\$12,430.98
TOTAL REVENUE	\$5,012,430.98
Expenses	
Department of Commerce Administrative	\$17,667.18
CARE Administrative (state services)	\$36,900.30
Empire Health Foundation (Program Administrator) ²	\$480,894.46
CARE Fund Account Management Fees	\$2,431.77
Grant Payments ³	\$2,000,000.00
TOTAL EXPENSES	\$2,537,893.71
Excess of Revenues over Expenses	\$2,474,537.27

¹This amount only reflects the state appropriation for Fiscal Year (FY) 2018. An appropriation of \$5 million was also made in FY 2016. Since the inception of the CARE Fund, a total of \$10 million has been appropriated, which is slightly more than what was available for grantmaking and administration costs for the fiscal year beginning July 1, 2017.

²The Program Administrator accounts for approximately 10% of the state appropriated amount and includes the cost of independent scientific grant reviews and program team salary and support. A full appropriation of \$10 million in Fiscal Year 2018 as authorized by statute would not have increased the administrator cost.

³Four Distinguished Researchers grants of \$500,000 each were awarded and paid in FY 2018. Three additional Distinguished Researchers grants awarded in FY 2018 totaling \$1.5 million will be expended beginning in FY 2019.

During the CARE Fund's grantmaking startup period, the timing of the grant reviews and awards cycle resulted in a short-term remaining balance in the Fund at fiscal year-end. For the fiscal year ending June 30, 2018, the CARE Fund had a balance of \$7,452,129.91. This includes state appropriations and program expenditures in FY 2016 and FY 2017.

CARE grantees have committed \$21.7 million in non-state funds to match CARE's grant award commitments of \$3.5 million through FY 2018. The state appropriated \$4 million of the \$10 million authorized for FY 2019. CARE anticipates that all of the available public funds will be expended or committed by June 30, 2019.



(509) 309-3455 · www.wacarefund.org

Laura Flores Cantrell, Executive Director
laura.fc@empirehealthfoundation.org

Peter Choi, Program Coordinator
peter@empirehealthfoundation.org