



American Eurasian
Cancer Alliance

SPECIAL
EDITION
NEWSLETTER

2021

Dr. Saniya Ossikbayeva of the Molecular Genetic Research Center at KazIOR isolates DNA from cancer patients to detect for mutations

Celebrating 20 Years of
Scientific Collaborations



7500+

CANCER
PROFESSIONALS
ENGAGED

50+

VIRTUAL EVENTS
HOSTED

15+

COUNTRIES
REPRESENTED

FROM THE EXECUTIVE DIRECTOR

Dear Readers,

As we look back on 2020—a year of immense challenges and heartache—I want to express my deep gratitude for AECA organizational partners and clinical experts worldwide for their continued support of our work and mission. Meetings may have looked a little different, collaboration may have shifted from in-person to virtual, but I'm proud of the impact we've been able to make together.

At the center of our efforts, we recognize why we do this work — to improve the quality-of-life and treatment outcomes for millions of people who will battle cancer each year. Throughout the majority of 2020 and into 2021, COVID-19 posed particular challenges for cancer patients and their caregivers. Aside from the isolation and loss of normalcy that we all grappled with, this community may have been managing canceled chemotherapy or surgery appointments, increased challenges acquiring necessary medication, or heightened fear of the virus due to immunosuppression. There has never been a more important time to support this vulnerable population.

Despite the disruption caused by the pandemic, the global cancer control community has adapted brilliantly, and we've seen several positive byproducts of the shift to virtual, including 1) increased level of collaboration; where discussions may have centered around few conferences per year, conversations are now continuous and producing greater scientific value, 2) lower cost of administrative and travel resources, encouraging the participation of organizations that may not have had the means to partake previously, and 3) AECA's ability to expand its programmatic focus due to streamlining of resources, which has helped identify synergies across work streams and new avenues for international collaboration.

AECA's strategy for scientific advancement has been spreading throughout the Eurasian region, with tumor board sessions, teach-the-teacher educational experiences, scientific exchanges, and public health policy discussions being held continuously over the past year. Across all cancer sites, with particular focus on gynecological cancer, urological cancer, and palliative care, AECA has prioritized connecting North American and Eurasian leaders to advance the research and treatment of these malignancies for communities around the globe. To highlight the tangible successes of ongoing partnerships and collaboration in the region, AECA has begun to capture a growing list of meeting abstracts and peer-reviewed scientific publications from participating organizations that result from bilateral relationships developed by AECA.

We encourage you to visit our website to see the tremendous strides we've made in pushing the global oncology community forward.

Throughout our tenure, AECA has strategically aligned our activities with priorities put forth by the World Health Organization (WHO) to ensure regional efforts mirrored those globally. For many years this was focused on tobacco control as a leading cause of cancer; AECA and partners encouraged major policy adoptions in the Russian Federation and forged critical connections between U.S. and Russian cancer centers to examine and coordinate key areas of tobacco-related research on behalf of NIH Fogarty. Later, this priority shifted to cancer screening; AECA facilitated the establishment the Eurasian Cancer Screening Congress in 2018 and made certain that screening topics were not only included in national cancer control plans, but evaluated for effectiveness and prioritization. These plans were later bolstered by international experts, highlighted through a Kazakhstan case study featured by WHO, touting that screening coverage had increased from 60% to 90% for breast and cervical cancer.

More recently, WHO announced the launch of a global strategy to accelerate the elimination of cervical cancer, which AECA promptly shared with its global scientific network. AECA has been addressing this issue for decades, working as a close partner of the U.S. National Cancer Institute (NCI) and International Gynecologic Cancer Society (IGCS) to help reduce the global burden of cancer. Preempting this WHO announcement, AECA had been working with Uzbekistan gynecological leaders to ensure the success of an HPV vaccination campaign in 2019 to educate the population on the cancer prevention resource and to ensure girls across all regions received the required HPV vaccinations. Just a few months ago, WHO also updated their classification of cervical tumors, which were launched at the IGCS Congress based out of Russia. As always, AECA distributed this vital information to relevant Eurasian stakeholders, ensuring the global pathology community had the latest resources to inform research efforts and clinical care. AECA will continue to work with gynecological leaders across Eurasia and North America to ensure scientific progress is made toward reducing women's cancers.

Looking onward into 2021, while we hope to be celebrating soon the widespread distribution and uptake of COVID-19 vaccines, AECA will also be celebrating its 20th year pursuing knowledge exchange and scientific excellence in cancer control. It is incredible to see all of the hard work we've done over the last two decades come to fruition and lead to substantial scientific discovery, and we're excited to see what additional advancements we'll be able to unveil in the coming months. This year, we hope to welcome new partners into the AECA network and continue to expand our portfolio into additional cancer sites and geographic locations. We look forward to continuing to share our successes with our invaluable network of individuals and organizations around the world.

Wishing you health and happiness in 2021 and beyond.

Sophia Michaelson, PhD

PARTNER PUBLICATIONS

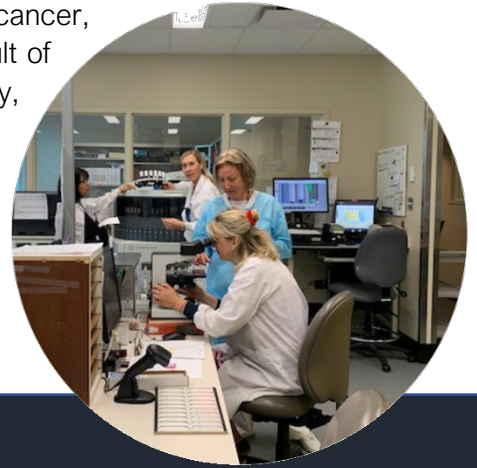
100+
PARTICIPATING
RESEARCH
ORGANIZATIONS

70+
SCIENTIFIC
TOPICS
PUBLISHED



SCIENCE

After more than two decades of ardent endeavors to reduce the global burden of cancer, AECA and its partner have seen tremendous scientific breakthroughs as a result of robust international collaboration. In preparation for the AECA's 20th anniversary, meeting abstracts and peer-reviewed journal publications were collected to highlight the tangible impact that partners had as a result of AECA's coalition-building efforts between North America and Eurasian stakeholders. In just the last two years, nearly two hundred scientific contributions were presented and discussed among the global oncology community.



Example Collaborative Partner Publication

Intracardiac Intravenous Leiomyomatosis: Diagnosis and Management

Through a close partnership forged between the Blokhin National Medical Research Center (Russia) and MD Anderson Cancer Center (USA), clinical researchers presented treatment strategies for patients requiring complex and multidisciplinary surgery for intravenous leiomyomatosis with intracardiac extension, a rare condition characterized by growth of a uterine neoplasm that extends through the uterine vascular channels, through the venous system, and ultimately into the cardiac chambers. The tumors may lead to significant physiologic disturbances and heart failure. It commonly occurs in pre-menopausal women and approximately 83% have undergone a previous hysterectomy or myomectomy. By outlining the details on management strategies in Russia through a peer-reviewed publication in the *International Journal of Gynecological Cancer*, clinicians around the world can bring these lessons learned into their treatment of this population.

Through close collaboration with the U.S. National Cancer Institute (NCI) for nearly 15 years, AECA helped develop critical connections between premier cancer centers throughout the U.S. and abroad. This effort led to multiple research initiatives between NCI and Eurasian institutions, most notably several U.S.-Russia bilateral collaborative partnerships that were established in 2017. Examples of the research projects which led to published literature and patented inventions include:

- Fox Chase Cancer Center partnered with Lomonosov Moscow State University to investigate mechanisms of PARP-1 interaction with chromatin
- Memorial Sloan Kettering Cancer Center and the Burdenko Neurosurgery Research Institute worked on the identification of essential areas of the brain in pre-operative brain tumor patients using BOLD fMRI and independent physiological parameters
- Harvard Medical School joined Saint-Petersburg State University to perform a single-cell analysis of tumor-microenvironment interactions in follicular lymphoma
- Vanderbilt University collaborated with the International Tomography Center of the Russian Academy of Sciences on magnetic resonance spectroscopy and molecular imaging of metabolic pathways in cancer

Sample Partner Publications

AECA Coordination Center
Fox Chase Cancer Center
Pennsylvania, USA

- ***The Lancet Oncology***: [Epacadostat plus pembrolizumab versus placebo plus pembrolizumab in patients with unresectable or metastatic melanoma](#)
- ***The New England Journal of Medicine (NEJM)***: [Atezolizumab plus Bevacizumab in Unresectable Hepatocellular Carcinoma](#)
- ***The Journal of the American Medical Association (JAMA)***: [Effect of Doxorubicin Plus Olaratumab vs Doxorubicin Plus Placebo on Survival in Patients with Advanced Soft Tissue Sarcomas](#)
- ***Cancer***: [A multicountry assessment in Eurasia: Alignment of physician perspectives on palliative care integration in pediatric oncology with World Health Organization guidelines](#)
- ***Nature***: [Protein-altering germline mutations implicate novel genes related to lung cancer development](#)

AECA and its organizational partners routinely participate in and contribute to global oncology conferences, including those hosted by the American Society of Clinical Oncology (ASCO), European Society for Medical Oncology (ESMO), and the Union for International Cancer Control (UICC). For example, several Eurasian-led abstracts shared at the 2020 Annual ASCO Meeting were featured in the *Journal of Clinical Oncology*, with topics including a phase II pilot study of the efficacy and safety of nivolumab and ipilimumab in T1aN0M0 renal cell carcinoma patients ineligible for surgical treatment, efficacy and safety of lenvatinib in combination with everolimus in metastatic renal cell carcinoma resistant to antiangiogenic targeted therapy, and next generation sequencing analysis of key genes in breast cancer patients, among others.

Last year, tremendous strides were also made in the field of palliative care. From large scientific summits, such as the Development of Palliative Care for Adults and Children Conference co-organized by AECA to more pointed ventures, like webinars focused on the principles of pain therapy in oncology, neuropathic pain, dose titration, among other topics, all serve as foundational elements for one purpose: scientific research. Ongoing cooperation between U.S. and Eurasian palliative care leaders led to the establishment of a minimum data set to facilitate health services research that will allow for a complete picture of how hospice and palliative care is delivered throughout the Eurasian region, creating a new global research platform in a rapidly growing palliative care landscape. This data includes routine and systematic measurement of information on patient demographics, type of care received, provider details, and cost and quality of care. Simultaneously, solid structures are being developed to conduct research projects and clinical trials on new methods for treating patients and families with both medical and psychosocial care. With nearly 80% of U.S. patients who are hospitalized for serious illness having access to palliative services, research in developing regions offers the opportunity to identify treatment strategies that improve on practices already established. A number of scientific papers are in development that will contribute to the body of knowledge on palliative care globally.

AECA continues to focus on expanding efforts with both global engagements and more targeted dialogs to ensure knowledge transfer among the appropriate stakeholders not only takes place, but is implemented in cancer control plans, scientific research agendas, and clinical practice. Looking into 2021, AECA will expand its portfolio to encompass skin cancer and melanoma, while also building on the stronghold on reproductive cancers and palliative care education and research already underway and flourishing within the Eurasian region. While the commitment to advance scientific research that will benefit the global oncology community remains as strong as ever, AECA will also continue to prioritize educational opportunities that will support young professionals and ensure regional scientific accomplishments are disseminated to the global community.

EDUCATION

While the extent of the scientific accomplishments over the last year were great, AECA maintains focus on the foundation of those accomplishments – educational opportunities. From identifying topical areas to improve knowledge transfer among stakeholders, to utilizing digital platforms to quickly connect leaders across the globe, the Alliance and its organizational partners are making tremendous strides in training the next generation of scientists, surgeons, and clinicians, ultimately creating a more conducive context for joint scientific cooperation.

For over two decades, AECA has optimized global platforms to engage professional oncology communities. AECA draws regional attention to distinguished events, fosters connections between relevant attendees, and organizes special sessions to further bring value to international meetings.



Based on global and organizational oncology priorities, AECA elected to co-host several events in 2020, including the Development of Palliative Care for Adults and Children Conference, the International Gynecologic Oncology Virtual Congress, and the International Conference on Cancer Care in Kazakhstan. Through these channels, AECA was able to propose world-renowned speakers and drive collaboration on surgical techniques, scientific exchange, and other educational opportunities.

In addition to playing a leading role at international events, AECA also prioritized strengthening more targeted, ongoing collaboration between cancer control specialists. Building on previous success facilitating virtual exchanges, 2020 brought the most sweeping AECA developments of the international tumor board platform. Uzbekistan, Belarus, Kazakhstan, and Russia all arranged to meet monthly with U.S. and European representatives to discuss gynecological and urological cancer control topics, ensuring medical professionals in both regions are addressing cancers of the reproductive region more holistically. Monthly meetings were also established to connect pathology experts, which helped forge a gynecological pathology virtual platform – led by Dr. Anna Plotkin of the University of Toronto – featuring recorded lectures and downloadable pathology resources categorized by disease site, summaries of relevant papers, commonly used gynecologic oncology stains, and direct access to the larger pathology community from Eurasia and other countries.



Ongoing efforts to improve cancer care in Eurasia allowed AECA to be able to establish the infrastructure necessary to sustain an early career research and publications network within the region. The network provides early career professionals with a supportive group of international peers and mentors to discuss research, publishing, and writing as critical components to career development. This effort ensures that research that is of value to the global cancer community will be accepted into prominent scientific journals and made available to intentional stakeholders who may benefit from the novel insights.



Delving even further into more personalized educational experiences, several palliative care “Teach the Teacher” courses were conducted last year. After two years of diligent work and ongoing engagement between AECA, the Worldwide Hospice Palliative Care Alliance (WHPCA), WHO, U.S. institutions, and Russian representatives, an educational course on palliative care for faculty of seven Russian higher education institutions was launched in November 2020.

The course provided educational professionals with guidance on how and what to teach emerging palliative care specialists, thus ensuring that best practices in palliative care research and treatment are implemented. AECA-affiliated faculty from Harvard, Johns Hopkins, Fox Chase Cancer Center and WHPCA presented on a number of topics, including grief and bereavement, patients with refractory dyspnea, neurobiology of pain, and life-sustaining treatment. Following advocacy from AECA and other organizations, it was decided that the event will be hosted on an annual basis under the auspices of WHO, given the increasing use of palliative care in developing nations and the opportunity to identify collaborative research synergies through the engagement. AECA is proud to have been a part of this effort, as the Alliance believes that improving educational curriculum for up-and-coming clinicians and policy leaders is key to making substantive change in palliative care practice.

Additionally, AECA is part of the international team coordinating regular palliative care case conferences where experts discuss clinical instruction on the management of patients suffering from complex pain syndromes, psychosocial problems, management of shortness of breath, and other hard to manage symptoms. This effort has resulted in the creation of a case library that professionals can access at any time, vastly improving access to these vital discussions both now and for future U.S. and Eurasian clinicians.

This year, AECA will continue to expand educational opportunities throughout the Eurasian region, both by cancer site and geographic representation. Plans are in development for a new educational webinar series focused on melanoma and skin cancer, with more details on that engagement forthcoming. AECA will also continue to invite new partners to optimize current platforms for additional engagement. For example, Eurasian stakeholders from multiple countries will be invited to a webinar series currently hosted between the U.S. and one Eurasian nation, in order to increase efficiency in information dissemination and identify opportunities for cooperation across the entire Eurasian perimeter.



Health care workers in the Eurasian region participate virtually in a palliative care educational event alongside AECA clinical experts from Johns Hopkins University, Harvard University, and the Hospice Care Professionals Association

AECA – 20 YEARS OF PROGRESS (2001–2021)

AECA has been at the forefront in driving global improvement in oncology research, education, and training efforts for twenty years, always with one thing in mind: improving the quality-of-life and health outcomes for the millions afflicted each year with life-threatening malignancies. While the snapshots below depict dramatic gains the international cancer control community has made, each individual effort is the result of multi-year, multi-institution collaboration. AECA will build on the successes over the last two decades by leveraging the strong relationships developed between North American and Eurasian researchers and institutions. There has never been more opportunity to make lasting, global change in scientific research, clinical care, public health programs, and policy priorities as it relates to cancer care. AECA is thrilled to be part of this work, and we look forward to developing new advances in the next twenty years.

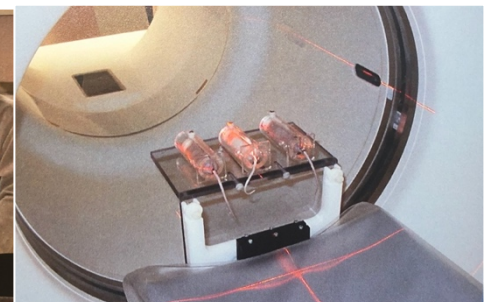
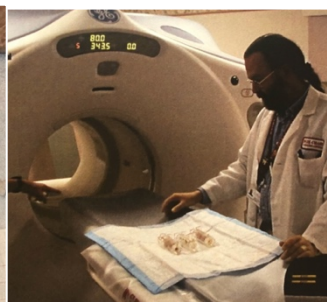
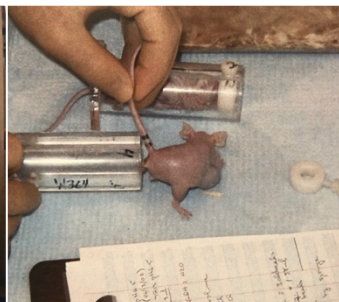
2001-2003

Launched the AECA program focused on the most prevalent U.S.-Eurasia cancer sites, establishing multidisciplinary cancer management programs through clinical summits focused on gynecology, urology, head and neck, lung, gastrointestinal, and skin cancers. Fostered cooperation between clinical experts and partnering organizations to elevate and sustain joint research projects.



2004-2005

Optimized research infrastructure development for cancer imaging and therapy by establishing a multi-national Eurasian scientific network; supported novel radio-immunotherapy research between Russia and the U.S. in order to develop radiopharmaceuticals for the detection and treatment of cancer.



2005-2006

Initiated public health programs and synchronized partners' priorities to align with the WHO agenda. While early cancer control efforts focused on detection and treatment, increased emphasis on prevention was the catalyst to the launch of a global tobacco control movement. AECA supported national events throughout Eurasia which encouraged several countries to adopt tobacco control policies, including smoke-free public zoning, direct advertising bans, and strict package labeling requirements.



2007-2008



Engaged all levels of Eurasian oncology services to introduce comprehensive cancer prevention and management programs that combined both cancer prevention and treatment techniques, while simultaneously expanding scientific networks and research platforms across all cancer sites.

2009-2010



Utilized international venues to showcase Eurasian clinical and scientific accomplishments, peer reviewed publications, and research capacity. Unified Eurasian partners around global cancer control efforts by encouraging participation in large-scale events hosted by organizations such as the Union for International Cancer Control (UICC), European Society for Medical Oncology (ESMO), American Society of Clinical Oncology (ASCO), International Agency for Research on Cancer (IARC), and more.



2010-2011

Launched multi-national "For Healthy Life" noncommunicable disease (NCD) prevention program following the United Nations General Assembly High-Level Meeting on NCDs and aligned with the 2008-2013 World Health Organization (WHO) Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases.



The U.S. National Cancer Institute (NCI) Center for Global Health (CGH) invited AECA to lead research, clinical, and policy efforts in Russia on behalf of CGH and other U.S. comprehensive cancer centers. AECA leveraged strong relationships with North American and Eurasian cancer control experts to spur scientific innovation.

2011-2012



2012-2013

Incorporated palliative care research, education, and clinical care into efforts to improve end-of-life programs and policies for cancer patients.



2013-2014

Expanded CGH focus from exclusively the Russian Federation to a larger territorial perimeter, including Central Asian Caucuses, Eastern European, and Baltic countries. On behalf of CGH, led regional efforts in the region on cancer prevention, symptom management, and palliative care.



2015-2016

Provided technical assistance to Central Asian nations during the development and implementation of national cancer controls plans. Stakeholders presented plans at the 2015 Cancer Control Leadership Forum in Uzbekistan, receiving feedback from international experts which AECA helped to not only incorporate into plans, but ensured the execution of these plans throughout the Eurasian region.



2016-2017

Coordinated the first bilateral extramural cancer research cooperation between the U.S. National Cancer Institute (NCI) and the Russian Foundation of Basic Research which resulted in ten scientific grants; multi-year projects have produced publications and patents of interest to the global cancer community.



2017-2018



Partnered with leading North American comprehensive cancer centers and international societies to support Eurasian initiatives in cancer screening. AECA developed initiatives to support the launch of WHO cancer screening guidelines in cervical, prostate, breast, and colon cancer to more than 20 countries at the Eurasian Cancer Screening Congress.

2018-2019

Initiated gynecological tumor boards and clinical case reviews between leading U.S., Russian, Central Asian, and Eastern European cancer centers. Dramatic advancements in gynecological cancer research, prevention, screening, and treatment throughout Eurasia, due in part to decades of AECA effort in the region, encouraged the Russian Federation to join the International Gynecologic Cancer Society (IGCS) Strategic Alliance Partnership Program.



2019-2021

Embraced virtual platforms to continue developing new international programs and partnerships, while addressing COVID-19 challenges. AECA coordinating center, Fox Chase Cancer Center, published clinical guidelines for cancer care during the pandemic, which was promptly shared with international partners to provide the most up-to-date guidance with the scientific community. Simultaneously, AECA, the Worldwide Hospice Palliative Care Alliance, and the Russian Association of Hospice Care Professionals mobilized efforts to develop pandemic recommendations for the palliative care space, which were distributed in both English and Russian.



OUR MISSION

To pool the intellectual and scientific resources of member institutions to further research and discovery in cancer prevention, treatment strategies, and palliative care.

STRENGTHENING GLOBAL CANCER RESEARCH

AECA is a scientific facilitator in Eurasia, adept at securing resources to strengthen cancer research through engagement with Ministries of Health, leaders of research institutes, and other regional decision makers. AECA programs focus on enhancing the understanding of the biology and etiology of cancer, implementing effective strategies for prevention, and developing new approaches for detection and treatment.

PROMOTING RESEARCH TRAINING AND EDUCATION

AECA has effectively facilitated research training delivered through high-quality, multidisciplinary professional courses designed to enhance knowledge and skills. Primary areas of international education exchange include urologic and gynecologic oncology, hematology, radiation oncology, pathology, immunotherapy, cancer prevention, palliative care, and pediatric cancers.

TRANSLATING RESEARCH INTO POLICY AND PROGRAMS

AECA, together with international partners, leads cancer control activities in Eurasia by providing guidance on existing practices to inform policy and strengthen research capacity, stimulate partnerships, and contribute to successful implementation of cancer control plans. AECA's active engagement in Eurasia has and continues to ensure that research results are translated into policies and programs that help all people live longer and healthier lives.

AECA Coordination Office

Fox Chase Cancer Center • 333 Cottman Avenue, Philadelphia, PA 19111 • +1-215-728-3800

www.theaeca.org

