

WORLD CANCER RESEARCH DAY: A Call to Action for a Coordinated International Research Effort to Prevent, Diagnose, and Treat Cancer



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ABSTRACT

Cancer is a major public health problem and the second leading cause of death worldwide. The burden of cancer continues to grow and is projected to double by 2040. This situation calls for coordinated action and emphasizes the need to join efforts on worldwide initiatives, including World Cancer Research Day (WCRD), which aims to create and consolidate a yearly momentum to raise awareness and commitment for research on cancer. Cancer research is a key driver of advances in prevention and therapeutic strategies that

will benefit tomorrow's cancer patients. In 2016, 10 international organizations partnered to launch the WCRD initiative. Five years later, a total of 89 organizations and more than half a million people have joined this global movement that helps raise awareness of the importance of cancer research, demonstrating that a collaborative research culture is essential to address current challenges and create opportunities to accelerate impactful cancer research for a better future.

Global Collaboration for Cancer Research: World Cancer Research Day Initiative

In 2016, several international organizations involved in the promotion of cancer research came together to launch the World Declaration for Research on Cancer (1). This initiative was established as a global call to action for the involvement of citizens, enterprises, institutions, and leaders in diverse areas and activities to join efforts and promote research to slow the progression of cancer, to reduce the global impact of cancer, and to improve survival rates and the quality of life of people with cancer.

The Declaration, under the auspices of Dr. Francis Collins, NIH, Dr. Julio E. Celis, Dr. Joan Massague, Prof. Tony Hunter, Dr. Mariano Barbacid, and Dr. Anton Berns contains five main goals to be achieved by 2025:

- Increase social awareness and knowledge about the value and impact of cancer research efforts by establishing September 24 as **World Cancer Research Day**

- **Enhance sustainable financial sources for cancer research** in each country by involving individuals, companies, and institutions
- **Promote international collaboration** to enable global advances in cancer research
- **Provide training in cancer research**
- Encourage the development of **infrastructures for cancer research** in each country

During these first five years, from 2016 to 2020, this global movement has achieved the first aim: the celebration of WCRD as a **yearly event to raise awareness and commitment for cancer research to increase survival, facilitate access to scientific advances worldwide, and reduce the global burden of cancer.**

Despite the progress that cancer researchers have achieved in several key areas, scientific and clinical advances are not uniform for all types or stages of cancer. Cancer research still faces challenges such as:

- Developing additional cost-effective primary and secondary prevention measures
- More accurate early detection strategies
- New treatments that save lives at a lower cost and have less acute and long-term side effects
- Enhancing international collaborating networks and effective teamwork
- Establishing sustainable funding models
- Increasing research training opportunities
- Defining the infrastructure to allow fast implementation of the research findings into national healthcare systems

Initially promoted by the Spanish Association Against Cancer [Asociación Española Contra el Cáncer (AECC)], WCRD is currently being coordinated jointly by 10 international organizations:

- American Association for Cancer Research (AACR)
- American Society of Clinical Oncology (ASCO)
- Asociación Española Contra el Cáncer (AECC)
- Fondazione AIRC per la Ricerca sul Cancro (AIRC)
- Cancer Research UK (CRUK)
- European Association for Cancer Research (EACR)
- European Society for Medical Oncology (ESMO)

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Translational Relevance

The complexity of cancer, and the high heterogeneity of tumors as well as their microenvironmental and macroenvironmental contexts, require the coordination of international and multidisciplinary research efforts to tackle global challenges in cancer research. The World Cancer Research Day (WCRD), launched in 2016, is an annual international event that aims to raise awareness and commitment for cancer research to increase survival, facilitate access to scientific advances worldwide, and reduce the global burden of cancer. One of the goals of the WCRD is to promote a global and multidisciplinary research community to facilitate researchers and health specialists from various scientific disciplines working together, strengthening the spirit of collaboration and offering new perspectives and technologies to conduct innovative cancer research and accelerate progress in cancer control at the individual and population levels.

- International Agency for Research on Cancer (IARC)
- NIH—NCI
- Union for International Cancer Control (UICC)

All these organizations actively contribute to implement WCRD awareness: raising strategic activities, spreading the key messages of the campaign, and reaching and engaging audiences, including researchers, healthcare professionals, policy-makers, patients, and the general public.

As part of the WCRD campaign, participating organizations are spreading campaign messages and reaching people from every corner of the globe through the homepage worldcancerresearchday.com, as well as Facebook, Twitter, and Instagram accounts, and sharing WCRD content on their own websites and social media channels.

Since 2016, the number of people who have endorsed WCRD has increased substantially from about 1,200 to more than half a million in 2019. Currently, 89 organizations are engaged in WCRD activities and 1.3 million users used the campaign hashtag #WorldCancerResearchDay in 2019.

Every year, organizers add new activities to the campaign. As example of initiatives to raise awareness, the main message for the WCRD campaign held in 2017 was “For the future of cancer research, don’t stand still. We won’t. . . Make your move” to highlight the extraordinary impact of cancer research and the need to support and encourage our researchers who are dedicated to improving and changing the lives of patients with cancer all over the world. In 2019, the WCRD theme was “A Day in the Life of a Researcher” where cancer researchers were asked to share their stories of the research projects they are involved in, their challenges, and goals to contribute in the fight against cancer.

Other initiatives focus more on policy-making. In 2018, the AECC called on for a National Cancer Research Plan to achieve 70% five-year median survival by 2030 and strengthen the country’s economy by boosting Research, Development and Innovation (R+D+i). In 2019, in 43 of the 52 Spanish provinces, science came alive in the streets with researchers performing different experiments, helping lay people to understand their work at the labs, and asking citizens to sign for the plan, with more than 500,000 signatures ready to be delivered to the Government of Spain.

In addition, capacity building activities contribute to increase visibility of the WCRD. In 2017, WCRD had a special place in the ESMO-EACR meeting in Madrid with an opening event held in the Prado Museum and a photo booth during the meeting that helped visualize the initiative among a significant number of cancer researchers. This year, the ESMO virtual congress 2020 focused on the latest advances in oncology to improve cancer patient care that has taken place from September 19 to 21, and has set the context for the WCRD event on September 24, 2020.

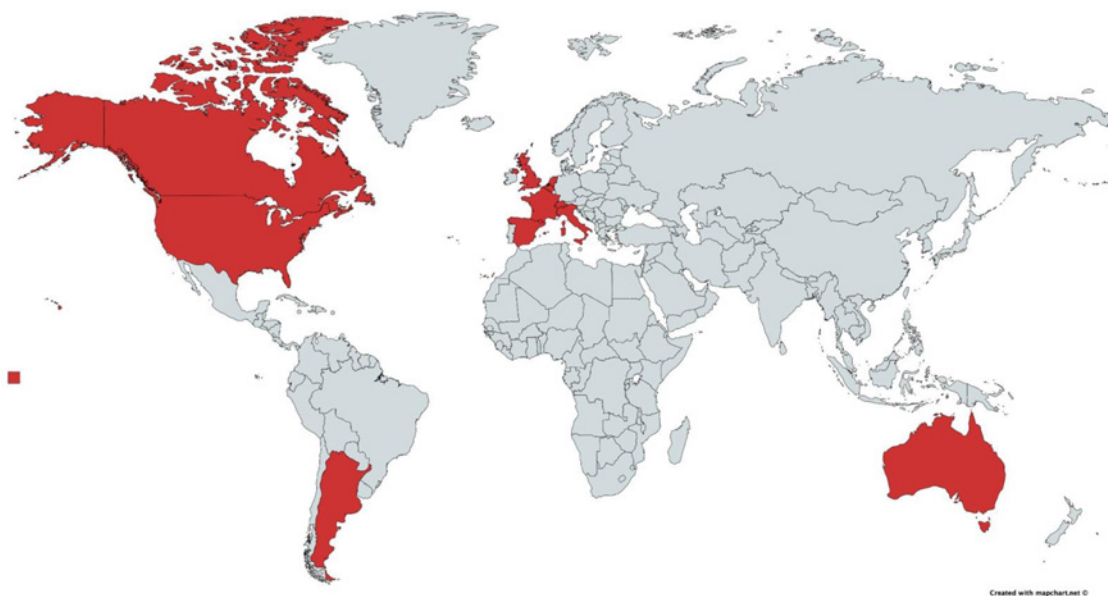


Figure 1.

In red, countries where there are organizations officially adhered to the WCRD global movement.

WCRD 2020: Team Up for Cancer Research to Beat Cancer Sooner**Future Directions**

Over the past five years, the WCRD campaign has promoted initiatives focused on bringing resources and attention to cancer research, demonstrating the value of cancer research to public health, and inviting people to be part of this global movement to consolidate the first aim of the World Declaration for Research on Cancer (1). Despite the significant increase in the engagement of individuals and researchers over the past years, the number of new organizations joining the campaign has only increased from 78 in 2017 to 87 in 2019. There are still some regions of the world where more efforts should be dedicated to recognizing WCRD initiative and the high value and impact of cancer research (Fig. 1). In many places, World Cancer Day is celebrated, but WCRD is not, representing missed opportunities to link cancer research and cancer control together in the public imag-

ination. As shown in Fig. 1, WCRD remains without official recognition particularly in low and middle income countries (LMIC), where cancer research has been far more limited, and where cancer research has often not been translated into measurable public health gains even when cancer research has been conducted. Therefore, for this 2020 campaign on September 24, we have expanded the reach of the campaign and identify new organizations to endorse the World Declaration for Research on Cancer to raise awareness about cancer research in every corner of the globe, towards a truly inclusive and equitable international movement.

On the other hand, patient engagement is gaining attention by all academic disciplines involved in health research. Patients can provide their personal experiences of coping with cancer to help shape research and promote truly patient-centered research. By increasing global patient involvement in the WCRD alongside researchers and other

Figure 2.
Key visual for the WCRD 2020 campaign.



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civil society members, we can accelerate progress in personalized cancer management and other areas of cancer research that can have worldwide impact.

Cancer research has been interrupted due to the SARS-CoV-2 pandemic and this has resulted in deleterious consequences in the near future, including disrupted cancer prevention and treatment due to widespread infection control measures, high SARS-CoV-2 morbidity and mortality in patients with concurrent cancer, disruptions to ongoing cancer research, intense prioritization of SARS-CoV-2 at biomedical research funding agencies, and diversion of cancer personnel and programmatic funding to pandemic control. Moreover, SARS-CoV-2 has also clearly demonstrated our global interconnectedness and the stark inequalities, which continue to exist worldwide. Therefore, now more than ever, it is essential that we come together to give all support to cancer researchers and oncology professionals and to ensure cancer patients' wellbeing.

This year, under the claim TEAM UP FOR CANCER RESEARCH, the WCRD campaign has shown that if cancer does not care about distance, neither do we (Fig. 2). Researchers from every corner in the world can work together, no matter how many kilometers separate them, because they have a common goal to accomplish. Therefore, a collaborative research culture is essential to address the current challenges facing us and the opportunities to accelerate results in cancer research for a future without cancer.

The future perspective of the WCRD initiative is to continue work on the remaining objectives of the Declaration to be achieved by 2025. These objectives (i.e., promote international collaborations, enhance sustainable financial sources for cancer research, or encourage the development of research infrastructures) are closely linked to the European Mission on Cancer, an initiative of the Horizon Europe Framework Programme for Research and Innovation (European Commission; ref. 2) that has the ambitious goal to reach more than

3 million lives saved, living longer and better by 2030. They are also closely linked to the U.S. Cancer Moonshot (3) initiative, which aims to accelerate cancer research and make more therapies available while improving cancer prevention and early detection methods. Sustained social and political support for all these initiatives is essential as few cancer control interventions can significantly alter the burden of cancer over just a few years, particularly important regarding equitable access to cancer control measures matters/affairs. Joining global efforts toward a common goal to control cancer will allow more people to live without cancer, and more patients with cancer to be diagnosed earlier, suffer less, respond to treatment, and have a better quality of life during and after treatment.

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Disclaimer

Where authors are identified as personnel of the International Agency for Research on Cancer/World Health Organization, the authors alone are responsible for the views expressed in this article and they do not necessarily represent the decisions, policy, or views of the International Agency for Research on Cancer/World Health Organization.

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References

1. World Declaration for Research on Cancer. Available from: <http://worldcancerresearchday.com/declaration/?lang=en>.
2. Horizon Europe – the next research and innovation framework programme. Available from: https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme_en.
3. Cancer MoonshotSM. Available from: <https://www.cancer.gov/research/key-initiatives/moonshot-cancer-initiative>.

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