



Mahesh Pandit

Postdoctoral Scholar, Immunology and Rheumatology

Bio

BIO

I have completed my PhD in Immunology from Yeungnam University, South Korea. I studied adaptive immune cells especially focusing T cells and its relation to autoimmunity and tumor. I worked on different conditional knockout mice to investigate the cellular mechanisms. Similarly, I worked on disease induced mice to study its preventive and therapeutic approaches. Currently, I am working on Translational immunology as a Postdoctoral Researcher at Stanford University department of Immunology and Rheumatology. I focus on Epstein-Barr Virus, B cells and its relation with various autoimmune diseases.

PROFESSIONAL EDUCATION

- Master of Science, Tribhuban University (2017)
- Doctor of Philosophy, Yeungnam University (2022)
- Bachelor of Science, Tribhuban University (2009)
- Ph.D., Yeungnam University , Immunology (2022)
- Master of Science, Tribhuvan University , Medical Microbiology (2017)
- Bachelor of Science, Tribhuvan University , Microbiology (2009)

STANFORD ADVISORS

- William Robinson, Postdoctoral Research Mentor
- William Robinson, Postdoctoral Faculty Sponsor

LINKS

- My Lab Site: <https://med.stanford.edu/robinsonlab>
- Google Scholar: <https://scholar.google.com/citations?user=LfUcDfgAAAAJ&hl>

Research & Scholarship

LAB AFFILIATIONS

- William Robinson, Robinson's Lab (11/1/2022 - - 10/31/2026)

Publications

PUBLICATIONS

- Epstein-Barr virus reprograms autoreactive B cells as antigen-presenting cells in systemic lupus erythematosus. *Science translational medicine*

Younis, S., Moutusy, S. I., Rasouli, S., Jahanbani, S., Pandit, M., Wu, X., Acharya, S., Sharpe, O., Wijeratne, T. U., Harris, M. L., Yang, E. Y., Chaichian, Y., Parsafar, et al
2025; 17 (824): eady0210

- **Methionine consumption by cancer cells drives a progressive upregulation of PD-1 expression in CD4 T cells.** *Nature communications*
Pandit, M., Kil, Y. S., Ahn, J. H., Pokhrel, R. H., Gu, Y., Mishra, S., Han, Y., Ouh, Y. T., Kang, B., Jeong, M. S., Kim, J. O., Nam, J. W., Ko, et al
2023; 14 (1): 2593
- **AMPK suppresses Th2 cell responses by repressing mTORC2.** *Experimental & molecular medicine*
Pandit, M., Timilshina, M., Gu, Y., Acharya, S., Chung, Y., Seo, S. U., Chang, J. H.
2022
- **AMPK promotes antitumor immunity by downregulating PD-1 in regulatory T cells via the HMGR/p38 signaling pathway.** *Molecular cancer*
Pokhrel, R. H., Acharya, S., Ahn, J. H., Gu, Y., Pandit, M., Kim, J. O., Park, Y. Y., Kang, B., Ko, H. J., Chang, J. H.
2021; 20 (1): 133
- **LKB1-PTEN axis controls Th1 and Th17 cell differentiation via regulating mTORC1.** *Journal of molecular medicine (Berlin, Germany)*
Pandit, M., Timilshina, M., Chang, J. H.
2021; 99 (8): 1139-1150
- **Geranylgeranyl pyrophosphate amplifies Treg differentiation via increased IL-2 expression to ameliorate DSS-induced colitis.** *European journal of immunology*
Pandit, M., Acharya, S., Gu, Y., Seo, S. U., Kweon, M. N., Kang, B., Chang, J. H.
2021
- **Memory B Cell Activation and Dysregulation in Systemic Lupus Erythematosus**
Younis, S., Moutusy, S., Jahanbani, S., Wu, X., Harris, M., Pandit, M., van Dam, L., Sharpe, O., Utz, P., Robinson, W.
WILEY.2024: 3653-3655
- **Nanoparticle-based Methionine and AICAR delivery Elicits Robust Antitumor Immune Response**
Gu, Y., Nguyen, L., Pandit, M., Mishra, S., Pokhrel, R., Kim, J., Chang, J.
AMER ASSOC IMMUNOLOGISTS.2024
- **Modulation of NLRP3 inflammasomes activation contributes to improved survival and function of mesenchymal stromal cell spheroids.** *Molecular therapy : the journal of the American Society of Gene Therapy*
Pham, D. V., Shrestha, P., Nguyen, T. K., Park, J., Pandit, M., Chang, J. H., Kim, S. Y., Choi, D. Y., Han, S. S., Choi, I., Park, G. H., Jeong, J. H., Park, et al
2023; 31 (3): 890-908
- **T-cell engaging poly(lactic-co-glycolic acid) nanoparticles as a modular platform to induce a potent cytotoxic immunogenic response against PD-L1 overexpressing cancer.** *Biomaterials*
Duwa, R., Pokhrel, R. H., Banstola, A., Pandit, M., Shrestha, P., Jeong, J. H., Chang, J. H., Yook, S.
2022; 291: 121911
- **Engineering of hybrid spheroids of mesenchymal stem cells and drug depots for immunomodulating effect in islet xenotransplantation.** *Science advances*
Nguyen, T. T., Pham, D. V., Park, J., Phung, C. D., Nepal, M. R., Pandit, M., Shrestha, M., Son, Y., Joshi, M., Jeong, T. C., Park, P. H., Choi, D. Y., Chang, et al
2022; 8 (34): eabn8614
- **Reactive oxygen species-responsive dual-targeted nanosystem promoted immunogenic cell death against breast cancer** *BIOENGINEERING & TRANSLATIONAL MEDICINE*
Banstola, A., Pandit, M., Duwa, R., Chang, J., Jeong, J., Yook, S.
2022
- **Preparation and evaluation of dabrafenib-loaded, CD47-conjugated human serum albumin-based nanoconstructs for chemimmunomodulation.** *Colloids and surfaces. B, Biointerfaces*
Pham, L. M., Poudel, K., Phung, C. D., Nguyen, T. T., Pandit, M., Nguyen, H. T., Chang, J. H., Jin, S. G., Jeong, J. H., Ku, S. K., Choi, H. G., Yong, C. S., Kim, et al
2021; 208: 112093

- **Combination chemotherapeutic and immune-therapeutic anticancer approach via anti-PD-L1 antibody conjugated albumin nanoparticles.** *International journal of pharmaceutics*

Pham, L. M., Poudel, K., Ou, W., Phung, C. D., Nguyen, H. T., Nguyen, B. L., Karmacharya, P., Pandit, M., Chang, J. H., Jeong, J. H., Ku, S. K., Yong, C. S., Choi, et al
2021; 605: 120816

- **Globular Adiponectin Inhibits Breast Cancer Cell Growth through Modulation of Inflammasome Activation: Critical Role of Sestrin2 and AMPK Signaling.** *Cancers*

Pham, D. V., Raut, P. K., Pandit, M., Chang, J. H., Katila, N., Choi, D. Y., Jeong, J. H., Park, P. H.
2020; 12 (3)