Stanford



Aanchal Preet Kaur

Postdoctoral Scholar, Hematology-Oncology

Bio

BIO

Dr. Aanchal Preet Kaur is a post-doctoral fellow in the Ramakrishna lab interested in understanding the role of myeloid cells in driving immunosuppression and resistance to CAR T cell therapies in pediatric patients with diffuse midline glioma. Her work involves developing organoid models to study the interaction of myeloid cells and CAR T cells and further employ these models to validate targets identified in patient single cell sequencing data using CRISPR technology.

Dr. Aanchal Preet Kaur received her PhD in Oncology at the University of Nottingham, United Kingdom where she focused on developing dendritic cell vaccines for melanoma. In her earlier post-doctoral work at Providence Cancer Institute with Dr. Michael Gough, she developed spheroid models to study the impact of radiation therapy on immune cell-cancer cell interactions.

HONORS AND AWARDS

- Vice Chancellor's Scholarship Award, University of Nottingham (2017-2021)
- National Overseas Scholarship, Government of India (2017-2019)
- Developing Solutions Scholarship Award, University of Nottingham (2014-2015)
- Merit Award, European Society for Medical Oncology Congress (2019)
- Research grant, Astrazeneca (2019)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, University Of Nottingham (2021)
- Master of Science, University Of Nottingham (2015)
- BE, PES Institute of Technology , Biotechnology (2014)

STANFORD ADVISORS

- Sneha Ramakrishna, Postdoctoral Faculty Sponsor

COMMUNITY AND INTERNATIONAL WORK

- Science Small Group Mentorship

LINKS

- LinkedIn: https://www.linkedin.com/in/aanchal-preet-kaur-a93b0957/
- Current lab website: https://med.stanford.edu/ramakrishnalab/people.html

Publications

PUBLICATIONS

- **CAR T cells for pediatric CNS tumors: Clinical experience and reverse translational opportunities.** *Molecular therapy. Oncology*
  Song, K. W., Kaur, A. P., Ramakrishna, S.
  2026; 34 (2): 201196

- **HUMANIZED ANTI-CAR ANTIBODIES AFFECT DURABLE RESPONSE TO GD2-CAR T-CELLS IN DIFFUSE MIDLINE GLIOMA**
  Chen, Y., Song, K., Huang, Y., Iswari, N., Desai, M., Ehlinger, Z., Daghagh, H., Reynolds, K., Mahdi, J., Majzner, R., Richards, B., Kamens, J., Barsan, et al
  OXFORD UNIV PRESS INC.2025: v114

- **Conditional knockouts demonstrate that the autoimmune-associated nuclease DNAse1L3 regulates tumor control by radiation therapy in preclinical models**
  Alice, A. F., Friedman, D. J., Kramer, G., Kaur, A., Keyel, P., Crittenden, M., Gough, M. J.
  OXFORD UNIV PRESS.2025

- **Ex vivo analysis of radiation effects on tumor infiltrating immune cells using tumor explants.** *Methods in cell biology*
  Kaur, A. P., Kramer, G., Crittenden, M. R., Gough, M. J.
  2023; 174: 55-63

- **The role of dendritic cells in radiation-induced immune responses.** *International review of cell and molecular biology*
  Preet Kaur, A., Alice, A., Crittenden, M. R., Gough, M. J.
  2023; 378: 61-104

- **Resistance Mechanisms and Barriers to Successful Immunotherapy for Treating Glioblastoma.** *Cells*
  Adhikaree, J., Moreno-Vicente, J., Kaur, A. P., Jackson, A. M., Patel, P. M.
  2020; 9 (2)

- **Impaired circulating myeloid CD1c+ dendritic cell function in human glioblastoma is restored by p38 inhibition - implications for the next generation of DC vaccines.** *Oncoimmunology*
  Adhikaree, J., Franks, H. A., Televantos, C., Vaghela, P., Kaur, A. P., Walker, D., Schmitz, M., Jackson, A. M., Patel, P. M.
  2019; 8 (7): 1593803

PRESENTATIONS

- Defining the immune-biology of myeloid cell states in Diffuse Intrinsic Pontine Glioma patients undergoing GD2-CAR-T cell therapy. - Stanford University (10/24/2024)
- Defining the immune-biology of myeloid cell states in Diffuse Intrinsic Pontine Glioma patients undergoing GD2-CAR-T cell therapy. - Stanford Research Park members (10/16/2024)
- Established 3D tumor-spheroid co-culture models demonstrate macrophage plasticity and unveil potential supportive roles of macrophages in the T cell-tumor-macrophage crosstalk post radiation therapy - American Association for Cancer Research (AACR) Conference Attendees (4/10/2024)
- 3D co-culture models demonstrate radiation-mediated activation of tumor-associated macrophages - IMMUNOLOGY 2023 attendees (5/13/2023)
- Deciphering the role of MyD88 signaling pathway in regulating type I IFN-mediated responses to radiation therapy in solid tumors - American Association for Cancer Research (AACR) Conference attendees (4/19/2023)
- Ex vivo tumor explant analyses reveal suppression of tumor-infiltrating T cells, but not myeloid cells, post radiation treatment. - Radiation Research Society (RRS) Annual meeting attendees (10/16/2022)
- Novel dendritic cell based immunotherapy for advanced cancer - European Society for Medical Oncology Congress (9/28/2019)
- Novel Dendritic Cell based Immunotherapy for Advanced Cancer - British Society for Immunology (BSI) (12/4/2019)
- Advanced Dendritic Cell Immunotherapy for Late-Stage Cancer Patients - British Association for Cancer Research (BARC) (7/2/2019)
- Alterations in natural Dendritic Cell (DC) subsets in advanced cancer patients - European Congress of Immunology (9/3/2018)
- “Evaluation of Anti-oxidant, Anti-tumor and Anti-leukemic Effect of Phytochemicals obtained from Plantago ovata” - Manipal Institute of Technology (4/12/2014)