

ERIKA FRIEHLING, MD

BIOGRAPHICAL INFORMATION

Name: Erika Friehling, MD (Maiden name Erika Posner) E-mail: erika.friehling@chp.edu

Business Address: UPMC Children's Hospital of Pittsburgh
Division of Hematology/Oncology
4401 Penn Avenue
Pittsburgh, PA 15224 Business Phone: 412-692-6945



EDUCATION AND TRAINING

Undergraduate

New York University New York, NY	B.S. 2001	Neural Science major <i>cum laude</i>	1997 – 2001
-------------------------------------	--------------	--	-------------

Graduate

University of Virginia Charlottesville, VA	M.D. 2006	Doctor of Medicine	2002 – 2006
---	--------------	--------------------	-------------

Post-Graduate

University of Pittsburgh UPMC Children's Hospital of Pittsburgh Pittsburgh, PA	Pediatric Resident Director: Dr. Dena Hofkosh		2006 – 2009
--	--	--	-------------

University of Pittsburgh UPMC Children's Hospital of Pittsburgh Pittsburgh, PA	Pediatric Chief Resident Director: Dr. Dena Hofkosh		2009 – 2010
--	--	--	-------------

University of Pittsburgh UPMC Children's Hospital of Pittsburgh Pittsburgh, PA	Pediatric Hematology & Oncology Fellow Director: Dr. A. Kim Ritchey		2010 – 2013
--	---	--	-------------

University of Pittsburgh Certificate in Medical Education Institute for Clinical Research Education Pittsburgh, PA	Director: Dr. Roseanne Granieri		2014 – 2016
---	---------------------------------	--	-------------

University of Pittsburgh Master's in Medical Education Institute for Clinical Research Education Pittsburgh, PA	Director: Dr. Carla Spagnoletti <i>expected graduation Fall 2020</i>		2017 – present
--	---	--	----------------

APPOINTMENTS AND POSITIONS

Pediatric Chief Resident	Department of Pediatrics UPMC Children's Hospital of Pittsburgh Pittsburgh, PA	2009 – 2010
Attending Physician	Department of Pediatrics UPMC Children's Hospital of Pittsburgh Pittsburgh, PA	2009 – 2010
Assistant Professor	University of Pittsburgh School of Medicine Department of Pediatrics Pittsburgh, PA	2013 – present
Associate Vice Chair for Faculty Development	Department of Pediatrics UPMC Children's Hospital of Pittsburgh Pittsburgh, PA	2016 – present
Associate Fellowship Program Director	Department of Pediatrics Division of Hematology/Oncology UPMC Children's Hospital of Pittsburgh Pittsburgh, PA	2016 – 2018
Fellowship Program Director	Department of Pediatrics Division of Hematology/Oncology UPMC Children's Hospital of Pittsburgh Pittsburgh, PA	2018 – present
Co-Director	Office of Faculty Development Department of Pediatrics UPMC Children's Hospital of Pittsburgh Pittsburgh, PA	2020 – present

CERTIFICATION AND LICENSURE

Specialty Certification

American Board of Pediatrics, Certification in General Pediatrics	2009
American Board of Pediatrics, Certification in Pediatric Hematology/Oncology	2015

Medical and Professional Licensure

Commonwealth of Pennsylvania	2009 – present
------------------------------	----------------

Skills Certification

Pediatric Advanced Life Support Instructor	2013 – present
Pediatric Advanced Life Support	2020 renewed

MEMBERSHIPS IN PROFESSIONAL AND SCIENTIFIC SOCIETIES

American Academy of Pediatrics (AAP)	2006 – present
American Society of Pediatric Hematology and Oncology (ASPHO)	2010 – present
American Society of Hematology (ASH)	2010 – present
American Society of Clinical Oncology (ASCO)	2010 – present
Association of Pediatric Program Directors (APPD)	2013 – present
Academic Pediatric Association (APA)	2014 – present

HONORS AND AWARDS

American Cancer Society Fellowship	2003
Association of Pathology Chairs Honor Society	2004
Alpha Omega Alpha	2005
Gold Humanism Honor Society	2005
Robert M. Blizzard Pediatric Scholar Award	2006
Jeffrey S. Farkas, MD Memorial Pediatric Intern Teaching Award	2007
Rossin Foundation Pediatric Resident Award	2008
Department of Pediatrics Junior Faculty Clinician Award	2013
<i>Awarded to a new faculty member based on potential for clinical excellence, the reward includes \$60,000 of salary support as well as \$20,000 for continuing medical education.</i>	
American Society of Pediatric Hematology/Oncology Clinician Educator Award	2015
<i>Awarded \$10,000 from the national organization to a promising clinical educator.</i>	
Patient Satisfaction Award, UPMC Children's Hospital of Pittsburgh	2016
<i>Award presented for Outstanding Achievement in Patient Satisfaction based on Press Ganey patient surveys.</i>	
Patient Satisfaction Award, UPMC Children's Hospital of Pittsburgh	2017
<i>Award presented for Outstanding Achievement in Patient Satisfaction based on Press Ganey patient surveys.</i>	
Academic Pediatric Association Educational Scholars Program	2015 – 2018
<i>Was selected to participate in this national faculty development program focused on building skills in educational scholarship. The program aims to teach scholars how to develop, implement, evaluate, and disseminate educational initiatives. Participants earn a Certificate of Excellence in Educational Scholarship at completion of the three-year program.</i>	

PUBLICATIONS

Original Peer Reviewed Articles

1. Boerner JL, Gibson MA, Fox EM, **Posner ED**, Parsons SJ, Silva CM, Shupnik MA. Estrogen Negatively Regulates Epidermal Growth Factor (EGF)-Mediated Signal Transducer and Activator of Transcription 5 Signaling in Human EGF Family Receptor Overexpressing Breast Cancer Cells. *Mol Endocrinol*. 2005; 19: 2660-2670.
2. Ou Z, Sherer M, Casey J, Bakos HA, Vitullo K, Hu J, **Friehling E**, Gollin SM, Surti U, Yatsenko SA. The Genomic Landscape of *PAX5*, *IKZF1* and *CDKN2A/B* Alterations in B-Cell

- Precursor Acute Lymphoblastic Leukemia. *Cytogenet Genome Res.* 2016; 150: 242-252.
3. Ahmed IA, Farooqi MS, Vander Lugt MT, Boklan J, Rose M, **Friehling E**, Triplett B, Lieu K, Saldana BD, Smith CM, Schwartz JR, Goyal RK. Outcomes of Hematopoietic Cell Transplantation in Patients with Germline SAMD9/SAMD9L Mutations. *Biol Blood Marrow Transplant.* 2019; 2: 2186-2196.
 4. Close AG, Jones KA, Landowski A, Switzer GE, Kazmerski TM, Miller E, **Friehling E**. Current Practices in Menstrual Management in Adolescents with Cancer: A National Survey of Pediatric Oncology Providers. *Pediatr Blood Cancer.* 2019; 66(12): e27961.
 5. Close AG, Ghuman A, **Friehling E**, Hamm M, Frederick NN, Miller E, Kazmerski TM. Experiences with Menses and Menstrual Suppression of Young Women with a History of Cancer. *J Adolesc Young Adult Oncol.* 2020; 9: 23-29.

Other Peer Reviewed Publications (case reports and reviews)

1. O'Halloran K, Ritchey AK, Djokic M, **Friehling E**. Transient Juvenile Myelomonocytic Leukemia in the Setting of PTPN11 Mutation and Noonan Syndrome with Secondary Development of Monosomy 7. *Pediatr Blood Cancer.* 2017; 64(7): e26408.
2. Trauernicht E, Bharil S, Panko L, **Friehling E**. Fever, Neck Pain, and Back Pain in a 16-year-old Boy. *Pediatr Review.* 2018; 39(9): 468-469.
3. Stanley K, **Friehling E**, Ranganathan S, Mazariegos G, McAllister-Lucas L, Sindhi R. Post-Transplant Lymphoproliferative Disease (PTLD) in Pediatric Intestinal Transplant Recipients. *Pediatr Transplant.* 2018; 22(5): e13211.
4. Epperly R, Ozolek J, Soltys K, Cohen D, Goyal R, **Friehling E**. Treatment of Pediatric Plasma Cell Myeloma Type Post-Transplant Lymphoproliferative Disorder with Modern Risk-Directed Therapy. *Pediatr Blood Cancer.* 2018; 65(10): e27283.
5. Stanley K, **Friehling E**, Davis A, Ranganathan S. SDH-Deficient GIST with SDHC Germline Mutation and Bilateral Renal and Neck Cysts. *Pediatr Dev Pathol.* 2019; 22(3): 265-268.

National Workshops

1. **Friehling E**, Jubran R, Venkatramani R, Young G. Art of Presentation: Creating Effective Poster Presentations. Workshop presented at: American Society of Pediatric Hematology/Oncology Annual Meeting. May 2015. Phoenix, AZ.
2. Bone M, **Friehling E**, Gaug A, Guidice E, Rotandi C, McBride A, McNamara M, Shorter C. Skill Building: Leadership Skills. Time Management section of larger workshop presented at: Association of Pediatric Program Directors Fall Meeting. October 2018. Philadelphia, PA.
3. Acosta A, Altman-Gans H, Bone M, Chawla E, **Friehling E**, Gifford K, Guidice E, McNamara M, Ramundo M, Rose J, Turner T, Waggoner-Fountain L, Wolfe A, Wroblewski M. Professional Development 101: Getting to Where You Want to Be. Association of Pediatric Program Directors Annual Spring Meeting. March 2019. New Orleans, LA.
4. Bone M, **Friehling E**. Innovative Design Thinking Approach to Faculty Development. APPD Forum for Fellowship Directors. May 2019. Baltimore, MD.

Book Chapters

1. Ritchey AK, **Friehling E**. "Principles of Diagnosis" in *Nelson Textbook of Pediatrics*, Editors: Robert Kliegman, Bonita Stanton, Joseph St. Geme, and Nina Schor. 20th edition. Philadelphia: Elsevier, 2013.
2. Bleyer A, Ritchey AK, **Friehling E**. "Principles of Treatment" in *Nelson Textbook of Pediatrics*, Editors: Robert Kliegman, Bonita Stanton, Joseph St. Geme, and Nina Schor. 20th edition. Philadelphia: Elsevier, 2013.
3. Tubergen D, Bleyer A, Ritchey AK, **Friehling E**. "The Leukemias" in *Nelson Textbook of Pediatrics*, Editors: Robert Kliegman, Bonita Stanton, Joseph St. Geme, and Nina Schor. 20th edition. Philadelphia: Elsevier, 2013.
4. Ritchey AK, **Friehling E**. "Principles of Cancer Diagnosis" in *Nelson Textbook of Pediatrics*, Editors: Robert Kliegman, Bonita Stanton, Joseph St. Geme, and Nina Schor. 21st edition. Philadelphia: Elsevier, 2019.
5. Bleyer A, Ritchey AK, **Friehling E**. "Principles of Cancer Treatment" in *Nelson Textbook of Pediatrics*, Editors: Robert Kliegman, Bonita Stanton, Joseph St. Geme, and Nina Schor. 21st edition. Philadelphia: Elsevier, 2019.
6. Tubergen D, Bleyer A, Ritchey AK, **Friehling E**. "The Leukemias" in *Nelson Textbook of Pediatrics*, Editors: Robert Kliegman, Bonita Stanton, Joseph St. Geme, and Nina Schor. 21st edition. Philadelphia: Elsevier, 2019.
7. Gassei K, Valli-Pulaski H, Close A, **Friehling E**, Chaudhry R, Fox P, Cannon G, Jaffe T, Meacham L, Orwig K. "Male Fertility Preservation – Current Options and Advances in Research" in *Oncofertility Research and Practice: A Multidisciplinary Approach*. Editor: Teresa K. Woodruff. Cham: Springer Nature, 2019.

Published Abstracts

1. Binder DR, **Posner ED**, Hill DL. Transcription of ENaC Subunits in the Developing Rat [abstract]. In: *Chem Senses*. 2002; Volume 27(7). Poster session presented at: Meeting of the Association for Chemoreception Sciences. April 2002. Sarasota, FL.
2. Silva CM, Boerner JL, **Posner ED**, Gibson MA, Laughlin KK, Parsons SJ, Shupnik MA. STAT5: Common Mediator of Estrogen and EGF Effects in Breast Cancer Cell Models [abstract]. In: *Proc Amer Assoc Cancer Res*. 2004; Volume 45. Poster session presented at: American Association of Cancer Research Meeting. March 2004. Orlando, FL.
3. Fouquerel E, Yu Z, **Friehling E**, Li J, Fang Q, Schamus S, Wang X-H, Kublo L, Lan L, Brown AR, Sobol RW. BER Crosstalk to DSB Repair Pathways [abstract]. In: *Environ Mol Mutagen*. 2013; Volume 54(S1). Poster session presented at: Environmental Mutagenesis and Genomics Society Annual Meeting. September 2013. Monterey, California.
4. Stanley K, **Friehling E**. Carney-Stratakis Syndrome: A Rare Case in an Adolescent with Bilateral Renal Cysts. [abstract]. In: *Pediatr Blood Cancer*. 2017; 64 (Supplement 1). Poster session presented at: American Society of Pediatric Hematology/Oncology Annual Meeting. April 2017. Montreal, Canada.

5. Stanley K, **Friehling E**. Plummer-Vinson Syndrome: A Rare Case in an Adolescent. [abstract]. In: *Pediatr Blood Cancer*. 2017; 64 (Supplement 1). Poster session presented at: American Society of Pediatric Hematology/Oncology Annual Meeting. April 2017. Montreal, Canada.
6. Epperly R, **Friehling E**. Treatment of Pediatric Plasma Cell Myeloma Type Post-Transplant Lymphoproliferative Disorder with Modern Risk-Directed Therapy Including Autologous Stem Cell Transplant. [abstract]. In: *Pediatr Blood Cancer*. 2017; 64(Supplement 1). Poster session presented at: American Society of Pediatric Hematology/Oncology Annual Meeting. April 2017. Montreal, Canada.
7. **Friehling E**, Proud L, Nowalk A. Longitudinal Subspecialty Clinic for Pediatric Residents: Enhancing Preparedness for Fellowship Through Continuity and Mentorship. [abstract]. In: *Pediatr Blood Cancer*. 2017; 64(Supplement 1). Poster session presented at: American Society of Pediatric Hematology/Oncology Annual Meeting. April 2017. Montreal, Canada. *Selected as one of the highest rated abstracts and featured on the poster tour.*
8. Ahmed I, Schwartz J, **Friehling E**, Vander Lugt M, Klco J, Triplett B, Goyal R. Outcomes of Hematopoietic Cell Transplantation in Patients with Germline SAMD9/SAMD9L Mutations. [abstract]. In: *Pediatr Blood Cancer*. 2018; 65(Supplement 1). Poster session presented at: Pediatric Blood and Marrow Transplant Consortium Meeting. May 2018. Pittsburgh, PA.
9. Stanley K, Malek M, **Friehling E**. PET- Probe Guided Surgical Resection of Relapsed Post-Transplant Lymphoproliferative Disorder. [abstract]. In: *Br J Haematol*. 2018; 182(Supplement 1). Poster session presented at: 6th International Symposium on Childhood, Adolescent, and Young Adult Non-Hodgkin Lymphoma. September 2018. Rotterdam, Netherlands.
10. Close A, Ghuman A, Kazmerski T, Fredrick N, Miller E, **Friehling E**. Experiences of Young Women with Cancer Regarding Menses/Menstrual Suppression During Chemotherapy. [abstract]. In: *Pediatr Blood Cancer*. 2019; 66(Supplement 2). Poster session presented at: American Society of Pediatric Hematology/Oncology Annual Meeting. May 2019. New Orleans, LA.
11. Close A, Munyoki S, **Friehling E**, Joolharzadeh P, Menke M, Orwig K, Valli-Pulaski H. Sperm Cryopreservation Prior to Gonadotoxic Therapies in Adolescent and Young Adults with Cancer. [abstract]. In: *Pediatr Blood Cancer*. 2019; 66(Supplement 2). Poster session presented at: American Society of Pediatric Hematology/Oncology Annual Meeting. May 2019. New Orleans, LA.

Oral Abstract Presentations

1. Girvin A, Vander Lugt M, **Friehling E**. Changing Patterns of Care for Immune Thrombocytopenia. Oral abstract presentation at: Children's Hospital of Pittsburgh Quality Research Week. October 2015. Pittsburgh, PA.
2. Yatsenko SA, Ou Z, Sebastian J, Arnold GL, **Friehling E**, Madan-Khetarpal S, El-Gharbawy A, Hu J, Surti U, Bellissimo D, Rajkovic A. Clinical Significance of Single Chromosome Regions of Homozygosity Detected by Microarray: uniparental disomy, genomic imprinting, autosomal recessive mutations, mitotic recombination, chromosomal aberrations and mosaicism. Oral abstract presentation at: American College of Medical

- Genetics Annual Clinical Genetics Meeting. March 2016. Tampa, FL.
3. Goyal R, Ahmed I, Boklan J, Rose M, **Friehling E**, Vander Lugt M, Triplett B, Lieu K, Saldana B, Smith C, Klco J, Schwartz J. Outcomes of Hematopoietic Cell Transplantation in Patients with Germline SAMD9/SAMD9L Mutations. Oral abstract presentation at: American Society of Hematology Scientific Workshop on Inherited Hematopoietic Malignancies. November 2018. San Diego, CA.
 4. McCormick M, **Friehling E**, Kalpatthi R, Smith K. Levofloxacin Prophylaxis is Effective and Cost-Effective in Pediatric Patients with Acute Myeloid Leukemia. Oral abstract presentation at: American Society of Hematology Annual Meeting. December 2019. Pittsburgh, PA.

Poster Abstract Presentations

1. Boerner JL, Rowe DF, **Posner ED**, Laughlin KK, Biscardi JS, Parsons SJ, Shupnik MA, Silva CM. Interaction between Signal Transducers (STATs) and Estrogen Receptor Signaling in Breast Cancer Cells. Poster session presented at: Endocrine Society Annual Meeting. June 2003. Philadelphia, PA.
2. **Friehling E**, Fouquerel E, Murai J, Pommier Y, Sobol RW. Exploring a Novel Mechanism of PARP Inhibition. Poster session presented at: University of Pittsburgh Cancer Institute Research Retreat. June 2013. Pittsburgh, PA.
3. Proud L, **Friehling E**. Preparing Residents for Fellowship by Optimizing Mentorship Through Longitudinal Patient Experiences. Poster session presented at: Pediatric Educational Excellence Across the Continuum (PEEAC) Meeting. September 2015. Atlanta, GA.
4. Ou Z, Sherer M, Casey J, Bakos H, Vitullo K, Hu J, **Friehling E**, Surti U, Yatsenko S. The Genomic Landscape of *PAX5*, *IKZF1*, and *CDKN2A/B* Alterations in B-Cell Precursor Acute Lymphoblastic Leukemia. Poster session presented at: American College of Medical Genetics Annual Clinical Genetics Meeting. March 2016. Tampa, FL.
5. Rabold E, Tarchichi T, **Friehling E**, Zitelli B, Mieczkowski A. A Diagnosis of Leukemia in Patients on a Hospitalist Medicine Service at a Quaternary Care Hospital. Poster session presented at: ROAR Research Day at Children's Hospital of Pittsburgh of UPMC. June 2016. Pittsburgh, PA.
6. Rabold E, Tarchichi T, **Friehling E**, Zitelli B, Mieczkowski A. A Diagnosis of Leukemia in Patients on a Hospitalist Medicine Service at a Quaternary Care Hospital. Poster session presented at: Sixth Annual Rangos Research Symposium. June 2016. Pittsburgh, PA.
7. **Friehling E**, Proud L, Nowalk A. Longitudinal Subspecialty Clinic for Pediatric Residents: Enhancing Preparedness for Fellowship Through Continuity and Mentorship. Poster session presented at: University of Pittsburgh School of Medicine Annual MedEd Day. September 2017. Pittsburgh, PA.
8. **Friehling E**, Proud L, Nowalk A. Longitudinal Subspecialty Clinic for Pediatric Residents: Enhancing Preparedness for Fellowship Through Continuity and Mentorship. Poster session presented at: University of Pittsburgh School of Medicine Annual GME Leadership Conference. February 2018. Pittsburgh, PA.

PROFESSIONAL ACTIVITIES

TEACHING ACTIVITIES

Educational Leadership

Educational Chief Fellow, Pediatric Hematology/Oncology	2012
Administrative Chief Fellow, Pediatric Hematology/Oncology	2013
Co-Director, Pediatric Residency Program Career Focused Curriculum	2013 – present
Director of Fellow Education, Pediatric Hematology/Oncology	2014 – 2016
Director of Resident Education, Pediatric Hematology/Oncology	2014 – present
Course Director, Pediatric Hematology/Oncology Fellow Core Lecture Series	2014 – present
Co-Organizer, Department of Pediatrics Faculty Development Series	2016 – present
Course Director, Pediatric Hematology/Oncology Journal Club	2016 – present
Course Director, Pediatric Hematology/Oncology Weekly Educational Conference	2016 – present
Director, Pediatric Hematology/Oncology Multi-Disciplinary Tumor Board	2016 – present
Co-Director, Office of Faculty Development	2020 – present

National Teaching

Contributor, American Society of Pediatric Hematology/Oncology Case Quiz	2016 – present
Developed clinical cases distributed by the society to a national audience	
3-4 cases contributed per year	
Moderator, ASPHO Maintenance of Certification Session, ASPHO Annual Meeting	2019

Pediatric Faculty, University of Pittsburgh School of Medicine

Lecturer, Department of Pediatrics Faculty Development Series, 25-30 faculty members	
“Milestones and the Clinical Competency Committee”	2014
“Turning Your Educational Work into Scholarship”	2015
“Making the Most of Mentoring for Career Success”	2016
“Being a Great Mentor”	2016
“CV Workshop for Clinician Educators”	2017
“New Faculty Orientation: Mentorship”	2017 – 2019
“New Faculty Orientation: Framing your Work as a Clinician Educator”	2017 – 2019
Lecturer, Department of Pediatrics Educational Champions, 8 faculty members	
“Educational Scholarship”	2016
Lecturer, Division of Pediatric Hospitalist Medicine	
“Mentoring, Promotion, and Career Development”	2019
Lecturer, Division of Pediatric Allergy and Immunology	
“Mentoring, Promotion, and Career Development”	2019
Lecturer, Division of Pediatric Gastroenterology	
“Making the Most of Mentoring for Career Success”	2019

Pediatric Hematology/Oncology Division, University of Pittsburgh School of Medicine

Presenter, Division of Pediatric Hematology/Oncology Journal Club, 25-30 attendees	
“Thrombotic Complications in Childhood Acute Lymphoblastic Leukemia”	2010
“Predictors of Survival After Relapse in Neuroblastoma”	2011
“Adrenal Insufficiency in Critically Ill Pediatric Oncology Patients”	2012
“Role of Bisphosphonates as Therapy for Osteonecrosis in Leukemic Patients”	2013

"Use of Dexrazoxane with Anthracyclines"	2016
"TPMT Testing in Pediatric Oncology"	2016
"Outpatient Management of Fever and Neutropenia"	2017
"Allergic Reactions to Asparaginase"	2017
Lecturer, Division of Pediatric Hematology/Oncology Educational Conference, 25-30 attendees	
"Disorders of Hemostasis"	2010
"Bone Marrow Failure Syndromes"	2011
"Giving Effective Feedback"	2011
"Improving Handoffs"	2012
"ALDH, DNA Damage, and DNA Repair"	2012
"Ph-like ALL"	2015
"Fertility Preservation in Pediatric Oncology"	2017
"Time Management"	2020
Lecturer, Pediatric Hematology/Oncology Nursing Educational Conference	
"Leukemia"	2017, 2018
"Transfusions and Transfusion Reactions"	2017, 2018
Facilitator, Division-wide Mock Codes	2017 – present

Pediatric Fellows, UPMC Children's Hospital of Pittsburgh

Preceptor, Outpatient Pediatric Hematology/Oncology Clinic	2013 – present
Attending, Inpatient Pediatric Hematology/Oncology	2013 – present
Lecturer, Pediatric Hematology/Oncology Fellow Core Lecture Series	
<u>Topics on Evidence Based Medicine</u>	
"Cost Analysis"	2014
"Non-Inferiority Trials"	2015
"Odds Ratios and Hazard Ratios"	2015
"Survival Analysis"	2015
"Likelihood Ratios"	2016
"Meta-Analysis and Systemic Reviews"	2016
"Non-Inferiority, Equivalence, and Superiority Trials"	2017
"Risk Analysis"	2017
<u>Topics on Pediatric Oncology (yearly recurring lecture)</u>	
"Acute Lymphoblastic Leukemia"	2017 – present
"Navigating the Literature and the COG Website"	2017 – present
Lecturer, Department of Pediatrics Unified Fellow Course, 15 fellows per session	
<u>Topics on Career Development</u>	
"Making Mentoring Work for You" (yearly recurring lecture)	2014 – present
"Responsible Authorship"	2017
"CV and Educator Portfolios"	2017, 2019
Lecturer, NICU Fellow Lecture Series, 5-10 fellows per session	
<u>Topics on Career Development</u>	
"Making the Most of Mentoring"	2019
"CV Workshop"	2019

Pediatric Residents, UPMC Children's Hospital of Pittsburgh

Facilitator, Pediatric Mock Codes, 10 pediatric residents per monthly session	2009 – 2010
---	-------------

Preceptor, Outpatient Elective in Hematology/Oncology, 25-30 residents per year	2013 – present
Attending, Inpatient Pediatric Hematology/ Oncology, 30 residents per year	2013 – present
Lecturer, Pediatric Residency Noon Conference, 30 residents, multiple sessions	2013 – present

Topics on Career Development

Faculty panel on fellowship research opportunities	2013
Faculty panel on applying to fellowship	2014
"Making the Most of Mentoring"	2014 – 2016
"CV Workshop"	2014 – 2017
"Generational Differences in Mentoring"	2015
"Wellness and Resilience"	2015
"How Outlook Changed My Life"	2016
"Academic Career Paths"	2016
"Cover Letter and Personal Statement"	2017
"Career Paths in Medical Education"	2018
"Mindful Career Planning"	2019
"Interview Skills"	2019

Topics on Hematology/Oncology

"Jeopardy for Pediatric Residents"	2010
"Hemolytic Anemia"	2014
"Thrombosis"	2014
"Hematologic Emergencies"	2014 – 2017
"Transfusion Basics"	2015
"Transfusion Reactions"	2015
"Leukemia and Lymphoma"	2018 – 2019
Preceptor, Subspecialty Continuity Clinic, 1 resident per year, ½ day weekly clinic	2014 – present
Facilitator, Death and Dying Workshop, 25 second year residents	2014, 2017, 2018
Deputy Facilitator, Chair Report, 10 senior residents, weekly case conference	2017 – present
<i>Asked by the Chair of Pediatrics to facilitate this conference</i>	

Graduate Students and Trainees, University of Pittsburgh School of Medicine

Presenter, University of Pittsburgh Cancer Institute Molecular and Cellular Biology Group	
"A Novel Mechanism of PARP Inhibition and its Role in Base Excision Repair"	2012
"ATR Inhibition in Ovarian Cancer Cell Lines"	2013
Presenter, Medical Education Journal Club, Institute for Clinical Research Education	
"Meaningful Use of Learning Goals"	2016
Lecturer, Department of Pathology, Hematopathology Fellows	
"Acute Lymphoblastic Leukemia"	2016 – present
Lecturer, Professional Development Course, Institute for Clinical Research Education	
"CV and Educator Portfolio" (yearly recurring lecture)	2017 – present
"Job Search and Negotiation" (yearly recurring lecture)	2017 – present

Medical Students, University of Pittsburgh School of Medicine

Preceptor, Advanced Physical Exam Course, 2 medical students per year	2009 – 2014
Attending Physician, Pediatric Clerkship, 6-8 medical students per year	2013 – present
Preceptor, Hematology/Oncology Elective, 5-8 medical students per year	2013 – present
Preceptor, Outpatient Hematology/Oncology, 10 medical students per year	2013 – present

Undergraduate Students, University of Pittsburgh

Lecturer, Bench to Bedside Course, 10 undergraduate students

2017

Teaching Products/Curriculum Development

Title	Description	Dates
Career Focused Curriculum for Pediatric Residents	Along with course co-directors, established a yearly recurring series focused on areas of professional development. The curriculum consists of 10-12 sessions a year and includes topics such as mentoring, CV writing, teaching skills, job search, fellowship application process, negotiation skills, personal finance, and leadership skill development.	2013 – present
Pediatric Hematology/Oncology Fellow Lecture Series	Designed and implemented a new pediatric hematology/oncology fellow core didactic curriculum utilizing the American Board of Pediatric Content Specifications. The hour-long lectures are held every week with topics rotating every 18 months.	2014 – present
Pediatric Hematology/Oncology EBM Series	Developed a novel, interactive educational series for pediatric hematology/oncology fellows. The lectures included review of basic EBM principles including cost-effective analysis, survival analysis, likelihood ratios, non-inferiority trials, and meta-analysis.	2015 – present
Pediatric Hematology/Oncology Journal Club	Designed and implemented a new journal club for the division of pediatric hematology/oncology which includes use of audience response system to engage learners in the critical review of the literature.	2016 – present

Mentoring**University of Pittsburgh, Bioengineering Students**

Juliana Bursic, Maria Munsch, Hunter Eason, Alicia Kolling and Ryan Begun.

2013 – 2014

Senior Project: "The Comfort Buddy", a stuffed toy designed for hospitalized pediatric oncology patients that warms when hugged.

University of Pittsburgh School of Medicine, Medical Students

Emily Rosenberger, MSTP student, Longitudinal Clinical Clerkship

2013 – 2015

Kevin Levine, MSTP student, Longitudinal Clinical Clerkship

2017

UPMC Children's Hospital of Pittsburgh, Pediatric Residents, Fellows, and Faculty

Mentee	Context of mentorship	Current Mentee Position	Mentee Achievements	Dates
Residents				
Lindsay Blazin, MD	Professional Development, Educational Scholarship	Heme/Onc Fellow, St. Jude Children's Research Hospital	<ul style="list-style-type: none"> • Publications (4 poster abstracts) • Heme/Onc Fellowship 	2013 – 2016
Meghan McCormick, MD	Professional Development, Resident QI Project	Heme/Onc Fellow, UPMC Children's Hospital of Pittsburgh	<ul style="list-style-type: none"> • Transfusion reaction guideline • Heme/Onc Fellowship 	2014 – 2017
Katrina O'Halloran, MD	Professional Development, Resident Scholarly Project	Heme/Onc Fellow, Children's Hospital of LA	<ul style="list-style-type: none"> • Publication (one published article) • Heme/Onc Fellowship 	2015 – 2018
Rebecca Epperly, MD	Professional Development, Resident Scholarly Project	Heme/Onc Fellow, St. Jude Children's Research Hospital	<ul style="list-style-type: none"> • Publications (one published article, one poster abstract) • Heme/Onc Fellowship 	2016 – 2017
Shireen Ganapathi, MD	Professional Development	Heme/Onc Fellow, Seattle Children's Hospital	<ul style="list-style-type: none"> • Heme/Onc Fellowship 	2016 – 2019
Erin Cummings, MD	Professional Development	Pediatric Chief Resident	<ul style="list-style-type: none"> • Chief Residency 	2016 – 2019
Jillian Lapinski, MD	Professional Development, Resident Scholarly Project	Pediatric Resident	<ul style="list-style-type: none"> • Ongoing research projects 	2017 – present
Alisa Brennan, MD	Professional Development	Pediatric Resident		2017 – present
Dana Tlais, MD	Professional Development, Resident Scholarly Project	Heme/Onc Fellow, Texas Children's Hospital	<ul style="list-style-type: none"> • Asparaginase guideline • Heme/Onc Fellowship 	2018 – 2019

Naomi Gunawardena, MD	Professional Development	Pediatric Resident		2018 – present
Fellows				
Angela Girvin, MD	Professional Development, Scholarly Projects	Assistant Professor, University of Rochester Medical Center	<ul style="list-style-type: none"> Quality improvement project (<i>oral abstract presentation</i>) 	2013 – 2015
Kaitlin Stanley, MD, MS	Professional Development, Scholarly Projects	Hospitalist, Children’s Hospital of Philadelphia	<ul style="list-style-type: none"> Publications (<i>two published articles, two poster abstracts</i>) 	2015 – 2018
Allison Close, MD, MS	Professional Development, Scholarly Projects, Clinical Research	Assistant Professor, Helen DeVos Children’s Hospital	<ul style="list-style-type: none"> Publications (<i>two manuscripts, one book chapter, two poster abstracts</i>) Fertility Preservation Consult Team development 	2016 – 2019
Grace Slater, MD	Professional Development, Scholarly Projects, Clinical Research	Pediatric Hospital Medicine Fellow, UPMC Children’s Hospital of Pittsburgh	<ul style="list-style-type: none"> Scholarly Oversight Committee 	2019 – present
Faculty				
Brittani Seynnaeve, MD, MS	Faculty Mentoring Committee	Assistant Professor, UPMC Children’s Hospital of Pittsburgh	<ul style="list-style-type: none"> Career guidance Appointment to Associate Fellowship Program Director 	2018 – present
Bianca Loverde, DO	Faculty Mentoring Committee	Assistant Professor, UPMC Children’s Hospital of Pittsburgh	<ul style="list-style-type: none"> Career guidance Appointment to Director of NICU Resident Education 	2018 – present

RESEARCH**Current Scholarly Activities in Medical Education**

1. Assessment of the impact of a subspecialty longitudinal continuity clinic 2015 – present
2. Design, implementation, and evaluation of a faculty mentoring program 2016 – present

Current Leadership and Scholarship in Clinical Oncology

1. Founding Director, Pediatric Oncofertility Consult Team 2017 – present
Establishment of consult service to improve access to both standard of care and experimental fertility preservation options for pediatric cancer patients.
2. Founding Director, Leukemia/Lymphoma Working Group 2017 – present
Establishment of institutional standards for pediatric leukemia/lymphoma and ongoing quality improvement projects.
 - i. Asparaginase premedication and therapeutic drug monitoring
 - ii. Discharge checklist for newly diagnosed patients
 - iii. Tumor lysis syndrome guideline
 - iv. Dexrazoxane use guideline

Non-Funded Research (Collaborative Clinical Trials)

1. AALL1731: A Phase 3 Trial Investigating Blinatumomab in Combination with Chemotherapy in Patients with Newly Diagnosed Standard Risk or Down Syndrome B-Lymphoblastic Leukemia and the Treatment of Patients with Localized B-Lymphoblastic Lymphoma
Role: Site PI
Funding Source: Children's Oncology Group
2. ANHL1522: A Pilot Study of Rituximab and Third-Party Latent Membrane Protein-specific Cytotoxic T-Lymphocytes in Pediatric Solid Organ Recipients with EBV-Positive CD20-Positive Post-Transplant-Lymphoproliferative Disease.
Role: Site PI
Funding Source: Children's Oncology Group
2. AHOD1331: A Randomized Phase III Study of Brentuximab Vedotin for Newly Diagnosed High-Risk Classical Hodgkin Lymphoma in Children and Adolescents
Role: Site PI
Funding Source: Children's Oncology Group
3. AHOD0831: A Non-Randomized Phase III Study of Response Adapted Therapy for the Treatment of Children with Newly Diagnosed High Risk Hodgkin Lymphoma
Role: Site PI
Funding Source: Children's Oncology Group
4. AHOD0431: A Phase III Study for the Treatment of Children and Adolescents with Newly Diagnosed Low Risk Hodgkin Disease
Role: Site PI
Funding Source: Children's Oncology Group
5. AHOD03P1: Treatment of Children with Newly-Diagnosed Low Stage Lymphocyte Predominant Hodgkin Disease
Role: Site PI
Funding Source: Children's Oncology Group

6. AHOD0031: A Phase III Group-Wide Study of Dose-Intensive Response-Based Chemotherapy and Radiation Therapy for Children and Adolescents with Newly Diagnosed Intermediate Risk Hodgkin Disease
Role: Site PI
Funding Source: Children's Oncology Group

Invited Seminars and Lectureships

Department of Pediatrics Annual Lee Bass Dinner, Pittsburgh, PA "The Preceptor as Mentor"	2015
Aflac Visiting Lecture Series, Atlanta, GA "Innovations in Graduate Medical Education"	2016
Academy of Master Educators, University of Pittsburgh School of Medicine "Being a Good Mentee"	2018
Magee-Womens Hospital of UPMC, Division of Urogynecology "The Mentor-Mentee Relationship"	2018
Western Psychiatric Institute and Clinic Wellness Retreat for Psychiatric Residents "Making the Most of Mentoring"	2018
Department of Pediatrics Grand Rounds "Novel Therapeutics in Acute Lymphoblastic Leukemia"	2018
University of Pittsburgh School of Medicine MedEd Day Panel "How to Turn Medical Education into Scholarship"	2018
Department of Obstetrics, Gynecology, and Reproductive Services Faculty Retreat "Being a Good Mentee"	2019
Department of Pathology Faculty Development Series "Promotion at Pitt Med in the Educator Track"	2019
University of Pittsburgh School of Medicine MedEd Day Workshop "Making it Count: Turning Education into Scholarship"	2019
Department of Anesthesia Grand Rounds "Mentoring in Academic Medicine"	2020

SERVICE

National

Member	ASPHO Certification and Continuing Education Committee	2016 – present
Responsible Investigator	Cancer Control and Supportive Care Children's Oncology Group	2017 – present
Manuscript Reviewer	Academic Medicine	2018
Facilitator	APPD Fall Meeting Table to Able Session: Educational Scholarship	2018
Member	APPD Faculty/Professional Development Learning Community	2018 – present
Member	APPD Professional Development Subgroup	2018 – present
Abstract Reviewer	APPD 2020 Spring Meeting	2019
Manuscript Reviewer	Pediatric Blood & Cancer	2019

University of Pittsburgh School of Medicine

Mentor	Women in Medicine and Science Forum Speed Mentoring	2014
Member	UPSOM MedEd Day Planning Committee	2016 – 2017
Abstract Reviewer	UPSOM MedEd Day	2016 – 2019
Poster Judge	UPSOM MedEd Day	2016 – 2019
Member	Fertility Preservation Group	2016 – present
Member	UPMC Graduate Medical Education Committee	2016 – present
Member	UPMC GME Professional Development Subcommittee	2018 – present
Abstract Reviewer	UPMC GME Leadership Conference	2018 – 2020
Poster Judge	UPMC GME Leadership Conference	2018 – 2020

UPMC Children's Hospital of Pittsburgh

Member	Asthma Compliance Committee	2009 – 2010
Member	Condition A/C Oversight Committee	2009 – 2010
Member	Condition Help Review Committee	2009 – 2010
Member	9B Floor Leadership Committee	2009 – 2010
Member	Chemotherapy Oversight Committee	2009 – present
Author	Clinical Effectiveness Guideline, Transfusion Reactions	2015
Author	Clinical Effectiveness Guideline, Management of Pediatric ITP	2015
Director	Leukemia/Lymphoma Working Group	2017 – present

Department of Pediatrics

Member	Residency Performance & Evaluation Committee	2009 – 2010
Member	Program Evaluation Committee	2011 – present
	Pediatric Hematology/Oncology Fellowship Program	
Member	Cerner Optimization Committee	2013 – 2015
Member	Pediatric Residency Selection Committee	2014 – present
Member	Clinical Competency Committee	2014 – present
	Pediatric Hematology/Oncology Fellowship Program	
Member	Clinical Competency Committee	2014 – present
	Pediatric Residency Program	
Member	Educational Champions Planning Group	2015
Member	Faculty Development Leadership Group	2015 – 2016
Member	Bridges Mentoring Program Development Group	2015 – 2018
Member	Diversity and Inclusion Committee	2015 – present