

ANDREA M. GRIESINGER, M.S., Ph.D.

Research Associate

Dr. Nicholas Foreman Laboratory, Dr. Jean Mulcahy Levy Laboratory |

University of Colorado Anschutz |

Division of Pediatric Hematology, Oncology, and Bone Marrow Transplant | Children's Hospital Colorado |

The Morgan Adams Foundation Pediatric Brain Tumor Research Program,

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EDUCATION

B.S. Biochemical and Chemical Engineering (2005-2009)

Minor Bioengineering and Life Sciences

Colorado School of Mines

Golden, CO

M.S. Cancer and Cell Biology (2009-2011)

University of Cincinnati

Cincinnati, OH

Ph.D. Clinical Sciences (2021-2025)

University of Colorado Anschutz Medical Campus

Aurora, CO

WORK EXPERIENCE

Research Scientist (July 2026-Present)

Division of Pediatric Hematology, Oncology, and Bone Marrow Transplant

University of Colorado Denver Anschutz

Aurora, CO

Research Associate (December 2020-June 2026)

Division of Pediatric Hematology, Oncology, and Bone Marrow Transplant

University of Colorado Denver Anschutz

Aurora, CO

Senior Professional Research Assistant (January 2015-November 2020)

Division of Pediatric Hematology, Oncology, and Bone Marrow Transplant

University of Colorado Denver Anschutz

Aurora, CO

Professional Research Assistant (January 2012-December 2014)

Division of Pediatric Hematology, Oncology, and Bone Marrow Transplant

University of Colorado Denver Anschutz

Aurora, CO

Graduate Research Assistant (July 2009-December 2012)

Cancer and Cell Biology

University of Cincinnati

Cincinnati, OH

Summer Training in Genetics (May 2008-August 2008)

Molecular Genetics

University of Cincinnati
Cincinnati, OH

Temporary Engineer (May 2006-August 2006, May 2007-August 2007)

Colorado Department of Transportation
Colorado Springs, CO

PROFESSIONAL MEMBERSHIPS

National Biology Honor Society
Order of the Engineer
WiSTEM
500 Women Scientists

RESEARCH INTERESTS

I bring to research a unique education background. My engineering training has given me the ability to troubleshoot complex problems, the drive to explore and utilize new technologies, and the foresight to think outside the box to address the difficult questions surrounding pediatric brain tumors. I continued my education in cancer and cell biology, which gave me the basic training that I needed to pursue a career in cancer research. I learned advanced signaling networks that benefited my work when NF- κ B signaling was found to be a hallmark of posterior fossa ependymoma (PFA EPN). I joined the pediatric neuro-oncology research team at University of Colorado Anschutz in 2012. I have focused my research on understanding the biology and development of therapy for poor outcome, pediatric PFA EPN. In Dr. Nicholas Foreman's lab, I became particularly interested in the role the immune system has in tumor biology. The Foreman lab is the leading pediatric ependymoma research lab in the country. I have had a critical role in advancing the field's understanding of pediatric ependymoma research through concept, design, execution of data, analysis, grant and manuscript writing. I am an author on 14 ependymoma specific manuscripts, of which I am primary author on 4 and senior author on 3. I used multi-color flow cytometry to identify specific subpopulations of immune infiltrating cells in the four most common pediatric brain tumors and developed techniques to measure functional phenotype of the infiltrating immune cells, specifically in ependymomas. From this work, we gained a deeper understanding of the critical interplay between tumor and immune cells in human ependymoma tumor microenvironment. During this time, I developed techniques and models to fully utilize primary patient material, collected from surgeries, to investigate the mechanism involved in cross talk between tumor and immune cells. Specifically, these tools were used to identify the functional consequences of tumor secreted IL-6 and polarization of infiltrating myeloid cells to an immune suppressive phenotype. These studies have been further enhanced with single-cell RNAseq identification of unique subpopulations of cells within the tumor microenvironment and was successfully awarded two NCI R01s (CA237608, CA239302-01A1). I have developed 2 in vivo patient derived xenograft models of PFA harboring the poor prognostic markers chromosome 1q+ and 6q-. These models, which have been peer reviewed and published, were the first of their kind world-wide and have opened the doors for developing new ependymoma specific therapies. My strong background in ependymoma tumor and immunobiology as well as extensive experience with the PFA1 xenograft models will continue to advance the field's knowledge of pediatric ependymoma and provide more rational therapeutic targets for this high-risk tumor.

While my knowledge and understanding of EPN tumor and immunobiology continues to expand through my work in the lab, one area I felt lacking was my understanding of translational science and moving studies from the lab to the clinic. I have had the unique opportunity to see three studies move into the clinic, specifically one that will be the next NIH-funded trial through Children's Oncology Group (ACNS2422). Once the bulk of the preliminary data were collected in the lab, I did not have much of a role in seeing the work developed into a clinical trial. To further develop my knowledge and expertise, I completed a PhD in Clinical Science at University of Colorado Anschutz. This program allowed me to continue the work that I currently do in Dr. Foreman's lab while gaining the necessary training to become an active contributor on the design and development for future clinical trials, bringing my research full circle from the lab to the clinic, and back to the lab. I am committed to becoming a leading expert in translation science in pediatric neuro-oncology. My primary goal is to actively participate in the informing of, design of and biological correlates of clinical trials in children with brain tumors. I would like to have my own basic and translational laboratory which will focus on

better understanding the mechanisms driving childhood brain tumors, design and execute relevant preclinical studies, and process biological correlative studies from future clinical trials.

PROFESSIONAL DEVELOPMENT, TRAINING AND CERTIFICATIONS

2024: Humanized mice: immunotherapy and regenerative medicine, European Molecular Biology Organization Practical Course, EMBL Advanced Training Centre, European Molecular Biology Laboratory Heidelberg.

TEACHING

2013-2026: Responsible for mentoring Cancer Center and Child Health Research summer students (Katharina Wyls, Rebecca Josephson, Sydney Grob, Sabrina Georgio Westover, Jessica Hansen, Sarah Slack, Nithyashri Eswaran, Akber Shaikh, Annaliese Calzadilla, Lila Wittemyer)

2013-present: Responsible for training new lab personnel (Lindsey Hoffman, Shadi Zahedi, Davis Witt, Andrew Domman, Faith Harris, Enrique Grimaldo, Graziella Ribeiro De Sousa, Annaliese Calzadilla, Emil Bratbak, Kendra Jones)

2020-2021: Colorado State High School Science Fair Mentor (Julia Prata, Caroline Crann)

COMMUNITY ENGAGEMENT

2012-present: Research liaison for The Morgan Adams Foundation
Attend fundraising events, participate in lunch & learn sessions, and provide lab tours for donors

2017-present: Volunteer for Family Science Night at Gold Camp Elementary
Run a science-based activities table

2017-2024: Volunteer at Denver United Church
Serve on Engage Team for Sunday morning services, provide backpacks with school supplies for low-income community, and participate in Thanksgiving meal deliveries for low-income communities

PRESENTATIONS

2015 University of Colorado Anschutz Human Immunology and Immunotherapy Initiative (HI³) Tumor Immunology Meeting.
Development of Immunotherapy for Pediatric Ependymoma.

Society of Neuro-Oncology Pediatric
3rd Biennial Conference

Activation of the IL-6/STAT3 pathway in childhood ependymoma is associated with a pro-inflammatory tumor microenvironment and a poor prognosis.

2016 17th International Symposium on Pediatric Neuro-Oncology
Epigenetic silencing of LDOC1 leads to chronic IL-6 secretion through upregulation of NF- κ B pathway in Group A Ependymoma: Potential for tailored therapies.

2022 20th International Symposium on Pediatric Neuro-Oncology
Development of humanized immune system, posterior fossa A ependymoma patient-derived xenograft model

20th International Symposium on Pediatric Neuro-Oncology
Tumor associated myeloid cells drive immunobiology of high risk pediatric ependymoma

2024 21st International Symposium on Pediatric Neuro-Oncology
5FU sensitivity is mediated through trisomy UCK2 expression in 1q+ PFA EPN.

2026 22nd International Symposium on Pediatric Neuro-Oncology
Molecular Biology and Phase 1 Study of GM-CSF and Intrathecal Trastuzumab in Children with Recurrent Posterior Fossa Ependymoma

AWARDS

Pediatric Cancer Research Award
Highest ranked presentation
20th International Symposium on Pediatric Neuro-Oncology
Tumor associated myeloid cells drive immunobiology of high risk pediatric ependymoma

FUNDING

01/01/2026-12/31/2026 Griesinger, Foreman (PI)
Morgan Adams Foundation
Targeting IL-6 to remodeling the immunosuppressive tumor microenvironment in pediatric ependymoma
Role: PI
Concept, design, acquisition of data, trouble shooting and manuscript writing
Amount: \$30,000

07/01/2026-6/31/2028 Venkataraman, Foreman (PI)
SPARK-CU Innovation
Breaking Barriers: Armored CAR-T Therapy for Curative Treatment of Pediatric Posterior Fossa A Ependymoma
Role: Instructor
Concept, design, acquisition of data, trouble shooting and manuscript writing
Amount: \$250,000

11/01/2025-10/31/2026 Mulcahy Levy, Foreman (PI)
Olivia Caldwell Foundation
Investigating pediatric low-grade gliomas; Development of tumor microenvironment models for pediatric ependymoma
Role: Research Associate
Concept, design, acquisition of data, trouble shooting and manuscript writing
Amount: \$60,000; \$40,000

07/01/2025-06/31/2026 DeSisto (PI), Griesinger (CO-I), Donson (CO-I)
University of Colorado Cancer Center, Research Development Pilot Grant
Establishment of a multiomic pan-pediatric brain tumor immune cell atlas
Role: Co-Investigator
Concept, design, data analysis and manuscript writing
Amount: \$50,000

Past

01/01/2025-12/31/2025 Griesinger, Foreman (PI)
Morgan Adams Foundation
Remodeling the immunosuppressive tumor microenvironment in pediatric ependymoma
Role: PI
Concept, design, acquisition of data, trouble shooting and manuscript writing
Amount: \$50,000

2023-2024 Mulcahy Levy, Foreman (PI)
Olivia Caldwell Foundation
Investigating pediatric low-grade gliomas

Role: Research Associate
Concept, design, acquisition of data, trouble shooting and manuscript writing
Amount: \$100,000

01/01/2024-12/31/2024 Mulcahy Levy, Griesinger (PI)
Morgan Adams Foundation
Evaluating how the genetic driver of pediatric low-grade glioma influences the cytokines produced by tumor cells and surrounding immune cells
Role: PI
Concept, design, acquisition of data, trouble shooting and manuscript writing
Amount: \$25,000

07/01/2020 – 7/31/2025 R01 CA239302-01A1 Foreman (PI)
NIH-NCI
Epigenetic regulation of LDOC1 drives tumor biology in high risk ependymoma
Role: Senior Professional Research Assistant
Concept, design, acquisition of data, trouble shooting, manuscript and grant writing.
Amount: \$1.14 million

04/01/2019-03/31/2024 RO1CA237608 Foreman (PI)
NIH-NCI
Investigation of a novel cancer stem cell population in ependymoma
Role: Senior Professional Research Assistant.
Optimization and execution of flow cytometry assays to isolate ependymoma tumor subpopulation. Manage and oversee in vivo studies.
Amount: \$1.25 million

1/01/2020-12/31/2022 Foreman (PI), Griesinger (PI)
The Morgan Adams Foundation
Development of humanized immune system PDX model for evaluating the tumor-immune interaction in pediatric brain tumors
Role: PI
Concept, design, acquisition of data, trouble shooting and manuscript writing
Amount: \$100,000

PUBLICATIONS

1. Chou FS, Wunderlich M, **Griesinger A**, Mulloy JC. N-Ras(G12D) induces features of stepwise transformation in preleukemic human umbilical cord blood cultures expressing the AML1-ETO fusion gene. *Blood*. 2011 Feb 17;117(7):2237-40. doi: 10.1182/blood-2010-01-264119. Epub 2011 Jan 3. PMID: 21200020.
2. Mizukawa B, Wei J, Shrestha M, Wunderlich M, Chou FS, **Griesinger A**, Harris CE, Kumar AR, Zheng Y, Williams DA, Mulloy JC. Inhibition of Rac GTPase signaling and downstream prosurvival Bcl-2 proteins as combination targeted therapy in MLL-AF9 leukemia. *Blood*. 2011 Nov 10;118(19):5235-45. doi: 10.1182/blood-2011-04-351817. Epub 2011 Sep 22. PMID: 21940819.
3. Chou FS, **Griesinger A**, Wunderlich M, Lin S, Link KA, Shrestha M, Goyama S, Mizukawa B, Shen S, Marcucci G, Mulloy JC. The thrombopoietin/MPL/Bcl-xL pathway is essential for survival and self-renewal in human preleukemia induced by AML1-ETO. *Blood*. 2012 Jul 26;120(4):709-19. doi: 10.1182/blood-2012-01-403212. Epub 2012 Feb 14. PMID: 22337712
4. **Griesinger AM**, Birks DK, Donson AM, Amani V, Hoffman LM, Waziri A, Wang M, Handler MH, Foreman NK. Characterization of distinct immunophenotypes across pediatric brain tumor types *J Immunol*. 2013;191(9):4880-8. PMID: 24078694; PMCID:3827919
5. **Griesinger AM**, Donson AM, Foreman NK. Immunotherapeutic implications of the immunophenotype of pediatric brain tumors. *Oncoimmunology*. 2014;3(1):e27256. PMID: 24575386. PMCID:3929359.

6. Hoffman LM, Donson AM, Nakachi I, **Griesinger AM**, Birks DK, Amani V, Hemenway MS, Liu AK, Wang M, Hankinson TC, Handler MH, Foreman NK. Molecular sub-group-specific immunophenotypic changes are associated with outcome in recurrent posterior fossa ependymoma. *Acta Neuropathol*. 2014;127(5):731-45. PMID:24240813; PMCID:3988227.
7. Levy JM, Thompson JC, **Griesinger AM**, Amani V, Donson AM, Birks DK, Morgan MJ, Mirsky DM, Handler MH, Foreman NK, Thorburn A. Autophagy inhibition improves chemosensitivity in BRAF(V600E) brain tumors. *Cancer Discov*. 2014 Jul;4(7):773-80. doi: 10.1158/2159-8290.CD-14-0049. Epub 2014 May 13. PubMed PMID: 24823863
8. Venkataraman S, Alimova I, Balakrishnan I, Harris P, Birks DK, **Griesinger A**, Amani V, Cristiano B, Remke M, Taylor MD, Handler M, Foreman NK, Vibhakar R. Inhibition of BRD4 attenuates tumor cell self-renewal and suppresses stem cell signaling in MYC driven medulloblastoma. *Oncotarget*. 2014 May 15;5(9):2355-71. PMID: 24796395
9. Gump JM, Donson AM, Birks DK, Amani VM, Rao KK, **Griesinger AM**, Kleinschmidt-DeMasters BK, Johnston JM, Anderson RC, Rosenfeld A, Handler M, Gore L, Foreman N, Hankinson TC. Identification of targets for rational pharmacological therapy in childhood craniopharyngioma. *Acta Neuropathol Commun*. 2015;3(1):30. PMID: 25990246
10. **Griesinger AM**, Josephson RJ, Donson AM, Mulcahy Levy JM, Amani V, Birks DK, Hoffman LM, Furtek SL, Reigan P, Handler MH, Vibhakar R, Foreman NK. Interleukin-6/STAT3 pathway signaling drives an inflammatory phenotype in Group A ependymoma. *Cancer Immunol Res*. 2015 [Epub ahead of print]. PMID: 25968456
11. Prince EW, Balakrishnan I, Shah M, Mulcahy Levy JM, **Griesinger AM**, Alimova I, Harris PS, Birks DK, Donson AM, Davidson N, Remke M, Taylor MD, Handler MH, Foreman NF, Venkataraman S, Vibhakar R. Checkpoint kinase 1 expression is an adverse prognostic marker and therapeutic target of MYC-driven medulloblastoma. *Oncotarget*. 2016 Aug 16;7(33):53881-53894. doi:10.18632/oncotarget.10692. PubMed PMID: 27449089
12. Mulcahy Levy JM, Zahedi S, **Griesinger AM**, Morin A, Davies KD, Aisner DL, Kleinschmidt-DeMasters BK, Fitzwalter BE, Goodall ML, Thorburn J, Amani V, Donson AM, Birks DK, Mirsky DM, Hankinson TC, Handler MH, Green AL, Vibhakar R, Foreman NK, Thorburn A. Autophagy inhibition overcomes multiple mechanisms of resistance to BRAF inhibition in brain tumors. *Elife*. 2017 Jan 17;6. doi: 10.7554/eLife.19671. PubMed PMID: 28094001
13. Amani V, Donson AM, Lummus SC, Prince EW, **Griesinger AM**, Witt DA, Hankinson TC, Handler MH, Dorris K, Vibhakar R, Foreman NK, Hoffman LM. Characterization of 2 Novel Ependymoma Cell Lines With Chromosome 1q Gain Derived From Posterior Fossa Tumors of Childhood. *J Neuropathol Exp Neurol*. 2017 Jul 1;76(7):595-604. doi: 10.1093/jnen/nlx040. PubMed PMID: 28863455
14. Donson AM, Apps J, **Griesinger AM**, Amani V, Witt DA, Anderson RCE, Niazi TN, Grant G, Souweidane M, Johnston JM, Jackson EM, Kleinschmidt-DeMasters BK, Handler MH, Tan AC, Gore L, Virasami A, Gonzalez-Meljem JM, Jacques TS, Martinez-Barbera JP, Foreman NK, Hankinson TC. Molecular Analyses Reveal Inflammatory Mediators in the Solid Component and Cyst Fluid of Human Adamantinomatous Craniopharyngioma. *J Neuropathol Exp Neurol*. 2017 Sep 1;76(9):779-788. doi: 10.1093/jnen/nlx061. PubMed PMID: 28859336
15. **Griesinger AM**, Witt DA, Grob ST, Georgio Westover SR, Donson AM, Sanford B, Mulcahy Levy JM, Wong R, Moreira DC, DeSisto JA, Balakrishnan I, Hoffman LM, Handler MH, Jones KL, Vibhakar R, Venkataraman S, Foreman NK. NF- κ B upregulation through epigenetic silencing of LDOC1 drives tumor biology and specific immunophenotype in Group A ependymoma. *Neuro Oncol*. 2017 Oct 1;19(10):1350-1360. doi: 10.1093/neuonc/nox061. PubMed PMID: 28510691
16. Nellan A, Rota C, Majzner R, Lester-McCully CM, **Griesinger AM**, Mulcahy Levy JM, Foreman NK, Warren KE, Lee DW. Durable regression of Medulloblastoma after regional and intravenous delivery of anti-HER2 chimeric antigen receptor T cells. *J Immunother Cancer*. 2018 Apr 30;6(1):30. doi: 10.1186/s40425-018-0340-z. PubMed PMID: 29712574
17. Witt DA, Donson AM, Amani V, Moreira DC, Sanford B, Hoffman LM, Handler MH, Levy JMM, Jones KL, Nellan A, Foreman NK, **Griesinger AM**. Specific expression of PD-L1 in RELA-fusion supratentorial ependymoma: Implications for PD-1-targeted therapy. *Pediatric Blood Cancer*. 2018 May;65(5):e26960. doi: 10.1002/pbc.26960. Epub 2018 Jan 19. PubMed PMID: 29350470
18. Donson AM, Amani V, Warner EA, **Griesinger AM**, Witt DA, Levy JMM, Hoffman LM, Hankinson TC, Handler MH, Vibhakar R, Dorris K, Foreman NK. Identification of FDA-Approved Oncology Drugs with

- Selective Potency in High-Risk Childhood Ependymoma. *Mol Cancer Ther*. 2018 Sep;17(9):1984-1994. doi: 10.1158/1535-7163.MCT-17-1185. Epub 2018 Jun 20. PubMed PMID: 29925527
19. Alimova I, Pierce A, Danis E, Donson A, Birks DK, **Griesinger A**, Foreman NK, Santi M, Soucek L, Venkataraman S, Vibhakar InhibitionInt J Cancer. 2019 Apr 15;144(8):1983-1995. doi: 10.1002/ijc.31873. Epub 2019 Jan 10. PubMed PMID: 30230537
 20. Pierce AM, Witt DA, Donson AM, Gilani A, Sanford B, Sill M, Van Court B, Oweida A, Prince EW, Steiner J, Danis E, Dorris K, Hankinson T, Handler MH, Jones KL, Karam SD, Serkova NJ, Vibhakar R, Foreman NK, **Griesinger AM**. Establishment of patient-derived orthotopic xenograft model of 1q+ posterior fossa group A ependymoma. *Neuro Oncol*. 2019 Dec 17;21(12):1540-1551. doi: 10.1093/neuonc/noz116. PubMed PMID: 31276586
 21. Moreira DC, Venkataraman S, Subramanian A, Desisto J, Balakrishnan I, Prince E, Pierce A, **Griesinger A**, Green A, Eberhardt CG, Foreman NK, Vibhakar R. Targeting MYC-driven replication stress in medulloblastoma with AZD1775 and gemcitabine. *J Neurooncol*. 2020 May;147(3):531-545. doi: 10.1007/s11060-020-03457-0. Epub 2020 Mar 16. PubMed PMID: 32180106; PubMed Central PMCID: PMC7291878.
 22. Gillen AE, Riemondy KA, Amani V, **Griesinger AM**, Gilani A, Venkataraman S, Madhavan K, Prince E, Sanford B, Hankinson T, Handler M, Vibhakar R, Jones K, Mitra S, Hesselberth J, Foreman NK, Donson AM. Single-cell RNAseq of childhood ependymoma reveals distinct neoplastic cell subpopulations that impact etiology, molecular classification and outcome. *Cancer Cell Reports*, 2020 Aug 11;32(6):108023. doi: 10.1016/j.celrep.2020.108023
 23. Panwalkar P, Tamrazi B, Dang D, Chung C, Sweha S, Natarajan SK, Pun M, Bayliss J, Ogrodzinski MP, Pratt D, Mullan B, Hawes D, Yang F, Lu C, Sabari BR, Achreja A, Heon J, Animasahun O, Cieslik M, Dunham C, Yip S, Hukin J, Phillips JJ, Bornhorst M, **Griesinger AM**, Donson AM, Foreman NK, Garton HJL, Heth J, Muraszko K, Nazarian J, Koschmann C, Jiang L, Filbin MG, Nagrath D, Kool M, Korshunov A, Pfister SM, Gilbertson RJ, Allis CD, Chinnaiyan AM, Lunt SY, Blüml S, Judkins AR, Venneti S. Targeting integrated epigenetic and metabolic pathways in lethal childhood PFA ependymomas. *Sci Transl Med*. 2021 Oct 6;13(614):eabc0497. Doi: 10.1126/scitranslmed.abc0497.
 24. Riemondy KA, Venkataraman S, Willard N, Nellan A, Sanford B, **Griesinger AM**, Amani V, Mitra S, Hankinson TC, Handler MH, Sill M, Ocasio J, Weir SJ, Malawsky DS, Gershon TR, Garancher A, Wechsler-Reye RJ, Hesselberth JR, Foreman NK, Donson AM, Vibhakar R. *Neoplastic and Immune single cell transcriptomics define subgroup-specific intra-tumoral heterogeneity of childhood medulloblastoma*. *Journal of Clinical Investigation*. *Neuro Oncol*. 2022 Feb 1;24(2):273-286. Doi: 10.1093/neuroonc/noab135.
 25. Fu R, Norris GA, Willard N, **Griesinger AM**, Riemondy KA, Amani V, Grimaldo E, Harris F, Hankinson TC, Mitra S, Ritzmann TA, Grundy RR, Foreman NK, Donson AM. Spatial transcriptomic analysis delineates epithelial and mesenchymal subpopulations and transition stages in childhood ependymoma. *Neuro Oncol*. 2022 Apr 6;25(4):786-798. doi: 10.1093/neuonc/noac219. PubMed PMID: 36215273; PubMed Central PMCID: PMC10076949.
 26. Donson AM, Bertrand KC, Riemondy KA, Gao D, Zhuang Y, Sanford B, Norris GA, Chapman RJ, Fu R, Willard N, **Griesinger AM**, de Sousa GR, Amani V, Grimaldo E, Hankinson TC, Booker F, Sill M, Grundy RG, Pajtl KW, Ellison DW, Foreman NK, Ritzmann TA. Significant increase of high-risk chromosome 1q gain and 6q loss at recurrence in posterior fossa group A ependymoma: a multicenter study. *Neuro Oncol*. 2023 May 29;. doi: 10.1093/neuonc/noad096. [Epub ahead of print] PubMed PMID: 37246777.
 27. Crotty EE, Wilson AL, Davidson T, Tahiri S, Gust J, **Griesinger AM**, Venkataraman S, Park JR, Mueller S, Rood BR, Hwang EI, Wang LD, Vitanza NA. Cellular Therapy for Children with Central Nervous System Tumors: Mining and Mapping the Correlative Data. *Curr Oncol Rep*. 2023 Aug;25(8):847-855. doi: 10.1007/s11912-023-01423-3. Epub 2023 May 9. Review. PubMed PMID: 37160547; PubMed Central PMCID: PMC10326126
 28. **Griesinger AM**, Riemondy K, Eswaran N, Donson AM, Willard N, Prince EW, Paine SML, Bowes G, Rheaume J, Chapman RJ, Ramage J, Jackson A, Grundy RG, Foreman NK, Ritzmann TA. Multi-omic approach identifies hypoxic tumor-associated myeloid cells that drive immunobiology of high-risk pediatric ependymoma. *iScience*. 2023 Aug 9;26(9):107585. doi: 10.1016/j.isci.2023.107585. PMID: 37694144; PMCID: PMC10484966.
 29. Amani V, Riemondy KA, Fu R, **Griesinger AM**, Grimaldo E, De Sousa GR, Gilani A, Hemenway M, Foreman NK, Donson AM, Willard N. Integration of single-nuclei RNA-sequencing, spatial

- transcriptomics and histochemistry defines the complex microenvironment of NF1-associated plexiform neurofibromas. *Acta Neuropathol Commun*. 2023 Sep 28;11(1):158. doi: 10.1186/s40478-023-01639-1. PMID: 37770931; PMCID: PMC10537467.
30. Grob ST, Miller KR, Sanford B, Donson AM, Jones K, **Griesinger AM**, Amani V, Foreman NK, Liu A, Handler M, Hankinson TC, Milgrom S, Levy JMM. Genetic predictors of neurocognitive outcomes in survivors of pediatric brain tumors. *J Neurooncol*. 2023 Oct;165(1):161-169. doi: 10.1007/s11060-023-04472-7. Epub 2023 Oct 25. PMID: 37878192; PMCID: PMC10638163.
 31. DeSisto J, Donson AM, **Griesinger AM**, Fu R, Riemondy K, Mulcahy Levy J, Siegenthaler JA, Foreman NK, Vibhakkar R, Green AL. Tumor and immune cell types interact to produce heterogeneous phenotypes of pediatric high grade glioma. *Neuro Oncol*. 2023 Nov 2:noad207. doi: 10.1093/neuonc/noad207. PMID: 37934854.
 32. **Griesinger AM**, Calzadilla AJ, Grimaldo E, Donson AM, Amani V, Pierce AM, Steiner J, Kargar S, Serkova NJ, Bertrand KC, Wright KD, Vibhakkar R, Hankinson T, Handler M, Lindsay HB, Foreman NK, Dorris K. Development of chromosome 1q+ specific treatment for highest risk pediatric posterior fossa ependymoma. *Clin Cancer Res*. 2024 Feb 9. doi: 10.1158/1078-0432.CCR-23-3156. PMID: 38334950.
 33. Riberio de Sousa G, Calzadilla AJ, Grimaldo E, Donson AM, Marin Sobral L, Jones KM, Liu T, Amani V, Venkataraman S, Dahl NA, Mulcahy Levy JM, Phang T, Vibhakkar R, Hankinson T, handler M, Terci Valera E, Foreman NK, **Griesinger AM**. Loss of LDOC1 by chromatin compaction in mesenchymal tumor cells is required for PFA1 ependymoma growth. *Neuro Oncol*. 2025 Feb 4:noaf029. doi: 10.1093/neuonc/noaf029. PMID: 39901723.
 34. Zahedid S, Riemondy K, Liu T, **Griesinger AM**, Donson AM, Apfelbaum AA, Fu R, Grandvallet Contreras J, Crespo M, DeSisto J, Groat M, Bratbak E, Green A, Hankinson T, Handler M, Vibhakkar R, Willard N, Foreman NK, Phang T, Mulchay Levy J. Multi-pronged analysis of pediatric low-grade glioma and ganglioglioma reveals a unique tumor microenvironment associated with BRAF alterations. *Brain Pathol*. 2025 Jun 30:e70023. doi: 10.1111/bpa.70023. PMID: 40588233.
 35. **Griesinger AM**, Widener M, Donson AM, Mettetal A, Hankinson TC, Handler M, Mulcahy Levy J, Lindsay HB, Macy ME, Foreman NK, Dorris K. Molecular Biology and Phase 1 Study of GM-CSF and Intrathecal Trastuzumab in Children with Recurrent Posterior Fossa Ependymoma. *Neuro Oncol*. 2026 Mar 31:noag066. doi: 10.1093/neuonc/noag066. Epub ahead of print. PMID: 41920921.
 36. Natarajan SK, Lum J, Skeans JH, Nenwani M, Eyunni S, Mota M, Bayliss JM, Deogharkar A, Hamanishi ET, Pun M, Sweha SR, Hoffman S, Young E, Zhang Q, Mehta R, Animasahun O, Narayanan P, Sunil S, Parolia A, Sajjakulnukit P, Panwalkar P, Doherty R, Clausen M, Dang D, Hawes D, Yang F, Santi M, Judkins AR, Wilson Y, Vigil T, Franson A, Mortensen RM, Ozawa T, **Griesinger A**, Holland EC, Foreman NK, Michealraj KA, Agnihotri S, Taylor M, Gilbertson RJ, Koschmann C, Chinnaiyan AM, Lyssiotis CA, Nagraath D, Venneti S. ZFTA-RELA ependymomas make itaconate to epigenetically drive fusion expression. *Nature*. 2026 Apr;652(8111):1004-1015. doi: 10.1038/s41586-025-10005-1. Epub 2026 Feb 4. PMID: 41639460; PMCID: PMC13102701.

Abstracts (Competitive)

1. Amani V, **Griesinger A**, Birks D, Donson A, Bemis L, Foreman NK, Schittone S. *BRAF V600E in Pediatric Brain Tumors: Treating the Mutation* *Neuro-Oncology* 14:i6. Presented at The Fifteenth International Symposium of Pediatric Neuro-Oncology, June 2012.
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