BEST CHILDREN'S HOSPITALS
U.S.News & WORLD REPORT
CANCER
2024-2025

Children's Healthcare of Atlanta

Aflac Cancer & Blood Disorders Center

BRINGING INNOVATIVE CARE TO THE KIDS WHO NEED IT MOST

A LETTER FROM THE CHIEF

Dear Colleagues,

At the Aflac Cancer and Blood Disorders Center of Children's Healthcare of Atlanta, we are actively working to transform the way we care for pediatric cancer and blood disorders, striving every day to secure a healthier future for the growing number of kids impacted by these complex diseases. The good news: we're making progress.

We achieved one of the most noteworthy milestones in Children's history in 2024. The opening of Arthur M. Blank Hospital has made an incredible impact on our ability to provide advanced care to the more than 9,800 kids we see each year, including more than 500 children newly diagnosed with cancer. This new facility has allowed us to consolidate all of our hematology and oncology services under one roof, which means greater opportunities for collaboration among our team, more streamlined support for patients and families and more dedicated space for breakthroughs to happen.

Our team has expanded to more than 125 faculty members—including nearly 50 advanced practice providers—allowing us to propel our research, launch innovative programs and strengthen our clinical subspecialty expertise in hematology, oncology and blood and marrow transplant.

Collaboration and innovation are essential to finding new cures and saving more lives. We are proud to have significant expertise in clinical trials—providing our patients with access to more than 200 open clinical trials, including 30 investigator-initiated trials. We are bringing innovative cancer treatments to the kids who need them most through these novel studies with our faculty leading clinical trials, including gene therapy for patients with severe hemophilia A and the use of brentuximab vedotin and checkpoint inhibitors for childhood and adolescent Hodgkin lymphoma.

As one of the largest programs of its kind in the country, our center is at the forefront of the field of pediatric hematology/oncology. We care for some of the most complex patients, learning from each and every one and sharing our knowledge and expertise with others, so that we can foster progress and make an impact beyond our walls.

As I look ahead to the 30th anniversary of the Aflac Cancer and Blood Disorders Center, I am confident we will raise the bar even higher and continue to advance the level of care we provide. We remain driven by the desire to find a cure and give every child the lifetime they deserve.

Sincerely,

Douglas K. Graham, MD, PhD
Chief, Aflac Cancer and Blood Disorders Center
Division Chief, Pediatric Hematology/Oncology/BMT
Children's Healthcare of Atlanta

Professor of Pediatrics
Emory University School of Medicine
William G. Woods, MD Chair

THE AFLAC CANCER AND BLOOD DISORDERS CENTER CARES FOR MORE KIDS WITH CANCER THAN ANYONE ELSE IN GEORGIA

As Georgia's top pediatric cancer research center, we're developing new and innovative cancer treatments right here in Atlanta.

AT A GLANCE

We are one of the **largest** pediatric cancer centers in the Southeast, treating **more than 500** new cancer patients annually.

Manage the **largest** pediatric sickle cell disease program in the nation, treating **more than 2,100** unique patients with sickle cell disease each year.

In collaboration with Emory University, our researchers are developing **new treatment options** for patients who need them most.

We employ **126** faculty members—nearly **6** times our size in 2000—including nearly **50** advanced practice providers.

We performed **84 bone and marrow transplants,** making us one of the **largest pediatric BMT programs** in the country.

More than 200 clinical trials are available to our patients, **30** of which are investigator-initiated.

CLINICAL EXCELLENCE

Blood and Marrow Transplant Program: As one of the country's leading pediatric blood and marrow transplant programs, we perform among the largest volumes of BMTs in the U.S. In addition to treating malignant diseases, we also treat a variety of nonmalignant diseases through BMT, including sickle cell disease, metabolic disorders, immune deficiencies and more.

Bone Marrow Failure Program: At the Comprehensive Bone Marrow Failure Clinic, we provide multidisciplinary care to children with inherited or acquired bone marrow failure syndromes, including leading-edge treatments and therapies available only at major academic hospitals.

Brain and Spinal Cord Tumor Program: One of the nation's leading and largest single-center pediatric groups caring for children with brain and spinal cord tumors, our skilled team offers innovative treatments using the latest technology, such as Gamma Knife, stereotactic radiosurgery and radiotherapy.

Cancer Predisposition Program: We provide patients affected by cancer predisposition syndromes with comprehensive, pediatric-focused genetic counseling and surveillance, as well as cutting-edge genetic tools.

Curative therapies: We offer therapies through clinical trials that correct the genetic mutations that cause sickle cell disease, potentially curing kids of the disease.

Developmental Therapeutics Program: The Dev-T Program focuses on the discovery and creation of new treatments for children with cancer and blood disorders, specifically the use of new drugs, combinations of drugs or ways of administering drugs that we hope will lead to better outcomes for the kids we care for.

General Hematology Program: We offer comprehensive diagnosis and treatment for a wide spectrum of rare, non-cancerous childhood blood disorders, such as immune thrombocytopenia and other platelet disorders, white blood cell disorders, bone marrow failure syndromes, and congenital and acquired anemias.

Hemostasis and Thrombosis Program: In collaboration with Emory University, we follow more than 1,000 children and adults with bleeding disorders and approximately 200 with clotting disorders. We treat a wide range of disorders, including hemophilia, thrombosis and von Willebrand disease.

Sickle Cell Disease Program: Seeing more than 2,100 unique patients each year, we have one of the largest sickle cell disease programs in the country. We offer comprehensive clinics, transfusion services, specialty clinics and inpatient care, and we utilize the latest in innovative services and technology, including BMT for eligible patients. Our transition program for adolescent and young adult patients facilitates a smooth transition to adult care. We are a member of the Sickle Cell Clinical Research Network, a collaboration of physicians and researchers working to advance care and develop a cure. Additionally, we work with experts and treatment centers throughout the country to conduct clinical research studies with a focus on improving the quality of life and reducing complications for children affected by this disease.

Solid Tumor Program: Our pediatric specialists are experienced in treating children and young adults with all forms of solid tumors, from the most common to those rarely seen at most pediatric centers. We care for more than 150 newly diagnosed patients with solid tumors each year, and our researchers are actively involved in developing new treatments and future cures.

Supportive Care Clinic: The Supportive Care Clinic brings together specialists from across our center who join forces with our Pediatric Advanced Care Team (PACT) to support treatment of the child's underlying disease, while also optimizing quality of life and improving symptoms. An interdisciplinary palliative care team, PACT takes a family-centered approach to promote healing, comfort and making childhood experiences meaningful.

Survivor Program: We provide long-term, follow-up care tailored to survivors of childhood and adolescent cancer who have been off treatment for approximately two years, as well as patients who have been treated with BMT for non-cancerous conditions. Our team has developed SurvivorLink to assist our cancer patients with care plans after treatment. We also offer education about the long-term risks associated with cancer treatments; assistance with school, job or insurance issues; support for physical or emotional changes or problems; and opportunities to enroll in research studies that focus on survivors and the late effects of treatment.

Because of our size, we are able to dedicate teams of providers to each of the major types of childhood cancers and blood disorders. This degree of specialization means every child is cared for by a team focused solely on their disease.

Treated patients from **45 states** and territories over the last five years

CARING FOR OUR COMMUNITY

Cared for **2,225** kids in our Cancer Survivor Program since 2019

Provided over **854** consults in the last five years through our Fertility Preservation Program


Nurse
Practitioner

FEATURED PROGRAMS

Cell and Gene Therapeutics Program

Our Cell and Gene Therapeutics Program is focused on the development and implementation of novel gene therapy treatments for childhood cancers and bleeding disorders. Our team is dedicated to the translation of basic science discoveries to clinical applications.

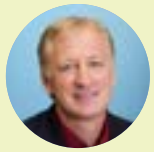
We have three major initiatives focused on the engineering of cellular products to treat childhood cancer:

- Development of drug-resistant immunocompetent cells for brain cancer
- Generation of anti-neuroblastoma cellular therapeutics
- Creation of chimeric antigen receptor technologies (CAR-T) for T-cell leukemia

Although we continue to advance our Cell and Gene Therapeutics Program toward clinical applications, we are also dedicated to building the personnel and infrastructure necessary to apply these technologies in Phase 1 clinical trials. Our main focus is to obtain U.S. Food and Drug Administration (FDA) approval as quickly as possible. Initiating gene-based trials is a complex process that requires the involvement of clinical and research faculty, technical expertise and regulatory personnel, which are available through various programs within the Aflac Cancer and Blood Disorders Center. In our new hospital, we have just opened a four-room Good Manufacturing Practice (GMP) compliant laboratory to enable local production of cell and gene therapy products.

Our program has successfully:

- Engineered Gamma Delta T-cells as a novel cellular therapy against multiple pediatric cancers, including neuroblastoma.
- Created bio-engineered, protein-based therapeutics for hemophilia A that we expect to be delivered at a cost more affordable to patients and families who cannot afford therapeutics.
- Pioneered the use of drug resistance immunotherapy to treat childhood cancers and participated in an international clinical trial testing the usefulness of T-cells engineered to kill cancer.
- Developed and opened a clinical trial to study the benefit of mesenchymal stromal cells (MSCs) in decreasing graft-versus-host disease (GVHD) in patients following a BMT.



RESEARCH SPOTLIGHT: GENE THERAPY

A scientific team at the Aflac Cancer and Blood Disorders Center led by Christopher Doering, PhD, Professor of Pediatrics at Emory University School of Medicine, and H. Trent Spencer, PhD, Professor of Pediatrics at Emory University and Director of the Cell and Gene Therapy Program at the Aflac Cancer and Blood Disorders Center, has developed a Factor VIII lentiviral gene therapy for hemophilia A currently in an international clinical trial.

SCAN FOR
INNOVATIONS
AND RESEARCH

FEATURED PROGRAMS

Immunohematology and Immune Dysregulation Program

At the Aflac Cancer and Blood Disorders Center, we strive to provide a medical home for children with complex, multisystem autoimmune disorders that arise from an underlying defect in immune regulatory pathways. The Immunohematology and Immune Dysregulation Program brings together unique expertise in immunology, hematology and BMT. In collaboration with hematology, rheumatology, gastroenterology and other subspecialties, the program offers focused immune and genetic evaluation of patients with either early-onset or refractory autoimmune conditions, with the goal of providing targeted immune modulatory and biological therapies based on immune profiles and genetics. In patients with immunological or genetically defined immune dysregulation conditions, we also offer BMT as a curative option.

Patients with underlying monogenetic immunohematology and immune dysregulation disorders are treated through different subspecialties because many will have more than one autoimmune manifestation and may not respond to conventional management. Identifying underlying immune and genetic etiologies is critical to the effective long-term management of these disorders.

With more than 700 patients, our program is among the largest in the country evaluating and treating patients with the following conditions:

- Autoimmune lymphoproliferative syndrome (ALPS) and ALPS-like conditions
- Immune dysregulation, polyendocrinopathy, enteropathy, X-linked (IPEX) and IPEX-like conditions
- Common variable immune deficiency (CVID)
- Very early onset inflammatory bowel disease (IBD) and treatment-refractory IBD
- Periodic fever syndromes and autoinflammatory syndromes
- Hemophagocytic lymphohistiocytosis (HLH)

RESEARCH SPOTLIGHT: IDENTIFYING AND QUANTIFYING T-CELL ACTIVATION IN HYPERINFLAMMATORY AND IMMUNE REGULATORY DISORDERS

When a child presents critically ill with multiorgan failure, quantifying T-cell activation and determining the extent of activation is essential for the timely evaluation and management of suspected hyperinflammatory and immune regulatory disorders, including hemophagocytic lymphohistiocytosis (HLH). Children's researchers are utilizing a flow cytometry-based measurement of direct T-cell activation assessed by HLA-DR^{+}CD38^hi T cells, which offers an accurate and rapid method to quantify T-cell activation. Results are available within a few hours, rather than the several days typically required for conventional biomarker assays. This rapid turnaround enables real-time decision-making and timely interventions, ultimately improving outcomes for critically ill pediatric patients.

High-Risk Leukemia and Lymphoma Program

The Aflac Cancer and Blood Disorders Center developed the High-Risk Leukemia and Lymphoma Program to streamline and coordinate treatment and care for pediatric patients with high-risk leukemia and lymphoma. Led by Sharon Castellino, MD, MSc, and Himalee Sabnis, MD, MSc, our program is one of only a few collaborative programs in the nation that brings together subject matter experts in the fields of leukemia, lymphoma, BMT, CAR-T, developmental therapeutics and precision medicine to design individualized treatment plans for some of the most complex pediatric leukemia and lymphoma cases. This advisory team of Aflac Cancer and Blood Disorders Center physicians educates patients and their families about their treatment options and empowers them to make informed decisions.

Tremendous improvements have been made in the treatment of pediatric leukemia and lymphoma; however, some children do not respond to treatment as well as others. These patients are considered to have high-risk leukemia or lymphoma. A child may be considered to have high-risk leukemia or lymphoma due to markers present in or on the leukemia or lymphoma cells at diagnosis, if the leukemia or lymphoma does not go away quickly with chemotherapy (refractory), or the leukemia or lymphoma comes back after initially going away (relapse).

Our team is advancing leukemia treatment options through the testing of novel small molecule inhibitors designed to block pathways that promote leukemia. We are also developing new cellular therapy approaches to specifically target and kill leukemia cells.

RESEARCH SPOTLIGHT: BETTER TREATMENT FOR ADVANCED CLASSICAL HODGKIN LYMPHOMA

A breakthrough clinical trial led by the Aflac Cancer and Blood Disorders Center revealed positive results that may change the standard for how advanced-stage classical Hodgkin lymphoma is treated. Based on the Phase 3 trial results published in The New England Journal of Medicine, patients receiving nivolumab (brand name Opdivo®) experienced fewer side effects and had a 50% lower risk of disease progression after treatment than those receiving the standard treatment. Sharon Castellino, MD, MSc, the study's Pediatric Chair and Director of the Leukemia and Lymphoma Program at the Aflac Cancer and Blood Disorders Center, collaborated with a team of other national lymphoma experts on this multicenter study.

FEATURED PROGRAMS

Adolescent and Young Adult Cancer Program

At the Aflac Cancer and Blood Disorders Center, we understand teenagers and young adults who are facing cancer have their own unique needs and concerns. They need a different approach than younger children or older adults, so we offer an Adolescent and Young Adult Cancer Program just for pediatric patients ages 15 to 21.

Our tailored approach to teen cancer care includes the following programs and services:

- **Fertility Preservation Program:** Some treatments for cancer, blood disorders or other serious illnesses, such as chemotherapy, radiation, surgery or BMT, may damage the ovaries or testes. By cryopreserving (freezing) sperm, eggs or tissue from the ovaries or testes, patients have options if they experience infertility, or difficulty having children, in the future. The process of saving reproductive materials and utilizing fertility-sparing methods is called fertility preservation. Our team offers fertility preservation as a continuum of care, treating not only the diagnosis at hand, but also preserving patient health and wellness into the future after treatment is over.
- **Psychology Program:** To help patients and families address the emotional, cognitive and behavioral challenges associated with the diagnosis and treatment of cancer and blood disorders, our psychologists conduct psychological testing and work to develop strategies to help reduce stress, ease anxiety and improve communication to ensure children maintain a good quality of life both during and after their treatment. The program has specialists who work in two primary domains: pediatric psychology and pediatric neuropsychology.
  - **Pediatric psychology** addresses emotional and behavioral concerns related to having medical problems (sadness about diagnosis or worry about symptoms) and promotes healthy behaviors (exercising and taking medications) for children, adolescents and young adults in pediatric hospitals and doctor's offices.
  - **Pediatric neuropsychology** focuses on understanding how a child's brain affects their thoughts, learning, feelings and behaviors. We provide specialized assessment and recommendations to maximize school and community success now and in the future.

FACILITIES AND STAFF

- More than 125 faculty members, including physicians and researchers
- Nearly 50 advanced practice providers
- 75-plus clinical research office staff
- 37 family support team members, in addition to child- and family-focused programs and services
- 25 fellows, adding six new fellows to our team each year

Treated more than 9,800 patients in 2024 across three campuses

TRAINING THE CARE PROVIDERS OF TOMORROW

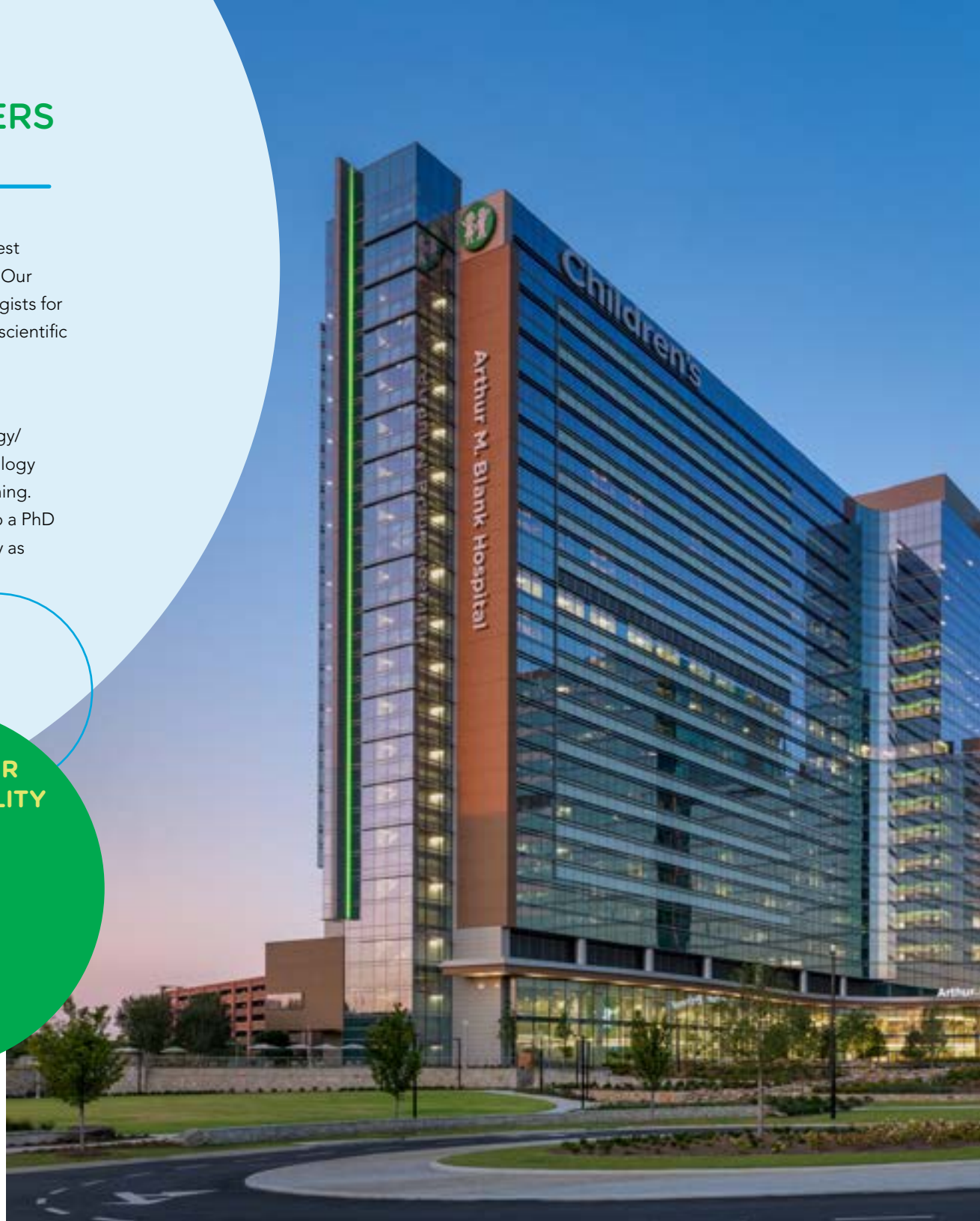
Fellowship Program

The Aflac Cancer and Blood Disorders Center offers one of the largest pediatric hematology/oncology fellowship programs in the country. Our program prepares academically oriented hematologists and oncologists for involvement in a lifetime of excellence in patient care, teaching and scientific research.

PhD Program

To expand the pipeline of physician scientists in pediatric hematology/oncology, the PhD program enables our pediatric hematology/oncology fellows to obtain a PhD during the research component of their training. During the second year of training, these fellows will matriculate into a PhD program at Emory University and/or Georgia Institute of Technology as full-time graduate students.

SCAN TO TOUR OUR NEW FACILITY



OUR LEADERSHIP TEAM

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SCAN TO MEET OUR TEAM

CONTACT US

Call 888-785-1112 or **404-785-1112** for more information or to make a referral.

Visit **choa.org/cancer** to learn more about Aflac Cancer and Blood Disorders Center.

Some physicians and affiliated healthcare professionals on the Children's Healthcare of Atlanta team are independent providers and are not employed by Children's.