Stanford

Azusa Terasaki

Postdoctoral Scholar, Pathology

Bio

BIO

Azusa Terasaki, MD, PhD, is a Postdoctoral scholar in the Department of Pathology at Stanford University School of Medicine. Her research focuses on tumor immunology and cancer metabolism, with a particular interest in mitochondrial transfer between cancer and immune cells and its role in immune suppression and metastasis.

Dr. Terasaki received her medical degree and PhD in Japan, where she completed her surgical training and is a board-certified surgeon with additional certifications as a breast specialist and in cancer therapy. During her clinical career, she developed a strong interest in translational research that bridges fundamental discoveries and patient care.

Her current work investigates how cancer cells reprogram immune cells through organelle transfer, integrating imaging, flow cytometry, and multi-omic approaches to uncover novel mechanisms of tumor–immune interaction. Her goal is to identify new therapeutic targets and biomarkers to improve cancer treatment outcomes.

HONORS AND AWARDS

- 2025 Stanford Postdoc Champions: Community Impact Award, Stanford University (10/08/2025)
- Overseas Research Fellowships—Restart Research Abroad (RRA), Japan Society for the Promotion of Science (JSPS) (04/01/2025-03/31/2027)
- Grant-in-Aid for Early-Career Scientists(KAKENHI), Japan Society for the Promotion of Science (JSPS) (04/01/2022-03/31-2024)

STANFORD ADVISORS

- Thomas Montine, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Mitochondrial transfer from immune to tumor cells enables lymph node metastasis.** *Cell metabolism*
  Terasaki, A., Bhatnagar, K., Weiner, A. T., Tan, Y., Szeifert, V., Huang, H. L., Wiggers, L., Rodrigues, V., Rada, C. C., Shankar, V., Saito, S., Ankomah, P. O., Roth, et al
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- **Mitochondria redistribution organizes the immunosuppressive tumor ecosystem.** *bioRxiv : the preprint server for biology*
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- **When Central Tolerance Fails: Thymic Malignancies at the Intersection of Cancer Immunity and Autoimmunity.** *Cancers*
  Abikenari, M., Choi, J., Enayati, I., Tucker, A., Bhatnagar, K., Chen, Y., Himic, V., Liu, J., Nageeb, G., Poe, J., Ong, S. J., Sanker, V., Diehl, et al

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- **Neutrophils Expressing Programmed Death-Ligand 1 Play an Indispensable Role in Effective Bacterial Elimination and Resolving Inflammation in Methicillin-Resistant Staphylococcus aureus Infection.** *Pathogens (Basel, Switzerland)*
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- **Safety and Efficacy of Compression Therapy to Prevent Chemotherapy-Induced Peripheral Neuropathy in Lower Extremities of Breast Cancer Patients: A Pilot Study.** *Cureus*
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- **Doublet or Triplet Antiemetic Prophylaxis for Nausea and Vomiting Induced by Trastuzumab Deruxtecan: an Open-Label, Randomized, and Multicenter Exploratory Phase 2 Study.** *Journal of Cancer*
  Iihara, H., Shimokawa, M., Bando, H., Niwa, Y., Mizuno, Y., Kawaguchi, Y., Kitahora, M., Murakami, A., Kawai, M., Ishida, K., Takeuchi, M., Ishihara, K., Iyoda, et al
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- **Local recurrence of breast cancer histologically resembling Paget disease presumably due to needle tract seeding: a case report.** *International cancer conference journal*
  Terasaki, A., Bando, H., Ueda, A., Okazaki, M., Hashimoto, S., Iguchi-Manaka, A., Kondo, Y., Hara, H.
  2023; 12 (2): 143-148

- **Absolute Lymphocyte Count as an Independent Prognostic Factor in Metastatic Breast Cancer: A Retrospective Study.** *Oncology*
  Sawa, A., Bando, H., Kamohara, R., Takeuchi, N., Terasaki, A., Okazaki, M., Iguchi-Manaka, A., Hara, H.
  2022; 100 (11): 591-601

- **Long-Term Fluorescent Tissue Marking Using Tissue-Adhesive Porphyrin with Polycations Consisting of Quaternary Ammonium Salt Groups.** *International journal of molecular sciences*
  Komatsu, Y., Yoshitomi, T., Furuya, K., Ikeda, T., Terasaki, A., Hoshi, A., Kawazoe, N., Chen, G., Matsui, H.
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- **Elevated Production of Mitochondrial Reactive Oxygen Species via Hyperthermia Enhanced Cytotoxic Effect of Doxorubicin in Human Breast Cancer Cell Lines MDA-MB-453 and MCF-7.** *International journal of molecular sciences*
  Terasaki, A., Kurokawa, H., Ito, H., Komatsu, Y., Matano, D., Terasaki, M., Bando, H., Hara, H., Matsui, H.
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- **Enhancement of PDT-cytotoxicity via ROS induced by indomethacin in metastatic breast cancer** *JOURNAL OF PORPHYRINS AND PHTHALOCYANINES*
  Terasaki, A., Kurokawa, H., Indo, H. P., Bando, H., Hara, H., Majima, H. J., Matsui, H., Ito, H.
  2019; 23 (11-12): 1440-1447

- **Exacerbation of prothrombin time-international normalized ratio before second polymyxin B cartridge hemoperfusion predicts poor outcome of patients with severe sepsis and/or septic shock.** *The Journal of surgical research*
  Ishizuka, M., Terasaki, A., Kubota, K.
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