

BIOGRAPHICAL SKETCH

NAME: Scott Moerdler

eRA COMMONS USER NAME (credential, e.g., agency login): SMOERDLE

POSITION TITLE: Assistant Professor of Pediatrics, Rutgers Cancer Institute of New Jersey, Rutgers Robert Wood Johnson Medical School

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
Brandeis University, Waltham MA	B.A.	05/2008	Fine Arts
Mount Sinai School of Medicine, New York, NY	M.D.	05/2012	Medicine
Icahn School of Medicine of Mount Sinai, New York, NY		06/2015	Pediatric Residency
Children's Hospital at Montefiore, Bronx, NY		06/2018	Pediatric Hematology/Oncology Fellowship
Albert Einstein College of Medicine, Bronx, NY		06/2018	Immunology (Zang Lab)

A. Personal Statement

My entire career in pediatric hematology/oncology has been driving me to this point, acquiring the skills and knowledge to care for this special patient population, and working to improve patient outcomes both in clinic and in the lab. During my fellowship, I joined Dr. Zang's lab to work on novel immune checkpoint discovery and immunotherapy development. We discovered a new receptor, KIR3DL3, to the immune checkpoint HHLA2 and I generated antibodies to the receptor (¹Wei Y, Ren X, Galbo P, Moerdler S... Zang X. *KIR3DL3-HHLA2 is a human immunosuppressive pathway and a cancer therapeutic target*. Science Immunology, July 2021). I have presented at multiple regional and national conferences and been elected to serve on national hematology/oncology committees, which expose me to the current updates in the field but also will allow me to widely disseminate our findings. This research experience was the perfect complement to my clinical career, broadening my knowledge, encouraging me to think differently and ask questions with new insights, and work to bring the science back to the patients I work with. I am currently working to expand upon these experiences to develop collaborative translational and clinical projects to broaden our knowledge of immune checkpoints in pediatric cancers (²Moerdler S. *HHLA2 is a New Immune Checkpoint Expressed in Pediatric Hodgkin Lymphoma*. Presented at AACR Advances in Pediatric Cancer Research September 2019, Canada. ³Moerdler S. *LAG-3 is Expressed on a Majority of Tumor Infiltrating Lymphocytes in Pediatric Hodgkin Lymphoma*. Journal of Leukemia and Lymphoma 2020). I hope to continue to pursue my research, grow as a scientist, clinician, and educator, and become a leader in pediatric oncology, to make an impact on the field and our patients.

B. Positions and Honors**Positions and Employment**

2018 – Present **Rutgers Cancer Institute of New Jersey, Rutgers Robert Wood Johnson Medical School**
Assistant Professor of Pediatrics, Pediatric Hematology/Oncology

Select Honors and Awards

2017 **2nd Place Prize Winner**, Einstein-Montefiore Young Investigator Research Symposium, Bronx, NY
2018 **Leo M. Davidoff Society Award for Excellence in Teaching**, Albert Einstein College of Medicine, Bronx, NY
2019 **Academic Scholarship Award**, Accelerating Anticancer Agent Development and Validation Workshop
2019 **Lawrence T. Taft M.D. 2019 Excellence in Clinical Teaching Award**, Robert Wood Johnson Medical School Pediatric Residency Program
2019 **American Society of Hematology Medical Educator Institute**
2019 **Rutgers Program for Early Career Excellence**

Certifications

2013	New York State Medical License
2015	American Board of Pediatrics
2018	New Jersey State Medical License
2019	American Board of Pediatrics – Pediatric Hematology Oncology

C. Contributions to Science

1. Since joining Dr. XingXing Zang's lab, I have studied tumor immunology through the characterization of B7 family members and their CD28 receptor family immune checkpoints. During my time in the lab, I discovered the co-inhibitory receptor for HHLA2, KIR3DL3, and developed antibodies. Currently, in collaboration with Dr. Zang and Dr. Peter Cole, I am investigating novel checkpoint expression in pediatric cancers. I was awarded a grant from the Children's Oncology Group to study novel B7 immune checkpoints in pediatric Hodgkin Lymphoma. We have found that HHLA-2 is expressed on a majority of patient samples evaluated.
 - a. **Moerdler S**, Chand D, Ewart M, Zang X, Cole P. HHLA2 is a New Immune Checkpoint Expressed in Pediatric Hodgkin Lymphoma. Poster presentation at AACR Advances in Pediatric Cancer Research September 2019, Montreal, Canada.
 - b. **Moerdler S**, Ewart M, Friedman D, Kelly K, Pei Q, Peng M, Zang X, Cole P. *LAG-3 is Expressed on a Majority of Tumor Infiltrating Lymphocytes in Pediatric Hodgkin Lymphoma*. *Journal of Leukemia and Lymphoma (2020): 1-8*. DOI: 10.1080/10428194.2020.1839651
 - c. Wei Y, Ren X, Galbo P, **Moerdler S**... Zang X. *KIR3DL3-HHLA2 is a human immunosuppressive pathway and a cancer therapeutic target*. *Science Immunology*, 6.61, July 2021.
2. Physician wellness with its opposing burnout and stress is an area which continues to require investigation and innovation. I have been collaborating with Dr. Jennifer Kesselheim in evaluating trainee wellness in Pediatric Hematology Oncology. In response to the Covid-19 pandemic, I led a multi-institutional study evaluating burnout, stress, and anxiety in Pediatric Hematology Oncology staff. As a result of this work I have been asked to join national multi-institutional steering committees.
 - a. **Moerdler S**, Li Y, Weng S, Kesselheim J. Burnout in pediatric hematology oncology fellows: Results of a cross-sectional survey. *Pediatric Blood & Cancer*, p.e28274.
 - b. O'Brien K, MD, Mechaber A, Ledford C, Klocksieben F, Fagan M, Harrell H, Kaib S, Elnicki M, VanDeusen R, **Moerdler S**, Jaggi R, Frank E. *Perception of Medical Student Mistreatment: Does Specialty Matter?* *Academic Medicine*. 2021 Jun 29. doi: 10.1097/ACM.0000000000004223
 - c. **Moerdler S**, Steinberg D, Jin Z, Cole P, Levy A, Rosenthal S. *Well-being of Pediatric Hematology/Oncology Providers and Staff During the COVID-19 Pandemic in the New York and New Jersey Epicenter*. *JCO OP*, 2021 Feb 17:OP2000882. doi: 10.1200/OP.20.00882. PMID: 33596094.
 - d. **Moerdler S**, Steinberg D, Jin Z, Cole P, Kesselheim J, Levy A, Roth M, Rosenthal S. *Provider and Staff Crisis Wellbeing Associated with Trust in Leadership and Baseline Burnout*. *Pediatric Blood and Cancer*, 2021 Dec 10:e29497. doi: 10.1002/pbc.29497. PMID: 34890105
3. As an educator through collaborative multi-institutional efforts, I have been working to improving education and training for our trainees. The Covid-19 pandemic resulted in transformations of education, including the switch to virtual teaching. Embracing virtual education we developed v-SYMPHONY, the virtual symposium of Pediatric Hematology Oncology in NY, a weekly educational series which has developed a collaborative regional community that extends to networking, mentorship, and collaborative scholarship. During this time, through my work on steering committees and national organizations, we are working to re-evaluate the pediatric hematology oncology training and workforce.
 - a. Kesselheim J, Baker J, Kersun L, Lee C, **Moerdler S**, Snaman J, Warwick A, Weng S, Zhang Z. Humanism and Professionalism Training for Pediatric Hematology-Oncology Fellows: Results of a Multi-Center Randomized Trial. *Pediatric Blood & Cancer*. *Pediatric Blood & Cancer*. 2020 <https://doi.org/10.1002/pbc.28308>
 - b. **Moerdler S**, Borinstein SC. *Recent Trends in Pediatric Hematology Oncology Fellowship Match and the Workforce Impact*. *Pediatr Res* (2021). <https://doi.org/10.1038/s41390-021-01505-7>.

- c. **Moerdler S**, Gampel B, Levine J, Chou A, Madhusoodhan P, Oberg J, Pierro J, Roberts S, Satwani P. *COVID-19 Has Changed the Way We Think About Training Future Pediatric Hematologists/Oncologists*. *Pediatric Blood & Cancer*, April 2021, <https://doi.org/10.1002/pbc.29088>.
 - d. **Moerdler S***, Nishitani M*, Kesselheim J. *Perceptions of the Stressful Job Search for Pediatric Hematology/Oncology Fellows*. *Pediatric Blood and Cancer*, 2023
4. I have mentored a pediatric resident on a research project investigating Pediatric Oncology providers' knowledge, experiences, and challenges with Compassionate Use applications. We identified actual and perceived barriers that pediatric oncologists face when submitting compassionate use applications, suggesting that they may benefit from education and support to improve pediatric patients access to investigational care.
- a. **Moerdler S**, Zang L, Weiser D, Roth M. *Expanded Access Programs Require More Than Compassion: Challenges in Pediatric Oncology*. *Pediatric Blood and Cancer*, Nov 2018. doi: 10.1002/pbc.27545
5. We have mentored trainees on a case study of Familial Neuroblastoma and Neurofibromatosis drivers, pathway interactions, and multifocal tumor heterogeneity. We present comprehensive molecular characterization of neuroblastoma tumors from siblings affected by familial multifocal neuroblastoma. In addition to PHOX2B deletion and NF1 mutation across all tumor samples and germline genome, we identified a single copy number variant which may offer insight on additional drivers.
- a. Rybinski B, Wolinsky T, Brohl A, **Moerdler S**, Reed D, Ewart M, Weiser D. *Multifocal primary neuroblastoma tumor heterogeneity in siblings with co-occurring PHOX2B and NF1 genetic aberrations*. *Genes, Chromosomes and Cancer*, 59(2), 119-124.

Complete List of Published Work in MyBibliography:

<https://www.ncbi.nlm.nih.gov/myncbi/scott.moerdler.1/bibliography/public/>

D. Research Support

There are no areas of potential overlap with the proposed project and funded grants and/or pending applications

Ongoing Research Support

Rutgers Cancer Institute of New Jersey Director's Pilot Award <i>Novel Immune Checkpoint Expression on Circulating Tumor Cells of Pediatric Sarcomas</i> Goal: To describe the expression pattern of the immune checkpoint HHLA2 on circulating tumor cells from patients with pediatric sarcomas and describe trends relating to metastatic disease. Role: PI	Moerdler (PI)	02/08/2021- 02/08/2022
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Rutgers Robert Wood Johnson Department of Pediatrics Pediatrics Research Pilot Support (PRePS) Program <i>Testing the Water of Pediatric Resident Compassion Fatigue</i> Goal: To evaluate the prevalence of compassion fatigue in pediatric residents using a multi-institutional cross-sectional study design, and describe trainee experiences with emotional patient encounters using qualitative research methods. Role: PI	Moerdler (PI)	09/01/2020 – 12/31/2021
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Completed Research Support

Children's Oncology Group Integrated Translational Science Center Award <i>Expression of a New Immune Checkpoint in the Tumor Microenvironment of Pediatric Hodgkin Lymphoma</i> Goal: To characterize the expression pattern and clinical significance of HHLA2, and related B7 immune checkpoint family members, in pediatric Hodgkin Lymphoma using immunohistochemistry (IHC) Role: PI	Moerdler (PI)	01/01/2018 – 07/31/2020
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