Hematology/Oncology Fellowship Program

https://www.cincinnatichildrens.org/cancer
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Introduction

The Hematology Oncology Fellowship Training Program at Cincinnati Children’s Hospital Medical Center accepts five new fellows each year. The first year is a full-time clinical experience where they will see a variety of diagnosis and build their continuity patients. The program is designed to give MD, DO or MD/PhD fellows a wide range of opportunities in clinical research, including Quality Improvement, epidemiology, therapeutic trials and translational research, or in one of the major basic science disciplines: protein chemistry, system biology, structural biology, molecular biology, stem cell and developmental biology, vascular biology, genetics, genomics, immunology, neuroscience, and cell biology.

There are other opportunities for an additional fellowship year in specialty training: Blood & Marrow Transplant Fellowship, Clinical Immunodeficiency Fellowship, Developmental & Translational Therapeutic Fellowship, Fourth Year Academic Fellowship, Pediatric Neuro-Oncology Fellowship, Young Adult Fellowship, HVMC Fellowship, Hemostasis and Thrombosis, and Sickle Cell Scholar Fellowship.

We strive to provide the highest quality clinical and research training in hematology/oncology and hematopoietic cell transplantation, so that our fellows become the future leaders in pediatric hematology/oncology. Our goal is to train excellent clinicians and independent investigators who make substantive contributions to the field of research.
Program Leadership and Committees

**Ashish R. Kumar, MD, PhD**  
*Program Director*

Dr. Ashish Kumar is currently a Professor of Pediatrics in the Division of Bone Marrow Transplantation and Immune Deficiency at Cincinnati Children’s within the University Of Cincinnati College Of Medicine. He is a member of the Immune Deficiency and Histiocytosis Program and is internationally recognized as an expert in rare immune disorders, HLH and LCH.

**Erin H. Breese, MD, PhD**  
*Associate Program Director*

Dr. Erin Breese is currently an Associate Professor of Pediatrics in the Division of Oncology at Cincinnati Children’s with in the University of Cincinnati College Of Medicine. Her research areas of interest are infant leukemia, the molecular biology of leukemia, KMT2A-rearranged leukemia, precision medicine and clinical trial development for high-risk and relapsed leukemia.

**Joseph S. Palumbo, MD**  
*Associate Program Director*

Dr. Joseph Palumbo is currently a Professor of Pediatrics in the Division of Hematology at Cincinnati Children’s with in the University of Cincinnati College Of Medicine. Conditions he treats include deep vein thrombosis, pulmonary embolism, von Willebrand disease, platelet dysfunction, as well as other bleeding and clotting disorders.

**Richard Graham, MD**  
*Associate Program Director*

Dr. Richard Graham is currently an Assistant Professor of Pediatrics in the Division of Oncology at Cincinnati Children’s with in the University of Cincinnati Of Medicine. His clinical and academic interests pertain to children and young adults with brain tumors.

Meet the entire Cancer and Blood Diseases Institute team [here](#).
Clinical Competency Committee (CCC)
The Clinical Competency Committee (CCC) meets twice a year to evaluate all fellows and assign “Milestones” to each fellow, reflecting their progress.

If a fellow is deemed to “need improvement”, a faculty member will schedule a time to speak with the Program Director in person so intervention can be implemented to correct deficiencies and get the fellow in question back on track.

Twice each year, these representative(s) meet as a large group of the CCC to discuss each fellow's progress. These meetings are then documented in each fellow’s file and will be timed to occur after each SOC committee is scheduled and written reports obtained. The committee goal is to do everything possible to keep the fellow on track for their level of training.

Program Evaluation Committee
The Program Evaluation Committee (PEC) is appointed by the Program Director and has the responsibility to review components of the Hematology/Oncology Fellowship Training Program at least annually. Members consist of at least two faculty, (one of which can be the Program Director), and at least one resident. While the PEC is to “activate participate,” it is not responsible for solving all problems on its own. The PEC may work with the GMEC, the Designated Institutional Official (DIO) department leaders, or the program director as part of its work. The goal is to try to improve the educational program every year.

Selection Committee
The Selection Committee reviews all applicants to the program. It is comprised of the program director, representatives from each discipline, representative from Experimental Hematology and Cancer Biology (research), current chief fellow(s), and the program coordinator. The Selection Committee is responsible for screening the interview results and ranking the candidates for recruitment.

Affiliations
CBDI and CCHMC also have formal affiliations with the University of Cincinnati College of Medicine and UC Health through the Cincinnati Cancer Center, and with the Ohio State University Comprehensive Cancer Center, for which John Perentesis, MD, serves as Co-Program Leader of the Pediatric Oncology Program.

The CBDI has a wide breadth of specialty and sub-specialty expertise. For the most up to date listing, we invite you to browse our website at: https://www.cincinnatichildrens.org/service/c/cancer-blood

Clinical Training
During their first year of clinical training, the fellows rotate through four services: hematology, oncology, bone marrow transplantation and immunodeficiency, and specialty electives, (neuro-oncology, vascular anomalies, palliative care, radiation therapy, cellular therapies etc.), as well as training in transfusion medicine and laboratory medicine. During the outpatient rotation, they are
exposed to specialty clinics including thrombosis, hemophilia, neuro-oncology, immune deficiency, sickle cell, hemangioma and vascular malformation and late effects. There is a high degree of “hands-on” clinical responsibility. Fellows follow oncology, hematology, and BMT patients during all three years of fellowship and function as their primary caregiver. The program is similar for most fellows, but it is possible to vary the clinical experience for fellows who have special interest or want additional training in other specialties (e.g. immunodeficiency, immunology, neuro-oncology, vascular anomalies). All fellows have one day of continuity clinic per week in which they concentrate on following their primary patients. Clinic is focused on oncology patients and general hematology.

**Rotations**
The first year of fellowship is the clinical year. The duration of rotations varies from 3-4 weeks. Nearly all inpatient clinical care is delivered on A5 of Cincinnati Children’s Hospital Medical Center except for bone marrow transplant which is now in the new Critical Care Building, G5.

Please note: the service is structured for fellow’s education; therefore, it is not dependent on the fellow. Fellows are encouraged to maintain a leadership role but there are a number of providers employed to enable excellent patient care.

**NP/Hospitalist Team/Resident Teaching**
The inpatient rotation is made up of four to five 2nd and 3rd year residents. Residents supervise most new diagnoses and ill patients. Patients are divided amongst the resident and NP/hospitalist who supervise all chemotherapy admission and some ill patients. When the service is busy, the residents are capped and the NP/ hospitalist service will pick up the patients. Night staff includes one senior resident and one hospitalist. Some hospitalists are heme/onc trained which is beneficial for teaching and work load.

**Inpatient Medical Oncology - Six rotations (3 leukemia/lymphoma; 3 solid tumor)**
On this service, the hematology/oncology fellow covers the hematology/oncology patient on a 30 bed, geographically distinct hematology/oncology ward. This service is comprised of a solid tumor team and a leukemia/lymphoma team. Each team has its own attending and fellow. He or she is responsible for running morning work rounds and evening sign-out rounds, for coordinating patient care on the ward service, and for supervising the residents. The fellow makes morning rounds daily with the attending, resident, NP, hospitalist and nurses, at which time medical problems are discussed, oncologic and medical therapy is planned, and support services (psychotherapy, social services, pain control, etc.) are organized. The fellow is responsible for all aspects of the oncologic care of the patients on the service including chemotherapy orders, monitoring for chemotherapy complications and patient procedures. The fellow is also responsible for education of residents and nursing staff and conducts sign-out rounds in the evenings.

**Inpatient Hematology and Hematology Consult Service**
During this rotation, the hematology/oncology fellow is responsible for the management of patients admitted to the hematology inpatient service. He or she is responsible for running morning work rounds and evening sign-out rounds, for coordinating patient care on the ward service and for supervision the residents. These are primarily work rounds with some targeted teaching. The hematology/oncology fellow is also responsible for all inpatient hematology consults as well as ED and outpatient urgent hematology consults.
Rounds are made on the CICU and ICU patients daily with the respective teams. The fellow is responsible for writing consults notes as well as the follow up progress notes on the consult patients. Time to review blood smears and bone marrows is arranged between the attending and fellow based on the day’s schedule. Sign out rounds with the attending occurs at the end of the day (around 5pm).

**Bone Marrow Transplantation and Immunodeficiency**

Our team has developed disease-specific transplant regimens that have improved outcomes and are now setting the international standard of care. The division is led by Stella Davies, MBBS, PhD, MRCP, internationally renowned expert in bone marrow transplantation.

The Division of Bone Marrow Transplantation and Immune Deficiency is part of the Cancer and Blood Diseases Institute, which brings together physicians and researchers who are devoted to improving the outcome for children with cancer, blood diseases and immune disorders. We are committed to improving all aspects of treatment for children with immune deficiencies and histocytosis, and providing transplant care for children and young adults with relapsed or complex malignancies. This service has a 40 bed unit in our [Critical Care Building](#).

Please refer to the [bone marrow transplant webpage](#) to learn more about the comprehensive, world-class care we provide for children facing bone marrow transplant, immune deficiency disorders and histocytosis.

In this service, the fellow will be part of a comprehensive team of nurse practitioners and hospitalists who take care of the BMT patients on the inpatient floor with 40 beds and the ICU. Our unit has tremendous experience in the unrelated transplantation and immunodeficiency disorders. Patients come from all over the world for these services. The BMT unit has 2 attendings and an NP/hospitalist team. There is a hospitalist on call every night which decreases fellow night time works load.

**Clinic Responsibilities**

All fellows have one day per week in continuity clinic in which they primarily evaluate their primary patients. Clinic is divided with emphasis on oncology patients in the morning and hematology patients in the afternoon. All fellows are required to review their clinic lists in advance. Fellows also will see new patient consults in clinic.

Clinic is supervised by one leukemia/lymphoma and one solid tumor attending. Hematology is supervised by general hematologists and specialty hematologists, depending on the day. Fellows will keep a log of all clinic patients seen to evaluate teaching goals.

**Pediatric Hematology/Oncology Clinics**

Our Hematology and Oncology clinics are open five days per week. Fellow accrue Oncology patients, Stem Cell Transplant patients, and Hematology patients in these clinics and serve as their primary physician. The fellow provides direct, hands-on care for his/her patients that are undergoing therapy, for those who are being evaluated for complications of therapy or disease, and for patients followed off-therapy.
Night and Weekend Call
Fellows will cover night/weekend call as rotation blocks built into the schedule. First year fellows will complete several night float rotations; each will consist of two consecutive weeks of night call from home but with the expectation that they will come in to the hospital as needed. The night-float fellow does not have any responsibilities during the day-time. As part of each rotation, the remaining days during the block will be elective or vacation time. Second and third year fellows will complete several weeks of night coverage (not consecutive). The majority of weekend call shifts will be assigned to first year fellows, with second and third years completing a couple weekend shifts per year.

Rounds and Conferences
Fellows have access to numerous conferences and rounds as well as online courses on a variety of topics. Fellows should focus their energy and are expected to attend those conferences which pertain to the specific service rotation they are currently on. The remaining conferences are open for their participation to serve both educational benefit and to support their colleagues. Weekly Tumor Boards and Hematology Grand Rounds are attended and presented regularly by the fellows. Most of the online courses are expected to be completed in the second and third years of fellowship.

Patient Rounds, Inpatient and Outpatient – (Daily)
Solid Tumor Board – (Weekly)
Leukemia/Lymphoma Conference – (Weekly)
Hematology Grand Rounds – (Weekly)
Musculoskeletal Tumor Board – (Weekly)
Neuro-Onc Radiology Conference – (Weekly)
BMT/Immunodeficiency Conference – (As applicable)
BMT Patient Management Conference – (Weekly)
Onc Patient Management Conference – (Weekly)
Hematology Patient Conference – (Weekly)
Experimental Hematology Floor Research Meeting – (Weekly)
Journal Clubs, EHCB and BMT – (Weekly)
Fellow’s Crosstalk – (Monthly)
CBDI Seminar Series – (Monthly)
Translational Cancer Research Seminar – (Monthly)
Translational Research Retreat – (Semi-Annual)

Fellow’s Lecture Series
Structured education pertinent to the field of Pediatric Hematology and Oncology is offered through a weekly lecture series. The series includes didactic lectures and workshops in hematologic and tumor biology, research methods, stress management, palliative care, and multiple disease and therapy specific topics. Presenters include faculty from within the Cancer and Blood Diseases Institute and senior fellows in the Pediatric Hematology and Oncology Program.
Research Training
With our resources available, we expect that all fellows will receive extensive research training.

Basic Science Research - We have a large group of exceptional scientists involved in cutting edge research in a variety of areas such as cell biology, structural biology, stem cell and developmental biology, vascular biology, genetics, systems biology, genomics, immunology, molecular biology, neuroscience or protein chemistry. Fellows can choose to do their research project under the mentorship of any of these accomplished researchers.

Clinical Research - Fellows interested in clinical research that does not require a laboratory experience are broadly trained in biostatistics, clinical trials, clinical epidemiology, ethics, experimental design, and/ or health services research.

In addition, fellows completing their clinical year may enter the University of Cincinnati’s program to obtain their Master of Science in Clinical Research which is designed to provide clinical professionals (physicians, nurses and other terminal degree clinical professionals) with the necessary preparation for a successful career development and independent investigator awards. For further information, please see the following link: http://www.eh.uc.edu/ClinicalResearch/

Translational Research - Fellows interested in translational research should generally train first in a basic laboratory field with a keen connection to a clinical project such as a clinical research trial.

Throughout research training, each clinical and laboratory fellow is aided by an independent Scholarly Oversight Committee that resembles a graduate school thesis committee.

Laboratory Based
- Stem Cells
- Hematologic Malignancies
- Coagulation
- Sickle Cell Disease
- Drug Discovery
- DNA Damage & Fanconi Anemia
- Neuro-Oncology & Neuro-Biology
- Gene Therapy
- Histiocytosis & Immune Deficiencies
- Solid Tumor Biology
- Bone Marrow Transplant
- Vascular Anomalies

Clinical Research
- Bone Marrow Failure Syndromes
- Bone Marrow Transplant
- Leukemia/Lymphoma
- Neuro-Oncology
- Rare Tumors
• **Vascular Malformation**
• **Sickle Cell**
• **Cancer Survivorship**
• **Sarcomas**
• **Quality Improvement**

**Laboratory Research**
• **Adhesion, Migration, Motility**
• **Apoptosis**
• **Cancer Stem Cells**
• **Chemoresistance**
• **Chromatin**
• **Coagulation**
• **Cytoskeleton**
• **DNA Damage and Repair**
• **Erythrocyte Biology**
• **Fanconi Anemia**
• **Gene Therapy**
• **Hematopoiesis**
• **Hemphagocytosis**
• **Hemostasis and Thrombosis**
• **Immune Deficiencies**
• **Immunology and Innate Immunity**
• **Leukemia and Leukemia Stem Cells**
• **MicroRNAs**
• **Neurobiology and Neuro-Oncology**
• **Oncolytic Tumor Viruses**
• **Sickle Cell Anemia**
• **Solid Tumor Biology**
• **Stem Cell Biology**
• **Vascular Biology**

**Clinical Research**
• **Adherence Psychology**
• **Adolescent & Young Adult Oncology**
• **Bone Marrow Failure & Fanconi Anemia**
• **Bone Marrow Transplantation & Chemoprotection**
• **Cancer Clinical Trials and Phase I Translational Research**
  - **Leukemia/Lymphoma**
  - **Liver Tumors**
  - **Neuroblastomas**
  - **Neurofibromatosis – Related Tumors & Malignancies**
  - **Neuro-Oncology**
  - **Renal Tumors**
  - **Retinoblastoma**
- Sarcomas
  - Vascular Tumors & Malformations
- Cancer Survivorship & Predictive Medicine
- Chemotherapy Safety
- Down Syndrome and Leukemia
- Fanconi Anemia Basic & Translational Research
- Fertility Preservation
- Gene Therapy
- Hemangiomas & Vascular Malformations Clinical Research
- Hemophilia Clinical Research
- Histiocytic Disorders Basic & Clinical Research
- Hodgkin Lymphoma Pharmacogenetics & Genomics
- Immune Deficiencies
- Pharmacogenetics, Pharmacology and Personalized Therapy/Research
- Sickle Cell Disease
  - Acute Chest Syndrome & Pulmonary Complications of Sickle Cell Disease
  - Stroke & Neurologic Complications of Sickle Cell Disease
  - Survival, Risk Prediction, & Long-Term Outcomes of Sickle Cell Disease
- Targeted Radiopharmaceuticals Clinical Research
- Thrombosis and Hemostasis
Benefits, Stipends and Wellness

Fellowship Training Salaries 2023-2024

<table>
<thead>
<tr>
<th>Level</th>
<th>Salary</th>
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<tbody>
<tr>
<td>PL-IV</td>
<td>$68,711</td>
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<tr>
<td>PL-V</td>
<td>$71,906</td>
</tr>
<tr>
<td>PL-VI</td>
<td>$74,695</td>
</tr>
<tr>
<td>PL-VII</td>
<td>$78,152</td>
</tr>
<tr>
<td>PL-VIII</td>
<td>$82,716</td>
</tr>
<tr>
<td>PL-IX</td>
<td>$85,452</td>
</tr>
<tr>
<td>PL-X</td>
<td>$89,024</td>
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Vacation

Fellows receive a total of 20 working days of vacation. During their clinical year, vacation is taken when on their elective/clinical rotations or during the call-free portion of the night-float block. Additionally, 5 sick days are also allotted each year.

Benefits

Fellows receive a large range of benefits, including:

- Health Insurance/several plans to choose from (with co-pay)
- Dental insurance (with co-pay)
- Night and weekend parking
- Fitness center discounts
- Group life insurance
- Long-term disability insurance
- Professional/general liability insurance
- Worker’s Compensation
- Business travel/accident insurance
- Vacation time (20 days)
- Sick time/leave (5 days)
- Credit Union
- Tuition Reimbursement
- One-time moving allocation to qualified incoming fellows (up to $1,750.00)
- Counseling via the Employee Assistance Program

In addition, our program is pleased to cover various professional expenses for fellows, including:

- SITE registration fees
- Poster printing fees
- Educational book expenses (as approved by the Program Director)
- Travel to 1 national medical conference/meeting of fellow’s choice in 2nd/3rd years

Supplemental (Purchased) Benefits

- Additional group life insurance
- Automobile and home insurance (reduced rates)
- On-site daycare
- Identity and Privacy Theft Protection
- Legal plan
- College Savings
- Adoption assistance
- Weekday parking
Application Process

Current Requirements
To apply for the Fellowship Program, you must supply the following:

- Completed Application Form
  - Cincinnati Children’s Hospital Medical Center accepts applications only through the Electronic Residency Application System (ERAS). For more information on the ERAS system, please visit the following: [https://students-residents.aamc.org/applying-residency/apply-smart-residency/](https://students-residents.aamc.org/applying-residency/apply-smart-residency/) Please note: when in this application, visit the section called Participating Specialties and Program, then search for the Pediatric Hematology/Oncology Fellowship Program. You will be directed to search for the program name. Our program name is Cincinnati Children’s Hospital. Please make sure that you click on this link. If not, you will be redirected to a different application.

- Curriculum vita (CV)
- Medical School Transcript
- Dean’s Letter
- USMLE board scores (at least Parts 1 and 2; part 3 if completed)
- Personal Statement in the style requested on the application form
- Three (3) letters of reference from people with whom you have worked closely in clinical capacity. (One letter needs to be from your current program director, and, if possible, all applicants should supply at least one letter from a hematologist/oncologist, or from someone who has worked at Cincinnati Children’s or who is otherwise familiar with our program).

*Please note: All applications and required documentation must be completed and turned in through the ERAS system. If your application is not received by the deadline mentioned below, your application will be marked incomplete and will not be accepted for review.

If you need further information, please contact:
Erica Howard-Blount, Hematology / Oncology Fellowship Program Coordinator
Cincinnati Children’s Hospital Medical Center
Email: CBDI.Fellowship@cchmc.org
Phone: 513-803-4738

National Residency Matching Program
Our training program participates in the National Resident Matching Program (NRMP). We cannot accept applicants who are not registered with the NRMP. The NRMP phone number and web address are (202)-862-6077 and [www.nrmp.org](http://www.nrmp.org).

Timeline
We begin receiving ERAS applications in July. We strongly encourage you to apply before the end of July since we begin to sort applications and issue invitations at that time. We do not issue all interview invitations at the same time because some candidates decide to apply later than others and we do not want to exclude them from consideration.
We generally interview about 40 applicants, which is about 25% of those who apply. Candidates are virtually interviewed individually. Candidates will begin by meeting with Program Director and/or Associate Program Director(s). They also meet a selection of other faculty matched to their interest and have a chance to meet with as many of our current fellows possible and are given a tour. The interview generally last one full day.

**Approximate Timetable**

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Event</th>
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<tbody>
<tr>
<td>Early July (check ERAS for start date)</td>
<td>Receive applications</td>
</tr>
<tr>
<td>July-August</td>
<td>NRMP applications are accessed</td>
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<tr>
<td>September - November</td>
<td>Interviews on selected days</td>
</tr>
<tr>
<td>Mid November</td>
<td>Rank order list deadline</td>
</tr>
<tr>
<td>Early-Mid December</td>
<td>Match day</td>
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For additional information and video of our fellowship program, please visit our website at: [https://www.cincinnatichildrens.org/education/clinical/fellowship/hem-onc](https://www.cincinnatichildrens.org/education/clinical/fellowship/hem-onc)
Overview

The goal of the Pediatric Hematology/Oncology Fellowship Training Program is to train fellows in the scientific and clinical aspects of the discipline, preparing them for a career in academic medicine. Paramount throughout training is the emphasis on excellence of clinical care for children with hematologic or malignant disorders and those requiring bone marrow transplantation. Emphasis is on the development of fellows in the physician-scientist model, for which there are numerous role models among the faculty.

During the fellowship, each fellow is expected to acquire clinical expertise and the procedural skills required for diagnosis and treatment of Hematology, Oncology and BMT patients. Of equal importance, each fellow is expected to select a research mentor, and under the guidance of that individual, to develop research skills, specifically learning the methods of careful, controlled scientific inquiry. The fellowship is designed as a three-year training program, with a clinical emphasis during the first year and a research emphasis in the latter two years. The fellowship is accredited by the Accreditation Council of Graduate Medical Education.

SECTION I — Goals and Objectives by Year Level of Training

Each of these goals and objectives corresponds directly to a section of the CCHMC Pediatric Hematology/Oncology Training Program Policies and Procedures Manual.

Year One Goals

- Master fundamentals of inpatient and outpatient clinical management of infants and children with hematologic disorders, cancer, and immunodeficiency (Policies and Procedure Manual Section B-Curriculum Specifications)
- Master fundamentals of clinical management of children undergoing autologous or allogeneic bone marrow and stem cell transplantation (Policies and Procedure Manual Section B-Curriculum Specifications)
- Establish an area for the pursuit of clinical or basic research (Policies and Procedure Manual Section E- Research and Scholarly Activity)
- Develop mentorship relationship with faculty member for research and general hematology/oncology clinical training (Policies and Procedure Manual Section F- Mentorship Policy)
- Experience in preparing clinical presentations, division of cases and case reports
- Participate in Subspecialty In-Training Examination, and review of performance with general hematology/oncology mentor
Year Two Goals
- Develop proficiency in clinical outpatient management and inpatient/outpatient procedures
- Further develop proficiency with standard procedures used in hematology/oncology practice (see Policies and Procedure Manual Section D-Procedure Competencies and Fellow Procedure List by year of training)
- Develop proficiency with standard procedures used in hematology/oncology practice (see Policies and Procedure Manual Section D-Procedure Competencies and Fellow Procedure List by year of training)
- Develop in-depth understanding of pathophysiology of blood and cancer disorders
- Develop proficiency with biostatistics, literature evaluation, and lecture presentation
- Pursue basic or clinical research project, potential abstract presentation at intramural or national meeting
- Development of an understanding of the investigative approach and the laboratory skills necessary to conduct independent research under the guidance of a research mentor
- Development of in-depth scientific knowledge in hematology/oncology/BMT
- Development of independence in clinical abilities
- Development of an in-depth understanding of the diseases and disorders treated by our subspecialty and a rational approach to treatment
- Participate in Subspecialty In-Training Examination, and review of performance with general hematology/oncology mentor

Year Three Goals
- Mastery of an understanding of the investigative approach and the laboratory skills necessary to conduct independent research under the guidance of a research mentor
- In-depth scientific knowledge in hematology/oncology/BMT
- Independence in the clinical practice of pediatric hematology/oncology.
- An in-depth understanding of the diseases and disorders treated by our subspecialty and a rational approach to treatment
- Develop directly supervised “junior attending” role in the inpatient hematology/oncology/BMT elective service, and outpatient clinic rotations
- Further develop proficiency with standard procedures used in hematology/oncology practice (see Policies and Procedure Manual Section D-Procedure Competencies and Fellow Procedure List by year of training)
- Complete basic and clinical research project, potentially develop draft manuscript for submission, potential abstract presentation at intramural or national meeting; potential application for extramural funding; process supervised by faculty mentors
- Identification of job and career options, consider extended research training for selected fellows; discussions with research and general hematology/oncology mentors
- Participate in Subspecialty In-Training Examination, and review of performance with general hematology/oncology mentor

SECTION II — Fellow’s Clinical Responsibilities and Lines of Supervision

1. For all fellows: daily outpatient Hematology/Oncology/BMT/Immunology rounds with the attending management plan for his/her patients, and to participate in the educational didactic
discussions of the other patients. The fellow is directly supervised by a subspecialty attending for all clinical encounters.

2. For fellows on an inpatient rotation: daily inpatient Hematology, Oncology or BMT Service rounds with the attending faculty, mid-level providers, and residents. The fellow should be prepared to oversee, discuss, and expand upon the management plan outlined by the residents, and to participate in the educational didactic discussions of the other patients. The fellow is directly supervised by a subspecialty attending for all clinical encounters.

3. All admissions are discussed with the responsible attending faculty member. The fellow will notify the attending regarding admissions. Specific management discussions and attending supervision of the fellow will be commensurate with the experience of the fellow. During the night, the attending faculty member is notified regarding all major changes in patient status.

4. A procedure note and procedure log (electronic version) has to be completed for each procedure. Outline of fellow procedures and supervision includes:

1st Year Fellows
   a. Procedures that may be performed independently: Accessing and using central IVADs, administration of intramuscular asparaginase injections
   b. Procedures that usually require direct attending supervision: Diagnostic lumbar puncture, bone marrow aspiration, posterior iliac crest; bone marrow biopsy, posterior iliac crest; lumbar puncture with instillation of intrathecal chemotherapy.
   c. Procedures that require prior verbal approval from the attending before they can be performed independently: None

2nd Year Fellows
   a. Procedures that may be performed independently: Accessing and using central IVADs, administration of intramuscular asparaginase injections.
   b. Procedures that usually require direct attending supervision: Diagnostic lumbar puncture, bone marrow aspiration, posterior iliac crest; bone marrow biopsy, posterior iliac crest; lumbar puncture with instillation of intrathecal chemotherapy.
   c. Procedures that require prior verbal approval from the attending before they can be performed independently: None

3rd Year Fellows
   a. Procedures that may be performed independently: Accessing and using central IVADs, administration of intramuscular asparaginase injections.
   b. Procedures that usually require direct attending supervision: Diagnostic lumbar puncture, bone marrow aspiration, posterior iliac crest; bone marrow biopsy, posterior iliac crest; lumbar puncture with instillation of intrathecal chemotherapy.
   c. Procedures that require prior verbal approval from the attending before they can be performed independently: None

5. Fellows supervise the pediatric residents regarding clinical management issues.
6. Fellows interact with consulting services to help coordinate clinical care of inpatients and outpatients.
Alumni Leadership Position Examples

Trainees of the program have a stellar academic record and the vast majority remaining in academic Hematology/Oncology positions.

**Melissa (Rayburg) Jefferson, MD:** Clinical Assistant Professor of Pediatrics, University of Kansas Medical Center

**Christine Phillips, MD:** Associate Professor of Clinical Pediatrics, Cancer and Blood Diseases Institute, Oncology Division, Children's Hospital Medical Center

**Adrienne Hammill, MD, PhD:** Associate Professor of Clinical Pediatrics, Cancer and Blood Diseases Institute, Hematology Division, Children's Hospital Medical Center

**Theodore Johnson, MD, PhD:** Associate Professor, Augusta University Medical College of Georgia

**Benjamin Mizukawa, MD:** Assistant Professor of Pediatrics, Cancer and Blood Diseases Institute, Oncology Division, Children’s Hospital Medical Center

**Kasiani Myers, MD:** Associate Professor of Clinical Pediatrics, Cancer and Blood Diseases Institute, Bone Marrow Transplantation, Children’s Hospital Medical Center

**Alex George, MD, PhD:** Associate Professor, Department of Pediatrics, Section of Hematology-Oncology, Wake Forest University School of Medicine

**Michael Bishop, MD:** Assistant Member, St. Jude Faculty, Solid Tumor Treatment Team, St. Jude Children’s Research Hospital

**Sharat Chandra, MD:** Associate Professor of Clinical Pediatrics, Division of Blood and Marrow Transplantation and Immune Deficiency, Cancer and Blood Diseases Institute, Cincinnati Children’s Hospital Medical Center

**Maa-Ohui Quarmyne, MD:** Pediatric Hematologist, Phoenix Children's Hospital, Phoenix, AZ

**Brian Turpin, DO:** Associate Professor of Clinical Pediatrics, Division of Oncology, Cancer and Blood Diseases Institute, Cincinnati Children's Hospital Medical Center

**Pooja Khandelwal, MD:** Associate Professor of Clinical Pediatrics, Division of Blood and Marrow Transplantation and Immune Deficiency, Cancer and Blood Diseases Institute, Cincinnati Children's Hospital Medical Center

**Omar Niss, MD:** Assistant Professor, Hematology Division, Cancer and Blood Diseases Institute, Cincinnati Children’s Hospital Medical Center

**Dawn Pinchasik, MD:** Senior Medical Director, Clinical Development at Rubius Therapeutics

**Jordan Wright, MD:** Assistant Professor, Wright State University School of Medicine, Director of the Hemophilia Program, Dayton Children's

**Shanmuganathan Chandrakasan, MD:** Associate Professor, BMT, Emory University School of Medicine

**Christopher Dandoy, MD:** Associate Professor, Division of Bone Marrow Transplantation, Cancer and Blood Diseases Institute, Cincinnati Children's Hospital Medical Center

**Ralph Salloum, MD:** Pediatrics Hematology and Oncology, Nationwide Children's Hospital

**Nihal Bakeer, MD:** Pediatric Hematologist/Oncologist at the Indiana Hemophilia and Thrombosis Center, Indianapolis, IN

**Andrew Bukowinski, MD:** Assistant Professor, Hematology/Oncology, University of Pittsburgh School of Medicine
Satheesh Chonat, MD: Assistant Professor, Hematology, Aflac Cancer & Blood Disorders Center, Children’s Healthcare of Atlanta/Emory University
Samantha Michaels, MD: Pediatric Hematology/Oncology, St. Joseph’s Hospital, Tampa, FL
Ahmad Rayes, MD: Assistant Professor, Pediatric Blood and Marrow Transplant, University of Utah Hospital
Beverly Schaefer, MD: Assistant Professor of Oncology, Pediatric Hematology and Oncology, Roswell Park Comprehensive Cancer Center
Lynn Lee, MD: Assistant Professor of Pediatrics, Division of Oncology, Cancer and Blood Diseases Institute, Cincinnati Children’s Hospital Medical Center
Kiersten Ricci, MD: Assistant Professor, Division of Hematology, Cancer and Blood Diseases Institute, Cincinnati Children’s Hospital Medical Center
Seth Rotz, MD: Assistant Professor, Department of Pediatrics School of Medicine, Case Comprehensive Cancer Center, Case Western Reserve University
Laura Agresta, MD: Assistant Professor in the College of Human Medicine’s Department of Pediatrics and Human Development, Michigan State University
Amber D’Souza, MD: Clinic Physician, St. Jude Children’s Research Hospital
LaQuita Jones, DO: Assistant Professor, Division of Oncology, Cancer and Blood Diseases Institute, Cincinnati Children’s Hospital Medical Center
Ruby Khoury, MD: Assistant Professor of Clinical Pediatrics, Cancer and Blood Diseases Institute, Cincinnati Children’s Hospital Medical Center
Allison Remiker, MD: Assistant Professor, Hematology, Medical College of Wisconsin
Jeremy Rubinstein, MD, PhD: Assistant Professor, Division of Oncology, Cancer and Blood Diseases Institute, Cincinnati Children’s Hospital Medical Center
Allison Bartlett, MD: Staff Physician, Division of Bone Marrow Transplantation and Immune Deficiency, Cancer and Blood Diseases Institute, Cincinnati Children’s Hospital Medical Center
Anthony Sabulski, MD: Instructor, Division of Bone Marrow Transplantation and Immune Deficiency, Cancer and Blood Diseases Institute, Cincinnati Children’s Hospital Medical Center
Margot Lazow, MD: Hematologist/Oncologist at Nationwide Children’s Hospital, Columbus, OH
Luke Smart, MD: Assistant Professor, Division of Hematology, Cancer and Blood Diseases Institute, Cincinnati Children’s Hospital Medical Center
Kevin Todd: Pediatric Hematologist/Oncologist at Children’s Hospital of The King’s Daughters, Norfolk, VA
Kristine Karkoska, MD: Assistant Professor of Clinical Internal Medicine, University of Cincinnati College of Medicine
Brenton Francisco, MD: Assistant Professor, Pediatric Hematology-Oncology, Mount Sinai Kravis Children’s Hospital’s Children’s Cancer Program
Myesa Emberesh, MD: Assistant Professor, Pediatric Hematology/Oncology, East Tennessee State University
Melissa Perrino, MD: Instructor, Oncology Department, St. Jude Children’s Research Hospital
Kristina Prus, MD: Medical Director, Cascades Northwest Region, American Red Cross
Alex Boucher, MD, FAAP: Assistant Professor of Pediatric Hematology, Department of Pediatrics, University of Minnesota Medical School
Arun Gurunathan, MD: Clinical Assistant Professor, Cancer and Blood Disorders Center, Seattle Children’s Hospital
Jonathan Bender, MD: Assistant Professor, Division of Oncology, Cancer and Blood Diseases Institute, Cincinnati Children’s Hospital Medical Center
Thomas Galletta, MD: Assistant Professor, Division of Oncology, Cancer and Blood Diseases Institute, Cincinnati Children's Hospital Medical Center
Alexandra Power-Hays, MD: Assistant Professor, Division of Hematology, Cancer and Blood Diseases Institute, Cincinnati Children's Hospital Medical Center
Eleanor Cook, MD: Instructor of Pediatrics, Division of Bone Marrow Transplantation and Immune Deficiency, Cancer and Blood Diseases Institute, Cincinnati Children's Hospital Medical Center
Zahra Hudda, MD: Instructor of Pediatrics, Division of Bone Marrow Transplantation and Immune Deficiency, Cancer and Blood Diseases Institute, Cincinnati Children's Hospital Medical Center
2023 – 2024 Hematology/Oncology Fellows

1st Year Fellows

Katia Crisler  Lubna Hamdan  Sarah McCormack-Spivey  Svatava Merkle  Sarah Reel

2nd Year Fellows

Morgan Drucker  Stephen Gilene  Lindsay Haacker  Kristie Ramos  Bethany Verkamp

3rd Year Fellows

Taslima Choudhury  Tiziana Coppola  Justin Ferrell  Jorie Gatts  Olivia Perrone

4th Year Fellow

Francis LeBlanc