

Stanford



Bomi Lee

Instructor, Pediatrics - Gastroenterology

Bio

BIO

My research focuses on the immunological mechanisms underlying pancreatic diseases, including pancreatitis and pancreatic cancer.

ACADEMIC APPOINTMENTS

- Instructor, Pediatrics - Gastroenterology

HONORS AND AWARDS

- Seed Grant, Hirshberg Foundation (2023)
- R01 (MPI), NIH NIDDK (2022)
- Research Scholar Award, American Gastroenterological Association (2022)
- Research Grant, National Pancreas Foundation (2019)
- NIH T32 Immunology Training Grant, Stanford (2017)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, American Gastroenterological Association (2019 - present)
- Member, American Pancreatic Association (2017 - present)

PROFESSIONAL EDUCATION

- PhD, University of Minnesota, Twin Cities , Pharmacology Department, School of Medicine (2016)
- Master of Science, Kyung Hee University , Microbiology and Immunology, Pharmacy School (2009)
- Bachelor, Kyung Hee University , Oriental Medicine, Pharmacy School (2007)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Immune mechanisms in pancreatic diseases, pancreatitis and pancreatic cancer

Teaching

STANFORD ADVISEES

Postdoctoral Research Mentor

Gyuwon Jeong

Publications

PUBLICATIONS

- **GPR15 in colon cancer development and anti-tumor immune responses.** *Frontiers in oncology*
Namkoong, H., Lee, B., Swaminathan, G., Koh, S. J., Rogalla, S., Paraskevopoulou, M. D., Tang, J., Mikhail, D., Becker, L. S., Habtezion, A. 2023; 13: 1254307
- **Distinct serum immune profiles define the spectrum of acute and chronic pancreatitis from the multi-center PROCEED study.** *Gastroenterology*
Lee, B., Jones, E. K., Manohar, M., Li, L., Yadav, D., Conwell, D. L., Hart, P. A., Vege, S. S., Fogel, E. L., Serrano, J., Andersen, D., Bellin, M. D., Topazian, et al 2023
- **A systems approach points to a therapeutic role for retinoids in asparaginase-associated pancreatitis.** *Science translational medicine*
Tsai, C. Y., Saito, T., Sarangdhar, M., Abu-El-Haija, M., Wen, L., Lee, B., Yu, M., Lipata, D. A., Manohar, M., Barakat, M. T., Contrepois, K., Tran, T. H., Theoret, et al 2023; 15 (687): eabn2110
- **Genetically Engineered Mouse Models Shine New Light on Decades-old Story of Trypsin in Pancreatitis.** *Gastroenterology*
Lee, B., Husain, S. Z., Gukovsky, I. 2023
- **Vitamin A and association with asparaginase-associated pancreatitis in children with acute lymphocytic leukemia.**
Tsai, C., Saito, T., Sarangdhar, M., Abu-El-Haija, M., Wen, L., Lee, B., Manohar, M., Barakat, M. T., Contrepois, K., Bo, N., Ding, Y., Stevenson, K. E., Ladas, et al
LIPPINCOTT WILLIAMS & WILKINS.2022
- **Single-cell sequencing unveils distinct immune microenvironments with CCR6-CCL20 crosstalk in human chronic pancreatitis.** *Gut*
Lee, B., Namkoong, H., Yang, Y., Huang, H., Heller, D., Szot, G. L., Davis, M. M., Husain, S. Z., Pandol, S. J., Bellin, M. D., Habtezion, A. 2021
- **Single-cell Sequencing Unveils Distinct Immune Microenvironment in Human Chronic Pancreatitis**
Lee, B., Namkoong, H., Yang, Y., Huang, H., Heller, D., Szot, G., Davis, M., Pandol, S. J., Bellin, M. D., Husain, S., Habtezion, A.
LIPPINCOTT WILLIAMS & WILKINS.2021: 1073
- **Antitumor effects of iPSC-based cancer vaccine in pancreatic cancer.** *Stem cell reports*
Ouyang, X., Liu, Y., Zhou, Y., Guo, J., Wei, T., Liu, C., Lee, B., Chen, B., Zhang, A., Casey, K. M., Wang, L., Kooreman, N. G., Habtezion, et al 2021
- **Distinct immune characteristics distinguish hereditary and idiopathic chronic pancreatitis.** *The Journal of clinical investigation*
Lee, B., Adamska, J. Z., Namkoong, H., Bellin, M. D., Wilhelm, J. J., Szot, G. L., Louis, D. M., Davis, M. M., Pandol, S., Habtezion, A. 2020
- **Prevalence, risk factors and clinical outcomes of COVID-19 in patients with a history of pancreatitis in Northern California.** *Gut*
Gubatan, J. n., Levitte, S. n., Patel, A. n., Balabanis, T. n., Sharma, A. n., Jones, E. n., Lee, B. n., Manohar, M. n., Swaminathan, G. n., Park, W. n., Habtezion, A. n. 2020
- **RIP140 in Osteoclast Precursors Regulates Bone Homeostasis, Growth and Osteoclast Activity.**
Lee, B., Iwaniec, U. T., Turner, R. T., Lin, Y., Clarke, B. L., Wei, L., Gingery, A.
WILEY.2017: S36
- **Immunology of pancreatitis and environmental factors** *CURRENT OPINION IN GASTROENTEROLOGY*
Lee, B., Zhao, Q., Habtezion, A.
2017; 33 (5): 383–89
- **RIP140 in monocytes/macrophages regulates osteoclast differentiation and bone homeostasis** *JCI INSIGHT*
Lee, B., Iwaniec, U. T., Turner, R. T., Lin, Y., Clarke, B. L., Gingery, A., Wei, L.
2017; 2 (7): e90517
- **Synergistic activation of Arg1 gene by retinoic acid and IL-4 involves chromatin remodeling for transcription initiation and elongation coupling** *NUCLEIC ACIDS RESEARCH*

- Lee, B., Wu, C., Lin, Y., Park, S., Wei, L.
2016; 44 (16): 7568–79
- **Receptor-Interacting Protein 140 Orchestrates the Dynamics of Macrophage M1/M2 Polarization** *JOURNAL OF INNATE IMMUNITY*
Lin, Y., Lee, B., Liu, P., Wei, L.
2016; 8 (1): 97–107
 - **Reducing RIP140 Expression in Macrophage Alters ATM Infiltration, Facilitates White Adipose Tissue Browning, and Prevents High-Fat Diet-Induced Insulin Resistance** *DIABETES*
Liu, P., Lin, Y., Lee, B., McCrady-Spitzer, S. K., Levine, J. A., Wei, L.
2014; 63 (12): 4021–31
 - **Linker Histone H1.2 cooperates with Cul4A and PAF1 to drive H4K31 ubiquitylation-mediated transactivation.** *Cell reports*
Kim, K., Lee, B., Kim, J., Choi, J., Kim, J. M., Xiong, Y., Roeder, R. G., An, W.
2013; 5 (6): 1690–703
 - **Selective requirement of H2B N-Terminal tail for p14ARF-induced chromatin silencing.** *Nucleic acids research*
Choi, J., Kim, H., Kim, K., Lee, B., Lu, W., An, W.
2011; 39 (21): 9167–80
 - **Inhibitory effects of steroid saponins isolated from the rhizomes of Anemarrhena asphodeloides against passive cutaneous anaphylaxis reaction and pruritus** *IMMUNOPHARMACOLOGY AND IMMUNOTOXICOLOGY*
Lee, B., Trinh, H., Jung, K., Han, S., Kim, D.
2010; 32 (3): 357–63
 - **Anti-scratching Behavioral Effects of N-Stearoyl-phytosphingosine and 4-Hydroxysphinganine in Mice** *LIPIDS*
Ryu, K., Lee, B., Lee, I., Oh, S., Kim, D.
2010; 45 (7): 613–18
 - **Timosaponin AIII, a saponin isolated from Anemarrhena asphodeloides, ameliorates learning and memory deficits in mice (vol 93, pg 121, 2009)** *PHARMACOLOGY BIOCHEMISTRY AND BEHAVIOR*
Lee, B., Jung, K., Kim, D.
2010; 94 (3): 496
 - **Mangiferin Inhibits Passive Cutaneous Anaphylaxis Reaction and Pruritus in Mice** *PLANTA MEDICA*
Lee, B., Trinh, H., Bae, E., Jung, K., Kim, D.
2009; 75 (13): 1415–17
 - **Timosaponin AIII, a saponin isolated from Anemarrhena asphodeloides, ameliorates learning and memory deficits in mice** *PHARMACOLOGY BIOCHEMISTRY AND BEHAVIOR*
Lee, B., Jung, K., Kim, D.
2009; 93 (2): 121–27
 - **Glycosaminoglycan Degradation-inhibitory Lactic Acid Bacteria Ameliorate 2,4,6-Trinitrobenzenesulfonic Acid-Induced Colitis in Mice** *JOURNAL OF MICROBIOLOGY AND BIOTECHNOLOGY*
Lee, B., Lee, J., Lee, H., Bae, E., Huh, C., Ahn, Y., Kim, D.
2009; 19 (6): 616–21
 - **Mangiferin Ameliorates Scopolamine-Induced Learning Deficits in Mice** *BIOLOGICAL & PHARMACEUTICAL BULLETIN*
Jung, K., Lee, B., Han, S., Ryu, J., Kim, D.
2009; 32 (2): 242–46
 - **Lactobacillus suntoryeus inhibits pro-inflammatory cytokine expression and TLR-4-linked NF-kappa B activation in experimental colitis** *INTERNATIONAL JOURNAL OF COLORECTAL DISEASE*
Lee, J., Lee, B., Lee, H., Bae, E., Lee, H., Ahn, Y., Lim, K., Huh, C., Kim, D.
2009; 24 (2): 231–37
 - **Antiallergic effect of the root of Paeonia lactiflora and its constituents paeoniflorin and paeonol** *ARCHIVES OF PHARMACAL RESEARCH*
Lee, B., Shin, Y., Bae, E., Han, S., Kim, J., Kang, S., Kim, D.
2008; 31 (4): 445–50

- **Antiasthmic effect of fermented *Artemisia princeps* in asthmic mice induced by ovalbumin** *JOURNAL OF MICROBIOLOGY AND BIOTECHNOLOGY*
Bae, Eun-Ah, Min, S., Lee, B., Kim, N., Baek, N., Han, E., Chung, H., Kim, D.
2007; 17 (9): 1554–57
- **Inhibitory effect of schizandrin on passive cutaneous anaphylaxis reaction and scratching behaviors in mice** *BIOLOGICAL & PHARMACEUTICAL BULLETIN*
Lee, B., Bae, E., Trinh, H., Shin, Y., Phuong, T., Bae, K., Kim, D.
2007; 30 (6): 1153–56
- **In vitro and in vivo antiallergic effects of *Glycyrrhiza glabra* and its components** *PLANTA MEDICA*
Shin, Y., Bae, E., Lee, B., Lee, S., Kim, J., Kim, Y., Kim, D.
2007; 73 (3): 257–61
- **Effect of fermented lactic acid bacteria on antiallergic effect of *Artemisia princeps Pampanini*** *JOURNAL OF MICROBIOLOGY AND BIOTECHNOLOGY*
Shin, Y., Bae, E., Lee, B., Min, S., Baek, N., Ryu, S., Chung, H., Kim, D.
2006; 16 (9): 1464–67
- **Lactic acid bacteria increase antiallergic effect of *Artemisia princeps Pampanini SS-1*** *ARCHIVES OF PHARMACAL RESEARCH*
Lee, S., Shin, Y., Bae, E., Lee, B., Min, S., Baek, N., Chung, H., Kim, N., Kim, D.
2006; 29 (9): 752–56