The AACR Journals: Advancing Progress Toward the AACR's 115-Year Mission

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Introduction

The American Association for Cancer Research (AACR) is the first and largest cancer research organization dedicated to accelerating the conquest of cancer. The stated purpose of the organization when it was founded 115 years ago was "to further the investigation and spread the knowledge of cancer." Since that time, the AACR has been the driving force to eradicate cancer. Publication of research findings has always been critical to this endeavor, with the 11 founders recognizing the importance of "sharing observations" and the need for a journal to "collect under one cover such contributions as bear in any way upon the general problems of oncology."

The AACR launched its first peer-reviewed scientific journal, *The Journal of Cancer Research*, in 1916. At the time, it was the only English-language cancer journal in the world. Since then, the AACR portfolio of journals has grown to 10. These journals cover the full spectrum of cancer science and medicine and together, over the years, have published over 100,000 articles and over 130,000 meeting abstracts. This is an immense contribution to the body of knowledge on cancer and has ignited communication among cancer scientists and physicians, helping to catalyze a revolution in the field.

We are honored to serve as the current Editors-in-Chief of the AACR journals. Each of the 10 journals was launched by the AACR to meet the scientific information needs of its membership and all those engaged in cancer research. Under our leadership, the journals engage closely and collaboratively with the community to facilitate the presentation and wide dissemination of research findings. Importantly, the AACR is a not-for-profit publisher. This means that any surplus from the AACR journals program is used to help support the cancer research community and the mission of the AACR to prevent and cure all cancers by contributing to funding for AACR grants, scientific conferences, and science policy and advocacy efforts. Here, we highlight the unique roles of our journals within the family of AACR journals and how they serve to advance the mission of the AACR.

CANCER RESEARCH

First Published: 1941

Editor-in-Chief:
Chi Van Dang, MD, PhD, FAACR

Building a Foundation for Understanding the Complexities of Cancer

At the inception of the AACR, there was a clear need for journals focused on cancer research to assemble key studies to help guide the field. *Cancer Research* was launched in 1941 as the flagship journal of the AACR from a rich ancestry that started with its predecessors: *The Journal of Cancer Research* (1916–1930) and *The American Journal of Cancer Research* (1931–1940). From the very beginning, *Cancer Research* has published landmark papers (https://aacrjournals.org/cancerres/pages/landmark_articles) that have enriched our knowledge of cancer biology and treatment and have provided the foundation upon which major breakthroughs have been built. In the first year of publication, *Cancer Research* featured seminal studies on the effect of castration on prostate cancer and the mechanism of carcinogenesis that shaped the field (https://www.aacr.org/wp-content/uploads/2019/11/CancerResearch_75Anniversary_1941-2016.pdf). *Cancer Research* has continued to publish articles that cover the full range of research, spanning from investigations on drug discovery, cancer molecular mechanisms, and the tumor microenvironment to clinical and population studies. As cancer research has evolved over the past century, new AACR journals have emerged to embrace and support expanding fields, providing specialized venues for studies that deepen our understanding of areas that were historically covered by *Cancer Research*. In this regard, the "pedigree" of AACR journals stemmed from the principles set by *Cancer Research*, which remains a venue for publishing fundamental studies in all areas of cancer research, including emerging areas such as cancer data science and mathematics. As a society journal, *Cancer Research* serves the community through its editorial process that is guided by the judgment of international academic editors who provide rich expertise in various areas as practicing researchers. Further, the Journal embraces early career investigators and has recognized these researchers with the prestigious *Cancer Research* Early Career Award. Guided by its extensive history, *Cancer Research* hopes to motivate and support the next generation of scientists to lessen the burden of cancer through their innovative research.

MOLECULAR CANCER RESEARCH

First Published: 2002

Editor-in-Chief:
Massimo Loda, MD

Defining the Molecular Basis of Malignancy and Progression

As cancer science and medicine entered the molecular biology era, it became clear that a communication channel was needed to emphasize basic science studies in oncology—studies that report significant mechanistic findings at the molecular or cellular level. Originally published under the title *Cell Growth & Differentiation* from 1990 to 2002, *Molecular Cancer Research* (*MCR*) was launched as the AACR was beginning to build its now-renowned focus on molecular biology and genetics. The Journal served to help emphasize this focus and attract more scientists into the AACR's membership. As part of this mission, *MCR* features studies exploring the molecular underpinnings of each of the hallmarks of cancer, with a particular emphasis on studies elucidating oncogenic alterations in metabolism. Cancer metabolism is increasingly recognized as a key vulnerability of tumor biology. *MCR* is committed to recruiting and disseminating studies featuring novel metabolomic analyses, mass spectrometry, metabolic imaging and tracing, and other approaches that clarify links between metabolism and cancer, with the goal of identifying metabolic vulnerabilities and adding to the armamentarium of anticancer interventions. In addition to publishing impactful basic cancer research studies, the Journal aims to promote diversity of thought and perspective within the basic cancer research community. To achieve this goal, *MCR* has launched an initiative in which senior investigators are paired with rising stars in their fields to write and edit review articles jointly. This initiative encourages collaboration among researchers by integrating historical perspectives with new directions to provide novel, actionable insights for the field.

CANCER EPIDEMIOLOGY, BIOMARKERS & PREVENTION

First Published: 1991

Editor-in-Chief:
Elizabeth A. Platz, ScD, MPH

Focusing on Cancer at the Population Level to Address Unresolved Problems

Cancer Epidemiology, Biomarkers & Prevention (*CEBP*) is the leading subspecialty journal for fundamental and applied population science research describing the burden of cancer; uncovering possible causes of cancer and its progression; and informing and evaluating strategies for cancer prevention, early detection, cancer survivorship, and closing the cancer disparities gap. *CEBP* is unique among AACR journals in focusing on populations at risk for cancer, with cancer, and surviving cancer, especially U.S. and global populations who experience health inequities. Among its many contributions, the Journal has advanced the field of molecular epidemiology of cancer by providing expert peer review and a highly regarded publications forum and has helped launch the careers of many investigators who conduct population science research on cancer. *CEBP* plays an active role in informing public health practice, policy, and recommendations by publishing articles that are cited as part of the evidence base, including by the FDA, the Centers for Disease Control and Prevention, the U.S. Preventive Services Task Force, and the World Health Organization. Recognizing the societal need to enhance the translation of population science evidence for cancer prevention and control today and in the future, the Journal recently expanded its scope to include cancer care delivery and implementation science research. Like the other AACR journals, *CEBP* serves the research community well through its editorial rigor and publication of innovative and impactful research addressing contemporary and emerging cancer problems.

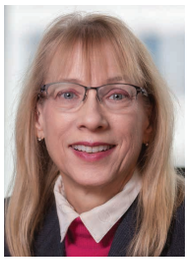
CLINICAL CANCER RESEARCH

First Published: 1995

Editor-in-Chief:
Keith T. Flaherty, MD

Bringing Cancer Science to the Clinic

As biologic insights into cancer rapidly accelerated in the decades after the discovery of the structure of DNA and the armamentarium of anticancer agents began to expand, the AACR identified the need for a communication outlet focused on the clinical applications of these discoveries; *Clinical Cancer Research* was launched to provide this much-needed outlet. Early therapeutic development has since transitioned from rigidly divided trial phases into an adaptive process that encompasses investigation of safety, pharmacokinetics, proof of mechanism, and first evidence of clinical activity. These same trials now frequently serve as the basis for first regulatory approval. The Journal bridges the transition from late preclinical development, when a new therapy is being paired with insights into the molecular features that predict responsiveness to therapy, to clinical validation of those hypotheses, and the Journal has evolved into a premier venue for phase I/II trials. As the only AACR journal with clinical research of all types, including clinical trials, as its sole purview, *Clinical Cancer Research* has taken the charge of being the journal that accounts for what happens to the discoveries described in basic and translational cancer research when they are tested prospectively for their potential impact on the outcomes of patients with cancer. Since its launch, *Clinical Cancer Research* has also played a distinct educational role among clinical oncology journals, with a robust collection of review articles to benefit basic scientists with clinical interests and clinical investigators studying new agents with unique biologic mechanisms of action. *Clinical Cancer Research* has also become an important forum for critical discussions in clinical oncology. Field-leading experts are invited to deliberate on the progress made in a given therapeutic area, focusing on the lessons to be learned from recent successes and failures. Authors from the FDA provide detailed insights into the data that drive regulatory decision-making for each successful therapy. *Clinical Cancer Research* continues to demonstrate the AACR's long-standing commitment to accelerating research that leads to potential interventions for prevention, early detection, and treatment of cancer and particularly to showcasing clinical trials.



MOLECULAR CANCER THERAPEUTICS

First Published: 2001

Editor-in-Chief:
Beverly A. Teicher, PhD

Accelerating Innovations in Preclinical Cancer Drug Development

Improving and expanding the arsenal of anticancer therapies is an essential goal in our shared mission to prevent and cure all cancers. From before the humble beginnings of nitrogen mustards and vinca alkaloids to the advent of immuno-oncology and rationally designed targeted therapy, the last 115 years have seen quantum leaps in therapeutic strategies and clinical options to combat cancer. *Molecular Cancer Therapeutics* has been at the forefront of this effort for more than 20 years, publishing top-tier science in the design, synthesis, discovery, and preclinical study of novel therapeutic agents for the treatment and prevention of cancer. The Journal's scope covers anticancer therapeutics broadly, including precision medicine therapies of all types: cell therapies, gene therapies, RNA therapeutics, oncolytic viruses, and vaccines in addition to established regimens such as molecular and biologic agents, chemotherapy, and radiotherapy. Among these efforts, the Journal provides a specialized venue for the first disclosure of experimental therapeutics advancing toward clinical trials, providing a platform with international reach to authors. The crucial role of *Molecular Cancer Therapeutics* among the AACR journals—and, indeed, among all oncology journals—cannot be overstated. The Journal's laser focus on disseminating rigorously vetted research with near-term clinical benefit has enormous potential to impact the entire cancer research community and to improve, extend, and defend the lives of patients with cancer. To that end, *Molecular Cancer Therapeutics* continues to provide a vital forum for the communication of important discoveries in cancer therapeutics research to the global research community.

CANCER PREVENTION RESEARCH

First Published: 2008

Editors-in-Chief:
Raymond N. DuBois, MD, PhD, FAACR, and Michael N. Pollak, MD

Emphasizing Prevention and Early Detection to Control Cancer

Effective global cancer control must emphasize efforts to reduce cancer incidence rather than concentrating solely on cancer treatment. To help catalyze such efforts, the AACR launched *Cancer Prevention Research* (*CaPR*) in 2008 to be devoted exclusively to cancer prevention research. From its inception, *CaPR* has endeavored to be a primary resource for original articles, scholarly reviews, and timely perspectives regarding basic, translational, clinical, and population science investigations related to cancer risk reduction. Five years ago, *CaPR* published the landmark perspective, "Transforming Cancer Prevention through Precision Medicine and Immune-oncology," which proposed a Pre-Cancer Atlas and recognized unprecedented opportunities to interrogate the biology of premalignancy (1). The subsequent development of the Pre-Cancer Atlas, together with other advances, represents a "moonshot" opportunity for the field of cancer prevention. *CaPR* will continue to cultivate high-caliber content from pioneers in fields such as carcinogenesis, the biology of premalignancy, cancer risk assessment, screening, and policy implementation that will transform the way we detect and, ultimately, intercept and prevent cancer. The Journal's mission to reflect the current state of cancer prevention and to catalyze the development of the field supports the AACR mission to prevent and cure all cancers. The community of researchers, educators, advocates, and funders that works together under the umbrella of the AACR and its family of journals is a critical part of the cancer prevention ecosystem. Together, we are publishing research that defines the field of cancer prevention, building a translational bridge between bench and community, and developing the next generation of cancer prevention researchers.

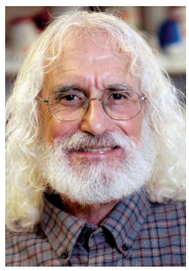
CANCER DISCOVERY

First Published: 2011

Editors-in-Chief:
Lewis C. Cantley, PhD, FAACR, and Luis A. Diaz, MD, FAACR

Advancing Cancer Science and Medicine for Patient Benefit

In 2011, recognizing the cancer research community's need for a journal that published the most impactful research while placing a premium on streamlined editorial processes and service to authors, the AACR launched *Cancer Discovery*. Bringing together basic scientists with detailed knowledge of cancer biology and physicians at the vanguard of science-driven clinical trial design, *Cancer Discovery* immediately changed the landscape of scientific publishing in the field, with many other journals now trying to emulate the unique mix of basic, translational, and clinical research that the Journal pioneered. *Cancer Discovery* has been at the forefront of the most important developments in cancer over the past decade, from targeted therapy and immunotherapy to technological advances in single-cell sequencing and liquid biopsy that have fundamentally changed our understanding of cancer biology and response to treatment. Preclinical and clinical studies published in *Cancer Discovery* have laid the foundation for numerous FDA approvals within a short period, and influential commentaries and reviews have galvanized the field and guided policy decisions. The unique editorial team consisting of leading researchers and experienced professional editors works collaboratively with the community to quickly publish and disseminate the strongest, immediately impactful science to support the AACR mission to prevent and cure all cancers.



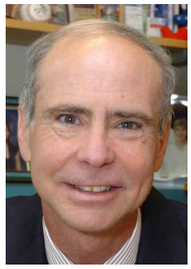
CANCER IMMUNOLOGY RESEARCH

First Published: 2013

Editors-in-Chief:
Robert D. Schreiber, PhD, FAACR, and Philip D. Greenberg, MD, FAACR

Harnessing Immunologic Insights to Drive Progress against Cancer

The first cancer immunotherapeutic is famously considered to have been administered in 1891 by William B. Coley, one of the 11 founders of the AACR, when he used a mixture of heat-killed bacteria (subsequently known as Coley's toxins) to create an inflammatory response that could treat a patient with sarcoma. However, it took more than 100 years before the field of cancer immunology and immunotherapy research gained meaningful traction among those working in the broader discipline of cancer science and medicine. The rapid expansion of the field began in the early 2000s as a result of increasing evidence linking the immune system with cancer development and demonstrations that the immune system might be harnessed to treat cancer, and it has continued at an even more remarkable pace since the FDA approval of the first immune checkpoint inhibitor, the CTLA4-specific blocking antibody ipilimumab, in 2011. Recognizing the need to further enhance interactions between researchers in the realm of cancer immunology and immunotherapy and those in all other areas of the cancer research community, and to provide a forum for the presentation of advances in the rapidly evolving field of cancer immunology science, the AACR collaborated with the Cancer Research Institute to launch *Cancer Immunology Research* in 2013. Since its inaugural issue, the Journal has disseminated exciting discoveries and developments in the field of cancer immunology and immunotherapy, and successfully introduced the central principles of immunology to cancer biologists and clinical investigators. As a journal devoted to the science underlying some of the most transformative therapeutics to have entered the clinic for the treatment of cancer in recent years, *Cancer Immunology Research* has played a unique role in advancing the mission of the AACR.



BLOOD CANCER DISCOVERY

First Published: 2020

Editors-in-Chief:
Riccardo Dalla-Favera, MD, FAACR, and Kenneth C. Anderson, MD, FAACR

Stimulating Understanding and Guiding Treatment of Hematologic Malignancies

Unprecedented progress in understanding the pathogenesis of hematologic malignancies and in translating these insights into improved clinical outcomes has created a demand for a high-profile outlet for publishing these discoveries. To address this need and to emphasize the AACR's commitment to the prevention and cure of all types of cancer, *Blood Cancer Discovery* was launched in 2020 to inspire, facilitate, and broadly disseminate important discoveries about hematologic malignancies. The Journal's model of operation replicates *Cancer Discovery*'s success in creating synergies between the expertise of leaders in the field and the dedication of in-house editorial and publishing teams, enabling rigorous, rapid, and transparent editorial processes. *Blood Cancer Discovery* has published cutting-edge research articles on a broad spectrum of topics encompassing leukemia, lymphoma, myeloma, and other blood cancer subtypes that also have profound implications for our understanding of solid tumors. The Journal has also published all the phases of clinical research: drug development in preclinical disease models, clinical trials, molecular events underlying clinical responses and resistance to therapies, and real-world epidemiology. As a forum for diverse ideas shaping future research directions, *Blood Cancer Discovery* has published incisive commentaries and has partnered with the AACR's hematologic malignancy-focused Special Conferences, quickly emerging as a thought leader in blood cancer research.

CANCER RESEARCH COMMUNICATIONS

First Published: 2021

Editors-in-Chief:
Elaine R. Mardis, PhD, FAACR, and Lillian L. Siu, MD

Catalyzing the Open and Rapid Dissemination of Cancer Research

The landscape of cancer science and medicine continues to change and accelerate, becoming ever more multifaceted. Launched in October 2021, *Cancer Research Communications* was designed with these considerations in mind. Most crucially, the Journal is fully open access and boasts the broadest and most flexible scope of any AACR title to date, providing a pathway to publication for authors working within funder mandates or whose work falls outside the scope of other titles in the AACR portfolio. The Journal's nine sections offer a comprehensive view of the spectrum of oncology research. With an editorial ethos centered on accessibility, reproducibility, and value to the field, the Journal is inclusive of a wide variety of important research findings that may be beyond the scope of other journals in the program. *Cancer Research Communications* is committed to catalyzing the rapid dissemination of rigorously peer-reviewed scientific findings in diversified areas of study, including but not limited to physics, engineering, mathematics, and computational biology. This interdisciplinary approach stimulates the cross-pollination of insight and innovation among cancer researchers. Moreover, the Journal emphasizes flourishing areas of research—such as precision medicine, immuno-oncology, and disparities in cancer health outcomes—that will be foundational to the next 115 years of progress against cancer. As a thoroughly modern platform designed to meet the needs of our authors and readers while complementing the other AACR journals, *Cancer Research Communications* is poised to stimulate the efficient and dynamic exchange of knowledge, actively sparking new ideas and discoveries to prevent and cure all cancers.

CONCLUSION

Since the very first issue of *The Journal of Cancer Research* was published in 1916, the AACR journals have been a critical resource for cancer researchers and physicians, providing a forum for disseminating groundbreaking discoveries in cancer science and medicine. As the current Editors-in-Chief of the AACR journals, we are proud that this tradition of publishing seminal, rigorously vetted research that can change the trajectory of the field has established the AACR journals as a trusted partner of the research community. Importantly, we would like to take this opportunity to thank our authors, editorial teams, reviewers, and readers for their invaluable contributions to this endeavor. The tireless efforts of this community provide a beacon of hope to patients and their loved ones.

As we look to the future, we continue to collaborate with the research community to ensure that the journals operate with a forward-thinking mentality that adapts to the evolving needs of all stakeholders. In recent years, we have seen critical scientific and technological innovations propel extraordinary progress against cancer. We are confident that this progress will continue, and we remain dedicated to ensuring that the AACR journals continue to provide a platform for the communication of impactful research and support the AACR mission to prevent and cure all cancers.

AUTHORS' DISCLOSURES

L. Cantley consulted for Petra Pharmaceuticals, Agios Pharmaceuticals, EIP Pharmaceuticals, Volastra, Larkspur, and Cell Signaling Technologies over the past year. He also received grant support from the NIH/NCI, Gray Foundation, The Mark Foundation, the Breast Cancer Research Foundation, and Stand Up To Cancer/American Association for Cancer Research over the past year, and is a stockholder in Agios Pharmaceuticals, EIP Pharmaceuticals, Cell Signaling Technologies, Volastra, and Larkspur. R. Dalla-Favera is a consultant for NeoGenomics and AstraZeneca and receives research funds from AstraZeneca. L.A. Diaz is a member of the board of directors of Jounce Therapeutics and Epitope and is a compensated consultant to PetDx, Innovatus CP, Se'er, Delfi, Blackstone, Kinnate, and Neophore. He is an inventor of multiple licensed patents related to technology for circulating tumor DNA analyses and mismatch repair deficiency for diagnosis and therapy; some of these licenses and relationships are associated with equity or royalty payments directly to the inventors. He holds equity in Epitope, Jounce Therapeutics, PetDx, Se'er, Delfi, Kinnate, and Neophore; he divested his equity in Personal Genome Diagnostics to LabCorp in February 2022 and he divested his equity in Thrive Earlier Detection to Exact Biosciences in January 2021. His spouse holds equity in Amgen. The terms of all these arrangements are being managed by Memorial Sloan Kettering in accordance with their conflict of interest policies. K.T. Flaherty reports personal fees from Clovis Oncology, Checkmate Pharmaceuticals, Strata Oncology, Kinnate Biopharma, Scorpion Therapeutics, PIC Therapeutics, Apricity, Tvardi, ALX Oncology, xCures, Monopteros, Vibliome, Soley Therapeutics, Quanta Therapeutics, Nextech, Takeda, Novartis, OMRx, and Transcode Therapeutics and other support from Roche/Genentech outside the submitted work. P.D. Greenberg reports grants and personal fees from Juno Therapeutics; grants from Lonza; personal fees and other support from Earli, Metagenomi, Elpiscience, Rapt Therapeutics, and Immunoscape; and grants, personal fees, and other support from Affini-T outside the submitted work. E.A. Platz reports personal fees from AACR. R.D. Schreiber reports personal fees from A2 Biotherapeutics, Arch Oncology, Meryx, GlaxoSmithKline, Johns Hopkins University, MD Anderson, Memorial Sloan Kettering Cancer Center, The Salk Institute for Biological Studies, Ohio State University, AACR, and Cancer Research Institute; grants, personal fees, and non-financial support from Asher Biotherapeutics and Sensei Biotherapeutics; grants and personal fees from NCI, Codiak Biosciences, and Jounce Therapeutics; and personal fees and non-financial support from NGM Biopharmaceuticals outside the submitted work. L.L. Siu reports personal fees from Roche, Oncorus, Voronoi, Arvinas, Tessa, Navire, Relay, Marengo, InteRNA, Qualigen, Daiichi Sankyo, Coherus, Hoopika, Medicenna, Agios, and Treadwell Therapeutics; grants from Novartis, Bristol-Myers Squibb, Boehringer-Ingelheim, Roche/Genentech, EMD Serono, Celgene, Astellas, Bayer, Abbvie, Symphogen, Intensity Therapeutics, Mirati, and Shattucks; and personal fees and grants from Merck, Pfizer, AstraZeneca, GlaxoSmithKline, and Amgen outside the submitted work. No disclosures were reported by the other authors.

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