



Gerstner Sloan Kettering  
Graduate School of Biomedical Sciences

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MOLECULAR PHARMACOLOGY PROGRAM

[Research](#) **The Michael Kharas Lab**

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## Research



Michael G. Kharas, PhD

Professor

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The Kharas lab is working to identify critical pathways in both normal and leukemic hematopoietic cells.

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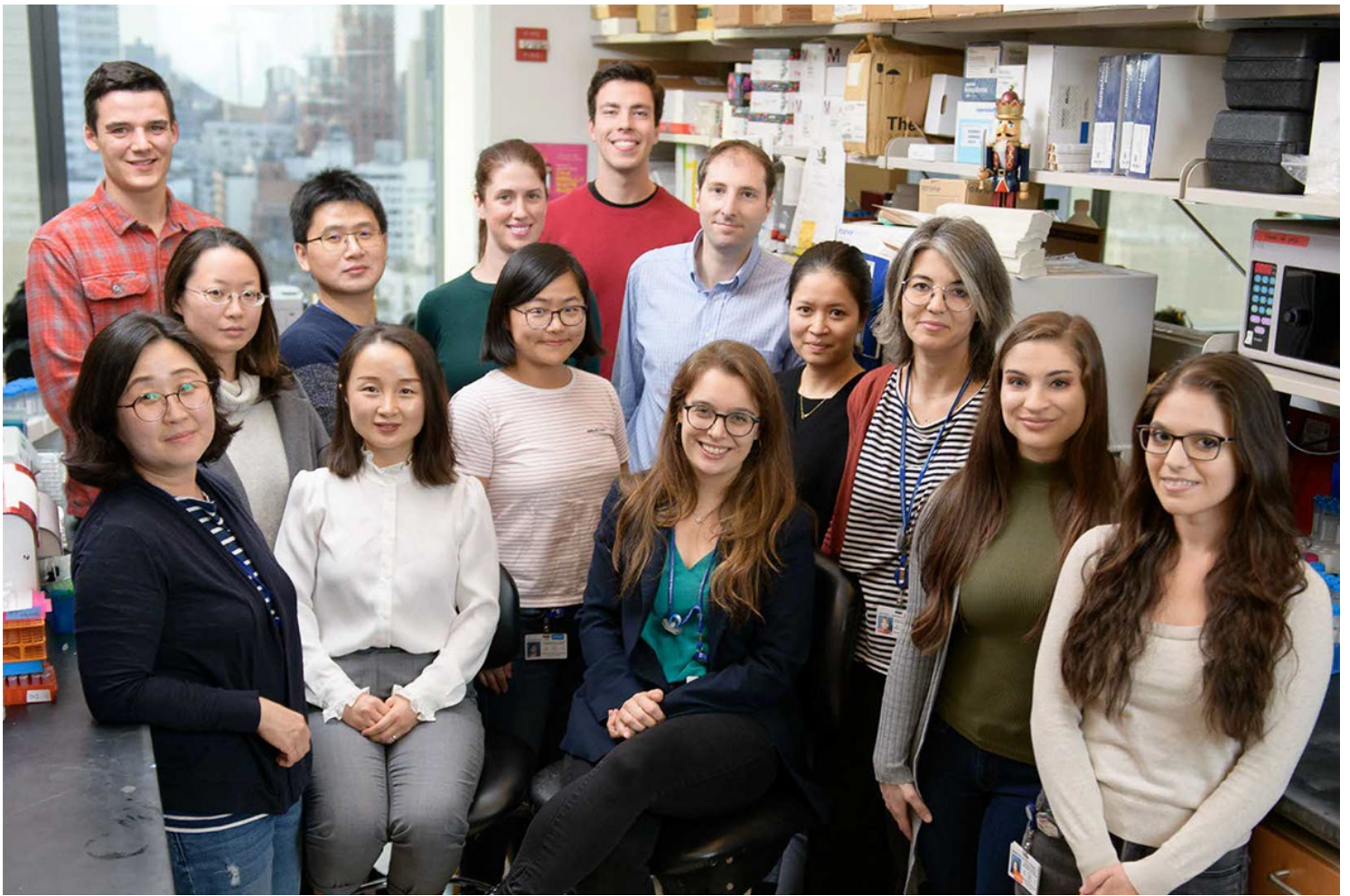
VIDEO | 02:13

Go inside the lab of Michael Kharas from SKI's Molecular Pharmacology Program.

[Video Details](#) →







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## Featured News

IN THE LAB



### [Researchers Discover New Cancer Cell Vulnerability: Droplets in the Nucleus](#)

SKI researchers have learned how tiny droplets prevent a cancer-causing type of messenger RNA from being degraded in leukemia cells.

IN THE LAB



## [Fructose Could Play a Role in Targeting Leukemia](#)

Leukemia cells metabolize fructose in a way that could make them easier to target with drugs.

### IN THE LAB



## [Novel Tool Enables Study of Rare Acute Myeloid Leukemia Stem Cells](#)

MSK investigators have used a lab tool originally developed to study fly nerve cells to uncover new findings about acute myeloid leukemia.

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## Publications Highlights

[Dual IKZF2 and CK1 \$\alpha\$  degrader targets acute myeloid leukemia cells.](#) Park SM, Miyamoto DK, Han GYQ, Chan M, Curnutt NM, Tran NL, Velleca A, Kim JH, Schurer A, Chang K, Xu W, Kharas MG, Woo CM. Cancer Cell. 2023 Apr 10;41(4):726-739.e11. doi: 10.1016/j.ccell.2023.02.010. Epub 2023 Mar 9. PMID: 36898380.

[Serine synthesis pathway flux is essential for acute myeloid leukemia cells to proliferate in fructose-rich conditions.](#) Jeong S, Savino AM, Chirayil R, Cheng Y, Barin E, Park SM, Schurer A, Mullarky E, Cantley LC, Kharas MG\*, Keshari KR\*. Cell Metab. 5 January 2021, Pages 145-159.

[TP53 mutations and RNA binding protein MUSASHI2 drive resistance to PRMT5-targeted therapy in B-cell lymphoma.](#) Erazo T, Evans CM, Zakheim D, Chu KL, Reformat AY, Asgari Z, Yang Z, Ferreira MD, Mehta S, Russo MV, Knezevic A, Zhang XP, Chen Z, Fennell M, Garippa R, Seshan V, de Stanchina E, Barbash O, Batlevi CL, Melnick AM, Younes A\*, Kharas MG\*. Nat Comm 2022 September 27. 13(5626).

[N6-methyladenosine on mRNA facilitates a phase-separated nuclear body that suppresses myeloid leukemic differentiation.](#) Cheng Y\*, Xie W\*, Pickering BF, Chu KL, Savino AM, Yang X, Luo H, Nguyen DTT, Mo S, Barin E, Velleca A, Rohwetter T, Patel DJ, Jaffrey SR, Kharas MG\*. Cancer Cell. July 2021.

[Transcriptional control of CBX5 by the RNA binding proteins RBMX/L1 maintain chromatin state in myeloid leukemia.](#) Prieto C, Nguyen DTT, Liu Z, Wheat J, Perez A, Gourkanti S, Chou T, Barin E, Velleca A, Rohwetter T, Barin E, Chow A, Taggart J, Hoskova K, Dhodapkar M, Schurer A, Barlowe TS, Vu LP, Leslie C, Steidl U, Rabadan R, Kharas MG\*. Nat

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## People



Michael G. Kharas, PhD

*Professor*

Cancer biologist Michael Kharas studies RNA regulators of self-renewal in both normal and leukemic hematopoiesis.

PhD, University of California Irvine

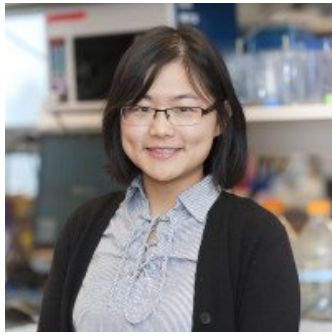
✉ [kharasm@mskcc.org](mailto:kharasm@mskcc.org)

Email Address

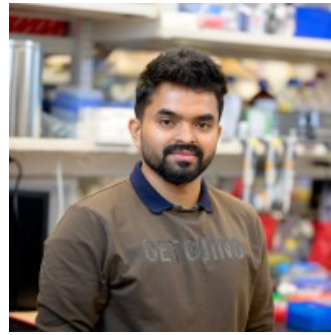
## Members



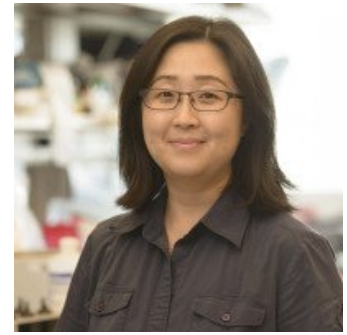
Michael Kharas  
Member



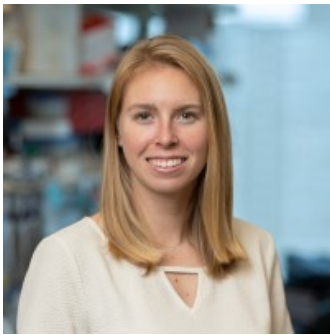
Hanzhi  
Luo  
Research Fellow



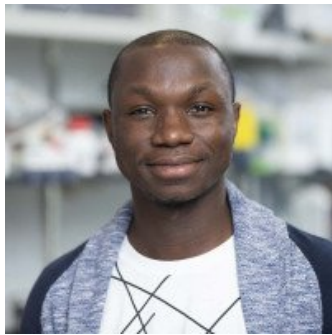
Sibasish  
Mohanty  
Research Scholar



Sun Mi  
Park  
Research Associate

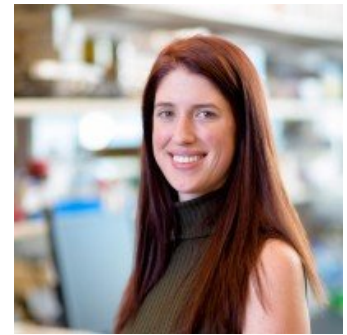


Aspen Pierson  
Research Technician

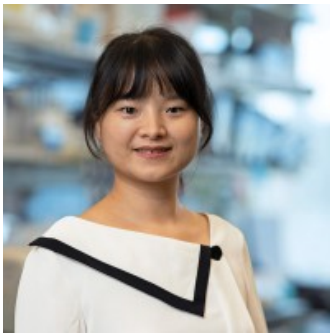


Isaac Wakiro  
GSK Student

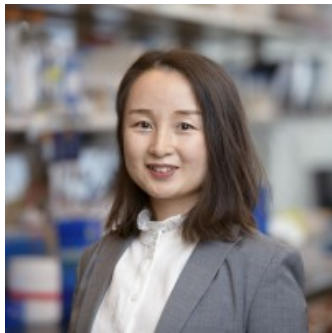
Wei Wei  
Fellow, Graduate Medical  
Education



Laura Wilson  
Senior SKI Administrative  
Assistant



Xueqin  
Xie  
Research Scholar -  
NYSTEM Training Award  
at the CSCB



Xuejing Yang  
Postdoctoral Fellow

Lab Alumni  
+

Lab Affiliations  
+



## Achievements

Leukemia and Lymphoma Society Career Development Award (2017)  
Alex Lemonade Stand Foundation 'A' Award (2016)  
American Society of Hematology Junior Faculty Scholar Award (2011)  
Kimmel Scholar Award (2013)  
V-Scholar Award (2013)

## Open Positions

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To learn more about compensation and benefits for postdoctoral researchers at MSK, please visit [Resources for Postdocs](#)

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## Career Opportunities

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## Research Technician

As a Research Technician you will perform research activities in collaboration with internal/external personnel to complete science-based projects. You will normally receive detailed instructions while making observations, analyzing data and interpreting results according to laboratory procedures. The Research Technician will provide support to all technical/research staff and postdocs.

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## Get in Touch

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Lab Head Email

✂ [Follow the Kharas Lab on X](#)

## Disclosures

Doctors and faculty members often work with pharmaceutical, device, biotechnology, and life sciences companies, and other organizations outside of MSK, to find safe and effective cancer treatments, to improve patient care, and to educate the health care community.

MSK requires doctors and faculty members to report ("disclose") the relationships and financial interests they have with external entities. As a commitment to transparency with our community, we make that information available to the public.

Michael G. Kharas discloses the following relationships and financial interests:



858 Therapeutics, Inc.

Equity; Professional Services and Activities

AstraZeneca

Professional Services and Activities

Kumquat Biosciences

Professional Services and Activities

Transition Bio, Inc.

Professional Services and Activities

The information published here is for a specific annual disclosure period. There may be differences between information on this and other public sites as a result of different reporting periods and/or the various ways relationships and financial interests are categorized by organizations that publish such data.

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This page and data include information for a specific MSK annual disclosure period (January 1, 2022 through disclosure submission in spring 2023). This data reflects interests that may or may not still exist. This data is updated annually.

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