

Stanford



Benjamin Rolles

Postdoctoral Scholar, Hematology

 Curriculum Vitae available Online

Bio

BIO

MD/Research Fellow

@MullallyLab @StanfordMed @VAPaloAlto @BrighamHeme @BrighamResearch @HarvardMed

Studied

@UniklinikAachen @RWTH

Interested in MPN & Myeloid Malignancies

HONORS AND AWARDS

- Abstract Achievement Award, American Society of Hematology (ASH) (2024)
- Abstract Achievement Award, American Society of Hematology (ASH) (2019)
- Borchers badge, RWTH Aachen University (2020)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, European Hematology Association (EHA) (2024 - present)
- Full Membership, Sigma Xi – The Scientific Research Honor Society (2024 - present)
- Member, American Society of Hematology (ASH) (2022 - present)
- Member, German Society of Hematology and Oncology (DGHO) (2018 - present)

PROFESSIONAL EDUCATION

- Staatsexamen, Rheinisch-Westfälische Technische Hochschule (2018)
- Doctor of Medicine, Rheinisch-Westfälische Technische Hochschule (2019)
- Physician license, RWTH Aachen University , Medicine (2018)
- MD, RWTH Aachen University , Medicine/Immunology (2018)

STANFORD ADVISORS

- Ann Mullally, Postdoctoral Faculty Sponsor

LINKS

- LinkedIn: <https://www.linkedin.com/in/benjaminrolles/>

- Twitter: <https://x.com/DrRolles>
- ResearchGate: <https://www.researchgate.net/profile/Benjamin-Rolles>
- Harvard Catalyst: <https://connects.catalyst.harvard.edu/Profiles/display/Person/201754>
- ORCID: <https://orcid.org/0000-0002-7393-861X>

Publications

PUBLICATIONS

- **Mutant SRSF2-associated impaired erythropoiesis is defined by increased mTORC1 signaling due to FYN missplicing.** *Leukemia*
Jutzi, J. S., Crosse, E., Kim, C. J., van Gasteren, B., Laureore, C., Rolles, B., Kramer, F., Tishena, A., Rocha, A. V., Wazir, M., Weeks, L. D., How, J., Stahl, et al
2026
- **Risk stratification of patients with TP53-mutated myeloproliferative neoplasms.** *Leukemia*
Rolles, B., Filho, C. i., Fergusson, N., Bewersdorf, J. P., Keating, J., Perkins, C., Schwede, M., England, J., Luskin, M. R., DeAngelo, D. J., Shimony, S., Faiz, M., Hillerbrand, et al
2026
- **Luspatercept for Patients with Lower-Risk Myelodysplastic Syndromes/Neoplasms: A Systematic Review and Meta-Analysis.** *Blood advances*
Alhajjahjeh, A., Link Woite, N., Rolles, B., Stempel, J. M., Mina, A., Mendez, L. M., Kewan, T., Podoltsev, N. A., Stahl, M. F., Grimshaw, A. A., Zeidan, A. M., Bewersdorf, J. P.
2025
- **ZIP10 as a potential therapeutic target in acute myeloid leukaemia** *BRITISH JOURNAL OF HAEMATOLOGY*
Rolles, B., Chatain, N., Goerg, R., Vieri, M., Tillmann-Troester, N., Bourgeois, M. G., Christen, D., Walter, J., Hillerbrand, A. C., Romine, K. A., Taylor, K. M., Bertram, J., Jost, et al
2025
- **Luspatercept in patients with lower-risk myelodysplastic syndromes (MDS): A systematic review and meta-analysis.**
Alhajjahjeh, A., Woite, N., Grimshaw, A., Rolles, B., Stahl, M., Kewan, T., Podoltsev, N., Stempel, J. M., Mendez, L., Zeidan, A., Bewersdorf, J. LIPPINCOTT WILLIAMS & WILKINS.2025: e18574
- **Mutation-Specific Differences in the Relationship between Obesity and Clonal Hematopoiesis, with a Focus on *JAK2^{V617F}* and MPN Prevention**
Rolles, B., Sekar, A., Serrano-Ron, L., Faiz, N., Perry, A., Hillerbrandt, A., Hem, J., Jutzi, J., Marneth, A. E., Niroula, A., Bick, A. G., Gibson, C. J., Griffin, et al
ELSEVIER.2024: 872-873
- **Inherited Telomere Biology Disorders: Pathophysiology, Clinical Presentation, Diagnostics, and Treatment.** *Transfusion medicine and hemotherapy : offizielles Organ der Deutschen Gesellschaft für Transfusionsmedizin und Immunhamatologie*
Rolles, B., Tometten, M., Meyer, R., Kirschner, M., Beier, F., Brümmendorf, T. H.
2024; 51 (5): 292-309
- **Leukemia cells accumulate zinc for oncofou protein stabilization.** *The Journal of nutritional biochemistry*
Görg, R., Büttgenbach, A., Jakobs, J., Kurtoğlu Babayev, F. H., Rolles, B., Rink, L., Wessels, I.
2024; 123: 109482
- **Telomere biology disorders may manifest as common variable immunodeficiency (CVID).** *Clinical immunology (Orlando, Fla.)*
Rolles, B., Caballero-Oteyza, A., Proietti, M., Goldacker, S., Warnatz, K., Camacho-Ordonez, N., Prader, S., Schmid, J. P., Vieri, M., Isfort, S., Meyer, R., Kirschner, M., Brümmendorf, et al
2023; 257: 109837
- **A Simple Prediction Model of Outcomes after Allogeneic Hematopoietic Stem Cell Transplant (HCT) in Myelodysplastic Syndromes Using HCT-Comorbidity Index, Cytogenetic Risk, and Platelet Count**
Frumm, S. M., Kim, H. T., Kelkar, A. H., Ho, V. T., Gooptu, M., Gibson, C., Koreth, J., Shapiro, R. M., Romee, R., Nikiforow, S., Antin, J. H., Soiffer, R. J., Rolles, et al
ELSEVIER.2023

- **Validation of the Molecular International Prognostic Scoring System (IPSS-M) in Patients (Pts) with Myelodysplastic Syndromes/Neoplasms (MDS) Who Underwent Allogenic Stem Cell Transplantation (HSCT)**
Kewan, T., Bewersdorf, J., Blaha, O., Stahl, M., Al Ali, N. H., DeZern, A. E., Sekeres, M. A., Uy, G. L., Carraway, H. E., Desai, P., Griffiths, E. A., Stein, E. M., Brunner, et al
ELSEVIER.2023
- **Validation of the Composite Complete Response (cCR) Definitions in the International Working Group (IWG) 2023 Criteria in Patients (Pts) with Higher-Risk Myelodysplastic Syndromes/Neoplasms (HR-MDS) Treated with Hypomethylating Agents (HMA) - a Large, Multicenter, Retrospective Analysis from the Validate Database**
Bewersdorf, J., Kewan, T., Blaha, O., Stahl, M., Al Ali, N. H., DeZern, A. E., Sekeres, M. A., Uy, G. L., Carraway, H. E., Desai, P., Griffiths, E. A., Stein, E. M., Brunner, et al
ELSEVIER.2023
- **Clinical Implications of TP53 Mutations/Allelic State in Patients (Pts) with Myelodysplastic Syndromes/Neoplasms (MDS) Treated with Hypomethylating Agents (HMA)- a Multicenter, Retrospective Analysis from the Validate Database**
Kewan, T., Bewersdorf, J., Blaha, O., Stahl, M., Al Ali, N. H., DeZern, A. E., Sekeres, M. A., Carraway, H. E., Desai, P., Griffiths, E. A., Stein, E. M., Brunner, A. M., Amaya, et al
ELSEVIER.2023
- **TP53 mutations and Their Impact on Survival in Patients with Myeloproliferative Neoplasms**
Rolles, B., De Oliveira Filho, C., Keating, J., Luskin, M. R., DeAngelo, D. J., Lindsley, C., Kim, A. S., Hem, J., Kim, C. J., Weeks, L. D., Wazir, M., How, J., Marneth, et al
ELSEVIER.2023
- **Evaluation of the Molecular International Prognostic Scoring System (IPSS-M) in Patients (Pts) with Myelodysplastic Syndromes/Neoplasms (MDS) with Missing Molecular Data**
Kewan, T., Bewersdorf, J., Blaha, O., Stahl, M., Al Ali, N. H., DeZern, A. E., Sekeres, M. A., Carraway, H. E., Desai, P., Griffiths, E. A., Stein, E. M., Brunner, A. M., Amaya, et al
ELSEVIER.2023
- **Validation of the Molecular International Prognostic Scoring System (IPSS-M) in Patients (Pts) with Myelodysplastic Syndromes/Neoplasms (MDS) Who Were Treated with Hypomethylating Agents (HMA)**
Kewan, T., Bewersdorf, J., Blaha, O., Stahl, M., Ali, N., DeZern, A. E., Sekeres, M. A., Carraway, H. E., Desai, P., Griffiths, E. A., Stein, E. M., Brunner, A. M., Amaya, et al
ELSEVIER.2023
- **Post Allogeneic Stem Cell Transplant Outcomes Following Response to Hypomethylating Agent Therapy in Myelodysplastic Syndromes Are Predicted By Persistent International Prognostic Scoring System-Molecular Risk**
Frumm, S. M., Kim, H. T., Kelkar, A. H., Ho, V. T., Gooptu, M., Gibson, C., Koreth, J., Shapiro, R. M., Romee, R., Nikiforow, S., Antin, J. H., Soiffer, R. J., Rolles, et al
ELSEVIER.2023
- **Impact of Type of Hypomethylating Agent (HMA) Used on Outcomes of Patients (Pts) with Higher-Risk Myelodysplastic Syndromes/Neoplasms (HR-MDS) - a Large, Multicenter, Retrospective Analysis**
Bewersdorf, P., Kewan, T., Blaha, O., Stahl, M., Al Ali, N. H., DeZern, A. E., Sekeres, M. A., Uy, G. L., Carraway, H. E., Desai, P., Griffiths, E. A., Stein, E. M., Brunner, et al
ELSEVIER.2023
- **Analysis of the Impact of Body Mass Index (BMI) on the Durability of Response in Patients with Aplastic Anemia Treated with Weight-Adjusted Horse Anti-Thymocyte Globulin (hATG)**
Walter, J., Rolles, B., Schumacher, Y., Theis, F., Hansmann, L., Heudobler, D., Radsak, M., Heuser, M., Georgi, J., Chromik, J., Drexler, B., Schubert, J., Kricheldorf, et al
ELSEVIER.2023
- **Editorial: Zinc in health and disease management. *Frontiers in nutrition***
González-Iglesias, H., Lengyel, I., Rolles, B.
2023; 10: 1242840
- **Eltrombopag Preserves the Clonogenic Potential of Hematopoietic Stem Cells During Treatment With Antithymocyte Globulin in Patients With Aplastic Anemia. *HemaSphere***
Vieri, M., Rolles, B., Crocioni, M., Schemionek-Reinders, M., Isfort, S., Panse, J., Brümmendorf, T. H., Beier, F.
2023; 7 (6): e906

- **DDX41 germline variants causing donor cell leukemia indicate a need for further genetic workup in the context of hematopoietic stem cell transplantation.** *Blood cancer journal*
Rolles, B., Meyer, R., Begemann, M., Elbracht, M., Jost, E., Stelljes, M., Kurth, I., Brümmendorf, T. H., Silling, G.
2023; 13 (1): 73
- **CALR-mutated cells are vulnerable to combined inhibition of the proteasome and the endoplasmic reticulum stress response.** *Leukemia*
Jutzi, J. S., Marneth, A. E., Jiménez-Santos, M. J., Hem, J., Guerra-Moreno, A., Rolles, B., Bhatt, S., Myers, S. A., Carr, S. A., Hong, Y., Pozdnyakova, O., van Galen, P., Al-Shahrour, et al
2023; 37 (2): 359-369
- **Telomere length dynamics measured by flow-FISH in patients with obesity undergoing bariatric surgery.** *Scientific reports*
Rolles, B., Ferreira, M. S., Vieri, M., Rheinwald, K. P., Schmitz, S. M., Alizai, P. H., Neumann, U., Brümmendorf, T. H., Beier, F., Ulmer, T. F., Tometten, M.
2023; 13 (1): 304
- **Molecular Pathogenesis of Myeloproliferative Neoplasms.** *Current hematologic malignancy reports*
Rolles, B., Mullally, A.
2022; 17 (6): 319-329
- **Impaired Overall Survival in Young Patients With Acute Myeloid Leukemia and Variants in Genes Predisposing for Myeloid Malignancies.** *HemaSphere*
Kirschner, M., Rolles, B., Crysandt, M., Röllig, C., Stölzel, F., Kramer, M., Bornhäuser, M., Serve, H., Platzbecker, U., Müller-Tidow, C., Kricheldorf, K., Vieri, M., Begemann, et al
2022; 6 (11): e787
- **Towards personalized medicine with iPS cell technology: a case report of advanced systemic mastocytosis with associated eosinophilia.** *Annals of hematology*
Atakhanov, S., Christen, D., Rolles, B., Schüler, H. M., Panse, J., Chatain, N., Koschmieder, S., Brümmendorf, T. H., Toledo, M. A., Zenke, M.
2022; 101 (11): 2533-2536
- **Effective treatment of advanced Hodgkin lymphoma with a modified BEACOPP regimen for a patient with demyelinating hereditary motor and sensory neuropathy type 1 (HMSN1).** *Clinical case reports*
Hess, P. P., Ventura Ferreira, M. S., Rolles, B., Kirschner, M., Holtbernd, F., Tometten, M., Brümmendorf, T. H., Beier, F.
2022; 10 (5): e05766
- **Retrospective observational study evaluating zinc plasma level in patients undergoing thoracoabdominal aortic aneurysm repair and its correlation with outcome.** *Scientific reports*
Rolles, B., Wessels, I., Doukas, P., Kotelis, D., Rink, L., Vieri, M., Beier, F., Jacobs, M., Gombert, A.
2021; 11 (1): 24348
- **Intracellular zinc during cell activation and zinc deficiency.** *Journal of trace elements in medicine and biology : organ of the Society for Minerals and Trace Elements (GMS)*
Rolles, B., Maywald, M., Rink, L.
2021; 68: 126864
- **Telomere Shortening in Peripheral Leukocytes Is Associated With Poor Survival in Cancer Patients Treated With Immune Checkpoint Inhibitor Therapy.** *Frontiers in oncology*
Rolles, B., Gorgulho, J., Tometten, M., Roderburg, C., Vieri, M., Abels, A., Vucur, M., Heymann, F., Tacke, F., Brümmendorf, T. H., Luedde, T., Beier, F., Loosen, et al
2021; 11: 729207
- **Androgen derivatives improve blood counts and elongate telomere length in adult cryptic dyskeratosis congenita.** *British journal of haematology*
Kirschner, M., Vieri, M., Kricheldorf, K., Ferreira, M. S., Wlodarski, M. W., Schwarz, M., Balabanov, S., Rolles, B., Isfort, S., Koschmieder, S., Höchsmann, B., Panse, J., Brümmendorf, et al
2021; 193 (3): 669-673
- **Phosphatidylserine Supplementation as a Novel Strategy for Reducing Myocardial Infarct Size and Preventing Adverse Left Ventricular Remodeling.** *International journal of molecular sciences*
Schumacher, D., Curaj, A., Staudt, M., Cordes, F., Dumitraşcu, A. R., Rolles, B., Beckers, C., Soppert, J., Rusu, M., Simsekiymaz, S., Kneizeh, K., Ramachandra, C. J., Hausenloy, et al

2021; 22 (9)

- **Prevalence of Inherited Predisposition Syndromes in Young Patients with Acute Myeloid Leukemia and Aberrant Karyotype**

Kirschner, M., Rolles, B., Crysandt, M., Rollig, C., Stolzel, F., Bornhauser, M., Muller-Tidow, C., Kricheldorf, K., Vieri, M., Begemann, M., Maurer, A., Panse, J., Isfort, et al

AMER SOC HEMATOLOGY.2020

- **Comparable Effects of the Androgen Derivatives Danazol, Oxymetholone and Nandrolone on Telomerase Activity in Human Primary Hematopoietic Cells from Patients with Dyskeratosis Congenita.** *International journal of molecular sciences*

Vieri, M., Kirschner, M., Tometten, M., Abels, A., Rolles, B., Isfort, S., Panse, J., Brümmendorf, T. H., Beier, F.

2020; 21 (19)

- **The Potential Impact of Zinc Supplementation on COVID-19 Pathogenesis.** *Frontiers in immunology*

Wessels, I., Rolles, B., Rink, L.

2020; 11: 1712

- **Common Variable Immunodeficiency (CVID) in Adults As First Manifestation of (cryptic) Dyskeratosis Congenita**

Rolles, B., Bulashevskaya, A., Proietti, M., Goldacker, S., Warnatz, K., Camacho-Ordóñez, N., Vieri, M., Kirschner, M., Brummendorf, T. H., Grimbacher, B., Beier, F.

AMER SOC HEMATOLOGY.2019

- **Influence of zinc deficiency and supplementation on NK cell cytotoxicity** *JOURNAL OF FUNCTIONAL FOODS*

Rolles, B., Maywald, M., Rink, L.

2018; 48: 322-328