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The Kayvan Keshari Lab

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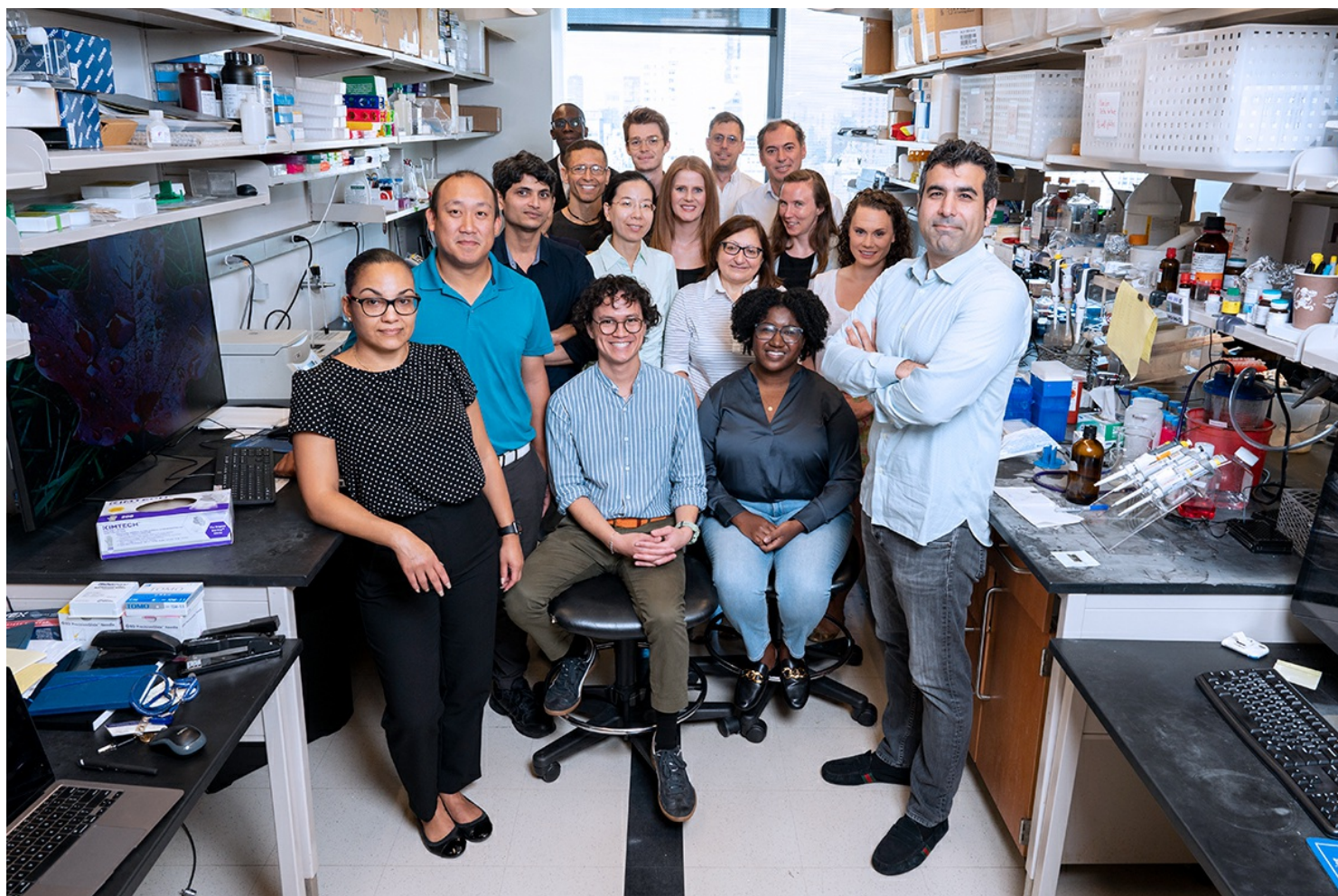
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Kayvan R. Keshari, PhD
Fred Lebow Chair at MSK

The goal of our research program is to improve our biochemical understanding of cancer metabolism and use metabolic changes to develop non-invasive methods for diagnosis as well as approaches to treat cancer. Our work takes advantage of multi-modality methods at all scales, with a special focus in hyperpolarized magnetic resonance, allowing us the ability to bring these approaches to the clinic.

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Featured News

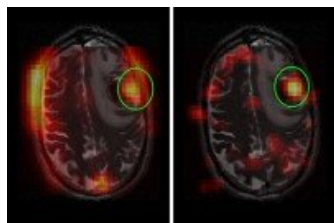
IN THE LAB



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

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

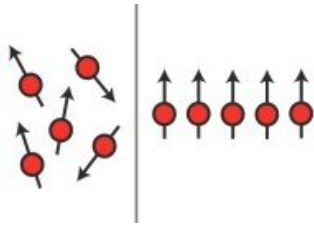
FEATURE



[New Imaging Technique Provides Snapshot of Brain Tumor Activity](#)

A new imaging approach could shorten the time needed to determine whether a brain tumor treatment is working.

IN THE CLINIC



[Hyperpolarized MRI: A New Tool to Assess Treatment Response within Days](#)

Hyperpolarized MRI could allow doctors to get a read on a tumor's response to treatment quickly.

Publications Highlights

DeBerardinis, R. J., & Keshari, K. R. (2022). Metabolic analysis as a driver for discovery, diagnosis, and therapy. *Cell*, 185(15), 2678–2689. <https://doi.org/10.1016/j.cell.2022.06.029>

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Granlund, K. L., Tee, S. S., Vargas, H. A., Lyashchenko, S. K., Reznik, E., Fine, S., Laudone, V., Eastham, J. A., Touijer, K. A., Reuter, V. E., Gonen, M., Sosa, R. E., Nicholson, D., Guo, Y. W., Chen, A. P., Tropp, J., Robb, F., Hricak, H., & Keshari, K. R. (2020). Hyperpolarized MRI of Human Prostate Cancer Reveals Increased Lactate with Tumor Grade Driven by Monocarboxylate Transporter 1. *Cell metabolism*, 31(1), 105–114.e3. <https://doi.org/10.1016/j.cmet.2019.08.024>

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People



Kayvan R. Keshari, PhD

Fred Lebow Chair at MSK


Biochemist and Bioengineer Kayvan Keshari explores changes in cancer metabolism to develop advanced imaging techniques and cancer therapeutics.

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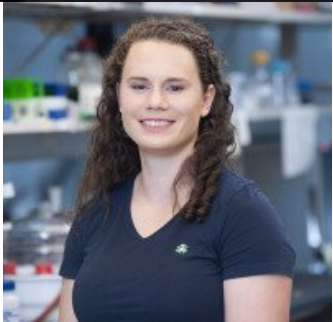
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Physician profile

Members

 Assistant Director Imaging
& Bioengineering Lead

John Consiglio

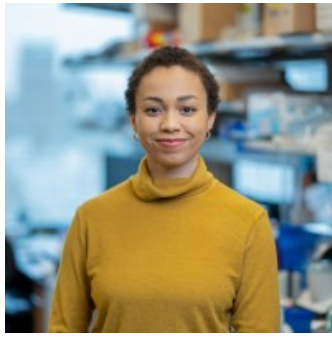


Quinlan
Cullen

Graduate Student



Grace Figlioli
Research Technician



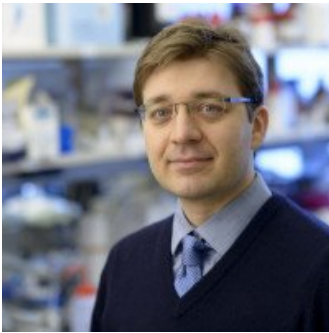
Lyric Haughton
Research Technician



Ana Mark
Project Coordinator



Celia Martinez de la
Torre
Research Scholar



Vesselin
Miloushev
Assistant Attending

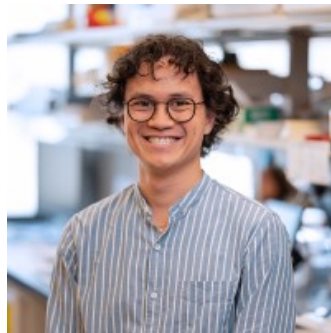


Saket
Patel
Research Scholar

Thasin Peyear
Graduate Student



Paola Porcari
Senior Research Scientist



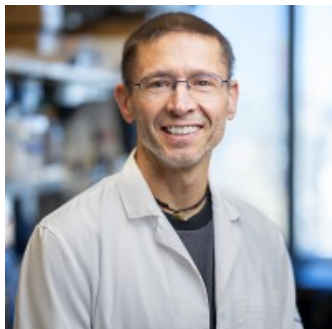
Thomas Ruan
Graduate Student



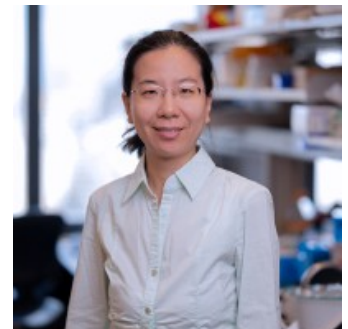
Nancy Santiappillai
Research Fellow



Tanya Schild



Briana Turner



Research Fellow

Thomas
Smoot
Research Technician

Graduate Student

Guannan
Zhang
Research Fellow

Lab Alumni
+

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Get in Touch

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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.

Kayvan R. Keshari discloses the following relationships and financial interests:

Atish Technologies, Inc.

Equity; Intellectual Property Rights

Bruker BioSpin GmbH

Professional Services and Activities (Uncompensated)

Imaginostics, Inc.

Equity

NVision Imaging Technologies GmbH

Equity; Professional Services and Activities

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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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