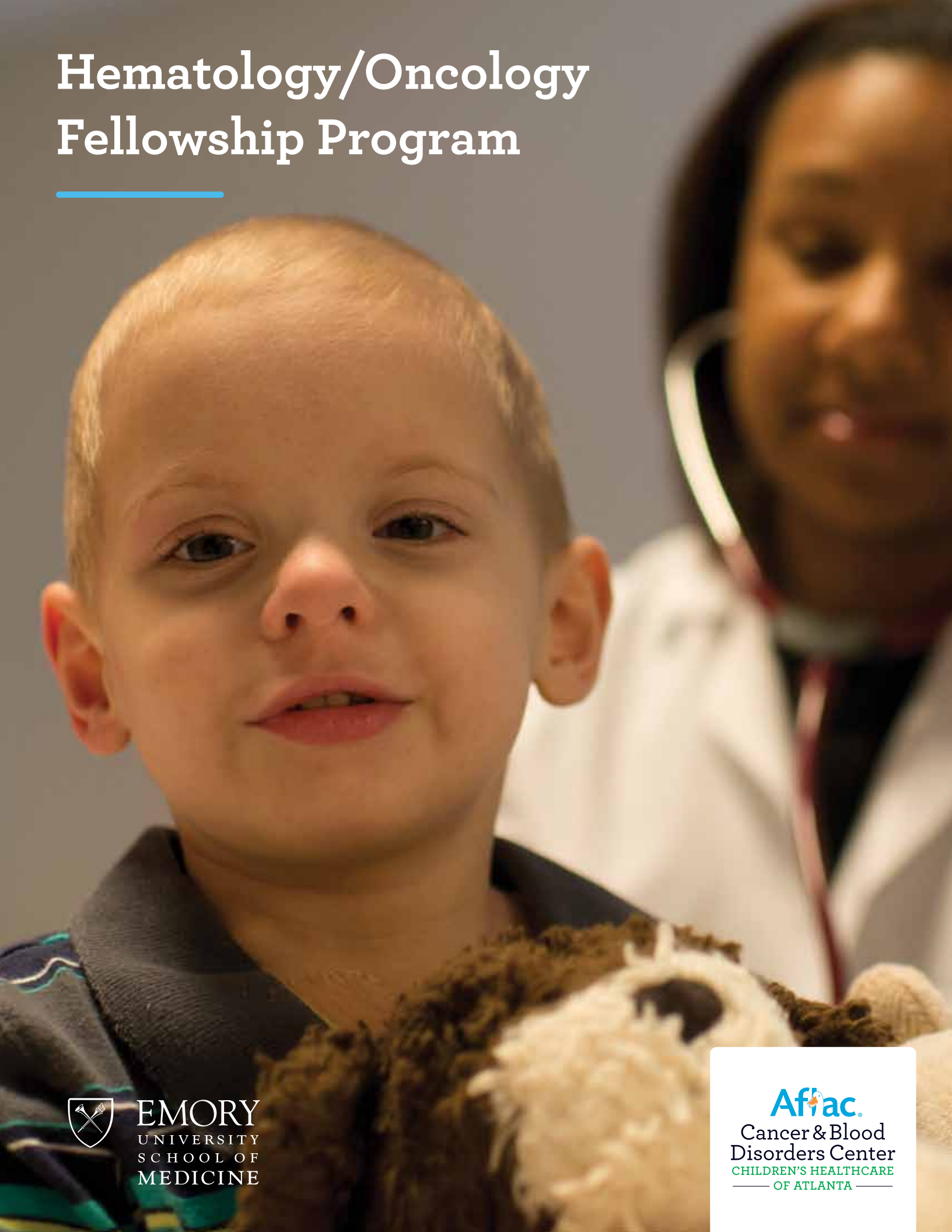
Hematology/Oncology Fellowship Program



EMORY UNIVERSITY SCHOOL OF MEDICINE

Aflac Cancer & Blood Disorders Center
CHILDREN'S HEALTHCARE OF ATLANTA

At the Aflac Cancer and Blood Disorders Center of Children's Healthcare of Atlanta, we offer three-year fellowships in collaboration with Emory University School of Medicine to qualified, promising physicians. We are dedicated to providing a comprehensive program for training subspecialty fellows in pediatric hematology/oncology.

Our goal

Our goal is to train academically oriented hematologists and oncologists who will be involved in a lifetime of excellence in patient care, teaching, and clinical, translational or basic research. Upon successful completion of our training program, fellows will:

- Have a thorough understanding of the pathophysiology of pediatric hematologic and oncologic disorders.
- Be competent in the clinical diagnosis and management of these disorders.
- Understand clinical trials methodology.
- Have excellence in a selected research interest—our program seeks to cultivate and encourage laboratory researchers and clinical investigators.

One of the largest pediatric hematology/oncology fellowship programs in the country

about the program

First-year fellows spend the majority of their time in clinical rotations. Second- and third-year fellows primarily spend their time in various research and educational activities. Additionally, each fellow maintains a continuity clinic one day each week for the entire three years.

Clinical rotations—first year

- Inpatient hematology/oncology ward service (three months)
- Blood and marrow transplant (BMT)—inpatient/outpatient service (two months)
- Clinic/consult (two months)
- Outpatient hematology service (two months)
- Neuro-oncology—inpatient/outpatient service (one month)
- Lab rotation—radiation oncology, hematopathology, flow cytometry, cytogenetics, blood banking and special coagulation (one month)
- Research exploration (one month)

Research—second and third year

Second- and third-year fellows are offered a variety of opportunities in clinical, translational and basic research. These opportunities are available at the Aflac Cancer Center and within specific divisions of the Emory University School of Medicine Department of Pediatrics.

We are devoted to training physician-scientists seeking careers in laboratory-based academic pediatric hematology/oncology. Research opportunities are performed in collaboration with faculty at the Winship Cancer Institute of Emory University, the Emory School of Public Health, the Yerkes National Primate Research Center and the Centers for Disease Control and Prevention (CDC).

In addition to the laboratory-based research track, we offer a clinical research track for fellows interested in careers as clinical investigators. Formal training in clinical research can be obtained through early involvement in several ongoing clinical trials within the institution. Fellows interested in clinical research are encouraged to apply for Emory's Master of Science in Clinical Research (MSCR) program. We are in a unique position to offer special resources for laboratory and clinical training, such as the MSCR program, for the entire fellowship period and for extended periods of laboratory research time, if required.

We have an individualized scholarship oversight/mentoring committee for each fellow, to guide him through his fellowship research experience.

On-call schedule

Night call takes place from home. Fellows occasionally return to the hospital to evaluate extremely ill or newly diagnosed patients:

- First year: 52 weekday nights (average one/week) and 12 weekends (one/month)
- Second year: 44 weekday nights and 10 weekends
- Third year: Four weekday nights and eight weekends

Didactic schedule

A variety of conferences and seminars are offered. A sample schedule is listed below. Additionally, structured teaching, ethics and research overview courses are offered throughout the year.

	Monday	Tuesday	Wednesday	Thursday	Friday
A.M.	Division conference	Core curriculum review	Grand rounds		Patient care conference
P.M.			Tumor board	Research conference	

Additional benefits of the program

Fellows receive three weeks of vacation each year. Each fellow has an educational stipend, which may be used for meetings, journals or other educational expenses. Senior fellows attend additional scientific meetings based on research presentations.

Accreditation

First accredited in the 1980s, in 2004 the fellowship program received full accreditation by the Accreditation Council for Graduate Medical Education (ACGME). The Aflac Cancer Center is affiliated with the Emory University School of Medicine, which is ranked among the top research medical schools in the country by *U.S.News & World Report*.

Funding

Fellows are fully funded throughout the three-year program. Additional years of research training, including application for the MSCR program, are available for qualified candidates.

Current fellows

First Year Fellows

Glaivy Batsuli, M.D.
glaivy.batsuli2@choa.org
College: University of North Carolina at Chapel Hill
Medical School: University of Pittsburgh
Residency: Emory University

"I chose Emory because of the diverse clinical exposures and abundant research opportunities. I am confident that at the end of my fellowship I will have an equally strong foundation in hematology and oncology."

Jonathan Metts, M.D.
jonathan.metts2@choa.org
College: Wofford College
Medical School: University of South Carolina
Residency: University of South Florida

"I think the biggest strength of the program is the large hematology and oncology populations we have access to here. The research opportunities are outstanding and the faculty is very friendly and welcoming."

Margo Rollins, M.D.
margo.rollins2@choa.org
College: Florida A&M University
Medical School: Rush Medical College
Residency: Duke University

"I chose to train at Emory because of my interest in sickle cell disease; we serve one of the largest sickle cell populations in the country. I am an Atlanta native and was happy to have the opportunity to come back home."

David Siegel, M.D., M.P.H.
david.siegel2@choa.org
College: Washington University in St. Louis
Medical School: George Washington University
Residency: Emory University

"I chose to stay at Emory for fellowship because of the strength of the faculty. I have loved working here because of the warm, family-like environment. I love living in Atlanta and have found it stimulating to be part of this very health-oriented city."

Second Year Fellows

Joanna Grossman Newton, M.D.
joanna.newton@choa.org
College: Skidmore College
Medical School: Case Western Reserve University
Residency: Case Western Reserve University
Current Research: The impact of race and ethnicity on outcomes in pediatric AML

"When I came for my interview, I received an especially warm welcome and was made to feel right at home. I am currently in the MSCR program, and I positively love it. The classes are excellent, and I am confident that I will be very prepared to apply for a K grant at the end of the program."

Robert (Shep) Nickel, M.D.
robert.nickel@choa.org
College: University of Virginia
Medical School: Washington University in St. Louis
Residency: Children's National Medical Center
Current research: Transfusion-related alloimmunization in sickle cell disease, exploring the significance of antibodies to minor histocompatibility antigens in stem cell transplant graft rejection

"My co-fellows are a great group of people. The program leadership is also extremely supportive of us."

Matthew Ramirez, M.D.
matthew.ramirez@choa.org
College: Texas Tech University
Medical School: University of Texas Medical Branch
Residency: University of Arkansas
Current Research: Late effects of pediatric cancer treatment, specifically evaluating the Children's Oncology Group long-term follow-up guidelines for genitourinary complications

"I chose Emory because I thought this program would provide a solid foundation in all aspects of pediatric hematology and oncology training including survivorship. People here work well as a team and enjoy what they do."

Benjamin Watkins, M.D.
benjamin.watkins@choa.org
College: Hendrix College
Medical School: University of Arkansas
Residency: University of Arkansas
Current Research: Autologous bone marrow transplantation for SIV in non-human primates; T-cell costimulation blockade and CD28 blockade in acute GVHD in non-human primates undergoing mismatched allogeneic bone marrow transplant

"I chose our program because I felt like it was a great balance of hematology and oncology—not only in the clinical setting, but also in research. This program was much more fellow-friendly than the other places I visited."

Third Year Fellows

Haneen Abdella, M.D.
haneen.abdella@choa.org
College: University of Miami
Medical School: University of Miami
Residency: University of Miami
Current Research: Chemotherapy resistance mechanisms in high-risk neuroblastoma, specifically the difference between MIBG-positive and MIBG-negative tumors, and the developmental pathways involved in their differentiation

"Emory has the ideal combination of the most important characteristics. It has large patient numbers and diversity, as well as a focus on teaching and fellow education in which the fellow has primary clinical responsibilities and excellent continuity of care. It also has a lot of support from attendings and nurse practitioners so that the focus is on fellow education and less so on the busy work. Emory also has wonderful mentors and a really nice, friendly, supportive staff of people who have now become my good friends."

Thomas Cash, M.D.
thomas.cash@choa.org
College: Auburn University
Medical School: University of Alabama
Residency: University of Arkansas
Current Research: Outcomes and epidemiology in rare pediatric tumors; The role of ezrin and tumor necrosis in patients with Ewing Sarcoma

"The guaranteed option and support from the fellowship program to obtain the Master of Science in Clinical Research (MSCR) really set Emory apart from other programs that I was considering, and I knew this would lay the foundation for me to have a successful clinical research career."

Fourth Year Fellows

Melinda Pauly, M.D.
melinda.pauly@choa.org
College: Auburn University
Medical School: Medical College of Georgia
Residency: University of Alabama at Birmingham
Current Research: The relationship of the BCL-2 family of proteins within the intrinsic apoptotic pathway and to members of the autophagy pathway
Research Career Interests: Translational and clinical research with an emphasis on phase I therapy; clinical interest in leukemia/lymphoma

"Our program's biggest strengths include a large volume of hematology and oncology patients, as well as great teaching in a collegial environment and easy to work with attendings. You will also receive very strong research support whether you are interested in MSCR, lab work or if you are undecided."

William Petersen, M.D.
william.petersen@choa.org
College: University of Virginia
Medical School: Emory University
Residency: University of Colorado
Fellowship Research: SRC and aurora kinase inhibition in medulloblastoma
Current Plans: Formal clinical research training through the Emory Laney Graduate School translational research certificate program and clinical responsibilities within our experimental therapeutics department
Research Career Interests: Innovative therapies for childhood cancer

"This program provided an excellent, balanced clinical and research training, with a very collegial work environment in a great location."

our center

Aflac Cancer and Blood Disorders Center

As one of the leading pediatric cancer, hematology and BMT programs in the country, the Aflac Cancer Center provides advanced diagnostic and clinical care, educational programs, psychosocial support and innovative treatment and research options for children and young adults. In addition, we offer exceptional pediatric imaging, surgical subspecialty and subspecialty support.

Our multidisciplinary approach to care integrates the efforts of many pediatric professionals, including a 33-member family support team, comprised of:

- Nurses
- Pharmacists
- Nurse practitioners
- Nutritionists
- Utilization review specialists
- Child life specialists
- Social workers
- Financial coordinators
- Psychologists
- Music therapist
- Chaplains
- Hospital teachers

One of the largest pediatric cancer and blood disorders centers in the country

Population served

As one of the largest childhood cancer and blood disorders centers in the country, the Aflac Cancer Center cares for more than 375 newly diagnosed cancer patients each year and follows more than 2,500 patients with sickle cell disease, hemophilia and other blood disorders. In addition, we have performed more than 900 BMTs since our program's inception and follow more than 1,000 survivors through our Cancer Survivorship Program.

Facility features

The Aflac Cancer Center features:

- 54 inpatient beds across the Egleston and Scottish Rite campuses
- 10 specially designed rooms for BMTs
- Outpatient clinics with a full range of infusional services
- Onsite diagnostics, marrow processing laboratory, surgical oncology and pharmacy services
- An MIBG treatment room

research

In conjunction with the Emory University School of Medicine and the Winship Cancer Institute at Emory, the Aflac Cancer Center is committed to excellence and innovation in pediatric cancer and blood disorders research. Our rapidly growing research program includes physicians and Ph.D.'s in the following fields of study: BMT, brain tumors, cancer survivorship, leukemia/lymphoma, solid tumors, hemostasis/thrombosis, sickle cell disease, gene therapy and transfusion medicine.

- Our program conducts innovative laboratory research that focuses on gene therapy, molecular therapy, cell signaling, nanomedicine and genomics.
- We received a $1 million, four-year Exceptional, Unconventional Research Enabling Knowledge Acceleration (EUREKA) grant, and our researchers and engineers are looking at a novel bioengineering solution aimed at pediatric brain tumors that could someday help eradicate almost any kind of tumor.
- As one of the first established National Institutes of Health (NIH) K12- and K30-sponsored clinical research training facilities (MSCR), Emory University School of Medicine is part of the Clinical and Translational Science Award (CTSA) granted from the NIH.
- Our patients have access to approximately 250 clinical trials, affording them access to some of the most novel treatment options in the country.
- We rank among the top five percent of institutions nationally for clinical trial enrollment for COG studies.*
- We have 14 faculty members who are current or former COG study chairs or disease committee members, ensuring state-of-the-art care as well as committee opportunities for graduating fellows.
- We are members of the NIH clinical trials network for hemostasis, transfusion medicine and sickle cell disease.
- Through a robust Innovative Therapy Program, we offer clinical trials related to a number of different cancers and blood disorders.
- We are one of only 21 centers nationwide that is a member of the Children's Oncology Group (COG) Phase I and Pilot Consortium.
- The program also offers enrollment in exclusive Phase I and Phase II studies for neuroblastoma and other cancers through our participation in collaborative research consortia such as Therapeutic Advances in Childhood Leukemia (TACL), Pediatric Oncology Experimental Therapeutics Investigator's Consortium (POETIC), and New Approaches to Neuroblastoma Therapy (NANT).

One of the largest pediatric clinical trial programs in the country*

2011 statistics:

- New cancer cases: 375+
- Active sickle cell disease patients: 1,710
- Hemostasis and thrombosis cases: 578
- Blood and marrow transplant cases: 59
- Outpatient visits: 29,160
- Inpatient days: 16,808

**COG Institutional Report Card*

our team and interests

Leadership

Division Director
William G. Woods, M.D.
Professor and Director, The Daniel P. Amos Children's Chair, Aflac Cancer Center
Children's Healthcare of Atlanta
Associate Director, Childhood Cancer, Winship Cancer Institute of Emory University

- Past President and Board Member, American Society of Pediatric Hematology/Oncology (ASPH/O)
- Recipient, ASPH/O Distinguished Career Award
- Member, Scientific Council and Executive Committee, Children's Oncology Group (COG)

Dr. Woods is a distinguished physician and research scientist who leads some of the country's most admired pediatric hematology/oncology physicians. Under his leadership, the Aflac Cancer Center has become one of the largest and most respected pediatric hematology/oncology programs in the country. Since forming the Aflac Cancer Center in 2001, Dr. Woods has:

- Been instrumental in training and mentoring numerous fellows and junior faculty who are now making their own contributions in the advancement of treating children with cancer and blood disorders
- Nearly doubled the number of clinical and research faculty
- Increased NIH funding six-fold
- Increased the number of publications six-fold

Fellowship program

Michael A. Briones, D.O.
Director, Fellowship Program,
Aflac Cancer Center
Assistant Professor of Pediatrics,
Emory University School of Medicine

Glen Lew, M.D.
Associate Director, Fellowship Program,
Aflac Cancer Center
Assistant Professor of Pediatrics,
Emory University School of Medicine

Blood and marrow transplant (BMT)

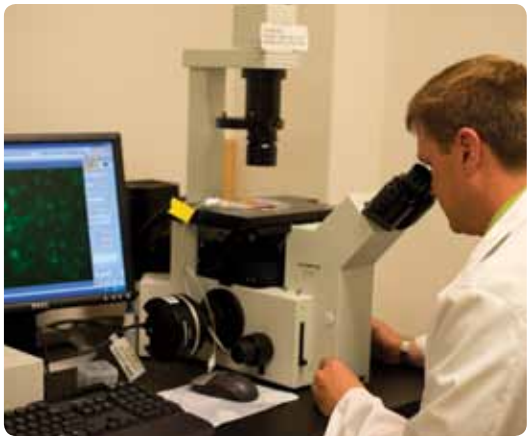
Kuang-Yueh (Ky) Chiang, M.D., Ph.D.: Clinical trials in BMT, stem cell biology and growth factor mobilization

Ann E. Haight, M.D.: BMT in sickle cell disease and other nonmalignant diseases, supportive care in BMT and infections in the immunocompromised host and clinical research ethics

John T. Horan, M.D., M.P.H.: Nonmyeloablative transplant for sickle cell disease, graft-versus-host disease (GVHD) and outcomes research

Leslie S. Kean, M.D., Ph.D.: Transplant immunology with a special interest in immune tolerance induction after nonmyeloablative transplant

Muna Qayed, M.D., M.S.C.R.: Incorporation of novel agents into the treatment of relapsed solid tumors, improving current treatments for patients with high-risk disease including autologous stem cell transplant and developing more effective prophylaxis/treatment against GVHD in patients undergoing allogeneic BMT



Hematology

General hematology

Jeanne M. Boudreaux, M.D.: Thalassemias, bone marrow failure syndromes, hemolytic anemias and white cell disorders

Michael A. Briones, D.O.: General hematology, histiocytic disorders and bone marrow failure syndromes

Marianne E. Yee, M.D., M.Sc.: Clinical research in sickle cell disease, hemoglobin disorders, transfusion therapy and BMT for patients with sickle cell disease

Hemophilia/thrombosis

Carolyn M. Bennett, M.D.: Platelet disorders including immune thrombocytopenic purpura (ITP)

Amy L. Dunn, M.D.: Joint disease in hemophilia, clinical trials in hemophilia and women with bleeding disorders

Shawn M. Jobe, M.D., Ph.D.: Platelet disorders

Christine L. Kempton, M.D.: Clinical trials in hemophilia with an emphasis on inhibitors

Shannon L. Meeks, M.D.: Inhibitors in hemophilia, mild bleeding disorders and women with bleeding disorders

Kavita Patel, M.D.: Thrombosis treatment and prevention

Sickle cell disease

R. Clark Brown, M.D., Ph.D.: Targeted therapies for thalassemia and sickle cell disease

Carlton D. Dampier, M.D.: Clinical trials in sickle cell disease, measurement science of patient- and parent-reported outcomes and symptom management in sickle cell disease, particularly pain

Anne G. James-Herry, M.D.: Clinical trials in sickle cell disease, comprehensive sickle cell disease and pulmonary and pain clinics

Clinton H. Joiner, M.D., Ph.D.: Red cell physiology, specifically cation transport and volume regulation and their perturbation in sickle cell disease

Peter A. Lane, M.D.: Newborn screening, health outcomes and clinical trials in sickle cell disease

Tamara N. New, M.D.: Clinical trials in sickle cell disease

Ifeyinwa (Ify) Osunkwo, M.D., M.P.H.: Clinical trials in sickle cell disease, chronic transfusion and hydroxyurea for the treatment of complications of sickle cell disease and BMT for sickle cell disease

Yih-Ming Yang, M.D.: Clinical trials in sickle cell disease, newborn screening for hemoglobinopathies and strategies to raise fetal hemoglobin

Transfusion Medicine

Cassandra D. Josephson, M.D.: Clinical transfusion medicine and blood safety in hemophilia, sickle cell disease, neonatology and open heart surgery

Jeanne E. Hendrickson, M.D.: Pathology and transfusion medicine research studying the immune response to transfused blood products

Oncology

Leukemia/lymphoma

D. John Bergsagel, M.D.: Clinical trials in leukemia and lymphoma

Todd M. Cooper, D.O.: Clinical trials within COG in myeloid leukemia and development of new agents for children with relapsed acute leukemia

Marla Daves, M.D., M.S.H.I.: Applying informatic tools to improve guideline adherence in pediatrics and the development of clinical research databases to improve the secondary use of clinical data for research

Frank G. Keller, M.D.: Phase I of COG trial for low-risk Hodgkin's disease and clinical trials in Hodgkin's disease, non-Hodgkin's lymphoma (NHL) and leukemia

Glen Lew, M.D.: Study chair of COG Phase III trial for relapsed acute lymphoblastic leukemia (ALL); etiology, treatment and outcomes in childhood ALL

Himalee Sabnis, M.D.: Biology of the latent transcription factor of Signal Transducers and Activators of Transcription (STAT5), in particular, its roles in normal hematopoietic stem cell function and its aberrant activation associated with a variety of hematologic malignancies

William G. Woods, M.D.: Clinical trials within COG in myeloid leukemia

Solid tumors

Bradley A. George, M.D.: Clinical trials in supportive care and treatment of solid tumors within COG

Kelly Goldsmith, M.D.: Basic and translational research of neuroblastoma, with a primary focus on mechanisms of therapy resistance

Howard M. Katzenstein, M.D.: Phase I of COG hepatoblastoma trial, innovative therapy in liver tumors and neuroblastoma and solid tumors

Thomas A. Olson, M.D.: Committee chair for COG germ cell disease, clinical trials in germ cell tumors, retinoblastoma and bone tumors

Louis B. Rapkin, M.D.: Clinical trials in solid tumors and the development of educational curriculum for house staff and fellows

Karen Wasilewski-Masker, M.D., M.Sc.: Bone sarcomas; adolescent/young adult oncology; supportive care/cancer control studies; transition of care

Neuro-oncology

Dolly Aguilera, M.D.: Development of Phase I and Phase II clinical trials for children with recurrent brain tumors

Anna J. Janss, M.D., Ph.D.: Phase I clinical trials (COG) and innovative therapeutics for brain tumors

Tobey J. MacDonald, M.D.: Basic and translational research of childhood brain tumors with a primary research focus on the role of platelet-derived growth factor receptor (PDGFR) signaling in medulloblastoma

Claire M. Mazewski, M.D.: Phase I of COG high-risk medulloblastoma trial for young children, clinical trials, innovative therapeutics and late effects studies for children with brain tumors

Neuropsychology

Alcuin Johnson, Ph.D.: Acquired brain injury and clinical trials in neurocognitive late effects

Cancer survivorship

Lillian R. Meacham, M.D.: Childhood Cancer Survivor Study (CCSS) and other clinical trials in late effects and endocrine late effects in oncology patients

Ann C. Mertens, Ph.D.: Childhood and adolescent cancer survivorship

Briana C. Patterson, M.D.: Late effects of cancer therapy in brain tumor patients and endocrine problems following cancer treatment

Karen Wasilewski-Masker, M.D., M.Sc.: Outcomes/cancer survivor research, adolescent/young adult oncology and intervention studies in cancer late effects

Research/Innovative therapy

David R. Archer, Ph.D.: Hematopoietic stem cell transplant for genetic disease, particularly sickle cell disease and use of stem cells in regenerative medicine

Kevin D. Bunting, Ph.D.: Laboratory-focused studies on normal cytokine signaling in hematopoiesis and dysregulated signaling associated with leukemogenesis

Robert C. Castellino, M.D.: Pediatric neuro-oncology, cell signaling in neuronal development and drug development

Christopher B. Doering, Ph.D.: Development of modified blood coagulation factors and implementation in gene transfer-based therapies

Jacques Galipeau, M.D.: Tumor immunology, biological and cellular therapies for autoimmune and alloimmune disorders, pediatric biopharmaceutical strategies for catastrophic diseases with unmet medical needs and mesenchymal stem cell research

Lubing Gu, M.D.: Molecular mechanisms of drug resistance in childhood cancer and leukemia

Anna Marie Kenney, Ph.D.: How Sonic hedgehog and interacting signal transduction pathways control normal and neoplastic development within the cerebellum

Wilbur A. Lam, M.D., Ph.D.: Nanomedical technology and approaches to study blood-endothelial cell interactions in sickle cell disease

Renhao Li, Ph.D.: Cell adhesion receptors to detect the extracellular stimulation and help to determine the response of their host cells

Pete Lollar, M.D.: Development of novel recombinant Factor VIII molecules for use in preventing and treating hemophilia patients with inhibitors and basic research in biosynthesis and expression of Factor VIII

Solomon F. Ofori-Acquah, Ph.D.: Endothelial barrier function involving leukocyte recruitment and angiogenesis, particularly as it relates to sickle cell disease and gene regulation in haematopoiesis and sickle cell disease

H. Trent Spencer, Ph.D.: Gene therapy for treatment of cancer and inherited disease via recombinant retroviral vectors and drug resistance immunotherapy

Zhengqi Wang, Ph.D.: Study of STAT5 and its function in signaling mechanisms in leukemogenesis, hematopoietic stem cell biology and transplant

Muxiang Zhou, M.D.: Signaling pathways and regulators of apoptosis relating to drug resistance in ALL

atlanta

Ranked among the fastest-growing metropolitan areas in the country*, Atlanta combines Southern hospitality with the amenities of any world-class city. More than 5 million metro Atlanta residents enjoy the city's rich history and cultural diversity. Whether you are a sports fanatic, history buff or have a love of the arts, metro Atlanta offers something for everyone.

World-class, modern city with a rich history

Why Atlanta?

- Cost of living is less expensive than other major cities**
- Hartsfield-Jackson Atlanta International Airport—the world's busiest airport
- Atlanta is within a two-hour flight of 80 percent of the United States
- Home to more than 12 Fortune 500 companies and more than 15 Fortune 1000 companies
- Museums, theaters and eclectic shopping areas
- Professional sports teams, including the Atlanta Falcons, Atlanta Braves and Atlanta Hawks
- Vast number of restaurant options, including a wealth of ethnic cuisines
- Seasonal climate suitable for outdoor activities nearly year-round
- Within driving distance to both the mountains and the ocean

**forbes.com*
*** metroatlantachamber.com*

contact us

For more information about the Aflac Cancer Center Fellowship Program:

- **Visit aflaccancercenter.org**
- **Contact Laurie Marion at 404-785-0083 or laurie.marion@choa.org**
- **Email Michael Briones, D.O., at michael.briones@choa.org**

All applications are accepted through ERAS. A requirements checklist is available online.

Hughes Spalding is owned by Grady Health System® and managed by HSOC Inc., an affiliate of Children's Healthcare of Atlanta.

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

Aflac
Cancer & Blood Disorders Center
CHILDREN'S HEALTHCARE OF ATLANTA