



## Kazukuni Hayashi

Postdoctoral Scholar, Pathology

### Bio

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#### PROFESSIONAL EDUCATION

- Bachelor of Science, University of Hawaii Manoa (2014)
- Doctor of Philosophy, Baylor College Of Medicine (2022)

#### STANFORD ADVISORS

- Edgar Engleman, Postdoctoral Faculty Sponsor

### Publications

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#### PUBLICATIONS

- **Chemotherapy-induced activation of caspase-1 and IL-1 $\alpha$  release by cancer cells remotely skews myelopoiesis to drive pro tumorigenic systemic neutrophil-dominant inflammation.** *Nature communications*  
Wong, S. Q., Hayashi, K., Subel, E. J., Huang, Y. H., Gao, H., Garcia, H. E., Porter, S. J., Karabici, M., Hoi, X. P., Alonzo, M. D., Kasabyan, A., Tsouko, E., Shin, et al  
2026
- **Caspase-1-dependent pyroptosis converts  $\alpha$ SMA+ CAFs into collagen-IIIhigh iCAFs to fuel chemoresistant cancer stem cells.** *Science advances*  
Gao, H., Wong, S. Q., Subel, E., Huang, Y. H., Lee, Y. C., Hayashi, K., Alonzo, M. E., Karabici, M., Hoi, X. P., Kasabyan, A., Mo, Q., Melchiodi, Z., El-Zaatari, et al  
2025; 11 (24): eadt8697
- **Tumor-derived erythropoietin acts as an immunosuppressive switch in cancer immunity.** *Science (New York, N.Y.)*  
Chiu, D. K., Zhang, X., Cheng, B. Y., Liu, Q., Hayashi, K., Yu, B., Lee, R., Zhang, C., An, X., Rajadas, J., Reticker-Flynn, N. E., Rankin, E. B., Engleman, et al  
2025; 388 (6745): eadr3026
- **Cell death-induced immunogenicity enhances chemoimmunotherapeutic response by converting immune-excluded into T-cell inflamed bladder tumors** *NATURE COMMUNICATIONS*  
Nikolos, F., Hayashi, K., Hoi, X., Alonzo, M., Mo, Q., Kasabyan, A., Furuya, H., Trepel, J., Di Vizio, D., Guarnerio, J., Theodorescu, D., Rosser, C., Apolo, et al  
2022; 13 (1): 1487
- **Inhibitory DAMPs in immunogenic cell death and its clinical implications** *CELL STRESS*  
Hayashi, K., Nikolos, F., Chan, K. S.  
2021; 5 (4): 52-54
- **Tippling the immunostimulatory and inhibitory DAMP balance to harness immunogenic cell death** *NATURE COMMUNICATIONS*  
Hayashi, K., Nikolos, F., Lee, Y. C., Jain, A., Tsouko, E., Gao, H., Kasabyan, A., Leung, H. E., Osipov, A., Jung, S. Y., Kurtova, A. V., Chan, K. S.  
2020; 11 (1): 6299

- **Plasminogen activator inhibitor-2 (PAI-2) overexpression supports bladder cancer development in PAI-1 knockout mice in N-butyl-N- (4-hydroxybutyl)-nitrosamine- induced bladder cancer mouse model** *JOURNAL OF TRANSLATIONAL MEDICINE*  
Furuya, H., Hayashi, K., Shimizu, Y., Kim, N., Tsukikawa, Y., Chen, R., Sun, Y., Chan, O. T. M., Pagano, I., Peres, R., Hokutan, K., Igari, F., Chan, et al  
2020; 18 (1): 57
  
- **Collagen-rich airway smooth muscle cells are a metastatic niche for tumor colonization in the lung** *NATURE COMMUNICATIONS*  
Lee, Y., Kurtova, A., Xiao, J., Nikolos, F., Hayashi, K., Tramel, Z., Jain, A., Chen, F., Chokshi, M., Lee, C., Bao, G., Zhang, X., Shen, et al  
2019; 10: 2131
  
- **Prognostic Power of a Tumor Differentiation Gene Signature for Bladder Urothelial Carcinomas** *JNCI-JOURNAL OF THE NATIONAL CANCER INSTITUTE*  
Mo, Q., Nikolos, F., Chen, F., Tramel, Z., Lee, Y., Hayashi, K., Xiao, J., Shen, J., Chan, K.  
2018; 110 (5): 448-459