

Curriculum Vitae	
Full name	Lee, Kyoung Eun
Current Position	Assistant Professor
Department	Pharmacology
Affiliation	University of Michigan
Country	USA



Education

07/2018

Postdoctoral Fellow

University of Pennsylvania Perelman School of Medicine, Philadelphia, PA Advisor: M. Celeste Simon, Ph.D.

09/2010

Ph.D., Cellular and Molecular Biology

New York University School of Medicine, New York, NY

Advisor: Dafna Bar-Sagi, Ph.D.

02/2003

B.S., Biological Sciences

Korea Advanced Institute of Science and Technology (KAIST), Korea

Professional Experience

Public and Professional Service

Journal Review

2023-present JCI Insight (Ad Hoc) 2021-present Cancer Cell (Ad Hoc)

2021-present Nature Communications (Ad Hoc) 2020-present Developmental Cell (Ad Hoc)

Grant Review

2023-present Pancreatic Cancer United Kingdom (PCUK) (Ad Hoc)

2023-present Worldwide Cancer Research (Ad Hoc)

<u>Professional Memberships</u>

2011-present Member, American Association for Cancer Research

Intramural Committees

2021-present PhD Admissions Committee for Department of Pharmacology through



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Honors and Awards

2023	American Cancer Society Research Scholar Award (declined due to
2020	overlap with NIH-R01)
2020	U.S. Department of Defense (DOD) Peer Reviewed Cancer Research
	Program Career Development Award
2020	Concern Foundation Conquer Cancer Now Award
2020	Swim Across America Young Investigator Award
2019	Young Investigator Scholarship, AACR-KCA Joint Workshop on Precision
	Medicine
2014	Top Poster Award at AACR Special Conference on Pancreatic Cancer
2009	NYU Graduate School of Arts and Science Student Conference Award
2003 - 200	5 Korea Science and Engineering Foundation Scholarship for Study Abroad
2003	Magna Cum Laude in the Biological Sciences, KAIST, Korea.
1999 - 200	3 Korean Government Scholarship, Ministry of Science and Technology

Grants and Other Financial Support

Current

2023-2028 National Cancer Institute (R01)

Role of hypoxia in shaping the tumor stroma in pancreatic cancer

Role: PI

2023-2027 National Cancer Institute (F31)

Role of hypoxia in CD8+ T cell exclusion and suppression in pancreatic cancer

PI: Ashley Mello Role: Sponsor

2023-2027 National Cancer Institute (F31)

Hypoxic regulation of macrophage migration and function via fibroblast

reprogramming in pancreatic cancer

PI: Sean Hannifin Role: Sponsor



2023-2026 National Cancer Institute (F31)

Role of hypoxia in fibroblast reprogramming in pancreatic cancer

PI: Tenzin Ngodup Role: Sponsor

Completed

2020-2023 Department of Defense Peer Reviewed Cancer Research Program

B cells in pancreatic tumorigenesis

Role: PI

2020-2022 Concern Foundation

Role of hypoxia in B cell migration and function in pancreatic cancer

Role: PI

2020-2021 Swim Across America

Effects of hypoxia on tumor-stroma crosstalk in pancreatic cancer

Role: PI

Patents

"Inhibition of Oncogenic KRas-induced GM-CSF Production and Function"

Patent Number: 9901079 Issue Date: 02/27/2018

Inventors: Bar-Sagi D, Pylayeva-Gupta Y, Lee KE

Presentations

Extramural Invited Seminars

- 2024 (Scheduled) Fox Chase Cancer Center, Philadelphia, PA
- 2024 (Scheduled) OU Health Stephenson Cancer Center, Oklahoma City, OK
- 2023 Pusan National University, Pusan, Korea
- 2023 Wayne State University, Detroit, MI

<u>Invited or Selected Presentations at International/National Meetings</u>

- 2024 (Scheduled) Pancreatic Cancer Center Symposium, Henry Ford Health, Detroit,
- 2024 (Scheduled) 50th Annual Meeting of Korean Cancer Association & 10th International Cancer Conference, Seoul, Korea
- 2024 Translational Research Cancer Centers Consortium, Champion, PA
- 2023 AACR-KCA Joint Conference on Precision Medicine in Cancer, Seoul, Korea
- 2023 NCI PDAC Stromal Reprogramming Consortium (PSRC) Meeting, Ann Arbor, MI

Intramural Invited Seminars

2024 (Scheduled) Tumor Microenvironment & Therapy Joint Symposium, University of Michigan



2024	Rogel Cancer Center Women in Cancer Research Symposium, University of
	Michigan
2022	Immunology Research Seminar, University of Michigan
2020	Center for Cell Plasticity and Organ Design Seminar Series, University of
	Michigan
2020	Rogel Cancer Center Grand Rounds, University of Michigan
2019	Cancer Biology Research Seminar, University of Michigan
2019	Radiation Oncology Research in Progress Seminar, University of Michigan

Teaching

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2022-present	Small group leader, PHRMACOL 502: Principles of Scientific
2022 present	Sman group reader, i inti-media 302. I imelpies of belefiting
	Communication, University of Michigan
	dominameation, only ersity of Michigan

2019 Rogel Cancer Center Grand Rounds at NCRC, University of Michigan

2020-present	Instructor, PHRMACOL 425: Development of New Medications,
	University of Michigan

2020-2022 Co-director, PHRMACOL 646: Graduate Student Seminar Course, University of Michigan

Publications

- 1. Brown BA, Myers PJ, Adair SJ, Pitarresi JR, Sah-Teli SK, Hart WS, Barbeau M, Leong K, Seyler N, Kane W, Lee KE, Stelow E, Simon MC, Koivunen P, Bauer TW, Stanger BZ, Lazzara MJ. (2024) A histone methylation-mapk signaling axis drives durable epithelial-mesenchymal transition in hypoxic pancreas cancer. *Cancer Research*
- 2. Jain C, Parimi SK, Huang W, Hannifin S, Singhal R, Das NK, Lee KE, Shah YM. (2023) Myeloid $Hif2\alpha$ is not essential to maintain systemic iron homeostasis. *Exp Hematol* 125-126:25-36.
- 3. <u>Lee KE</u>. (2023) Hypoxia as a regulator of tumor stroma and metastasis. *Am J Physiol Cell Physiol* 324:C10-C13.
- 4. Mello A, Ngodup T, Lee Y, Donahue KL, Li J, Rao A, Carpenter ES, Crawford HC, di Magliano MP, <u>Lee KE</u>. (2022) Hypoxia promotes an inflammatory phenotype of fibroblasts in pancreatic cancer. *Oncogenesis* 11:56.
- 5. Li F, Huangyang P, Burrows M, Guo K, Riscal R, Godfrey J, <u>Lee KE</u>, Lin N, Lee P, Blair IA, Keith B, Li B, Simon MC. (2020) FBP1 loss disrupts liver metabolism and promotes tumorigenesis through a hepatic stellate cell senescence secretome. *Nat Cell Biol* 22:728-739.
- 6. Lee KE, Spata M, Maduka R, Vonderheide RH, Simon MC. (2018) $Hif1\alpha$ deletion limits tissue regeneration via aberrant B cell accumulation in experimental



pancreatitis. *Cell Reports* 23:3457-3464.

- 7. Li F*, Lee KE*, Simon MC. (2018) Detection of Hypoxia and HIF in Paraffin-Embedded Tumor Tissues. *Methods Mol Biol* 1742:277-282. *Equal contribution
- 8. <u>Lee KE</u>, Spata M, Bayne LJ, Buza EL, Durham AC, Allman D, Vonderheide RH, Simon MC. (2016) $Hif1\alpha$ deletion reveals pro-neoplastic function of B cells in pancreatic neoplasia. *Cancer Discovery* 6:256-269.
 - In the Spotlight. *Cancer Discovery* 6:230-232, 2016.
 - Research Highlight. *Nature Reviews Cancer* 16:67, 2016.
 - Editors' Choice. *Science Signaling* 9:ec77, 2016.
- 9. <u>Lee KE</u>, Simon MC. (2015) SnapShot: Hypoxia-Inducible Factors. *Cell* 163:1288-1288.e1.
- 10. Court H, Amoyel M, Hackman M, <u>Lee KE</u>, Xu R, Miller G, Bar-Sagi D, Bach EA, Bergö MO, Philips MR. (2013) Isoprenylcysteine carboxylmethyltransferase deficiency exacerbates KRAS-driven pancreatic neoplasia via Notch suppression. *J Clin Invest* 123:4681-4694.
- 11. Pylayeva-Gupta Y, <u>Lee KE</u>, Bar-Sagi D. (2013) Microdissection and culture of murine pancreatic ductal epithelial cells. *Methods Mol Biol* 980:267-279.
- 12. <u>Lee KE</u>, Simon MC. (2012) From Stem Cells to Cancer Stem Cells: HIF Takes the Stage. *Curr Opin Cell Biol* 24:232-235.
- 13. Pylayeva-Gupta Y, <u>Lee KE</u>, Hajdu CH, Miller G, Bar-Sagi D. (2012) Oncogenic Krasinduced GM-CSF production supports the development of pancreatic neoplasia. *Cancer Cell* 21:836-847.
- 14. Mallen-St.Clair J, Soydaner-Azeloglu R, <u>Lee KE</u>, Taylor LJ, Livanos A, Pylayeva-Gupta Y, Miller G, Margueron R, Reinberg D, Bar-Sagi D. (2012) EZH2 couples pancreatic regeneration to neoplastic progression. *Genes Dev* 26:439-444.
- 15. <u>Lee KE</u>, Bar-Sagi D. (2010) Oncogenic KRas suppresses inflammation-associated senescence of pancreatic ductal cells. *Cancer Cell* 18:448-458.
 - Research Highlight In Brief. *Nature Reviews Cancer* 11:5, 2011.
- 16. Agbunag C, Lee KE, Buontempo S, Bar-Sagi D. (2006) Pancreatic duct epithelial cell isolation and cultivation in two-dimensional and three-dimensional culture systems. *Methods Enzymol* 407:703-710.