

Ready to start planning your care? Call us at [800-525-2225](tel:800-525-2225) to make an appointment.

×



Memorial Sloan Kettering
Cancer Center

[Make an Appointment](#)

[Back](#)

[The Ross Levine Lab](#)

[Learn about our research & treatment](#)

[Refer a Patient](#)

ABOUT US

ABOUT US

[Our mission, vision & core values](#)

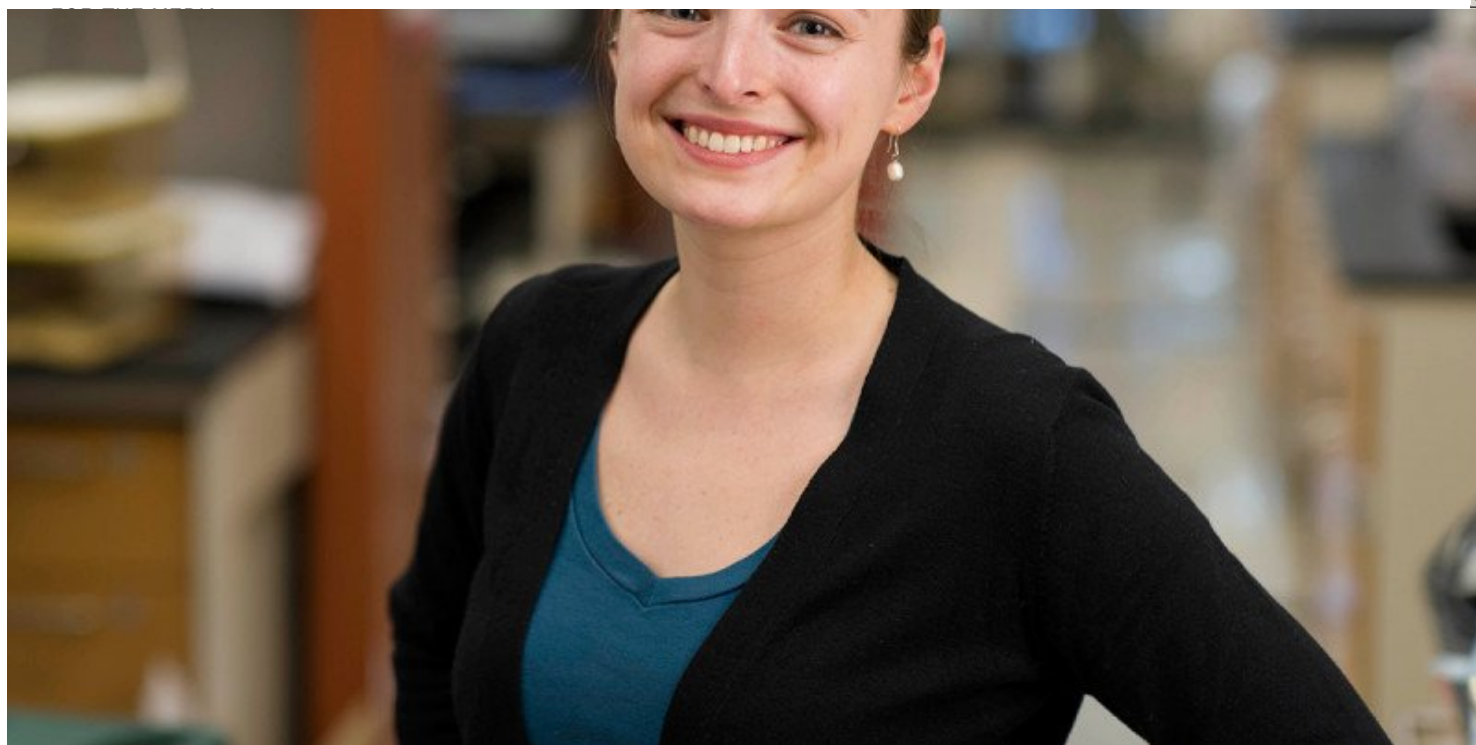
[Leadership](#)

[History](#)

[Equality, diversity & inclusion](#)

[Annual report](#)

[Give to MSK](#)



Lab Phone

646-888-2796

Email

mckennea@mskcc.org

Dissertation

[Modeling Transformation From Myeloproliferative Neoplasms \(2016\)](#)

Mentor

[Ross L. Levine, MD](#)

Start Year

2011

End Year

2016

Education

Rensselaer Polytechnic University

I'm interested in the intersection between public health and individual medicine, especially as it relates to diagnosis and prognosis. For my PhD, I wanted to focus on one research area, to become an expert in both the knowledge surrounding the topic and the scientific approach to problem solving. As an MD-PhD student, I'm drawn to research that can translate between the clinic and the bench. I found that Gerstner Sloan Kettering's program really made this practicable for my research, and at the same time, it provided me with a strong background in cancer research through rigorous course work.

Fellowships

[Ruth L. Kirschstein National Research Service Award for Individual Predoctoral MD/PhD Fellows \(F30\).](#) 2014-2018

Publications

- Hobbs GS, Hanasoge Somasundara AV, Kleppe M, Litvin R, Arcila M, Ahn J, McKenney AS, Knapp K, Ptashkin R, Weinstein H, Heinemann MH, Francis J, Chanel S, Berman E, Mauro M, Tallman MS, Heaney ML, Levine RL, Rampal RK. (2018) Hsp90 inhibition disrupts JAK-STAT signaling and leads to reductions in splenomegaly in patients with myeloproliferative neoplasms. *Haematologica*. 103, e5-e9. PMID: PMC5777196
- McKenney AS, Lau AN, Somasundara AVH, Spitzer B, Intlekofer AM, Ahn J, Shank K, Rapaport FT, Patel MA, Papalexi E, Shih AH, Chiu A, Freinkman E, Akbay EA, Steadman M, Nagaraja R, Yen K, Teruya-Feldstein J, Wong KK, Rampal R, Heiden MGV, Thompson CB, Levine RL. (2018) JAK2/IDH- mutant-driven myeloproliferative neoplasm is sensitive to combined targeted inhibition. *J Clin Invest*. 128, 789-804. PMID: PMC5785272
- Guryanova OA, Shank K, Spitzer B, Luciani L, Koche RP, Garrett-Bakelman FE, Ganzel C, Durham BH, Mohanty A, Hoermann G, Rivera SA, Chramiec AG, Pronier E, Bastian L, Keller MD, Tovbin D, Loizou E, Weinstein AR, Gonzalez AR, Lieu YK, Rowe JM, Pastore F, McKenney AS, Krivtsov AV, Sperr WR, Cross JR, Mason CE, Tallman MS, Arcila ME, Abdel-Wahab O, Armstrong SA, Kubicek S, Staber PB, Gönen M, Paietta EM, Melnick AM, Nimer S, Mukherjee S, Levine RL. (2016) DNMT3A mutations promote anthracycline resistance in acute myeloid leukemia via impaired nucleosome remodeling. *Nat Med*. 22:1488-1495. PMID: PMC5359771 [Available on 2017-06-01]
- Kleppe M, Kwak M, Koppikar P, Riester M, Keller M, Bastian L, Hricik T, Bhagwat N, McKenney AS, Papalexi E, Abdel-Wahab O, Rampal R, Marubayashi S, Chen JJ, Romanet V, Fridman JS, Bromberg J, Teruya-Feldstein J, Murakami M, Radimerski T, Michor F, Fan R, Levine RL. (2015) JAK-STAT pathway activation in malignant and nonmalignant cells contributes to MPN pathogenesis and therapeutic response. *Cancer Discov*. 5, 316-31. PMID: PMC4355105.
- Meyer SC, Keller MD, Chiu S, Koppikar P, Guryanova OA, Rapaport F, Xu K, Manova K, Pankov D, O'Reilly RJ, Kleppe M, McKenney AS, Shih AH, Shank K, Ahn J, Papalexi E, Spitzer B, Socci N, Viale A, Mandon E, Ebel N, Andraos R, Rubert J, Dammassa E, Romanet V, Dölemeyer A, Zender M, Heinlein M, Rampal R, Weinberg RS, Hoffman R, Sellers WR, Hofmann F, Murakami M, Baffert F, Gaul C, Radimerski T, Levine RL. (2015) CHZ868, a Type II JAK2 Inhibitor, Reverses Type I JAK Inhibitor Persistence and Demonstrates Efficacy in Myeloproliferative Neoplasms. *Cancer Cell*. 28, 15-28. PMID: PMC4503933.
- Rampal R, Ahn J, Abdel-Wahab O, Nahas M, Wang K, Lipson D, Otto GA, Yelensky R, Hricik T, McKenney AS, Chiosis G, Chung YR, Pandey S, van den Brink MR, Armstrong SA, Dogan A, Intlekofer A, Manshouri T, Park CY, Verstovsek S, Rapaport F, Stephens PJ, Miller VA, Levine RL. (2014) Genomic and functional analysis of leukemic transformation of myeloproliferative neoplasms. *Proc Natl Acad Sci U S A*. 111, E5401-10. PMID: PMC4273376.
- McKenney AS, Levine RL. (2013) Isocitrate dehydrogenase mutations in leukemia. *J Clin Invest*. 123, 3672-7. PMID: PMC3754251.
- Russ JB, McKenney AS, Patel AB. (2013) An identity crisis: the need for core competencies in undergraduate medical education. *Med Educ Online*. 18, 1-2. PMID: PMC3641287.
- Francis ER, Goodsmith N, Michelow M, Kulkarni A, McKenney AS, Kishore SP, Bertelsen N, Fein O, Balsari S, Lemery J, Fitzgerald D, Johnson W, Finkel ML. (2012) The global health curriculum of Weill Cornell Medical College: how one school developed a global health program. *Acad Med*. 87, 1296-302.
- Tetenbaum-Novatt J, Hough LE, Mironska R, McKenney AS, Rout MP. (2012) Nucleocytoplasmic transport: a role for nonspecific competition in karyopherin-nucleoporin interactions. *Mol Cell Proteomics*. 11, 31-46. PMID: PMC3418842.
- Barzilla JE, McKenney AS, Cowan AE, Durst CA, Grande-Allen KJ. (2010) Design and validation of a novel splashing bioreactor system for use in mitral valve organ culture. *Ann Biomed Eng*. 38, 3280-94. PMID: PMC4412843.
- Jovanovic-Talisman T, Tetenbaum-Novatt J, McKenney AS, Zilman A, Peters R, Rout MP, Chait BT. (2009) Artificial nanopores that mimic the transport selectivity of the nuclear pore complex. *Nature*. 457, 1023-7. PMID: PMC2764719.
- [View a full listing of Anna Sophia McKenney's journal articles.](#)

▼ Connect

[Contact us](#)

[Locations](#)

[APPOINTMENTS](#)

[800-525-2225](#)



▼ About MSK

[About us](#)

[Careers](#) ■

[Giving](#) ■

▼ Cancer Care

[Adult cancer types](#)

[Child & teen cancer types](#)

[Integrative medicine](#)

[Nutrition & cancer](#)

[Find a doctor](#)

▼ Research & Education

[Sloan Kettering Institute](#)

[Gerstner Sloan Kettering Graduate School](#) ■

[Graduate medical education](#)

[MSK Library](#) ■

[Communication preferences](#)

[Cookie preferences](#)

[Legal disclaimer](#)

[Accessibility statement](#)

[Privacy policy](#)

[Price transparency](#)

[Public notices](#)

© 2024 Memorial Sloan Kettering Cancer Center