On the cover:

Top row (left to right): Elizabeth M. Jaffee, MD, FAACR, 2018-2019 AACR President; Chuck Dandridge (*second from right*), an acute myeloid leukemia survivor featured in the *AACR Cancer Progress Report 2018*; Michael A. Caligiuri, MD, FAACR, 2017-2018 AACR President; Tori Lee (center), a leukemia survivor featured in the AACR Cancer Progress Report 2018.

Middle row (*left to right*): Margaret Foti, AACR Chief Executive Officer; Laurie Trotman, a breast cancer survivor featured in the AACR Cancer Progress Report 2018.

Bottom row (*left to right*): Lucile L. Adams-Campbell, PhD, Chair of the AACR Women in Cancer Research Council; Mike Delia, a non-Hodgkin James P. Allison, PhD, FAACR, a former member of the AACR Board of Directors who received the Nobel Prize in Physiology or Medicine in 2018 for his shared discovery of cancer therapy by inhibition of negative immune regulation; Ron Scolamiero (*left*), a prostate cancer survivor featured in the AACR Cancer Progress Report 2018.





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DRIVING INNOVATIVE CANCER SCIENCE TO PATIENT CARE





AMERICAN ASSOCIATION FOR CANCER RESEARCH **2018 ANNUAL REPORT**



AACR American Association for Cancer Research*

FINDING CURES TOGETHER*





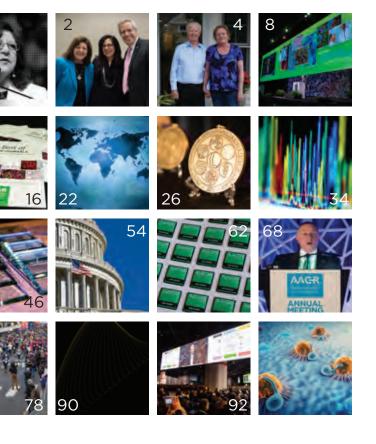








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WELCOME

and Friends:

advocacy.

Margan St

MARGARET FOTI, PHD, MD (HC)

ELIZABETH M. JAFFEE, MD. FAACR AACR President 2018-2019

MICHAEL A. CALIGIURI, MD. FAACR

DRIVING INNOVATIVE CANCER SCIENCE TO PATIENT CARE

Dear Colleagues

We are pleased to present the 2018 Annual Report of the American Association for Cancer Research (AACR) The report highlights the AACR's progress over the past year in support of our mission: to prevent and cure cancer through research, education, communication, collaboration, funding, and

The theme of the AACR Annual Meeting 2018, "Driving Innovative Cancer Science to Patient Care," is also the theme of this report. The report outlines all the ways in which AACR programs and initiatives support the efforts of investigators from the laboratory to the clinic to improve the lives of cancer patients.

As the report documents, 2018 was a spectacular year for the AACR, one that was marked by several milestones. The AACR Annual Meeting attracted a record number of participants, as we welcomed more than 22,500 scientists, clinicians, other health care professionals, survivors, and advocates to Chicago to share the latest breakthroughs in cancer science. The organization expanded its global outreach, collaborating with 16 different international scientific organizations to foster progress against cancer around the world. And AACR Project GENIE (Genomics Evidence Neoplasia Information Exchange) doubled in size, welcoming 11 new participating institutions that are committed to its goal of delivering the benefits of precision medicine to cancer patients.

In addition to these achievements, in 2018 we witnessed the confirmation of the place of cancer immunotherapy among the pillars

of cancer treatment—and celebrated a major accomplishment by one of our most distinguished members. AACR member and Fellow of the AACR Academy James P. Allison, PhD, FAACR-along with his colleague, Tasuku Honjo, MD, PhD-was awarded the Nobel Prize in Physiology or Medicine in October for his shared discovery of cancer therapy by inhibition of negative immune regulation. The day after the announcement, we were fortunate to have Dr. Allison attend the Fourth CRI-CIMT-EATI-AACR International Cancer Immunotherapy Conference: Translating Science into Survival. As he entered the ballroom for the morning session at the conference, Dr. Allison received a standing ovation from his friends, his colleagues, and the other senior investigators and earlycareer scientists in attendance.

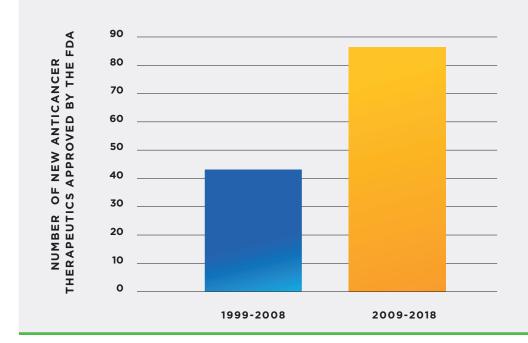
It is fitting that Dr. Allison was at an AACR conference to celebrate the breakthroughs that led to his recognition by the Nobel committee, as the AACR is uniquely positioned to support such breakthroughs in all areas of cancer research. As a joint effort with the Cancer Research Institute (CRI), the Association for Cancer Immunotherapy (CIMT), and the European Academy of Tumor Immunology (EATI), the International Cancer Immunotherapy

Conference is an example of the AACR's global collaboration to advance cancer science. AACR conferences such as this one bring together the greatest minds in cancer research to share the latest developments in the field, and special conferences—such as the AACR's first conference on Tumor Immunology in 2006-identify promising areas of inquiry and inspire scientists to pursue new approaches. And AACR grants and scientific achievement awards identify promising young investigators and accomplished senior scientists-including Dr. Allison in 2013, 2014, and 2015 (see *p.* 30)—and support their efforts to find the next breakthrough.

Continued progress against cancer requires continued inspiration and innovation. As outlined in this report, the AACR meets the challenge of driving innovative cancer science to patient care by pursuing an agenda that is scientifically bold, broad, and collaborative. Powered by the dedicated efforts of our 42,000 members, and guided by the best minds in cancer research, the AACR will continue translating knowledge into breakthroughs until our mission-the prevention and cure of all cancers—is realized.

DRIVEN BY RESEARCH

Research discoveries providing deep insights into the complexities of cancer are driving vital progress in public health and spurring the development of lifesaving improvements across the cancer care spectrum. Research-fueled advances in 2018 include the 18 new therapeutics approved by the U.S. Food and Drug Administration (FDA) for treating patients with various types of cancer. During this time period, the FDA also approved 10 previously approved anticancer therapeutics for treating new types of cancer.



The pace at which research discoveries are being converted to new anticancer therapeutics has been accelerating in recent years, as illustrated by the fact that the number of new anticancer therapeutics approved by the Food and Drug Administration (FDA) from 2009 to 2018 (*yellow bar*) was more than double the number approved by the agency in the previous decade (*1999-2008; blue bar*). Adapted from the AACR Cancer Progress Report 2018 (Fig. 9).

PROGRESS AGAINST CANCER IN 2018

A featured survivor in the AACR Cancer Progress Report 2018, Ron Scolamiero (with his wife, Laurie) participated in a clinical trial of apalutamide, a new molecularly targeted therapeutic, to treat his prostate cancer. He is currently cancer free. Apalutamide was approved for patients with non-metastatic castration-resistant prostate cancer in 2018.

American Association for Cancer Research Ann



NICOLE DICAMILLO CANCER SURVIVOR

A featured survivor in the *AACR Cancer Progress Report 2018*, Nicole DiCamillo was diagnosed with gastroenteropancreatic neuroendocrine tumor—a rare type of cancer, which used to be called carcinoid cancer, that can arise in the pancreas or in other parts of the gastrointestinal tract—at the age of 27. For the next 12 years she underwent surgeries, chemoembolizations, radiofrequency ablations, and other treatments, which kept the cancer at bay but did not control the debilitating symptoms it caused. In 2016, Nicole began a targeted radiation treatment called Lutathera, which delivers a radioisotope directly to the cancer cells after it has been infused or injected:

⁶⁶Over the years, I have had many treatments that have controlled the cancer, [but] none stopped the stomach and intestinal issues that greatly reduced my quality of life. Then, in 2016, I started seeing a new doctor and received four treatments of [the radioisotope] Lutathera through a compassionate use program.

Lutathera has changed my life.... Not only is it shrinking the tumors, it is allowing me to live a normal life with my husband and kids. I never take days off work. I coach my son's soccer team. I watch my kids' concerts. I couldn't even have dreamed of doing these things before Lutathera. It is the best thing that has happened for me and for my family.

Learn more about Nicole's story: AACR.org/Nicole

One of the areas of cancer treatment in which researchers are making extraordinarily rapid progress is immunotherapy, which refers to the use of therapeutics that harness the power of a patient's own immune system to treat his or her cancer. These revolutionary anticancer therapeutics include seven of the therapeutics to gain FDA approvals in 2018. Including these approvals, the number of types of cancer that can be treated by at least one immunotherapeutic has more than tripled in the past decade, increasing from just six to 20.

Discoveries that deepen our understanding of cancer biology are continuing to catalyze the development of new therapeutics that target specific molecules involved in cancer and to expand the use of those agents that have already been approved. These anticancer therapeutics are referred to as molecularly targeted therapeutics. Eighteen such therapeutics gained FDA approvals in 2018, including larotrectinib (Vitrakvi), which is the first molecularly targeted therapeutic to be approved for use based solely on whether a patient has a tumor with certain molecular characteristics rather than where in the body the tumor originated. Molecularly targeted therapeutics are part of the precision medicine revolution that is ensuring that more and more people live longer, higher-quality lives after a cancer diagnosis, including Ron Scolamiero (p. 5).

Another two anticancer therapeutics to gain FDA approvals in 2018 are providing oncologists with an exciting new way to use radiotherapy to treat neuroendocrine tumors. These pioneering targeted radiotherapeutics are benefiting many patients, including Nicole DiCamillo (*far left*).

The AACR is proud to have helped catalyze the progress made against cancer in 2018 through its many programs, services, and initiatives. For example, early data from one of the trials that led to the November 2018 approval of larotrectinib for treating certain patients with solid tumors that have a particular type of NTRK gene mutation were presented at the AACR Annual Meeting 2016.

With the number of cancer cases diagnosed in the United States rising every year, it is vital that the AACR increase public understanding of cancer and the importance of cancer research for saving lives. The annual AACR Cancer Progress Report is a cornerstone of these educational efforts and the AACR's efforts to advocate for increased annual federal funding by government entities that fuel progress against cancer and improve public health, in particular the National Institutes of Health (NIH), National Cancer Institute (NCI), FDA, and Centers for Disease Control and Prevention (CDC).

The AACR Cancer Progress Report 2018 achieves these goals by chronicling how federally funded research discoveries ignited progress against cancer over a 12-month period. The report also highlights that unwavering, bipartisan support from Congress, in the form of robust, sustained, and predictable annual increases in funding for the NIH, NCI, FDA, and CDC, is vital if we are to save more lives from cancer.

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PROGRESS AGAINST CANCER 2018

"

Enlisting experts from an even broader spectrum of disciplines, including physics, chemistry, engineering, mathematics, and computer science, will significantly accelerate the pace of progress in the future.

– ELIZABETH M. JAFFEE, MD, FAACR, AACR PRESIDENT (2018-2019) AACR CANCER PROGRESS REPORT 2018



As AACR President (2018–2019) Elizabeth M. Jaffee, MD, FAACR, noted in the *AACR Cancer Progress Report 2018*, "Enlisting experts from an even broader spectrum of disciplines, including physics, chemistry, engineering, mathematics, and computer science, will significantly accelerate the pace of progress in the future."

DRIVING INNOVATION FOR PATIENTS

The AACR Annual Meeting sets the research agenda for the individuals and institutions working across the full spectrum of basic, translational, and clinical science to prevent and cure cancer. For the sixth consecutive year, the meeting hosted a record number of attendees: the AACR welcomed more than 22,500 scientists, clinicians, other health care professionals, survivors, patients, and advocates to Chicago to share and discuss the latest breakthroughs in cancer science. With its expanding audience and broad scientific focus, the Annual Meeting has become the forum of choice for thought leaders in the cancer research community.

WELCOMING THE NEW DIRECTOR OF THE NATIONAL CANCER INSTITUTE (NCI)

Six months after being sworn in as the 15th director of the NCI, Norman E. Sharpless, MD, FAACR chose the AACR Annual Meeting 2018 as the forum for his first major public address. Reporting to AACR members and other meeting attendees on the results of his listening tour of the National Cancer Program, Dr. Sharpless discussed four key areas of focus for the NCI that will catalyze progress against cancer:

- Workforce Training and Development. Support the cancer research enterprise by fostering a diverse and talented cancer workforce.
- **Basic Science.** Reaffirm the NCI's commitment to basic science to drive novel approaches and technologies.

• **Big Data.** Increase data aggregation and interpretation to accelerate research and improve patient care.

• Clinical Trials. Fully realize the power of clinical trials through innovative design, administration, and analyses.

After his address, Dr. Sharpless joined AACR Immediate Past President Michael A. Caligiuri, MD, FAACR, and AACR President Elizabeth M. Jaffee, MD, FAACR, for a "fireside chat" to discuss the key focus areas in more detail and take questions from the audience.

NCL Leading the National Cancer Program Bainer Bainer Bainer Bainer Bainer Bainer

New NCI Director Norman E. Sharpless, MD, FAACR, reports on the results of his listening tour of the National Cancer Program and discusses his key areas of focus for the NCI.

"PROGRESS AND PROMISE" IN CHICAGO

The AACR Annual Meeting brings together all stakeholders in the cancer research enterprise to share the latest advances in cancer research and treatment; for the third consecutive year, the AACR brought these advances to the local community. The AACR partnered with the *Chicago Tribune* Prime Expo to present "Progress and Promise against Cancer," an educational event for residents in the Chicago area. Moderated by incoming AACR President Elizabeth M. Jaffee, MD, FAACR, the event featured leading experts in cancer research discussing the current state of cancer prevention and interception and breakthroughs in cancer treatment specifically, precision medicine and immunotherapy. The event concluded with a panel of patient advocates who placed these advances into the context of their own cancer journeys.



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ANNUAL MEETING 2018

AACR President (2017-2018) Michael A. Caligiuri, MD, FAACR, addresses attendees during the opening ceremony of the AACR Annual Meeting 2018.

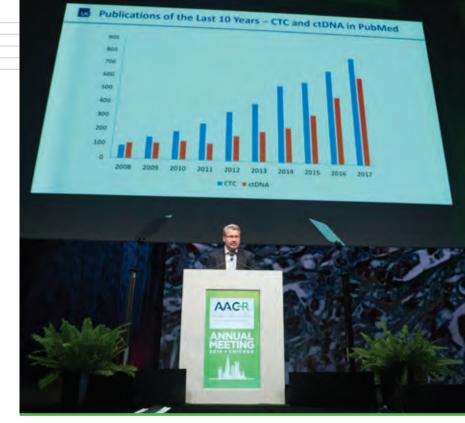
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ANNUAL MEETING 2018

INNOVATIVE CANCER SCIENCE

The theme of the AACR Annual Meeting 2018, Driving Innovative Cancer Science to Patient Care, emphasized how progress against cancer is driven by discoveries in all areas of cancer research and the cancer-related sciences. The program for the meeting, which featured the latest advances across the cancer research continuum, was developed with the goal of catalyzing new breakthroughs for patients.

Highlights of the cutting-edge research presented at the meeting were summarized by AACR experts in a wrap-up plenary session.

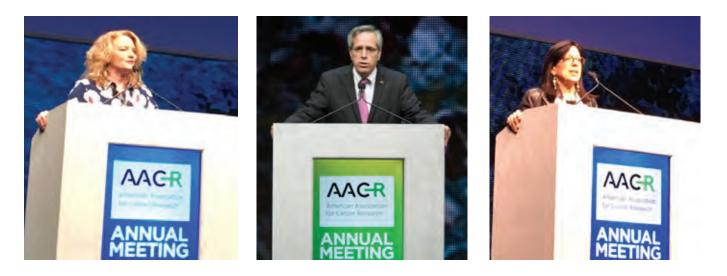


Klaus Pantel, MD, PhD, delivers his presentation on "Liquid biopsy: Novel technologies and clinical applications" at the opening plenary session of the AACR Annual Meeting 2018.



The first presenter, Avrum E. Spira, MD, MSc, gave an overview of some of the cancer prevention, early detection, and interception research reported at the meeting. He opened by focusing on two presentations about efforts to create a precancer atlas similar to The Cancer Genome Atlas but in premalignancy for squamous cell lung cancer and multiple myeloma. He explained that the information gained from these studies about the earliest cellular and molecular events leading to invasive cancer could

identify new approaches to prevention and early detection. Dr. Spira then discussed early promising data from clinical trials testing immunoprevention approaches in patients with either colonic polyps or ductal carcinoma in situ and studies using liquid biopsies for early detection of cancer. Lastly, Dr. Spira highlighted the challenges facing cancer survivors that were discussed in a special cancer survivorship session held in memory of Fellow of the AACR Academy Jimmie C. Holland, MD, FAACR



Elaine R. Mardis, PhD, 2018-2019 AACR **President-Elect**, discussed key basic science research presentations with a focus on those showing how new technologies and computational analysis approaches are significantly increasing our understanding of cancer. Dr. Mardis, who was also chair of the 2018 Annual Meeting Program Committee, highlighted presentations outlining how next-generation sequencing is deepening our knowledge of the cancer genome and epigenome, how liquid biopsies are being used to understand how cancers become resistant to treatment over time, and how advanced technologies are being used to study the molecular characteristics of individual cells in a tumor-including cancer cells, immune cells, and other cells in the tumor microenvironment. She also summarized two presentations on the use of systems biology approaches to model

cancer, which have yielded new insights into cancer biology and identified potential new combination treatments. Dr. Mardis concluded by reminding the audience that as technological advances continue to drive progress in basic cancer science, we will see further application of precision cancer medicine and better outcomes for patients.

Michael A. Caligiuri, MD, FAACR, AACR President 2017-2018, highlighted some of the groundbreaking clinical research presented at the meeting. He began by discussing two potentially practice-changing phase III clinical trials testing immunotherapeutics called checkpoint inhibitors as initial treatment for metastatic non-small cell lung cancer. Results from the first trial, KEYNOTE-189, showed that adding the checkpoint inhibitor pembrolizumab to

chemotherapy significantly improved overall survival, and results from the second trial, CheckMate-227, showed that patients who received two checkpoint inhibitors-nivolumab plus ipilimumabhad significantly longer progressionfree survival compared with those who received chemotherapy. Dr. Caligiuri then highlighted several presentations about clinical trials testing molecularly targeted therapeutics, including the ARROW trial of BLU-667 for RET-altered cancers, the EORTC 90101 trial of crizotinib for ALK-altered inflammatory myofibroblastic tumor, and biomarker data from the PALOMA-3 trial of palbociclib for HER2negative breast cancer. Throughout his presentation, Dr. Caligiuri emphasized how identifying biomarkers of response is essential if we are to optimize the use of immunotherapeutics and molecularly

targeted therapeutics-and to move these revolutionary therapeutics to earlier lines of treatment in a safe and effective way.

Elizabeth M. Jaffee, MD, FAACR, AACR President 2018–2019, concluded the session by explaining that despite the incredible advances we are making against the collection of diseases we call cancer, they remain a global challenge. She then highlighted several cutting-edge areas of research that she believes will ignite quantum leaps forward, including convergence science, implementation and behavioral sciences, and survivorship research. She also emphasized the importance of enhancing support for early- and mid-career cancer researchers, in particular female and minority cancer researchers, in order to accelerate the pace of scientific and clinical progress.

AT A GLANCE

22,500

People attended the meeting. The Annual Meeting 2018 was the largest in the history of the AACR.

69 Countries were represented at the meeting.

6,328

Proffered papers were accepted for presentation in poster sessions or minisymposia. A total of 27 of these papers were selected for presentation in poster discussion sessions; this new type of session provided the presenters of highly-rated posters with an opportunity to share their work in a brief oral presentation.

253

Scientific sessions highlighted the latest in innovative basic, translational, and clinical cancer science—including 44 major symposia, five plenary sessions, and 47 educational sessions. The program included three "Unsolved Mysteries" sessions; these

sessions brought together experts to address some of the major challenges in cancer research, such as the problem of cancer cachexia, the failure to translate IGF-1R and PI3K inhibitors into effective treatments. and how the age of patients at the time of cancer diagnosis impacts cancer genomics and drug development.

Panelists participated in a special session titled "The Cancer Survivorship Landscape: Potential Focus Areas for the Future." Chaired by Anna D. Barker, PhD, the session was presented in memory of Jimmie C. Holland, MD, FAACR, a 20-year AACR member and pioneer in the field of psycho-oncology who died in December 2017. The panelists represented the entire continuum from cancer research to cancer care and patient advocacy, and they addressed several issues affecting cancer survivors, including the psychosocial and lifestyle aspects of cancer survivorship; concerns regarding the development of second malignancies; and challenges such as comorbidities and the toxicities resulting from current and prior treatments.

167

Clinical trials were presented, the largest number of trials ever presented at an AACR Annual Meeting. Several high-impact trials were presented in special sessions, including two trials that received significant media coverage for their practice-changing results that demonstrate the potential of cancer immunotherapy:

- According to data from the phase III trial KEYNOTE-189, treatment with pembrolizumab in combination with chemotherapy improved the overall response rate in patients with metastatic nonsquamous non-small cell lung cancer, reducing by half the risk of death for previously untreated patients. These results set the stage for pembrolizumab to become a standard treatment for patients with non-small cell lung cancer (NSCLC).
- Results from another phase III trial (CheckMate-227) demonstrated that, among patients newly diagnosed with advanced NSCLC with high tumor mutational burden (TMB), those who received nivolumab plus ipilimumab had significantly improved progression-

free survival compared with patients who received the standard-of-care chemotherapy. These data could establish the combination of nivolumab plus ipilimumab as a first-line treatment option for patients with high-TMB NSCLC.

33

Recent Advances sessions were presented at the meeting to provide attendees with the latest updates in critical areas of research. In addition to sessions on organ sites, diagnostics and therapeutics, and cancer prevention, the program featured sessions on Recent Advances in Cancer Health Disparities Research. These sessions-which were added to the program by 2017-2018 AACR President Michael A. Caligiuri, MD, FAACR, as part of his presidential initiative to highlight the issue of cancer health disparities-focused on the scientific questions that must be answered to ensure that all patients benefit from breakthroughs in cancer treatment regardless of race or socioeconomic status.

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AAGER American Association for Cancer Research

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AACR American Association for Cancer Research **FINDING CURES TOGETHER**

Leena Gandhi, MD, PhD, presents the results of the phase III trial **KEYNOTE-189** in a clinical trials plenary session at the AACR Annual Meeting 2018.

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MEDIA COVERAGE

The AACR Annual Meeting 2018 generated global interest, as the innovative cancer science presented in Washington produced a significant amount of news coverage and social media activity.

33 News releases were distributed.

185 Reporters registered to cover the meeting.

2,666 Media mentions were generated.

21,592

People viewed the AACR's Facebook Live broadcasts during the Annual Meeting. The AACR conducted seven live broadcasts during the meeting, including a discussion of important science presented at the meeting. 2017-2018 AACR President Michael A. Caligiuri, MD, FAACR, hosted the broadcast, which featured Annual Meeting Program Chair Elaine R. Mardis, PhD.

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40,482 Tweets mentioned the #AACR18 hashtag.

10,324 Unique users joined the Annual Meeting conversation on Twitter.

500 Number of followers for the @AACRPres Twitter account. The AACR launched the social media account during the Annual Business Meeting of Members, when Elizabeth M. Jaffee, MD, FAACR, began her term as President. The account offers followers a perspective on the unique experience of serving as President of the AACR.

@AACRPRES ON TWITTER

FACEBOOK LIVE BROADCAST

AACR President Elizabeth Jaffee @AACRPres

Q Search Twitter

AACR

Taking a moment with my team at the HopkinsKimmel lab to celebrate #NationalSelfieDay.



AMONG THE MANY NEWS ORGANIZATIONS COVERING THE ANNUAL MEETING WERE THE FOLLOWING MAJOR MEDIA OUTLETS:

The Washington Post

THE WALL STREET JOURNAL.

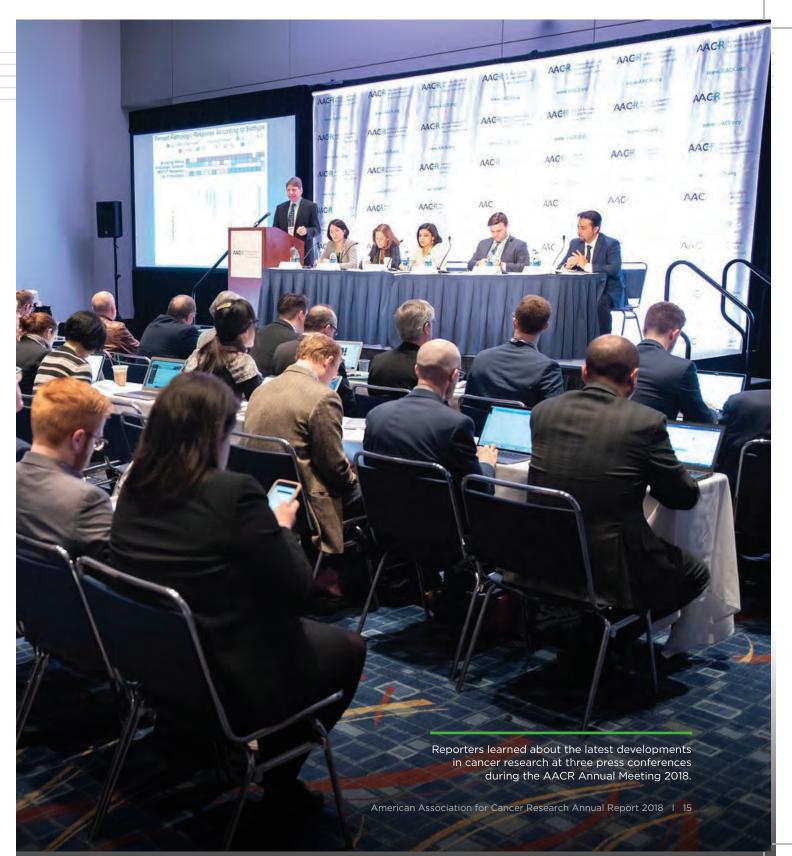
BBC

Forbes TIME





AP



SCIENTIFIC

PUBLISHING

ONGRATULATIONS O THE AUTHORS OF THE MOST-CITED ARTICLES!

Authors of the most cited articles published in AACR journals in 2016 were recognized during a reception at the AACR Annual Meeting 2018.

AACR JOURNALS: PUBLISHING HIGH-IMPACT CANCER SCIENCE

The eight journals in the AACR's scientific publishing program represent four percent of all journals in the oncology field, but they garner 15 percent of all citations in that field (Journal *Citation Report®*, 2018). This impact on the field—which is due in large part to the vision of their editors-inchief and the expertise of their editorial boards marks AACR journals as publication venues of choice across the spectrum of basic, translational, clinical, and epidemiological cancer research.



Chi Van Dang, MD, PhD, new editor-in-chief of *Cancer Research*, discusses the journal at a Meet the Editor session during the AACR Annual Meeting.

NEW EDITORIAL LEADERSHIP FOR CANCER RESEARCH

In January 2018, Chi Van Dang, MD, PhD, began his appointment as the new editorin-chief of *Cancer Research*, the AACR's longest-running journal. Dr. Dang—whose work has significantly contributed to the understanding of molecular signaling pathways and mechanisms that govern the unusual metabolism of cancer cells currently serves as Scientific Director of the Ludwig Institute for Cancer Research.

The second-most frequently cited cancer journal in the world, *Cancer Research* publishes high-impact papers in all areas of cancer science. The cancer field changes rapidly, and in his first year Dr. Dang has launched new sections of the journal to reflect those changes. By inviting engineers, mathematicians, physicists, and data scientists to share their work in *Cancer Research*, and by introducing to the cancer research community emerging tools and technologies to attack the cancer problem, Dr. Dang has enhanced the journal's position as a critical driver of progress against cancer.

ACKNOWLEDGING **OUTSTANDING EDITORIAL** SERVICE

The AACR gratefully acknowledges the contributions of three editors-in-chief whose terms of service ended in 2018:

Cancer Epidemiology, Biomarkers & Prevention (CEBP) Timothy R. Rebbeck, PhD



Since his appointment as editor-in-chief began in 2008, Timothy R. Rebbeck, PhD, has positioned CEBP as a critical cross-disciplinary publication venue for a range of interdependent fields, including epidemiology, translational science, survivorship, and prevention. During his tenure, Dr. Rebbeck emphasized the importance of population science and shaped the journal's content via commissioned articles that addressed high-priority issues, including genetic epidemiology, emerging technologies, survivorship, and surveillance. In addition, he increased the journal's focus on the full range of health disparities research, to ensure that all patients—including minorities and medically underserved populations—benefit from advances in cancer screening and treatment.

CEBP published high-impact research across a wide range of fields under Dr. Rebbeck's leadership, including the following highly-cited articles:

• A review describing the changing global patterns of cancer incidence and mortality for select common

cancer sites using data compiled by the International Agency for Research on Cancer (IARC). [Jemal et al., August 2010]

- A study demonstrating the expression of PD-1 and PD-L1-two potentially targetable immune checkpoint proteins—in a substantial proportion of solid tumors, including some aggressive subtypes that lack targeted treatment modalities. [Gatalica et al., December, 2014]
- The first study to project cancer prevalence in the U.S. through 2040 in an aging context, predicting a "silver tsunami" in which 73 percent of U.S. cancer survivors in 2040 will be 65 or older. [Bluethmann et al., July 2016]
- An introduction to the OncoArray, an inexpensive genotyping microarray developed by a worldwide community of investigators to understand common causes of cancer susceptibility and progression. [Amos et al., January 2017]

Cancer Prevention Research Scott M. Lippman, MD



As the founding editor-in-chief, Scott Lippman, MD, established Cancer Prevention Research as the first scientific journal devoted exclusively to cancer prevention. In addition to providing a critical bridge between basic and clinical prevention research, Dr. Lippman's vision for the journal included creating a forum for emerging science that attempted to extend the current conceptual and practical boundaries of prevention. His focus on cutting-edge science—coupled with an awareness of changes in the current paradigm-established Cancer Prevention Research as the preferred publication outlet for groundbreaking studies, including:

• The first prospective assessment of confirmed HPV status in black versus white head and neck cancer patients, investigating racial survival disparities in the HPV-induced cancer epidemic. [Settle and Cullen et al., September 2009]

- A randomized, placebo-controlled phase II trial of the oral prostacyclin analogue iloprost, which showed an improvement in bronchial histology in former smokers with sputum atypia—the first and only positive chemoprevention trial for lung cancer. [Keith et al., June 2011]
- The first study to demonstrate a durable antibody response from a single dose of HPV vaccine. Several international trials are underway to investigate the study's implication that that one dose of the HPV vaccine may be sufficientwhich could have a major impact on implementation science. [The CVT Group, November 2013]

In his inaugural editorial as editor-inchief, Napoleone Ferrara, MD, FAACR, noted that despite the great progress made in cancer treatment, more than 90% of phase III clinical trials in oncology still fail to meet their primary endpoints-a reminder of the ongoing need to improve the safety and efficacy of new drugs, the predictability of preclinical and earlystage clinical studies, and strategies for clinical drug development. During his tenure, he transformed *MCT* to address these challenges, expanding the journal's focus in critical areas such as biomarkers and companion diagnostics as well as new models and technologies. Dr. Ferrara also expanded the number of high-quality reviews in the journal with the launch of MCT Focus issues; under his stewardship, the citation impact of review articles published in MCT increased by 60%.

Therapeutics

Napoleone

Ferrara, MD,

(MCT)

FAACR

MCT published high-priority research across the spectrum of oncology drug



discovery and preclinical development during Dr. Ferrara's tenure, including the following highly-cited articles:

- A review of PD-L1 IHC as a predictive biomarker for anti–PD-1/PD-L1 therapy across multiple tumor types. [Patel et al., April 2015]
- A detailed study of EPZ-6438, an EZH2 inhibitor (in phase I trials at the time) that resulted in profound and durable tumor regression.

[Knutson et al., April 2014]

- A characterization of CB-839, a newlydiscovered glutaminase inhibitor that may have therapeutic benefit for patients with triple-negative breast cancer and perhaps other glutamine-dependent cancers. [Gross et al., April 2014]
- A study demonstrating that the long noncoding RNA ANRIL promotes proliferation of non-small cell lung cancer and inhibits apoptosis. [Nie et al., January 2015]

BY THE NUMBERS

24.373

Current Impact Factor for Cancer *Discovery*—which ranks sixth out of 222 journals in the Oncology categoryaccording to the 2017 Journal Citation Report.

AACR journals ranked in the top 8% in the Oncology category with regard to Impact Factor, according to the Journal Citation Report released in July 2018. *Cancer Discovery* ranked 6th out of all oncology journals, followed by Clinical *Cancer Research* (12th), *Cancer Immunology* Research (16th), and Cancer Research (17th).

35

Days from manuscript submission to first decision (on average). The AACR has made a concerted effort to reduce turnaround times for peer review and to improve the overall author experience.

26 million Full-text views of AACR journal articles were recorded in 2018.





The AACR thanks its editors-in-chief for their hard work and stewardship of its scientific publishing program during 2018.







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EDITORS-IN-CHIEF

CANCER DISCOVERY



LEWIS C. CANTLEY, PHD, FAACR Sandra and Edward Meyer Cancer Center at Weill Cornell Medical College New York, New York

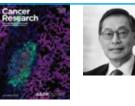
JOSÉ BASELGA, MD, PHD, FAACR Memorial Sloan Kettering Cancer Center New York, New York [Until December 2018]

CANCER PREVENTION RESEARCH



SCOTT M. LIPPMAN, MD UC San Diego Moores Cancer Center San Diego, Čalifornia [Until July 2018]

CANCER RESEARCH



CHI VAN DANG, MD, PHD, FAACR Ludwig Institute for Cancer Research New York, New York The Wistar Institute Philadelphia, Pennsylvania

CLINICAL CANCER RESEARCH



KEITH T. FLAHERTY, MD Massachusetts General Hospital Cancer Center Boston, Massachusetts

CANCER EPIDEMIOLOGY, BIOMARKERS & PREVENTION



IMOTHY R. REBBECK, PHD Dana-Farber Cancer Institute Boston, Massachusetts [Until December 2018]

CANCER IMMUNOLOGY RESEARCH



OBERT D. SCHREIBER, PHD Washington University School of Medicine St. Louis, Missouri

PHILIP D. GREENBERG, MD Fred Hutchinson Cancer Research Center Seattle, Washington



MOLECULAR CANCER RESEARCH



KAREN E. KNUDSEN, PHD Kimmel Cancer Center Philadelphia, Pennsylvania

MOLECULAR CANCER THERAPEUTICS



NAPOLEONE FERRARA, MD, FAACR UC San Diego Moores Cancer Center San Diego, Čalifornia [Until December 2018]

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COLLABORATIONS ADVANCING CANCER SCIENCE WORLDWIDE

With programs in 12 countries and members in 120 countries, the AACR collaborates on a global scale to promote scientific excellence and benefit all people by reducing cancer incidence, morbidity, and mortality. Through collaborations with 16 international organizations, the AACR provided scientific conferences, educational workshops, and financial support to the cancer research community on six continents in 2018.



The AACR and the Korean Cancer Association (KCA) collaborated to host the AACR-KCA Joint Conference on Precision Medicine in Solid Tumors. Held in November, the conference was the first AACR-KCA joint program presented in Seoul, Korea.

(Opposite page) AACR President (2017-2018) Michael A. Caligiuri, MD, FAACR, and Cancer Research UK (CRUK) Chief Clinician Charles Swanton, MD, PhD, FRCP, announce a new international alliance between the AACR and CRUK during the opening ceremony of the AACR Annual Meeting 2018.

AACR INTERNATIONAL







AACR INTERNATIONAL

LAUNCHING A NEW TRANSATLANTIC PARTNERSHIP

In April 2018, the AACR and Cancer Research UK (CRUK) announced a new international alliance aimed toward accelerating the pace of progress against cancer. The announcement was made jointly by AACR President (2017-2018) Michael A. Caligiuri, MD, FAACR, and CRUK Chief Clinician Charles Swanton, MD, PhD, FRCP, during the opening ceremony at the AACR Annual Meeting 2018.

The alliance between the world's largest professional organization dedicated to advancing cancer research and the world's largest fundraising medical research charity will build transatlantic collaborations by establishing training and exchange programs, convening international meetings and workshops, and uniting the community to influence global research policy.

JOINT CONFERENCES AND WORKSHOPS

The AACR collaborated with 12 international cancer research organizations in 2018 to develop the following joint conferences, educational workshops, and symposia:

TWENTIETH ECCO-AACR-EORTC-ESMO METHODS IN CLINICAL CANCER RESEARCH WORKSHOP

Zeist, The Netherlands, June 2018

SIXTH JCA-AACR SPECIAL JOINT CONFERENCE ON THE LATEST ADVANCES IN LUNG CANCER RESEARCH: FROM BASIC SCIENCE TO THERAPEUTICS Kyoto, Japan, July 2018

ACORD: AUSTRALIA & ASIA PACIFIC CLINICAL ONCOLOGY RESEARCH DEVELOPMENT WORKSHOP Sydney, Australia, September 2018

SECOND AACR INTERNATIONAL CONFERENCE ON TRANSLATIONAL CANCER MEDICINE: CANCER DISCOVERIES FOR CLINICAL APPLICATION Held in cooperation with LACOG

São Paulo, Brazil, September 2018

FOURTH CRI-CIMT-EATI-AACR INTERNATIONAL CANCER **IMMUNOTHERAPY CONFERENCE:** TRANSLATING SCIENCE INTO SURVIVAL New York, New York, September 2018

EACR-AACR-ISCR CONFERENCE: THE CUTTING EDGE OF CONTEMPORARY CANCER RESEARCH Jerusalem, Israel, October 2018

AACR-KCA JOINT CONFERENCE ON PRECISION MEDICINE IN SOLID TUMORS Seoul, Korea, November 2018

EORTC-NCI-AACR MOLECULAR TARGETS AND CANCER THERAPEUTICS SYMPOSIUM Dublin, Ireland, November 2018

INNOVATION AND BIOMARKERS IN CANCER DRUG DEVELOPMENT: A JOINT MEETING PRESENTED BY EORTC, NCI, EMA, AND AACR

Brussels, Belgium, November 2018



OTHER INTERNATIONAL COLLABORATIONS

The AACR worked with additional organizations while developing joint sessions for the following international conferences:

A.C. CAMARGO NEXT FRONTIERS TO CURE CANCER CONFERENCE

São Paolo, Brazil, May 2018

The AACR partnered with LACOG to offer a session on "Science behind the Trial," in which Brazilian investigators presented the results of three clinical trials and AACR scientists discussed the biological underpinnings of each study.

CSCO 21ST ANNUAL MEETING

Xiamen, China, September 2018 The AACR and CSCO offered a symposium titled "Update and New Paradigm in Cancer Immunology Research."

UICC WORLD CANCER CONGRESS

Kuala Lumpur, Malaysia, October 2018 The AACR worked with the UICC to organize a session on "Breast Cancer Genomic Risk Assessment in Global Health: Implementation in Low-Resource Settings."

ESMO ASIA CONGRESS 2018

Singapore, November 2018 The AACR collaborated with the conference organizers to develop two joint symposia: "PD1/PDL1: From Discovery to Clinical Use" and "ALK Gene Fusions: From Discovery to Clinical Use."

INTERNATIONAL AACR COLLABORATORS IN 2018

A.C. Camargo Cancer Center Association for Cancer Immunotherapy (CIMT) Cancer Science Institute of Singapore (CSI) Chinese Society for Clinical Oncology (CSCO) Cancer Research UK (CRUK) European Academy of Tumor Immunotherapy (EATI) European Association for Cancer Research (FACR) European Cancer Organisation (ECCO) European Medicines Agency (EMA) European Organisation for Research and Treatment of Cancer (EORTC) European Society for Medical Oncology (ESMO) Israel Society for Cancer Research (ISCR)

Japanese Cancer Association (JCA) Korean Cancer Association (KCA) Latin American Cooperative Oncology Group (LACOG)

Medical Oncology Group of Australia (MOGA)



In 2018, the AACR offered an expanded slate of opportunities to international investigators to travel to Chicago, Illinois, and participate in the AACR Annual Meeting—the touchstone event for the global cancer research community-while also offering opportunities for AACR members to present their work abroad:

POSTER PRIZES AND TRAVEL AWARDS

• Working with the program committees for the Frontiers in Cancer Science Conference (Singapore, November 2017; organized by the Cancer Science Institute of Singapore) and the Fourth Conference on New Horizons in Cancer Research (Shanghai, China, November 2017), the AACR awarded prizes to the presenters of two highly-rated posters from each meeting. The prizes provided travel support to the presenters, enabling them to attend the AACR Annual Meeting.

• Launched in 2016, the AACR African Cancer Researcher Travel Awards provided financial assistance to meritorious earlycareer investigators engaged in cancer research in Africa, enabling them to attend and present their research at the

AACR Annual Meeting. Award recipients who attended the Annual Meeting 2018 received additional networking opportunities at the University of Chicago provided by the AACR. Hosted by AACR International Affairs Committee member Olufunmilayo I. Olopade, MD, FAACR, the recipients toured the university hospital and the Olopade Laboratory, participated in a professional development panel with university faculty and attended the E. E. Just Lecturewhich honors Ernest Everett Just, one of the first African Americans to earn a PhD from the university. The recipients were also recognized at the AACR Scholarin-Training Award Reception by Peter A. Jones, PhD, DSc, FAACR, chair of the AACR International Affairs Regional Advisory Subcommittee on Africa (above, third from left).

• As part of a new partnership with the AACR to promote international scientific exchange, the Chinese Society for Clinical Oncology (CSCO) launched the CSCO Young Investigator Travel Awards in 2018. Administered by the AACR, the program selected 12 AACR members who presented meritorious abstracts at

the AACR Annual Meeting 2018 and provided them with travel support to attend and present their work at the CSCO 21st Annual Meeting (Xiamen, China, September 2018).

ENHANCING THE AACR'S **RELATIONSHIP WITH ISRAEL**

While in Jerusalem in October to attend the conference on "The Cutting Edge of Contemporary Cancer Research"-a joint venture between the AACR, the European Association for Cancer Research (EACR), and the Israel Society for Cancer Research (ISCR)—AACR CEO Margaret Foti, PhD, MD (hc) (above center), met with Israeli President Reuven Rivlin (*above right*) and First Lady Nechama Rivlin at their residence. During her remarks, Dr. Foti highlighted the progress that has been made against cancer and the importance of international collaborations to advancing that progress. The meeting was coordinated by Miri Ziv (*above left*), Director General of the Israel Cancer Association; in her remarks, Dr. Foti acknowledged Ms. Ziv for her contributions to international cancer research and advocacy.

WORLD CANCER RESEARCH DAY

The AACR joined ten other cofounding partner organizations to mark World Cancer Research Day on September 24. The goal of World Cancer Research Day was to raise awareness of the extraordinary impact of cancer science and to acknowledge the contributions made by cancer researchers to reduce the global burden of cancer.



HONORING SCIENTIFIC ACHIEVEMENT





Established in 2013, the AACR Academy recognizes and honors distinguished scientists whose major scientific contributions have propelled significant innovation and progress against cancer. Fellows of the AACR Academy serve as a vital resource to AACR leadership, advancing the organization's mission by providing scientific guidance and a powerful voice in support of sound science policy.

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HONORING SCIENTIFIC ACHIEVEMENT

FELLOWS OF THE AACR ACADEMY: _EADING PROGRESS AGAINST CANCER

AACR ACADEMY ESTABLISHES GOVERNANCE AND LEADERSHIP BODY

To formalize its advisory and advocacy roles within the organization, the AACR established a governance structure for the AACR Academy in 2018. This leadership body consists of an elected presidentelect, who will serve for one year and then transition to a two-year term as Academy president at the AACR Annual Meeting 2019, and six elected Steering Committee members who will serve three-year terms.

The following AACR Fellows are inaugural members of the AACR Academy leadership body:

PRESIDENT-ELECT (2018-2019) AACR ACADEMY PRESIDENT (2019-2021)



JUDY E. GARBER, MD, MPH, FAACR

AACR ACADEMY STEERING COMMITTEE



CARLOS L. ARTEAGA, MD, FAACR



JOAN S. BRUGGE PHD. FAACR



MICHAEL A. CALIGIURI, MD, FAACR



RAYMOND N. DUBOIS, MD, PHD, FAACR



TYLER JACKS, PHD, FAACR



KAREN H. VOUSDEN, PHD, FAACR

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CLASS OF 2018 INDUCTION



the 2018 class of Fellows of the AACR Academy was formally inducted.



ALAN ASHWORTH, PHD, FRS, FAACR UCSF Helen Diller Family Comprehensive Cancer Center University of California, San Francisco San Francisco, California





BRUCE A. BEUTLER, MD, FAACR University of Texas Southwestern Medical Center Dallas, Texas

HONORING SCIENTIFIC ACHIEVEMENT

FELLOWS OF THE AACR ACADEMY CLASS OF 2018



For characterizing the significance of cancer susceptibility genes, notably BRCA2, in the pathogenesis of cancer, and for his contributions to the establishment of PARP inhibitors as effective therapeutic options for the treatment of various cancers.



RENÉ BERNARDS, DPHIL, FAACR Netherlands Cancer Institute Amsterdam, Netherlands

For establishing innovative strategies to categorize biomarkers of treatment response and effective treatment combinations, and for pioneering the use of genetic screening tests to identify and stratify individuals at risk of developing breast cancer.



For his discovery of Toll-like receptors and for deciphering the biological mechanisms and signaling events that govern tumor necrosis factor-mediated inflammation and innate immune system activation.



MICHAEL A. CALIGIURI, MD, FAACR City of Hope National Medical Center Duarte, California

For elucidating the fundamental mechanisms of natural killer cell development and immune surveillance, and for his commitment to advancing cancer health disparities research and promoting the collection and use of clinical samples to guide screening, treatment, and surveillance protocols.



CHI VAN DANG, MD, PHD, FAACR Ludwig Institute for Cancer Research New York, New York The Wistar Institute Philadelphia, Pennsylvania

For illuminating mechanistic links between the MYC oncogene and cellular metabolism, and for defining how tumor cell utilization of various energy sources contributes to cancer progression.



DWIGHT GARY GILLILAND, MD, PHD, FAACR Fred Hutchinson Cancer Research Center Seattle, Washington

For identifying genetic drivers of various hematologic malignancies including leukemia, myelodysplastic syndrome, and myeloproliferative disease, and for his contributions to the development of monoclonal antibody-based immunotherapeutics.



LAURIE H. GLIMCHER, MD, FAACR Dana-Farber Cancer Institute Harvard Medical School Boston, Massachusetts

For her central discoveries in the fields of transcriptional regulation, lymphocyte differentiation, inflammation, and osteobiology, and for her trailblazing efforts to improve access to care, health policy, and medical education.



ELIZABETH M. JAFFEE, MD, FAACR Sidney Kimmel Comprehensive Cancer Center The Johns Hopkins University School of Medicine Baltimore, Maryland

For her groundbreaking efforts dedicated to the development of cancer vaccines and vaccine combinations that bypass tumor-associated immunotolerance, and for exploiting genomic and proteomic technologies to define biomarkers required for cancer onset, progression, and metastasis.



RICHARD D. KLAUSNER, MD, FAACR Juno Therapeutics Los Altos Hills, California

For defining molecular mechanisms of intracellular trafficking, translation, and protein assembly, and for leading the creation of national and international programs to support the spectrum of cancer research, resulting in improved cancer diagnosis and treatment strategies.



ROGER D. KORNBERG, PHD, FAACR Stanford University School of Medicine Stanford, California

For his pioneering discovery of the structure and function of nucleosomes, and for revolutionizing the understanding of the molecular machinery and orchestrated mechanisms required for eukaryotic gene transcription.



ARTHUR D. LEVINSON, PHD, FAACR Calico Life Sciences LLC South San Francisco, California

For his visionary leadership and relentless commitment to the discovery and development of targeted therapeutics for the treatment of various malignancies, including HER2/neu monoclonal antibodies for the treatment of breast cancer.



NORMAN E. SHARPLESS, MD, FAACR National Cancer Institute Bethesda, Maryland

For his seminal contributions to stem cell biology and to demonstrating the relationship between tumor suppressor activation, cell cycle control, cellular senescence, and molecular aging in tumorigenesis.

SCIENTIFIC ACHIEVEMENT AWARDS

Progress against cancer requires innovative thinking and discovery across the full spectrum of research. AACR Scientific Achievement Awards and Lectureships recognize innovative investigators in all fields of inquiry and provide research funding to support their next breakthroughs.

The ability of the AACR Scientific Achievement Awards program to identify paradigm-shifting excellence in cancer research was confirmed in October 2018 when AACR member and former member of the AACR Board of Directors James P. Allison, PhD, FAACR, was awarded the Nobel Prize in Physiology or Medicine for his shared discovery with colleague Tasuku Honjo, MD, PhD, of cancer therapy by inhibition of negative immune regulation. Before culminating in this recognition by the international scientific community, Dr. Allison's career was marked by several AACR awards, including:

- The AACR-CRI Lloyd J. Old Award (2013), for innovative research that stimulates new directions in cancer immunology;
- The AACR G.H.A. Clowes Memorial Award (2014), for outstanding accomplishments in basic cancer research; and
- The Pezcoller Foundation-AACR International Award for Cancer Research

(2015; *above right*), for outstanding basic research that holds promise for continued substantive contributions to progress in the field of cancer.

By honoring exceptional scientists in all scientific areas and at all career stages, AACR Scientific Achievement Awards highlight the critical steps along the path of progress against cancer.





HONORING SCIENTIFIC ACHIEVEMENT

2018 AWARD RECIPIENTS AND LECTURERS





Twenty-Seventh AACR-American Cancer Society Award for Research Excellence in Cancer Epidemiology and Prevention

LESLIE BERNSTEIN, PHD

City of Hope Comprehensive Cancer Center Duarte, California



Fifty-Eighth AACR G.H.A. Clowes Memorial Award SCOTT W. LOWE, PHD Memorial Sloan Kettering Cancer Center New York, New York



Second AACR-Waun Ki Hong Award for Outstanding Achievement in Translational and Clinical Cancer Research

PASI A. JÄNNE, MD, PHD

Dana-Farber Cancer Institute Harvard Medical School Boston, Massachusetts



Twenty-First Pezcoller-AACR International Award for Extraordinary Achievement In Cancer Research TONY HUNTER, PHD, FAACR

The Salk Institute La Jolla, California



Twenty-Third AACR Joseph H. Burchenal Memorial Award for Outstanding Achievement in Clinical Cancer Research

JOHANN S. DE BONO, MD. PHD

Institute of Cancer Research and Royal Marsden Sutton, United Kingdom



Sixth AACR-CRI Lloyd J. Old Award in Cancer Immunology ANTONI RIBAS, MD, PHD

Jonsson Comprehensive Cancer Center Parker Institute for Cancer Immunotherapy Center at University of California Los Angeles Los Angeles, California



Fifteenth AACR Award for Lifetime Achievement in Cancer Research

JOSEPH R. BERTINO, MD. FAACR

Rutgers Cancer Institute of New Jersey Rutgers Robert Wood Johnson Medical School New Brunswick, New Jersey



Twelfth AACR Princess Takamatsu Memorial Lectureship LISA M. COUSSENS, PHD

Knight Cancer Institute Portland, Oregon



Twelfth AACR Award for Outstanding Achievement in Chemistry in Cancer Research JOHN A. KATZENELLENBOGEN, PHD

University of Illinois at Urbana-Champaign Urbana, Illinois



Twelfth Margaret Foti Award for Leadership and Extraordinary Achievements in Cancer Research ISAIAH J. FIDLER, DVM, PHD, FAACR University of Texas MD Anderson Cancer Center Houston, Texas



Thirteenth AACR-Minorities in Cancer Research Jane Cooke Wright Memorial Lectureship JOHN D. CARPTEN, PHD

University of Southern California Keck School of Medicine





Los Angeles, California



Team Leader

Cancer Science Institute of Singapore Singapore

Cancer Science Institute of Singapore Singapore

Singapore

Singapore

(A*STAR) Singapore

Twelfth Annual AACR Team Science Award GENOMIC APPROACHES TO PREVENTING AND TREATING ASIAN-PREVALENT



PATRICK TAN, MD, PHD Duke-NUS Medical School

BIN TEAN TEH, MD, PHD Duke-NUS Medical School

STEVEN ROZEN, PHD Duke-NUS Medical School

SOON THYE LIM, MBBS, MRCP (UK), FAMS National Cancer Centre Singapore

Duke-NUS Medical School

CHOON KIAT ONG, PHD

National Cancer Centre Singapore Agency for Science, Technology and Research

CHIEA CHUEN KHOR, MBBS, PHD Agency for Science, Technology and Research (A*STAR) Singapore

TATSUHIRO SHIBATA, MD, PHD

The University of Tokyo National Cancer Center Tokyo, Japan

CHAWALIT PAIROJKUL. MD Khon Kaen University Khon Kaen, Thailand

NARONG KHUNTIKEO, MD

Khon Kaen Universitv Khon Kaen, Thailand

JACOB SEE-TONG PANG, MD, PHD

Chang Gung Memorial Hospital Linkou, Taiwan SEN-YONG HSIEH, MD, PHD

Chang Gung Memorial Hospital Linkou, Taiwan



Fourteenth AACR-Irving Weinstein Foundation Distinguished Lectureship

JENNIFER A. DOUDNA, PHD, FAACR University of California Berkeley Berkeley, California



Twenty-First AACR-Women in Cancer Research Charlotte Friend Memorial Lectureship DAFNA BAR-SAGL PHD

New York University Langone Medical Center New York, New York



Ninth AACR Distinguished Lectureship on the Science of Cancer Health Disparities, funded by Susan G. Komen

CHANITA HUGHES-HALBERT, PHD

Medical University of South Carolina Charleston, South Carolina



Eleventh AACR Distinguished Lectureship in Breast Cancer Research ZENA WERB, PHD

University of Califonia San Francisco San Francisco, California



Eleventh AACR Outstanding Investigator Award for Breast Cancer Research, funded by the Breast Cancer **Research Foundation**

ANN PARTRIDGE, MD, MPH Dana-Farber Cancer Institute Boston, Massachusetts

SCIENTIFIC LEADERSHIP: CATALYZING COLLABORATIONS

The AACR identifies the challenges facing cancer scientists and clinicians; assembles leaders in various fields to address those challenges; and works with academic, industry, and government institutions to implement solutions that drive progress against cancer.



Members from each AACR Project GENIE participating center and strategic partners gathered at the AACR offices in January for their Winter Summit.

AACR PROJECT GENIE: POWERING PRECISION MEDICINE

As the founder of Project GENIE (Genomics Evidence Neoplasia Information Exchange), the AACR is working to deliver on the promise of precision medicine. Built upon data sharing between the world's leading cancer centers, AACR Project GENIE is an international cancer registry that aggregates clinical-grade tumor sequencing data with limited clinical data to build virtual cohorts of patients on whom detailed outcomes data can be retrieved. By offering insights into the relationships between genotype and patient outcome, the project powers translational and clinical research—facilitating the development of new therapies, informing the design of better clinical trials, and improving clinical decision-making for the benefit of all cancer patients.

The increasing momentum of AACR Project GENIE over the past year was reflected in the number of institutions expressing interest in joining the consortium, which more than doubled in size in 2018 as 11 new participating organizations joined the eight founding participants (*p. 36*). The expansion of the consortium was accompanied by an expansion of the data set, as releases in January and July increased the number of sequenced tumors by more than 50 percent. AACR Project GENIE is now one of the largest fully public cancer genomic datasets, with more than 48,000 de-identified genomic records covering more than 80 cancer types.

In February 2018—one year after the release of the first data set—members of the consortium published a paper in the journal *JCO Clinical Cancer Informatics* that detailed the genesis of the project and shared the perspectives of the founding institutions. The paper, which was intended to share best practices and serve as a guide for other organizations who wish to develop their own genomic data-sharing consortia, was among the most read articles in the journal in July 2018.

AACR Project GENIE is also supporting the "2020 by 2020" Presidential initiative and collaboration. Announced in March 2018, this initiative from AACR President (2017-2018) Michael A. Caligiuri, MD, FAACR, will perform genomic sequencing of both tumor and normal tissue from 2,020 consented African-American cancer patients by the year 2020 and aggregate this

SCIENCE AND EDUCATION

The AACR Think Tank on Cancer Health Disparities met in Washington, DC, in October.

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AACR PROJECT GENIE

FOUNDING CONSORTIUM PARTICIPANTS

Dana-Farber Cancer Institute Boston, Massachusetts

Gustave Roussy Cancer Campus Paris-Villejuif, France

The Netherlands Cancer Institute, Amsterdam, on behalf of the Center for Personalized Cancer Treatment Utrecht, The Netherlands

Memorial Sloan Kettering Cancer Center New York, New York

Princess Margaret Cancer Centre Toronto, Ontario, Canada

The University of Texas MD Anderson Cancer Center Houston, Texas

Vanderbilt-Ingram Cancer Center Nashville. Tennessee

NEW CONSORTIUM PARTICIPANTS

Children's Hospital of Philadelphia Cancer Center Philadelphia, Pennsylvania

Cancer Research UK Cambridge Centre, University of Cambridge Cambridge, England

Duke University (Duke Cancer Institute) Durham, North Carolina

Herbert Irving Comprehensive Cancer Center, Columbia University New York, New York

Swedish Cancer Institute Seattle, Washington

Providence Cancer Institute Portland, Oregon

Wake Forest University Health Sciences Winston-Salem, North Carolina

The University of Chicago Comprehensive Cancer Center Chicago, Illinois

University of California-San Francisco Helen Diller Family Comprehensive Cancer Center San Francisco, California

Vall d'Hebron Institute of Oncology Barcelona, Spain

Yale Cancer Center New Haven, Connecticut valuable information with clinical data from these patients. The genomic data will be made publicly available through the Project GENIE registry and the Oncology Research Information Exchange Network (ORIEN) to benefit researchers who are studying cancer and cancer outcomes in African-American populations with the goal of addressing this serious public health challenge.

AACR THINK TANK ON CANCER HEALTH DISPARITIES

One of the major goals of Dr. Caligiuri's presidential year was to confront and overcome the challenges of cancer health disparities. A major step toward reaching this ambitious goal was the formation of an AACR Think Tank on Cancer Health Disparities. Under the leadership of chair John D. Carpten, PhD, and cochairs Marcia R. Cruz-Correa, MD, PhD, Brian M. Rivers, PhD, MPH, and Sanya A. Springfield, PhD, the think tank met in Washington, DC, in October to address three critical elements of the cancer disparities problem: 1) increasing participation of underrepresented/minority patients in clinical trials; 2) developing key resources to accelerate cancer health disparities research; and 3) training the cancer health disparities workforce to meet emerging needs. Participants in the think tank meeting included James W. Lillard, PhD, MBA, associate dean for Research at Morehouse School of Medicine and principal investigator of the 2020 by 2020 Initiative; and 2018-2019 AACR President Elizabeth M. Jaffee, MD, FAACR

AACR PATHOLOGY TASK FORCE

Recognizing the vital role that pathologists play in delivering timely and accurate diagnoses to support the most effective treatment decisions, the AACR convened a Pathology Task Force in December to identify ways the association can better serve the field. Chaired by Massimo F. Loda, MD, the task force gathered thought leaders and stakeholders in academia, industry, and government to survey the challenges facing the field of cancer pathology and to develop innovative solutions to those challenges for the benefit of cancer patients.

CANCER PREVENTION SUMMIT: WHITE PAPER ON THE FUTURE OF CANCER PREVENTION

In February 2016, the AACR convened a three-day Cancer Prevention Summit, bringing together nearly 70 scientists, clinicians, patient advocates, and funders to set a course for future efforts in cancer prevention research. In December, under the leadership of chairs Ernest T. Hawk, MD, MPH, and Scott M. Lippman, MD, the summit participants published a white paper in the AACR journal *Cancer* Prevention Research titled "Shaping the Future of Cancer Prevention—A Roadmap for Advancing Science and Public Health."

SCIENTIFIC WORKING GROUPS



Johanna A. Jovce. PhD. delivers her presentation on "Microenvironmental regulation of cancer metastasis and therapeutic efficacy" during the Cancer Immunology (CIMM)/Tumor Microenvironment (TME) Working Groups Joint Scientific Session. held during the AACR Annual Meeting 2018.

AACR scientific working groups facilitate progress against cancer through collaboration. By building communities around areas of scientific interest, the AACR aligns the efforts of its members to address the most challenging questions in cancer research.

PEDIATRIC CANCER WORKING GROUP (PCWG): FACILITATING INTERNATIONAL COOPERATION AND COORDINATION

While the AACR's PCWG works to address the scientific challenges facing the pediatric cancer field, the group also addresses the logistical challenges that hinder progress for children with cancer. One such challenge was a lack of coordination between two of the largest pediatric cancer drug development consortia, the NCI Pediatric Preclinical Testing Consortium (PPTC) in the United States and the Innovative Therapies for Children with Cancer (ITCC) Pediatric Preclinical Proof-of-Concept Program (P4) in Europe. These consortia bring together scientists, clinicians, regulators, and patients to develop novel pediatric cancer therapies. To maximize

the impact of critical research resources, it is imperative that the organizations avoid duplication of effort. Leveraging its international membership and the AACR's reputation as an honest broker, PCWG began acting as an intermediary between these consortia in 2018, aligning their efforts to accelerate the pace of progress against pediatric cancer. At the AACR Annual Meeting 2018, the PCWG brought the consortia together for a special session to discuss the preclinical models they have developed, the therapeutic agents they are currently testing, and opportunities to collaborate for the benefit of pediatric cancer patients worldwide.



RADIATION SCIENCE AND MEDICINE (RSM): NEW CHALLENGES, NEW COLLABORATIONS

The mission of the AACR's Radiation Science and Medicine Working Group (RSM; *above*) is to foster the application of radiation science and medicine to understand and treat cancer malignancies. In June, RSM advanced that mission by hosting a think tank on Illuminating Technological Advances and Challenges in Precision Radiotherapies. Supported in part by Bayer Pharmaceuticals, the think tank convened more than 30 experts in all areas of radiation science-including radiobiology, medical physics, and nuclear medicine-to highlight current and emerging radiotherapy technologies, address the critical needs of the field, and discuss the most effective approaches to improving patient care.

Preventing and curing cancer through collaboration is one of the pillars of the AACR mission, and RSM joined forces with two other scientific organizations in 2018 to advance that mission:

- A major concern among clinicians is the lack of cancer drugs intended specifically for use with radiation therapy. In February, the AACR partnered with the Food and Drug Administration (FDA) and the American Society for Radiation Oncology (ASTRO) to host a regulatory science and policy workshop on Clinical Development of Drug-Radiotherapy Combinations. The workshop brought together regulators with academic and industry scientists to identify the drug development challenges and to develop a strategy to overcome them.
- In March, the AACR worked with the Radiation Research Society (RRS) to cohost a workshop on Targeting Cancer

Metabolism to Improve Radiotherapy that explored the critical interface between tumor metabolism and radiotherapy response. Chaired by Julie Schwarz, MD, PhD, Douglas Spitz, PhD, and David Gius, MD, PhD, the workshop gathered radiobiologists, radiologists, and radiation oncologists to share the program with basic scientists focused on tumor metabolism.

• The AACR and ASTRO collaborated again to host a workshop on Targeting the Tumor Microenvironment in Radiation Oncology in July. The meeting—which was chaired by Wendy Woodward, MD, PhD, and Amato Giaccia, PhDaddressed critical topics such as tumor stromal effects on radiosensitivity and radioresistance, immune response to radiotherapy, and the effect of metabolism on the tumor microenvironment and the efficacy of radiotherapy efficacy.

MOLECULAR EPIDEMIOLOGY WORKING GROUP (MEG): ADDRESSING CANCER HEALTH DISPARITIES

At the AACR Annual Meeting 2018, MEG worked with the AACR Minorities in Cancer Research (MICR) Council to present an inaugural joint symposium on "Aggressive Cancer Phenotypes in Racial/ Ethnic Minority Populations: Opportunities and Challenges." Moderated by MICR Council Chair-Elect Laura Fejerman, PhD, and MEG Steering Committee Chair Melissa L. Bondy, PhD (above), the session addressed the greater susceptibility of different minority populations to aggressive forms of cancer.



SCIENCE EDUCATION, CAREER DEVELOPMENT. AND CONTINUING MEDICAL EDUCATION

Continued progress against cancer requires a robust workforce consisting of dedicated scientists and clinicians at all career levels. Through its science education and professional development programs, the AACR inspires and prepares young people to pursue careers in cancer science and supports these emerging investigators at all stages of their career paths.



AACR CEO Margaret Foti, PhD, MD (hc) congratulates the inaugural recipients of the Margaret Foti Foundation Undergraduate Prizes for Cancer Research.

SCIENCE AND EDUCATION



STUDENT MEMBERS: FOSTERING THE NEXT GENERATION OF CANCER SCIENTISTS

The AACR continued its long-standing support of students interested in careers in science at the Annual Meeting 2018. At the annual Special Program for High School Students, nearly 300 students were welcomed to Chicago to participate in interactive lectures on cancer development and prevention and to tour the exhibits and poster sessions. In addition, 11 high school students presented their own research and received feedback on their projects from AACR scientist mentors.

More than 200 undergraduate students also attended the AACR Annual Meeting to participate in the Thirteenth Annual Undergraduate Student Caucus and Poster Competition. The poster competition featured presentations from more than 115 students, whose research projects were evaluated by leading AACR members. Presenters of the most highly-rated posters were recipients of the inaugural Margaret Foti Foundation Undergraduate Prizes for Cancer Research. Funded by AACR Chief Executive Officer Margaret Foti, PhD, MD (hc) (*left*), the prizes encourage college students who are interested in science to pursue careers in cancer research.

FELLOWS

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SUPPORTING POSTDOCTORAL

The National Postdoctoral Association (NPA) is a nonprofit member organization that works to enhance the quality of the postdoctoral experience in the United States. As a sustaining member of the NPA, the AACR expresses its appreciation for the vital contributions of postdoctoral scholars to the cancer research enterprise and demonstrates its commitment to expanding the opportunities available to postdocs through education and training.

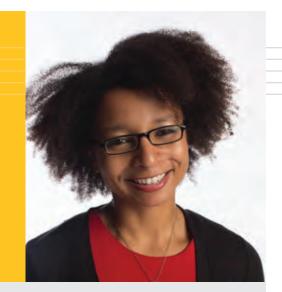
In September, the AACR participated in National Postdoc Appreciation Week activities by hosting two Cancer Careers Clinics at Drexel University and the University of Pennsylvania. AACR staff provided participants with advice on navigating the interview and negotiation processes, managing the transition to a fulltime position, and submitting successful publications and grant applications.

CONTINUING MEDICAL EDUCATION

As an ACCME-accredited provider, the AACR offered CME credit at 20 different meetings in 2018, including ten focused special conferences, three joint conferences, two educational workshops, two joint providership activities, and the AACR Annual Meeting. AACR journals provided another educational resource, offering credit to investigators for reviewing manuscripts. A total of 3,611 researchers and clinicians claimed CME credit from the AACR in 2018, taking advantage of opportunities to maintain their professional competence and incorporate new knowledge into their practices.

MYA ROBERSON, MSPH AACR ASSOCIATE MEMBER

PAST AACR UNDERGRADUATE SCHOLAR



Mya Roberson is an Associate Member of the AACR and a doctoral candidate in epidemiology at the University of North Carolina Gillings School of Global Public Health. She is studying spatial and temporal patterns in racial disparities in cancer outcomes from a health services perspective, and she hopes to eliminate inequities that exist in breast and gynecologic cancer outcomes between black and white women in North Carolina and nationally.

In September 2017, Mya attended her first conference as a graduate student. She received an AACR Scholar-in-Training Award, which enabled her to present her work at the AACR Conference on the Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved. She discussed her transformative experience at the conference in an op-ed published in The New York Times. Prior to that, Mya attended the 2015 and 2016 AACR Annual Meetings as an AACR Undergraduate Scholar:

¹¹ I am thankful for this life-altering organization and for its commitment to fostering the development of very early career scientists, particularly those from demographic backgrounds underrepresented in cancer research. The AACR has changed my life, and now I will go on to change others.

MEETINGS AND EDUCATIONAL WORKSHOPS



Scientific committee chair Ari M. Melnick, MD, addresses attendees of the AACR International Meeting on Advances in Malignant Lymphoma, held in Boston in June.

AACR meetings and educational workshops bring the latest advances in cancer science to researchers around the world. The AACR collaborated with 16 scientific organizations to convene 32 meetings in ten countries in 2018, the most in its history. The organization also recognized a significant milestone in 2018, which marked the 30th year of its special conferences program. To celebrate 30 years of scientific excellence, the AACR invited Nobel Laureate Phillip A. Sharp, PhD, FAACR—the chairperson of the first special conference in 1988—to chair an anniversary conference on "Convergence: Artificial Intelligence, Big Data, and Prediction in Cancer."

While acknowledging the rich history of its special conference series, the AACR also advanced its meetings program into new scientific areas in 2018. One of the scientific priorities identified by the AACR Board of Directors in its Vision 2020 Strategic Plan was an expanded focus on hematological malignancies. To realize this critical vision, the AACR partnered with the organizers of the International Conference on Malignant Lymphoma (ICML)—held semiannually in Lugano, Switzerland, since 1981-to bring a version of this premier forum for malignant lymphoma research to the United States. In June, the inaugural AACR International Meeting on "Advances in Malignant Lymphoma" was held in Boston. Under the leadership of Scientific Committee chair Ari M. Melnick, MD, the meeting employed a unique, discussion-driven format to discuss recent advances and emerging areas of lymphoma research and their potential for transforming patient care. Going forward, the meeting will be held annually and will alternate between the United States and Switzerland, ensuring that hematological malignancies remain a critical priority for the cancer research community.

2018 WORKSHOPS

ACCELERATING ANTICANCER AGENT DEVELOPMENT AND VALIDATION WORKSHOP May 2-4; Bethesda, Maryland Executive Committee: H. Kim Lyerly, MD, Richard Pazdur, MD, Gregory Reaman, MD, and Mary Scroggins, MA

😵 Workshop Held outside U.S.

ECCO-AACR-EORTC-ESMO WORKSHOP ON METHODS IN CLINICAL CANCER RESEARCH

June 16-22; Zeist, The Netherlands Codirectors: Stefan Sleijfer, MD, PhD, Lee M. Ellis, MD, Corneel Coens, MSc, and Emiliano Calvo, MD, PhD

INTEGRATIVE MOLECULAR EPIDEMIOLOGY WORKSHOP: BRIDGING CANCER BIOLOGY AND PRECISION MEDICINE

July 9-13; Boston, Massachusetts

Director: Thomas A. Sellers, PhD, MPH Codirectors: Peter Kraft, PhD, and Lorelei A. Mucci, ScD, MPH

MOLECULAR BIOLOGY IN CLINICAL ONCOLOGY WORKSHOP

July 22-29; Snowmass Village, Colorado Director: Ross L. Levine, MD Codirectors: Mark W. Geraci, MD, Christine M. Lovly, MD, PhD, and Jean Y. Tang, MD, PhD

AACR/ASCO METHODS IN CLINICAL CANCER RESEARCH WORKSHOP

July 28-August 3; Vail, Colorado Codirectors: Patricia M. LoRusso, DO, Jyoti D. Patel, MD, and Meredith M. Regan, ScD

ACORD-AUSTRALIA & ASIA PACIFIC ONCOLOGY RESEARCH DEVELOPMENT WORKSHOP

September 9-14; Magenta Shores NSW Central Coast, Sydney, Australia

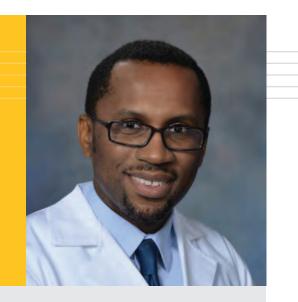
Organizing Committee: Zeba Aziz, MBBS, Gary M. Clark, PhD, Reena Nair, MD, Katrin Sjoquist, MBBS, Martin Stockler, MBBS, and Nirav P. Trivedi, MS, MCh

TRANSLATIONAL CANCER RESEARCH FOR BASIC SCIENTISTS WORKSHOP

November 4-9; Boston, Massachusetts Codirectors: George D. Demetri, MD, Susan Band Horwitz, PhD, FAACR, and Pasi A. Jänne, MD, PhD

NMAZUO W. OZUAH, MD AACR/ASCO METHODS

IN CLINICAL CANCER RESEARCH WORKSHOP PARTICIPANT



Nmazuo W. Ozuah, MD is an Assistant Professor, Department of Pediatrics, Section of Hematology-Oncology, at Baylor College of Medicine and a member of the Global Pediatric Hematology-Oncology Excellence (HOPE) program at Texas Children's Cancer and Hematology Centers. His main interest is improving treatment outcomes for children with cancer in resourcelimited settings, in particular Sub-Saharan Africa.

In July, Dr. Ozuah participated in the 2018 AACR/ASCO Methods in Clinical Cancer Research Workshop, an intensive one-week program that teaches clinical fellows and junior faculty clinical researchers the essentials of effective clinical trial designs of therapeutic interventions in the treatment of cancer. At the end of the workshop, Dr. Ozuah was awarded the Daniel D. Von Hoff Innovator Award. Named for founding Workshop Director and AACR Past President Daniel D. Von Hoff, MD, FAACR, the award recognizes the most innovative and impactful protocol developed by a workshop participant. Dr. Ozuah's award-winning protocol—addressing the feasibility of dose-intensive response-based chemotherapy for pediatric Hodgkin's lymphoma in Malawihas the potential to profoundly impact pediatric care in Africa:

^{ff} The AACR/ASCO Vail workshop greatly exceeded my expectations. No training to date has better equipped me for a career in clinical research. The career guidance and networking opportunities through the outstanding course faculty continued past the workshop, further demonstrating a strong commitment to the successful careers of budding investigators in oncology research. I feel empowered to translate the lessons learned into clinical research protocols that will ultimately improve the prognosis of children with cancer in Sub-Saharan Africa. Thank you for the opportunity to be part of this awesome workshop.

2018 SCIENTIFIC MEETINGS Meeting Held outside U.S.

FIFTH AACR-IASLC INTERNATIONAL JOINT CONFERENCE: LUNG CANCER TRANSLATIONAL SCIENCE FROM THE BENCH TO THE CLINIC

January 8-11; San Diego, California Chairs: Charles M. Rudin, MD, PhD, and Charles Swanton, PhD Cochairs: Tony S.K. Mok, MD, Lecia V. Sequist, MD, MPH, and Monte M. Winslow, PhD

OBESITY AND CANCER: MECHANISMS UNDERLYING ETIOLOGY AND OUTCOMES

January 27-30; Austin, Texas Cochairs: Lewis C. Cantley, PhD, FAACR,

Michael N. Pollak, MD, and Elizabeth A. Platz, ScD, MPH

IMMUNOBIOLOGY OF PRIMARY AND METASTATIC CNS CANCER: MULTIDISCIPLINARY SCIENCE TO ADVANCE CANCER IMMUNOTHERAPY

Presented in association with the AACR Cancer Immunology Working Group February 12-15; San Diego, California Cochairs: Hideho Okada, MD, PhD, Robyn S. Klein, MD, PhD, Ignacio Melero, MD, PhD, and Patricia S. Steeg, PhD

THIRD AACR-SNMMI JOINT CONFERENCE ON STATE-OF-THE-ART MOLECULAR IMAGING IN CANCER BIOLOGY AND THERAPY

February 14-17; San Diego, California Cochairs: Todd E. Peterson, PhD, and David R. Piwnica-Worms, MD, PhD

TARGETING DNA METHYLATION AND CHROMATIN FOR CANCER THERAPY March 1-4; Atlanta, Georgia

Cochairs: Stephen B. Baylin, MD, FAACR, Margaret A. Goodell, PhD, and Peter A. Jones, PhD, DSc, FAACR

AACR ANNUAL MEETING 2018

April 14-18; Chicago, Illinois Program Committee Chair: Elaine R. Mardis, PhD

CANCER DORMANCY AND RESIDUAL DISEASE

June 19-22; Montreal, Quebec, Canada Cochairs: Julio A. Aguirre-Ghiso, PhD, Ann F. Chambers, PhD, Cyrus M. Ghajar, PhD, Christoph A. Klein, MD, PhD, and Dorothy A. Sipkins, MD, PhD

INAUGURAL AACR

INTERNATIONAL MEETING ADVANCES IN MALIGNANT LYMPHOMA: MAXIMIZING THE BASIC-TRANSLATIONAL INTERFACE FOR CLINICAL APPLICATION *In cooperation with the International Conference on Malignant Lymphoma (ICML)* June 22-26; Boston, Massachusetts Chair: Ari M. Melnick, MD

Cochairs: Francesco Bertoni, MD, Renier J. Brentjens, MD, PhD, Bertrand Nadel, PhD, Lisa G. Roth, MD, Louis M. Staudt, MD, PhD, Christian Steidl, MD, Karin Tarte, PharmD, PhD, Thomas E. Witzig, MD, and Wei-Li Zhao, MD

SIXTH JCA-AACR SPECIAL JOINT CONFERENCE ON THE LATEST ADVANCES IN LUNG CANCER RESEARCH: FROM BASIC SCIENCE TO THERAPEUTICS

July 10-12; Kyoto, Japan

Organizing Committee (JCA): Hiroyuki Mano, MD, PhD, Seiji Yano, MD, PhD, and Hirovoshi Nishikawa, MD, PhD Organizing Committee (AACR): Alice T. Shaw, MD, PhD, Roy S. Herbst, MD, PhD, and Charles M. Rudin, MD, PhD

TWELFTH BIENNIAL OVARIAN CANCER RESEARCH SYMPOSIUM

Presented by the Rivkin Center for Ovarian Cancer and the AACR

September 13-15; Seattle, Washington

Cochairs: Frances R. Balkwill, PhD, Mary L. (Nora) Disis, MD, Pamela S. Ohashi, PhD, and Elizabeth M. Swisher, MD

PANCREATIC CANCER: ADVANCES IN SCIENCE AND CLINICAL CARE

September 21-24; Boston, Massachusetts Cochairs: Ronald M. Evans, PhD, FAACR, Manuel Hidalgo, MD, PhD, Steven D. Leach, MD, Gloria M. Petersen, PhD, and Brian M. Wolpin, MD, MPH

INTESTINAL STEM CELLS AND COLON CANCER: BIOLOGY TO THERAPY

September 27-30; Washington, DC

Cochairs: Anil K. Rustgi, MD, Johanna C. Bendell, MD, Hans Clevers, MD, PhD, FAACR, Christina Curtis, PhD, and Owen Sansom, PhD

SECOND AACR INTERNATIONAL CONFERENCE: TRANSLATIONAL CANCER MEDICINE, CANCER DISCOVERIES FOR CLINICAL APPLICATION

Held in cooperation with the Latin American Cooperative Oncology Group (LACOG) September 27-29; São Paulo, Brazil Cochairs: Carlos L. Arteaga, MD, FAACR, Carlos Gil Ferreira, MD, PhD, and Gabriel A. Rabinovich, PhD

METABOLISM AND CANCER

September 28-October 1; New York, New York

Cochairs: Ralph J. DeBerardinis, MD, PhD, Tak W. Mak, PhD, FAACR, Joshua D. Rabinowitz, MD, PhD, and M. Celeste Simon, PhD

FOURTH CRI-CIMT-EATI-AACR INTERNATIONAL CANCER **IMMUNOTHERAPY CONFERENCE:** TRANSLATING SCIENCE INTO SURVIVAL

September 30-October 3; New York, New York

Cochairs: Nina Bhardwaj, MD, PhD, Christoph Huber, MD, Elizabeth M. Jaffee, MD, FAACR, and Guido Kroemer, MD, PhD

EACR-AACR-ISCR CONFERENCE: THE CUTTING EDGE OF CONTEMPORARY CANCER RESEARCH

October 9-11; Jerusalem, Israel Cochairs: Richard M. Marais, PhD, Eli Pikarsky, MD, PhD, and Robert A. Weinberg, PhD, FAACR

IN CANCER

October 14-17; Newport, Rhode Island Cochairs: Phillip A. Sharp, PhD, FAACR, and William C. Hahn, MD, PhD Program Committee: Judy E. Garber, MD, MPH, FAACR, Richard D. Klausner, MD, FAACR, Aviv Regev, PhD, and Charles L. Sawyers, MD, FAACR

11TH AACR CONFERENCE ON THE SCIENCE OF CANCER HEALTH DISPARITIES IN RACIAL/ETHNIC MINORITIES AND THE MEDICALLY UNDERSERVED

In association with the AACR Minorities in Cancer Research Council November 2-5; New Orleans, Louisiana Cochairs: Ivis Febus-Sampayo, Laura Fejerman, PhD, Scarlett Lin Gomez, MPH, PhD, Augusto C. Ochoa, MD, and Brian M.

Rivers, PhD

Secret Contract Contr AND CANCER THERAPEUTICS SYMPOSIUM

Ribas, MD, PhD

November 15-17; Seoul, Korea Cochairs: Tae-You Kim, MD, PhD, and Charles L. Sawyers, MD, FAACR

30TH ANNIVERSARY AACR SPECIAL CONFERENCE CONVERGENCE: ARTIFICIAL INTELLIGENCE, BIG DATA, AND PREDICTION

November 13-16; Dublin, Ireland Cochairs: Charles Swanton, MD, PhD, James L. Gulley, MD, PhD, and Antoni

AACR-KCA JOINT CONFERENCE ON PRECISION MEDICINE IN SOLID TUMORS

TUMOR IMMUNOLOGY AND IMMUNOTHERAPY

November 27-30; Miami Beach, Florida Cochairs: James P. Allison, PhD, FAACR, Lisa M. Coussens, PhD, Ira Mellman, PhD, and Drew M. Pardoll, MD, PhD

NNOVATION AND BIOMARKERS IN CANCER DRUG DEVELOPMENT: A JOINT MEETING PRESENTED BY EORTC, NCI, EMA, AND AACR

November 29-30; Brussels, Belgium Chairs: Denis A. Lacombe, MD, MSc, and Roberto Salgado, MD, PhD Cochairs: Jonas C. S. Bergh, MD, Michael A. Caligiuri, MD, FAACR, Lyndsay N. Harris, MD, Tracy G. Lively, PhD, Francesco Pignatti, MD, and Victor E. Velculescu, MD, PhD

TARGETING PI3K/MTOR SIGNALING November 30-December 3; Boston, Massachusetts

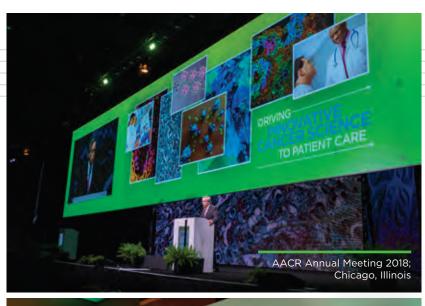
Cochairs: Lewis C. Cantley, PhD, FAACR, David M. Sabatini, MD, PhD, and Jean J. Zhao, PhD

SAN ANTONIO BREAST CANCER SYMPOSIUM

December 4-8; San Antonio, Texas Cochairs: Carlos L. Arteaga, MD, FAACR, Virginia G. Kaklamani, MD, and C. Kent Osborne, MD

TARGETING RAS-DRIVEN CANCERS

December 9-12; San Diego, California Cochairs: Frank McCormick, PhD, FAACR, Gideon Bollag, PhD, Karen M. Cichowski, PhD, and Shiva Malek, PhD







SCIENTIFIC REVIEW AND GRANTS

ADMINISTRATION

CR-Bayer Innovation

AACR-Bayer Innovation

The AACR Grants Program advances the frontiers of cancer science for the benefit of cancer patients by investing in promising basic. translational. and clinical researchers at all career levels. Over the last 20 years, the program has distributed more than \$86 million in vital support through the work of the AACR Foundation. New and ongoing partnerships with nonprofit organizations, foundations, and pharmaceutical companies fueled a dramatic expansion of the grants program in 2018, enabling the AACR to foster cancer science and develop the next generation of leaders in the United States and around the world.

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SCIENTIFIC REVIEW AND GRANTS ADMINISTRATION

INVESTING IN THE FUTURE OF CANCER RESEARCH





BIRGIT KNOECHEL. MD. PHD AACR GRANTEE

Birgit Knoechel, MD, PhD, is a pediatric oncologist at Dana-Farber Cancer Institute and an assistant professor of pediatrics at Harvard Medical School who focuses on acute lymphoblastic leukemia (ALL), the most commonly diagnosed childhood leukemia. In 2016, she was awarded the AACR-Aflac Inc. Career Development Award for Pediatric Cancer Research to study the mechanisms of enhancer rewiring in drug resistant T-cell ALL (T-ALL), a form of ALL that frequently develops resistance to treatment. The data generated through that grant led Dr. Knoechel to new research projects, one of which resulted in her receiving the inaugural AACR-The Mark Foundation NextGen Grant for Transformative Cancer Research in 2018:

As a first-year clinical fellow, I took care of two teenage boys with [T-ALL], both of whom relapsed very quickly after starting treatment. This experience made me realize the urgent need to identify novel treatment strategies for these high-risk patients and novel biomarkers that predict who will benefit most from these new therapeutic approaches.

I am so grateful for this support [from the AACR], as it has allowed me to ask transformative scientific questions and has been instrumental toward establishing myself as an innovative translational scientist. This [NextGen] grant will provide crucial funds toward our study of intratumor epigenetic heterogeneity as the basis for diverse treatment outcomes for difficult to treat cancers in children.

Learn more about Birgit's story: AACR.org/Birgit

Since the AACR Grants Program launched in 1993, AACR grantees have earned more than \$70 million in additional funding. In addition, they have published more than 700 original research articles on innovative cancer science and technologies, including the identification of novel cancer targets and pathways as well as potential therapeutics. These articles have been cited more than 58,000 times, exemplifying the impact that AACR grantees have on the field.

In 2018, the AACR partnered with AstraZeneca and Bayer to offer a unique funding model designed to foster collaboration between academic research centers and the pharmaceutical industry. The Stimulating Therapeutic Advancements through Research Training (START) grants are among the first of their kind in nonprofit grantmaking, offering postdoctoral and/or clinical research fellows the opportunity to spend one year of their training conducting research onsite at a pharmaceutical company.

In addition, through the support of the Johnson & Johnson Lung Cancer Initiative, AACR offered three new Team Science grants focused on lung cancer interception and prevention. The AACR-Johnson & Johnson Lung Cancer Innovation Science Grants are expected to drive innovation by supporting collaborative team science focused on identifying novel approaches to the prevention, interception, and cure of lung cancer.

59

Scientists from 41 institutions were funded by AACR grants in 2018; these investigators received more than \$10 million in support of research across the spectrum of cancer science.

642

276 Expert scientists served on 17 scientific review committees to select the 2018 grant recipients. The AACR is a trusted administrator of research support, providing scientific oversight and expert peer review that is fast, flexible, rigorous, and transparent.

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SCIENTIFIC REVIEW AND GRANTS ADMINISTRATION

Applications for AACR grants were evaluated in 2018.

\$3.3 million

Amount awarded to postdoctoral and clinical fellows in 2018, providing critical resources to spark the career development of the next generation of cancer scientists. The 2018 awards included the Debbie's Dream Foundation-AACR Gastric Cancer Research Fellowships (*right*), which provided \$50,000 each to support four fellows working on mentored gastric cancer research.

\$1.9 million

Amount awarded to eight junior faculty in 2018 to support the launch of their independent research careers.

\$7.5 million

Amount awarded through partnerships with the pharmaceutical industry, including new partnerships with Johnson & Johnson and Loxo Oncology and expanded partnerships with AstraZeneca and Bayer.



THE AACR AND STAND UP TO CANCER: PARTNERS IN PROGRESS

In 2018, Stand Up To Cancer (SU2C) marked its tenth year of accelerating the delivery of new therapies to cancer patients by supporting collaboration and innovation in translational cancer research. The AACR has proudly served as SU2C's Scientific Partner throughout those ten years, providing expert peer review, scientific oversight, policy guidance, communications, and grants administration to ensure that SU2C's groundbreaking funding models deliver outstanding results.



American Association for Cancer Research





SU2C SUMMITS: REVIEWING PROGRESS, CHARTING FUTURE DIRECTIONS

Collaboration and accountability are critical elements of the SU2C funding model. By bringing together grantees on a regular basis, SU2C and the AACR monitor the progress of funded research projects and encourage project leaders to explore new opportunities to work together.

• Annual Scientific Summit. In January, AACR staff worked with the SU2C Scientific Advisory Committee to host the largest Scientific Summit in SU2C's ten-year history. Dream Team leaders and individual grant recipients reported on the status of their research programs. Guest speakers at the summit included Norman E. Sharpless, MD, FAACR, director of the National Cancer Institute, and Martha Donoghue, MD, clinical lead on the FDA's Gastrointestinal Cancers Team.

NEW SU2C MULTIPLE MYELOMA DREAM TEAM: SCREENING AND INTERCEPTION OF PRECURSOR MYELOMA

A cancer afflicting the plasma cells of the blood, multiple myeloma is often not diagnosed until its later stages, and patients do not receive treatment until their disease has progressed and they have overt end-organ damage. Led by Irene Ghobrial, MD, and Ivan M. Borrello, MD, this new Dream Team seeks to change the disease treatment paradigm by characterizing the genomic, epigenomic, microenvironmental, and immune regulators of progression, and developing effective strategies to intercept disease progression.

• Pancreatic Cancer Mini-Summit. Because of its devastating effects on cancer patients and the limited treatment options available, pancreatic cancer has always been a major focus of SU2C. At the AACR Annual Meeting in April, SU2C joined with the Lustgarten Foundation to announce the launch of the Pancreatic Cancer Collective, a formal strategic partnership to accelerate research to improve outcomes for pancreatic cancer patients. In August, the AACR organized a summit focused exclusively on pancreatic cancer. Supported by the Lustgarten Foundation and Cancer Research UK, the summit gathered about 100 leaders in the field—including 2018-2019 AACR President Elizabeth M. Jaffee, MD, FAACR (above right)-to review progress and explore new collaborations.

The primary element of the SU2C funding model is the Dream Team, a scientific task force focused on a specific cancer problem that incentivizes collaboration among leading researchers from different institutions. At the AACR Annual Meeting in April, SU2C announced the launch of a new \$10 million Dream Team to address the challenge of multiple myeloma.





PHILLIP A. SHARP INNOVATION IN COLLABORATION AWARDS

Through its focus on team science and its emphasis on interaction at annual Scientific Summits, SU2C has fostered a community of leading researchers addressing the most difficult challenges in cancer research. The Phillip A. Sharp Innovation in Collaboration Awards encourage members of that community to identify new research questions and form new teams to answer them. Named for Phillip A. Sharp, PhD, FAACR, chair of the SU2C Scientific Advisory Committee, the awards provide these new teams with support to accelerate progress for the benefit of cancer patients. The 2018 Sharp Awards provided \$250,000 grants to each of the following five teams:

- Defining Effective T-Cell Response in Viral and Nonviral Gynecologic Cancers Leaders: Claire F. Friedman, MD, and Marta Łuksza, PhD
- Cupid-Seq—High Throughput Transcriptomic Spatial Mapping of **Immune-Tumor Interactions in the** Microenvironment Leaders: Raul Rabadan, PhD, and Dan A.
- Landau, MD, PhD • Interrogating Impact of Epigenetic Modifiers on Durable Reprogramming of Exhausted CD8 T Cells in Patients with NSCLC Treated with PD-1

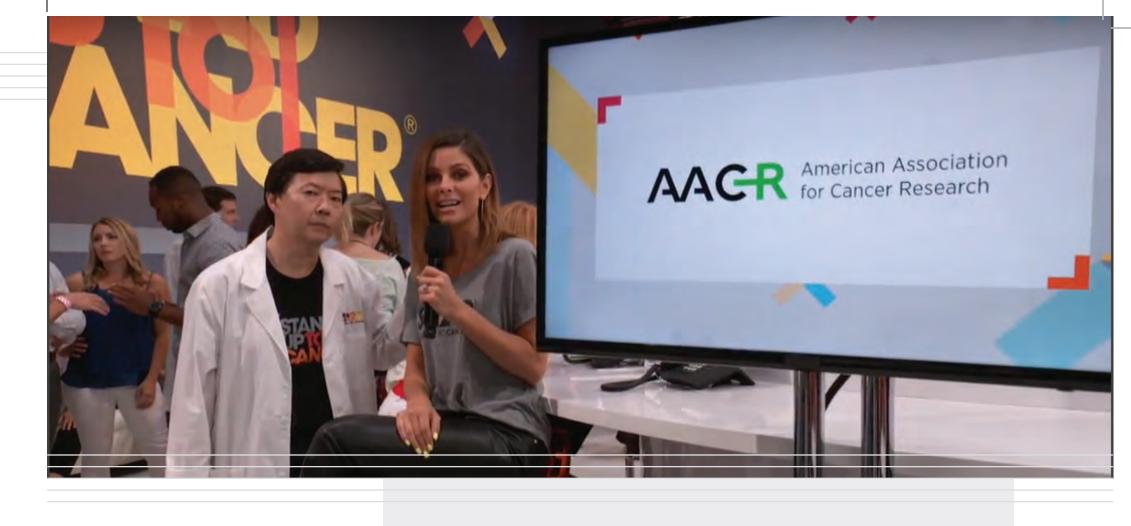
Blockade

Leaders: E. John Wherry, PhD, and Matthew D. Hellmann, MD



- Characterizing Immuno-variability in Children following Standard of **Care Treatment to Enable Precision** Assignment to Immunotherapy Trials Leaders: Trevor J. Pugh, PhD, and David M. Barrett, MD, PhD Support for this award includes \$125,000 from the Emily Whitehead Foundation.
- Studies of Colorectal Cancer Patient-**Derived Organoids to Validate** Candidate Biomarkers of Resistance to Natural Killer Cells Leaders: Michal Sheffer, PhD, and Hugo J. G. Snippert, PhD Funding for this grant was provided by

the C4C Fund.



RESEARCH

On September 7, with the support of the AACR, SU2C produced its sixth biennial telecast. The broadcast raised more than \$123.6 million in pledges collectively in the United States and Canada to support SU2C's innovative collaborative research programs. During the broadcast, actor Ken Jeong, MD (above left), described the role of the AACR:

SIXTH SU2C TELECAST: RAISING AWARENESS AND FUNDS FOR CANCER

^{ff} This great organization brings the scientists together and makes sure the funding goes to the best research that will save lives now. With dedication and brilliance, the American Association for Cancer Research makes it all work."

SCIENCE POLICY AND **GOVERNMENT AFFAIRS**

The AACR Office of Science Policy and Government Affairs is an authoritative source of information for policy makers and regulators about the critical value of cancer research. In 2018, the AACR was a powerful voice for the cancer research community, advocating for investments in cancer research; supporting evidence-based policies that advance cancer research, prevention, and treatment; and providing expert guidance based upon the best available science.

ADVOCATING FOR ROBUST ANNUAL FEDERAL FUNDING INCREASES

The AACR led efforts to make public health a continued national priority in 2018, working with individuals and organizations in the broader medical research community to advocate for robust, sustained, and predictable annual funding increases for medical research. These efforts resulted in a \$2 billion FY2019 budget increase for the National Institutes of Health (NIH), \$179 million of which is directed to the National Cancer Institute (NCI). The AACR also successfully advocated for \$20 million for the Food and Drug Administration (FDA) Oncology Center of Excellence in the FY19 draft funding bills.



AACR associate members gathered in Washington in February for the third annual AACR Early-Career Investigator Hill Day.



POLICY AND ADVOCACY

Participants in the sixth annual Rally for Medical Research Hill Day. The AACR is a founding organizer of the event, which brought advocates on behalf 350 partnering organizations to Capitol Hill in September 2018 to call on Congress to make biomedical research funding a national priority.

YFOR MEDICAL RESEARCH

Together for More **Progress**, More **Hope**, More **Life**.

POLICY AND ADVOCACY

• AACR Cancer Progress Report 2018: Harnessing Research Discoveries for Patient Benefit. The keystone of AACR's advocacy efforts is the AACR Cancer Progress Report. In September, the AACR presented the eighth annual report to members of Congress and their staffers at a briefing on Capitol Hill. AACR President Elizabeth M. Jaffee, MD, FAACR (center right), and Chief Executive Officer Margaret Foti, PhD, MD (hc) (far right) joined cancer survivors and leading experts to highlight the benefits of federally funded cancer research, from supporting advances like CAR-T immunotherapy to reducing cancer health disparities. Rep. Ted Poe (R-TX), a leukemia survivor whose story was included in the report, was a featured speaker at the briefing.

- Rally for Medical Research Hill Day. As the founding organizer of the Rally for Medical Research, the AACR worked with 350 partnering organizations to organize the Rally for Medical Research Hill Day, bringing hundreds of advocates from across the country to Capitol Hill in September to advocate for making NIH funding a national priority. The associated Rally for Medical Research National Day of Action enabled individuals across the country to participate by contacting their legislators directly and posting social media messages in support of sustained increases to the NIH budget.
- 2018 Capitol Hill Days. In addition to the Rally for Medical Research Hill Day, the AACR provided two other opportunities in 2018 for researchers, physicianscientists, cancer survivors, and advocates to present the case for federal investment in cancer research. In February, the AACR brought 15 associate members to Washington for the third annual AACR Early-Career Investigator Hill Day. The early-career scientists completed over 30 visits to House and Senate offices, where they had the opportunity to discuss the importance of federal funding in sustaining and expanding the cancer research workforce. In April, the AACR continued its annual partnership with the Association of American Cancer Institutes (AACI) to bring stakeholders from across the cancer community to Capitol Hill, including directors and representatives from the 70 NCI-designated cancer centers (right). The participants in the 2018 AACR-AACI Hill Day provided insights on the impact of cancer research funding to congressional offices, including those of leading members in the House and Senate.





EDUCATING, ADVOCATING, AND ADVISING ON FUNDAMENTAL CANCER HEALTH POLICY ISSUES

July, the AACR held a congressional briefing about the growing incidence of e-cigarette use among youths (*right*). Cosponsored by Senator Dick Durbin (D-IL) and Representative Jackie Speier (D-CA), the briefing addressed the state of the science around e-cigarettes, recent research on the use, sale, and marketing of e-cigarettes, and potential policy solutions. Participants discussed options for halting youth vaping, balanced against the need for research to determine the efficacy of e-cigarettes as a smoking cessation aid. [For a summary and video of the complete briefing, visit the AACR blog, Cancer *Research Catalyst*, at AACR.org/Ecig.]

• Providing Expert Recommendations to Policy Makers and Regulators. Throughout 2018, the AACR worked with legislators to provide expert comments on draft legislation and provided guidance to regulators by attending public hearings and submitting public comments. The AACR provided guidance to the FDA on five occasions, informing the discussion of the regulation of e-cigarettes and tobacco products as well as the structure and function of the FDA Oncology Center of Excellence.

As a trusted source of cancer information, the AACR engages lawmakers and government agencies in discussions of science-based policies that can accelerate progress in the prevention and cure of all cancers.

• E-Cigarettes: The State of the Science and Reducing Youth Uptake. In

• Advocating for the Elimination of Human Papillomavirus (HPV). In June, the AACR joined five other national cancer organizations and all 70 NCI-designated cancer centers in issuing a Consensus Statement urging increased HPV vaccination rates and screening measures to achieve the goal of eliminating HPV-related cancers.



FOSTERING DIALOGUE BETWEEN REGULATORS AND THE CANCER RESEARCH COMMUNITY

To accelerate progress against cancer, the AACR promotes engagement between the cancer research community and federal regulators. The Regulatory Science and Policy track at the AACR Annual Meeting 2018—which included 10 sessions on a large range of topics, including pediatric cancer drug development, real-world evidence, and CAR-T therapies for solid tumors was a major component of this effort. In addition, the AACR partnered with the FDA to host three workshops on cuttingedge issues in cancer regulatory science in 2018. These workshops brought together leading experts from industry and academia along with regulators from the FDA to discuss challenges and opportunities for advancement in critical areas:

• FDA-AACR-ASTRO Clinical **Development of Drug-Radiotherapy Combinations Workshop.** In the era of precision medicine, the combination of radiation and targeted therapy holds potential for the treatment of many

cancers. However, little progress has been made toward developing specific drug-radiotherapy combinations. In February, the AACR partnered with the FDA and the American Society for Radiation Oncology (ASTRO) to convene a two-day workshop on the topic, bringing stakeholders together to discuss the problem and devise a path forward. The outcomes of the workshop were summarized in an article published in the AACR journal *Clinical Cancer Research*.

FDA-AACR-SGO Drug Development for Gynecologic Malignancies

Workshop. The development of new treatments for cancers of the uterus, ovaries, cervix, and vulva is vital to reduce mortality rates for these diseases. In June, the AACR worked with the FDA and the Society of Gynecologic Oncology (SGO) to organize this workshop (*right*), creating a forum for open discussion among stakeholders on the way forward for the diagnosis and treatment of both common and rare gynecologic cancers. Presenters at the workshop highlighted the unique molecular characteristics of rare gynecologic cancers that can serve as effective therapeutic targets.

• FDA-AACR Nonclinical Models for Safety Assessment of Immuno-oncology Products Workshop. In September, the AACR joined the NCI and the FDA to host a workshop to address the scientific and practical aspects of developing models for the study of immunooncology products. Participants discussed current challenges and opportunities in the use of nonclinical models to predict toxicities of immune checkpoint inhibitors and stimulators in patients.



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SURVIVOR AND PATIENT ADVOCACY

The AACR is the authoritative voice of cancer research. using meetings, publications, and other programs to disseminate breakthrough discoveries made by scientists and clinicians. Equally important, the AACR's Survivor and Patient Advocacy programs give a voice to cancer patients, providing forums that empower patients to tell their stories and share their perspectives with the cancer research community.



SCIENTIST↔SURVIVOR PROGRAM

The cornerstone of the AACR's survivor and patient advocacy efforts is the Scientist↔Survivor Program (SSP), which brings patient advocates together with scientists and clinicians to attend sessions at AACR scientific meetings. Participants attend sessions with their AACR scientist mentors, gaining an understanding of the innovative science behind treatment decisions while providing their counterparts with vital patient perspectives.

In 2018, the AACR celebrated the 20th anniversary of the SSP-the longestrunning survivor program in the cancer research community. This milestone was commemorated during the opening ceremony of the AACR Annual Meeting 2018 with a video highlighting the history of the program and charting its future direction. In addition, Anna D. Barker, PhD (*left*)—who founded the Scientist↔Survivor Program with AACR CEO Margaret Foti, PhD, MD (hc)-was

presented with the AACR Distinguished Award for Exceptional Leadership in Cancer Science Policy and Advocacy in recognition of her two decades of dedication to patient advocates through this remarkable and impactful program. During the life of this program, more than 500 advocates from all over the world have participated in this educational experience.

Nearly 40 patient advocates participated in the SSP in 2018, joining scientist and clinician mentors at the AACR Annual Meeting in April and the Science of Cancer Health Disparities conference in November. Annual Meeting program participants included patient advocates from Trinidad and Tobago, Japan, and Canada. During the Annual Meeting, two AACR members were named Emeritus Mentors in recognition of their long-standing commitment to the SSP. The advocates thanked Peter Kuhn, PhD, and Christopher Kissinger, PhD, for sharing their time and expertise with program participants for more than three years.

CANCER TODAY MAGAZINE

Cancer Today—the AACR's magazine for cancer patients, survivors, and caregivers-provides vital information for anyone navigating the challenges of cancer diagnosis, treatment, and survival while also offering a platform for patients to share stories of their journey with cancer. Now in its seventh full year of publication, the magazine continues to tackle important cancer topics in a serious, comprehensive way. Among the most compelling stories published in 2018 were the following:

• "Searching Blood for Cancer Clues" (Spring 2018). Liquid biopsies offer a new way to analyze a tumor's genetics and to measure treatment response. But questions remain about whether these tools will help oncologists more effectively choose treatments for patients.

• "Liver Cancer on the Rise" (Spring 2018). More people are being diagnosed with liver cancer. Contributing editor Sue Rochman examines how avoiding exposure to risk factors like cigarette smoking, obesity, and hepatitis B and C could cut liver cancer deaths in half.

• "Pushing the Immune System to Its Limits" (Summer 2018). Associate editor Kate Yandell writes about how, while immunotherapy drugs have shown remarkable success in some cancer patients, they carry an array of side effects that can be challenging to monitor and treat.

 "New Tactics for Bladder Cancer" (Fall 2018). After decades of minimal advances in the treatment of bladder cancer, research and new therapies are on the upswing, bringing options and hope to those who face the disease.





Under the leadership of editor-in-chief William G. Nelson, MD, PhD, Cancer Today pursued two major initiatives in 2018 to expand its presence among patients and their loved ones:

- In February, the Cancer Today website was re-launched with a new format that makes it easier for readers to find late-breaking news about cancer research, new cancer therapies, prevention strategies, and clinical trials. The new website features more original stories, and its mobilefriendly design enables the editorial staff to share more content with the magazine's growing social media following. Traffic to *Cancer Today* online has more than doubled since the launch of the new site, expanding the reach of this vital publication.
- In March, the Cancer Today staff established an online book club to offer readers an opportunity to engage with the magazine staff and other cancer patients, caregivers, survivors, and advocates. Led by senior editor Marci A. Landsmann, each quarter the club featured a book that shared a unique perspective on the cancer experience—whether by illuminating a complex scientific topic or describing a common survivor experience or challenge. Online discussion of each book culminated in a live online conversation with the author on the magazine's Facebook page.



C. KENT OSBORNE, MD Houston, Texas

Dr. Osborne has not only made groundbreaking research contributions, but he has also provided vision and leadership to the field of breast cancer science and medicine. Since 1992, he has served as a codirector of the San Antonio Breast Cancer Symposium (SABCS), which is considered the world's largest and most prestigious conference on breast cancer.

AACR DISTINGUISHED LEADERSHIP AWARDS

During the opening ceremony of the AACR Annual Meeting 2018, the AACR honored outstanding men and women who have contributed substantially to cancer research with Distinguished Leadership Awards.

AACR Distinguished Award for Extraordinary Scientific Achievement and Leadership in Breast Cancer Research

Baylor College of Medicine



AACR Distinguished Award for Exceptional Leadership in Cancer Science Policy and Advocacy ANNA D. BARKER, PHD Arizona State University Tempe, Arizona

As the chair of the AACR Public Education Committee from 1992-2001, and later as the founding chair of the reconstituted Science Policy and Legislative Affairs Committee from 2001-2002, Dr. Barker has been instrumental in defining and achieving the AACR's science and public policy goals. In addition, her efforts to launch the AACR Scientist↔Survivor Program—which celebrated its 20th anniversary in 2018-established the AACR as a leader in survivor and patient advocacy.



AACR Distinguished Public Service Award for Exceptional Leadership in Cancer Advocacy COLONEL JAMES E. WILLIAMS (RETIRED) Camp Hill, Pennsylvania

A prostate cancer survivor, Colonel Williams is an alumnus of the AACR Scientist↔Survivor Program and has been a passionate advocate for funding and research dedicated to men's health issuesin particular, the need for improved care for men from racial and ethnic minorities. He shared his story in the Summer 2016 issue of Cancer Today, and he serves as a member of the magazine's Editorial Advisory Board.



AACR Distinguished Award for Extraordinary Scientific Innovation and Exceptional Leadership in Cancer Research and Biomedical Science

PHILLIP A. SHARP. PHD. FAACR Massachusetts Institute of Technology Cambridge, Massachusetts

A Nobel laureate and Fellow of the AACR Academy, Dr. Sharp was the program chair for the inaugural AACR Special Conference in 1988, and he currently serves as chair of the Scientific Advisory Committee for Stand Up To Cancer. He has consistently demonstrated his extraordinary dedication to the AACR and its mission.



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BY THE NUMBERS

The AACR's ambitious mission to prevent and cure all cancers is driven by its members. More than 40,000 member scientists, clinicians, and other health care professionals in 120 countries around the world advance the frontiers of understanding in all areas of inquiry, from epidemiology, prevention, early detection, and interception, to basic, translational, and clinical research. AACR programs foster communication and collaboration among these members, aligning their efforts and catalyzing progress for cancer patients.

ACTIVE MEMBERS

Established laboratory researchers, physician-scientists, clinicians, and population scientists

ASSOCIATE MEMBERS

Young laboratory scientists and physicians-in-training (graduate students medical students and residents, and clinical and postdoctoral fellows)

STUDENT MEMBERS

Undergraduate and high school students

EMERITUS MEMBERS

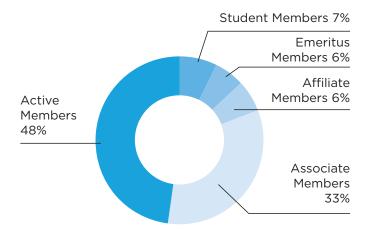
Active members who have reached the age of 70 years

AFFILIATE MEMBERS

Other health care professionals (practicing oncologists, nurses, laboratory technicians, non-scientific corporate professionals, and patient advocates)

Note: Totals may not equal 100% due to rounding.

MEMBERS BY CATEGORY



4,888 New members joined the AACR in 2018.

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Nobel laureates have been members of the AACR, including James P. Allison, PhD, FAACR, who was awarded the Nobel Prize in Physiology or Medicine in October 2018 for his shared discovery of cancer therapy by inhibition of negative immune regulation.

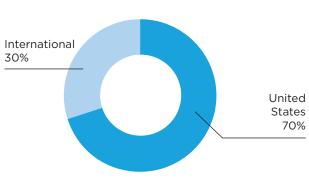
3,416 Individuals have been AACR members for more than 25 years.

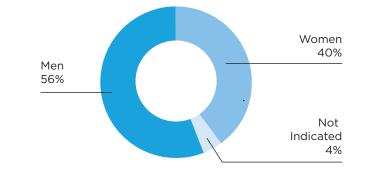
140 Individuals have been AACR members for more than 50 years.

120 Countries are represented by AACR members.

277 Patient advocates are members of the AACR.

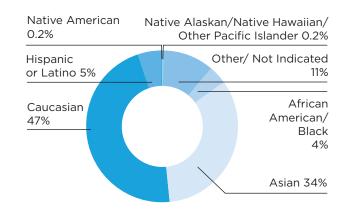




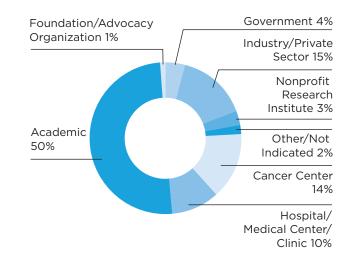


MEMBERS BY GENDER

MEMBERS BY RACE/ETHNICITY



MEMBERS BY WORK SETTING



AACR MEMBERSHIP: DIVERSIFYING THE CANCER WORKFORCE

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The AACR fosters diversity in the cancer research workforce through the efforts of three vital groups: Minorities in Cancer Research (MICR), Women in Cancer Research (WICR), and the Associate Member Council (AMC). Through training and mentorship, these groups empower talented scientists from populations that have been historically underrepresented in the scientific community ensuring that the AACR membership more comprehensively reflects the patients that it serves.



Early-career scientists participating in a roundtable discussion at the Minorities in Cancer Research Professional Advancement Session on "Navigating the Road to a Successful Career in Cancer Research," held at the AACR Annual Meeting 2018.

MEMBERSHIP

The AACR's commitment to promoting diversity in the cancer research community is exemplified by CEO Margaret Foti, PhD, MD (hc). In October, Dr. Foti was honored with the 2018 European Society for Medical Oncology (ESMO) Women for Oncology Award for her role in supporting the career development of women in oncology. Dr. Foti received the award during the Opening Session of the ESMO 2018 Congress in Munich, Germany (below), during which she presented a lecture titled "The Professional Advancement of Women in Oncology: A Matter of Great Urgency for Patients."





ASSOCIATE MEMBER COUNCIL (AMC; 2018 COUNCIL CHAIR: ALLISON S. BETOF WARNER, MD, PHD)

AMC serves as the leadership body for AACR associate members, who consist of graduate students, medical students and residents, and clinical and postdoctoral fellows. The council develops programs that address the particular needs of earlycareer scientists.

• The AACR first offered the benefits of membership to early-career scientists in 1988 with the introduction of associate membership. In 2018, the AACR and the AMC commemorated the thirtieth anniversary of the Associate Member category with a series of events at the Annual Meeting and throughout the year (above).

The highlight of the year-long celebration was the announcement of the elimination of annual dues for AACR associate members—ensuring that the benefits of AACR membership will be available to all early-career scientists.

• In March, 14 associate members visited their senators and congressional representatives during the Third Annual Early-Career Investigator Hill Day. Organized by the AMC and the AACR Office of Science Policy and Government Affairs, the event gave early-career scientists the opportunity to thank their representatives for their February vote to pass the Bipartisan Budget Agreement Act of 2018—which facilitated a \$2 billion increase to the 2018 NIH budget-and to advocate for predictable and sustained funding increases in the future.

scientists.



MINORITIES IN CANCER **RESEARCH (MICR: 2018** COUNCIL CHAIR: BRIAN M. RIVERS, PHD, MPH)

MICR is a membership group within the AACR committed to preventing and curing cancer while meeting the professional needs and advancing the careers of minority

• The AACR-MICR Distinguished Lecture Series brings together leading researchers to present the latest developments in cancer research to students and faculty at Minority-Serving Institutions or other educational institutions that serve large minority populations in order to inspire these students and educators to pursue careers in cancer research. MICR organized two lecture sessions in 2018 that addressed the critical topic of cancer health disparities. At the AACR Annual Meeting in Chicago, Robert A. Winn, MD, director of the University of Illinois Cancer Center, hosted and chaired a session titled "From Bench to Community Driving Innovative Cancer Research to Patient Care and Health Equity." In November, at the AACR Conference on The Science of Cancer Health Disparities in New Orleans, MICR hosted a session titled "Advances in Cancer Disparities Research: Understanding the Drivers vs. Passengers" at the Louisiana State Health Sciences Center.

• The AACR-MICR Jane Cooke Wright Memorial Lectureship highlights an outstanding scientist who has made meritorious contributions to the field of cancer research and who has, through leadership or by example, furthered the advancement of minority investigators in cancer research. The 2018 edition of the lectureship recognized John D. Carpten, PhD (above center), of the Keck School of Medicine of the University of Southern California. Dr. Carpten delivered his lecture, titled "Towards Understanding the Impact of Diversity in Cancer Genome Science," at the AACR Annual Meeting 2018.

WOMEN IN CANCER RESEARCH (WICR: 2018 COUNCIL CHAIR: LUCILE L. ADAMS-CAMPBELL, PHD)

WICR is a membership group within the AACR committed to recognizing women's scientific achievements and fostering their career development and advancement in cancer research.

• The AACR-WICR Charlotte Friend Memorial Lectureship recognizes an outstanding investigator who has made meritorious contributions to the field of cancer research and who has, through leadership or example, furthered the advancement of women in science. The 2018 edition of the lectureship honored Dafna Bar-Sagi, PhD (above left), of New York University Langone Medical Center. Dr. Bar-Sagi delivered her lecture, titled "Unraveling Mechanisms of Oncogenic Ras-mediated Tumorigenesis," at the AACR Annual Meeting 2018.



• The AACR Annual Meeting 2018 also presented an opportunity for the WICR council to provide early-career scientists with critical career training through a Professional Advancement Session. Titled "Challenges and Solutions for Wonder Women in Science," the session featured Annual Meeting Program Chair and AACR President-Elect Elaine R. Mardis, PhD, who delivered a keynote address on "Finding Your Inner Wonder(ful)."

LEADERSHIP

Members of the AACR Board of Directors for 2018-2019.

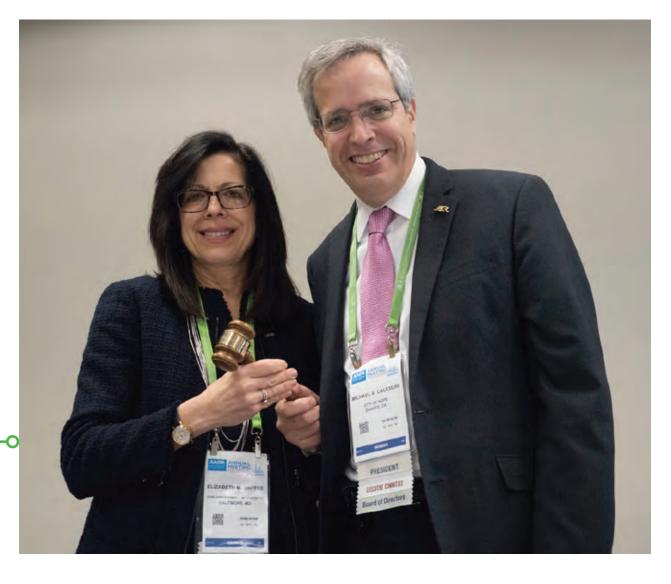


2017-2018 AACR President Michael A. Caligiuri, MD, FAACR, hands the gavel to incoming (2018-2019) President Elizabeth M. Jaffee, MD, FAACR, during the presidential transfer of power ceremony, which took place during the Annual Business Meeting of Members at the AACR Annual Meeting 2018.

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AACR OFFICERS AND DIRECTORS

The AACR thanks its officers and members of the board of directors for their vision, their wisdom, and their hard work in support of the AACR's mission.



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Eighty-eight cents of every dollar raised by the AACR Foundation goes to support lifesaving cancer science. The AACR thanks the officers and trustees of the Foundation for their efforts to maximize the impact of donations on the lives of cancer patients.



Mitchell R. Stoller, Executive Director of the AACR Foundation, thanks supporters of the AACR at the Partners in Progress Reception during the AACR Annual Meeting 2018.

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AACR Science Education and Career Advancement Committee Chair Kathleen W. Scotto, PhD (left), presents an AACR-Thomas J. Bardos Science Education Scholar Award to undergraduate student Leah V. Dodds during the AACR Annual Meeting 2018.

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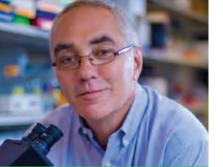
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AACR Pathology Task Force MASSIMO LODA, MD

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SUPPORTING PROGRESS AGAINST CANCER

The mission of the AACR—to prevent and cure all cancers through research, education, communication, collaboration, policy and advocacy, and funding—is an ambitious one. The goal of the AACR Foundation—to provide the full range of resources needed to support the AACR's mission—is equally ambitious. By creating a community of supporters from all sectors of the field—including nonprofit organizations; foundations; industry partners; and cancer survivors, family, and friends—the AACR Foundation accelerates progress against cancer.



MARK SCHONEVELD CANCER SURVIVOR, AACR AMBASSADOR

Mark Schoneveld was diagnosed with grade III anaplastic astrocytoma in 2013. After two brain surgeries, proton therapy, and a course of chemotherapy, he has been cancer free for nearly four years. A stay-at-home dad to son Soren and twins Mira and River, Mark focuses on each day, running to stay healthy in the face of a disease that may return some day.

Mark began working with the AACR as an Ambassador in 2018, and he ran in the 2018 AACR Philadelphia Marathon as part of the AACR Runners for Research team to raise money to support lifesaving cancer science:

^{ff} The piece of the disease that hits me every day is that this day matters, because I'm alive and I can talk and I can walk and I can run.

I know the promise of research and how it benefits cancer patients today like me. And I want to support cancer researchers in any way I can.

Learn more about Mark's story: **AACR.org/Mark**

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American Association for Cancer

AACR Runners for Research team member Mamadou Ba sprints out to the lead in his starting group during the 2018 AACR Philadelphia Marathon. The Runners for Research team helped raise \$400,000 to support lifesaving cancer research.

AACR FOUNDATION

EXPANDING INDUSTRY PARTNERSHIPS

Industry plays a vital role in the cancer research enterprise, and the AACR's industry partners increased their critical support of its programs and initiatives in 2018. The AACR's Sustaining Member program expanded to a total of 26 corporate partners, and two longtime AACR supporters made substantial financial commitments to advance the AACR's mission:

- In February, Johnson & Johnson announced a \$4.86 million contribution to the AACR, the largest single gift ever received from a pharmaceutical partner. Supported by the Johnson & Johnson Lung Cancer Initiative, the gift was used to fund three AACR-Johnson & Johnson Lung Cancer Innovation Science Grants that support multi-institutional research teams seeking novel approaches to the prevention, interception, and cure of lung cancer.
- In March, AstraZeneca and its global biologics research and development arm, MedImmune, announced a contribution of \$2.9 million to the AACR to support 12 fellowships that will stimulate innovative research in the fields of DNA damage response and immuno-oncology. Postdoctoral and clinical fellowship recipients will conduct groundbreaking research both in an academic environment and at AstraZeneca and MedImmune under the guidance of a dedicated industry mentor.

AN EXCITING NEW FUNDING MODEL TO SUPPORT **INNOVATIVE CANCER** RESEARCH

Since 2016, MPM Capital has managed the UBS Oncology Impact Fund (OIF). The fund, which invests across a spectrum of companies that develop transformative cancer therapeutics, is the first social impact fund to dedicate a portion of its profits specifically to cancer research. At the AACR Annual Meeting in April (*right*), MPM announced that it had selected the AACR as a beneficiary of the OIF, beginning with a \$1.2 million gift to establish the AACR-MPM Transformative Research Grants Program. The grants, which will be awarded by a Scientific Advisory Board established by the AACR, will support innovative research that accelerates breakthroughs against cancer.

LOCAL OUTREACH, GLOBAL IMPACT

While its industry partnerships continue to raise the AACR's national and international profile, the AACR Foundation maintains a strong presence in its home city of Philadelphia—raising funds locally to support the AACR's mission.

• AACR Revolutions for Research. The third edition of this annual indoor cycling event was held in October at The Fillmore, a new Philadelphia music venue (*right*). Teams of cyclists gathered to ride for 90-minute and 180-minute sessions to raise funds to support the AACR's mission.







• Party With a Purpose. Since 2016, the AACR has been the exclusive beneficiary of this elite fundraising gala. The 2018 Party with a Purpose—which was organized by committee president Beverly Goldberg and committee chairs Julia Somers-Morley, John Kroll, John J. Parker, Sr., and Arlene Cohen in partnership with the AACR—focused on prostate cancer research and raised over \$500,000 to support groundbreaking science.

During the October gala, the Party With a Purpose Distinguished Service Award was presented to John J. Dougherty, Business Manager of the International Brotherhood of Electrical Workers Local 98, for leading the union's charitable efforts over the past 25 years. The Party With a Purpose Scientific Achievement Award was presented to Karen Knudsen, PhD, a prostate cancer researcher and the Enterprise Director of the Sidney Kimmel Cancer Center (SKCC) at Jefferson. As part of her award, Dr. Knudsen selected Veronica Rodriguez-Bravo, PhD, Assistant Professor, Sidney Kimmel Cancer Center at Jefferson, to receive the Friends of the AACR Foundation Early Career Investigator Award. The Early Career Investigator Award provides a grant to support Dr. Rodriguez-Bravo's research on the responsiveness and vulnerability of cancer cells.

• AACR Philadelphia Marathon. In its second year as the Title Partner of the AACR Philadelphia Marathon, the AACR joined the City of Philadelphia in welcoming more than 30,000 participants for race weekend, November 17-18. The participants included more than 300 members of the AACR Runners for Research team, who made their miles matter by raising \$400,000 to support lifesaving cancer research.



SECURING THE FUTURE OF THE AACR MISSION: DR. BAYARD D. CLARKSON LEGACY SOCIETY

In 2017, the AACR legacy giving society was renamed in honor of Bayard D. Clarkson, MD, FAACR-past president, fifty-year AACR member, Fellow of the AACR Academy, and founding chair of the AACR Foundation. Inspired by Dr. Clarkson's lifetime of service to the AACR's mission, a record number of AACR members made an endowed, estate, or other planned gift to benefit the AACR in 2018. Their generous support will sustain the AACR's ongoing pursuit of its mission to prevent and cure all cancers.

RESEARCH GRANT FUNDERS

AACR

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Fund of Communities Foundation of Texas



Effie Tzameli, PhD, (right) Director of Research at the Neuroendocrine Tumor Research Foundation, presents the Neuroendocrine Tumor Research Foundation-AACR Grant to Pawel Mazur, PhD, (*left*) at the AACR Annual Meeting 2018. Since 2011, the Neuroendocrine Tumor Research Foundation has provided \$2,750,000 in funding to the AACR to support neuroendocrine cancer research.

calendar year.

- Sustaining Hope Club

- 1 AACR Member 2 - AACR Board of Directors 3 - AACR Foundation Trustee 4 - AACR Fellow 5 - 50 year-plus AACR Member 6 - AACR Staff Member 7 - AACR Sustaining Member 8 - 25-49 year AACR Member 9 - Dr. Bayard D. Clarkson Legacy Society 10 - AACR Monthly Giving/ 11 - The 1907 AACR Founders Society 12 - The Medaled Society 13 - 15-24 year AACR Member 14 - Trustee Emeritus

- * Deceased

ACKNOWLEDGMENT OF SUPPORTERS

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Annual giving offers all donors an opportunity to support lifesaving cancer research and sustain the mission of the AACR. We gratefully acknowledge those individuals and family foundations who gave \$500 or more, and those special events, associations, corporations, and foundations that contributed \$5,000 or more during the

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Amgen, Inc.^{7, 11} AstraZeneca^{7, 11} Bristol-Myers Squibb^{7, 11} Genentech, a member of The Roche Group¹¹ Pancreatic Cancer Action Network¹¹ Stand Up To Cancer, a program of the Entertainment Industry Foundation^{7, 11}

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Michele Cleary, PhD (left), Chief Executive Officer at The Mark Foundation, and Michael A. Caligiuri, MD, FAACR (right), AACR President (2017-2018), present the inaugural AACR-The Mark Foundation NextGen Grant for Transformative Cancer Research to Birgit Knoechel, MD, PhD (center).

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STEWARDS (\$100,000 TO \$249,999)

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- Loxo Oncology¹² Novartis^{7, 11} Novocure¹² Ocular Melanoma Foundation¹² Pharmacyclics, LLC^{7, 12} Sidney Kimmel Cancer Center at Jefferson¹² Susan G. Komen The Mark Foundation for Cancer Research¹² Triple Negative Breast Cancer Foundation

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We gratefully acknowledge the following individuals who have made an endowed, estate, or other planned gift to the American Association for Cancer Research. Creative gift planning provides an opportunity to make a meaningful commitment, maximize philanthropic objectives, and receive important tax benefits.

All those who have established an estate or other planned gift to the AACR, such as a bequest naming the AACR in their will, are recognized with membership in the Dr. Bayard D. Clarkson Legacy Society. This society honors individuals who have invested in sustaining the future of the AACR and its initiatives so that generations to come may benefit from the leadership and groundbreaking work of the AACR and

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The AACR Sustaining Membership Program is a support mechanism that engages industry partners in the AACR's mission-based activities year-round.

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Incyte Corporation Pharmacyclics, LLC

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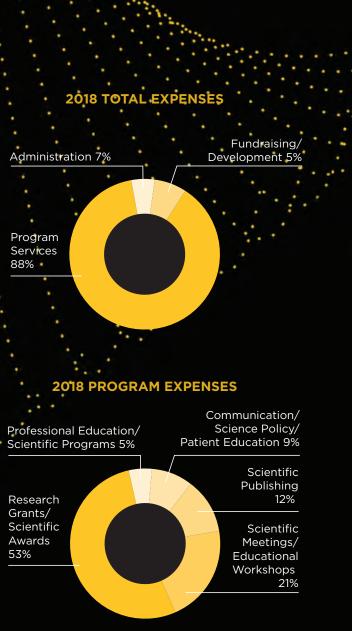
In 2018, the AACR reported another year of positive operating returns. This financial stability enables the AACR to comprehensively meet the challenges of the cancer problem. Operating revenues totaled \$111.5 million and total expenditures closely matched revenues. The net impact of revenues and expenses resulted in an operating surplus of \$1.4 million. As outlined in this report, several major projects were launched in 2018, and the AACR was able to outperform the budget through successful programming, revenue growth, and prudent financial management.

Non-operating activities are primarily related to long-term investments. After several years of positive performance in the AACR's investment portfolio, the portfolio experienced negative returns in the amount of \$5.8 million in 2018 due to a market correction. These returns were offset in part by the net operating surplus, resulting in an overall net deficit of \$4.4 million for the year. Fortunately, the AACR was able to manage its operating budget without using investment income, so the negative market returns did not have an adverse effect on net operating income.

As a result of the financial performance for the year 2018, the AACR's unrestricted net assets are now \$71.8 million. These reserves ensure continued investment in the programs and initiatives that support the AACR's mission to prevent and cure all cancers.

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FINANCIAL STATEMENT



American Association for Cancer Research, Inc. and AACR Foundation UNRESTRICTED REVENUES AND EXPENSES (UNAUDITED) AS OF DECEMBER 31, 2018

	2017	2018	2018 PERCENT OF TOTAL
REVENUE			
Membership Dues	\$4,145,566	\$4,296,301	4%
Scientific Publishing	\$17,920,478	\$20,255,103	18%
Scientific Meetings / Educational Workshops	\$23,648,781	\$25,714,086	23%
Other Revenue	\$2,669,170	\$2,232,813	2%
Subtotal: Program Revenue	\$48,383,995	\$51,903,543	47%
Support			
NIH Grants	\$911,665	\$940,501	1%
Contributions	\$63,675,776	\$58,670,725	52%
Subtotal: Support Revenue	\$64,587,441	\$52,498,303	53%
TOTAL REVENUE	\$112,971,436	\$112,109,529	100%
EXPENSES			
Research Grants / Scientific Awards	\$54,556,901	\$51,391,700	47%
Scientific Meetings / Educational Workshops	\$18,110,349	\$19,721,140	18%
Scientific Publishing	\$11,622,941	\$11,880,364	11%
Communications / Science Policy / Patient Education	\$8,585,386	\$8,657,004	8%
Professional Education / Scientific Programs	\$4,464,488	\$5,188,363	5%
Subtotal: Program Expenses	\$97,340,065	\$96,838,571	88%
Member Services / Support Services	\$7,152,289	\$8,303,701	8%
Fundraising / Development	\$4,646,576	\$5,050,547	5%
Subtotal: Support Expenses	\$11,798,865	\$13,354,248	12%
TOTAL EXPENSES	\$109,138,930	\$110,192,819	100%
Operating Surplus before Investments	\$3,832,506	\$1,916,710	
Investment Income	\$11,324,081	(\$5,865,862)	
Change in Unrestricted Net Assets	\$15,156,587	(\$3,949,152)	
NET ASSETS BEGINNING OF YEAR	\$60,640,037	\$75,796,624	
NET ASSETS END OF YEAR	\$75,796,624	\$71,847,472	

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LEADING DISCOVERIES, TARGETING CURES

AACR programs and initiatives have fostered collaboration, sparked innovation, and driven progress against cancer in the past year. Entering 2019, the AACR will continue that progress in critical areas, forging international alliances and redefining the frontiers of cancer science for the benefit of patients.



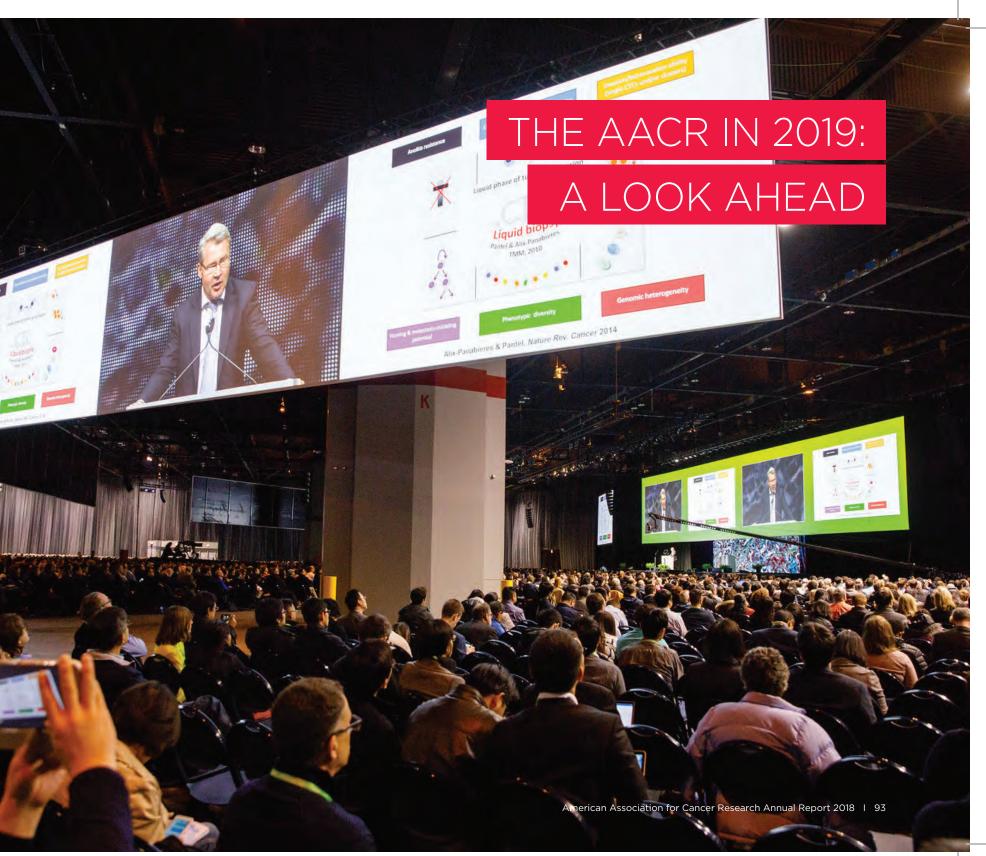
FUTURE OF CANCER RESEARCH INNOVATION SUMMITS

AACR President (2018-2019) and Fellow of the AACR Academy Elizabeth M. Jaffee, MD (*above*), will lead the organization's efforts to explore and advance two critical areas of cancer science by serving as the chair of two Future of Cancer Research Innovation Summits to be launched in 2019:

• Combination Therapies. Convening in June 2019 under the leadership of Dr. Jaffee and cochairs Jennifer Rubin Grandis, MD, Albert C. Koong, MD, PhD, Patricia M. LoRusso, DO, and Antoni Ribas, MD, PhD, this summit will bring together leaders in immunotherapy, targeted drug therapies, surgical oncology, and radiation therapy to discuss the current status of and challenges to the success of combination cancer therapies. The goal of the summit is to better understand the science and effectiveness of combining various modalities and to improve the development of combination cancer therapies through scientifically driven clinical trials.

• Convergence Cancer Science. This summit, which will convene in the fall of 2019, will bring together experts from different areas of science-including life sciences, engineering, mathematics, chemistry, and physical sciences-to discuss recent and emerging technologies and methodologies that are uncovering new cancer pathways. Guided by Dr. Jaffee and cochairs Anna D. Barker, PhD, Joe W. Gray, PhD, FAACR, Peter Kuhn, PhD, and Charles Swanton, MD, PhD, the summit participants will work to understand the current activities that are uniting experts with multiple areas of expertise to attack the cancer problem, to identify the challenges in integrating convergent disciplines, and to determine how the AACR can address these challenges in the future.

(Opposite page) Klaus Pantel, MD, PhD, presents in the Opening Plenary Session titled "Advancing Cancer Medicine: From Discovery to Patient Care" at the AACR Annual Meeting 2018. 10 3



THE AACR IN 2019: A LOOK AHEAD



CATALYZING COLLABORATION IN PEDIATRIC DRUG DEVELOPMENT

Advances in cancer science require continuous international collaborations, and international collaborations require a trusted broker to bring together scientists, clinicians, regulators, and patient advocates from around the world. The AACR is such a broker, and in 2019 the organization will facilitate several collaborations in critical areas required to catalyze progress against cancer.

The ACCELERATE platform is the premier European forum for addressing issues associated with the development of innovative anticancer medicines for children and adolescents with cancer. Created in 2013 by the European Consortium for Innovative Therapies for Children with Cancer (ITCC) and the European Society

for Pediatric Oncology (SIOPE), the platform supports collaborations among pediatric oncologists and clinicians, industry scientists, regulatory bodies, and patients to identify and overcome pediatric cancer drug development challenges.

In June 2018, ITCC and SIOPE launched a project to reorganize and expand the ACCELERATE platform beyond Europe, strengthening international cooperation to improve the global development of new pediatric oncology drugs. In 2019, the AACR Pediatric Cancer Working Group (PCWG) will work with ITCC and SIOPE to realize that vision. Chaired by Crystal L. Mackall, MD (above left), the PCWG will facilitate the coordination of efforts among European and U.S. drug developers, ensuring that pediatric and adolescent cancer patients around the world benefit from advances in drug development.



TRANSFORMING POPULATION SCIENCE

The AACR advances the frontiers of cancer science by understanding the field, identifying the forces impacting the field, and taking a leadership role in responding to those potential changes. In February 2019, in association with its Molecular Epidemiology Working Group (MEG), the AACR will host a special conference on "Modernizing Population Sciences in the Digital Age."

Chaired by MEG Steering Committee members Melissa L. Bondy, PhD (above), and Peter Kraft, PhD, along with Marc T. Goodman, PhD, and Sophia S. Wang, PhD, the conference will address the ways in which population scientists can transform their methodologies to incorporate "big data," including data from wearable technologies and electronic medical

records. The conference will also address the use of mobile and social media outreach for study recruitment and retention, increasing participation in population studies by responding to changes in the way populations interact.

EXPANDING COLLABORATIONS IN CANADA

The AACR's international outreach has included efforts to enhance relationships with organizations in Canada. These efforts will impact several AACR programs and initiatives in 2019:

• The Canadian Institutes of Health Research (CIHR) will sponsor the participation of three Canadian patient advocates in the AACR Scientist↔Survivor Program at the 2019 AACR Annual Meeting in Atlanta. These patient advocates will attend Annual

- approaches.



Meeting sessions with AACR scientist mentors to learn about the innovative science behind their cancer treatments.

• The AACR special conference on Advances in Pediatric Cancer Research will be held in Montreal, Quebec, in September. Cochaired by David Malkin, MD, of the Hospital for Sick Children in Toronto, the conference will address the unique issues and challenges in investigating the biologic basis of childhood cancers and translating recent findings into new treatment

• The AACR's focus on eliminating cancer disparities is shared by the CIHR Institute of Cancer Research (ICR). A representative of the ICR participated in the AACR Cancer Health Disparities Think Tank held in October 2018, and the AACR and CIHR-ICR will be exploring additional opportunities to collaborate on this critical issue in 2019 and beyond.

EXPANDING AND TRAINING THE CANCER RESEARCH WORKFORCE

AACR leadership is committed to sustaining the pipeline of researchers in all fields of cancer science and medicine to meet the needs of cancer patients now and in the future. The recent decision by the AACR Board of Directors to eliminate dues for associate members is expected to markedly increase the number of young investigators in the AACR membership, providing valuable training and networking opportunities to early-career investigators at a critical point in their careers.

As the cancer workforce expands, the AACR will take steps in 2019 to ensure that these scientists and clinicians receive the best possible training with the launch of the AACR Education and Training Committee. Chaired by President-Elect Elaine R. Mardis, PhD (above), this new standing

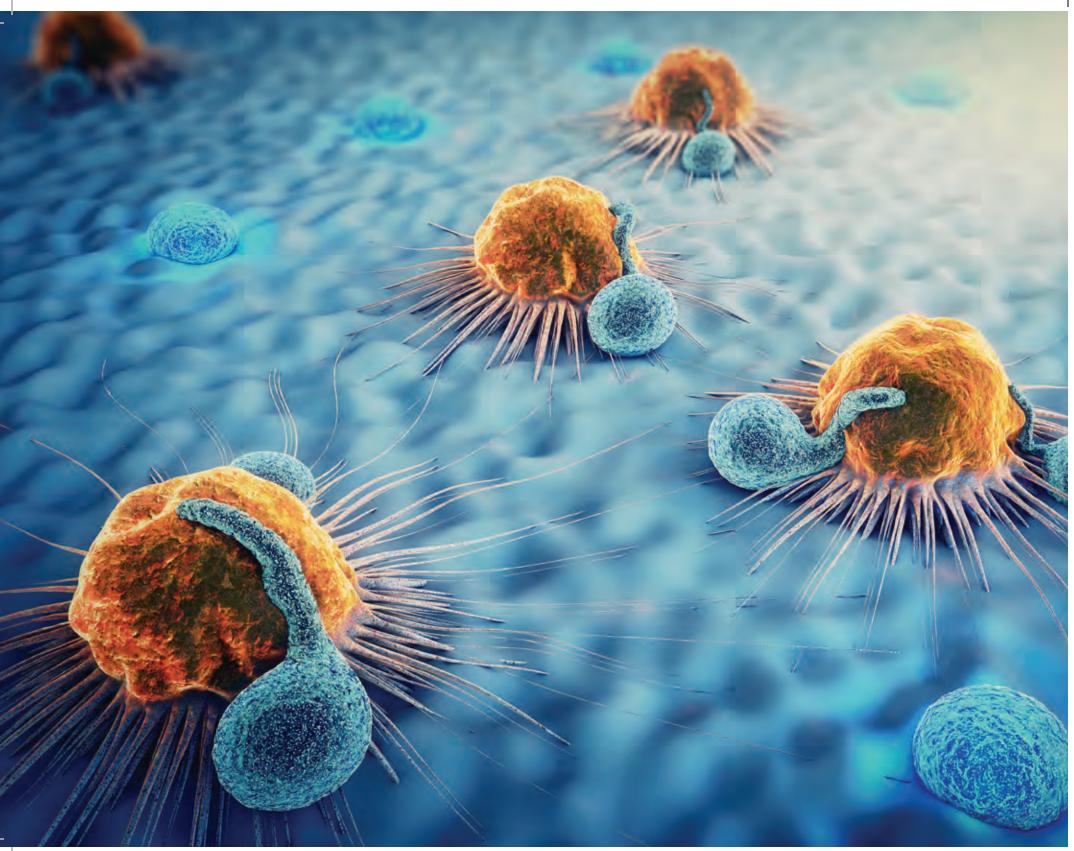
committee will work to expand the AACR's portfolio of educational workshops and develop new in-person and online training opportunities-ensuring that investigators at all career stages are well equipped to face the challenge of preventing and curing all cancers.

VISION 2020: FOCUS ON SCIENTIFIC PRIORITIES

In the coming year, the AACR will continue to pursue the objectives outlined in its Vision 2020 strategic plan, which was developed by the Board of Directors and the AACR staff in late 2016 to set a course for the organization's growth and impact on cancer research. The strategic priorities established in the plan include a directive to "identify and foster innovative science that is of the highest priority and potential for impact in reducing cancer incidence, morbidity, and mortality." In accordance with this directive, the AACR

will strengthen its focus on several scientific priorities in 2019, including basic science, survivorship research, cancer disparities, early detection and cancer interception, hematological malignancies, new technologies, and pathology.

With the guidance of the Vision 2020 strategic plan and the leadership of its Board of Directors, the AACR and its more than 40,000 members will continue to be the most effective catalyst for the prevention and cures of all cancers.



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