

Stanford



Ravi Majeti MD, PhD

Director, Stanford Institute for Stem Cell Biology and Regenerative Medicine, Virginia
and D. K. Ludwig Professor and Professor of Medicine (Hematology)
Medicine - Hematology

Curriculum Vitae available Online

CONTACT INFORMATION

- **Administrative Contact**

Peggy Cuadro - Administrative Associate

Email mcuadro@stanford.edu

Tel (650) 723-5569

Bio

BIO

Ravi Majeti MD, PhD is Professor of Medicine, Division of Hematology, and Director of the Institute for Stem Cell Biology and Regenerative Medicine at the Stanford University School of Medicine. He was an undergraduate at Harvard, earned his MD and PhD from UCSF, and trained in Internal Medicine at Brigham and Women's Hospital in Boston. Dr. Majeti completed his Hematology Fellowship at Stanford, and is a board-certified hematologist. While at Stanford, he completed post-doctoral training in the laboratory of Irving Weissman, where he investigated acute myeloid leukemia (AML) stem cells and therapeutic targeting with anti-CD47 antibodies. With Dr. Weissman, he developed a humanized anti-CD47 antibody, initiated first-in-human clinical trials. Dr. Majeti directs an active NIH-funded laboratory that focuses on the molecular characterization and therapeutic targeting of leukemia stem cells in human hematologic disorders, particularly AML, and has published >100 peer-reviewed articles. He is a recipient of the Burroughs Wellcome Career Award for Medical Scientists, the New York Stem Cell Foundation Robertson Investigator Award, and the Leukemia and Lymphoma Society Scholar Award. Dr. Majeti is currently a member of the Committee on Scientific Affairs for the American Society of Hematology (ASH) and serves on the editorial board of Blood and eLife.

ACADEMIC APPOINTMENTS

- Professor, Medicine - Hematology
- Member, Bio-X
- Director, Institute for Stem Cell Biology and Regenerative Medicine
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Stanford Cancer Institute

ADMINISTRATIVE APPOINTMENTS

- Director, Stanford Institute for Stem Cell Biology and Regenerative Medicine, (2022- present)
- Chief, Division of Hematology, (2017-2022)
- Associate Director, Stanford Ludwig Center for Cancer Stem Cell Research, (2014- present)
- Co-Director, Hematologic Malignancies Program - Stanford Cancer Institute, (2014- present)
- Co-Director, Translational Research Program - Internal Medicine Residency, (2013-2017)

HONORS AND AWARDS

- Scholar Award, Leukemia and Lymphoma Society (2015)
- Robertson Investigator Award, New York Stem Cell Foundation (2011)
- Career Award for Medical Scientists, Burroughs Wellcome Fund (2008)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, American Society of Hematology - Committee on Myeloid Neoplasia (2013 - present)

PROFESSIONAL EDUCATION

- Board Certification: Hematology, American Board of Internal Medicine (2007)
- Medical Education: University of California at San Francisco School of Medicine (2002) CA
- Residency: Brigham and Women's Hospital Harvard Medical School (2004) MA
- Fellowship: Stanford University Medical Center (2008) CA

LINKS

- Lab Website: <http://majetilab.stanford.edu/>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Acute myeloid leukemia (AML) is a cancer of the blood and bone marrow that is rapidly fatal within months if untreated. Even with aggressive treatment, including high dose chemotherapy and bone marrow transplantation, five-year overall survival rates range between 30-40%. A growing body of evidence indicates that not all cells in this cancer are the same, and that there is a rare population of leukemia stem cells (LSC) that are responsible for maintaining the disease. These findings have led to the idea that in order to cure this cancer, the LSC must be eliminated, while at the same time sparing the normal blood forming stem cells within the bone marrow.

The overall goal of our research is to identify molecular and genetic differences between human AML stem cells and their normal counterparts, and then to develop therapeutic strategies directed against these targets. We utilize bioinformatics, genomics, and functional methods to investigate genes and pathways preferentially expressed or activated in LSC. From this analysis, we have identified a number of factors, including several cell surface protein markers that are more highly expressed on AML LSC compared to their normal counterparts. We have focused on one of these markers, CD47, that contributes to leukemia development by blocking the ingestion and removal of leukemia cells by cells of the immune system. Most significantly, we determined that blocking monoclonal antibodies directed against CD47 targeted LSC and depleted leukemia in mouse pre-clinical models. We have now developed a clinical grade humanized anti-CD47 antibody that is in clinical trials at the Stanford Cancer Center.

Our research has also investigated the development of AML from normal blood forming, or hematopoietic, stem cells (HSC). Genomic studies have determined that most cases of AML are associated with an average of 5 mutations, raising the question of how these multiple mutations accumulate in a single lineage of cells. We hypothesized that since HSC are the only long-lived, self-propagating cells in the myeloid lineage, then the mutations must be serially acquired in clones of HSC. Using primary patient samples and single cell genomic methods, we found evidence of pre-leukemic HSC and mutations, confirming our hypothesis. Furthermore, we showed that these pre-leukemic HSC survive chemotherapy and may give rise to relapsed disease. Thus, these pre-leukemic mutations may be critical targets for curative therapies.

Teaching

COURSES

2023-24

- Clinical Cancer Research Internship Program: CBIO 246 (Win)

2022-23

- Clinical Cancer Research Internship Program: CBIO 246 (Win)

2021-22

- Clinical Cancer Research Internship Program: CBIO 246 (Win)

2020-21

- Clinical Cancer Research Internship Program: CBIO 246 (Win)

STANFORD ADVISEES

Med Scholar Project Advisor

Xiaoyi Hu

Doctoral Dissertation Reader (AC)

Andrea Garofalo, Hana Ghanim

Orals Chair

Tim Chai

Postdoctoral Faculty Sponsor

Cailin Collins, Mark Hamilton, Marco Herrera, Sebastian Koschade Rixner

Doctoral Dissertation Advisor (AC)

James Chavez, Asiri Ediriwickrema, Anthony François, Emma Heaton, Cassandra Stawicki, Aaron Trotman-Grant

Postdoctoral Research Mentor

Cailin Collins

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Cancer Biology (Phd Program)
- Immunology (Phd Program)
- Stem Cell Biology and Regenerative Medicine (Phd Program)

Publications

PUBLICATIONS

• Convergent epigenetic evolution drives relapse in acute myeloid leukemia. *eLife*

Nuno, K., Azizi, A., Koehnke, T., Lareau, C., Ediriwickrema, A., Corces, M. R., Satpathy, A. T., Majeti, R.
2024; 13

• Genome engineering with Cas9 and AAV repair templates generates frequent concatemeric insertions of viral vectors. *Nature biotechnology*

Suchy, F. P., Karigane, D., Nakauchi, Y., Higuchi, M., Zhang, J., Pekrun, K., Hsu, I., Fan, A. C., Nishimura, T., Charlesworth, C. T., Bhadury, J., Nishimura, T., Wilkinson, et al
2024

- **Mutation order in acute myeloid leukemia identifies uncommon patterns of evolution and illuminates phenotypic heterogeneity.** *Leukemia*
Schwede, M., Jahn, K., Kuipers, J., Miles, L. A., Bowman, R. L., Robinson, T., Furudate, K., Uryu, H., Tanaka, T., Sasaki, Y., Edirickrema, A., Benard, B., Gentles, et al
2024
- **Human ASXL1-mutant hematopoiesis is driven by a truncated protein associated with aberrant de-ubiquitination of H2AK119.** *Blood cancer discovery*
Kohnke, T., Nuno, K. A., Alder, C. C., Gars, E. J., Phan, P., Fan, A. C., Majeti, R.
2024
- **IDH1-Mutant Preleukemic Hematopoietic Stem Cells Can Be Eliminated by Inhibition of Oxidative Phosphorylation.** *Blood cancer discovery*
Landberg, N., Köhnke, T., Feng, Y., Nakauchi, Y., Fan, A. C., Linde, M. H., Karigane, D., Lim, K., Sinha, R., Malcovati, L., Thomas, D., Majeti, R.
2024: OF1-OF18
- **IDH1-mutant preleukemic hematopoietic stem cells can be eliminated by inhibition of oxidative phosphorylation.** *Blood cancer discovery*
Landberg, N., Köhnke, T., Feng, Y., Nakauchi, Y., Fan, A. C., Linde, M. H., Karigane, D., Lim, K., Sinha, R., Malcovati, L., Thomas, D., Majeti, R.
2023
- **RUNX1 loss renders hematopoietic and leukemic cells dependent on interleukin-3 and sensitive to JAK inhibition.** *The Journal of clinical investigation*
Fan, A. C., Nakauchi, Y., Bai, L., Azizi, A., Nuno, K. A., Zhao, F., Köhnke, T., Karigane, D., Cruz-Hernandez, D., Reinisch, A., Khatri, P., Majeti, R.
2023
- **Reprogramming Cancer into Antigen Presenting Cells as a Novel Immunotherapy.** *Cancer discovery*
Linde, M. H., Fan, A. C., Kohnke, T., Trotman-Grant, A. C., Gurev, S. F., Phan, P., Zhao, F., Haddock, N. L., Nuno, K. A., Gars, E. J., Stafford, M., Marshall, P. L., Dove, et al
2023
- **Dysregulated lipid synthesis by oncogenic IDH1 mutation is a targetable synthetic lethal vulnerability.** *Cancer discovery*
Thomas, D., Wu, M., Nakauchi, Y., Zheng, M., Thompson-Peach, C. A., Lim, K., Landberg, N., Kohnke, T., Robinson, N., Kaur, S., Kutyna, M., Stafford, M., Hiwase, et al
2022
- **Single cell genomics in AML: extending the frontiers of AML research.** *Blood*
Edirickrema, A., Gentles, A. J., Majeti, R.
2022
- **The cell type specific 5hmC landscape and dynamics of healthy human hematopoiesis and TET2-mutant pre-leukemia.** *Blood cancer discovery*
Nakauchi, Y., Azizi, A., Thomas, D., Corces, M. R., Reinisch, A., Sharma, R., Cruz Hernandez, D., Kohnke, T., Karigane, D., Fan, A., Martinez-Kramps, D., Stafford, M., Kaur, et al
2022
- **Clonal hematopoiesis: from mechanisms to clinical intervention.** *Cancer discovery*
Kohnke, T., Majeti, R.
2021
- **NOT-Gated CD93 CAR T Cells Effectively Target AML with Minimized Endothelial Cross-Reactivity.** *Blood cancer discovery*
Richards, R. M., Zhao, F., Freitas, K. A., Parker, K. R., Xu, P., Fan, A., Sotillo, E., Daugaard, M., Oo, H. Z., Liu, J., Hong, W. J., Sorensen, P. H., Chang, et al
2021; 2 (6): 648-665
- **IL-6 blockade reverses bone marrow failure induced by human acute myeloid leukemia.** *Science translational medicine*
Zhang, T. Y., Dutta, R., Benard, B., Zhao, F., Yin, R., Majeti, R.
2020; 12 (538)
- **Enasidenib drives human erythroid differentiation independently of isocitrate dehydrogenase 2.** *The Journal of clinical investigation*
Dutta, R. n., Zhang, T. Y., Köhnke, T. n., Thomas, D. n., Linde, M. n., Gars, E. n., Stafford, M. n., Kaur, S. n., Nakauchi, Y. n., Yin, R. n., Azizi, A. n., Narla, A. n., Majeti, et al
2020
- **Integrated analysis of patient samples identifies biomarkers for venetoclax efficacy and combination strategies in acute myeloid leukemia.** *Nature cancer*
Zhang, H. n., Nakauchi, Y. n., Köhnke, T. n., Stafford, M. n., Bottomly, D. n., Thomas, R. n., Wilmot, B. n., McWeeney, S. K., Majeti, R. n., Tyner, J. W.
2020; 1 (8): 826-39

- **Single-cell mutational profiling enhances the clinical evaluation of AML MRD.** *Blood advances*
Ediriwickrema, A. n., Aleshin, A. n., Reiter, J. G., Corces, M. R., Köhnke, T. n., Stafford, M. n., Liedtke, M. n., Medeiros, B. C., Majeti, R. n.
2020; 4 (5): 943–52
- **CD47 Blockade by Hu5F9-G4 and Rituximab in Non-Hodgkin's Lymphoma.** *The New England journal of medicine*
Advani, R., Flinn, I., Popplewell, L., Forero, A., Bartlett, N. L., Ghosh, N., Kline, J., Roschewski, M., LaCasce, A., Collins, G. P., Tran, T., Lynn, J., Chen, et al
2018; 379 (18): 1711–21
- **SY-1425 (tamibarotene), a potent and selective RAR alpha agonist, induces changes in the transcriptional regulatory circuit of AML cells leading to differentiation**
Fiore, C. M., McKeown, M. R., Lee, E., Eaton, M. L., Smith, D., Austgen, K., Chen, M., Guenther, M., Corces, M., Majeti, R., Olson, E., Fritz, C. C.
AMER ASSOC CANCER RESEARCH.2017: 29–30
- **Human AML-iPSCs Reacquire Leukemic Properties after Differentiation and Model Clonal Variation of Disease.** *Cell stem cell*
Chao, M. P., Gentles, A. J., Chatterjee, S., Lan, F., Reinisch, A., Corces, M. R., Xavy, S., Shen, J., Haag, D., Chanda, S., Sinha, R., Morganti, R. M., Nishimura, et al
2017; 20 (3): 329–344 e7
- **Biology and relevance of human acute myeloid leukemia stem cells.** *Blood*
Thomas, D., Majeti, R.
2017
- **Super-Enhancer Analysis Defines Novel Epigenomic Subtypes of Non-APL AML Including an RAR# Dependency Targetable by SY-1425, a Potent and Selective RAR# Agonist.** *Cancer discovery*
McKeown, M. R., Corces, M. R., Eaton, M. L., Fiore, C. n., Lee, E. n., Lopez, J. T., Chen, M. W., Smith, D. n., Chan, S. M., Koenig, J. L., Austgen, K. n., Guenther, M. G., Orlando, et al
2017
- **Multiplexed genetic engineering of human hematopoietic stem and progenitor cells using CRISPR/Cas9 and AAV6.** *eLife*
Bak, R. O., Dever, D. P., Reinisch, A. n., Cruz Hernandez, D. n., Majeti, R. n., Porteus, M. H.
2017; 6
- **A humanized bone marrow ossicle xenotransplantation model enables improved engraftment of healthy and leukemic human hematopoietic cells** *NATURE MEDICINE*
Reinisch, A., Thomas, D., Corces, M. R., Zhang, X., Gratzinger, D., Hong, W., Schallmoser, K., Strunk, D., Majeti, R.
2016; 22 (7): 812–821
- **Leukemia-Associated Cohesin Mutants Dominantly Enforce Stem Cell Programs and Impair Human Hematopoietic Progenitor Differentiation.** *Cell stem cell*
Mazumdar, C., Shen, Y., Xavy, S., Zhao, F., Reinisch, A., Li, R., Corces, M. R., Flynn, R. A., Buenrostro, J. D., Chan, S. M., Thomas, D., Koenig, J. L., Hong, et al
2015; 17 (6): 675–688
- **Reprogramming of primary human Philadelphia chromosome-positive B cell acute lymphoblastic leukemia cells into nonleukemic macrophages** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
McClellan, J. S., Dove, C., Gentles, A. J., Ryan, C. E., Majeti, R.
2015; 112 (13): 4074–4079
- **Isocitrate dehydrogenase 1 and 2 mutations induce BCL-2 dependence in acute myeloid leukemia.** *Nature medicine*
Chan, S. M., Thomas, D., Corces-Zimmerman, M. R., Xavy, S., Rastogi, S., Hong, W., Zhao, F., Medeiros, B. C., Tyvoll, D. A., Majeti, R.
2015; 21 (2): 178–184
- **Mutant WT1 is associated with DNA hypermethylation of PRC2 targets in AML and responds to EZH2 inhibition.** *Blood*
Sinha, S., Thomas, D., Yu, L., Gentles, A. J., Jung, N., Corces-Zimmerman, M. R., Chan, S. M., Reinisch, A., Feinberg, A. P., Dill, D. L., Majeti, R.
2015; 125 (2): 316–326
- **Preleukemic mutations in human acute myeloid leukemia affect epigenetic regulators and persist in remission.** *Proceedings of the National Academy of Sciences of the United States of America*
Corces-Zimmerman, M. R., Hong, W., Weissman, I. L., Medeiros, B. C., Majeti, R.
2014; 111 (7): 2548–2553
- **Clonal Evolution of Preleukemic Hematopoietic Stem Cells Precedes Human Acute Myeloid Leukemia** *SCIENCE TRANSLATIONAL MEDICINE*

- Jan, M., Snyder, T. M., Corces-Zimmerman, M. R., Vyas, P., Weissman, I. L., Quake, S. R., Majeti, R. 2012; 4 (149)
- **Association of a Leukemic Stem Cell Gene Expression Signature With Clinical Outcomes in Acute Myeloid Leukemia** *JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*
Gentles, A. J., Plevritis, S. K., Majeti, R., Alizadeh, A. A. 2010; 304 (24): 2706-2715
 - **Anti-CD47 Antibody Synergizes with Rituximab to Promote Phagocytosis and Eradicate Non-Hodgkin Lymphoma** *CELL*
Chao, M. P., Alizadeh, A. A., Tang, C., Myklebust, J. H., Varghese, B., Gill, S., Jan, M., Cha, A. C., Chan, C. K., Tan, B. T., Park, C. Y., Zhao, F., Kohrt, et al 2010; 142 (5): 699-713
 - **CD47 Is an Adverse Prognostic Factor and Therapeutic Antibody Target on Human Acute Myeloid Leukemia Stem Cells** *CELL*
Majeti, R., Chao, M. P., Alizadeh, A. A., Pang, W. W., Jaiswal, S., Gibbs, K. D., van Rooijen, N., Weissman, I. L. 2009; 138 (2): 286-299
 - **Identification of a hierarchy of multipotent hematopoietic progenitors in human cord blood** *CELL STEM CELL*
Majeti, R., Park, C. Y., Weissman, I. L. 2007; 1 (6): 635-645
 - **Lineage-tracing hematopoietic stem cell origins in vivo to efficiently make human HLF+ HOXA+ hematopoietic progenitors from pluripotent stem cells.** *Developmental cell*
Fowler, J. L., Zheng, S. L., Nguyen, A., Chen, A., Xiong, X., Chai, T., Chen, J. Y., Karigane, D., Banuelos, A. M., Niizuma, K., Kayamori, K., Nishimura, T., Cromer, et al 2024
 - **Genetically Corrected RAG2-SCID Human Hematopoietic Stem Cells Restore V(D)J-Recombinase and Rescue Lymphoid Deficiency.** *Blood advances*
Pavel-Dinu, M., Gardner, C. L., Nakauchi, Y., Kawai, T., Delmonte, O. M., Palterer, B., Bosticardo, M., Pala, F., Viel, S., Malech, H. L., Ghanim, H. Y., Bode, N. M., Kurgan, et al 2023
 - **Cancer in 2023** *CANCER DISCOVERY*
Greenberg, P. D., Abbruzzese, J. L., Cohen, E. W., Domcheck, S. M., Doubeni, C. A., Elkins, I., Formenti, S. C., Foti, M., Fuchs, T. J., Kucharczuk, J. C., Majeti, R., Mischel, P., Mucci, et al 2023; 13 (12): 2510-2514
 - **Simplified Intrafemoral Injections Using Live Mice Allow for Continuous Bone Marrow Analysis.** *Journal of visualized experiments : JoVE*
Nakauchi, Y., Ediriwickrema, A., Martinez-Kramps, D., Zhao, F., Rangavajhula, A., Karigane, D., Majeti, R. 2023
 - **Simplified Intrafemoral Injections Using Live Mice Allow for Continuous Bone Marrow Analysis** *Journal of Visualized Experiments*
Nakauchi, Y., Ediriwickrema, A., Martinez-Kramps, D., Zhao, F., Rangavajhula, A., Karigane, D., Majeti, R. 2023
 - **Mutation order in acute myeloid leukemia identifies uncommon patterns of evolution and illuminates phenotypic heterogeneity.** *Research square*
Schwede, M., Jahn, K., Kuipers, J., Miles, L. A., Bowman, R. L., Robinson, T., Furudate, K., Uryu, H., Tanaka, T., Sasaki, Y., Ediriwickrema, A., Benard, B., Gentles, et al 2023
 - **A Year of Advances in Precision Therapy for Blood Cancers** *BLOOD CANCER DISCOVERY*
Greenberg, P. D., Abbruzzese, J. L., Cohen, E. W., Domcheck, S. M., Doubeni, C. A., Elkins, I., Formenti, S. C., Foti, M., Fuchs, T. J., Kucharczuk, J. C., Majeti, R., Mischel, P., Mucci, et al 2023; 4 (6): 423-426
 - **Immune Surveillance of Acute Myeloid Leukemia Is Mediated by HLA-Presented Antigens on Leukemia Progenitor Cells.** *Blood cancer discovery*
Nelde, A., Schuster, H., Heitmann, J. S., Bauer, J., Maringer, Y., Zwick, M., Volkmer, J. P., Chen, J. Y., Stanger, A. M., Lehmann, A., Appiah, B., Märklin, M., Rücker-Braun, et al 2023: OF1-OF22
 - **Convergent Epigenetic Evolution Drives Relapse in Acute Myeloid Leukemia.** *bioRxiv : the preprint server for biology*
Nuno, K. A., Azizi, A., Kohnke, T., Lareau, C. A., Ediwickrema, A., Ryan Corces, M., Satpathy, A. T., Majeti, R.

2023

- **Patient-Derived iPSCs Faithfully Represent the Genetic Diversity and Cellular Architecture of Human Acute Myeloid Leukemia.** *Blood cancer discovery*
Kotini, A. G., Carcamo, S., Cruz-Rodriguez, N., Olszewska, M., Wang, T., Demircioglu, D., Chang, C. J., Bernard, E., Chao, M. P., Majeti, R., Luo, H., Kharas, M. G., Hasson, et al
2023: OF1-OF18
- **Lineage plasticity dictates responsiveness to anti-GD2 therapy in neuroblastoma.**
Mabe, N. W., Huang, M., Schaefer, D. A., Dalton, G. N., Digiovanni, G., Alexe, G., Geraghty, A. C., Khalid, D., Mader, M. M., Sheffer, M., Linde, M. H., Ly, N., Rotiroti, et al
AMER ASSOC CANCER RESEARCH.2022
- **Targeting IDH1-Mutated Pre-Leukemic Hematopoietic Stem Cells in Myeloid Disease, Including CCUS and AML**
Landberg, N., Koehnke, T., Nakuchi, Y., Fan, A., Karigane, D., Thomas, D., Majeti, R.
AMER SOC HEMATOLOGY.2022: 2234-2235
- **Finding consistency in classifications of myeloid neoplasms: a perspective on behalf of the International Workshop for Myelodysplastic Syndromes.** *Leukemia*
Zeidan, A. M., Bewersdorf, J. P., Buckstein, R., Sekeres, M. A., Steensma, D. P., Platzbecker, U., Loghavi, S., Boultwood, J., Bejar, R., Bennett, J. M., Borate, U., Brunner, A. M., Caraway, et al
2022
- **An agenda to advance research in MDS: A TOP 10 Priority List from the first international workshop in MDS (iwMDS).** *Blood advances*
Stahl, M., Abdel-Wahab, O., Wei, A. H., Savona, M. R., Xu, M. L., Xie, Z., Taylor, J., Starczynowski, D. T., Sanz, G. F., Sallman, D. A., Santini, V., Roboz, G. J., Patnaik, et al
2022
- **TP53-Mutated Myelodysplastic Syndrome and Acute Myeloid Leukemia: Biology, Current Therapy, and Future Directions.** *Cancer discovery*
Daver, N. G., Maiti, A., Kadia, T. M., Vyas, P., Majeti, R., Wei, A. H., Garcia-Manero, G., Craddock, C., Sallman, D. A., Kantarjian, H. M.
2022: OF1-OF14
- **MDS-482 Impact Of Magrolimab in Combination With Azacitidine on Red Blood Cells (RBCs) in Patients With Higher-Risk Myelodysplastic Syndromes (HR MDS).** *Clinical lymphoma, myeloma & leukemia*
Chen, J., Johnson, L., McKenna, K., Choi, T., Duan, J., Feng, D., Tsai, J., Garcia-Martin, N., Sompalli, K., Maute, R., Vyas, P., Majeti, R., Takimoto, et al
2022; 22 Suppl 2: S317-S318
- **Impact Of Magrolimab in Combination With Azacitidine on Red Blood Cells (RBCs) in Patients With Higher-Risk Myelodysplastic Syndromes (HR MDS)**
Chen, J., Johnson, L., McKenna, K., Choi, T., Duan, J., Feng, D., Tsai, J., Garcia-Martin, N., Sompalli, K., Maute, R., Vyas, P., Majeti, R., Takimoto, et al
CIG MEDIA GROUP, LP.2022: S317-S318
- **Reengineering Ponatinib to Minimize Cardiovascular Toxicity** *CANCER RESEARCH*
Hnatiuk, A. P., Bruyneel, A. N., Tailor, D., Pandrala, M., Dheeraj, A., Li, W., Serrano, R., Feyen, D. M., Vu, M. M., Amatya, P., Gupta, S., Nakuchi, Y., Morgado, et al
2022; 82 (15): 2777-2791
- **Author Correction: Germline mutations in mitochondrial complex I reveal genetic and targetable vulnerability in IDH1-mutant acute myeloid leukaemia.** *Nature communications*
Bassal, M. A., Samaraweera, S. E., Lim, K., Benard, B. A., Bailey, S., Kaur, S., Leo, P., Toubia, J., Thompson-Peach, C., Nguyen, T., Maung, K. Z., Casolari, D. A., Iarossi, et al
2022; 13 (1): 4131
- **Transition to a mesenchymal state in neuroblastoma confers resistance to anti-GD2 antibody via reduced expression of ST8SIA1.** *Nature cancer*
Mabe, N. W., Huang, M., Dalton, G. N., Alexe, G., Schaefer, D. A., Geraghty, A. C., Robichaud, A. L., Conway, A. S., Khalid, D., Mader, M. M., Belk, J. A., Ross, K. N., Sheffer, et al
2022
- **Impact of magrolimab treatment in combination with azacitidine on red blood cells in patients with higher-risk myelodysplastic syndrome (HR-MDS).**
Chen, J., Johnson, L., McKenna, K., Choi, T. S., Duan, J., Feng, D., Tsai, J. M., Garcia-Martin, N., Sompalli, K., Maute, R., Vyas, P., Majeti, R., Takimoto, et al
LIPPINCOTT WILLIAMS & WILKINS.2022

- **Reengineering Ponatinib to Minimize Cardiovascular Toxicity.** *Cancer research*
Hnatiuk, A. P., Bruyneel, A. A., Tailor, D., Pandrala, M., Dheeraj, A., Li, W., Serrano, R., Feyen, D. A., Vu, M. M., Amatya, P., Gupta, S., Nakauchi, Y., Morgado, et al
2022
- **Germline mutations in mitochondrial complex I reveal genetic and targetable vulnerability in IDH1-mutant acute myeloid leukaemia.** *Nature communications*
Bassal, M. A., Samaraweera, S. E., Lim, K., Bernard, B. A., Bailey, S., Kaur, S., Leo, P., Toubia, J., Thompson-Peach, C., Nguyen, T., Maung, K. Z., Casolari, D. A., Iarossi, et al
2022; 13 (1): 2614
- **CytofIn enables integrated analysis of public mass cytometry datasets using generalized anchors.** *Nature communications*
Lo, Y., Keyes, T. J., Jager, A., Sarno, J., Domizi, P., Majeti, R., Sakamoto, K. M., Lacayo, N., Mullighan, C. G., Waters, J., Sahaf, B., Bendall, S. C., Davis, et al
2022; 13 (1): 934
- **Anti-GD2 synergizes with CD47 blockade to mediate tumor eradication.** *Nature medicine*
Theruvath, J., Menard, M., Smith, B. A., Linde, M. H., Coles, G. L., Dalton, G. N., Wu, W., Kiru, L., Delaidelli, A., Sotillo, E., Silberstein, J. L., Geraghty, A. C., Banuelos, et al
1800
- **IL-3 SELECTIVELY RESCUES RUNX1-DEFICIENT HUMAN HSPCs WITH DYSREGULATED JAK/ STAT SIGNALING**
Fan, A., Azizi, A., Nuno, K., Nakauchi, Y., Zhao, F., Cruz-Hernandez, D., Reinisch, A., Majeti, R.
ELSEVIER SCIENCE INC.2022: S84
- **Clonal architecture predicts clinical outcomes and drug sensitivity in acute myeloid leukemia.** *Nature communications*
Benard, B. A., Leak, L. B., Azizi, A., Thomas, D., Gentles, A. J., Majeti, R.
1800; 12 (1): 7244
- **Monocytic differentiation and AHR signaling as Primary Nodes of BET Inhibitor Response in Acute Myeloid Leukemia.** *Cancer discovery*
Romine, K. A., Nechiporuk, T., Bottomly, D., Jeng, S., McWeeney, S. K., Kaempf, A., Corces, M. R., Majeti, R., Tyner, J. W.
2021
- **Reprogramming cancer into antigen presenting cells as a novel immunotherapy.**
Linde, M. H., Gurev, S. F., Phan, P., Zhao, F., Gars, E. J., Stafford, M., Kohnke, T., Marshall, P. L., Fan, A. C., Dove, C. G., Linde, I. L., Miller, L. P., Majzner, et al
AMER ASSOC CANCER RESEARCH.2021
- **Gene replacement of alpha-globin with beta-globin restores hemoglobin balance in beta-thalassemia-derived hematopoietic stem and progenitor cells.** *Nature medicine*
Cromer, M. K., Camarena, J., Martin, R. M., Lesch, B. J., Vakulskas, C. A., Bode, N. M., Kurgan, G., Collingwood, M. A., Rettig, G. R., Behlke, M. A., Lemgart, V. T., Zhang, Y., Goyal, et al
2021
- **The TRACE-Seq method tracks recombination alleles and identifies clonal reconstitution dynamics of gene targeted human hematopoietic stem cells.** *Nature communications*
Sharma, R. n., Dever, D. P., Lee, C. M., Azizi, A. n., Pan, Y. n., Camarena, J. n., Köhnke, T. n., Bao, G. n., Porteus, M. H., Majeti, R. n.
2021; 12 (1): 472
- **Monocytic differentiation and AHR signaling as Primary Nodes of BET Inhibitor Response in Acute Myeloid Leukemia.** *Blood cancer discovery*
Romine, K. A., Nechiporuk, T., Bottomly, D., Jeng, S., McWeeney, S. K., Kaempf, A., Corces, M. R., Majeti, R., Tyner, J. W.
2021; 2 (5): 518-531
- **CD34 expression does not correlate with immunophenotypic stem cell or progenitor content in human cord blood products.** *Blood advances*
Mantri, S., Reinisch, A., Dejene, B. T., Lyell, D. J., DiGiusto, D. L., Agarwal-Hashmi, R., Majeti, R., Weinberg, K. I., Porteus, M. H.
2020; 4 (21): 5357–61
- **Targeting LSCs: Peeling Back the Curtain on the Metabolic Complexities of AML.** *Cell stem cell*
Zhang, T. Y., Majeti, R.
2020; 27 (5): 693–95
- **Sufficiency for inducible Caspase-9 safety switch in human pluripotent stem cells and disease cells.** *Gene therapy*

Nishimura, T., Xu, H., Iwasaki, M., Karigane, D., Saavedra, B., Takahashi, Y., Suchy, F. P., Monobe, S., Martin, R. M., Ohtaka, M., Nakanishi, M., Burrows, S. R., Cleary, et al
2020

● **Reprogramming leukemia cells into antigen presenting cells as a novel cancer vaccination immunotherapy**

Linde, M. H., Dove, C. G., Gurev, S. F., Phan, P., Zhao, F., Gars, E. J., Marshall, P. L., Miller, L. P., Majeti, R.
AMER ASSOC IMMUNOLOGISTS.2020

● **A Dysregulated DNA Methylation Landscape Linked to Gene Expression in MLL-Rearranged AML.** *Epigenetics*

Koldobskiy, M. A., Abante, J., Jenkinson, G., Pujadas, E., Tetens, A., Zhao, F., Tryggvadottir, R., Idrizi, A., Reinisch, A., Majeti, R., Goutsias, J., Feinberg, A. P.
2020: 1–18

● **Targeting macrophage checkpoint inhibitor SIRPa for anticancer therapy.** *JCI insight*

Liu, J. n., Xavy, S. n., Mihardja, S. n., Chen, S. n., Sompalli, K. n., Feng, D. n., Choi, T. S., Agoram, B. n., Majeti, R. n., Weissman, I. L., Volkmer, J. P.
2020

● **Multiomic single cell analysis of normal human bone marrow identifies a unique stem and progenitor population that expands in AML** *Proceedings of the Annual Meeting of the American Association for Cancer Research* 2020

Ediriwickrema, A., Ramakrishnan, S., Nakamoto, M., Ghanekar, S., Luca, B., Newman, A., Gentles, A., Majeti, R.
2020

● **Venetoclax and hypomethylating agent therapy in high risk myelodysplastic syndromes: a retrospective evaluation of a real-world experience.** *Leukemia & lymphoma*

Azizi, A. n., Ediriwickrema, A. n., Dutta, R. n., Patel, S. A., Shomali, W. n., Medeiros, B. n., Iberri, D. n., Gotlib, J. n., Mannis, G. n., Greenberg, P. n., Majeti, R. n., Zhang, T. n.
2020: 1–8

● **Single-cell multiomic analysis identifies regulatory programs in mixed-phenotype acute leukemia.** *Nature biotechnology*

Granja, J. M., Klemm, S., McGinnis, L. M., Kathiria, A. S., Mezger, A., Corces, M. R., Parks, B., Gars, E., Liedtke, M., Zheng, G. X., Chang, H. Y., Majeti, R., Greenleaf, et al
2019

● **Single-cell mutational profiling of paired AML samples at diagnosis, remission and relapse: Implications for therapeutic resistance and MRD detection**

Aleshin, A., Durruthy-Durruthy, R., Corces, R., Liedtke, M., Eastburn, D., Majeti, R.
AMER ASSOC CANCER RESEARCH.2019

● **Barcode Clonal Tracking of CRISPR-Cas9 and rAAV6-Mediated Gene Targeting in Human Hematopoietic Stem and Progenitor Cells**

Dever, D. P., Sharma, R., Lee, C. M., Aziz, A., Koehnke, T., Camarena, J., Pan, Y., Zhao, F., Bao, G., Majeti, R., Porteus, M.
CELL PRESS.2019: 5

● **First-in-Human, First-in-Class Phase I Trial of the Anti-CD47 Antibody Hu5F9-G4 in Patients With Advanced Cancers** *JOURNAL OF CLINICAL ONCOLOGY*

Sikic, B., Lakhani, N., Patnaik, A., Shah, S. A., Chandana, S. R., Rasco, D., Colevas, A., O'Rourke, T., Narayanan, S., Papadopoulos, K., Fisher, G. A., Villalobos, V., Prohaska, et al
2019; 37 (12): 946–+

● **CAR T Cells Targeting B7-H3, a Pan-Cancer Antigen, Demonstrate Potent Preclinical Activity Against Pediatric Solid Tumors and Brain Tumors** *CLINICAL CANCER RESEARCH*

Majzner, R. G., Theruvath, J. L., Nellan, A., Heitzeneder, S., Cui, Y., Mount, C. W., Rietberg, S. P., Linde, M. H., Xu, P., Rota, C., Sotillo, E., Labanieh, L., Lee, et al
2019; 25 (8): 2560–74

● **Single-cell lineage tracing by endogenous mutations enriched in transposase accessible mitochondrial DNA** *ELIFE*

Xu, J., Nuno, K., Litzenburger, U. M., Qi, Y., Corces, M., Majeti, R., Chang, H. Y.
2019; 8

● **Single-cell lineage tracing by endogenous mutations enriched in transposase accessible mitochondrial DNA.** *eLife*

Xu, J., Nuno, K., Litzenburger, U. M., Qi, Y., Corces, M. R., Majeti, R., Chang, H. Y.
2019; 8

● **Data mining for mutation-specific targets in acute myeloid leukemia** *LEUKEMIA*

- Benard, B., Gentles, A. J., Kohnke, T., Majeti, R., Thomas, D.
2019; 33 (4): 826–43
- **No Matter How You Splice It, RBM39 Inhibition Targets Spliceosome Mutant AML.** *Cancer cell*
Thomas, R., Majeti, R.
2019; 35 (3): 337–39
 - **First-in-Human, First-in-Class Phase I Trial of the Anti-CD47 Antibody Hu5F9-G4 in Patients With Advanced Cancers.** *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*
Sikic, B. I., Lakhani, N., Patnaik, A., Shah, S. A., Chandana, S. R., Rasco, D., Colevas, A. D., O'Rourke, T., Narayanan, S., Papadopoulos, K., Fisher, G. A., Villalobos, V., Prohaska, et al
2019: JCO1802018
 - **Data mining for mutation-specific targets in acute myeloid leukemia.** *Leukemia*
Benard, B., Gentles, A. J., Kohnke, T., Majeti, R., Thomas, D.
2019
 - **CAR T cells targeting B7-H3, a Pan-Cancer Antigen, Demonstrate Potent Preclinical Activity Against Pediatric Solid Tumors and Brain Tumors.** *Clinical cancer research : an official journal of the American Association for Cancer Research*
Majzner, R. G., Theruvath, J. L., Nellan, A., Heitzeneder, S., Cui, Y., Mount, C. W., Rietberg, S. P., Linde, M. H., Xu, P., Rota, C., Sotillo, E., Labanieh, L., Lee, et al
2019
 - **Induced pluripotent stem cell modeling of malignant hematopoiesis.** *Experimental hematology*
Chao, M. P., Majeti, R.
2019
 - **Targeting Cancer Stemness in the Clinic: From Hype to Hope** *CELL STEM CELL*
Saygin, C., Matei, D., Majeti, R., Reizes, O., Lathia, J. D.
2019; 24 (1): 25–40
 - **Mebendazole for Differentiation Therapy of Acute Myeloid Leukemia Identified by a Lineage Maturation Index.** *Scientific reports*
Li, Y. n., Thomas, D. n., Deutzmann, A. n., Majeti, R. n., Felsher, D. W., Dill, D. L.
2019; 9 (1): 16775
 - **Therapeutic Targeting of the Macrophage Immune Checkpoint CD47 in Myeloid Malignancies.** *Frontiers in oncology*
Chao, M. P., Takimoto, C. H., Feng, D. D., McKenna, K., Gip, P., Liu, J., Volkmer, J., Weissman, I. L., Majeti, R.
2019; 9: 1380
 - **The Phosphatidylethanolamine Biosynthesis Pathway Provides a New Target for Cancer Chemotherapy.** *Journal of hepatology*
Guan, Y. n., Chen, X. n., Wu, M. n., Zhu, W. n., Arslan, A. n., Takeda, S. n., Nguyen, M. H., Majeti, R. n., Thomas, D. n., Zheng, M. n., Peltz, G. n.
2019
 - **Targeting Cancer Stemness in the Clinic: From Hype to Hope.** *Cell stem cell*
Saygin, C., Matei, D., Majeti, R., Reizes, O., Lathia, J. D.
2018
 - **Accumulation of JAK Activation-Loop Phosphorylation Promotes Type I JAK Inhibitor Withdrawal Syndrome in Myelofibrosis**
Tvorogov, D., Thomas, D., Liau, N. D., Dottore, M., Barry, E. F., Lathi, M., Kan, W. L., Hercus, T. R., Stomski, F., Hughes, T. P., Tergaonkar, V., Parker, M. W., Ross, et al
AMER SOC HEMATOLOGY.2018
 - **Macrophage de novo NAD⁺ synthesis specifies immune function in aging and inflammation.** *Nature immunology*
Minhas, P. S., Liu, L., Moon, P. K., Joshi, A. U., Dove, C., Mhatre, S., Contrepois, K., Wang, Q., Lee, B. A., Coronado, M., Bernstein, D., Snyder, M. P., Migaud, et al
2018
 - **Accumulation of JAK activation loop phosphorylation is linked to type I JAK inhibitor withdrawal syndrome in myelofibrosis.** *Science advances*
Tvorogov, D., Thomas, D., Liau, N. P., Dottore, M., Barry, E. F., Lathi, M., Kan, W. L., Hercus, T. R., Stomski, F., Hughes, T. P., Tergaonkar, V., Parker, M. W., Ross, et al
2018; 4 (11): eaat3834

- **Accumulation of JAK activation loop phosphorylation is linked to type I JAK inhibitor withdrawal syndrome in myelofibrosis** *SCIENCE ADVANCES*
Tvorogov, D., Thomas, D., Liau, N. D., Dottore, M., Barry, E. F., Lathi, M., Kan, W. L., Hercus, T. R., Stomski, F., Hughes, T. P., Tergaonkar, V., Parker, M. W., Ross, et al
2018; 4 (11)
- **CD47 Blockade by Hu5F9-G4 and Rituximab in Non-Hodgkin's Lymphoma** *NEW ENGLAND JOURNAL OF MEDICINE*
Advani, R., Flinn, I., Popplewell, L., Forero, A., Bartlett, N. L., Ghosh, N., Kline, J., Roschewski, M., LaCasce, A., Collins, G. P., Thu Tran, Lynn, J., Chen, J. Y., et al
2018; 379 (18): 1711–21
- **Identification of the Human Skeletal Stem Cell** *Cell*
Chan, C. K., Gulati, G. S., Sinha, R., Tompkins, J. V., Lopez, M., Carter, A. C., Ransom, R. C., Reinisch, A., Wearda, T., Murphy, M., Brewer, R. E., Koepke, L. S., Marecic, et al
2018; 175 (1): 43
- **Identification of the Human Skeletal Stem Cell** *CELL*
Chan, C. F., Gulati, G. S., Sinha, R., Tompkins, J., Lopez, M., Carter, A. C., Ransom, R. C., Reinisch, A., Wearda, T., Murphy, M., Brewer, R. E., Koepke, L. S., Marecic, et al
2018; 175 (1): 43-+
- **Integrated Single-Cell Analysis Maps the Continuous Regulatory Landscape of Human Hematopoietic Differentiation** *CELL*
Buenrostro, J. D., Corces, M., Lareau, C. A., Wu, B., Schep, A. N., Aryee, M. J., Majeti, R., Chang, H. Y., Greenleaf, W. J.
2018; 173 (6): 1535-+
- **A first-in-class, first-in-human phase 1 pharmacokinetic (PK) and pharmacodynamic (PD) study of Hu5F9-G4, an anti-CD47 monoclonal antibody (mAb), in patients with advanced solid tumors.**
Sikic, B. I., Lakhani, N. J., Patnaik, A., Shah, S., Chandana, S. R., Rasco, D. W., Colevas, A., O'Rourke, T. J., Papadopoulos, K. P., Fisher, G. A., Chao, M., Agoram, B., Chen, et al
AMER SOC CLINICAL ONCOLOGY.2018
- **Single-cell analysis reveals the continuum of human lympho-myeloid progenitor cells** *NATURE IMMUNOLOGY*
Karamitros, D., Stoilova, B., Aboukhalil, Z., Hamey, F., Reinisch, A., Samitsch, M., Quek, L., Otto, G., Repapi, E., Doondeea, J., Usukhbayar, B., Calvo, J., Taylor, et al
2018; 19 (1): 85-+
- **Engineering complex genotypes in primary haematopoietic cells using Cas9/sgRNA and AAV donor vectors**
Bak, R. O., Dever, D. P., Reinisch, A., Cruz, D., Majeti, R., Porteus, M. H.
MARY ANN LIEBERT, INC.2017: A17
- **Proposed Terminology and Classification of Pre-Malignant Neoplastic Conditions: A Consensus Proposal.** *EBioMedicine*
Valent, P., Akin, C., Arock, M., Bock, C., George, T. I., Galli, S. J., Gotlib, J., Haferlach, T., Hoermann, G., Hermine, O., Jäger, U., Kenner, L., Kreipe, et al
2017; 26: 17-24
- **Proposed Terminology and Classification of Pre-Malignant Neoplastic Conditions: A Consensus Proposal** *EBOIMEDICINE*
Valent, P., Akin, C., Arock, M., Bock, C., George, T. I., Galli, S. J., Gotlib, J., Haferlach, T., Hoermann, G., Hermine, O., Jaeger, U., Kenner, L., Kreipe, et al
2017; 26: 17–24
- **Preleukemic Hematopoietic Stem Cells in Human Acute Myeloid Leukemia** *FRONTIERS IN ONCOLOGY*
Corces, M., Chang, H. Y., Majeti, R.
2017; 7: 263
- **Generation and use of a humanized bone-marrow-ossicle niche for hematopoietic xenotransplantation into mice.** *Nature protocols*
Reinisch, A., Hernandez, D. C., Schallmoser, K., Majeti, R.
2017; 12 (10): 2169-2188
- **Generation and use of a humanized bone-marrow-ossicle niche for hematopoietic xenotransplantation into mice** *NATURE PROTOCOLS*
Reinisch, A., Hernandez, D., Schallmoser, K., Majeti, R.
2017; 12 (10): 2169-2188
- **Multiplexed genetic engineering of human hematopoietic stem and progenitor cells using CRISPR/Cas9 and AAV6** *ELIFE*
Bak, R. O., Dever, D. P., Reinisch, A., Hernandez, D., Majeti, R., Porteus, M. H.

2017; 6

- **Systematic discovery of mutation-specific synthetic lethals by mining pan-cancer human primary tumor data.** *Nature communications*
Sinha, S., Thomas, D., Chan, S., Gao, Y., Brunen, D., Torabi, D., Reinisch, A., Hernandez, D., Chan, A., Rankin, E. B., Bernards, R., Majeti, R., Dill, et al
2017; 8: 15580-?
- **Systematic discovery of mutation-specific synthetic lethals by mining pan-cancer human primary tumor data.** *Nature communications*
Sinha, S., Thomas, D., Chan, S., Gao, Y., Brunen, D., Torabi, D., Reinisch, A., Hernandez, D., Chan, A., Rankin, E. B., Bernards, R., Majeti, R., Dill, et al
2017; 8: 15580-?
- **Optimizing Next-Generation AML Therapy: Activity of Mutant IDH2 Inhibitor AG-221 in Preclinical Models** *CANCER DISCOVERY*
Thomas, D., Majeti, R.
2017; 7 (5): 459–61
- **Optimizing Next-Generation AML Therapy: Activity of Mutant IDH2 Inhibitor AG-221 in Preclinical Models.** *Cancer discovery*
Thomas, D., Majeti, R.
2017; 7 (5): 459-461
- **Biology and relevance of human acute myeloid leukemia stem cells** *BLOOD*
Thomas, D., Majeti, R.
2017; 129 (12): 1577-1585
- **Disrupting the CD47-SIRP alpha anti-phagocytic axis by a humanized anti-CD47 antibody is an efficacious treatment for malignant pediatric brain tumors** *SCIENCE TRANSLATIONAL MEDICINE*
Gholamin, S., Mitra, S. S., Feroze, A. H., Liu, J., Kahn, S. A., Zhang, M., Esparza, R., Richard, C., Ramaswamy, V., Remke, M., Volkmer, A. K., Willingham, S., Ponnuswami, et al
2017; 9 (381)
- **The role of mutations in the cohesin complex in acute myeloid leukemia** *INTERNATIONAL JOURNAL OF HEMATOLOGY*
Mazumdar, C., Majeti, R.
2017; 105 (1): 31-36
- **The CD47 Macrophage Checkpoint as a New Immunotherapy Target**
Sikic, B. I., Padda, S. K., Shah, S. A., Colevas, D., Narayanan, S., Fisher, G. A., Supan, D., Wakelee, H. A., Aoki, R., Pegram, M. D., Villalobos, V. M., Liu, J., Takimoto, et al
ELSEVIER SCIENCE INC.2017: S108–S109
- **Inhibiting glutaminase in acute myeloid leukemia: metabolic dependency of selected AML subtypes** *ONCOTARGET*
Matre, P., Velez, J., Jacamo, R., Qi, Y., Su, X., Cai, T., Chan, S. M., Lodi, A., Sweeney, S. R., Ma, H., Davis, R. E., Baran, N., Haferlach, et al
2016; 7 (48): 79708-79721
- **Sticking It to the Niche: CD98 Mediates Critical Adhesive Signals in AML** *CANCER CELL*
Reinisch, A., Majeti, R.
2016; 30 (5): 662–64
- **CRISPR/Cas9 β-globin gene targeting in human haematopoietic stem cells.** *Nature*
Dever, D. P., Bak, R. O., Reinisch, A., Camarena, J., Washington, G., Nicolas, C. E., Pavel-Dinu, M., Saxena, N., Wilkens, A. B., Mantri, S., Uchida, N., Hendel, A., Narla, et al
2016
- **The role of mutations in the cohesin complex in acute myeloid leukemia.** *International journal of hematology*
Mazumdar, C., Majeti, R.
2016: -?
- **SIRP alpha-Antibody Fusion Proteins Selectively Bind and Eliminate Dual Antigen-Expressing Tumor Cells** *CLINICAL CANCER RESEARCH*
Piccione, E. C., Juarez, S., Tseng, S., Liu, J., Stafford, M., Narayanan, C., Wang, L., Weiskopf, K., Majeti, R.
2016; 22 (20): 5109-5119
- **Autophagy mediates proteolysis of NPM1 and HEXIM1 and sensitivity to BET inhibition in AML cells.** *Oncotarget*
Huang, M., Garcia, J. S., Thomas, D., Zhu, L., Nguyen, L. X., Chan, S. M., Majeti, R., Medeiros, B. C., Mitchell, B. S.
2016

- **Lineage-specific and single-cell chromatin accessibility charts human hematopoiesis and leukemia evolution.** *Nature genetics*
Corces, M. R., Buenrostro, J. D., Wu, B., Greenside, P. G., Chan, S. M., Koenig, J. L., Snyder, M. P., Pritchard, J. K., Kundaje, A., Greenleaf, W. J., Majeti, R., Chang, H. Y.
2016; 48 (10): 1193-1203
- **Burning Fat Fuels Leukemic Stem Cell Heterogeneity.** *Cell stem cell*
Thomas, D., Majeti, R.
2016; 19 (1): 1-2
- **CD47-blocking immunotherapies stimulate macrophage-mediated destruction of small-cell lung cancer** *JOURNAL OF CLINICAL INVESTIGATION*
Weiskopf, K., Jahchan, N. S., Schnorr, P. J., Cristea, S., Ring, A. M., Maute, R. L., Volkmer, A. K., Volkmer, J., Liu, J., Lim, J. S., Yang, D., Seitz, G., Thuyen Nguyen, et al
2016; 126 (7): 2610-2620
- **ASH1L Links Histone H3 Lysine 36 Dimethylation to MLL Leukemia** *CANCER DISCOVERY*
Zhu, L., Li, Q., Wong, S. K., Huang, M., Klein, B. J., Shen, J., Ikenouye, L., Onishi, M., Schneidawind, D., Buechele, C., Hansen, L., Duque-Afonso, J., Zhu, et al
2016; 6 (7): 770-83
- **ASH1L Links Histone H3 Lysine 36 Dimethylation to MLL Leukemia.** *Cancer discovery*
Zhu, L., Li, Q., Wong, S. H., Huang, M., Klein, B. J., Shen, J., Ikenouye, L., Onishi, M., Schneidawind, D., Buechele, C., Hansen, L., Duque-Afonso, J., Zhu, et al
2016; 6 (7): 770-783
- **SUPER-ENHANCER ANALYSIS DEFINES NOVEL AML AND MDS SUB-TYPES SENSITIVE TO SY-1425, A POTENT AND SELECTIVE RARA AGONIST**
McKeown, M., Lee, E., Fiore, C., Eaton, M., Lopez, J., Corces-Zimmerman, R., Majeti, R., Stephens, K., Fritz, C., Olson, E.
FERRATA STORTI FOUNDATION.2016: 325
- **FACS-Based Enrichment of a Highly Purified HBB-Targeted Hematopoietic Stem and Progenitor Cell Population Using rAAV6 and CRISPR/Cas9**
Dever, D. P., Bak, R. O., Camarena, J., Saxena, N., Reinisch, A., Nicolas, C. E., Wilkens, A. B., Hendel, A., Uchida, N., Majeti, R., Weinberg, K. I., Porteus, M. H.
NATURE PUBLISHING GROUP.2016: S17
- **CRISPR/Cas9 and rAAV6-Mediated Targeted Integration at the CCR5 Locus in Hematopoietic Stem and Progenitor Cells**
Bak, R. O., Dever, D. P., Saxena, N., Camarena, J., Reinisch, A., Wilkens, A. B., Nicolas, C. E., Hendel, A., Majeti, R., Weinberg, K. I., Porteus, M. H.
NATURE PUBLISHING GROUP.2016: S19
- **Anti-CD47 Treatment Stimulates Phagocytosis of Glioblastoma by M1 and M2 Polarized Macrophages and Promotes M1 Polarized Macrophages In Vivo** *PLOS ONE*
Zhang, M., Hutter, G., Kahn, S. A., Azad, T. D., Gholamin, S., Xu, C. Y., Liu, J., Achrol, A. S., Richard, C., Sommerkamp, P., Schoen, M. K., McCracken, M. N., Majeti, et al
2016; 11 (4)
- **Alkylator-Induced and Patient-Derived Xenograft Mouse Models of Therapy-Related Myeloid Neoplasms Model Clinical Disease and Suggest the Presence of Multiple Cell Subpopulations with Leukemia Stem Cell Activity.** *PloS one*
Jonas, B. A., Johnson, C., Gratzinger, D., Majeti, R.
2016; 11 (7)
- **Clonal evolution of preleukemic hematopoietic stem cells in acute myeloid leukemia** *EXPERIMENTAL HEMATOLOGY*
Sykes, S. M., Kokkaliaris, K. D., Milsom, M. D., Levine, R. L., Majeti, R.
2015; 43 (12): 989-92
- **Deciphering the cancer methylome with Boolean implications to find novel drivers of aberrant DNA methylation and actionable drug targets**
Sinha, S., Thomas, D., Majeti, R., Dill, D. L.
AMER ASSOC CANCER RESEARCH.2015
- **An LSC epigenetic signature is largely mutation independent and implicates the HOXA cluster in AML pathogenesis** *NATURE COMMUNICATIONS*
Jung, N., Dai, B., Gentles, A. J., Majeti, R., Feinberg, A. P.
2015; 6
- **A bispecific antibody targeting CD47 and CD20 selectively binds and eliminates dual antigen expressing lymphoma cells** *MABS*
Piccione, E. C., Juarez, S., Liu, J., Tseng, S., Ryan, C. E., Narayanan, C., Wang, L., Weiskopf, K., Majeti, R.

2015; 7 (5): 946-956

- **Biology and Clinical Relevance of Acute Myeloid Leukemia Stem Cells** *SEMINARS IN HEMATOLOGY*

Reinisch, A., Chan, S. M., Thomas, D., Majeti, R.

2015; 52 (3): 150-164

- **Tuning Cytokine Receptor Signaling by Re-orienting Dimer Geometry with Surrogate Ligands** *CELL*

Moraga, I., Wernig, G., Wilmes, S., Gryshkova, V., Richter, C. P., Hong, W., Sinha, R., Guo, F., Fabionar, H., Wehrman, T. S., Krutzik, P., Demharter, S., Plo, et al
2015; 160 (6): 1196-1208

- **Epigenetic and in vivo comparison of diverse MSC sources reveals an endochondral signature for human hematopoietic niche formation.** *Blood*

Reinisch, A., Etchart, N., Thomas, D., Hofmann, N. A., Fruehwirth, M., Sinha, S., Chan, C. K., Senarath-Yapa, K., Seo, E., Wearda, T., Hartwig, U. F., Beham-Schmid, C., Trajanoski, et al

2015; 125 (2): 249-260

- **Refractory warm IgM-mediated autoimmune hemolytic anemia associated with Churg-Strauss syndrome responsive to eculizumab and rituximab** *AMERICAN JOURNAL OF HEMATOLOGY*

Chao, M. P., Hong, J., Kunder, C., Lester, L., Schrier, S. L., Majeti, R.

2015; 90 (1): 78-81

- **Pre-Clinical Development of a Humanized Anti-CD47 Antibody with Anti-Cancer Therapeutic Potential.** *PloS one*

Liu, J., Wang, L., Zhao, F., Tseng, S., Narayanan, C., Shura, L., Willingham, S., Howard, M., Prohaska, S., Volkmer, J., Chao, M., Weissman, I. L., Majeti, et al
2015; 10 (9)

- **A bispecific antibody targeting CD47 and CD20 selectively binds and eliminates dual antigen expressing lymphoma cells.** *mAbs*

Piccione, E. C., Juarez, S., Liu, J., Tseng, S., Ryan, C. E., Narayanan, C., Wang, L., Weiskopf, K., Majeti, R.

2015; 7 (5): 946-956

- **Mutation in Wilms' Tumor 1 Induces DNA Hypermethylation of PRC2 Targets, Blocks Myelomonocytic Differentiation, and Defines a Novel Subtype of AML Responsive to EZH2 Inhibition**

Thomas, D., Sinha, S., Yu, L., Jung, N., Dai, B., Gentles, A. J., Feinberg, A. P., Dill, D., Majeti, R.

AMER SOC HEMATOLOGY.2014

- **Pre-leukemic evolution of hematopoietic stem cells: the importance of early mutations in leukemogenesis** *LEUKEMIA*

Corces-Zimmerman, M. R., Majeti, R.

2014; 28 (12): 2276-2282

- **Clonal evolution of pre-leukemic hematopoietic stem cells precedes human acute myeloid leukemia.** *Best practice & research. Clinical haematology*

Majeti, R.

2014; 27 (3-4): 229-34

- **Clonal evolution of pre-leukemic hematopoietic stem cells precedes human acute myeloid leukemia** *BEST PRACTICE & RESEARCH CLINICAL HAEMATOLOGY*

Majeti, R.

2014; 27 (3-4): 229-234

- **WILMS' TUMOR 1 MUTATION DRIVES DNA HYPERMETHYLATION IN AML AND RESPONDS TO EZH2-INHIBITOR**

Thomas, D., Sinha, S., Gentles, A., Jung, N., Feinberg, A., Dill, D., Majeti, R.

ELSEVIER SCIENCE INC.2014: S62

- **Interaction of TIF-90 and filamin A in the regulation of rRNA synthesis in leukemic cells.** *Blood*

Nguyen, L. X., Chan, S. M., Ngo, T. D., Raval, A., Kim, K. K., Majeti, R., Mitchell, B. S.

2014; 124 (4): 579-589

- **Proffered Paper: Overcoming immune evasion in ovarian and breast cancer with anti-CD47 antibody blockade: A novel class of immune therapy**

Volkmer, A. K., Willingham, S. B., Tseng, S. R., Ho, P. Y., Volkmer, J. P., Sikic, B. I., Majeti, R., Weissman, I. L.

ELSEVIER SCI LTD.2014: S13

- **Transient expression of Bcl6 is sufficient for oncogenic function and induction of mature B-cell lymphoma** *NATURE COMMUNICATIONS*

Green, M. R., Vicente-Duenas, C., Romero-Camarero, I., Liu, C. L., Dai, B., Gonzalez-Herrero, I., Garcia-Ramirez, I., Alonso-Escudero, E., Iqbal, J., Chan, W. C., Campos-Sanchez, E., Orfao, A., Pintado, et al

2014; 5

● **OVERCOMING IMMUNE EVASION IN PEDIATRIC BRAIN TUMORS: A PRE-CLINICAL DEVELOPMENT STUDY USING A HUMANIZED ANTI-CD47 ANTIBODY**

Gholamin, S., Mitra, S., Feroze, A., Zhang, M., Esparza, R., Kahn, S., Richard, C., Achrol, A., Volkmer, A., Liu, J., Volkmer, J., Majeti, R., Weissman, et al
OXFORD UNIV PRESS INC.2014: 138

● **Centrosome-kinase fusions promote oncogenic signaling and disrupt centrosome function in myeloproliferative neoplasms.** *PloS one*

Lee, J. Y., Hong, W., Majeti, R., Stearns, T.
2014; 9 (3)

● **Centrosome-kinase fusions promote oncogenic signaling and disrupt centrosome function in myeloproliferative neoplasms.** *PloS one*

Lee, J. Y., Hong, W., Majeti, R., Stearns, T.
2014; 9 (3)

● **Transient expression of Bcl6 is sufficient for oncogenic function and induction of mature B-cell lymphoma.** *Nature communications*

Green, M. R., Vicente-Dueñas, C., Romero-Camarero, I., Long Liu, C., Dai, B., González-Herrero, I., García-Ramírez, I., Alonso-Escudero, E., Iqbal, J., Chan, W. C., Campos-Sánchez, E., Orfao, A., Pintado, et al
2014; 5: 3904-?

● **Role of DNMT3A, TET2, and IDH1/2 mutations in pre-leukemic stem cells in acute myeloid leukemia** *INTERNATIONAL JOURNAL OF HEMATOLOGY*

Chan, S. M., Majeti, R.
2013; 98 (6): 648-657

● **Role of cysteine 288 in nucleophosmin cytoplasmic mutations: sensitization to toxicity induced by arsenic trioxide and bortezomib** *LEUKEMIA*

Huang, M., Thomas, D., Li, M. X., Feng, W., Chan, S. M., Majeti, R., Mitchell, B. S.
2013; 27 (10): 1970-1980

● **CD99 IDENTIFIES DISEASE STEM CELLS IN ACUTE MYELOID LEUKEMIA (AML) AND THE MYELODYSPLASTIC SYNDROMES (MDS)**

Chung, S., Pang, W., Jan, M., Klimek, V., Weissman, I., Majeti, R., Park, C.
ELSEVIER SCIENCE INC.2013: S16

● **Azacitidine fails to eradicate leukemic stem/progenitor cell populations in patients with acute myeloid leukemia and myelodysplasia** *LEUKEMIA*

Craddock, C., Quek, L., Goardon, N., Freeman, S., Siddique, S., Raghavan, M., Azibberger, A., Schuh, A., Grimwade, D., IVEY, A., Virgo, P., Hills, R., McSkeane, et al
2013; 27 (5): 1028-1036

● **Clonal evolution of acute leukemia genomes** *ONCOGENE*

Jan, M., Majeti, R.
2013; 32 (2): 135-140

● **The cancer stem cell model: B cell acute lymphoblastic leukaemia breaks the mould.** *EMBO molecular medicine*

McClellan, J. S., Majeti, R.
2013; 5 (1): 7-9

● **Cyclin-A1 represents a new immunogenic targetable antigen expressed in acute myeloid leukemia stem cells with characteristics of a cancer-testis antigen** *BLOOD*

Ochsenreither, S., Majeti, R., Schmitt, T., Stirewalt, D., Keilholz, U., Loeb, K. R., Wood, B., Choi, Y. E., Bleakley, M., Warren, E. H., Hudecek, M., Akatsuka, Y., Weissman, et al
2012; 119 (23): 5492-5501

● **The CD47-signal regulatory protein alpha (SIRPa) interaction is a therapeutic target for human solid tumors** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*

Willingham, S. B., Volkmer, J., Gentles, A. J., Sahoo, D., Dalerba, P., Mitra, S. S., Wang, J., Contreras-Trujillo, H., Martin, R., Cohen, J. D., Lovelace, P., Scheeren, F. A., Chao, et al
2012; 109 (17): 6662-6667

● **Antibody therapy targeting the CD47 protein is effective in a model of aggressive metastatic leiomyosarcoma** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*

Edris, B., Weiskopf, K., Volkmer, A. K., Volkmer, J., Willingham, S. B., Contreras-Trujillo, H., Liu, J., Majeti, R., West, R. B., Fletcher, J. A., Beck, A. H., Weissman, I. L., van de Rijn, et al

2012; 109 (17): 6656-6661

● **Clonal evolution of pre-leukemic hematopoietic stem cells precedes human acute myeloid leukemia**

Jan, M., Snyder, T. M., Corces-Zimmerman, M., Weissman, I. L., Quake, S. R., Majeti, R.
AMER ASSOC CANCER RESEARCH.2012

● **The CD47-SIRP alpha pathway in cancer immune evasion and potential therapeutic implications** *CURRENT OPINION IN IMMUNOLOGY*

Chao, M. P., Weissman, I. L., Majeti, R.
2012; 24 (2): 225-232

● **Treatment advances have not improved the early death rate in acute promyelocytic leukemia** *HAEMATOLOGICA-THE HEMATOLOGY JOURNAL*

McClellan, J. S., Kohrt, H. E., Coutre, S., Gotlib, J. R., Majeti, R., Alizadeh, A. A., Medeiros, B. C.
2012; 97 (1): 133-136

● **Programmed cell removal: a new obstacle in the road to developing cancer** *NATURE REVIEWS CANCER*

Chao, M. P., Majeti, R., Weissman, I. L.
2012; 12 (1): 58-67

● **Programmed cell removal: a new obstacle in the road to developing cancer.** *Nature reviews. Cancer*

Chao, M. P., Majeti, R., Weissman, I. L.
2012; 12 (1): 58-67

● **Extranodal dissemination of non-Hodgkin lymphoma requires CD47 and is inhibited by anti-CD47 antibody therapy** *BLOOD*

Chao, M. P., Tang, C., Pachynski, R. K., Chin, R., Majeti, R., Weissman, I. L.
2011; 118 (18): 4890-4901

● **Surprise! HSC Are Aberrant in Chronic Lymphocytic Leukemia** *CANCER CELL*

Alizadeh, A. A., Majeti, R.
2011; 20 (2): 135-136

● **Single-cell phospho-specific flow cytometric analysis demonstrates biochemical and functional heterogeneity in human hematopoietic stem and progenitor compartments** *BLOOD*

Gibbs, K. D., Gilbert, P. M., Sachs, K., Zhao, F., Blau, H. M., Weissman, I. L., Nolan, G. P., Majeti, R.
2011; 117 (16): 4226-4233

● **Prospective separation of normal and leukemic stem cells based on differential expression of TIM3, a human acute myeloid leukemia stem cell marker** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*

Jan, M., Chao, M. P., Cha, A. C., Alizadeh, A. A., Gentles, A. J., Weissman, I. L., Majeti, R.
2011; 108 (12): 5009-5014

● **Leukemic Stem Cell Gene Expression Signature and Clinical Outcomes in Acute Myeloid Leukemia Reply** *JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*

Gentles, A. J., Majeti, R., Alizadeh, A. A.
2011; 305 (11): 1094

● **Monoclonal antibody therapy directed against human acute myeloid leukemia stem cells** *ONCOGENE*

Majeti, R.
2011; 30 (9): 1009-1019

● **Therapeutic Antibody Targeting of CD47 Eliminates Human Acute Lymphoblastic Leukemia** *CANCER RESEARCH*

Chao, M. P., Alizadeh, A. A., Tang, C., Jan, M., Weissman-Tsukamoto, R., Zhao, F., Park, C. Y., Weissman, I. L., Majeti, R.
2011; 71 (4): 1374-1384

● **Human Acute Myelogenous Leukemia Stem Cells Revisited: There's More Than Meets the Eye** *CANCER CELL*

Majeti, R., Weissman, I. L.
2011; 19 (1): 9-10

● **Calreticulin Is the Dominant Pro-Phagocytic Signal on Multiple Human Cancers and Is Counterbalanced by CD47** *SCIENCE TRANSLATIONAL MEDICINE*

Chao, M. P., Jaiswal, S., Weissman-Tsukamoto, R., Alizadeh, A. A., Gentles, A. J., Volkmer, J., Weiskopf, K., Willingham, S. B., Raveh, T., Park, C. Y., Majeti, R., Weissman, I. L.

2010; 2 (63)

- **Second-line mitoxantrone, etoposide, and cytarabine for acute myeloid leukemia: A single-center experience** *AMERICAN JOURNAL OF HEMATOLOGY*
Kohrt, H. E., Patel, S., Ho, M., Owen, T., Pollyea, D. A., Majeti, R., Gotlib, J., Coutre, S., Liedtke, M., Berube, C., Alizadeh, A. A., Medeiros, B. C.
2010; 85 (11): 877-881
- **Metastatic Cancer Stem Cells: An Opportunity for Improving Cancer Treatment?** *CELL STEM CELL*
Diehn, M., Majeti, R.
2010; 6 (6): 502-503
- **Macrophages as mediators of tumor immunosurveillance** *TRENDS IN IMMUNOLOGY*
Jaiswal, S., Chao, M. P., Majeti, R., Weissman, I. L.
2010; 31 (6): 212-219
- **Immunophenotypic features of acute myeloid leukemia with inv(3)(q21q26.2)/t(3;3)(q21;q26.2)** *LEUKEMIA RESEARCH*
Medeiros, B. C., Kohrt, H. E., Arber, D. A., Bangs, C. D., Cherry, A. M., Majeti, R., Kogel, K. E., Azar, C. A., Patel, S., Alizadeh, A. A.
2010; 34 (5): 594-597
- **Early Mortality in Acute Promyelocytic Leukemia May Be Higher Than Previously Reported.** *51st Annual Meeting and Exposition of the American-Society-of-Hematology*
Alizadeh, A. A., McClellan, J. S., Gotlib, J. R., Coutre, S., Majeti, R., Kohrt, H. E., Medeiros, B. C.
AMER SOC HEMATOLOGY.2009: 420-21
- **Is Time of the Essence in Adult Acute Myeloid Leukemia (AML)? Time to Blast Clearance and Time to Induction Therapy Fail to Predict Overall Survival (OS).** *51st Annual Meeting and Exposition of the American-Society-of-Hematology*
Kohrt, H. E., Patel, S., Ho, M., Owen, T., Majeti, R., Gotlib, J. R., Coutre, S., Medeiros, B. C., Alizadeh, A. A.
AMER SOC HEMATOLOGY.2009: 646-47
- **CD47 Is Upregulated on Circulating Hematopoietic Stem Cells and Leukemia Cells to Avoid Phagocytosis** *CELL*
Jaiswal, S., Jamieson, C. H., Pang, W. W., Park, C. Y., Chao, M. P., Majeti, R., Traver, D., van Rooijen, N., Weissman, I. L.
2009; 138 (2): 271-285
- **Dysregulated gene expression networks in human acute myelogenous leukemia stem cells** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Majeti, R., Becker, M. W., Tian, Q., Lee, T. M., Yan, X., Liu, R., Chiang, J., Hood, L., Clarke, M. F., Weissman, I. L.
2009; 106 (9): 3396-3401
- **The Adhesion Molecule Esam1 Is a Novel Hematopoietic Stem Cell Marker** *STEM CELLS*
Ooi, A. G., Karsunky, H., Majeti, R., Butz, S., Vestweber, D., Ishida, T., Quertermous, T., Weissman, I. L., Forsberg, E. C.
2009; 27 (3): 653-661
- **In vivo evaluation of human hematopoiesis through xenotransplantation of purified hematopoietic stem cells from umbilical cord blood** *NATURE PROTOCOLS*
Park, C. Y., Majeti, R., Weissman, I. L.
2008; 3 (12): 1932-1940