

### **The** Jimmy Fund

# Milestones 2020



#### Dear Friends,

The events of this past year have tested us at Dana-Farber, in our community, and across our nation. Given these challenges, I am very proud of the myriad ways in which every person in the Dana-Farber and Jimmy Fund family stepped up and adjusted, particularly in our efforts to ensure the health and safety of our patients, their families, and our entire workforce.

In a year like no other, the core mission of the Institute remains the same: we are here to provide hope and healing for people facing cancer. To that end, even as the COVID-19 pandemic tested the country's health care system as never before,

clinical research in cancer stayed on course at Dana-Farber. We quickly developed new procedures to ensure that patients could remain on clinical trials during this period, and new enrollments continued, as well. In March, facing a nationwide shortage of new personal protective equipment (PPE), we converted a research facility to help sterilize PPE for re-use. We also redoubled our efforts to expand access to our comprehensive care by launching outpatient facilities in Chestnut Hill and Merrimack Valley, and introduced a new phase of digital health tools designed to simplify patients' care experience as much as possible.

As you will read in the following pages, our investigators also made crucial research progress and achieved many breakthroughs this year. Our physician-scientists tested several new targeted therapies for historically hard-to-treat cancers, garnered FDA approvals for new therapies, and pursued research aimed at reducing health disparities in vulnerable populations. Dana-Farber scientists leveraged their expertise to better understand and treat COVID-19, from mapping protein interactions that may drive the virus, to exploring ways to bar it from entering cells, to developing therapies to treat its complications. And thanks to new early detection screening techniques, we are closer than ever to a world in which cancer can be halted before it starts.

Navigating this year's highs and lows was made possible by the talent, tenacity, and compassion of our entire community. I want to especially acknowledge our generous donors and event participants who, throughout the year, saw a need and came forward with a tremendous outpouring of support. Thanks to your dedication, we are stronger than ever before and ready to move forward into the new year. For that, we thank you.

Sincerely,

Laurie H. Glimcher, MD President and CEO Richard and Susan Smith Professor of Medicine

# Besearch SAVING LIVES THROUGH DISCOVERY

#### Predicting Treatment Responses

Dana-Farber scientists have developed a new screening tool to predict effective therapies in solid tumors. Able to screen hundreds of drugs at once, the technique is faster and more accurate than previous approaches, and holds promise for improving doctors' ability to tailor treatments to individual patients.

#### First Epigenetic Drug for Rare Cancer

Thanks to a Dana-Farber-led study, the FDA approved the first epigenetic drug to treat solid tumors. The approval benefits patients with epithelioid sarcoma—a rare, aggressive soft tissue cancer that occurs mainly in young adults—and will aid development of epigenetic drugs for other solid tumors.

#### Early Detection for Kidney Cancer

About 35% of kidney cancers are diagnosed only after they have spread beyond the kidney and are harder to treat. But a new screening technique offers hope: our researchers developed a non-invasive liquid biopsy method that can detect kidney cancers with high accuracy—including small, localized tumors which are often curable if caught early.

#### Artificial Intelligence in Diagnosis

Using artificial intelligence, Dana-Farber researchers developed an algorithm that can outperform radiologists in diagnosing a common risk factor in head and neck cancer. The algorithm can improve doctors' ability to determine the stage of the disease and select the most effective treatments for each patient.

#### Targeting Multiple Myeloma

A new generation of targeted drugs studied and tested by Dana-Farber has received FDA approval for use in multiple myeloma. These novel therapies are producing better outcomes and fewer side effects, improving patients' quality of life during and after treatment.

#### New Insight into Disparities

Dana-Farber collaborated on a study that revealed how the intersection of gender, sexual orientation, race, and ethnicity may influence individuals' vulnerability to tobacco advertising. Previous research focused on each population separately, but since individuals may belong to more than one marginalized group, this new research provides insights that can better inform public health interventions.



A playful moment between Harold Burstein, MD, PhD, and his patient, Cheryll Plunkett, and her husband during a telemedicine appointment. Digital health solutions like this quickly gained traction during the COVID-19 pandemic and continue to supplement face-to-face visits for many patients.



### A New Center for Excellence

Dana-Farber launched the Center for BRCA and Related Genes, dedicated to the care for, prevention of, and research into BRCA-related cancers. Over the past 20 years, Dana-Farber investigators have made critical discoveries into heritable mutations in genes including BRCA1/2, which are linked to increased risk for many different types of cancer.

## CAR T-cell Therapy for Lymphoma

Thanks in part to results from a Dana-Farber clinical trial, the FDA approved the first CAR T-cell therapy for mantle cell lymphoma, a key advancement for patients with relapsed or treatment-resistant forms of the disease. Dana-Farber began offering the therapy this year.

#### Simplified Care

The Dana-Farber Direct Connect Program launched this year, providing companies with dedicated support services for their employees. Through partnerships with employers, payers, and other corporations, the program aims to ease the challenges that come with navigating a cancer diagnosis.

#### A Groundbreaking Collaboration

Dana-Farber and Massachusetts Eye and Ear collaborated on a procedure that uses a patient's own stem cells to repair damaged corneas. This is the first procedure of its kind to occur in the United States, and could help thousands of people with corneal blindness who cannot receive corneal transplants.

### **Expanding Our Reach**

To increase access to our high-quality patient care, we opened the Dana-Farber – Merrimack Valley adult outpatient facility north of Boston, and continued construction of Dana-Farber – Chestnut Hill to the west, which is expected to open in January 2021.

To learn more about our world-class research and patient care, or to get involved, please visit: **Dana-Farber.org | JimmyFund.org** 



Suzan Lazo prepares masks for decontamination through a procedure developed at Dana-Farber that allows PPE to be sterilized on-site and reused multiple times.



#### #3 in the World for Cancer

Dana-Farber Cancer Institute was named the #3 cancer hospital in the world by Newsweek in its new World's Best Specialized Hospitals rankings.

#### Top in New England, Top 6 Nationwide

Dana-Farber Cancer Institute has been the top ranked cancer hospital in New England by U.S. News and World Report for 20 consecutive years, and is the only cancer center in the country ranked in the top 6 for both adult and pediatric cancer programs.

#### **Top Doctors**

Boston magazine named more than 110 physicians and surgeons affiliated with Dana-Farber Cancer Institute to its annual "Top Doctors" guide, recognizing their expert and compassionate care.

#### Highly Cited Researchers

Twenty-four of Dana-Farber's researchers have been named as Highly Cited Researchers, according to an annual list from the Web of Science Group.

#### **To be removed from our mailing list, please contact:** Dana-Farber Cancer Institute & The Jimmy Fund, Division of Philanthropy, 10 Brookline Place West, 6th Floor Brookline, MA 02445-7226; 617-632-3019 or 800-52-JIMMY; or visit JimmyFund.org/opt-out.

#### #1 Women-Led Business

Dana-Farber Cancer Institute and Laurie H. Glimcher, MD, president and CEO, are #1 on the list of Top 100 Women-Led Businesses in Massachusetts, The Boston Globe and The Commonwealth Institute's annual list of noteworthy companies and nonprofits led by women.

#### Building an Inclusive Environment

Dana-Farber has been designated as an "LGBTQ Health Care EqualityTop Performer" by the Human Rights Campaign Foundation in recognition of our LGBTQ patient care and support, employee policies and benefits, and LGBTQ patient and community engagement.

#### **Employer of Excellence**

Dana-Farber is one of only 16 health care organizations across the U.S. named an Employer of Excellence by the American Academy of Physician Assistants, for creating a positive work environment and encouraging collaborative provider teams.

Dana-Farber and the Jimmy Fund share patient stories which may include descriptions of actual medical results. Dana-Farber provides personalized care for each patient based on their unique needs; their experiences and results will vary.

## THE IMPACT OF YOUR GIVING Clinical Trial Enables Major Milestones



OK Eason doesn't mind jokes about his unique first name, especially lately. Healthy and thriving more than 30 months after being diagnosed with a glioblastoma, Eason takes pleasure in telling people that he is more than just "O.K."

A month after his diagnosis, Eason joined a clinical trial at the Center for Neuro-Oncology at Dana-Farber. The phase II study is testing whether standard care for newly-diagnosed glioblastoma can be improved with the addition of a second drug, bavituximab. The hope is that bavituximab will activate the patient immune system to attack the cancer cells.

So far, Eason's disease has stayed stable, with no perceptible tumor growth, and he has remained on the trial ever since.

Eason is indeed more than just OK. He knows he has already beaten the odds, and milestones like his son's recent high school graduation are eagerly awaited and greatly cherished.

"Now I have a new goal," he says. "Seeing him graduate college."



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#### Alejandro Gutierrez, MD,

received the Milagros para Niños Award for his contributions to reseach and care for children with cancer and his work in Latin America.

#### Nikhil Munshi, MD,

was named president of the International Myeloma Society, which promotes research, education, and clinical studies worldwide.

#### **Komelia Polyak, MD, PhD,** was named a Fellow of the American Association

for the Advancement of Science, for pioneering studies into breast tumor progression.





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