



Gerstner Sloan Kettering

Graduate School of Biomedical Sciences

Welcome to GSK

Admissions

Cancer Biology

CHEMICAL BIOLOGY PROGRAM

Cancer Engineering

Cancer Engineering **The Derek Tan Lab**

Research

Research

Alumni



Derek Tan, PhD

Chair, Chemical Biology Program, SKI; Tri-Institutional Professor; Eugene W. Kettering Chair

Professor

The identification of small-molecule probes and therapeutic lead compounds to address novel biological targets is a significant current challenge in chemical biology and drug discovery. We are engaged in a two-pronged approach to this problem involving diversity-oriented synthesis and rational design as complementary approaches to ligand discovery. Our work in both of these areas is influenced at multiple levels by insights from natural products. At the core of these efforts is the

development of new chemical methodologies to provide flexible, efficient, systematic access to these structures. We leverage multidisciplinary collaborations with biologists to evaluate these molecules to probe key biological processes and to explore new therapeutic opportunities in cancer and infectious diseases. Our group is strongly committed to promoting diversity and inclusion at all levels and welcomes scientists from all backgrounds!

[View Lab Overview](https://www.sloankettering.edu/research-areas/labs/derek-tan/overview) (<https://www.sloankettering.edu/research-areas/labs/derek-tan/overview>)

Research Projects

- [Research Projects](#)

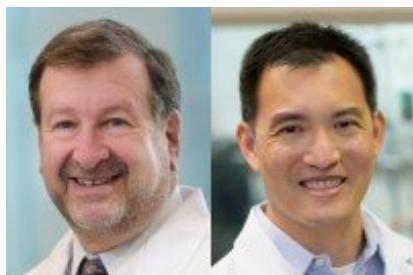
VIDEO | 02:08

Go inside the lab of Derek Tan from SKI's Chemical Biology Program.

[Video Details](https://www.sloankettering.edu/research/ski/research/meet-derek-tan-lab) (<https://www.sloankettering.edu/research/ski/research/meet-derek-tan-lab>)



Featured News



[Sloan Kettering Institute Scientists Retool CAR T Cells to Serve as 'Micropharmacies' for Cancer Drugs](#)

These souped-up versions may help overcome some limitations of existing CAR T cells.



[Science Spotlight: Experience the Drug Discovery Journey with Derek Tan, PhD](#)

The June 15 edition of “MSK Science Spotlight,” features Derek Tan, PhD discussing “A Drug Discovery Journey from Tuberculosis to Cancer.”

IN THE LAB



[New Chemical Biology Program Brings Power of Chemistry to Biomedical Research](#)

A new Sloan Kettering Institute program will enhance the use of chemical principles to investigate

biological processes.

[View All Featured News](#)

Publications Highlights

Structural basis for transthiolation intermediates in the ubiquitin pathway.

Kochańczyk, T.; Hann, Z. S.; Lux, M. C.; Delos Reyes, A. M. V.; Ji, C.; Tan, D. S.* ; Lima, C. D.* *Nature* 2024, 633, 216–223.

[[Abstract](#) | [PubMed](#) | [PMC](#)]

Activation of *N*-formyldipeptide-masked prodrugs by human peptide deformylase.

Geißen, R.; Yildirim, O.; Köhn, M.; Scheinberg, D. A.; Tan, D. S.* *ACS Chem. Biol.* 2025, 2171–2179.

[[Abstract](#) | [PubMed](#) | [PMC](#)]

[View All Publications](#)

People



Derek Tan, PhD

Chair, Chemical Biology Program, SKI; Tri-Institutional Professor; Eugene W. Kettering Chair

Professor

- Derek Tan's lab studies diversity-oriented synthesis and rational drug design of probes and lead compounds for chemical biology and drug discovery.
- BS, Stanford University
- PhD, Harvard University

[!\[\]\(950a62bbddad88d64435fd35607dfc42_img.jpg\) tand@mskcc.org](mailto:tand@mskcc.org)

Email Address

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PDF File

Members



Derek Tan

Member and Lab Head



Kristin Hulsaver

Assistant to Chair

tuberculosis and other infections

Lab

Alumni

Lab Affiliations

Achievements

- Development of salicyl-AMS, a novel antibacterial agent to treat



Yaritza Molina
Administrative Assistant



Christian Cook
Research Technician



Fabian Krutzek
Postdoctoral Fellow



Elijah Mugabe
Graduate Student



Christopher Nieves-Escobar
Graduate Student



Pooja Pandya
Graduate Student

- Louise and Allston Boyer Young Investigator Award for Basic Research, Memorial Sloan Kettering Cancer Center (2010)
- Dean's Award for Excellence in Teaching and Mentoring, Weill Cornell Graduate School of Medical Sciences (2013)

Open Positions

To learn more about available postdoctoral opportunities, please visit our [Career Center](#)

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

Career Opportunities

Training opportunities in the Tan lab.

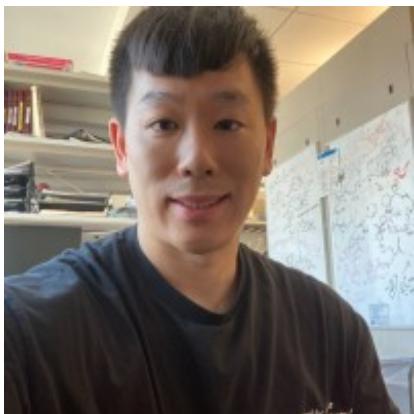
[Apply](#)

Get in Touch

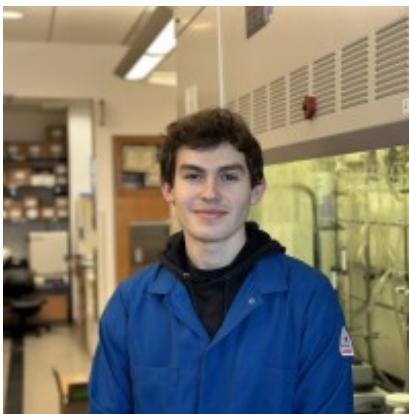
✉ tand@mskcc.org

Lab Head Email

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Kun Ho Park
Postdoctoral Fellow



Nicholas Duran
Research Technician

Lab Phone

Disclosures

Members of the MSK Community 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. These activities outside of MSK further our mission, provide productive collaborations, and promote the practical application of scientific discoveries.



Niklas Rauscher
Postdoctoral Fellow

MSK requires doctors, faculty members, and leaders 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. Not all disclosed interests and relationships present conflicts of interest.

MSK reviews all disclosed interests and relationships to assess whether a conflict of interest exists and whether formal COI management is needed.

Derek Tan discloses the following relationships and financial interests:

- Adjuvance Technologies
Intellectual Property Rights
- Aflac Inc.
Equity
- Amgen
Equity
- Bristol-Myers Squibb
Equity
- CVS Caremark Corp
Equity
- Institute for Research in Biomedicine Barcelona
Professional Services and Activities
- Medtronic
Equity

- Merck & Co Inc.
 - Equity
- Moderna, Inc.
 - Equity
- Regeneron Pharmaceuticals, Inc.
 - Equity
- Research Center for Molecular Medicine of the Austrian Academy of Sciences (CeMM)
 - Professional Services and Activities
- Solventum Corporation
 - Equity
- Tri-Institutional Therapeutics Discovery Institute
 - Fiduciary Role / Position
- UnitedHealth Group
 - Equity

The information published here is a complement to other publicly reported data and 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.

This page and data include information for a specific MSK annual disclosure period (January 1, 2024 through disclosure submission in spring 2025). This data reflects interests that may or may not still exist. This data is updated annually.

Learn more about MSK's COI policies [here](#) . For questions regarding MSK's COI-related policies and procedures, email MSK's Compliance Office at ecoi@mskcc.org .

[View all disclosures \(https://www.sloankettering.edu/disclosures\)](https://www.sloankettering.edu/disclosures)

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