Stanford



Zinaida Good, Ph.D.

Instructor, Stanford Institutes of Medicine

NIH Biosketch available Online

Curriculum Vitae available Online

Bio

BIO

Zinaida Good, Ph.D. is an instructor working at the interface between systems biology and cancer immunotherapy at Stanford University. Dr. Good's research with Profs. Crystal L. Mackall and Sylvia K. Plevritis is focused on investigating why chimeric antigen receptor (CAR) T cell immunotherapies succeed or fail in patients, and she has recently identified CAR T regulatory cells as a correlate of progression following CD19-CAR therapy for large B cell lymphoma. Dr. Good earned her Ph.D. in Computational & Systems Immunology from Stanford University, where she trained with Profs. Garry P. Nolan and Sean C. Bendall and defined methods to build and leverage lymphocyte differentiation trajectories in health and cancer. Her background is in experimental immunology and oncology and combines 2 years of experience working in Discovery Oncology at Genentech with B.S. and M.S. degrees in Microbiology & Immunology from the University of British Columbia, where she investigated the mechanisms of T cell memory with Prof. Michael R. Gold. Dr. Good's work includes 4 first-author papers (Nature Medicine 2018 & 2022, Nature Biotechnology 2019, Trends in Immunology 2019), 12 co-authored papers (including Nature 2019 & 2022, Science 2021, Nature Methods 2016 & 2022), and 2 patent applications. Her academic potential has been recognized by prestigious postdoctoral fellowships (2018 Parker Institute for Cancer Immunotherapy Scholar, 2020 Stanford Cancer Institute Fellow), a career development award (2023 Parker Institute for Cancer Immunotherapy Bridge Fellow), and she has been named an Arthur and Sandra Irving Cancer Immunology Fellow in 2022. Dr. Good is preparing to launch an independent research program with a long-term goal to understand and enhance engineered cellular immunotherapies for patients with cancer.

ACADEMIC APPOINTMENTS

• Instructor, Stanford Institutes of Medicine

HONORS AND AWARDS

- PICI Resiliece Innovation Challenge, Parker Institute for Cancer Immunotherapy (2024 2026)
- AACR Woman in Cancer Research Scholar, American Association for Cancer Research (2024)
- Parker Bridge Fellow, Parker Institute for Cancer Immunotherapy (2023 2026)
- PICI 10x Genomics In-Kind Pilot Project Support, Parker Institute for Cancer Immunotherapy (2022 2024)
- Arthur and Sandra Irving Fellow, Arthur and Sandra Irving Cancer Immunology Symposium (2022)
- NK and Irene Cheung Family Scholar, Keystone Symposia (2022)
- Stanford Cancer Institute Fellow, Stanford Cancer Institute (2020 2021)
- ASH 2019 Abstract Achievement Award, American Society of Hematology (2019)
- Best Q1 2019 Paper (1 of 3 papers selected), Parker Institute for Cancer Immunotherapy (2019)
- Parker Scholar, Parker Institute for Cancer Immunotherapy (2018 2020)
- Keystone Symposium Scholar, Keystone Symposia (2018)

- CYTO Image Analysis Challenge Finalist, International Society for Advancement of Cytometry (2017)
- Stanford Biosciences Travel Grant (3 times), Stanford University (2016 2018)
- CYTO Student Travel Award (2 times), International Society for Advancement of Cytometry (2016 2017)
- CYTO Exceptional Student Award Finalist, International Society for Advancement of Cytometry (2016)
- Featured Wikipedia Editor (2 times), Wikimedia Foundation (2012 2013)
- 4th Prize in Speed Poster Competition, ImmunoVancouver Conference (2011)
- Member of the DARPA Shredder Challenge Winning Team "All Your Shreds Are Belong to Us", Defense Advanced Research Projects Agency (2011)
- 2nd Prize in the Life Sciences Institute Junior Poster Competition, University of British Columbia (2009)
- Graduate Entrance Scholarship, University of British Columbia (2008)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, Society for Immunotherapy of Cancer (2021 present)
- Member, American Society of Hematology (2019 present)
- Member, Parker Institute for Cancer Immunotherapy (2017 present)
- Associate Member, American Association for Cancer Research (2016 present)
- Member, International Society for the Advancement of Cytometry (2016 2018)
- Member, International Society for Stem Cell Research (2015 2016)
- Member, Canadian Society for Immunology (2009 2012)
- Member, American Association for the Advancement of Science (2009 2011)
- Member, Canadian Student Biotechnology Network (2005 2011)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Stanford University , Immunology Computational & Systems Immunology (2018)
- Master of Science, University of British Columbia, Microbiology & Immunology (2012)
- Bachelor of Science, University of British Columbia, Microbiology & Immunology (2008)

LINKS

- Editor profile on Wikipedia (article by Sarah Mitroff from June 28, 2013): http://blog.wikimedia.org/2013/06/28/everyone-edit-wikipedia-zinaida-good-profile
- LinkedIn: https://www.linkedin.com/in/zinaidagood/

Publications

PUBLICATIONS

• Engineered CD47 protects T cells for enhanced antitumour immunity. Nature

Yamada-Hunter, S. A., Theruvath, J., McIntosh, B. J., Freitas, K. A., Lin, F., Radosevich, M. T., Leruste, A., Dhingra, S., Martinez-Velez, N., Xu, P., Huang, J., Delaidelli, A., Desai, et al 2024

CAR19 monitoring by peripheral blood immunophenotyping reveals histology-specific expansion and toxicity. Blood advances

Hamilton, M. P., Craig, E., Gentille Sanchez, C., Mina, A., Tamaresis, J., Kirmani, N., Ehlinger, Z., Syal, S., Good, Z., Sworder, B., Schroers-Martin, J., Lu, Y., Muffly, et al 2024

 Lessons for the Next Generation of Scientists from the Second Annual Arthur and Sandra Irving Cancer Immunology Symposium. Cancer immunology research

Alvarez-Breckenridge, C., Anderson, K. G., Correia, A. L., Demehri, S., Dinh, H. Q., Dixon, K. O., Dunn, G. P., Evgin, L., Goc, J., Good, Z., Hacohen, N., Han, P., Han#, et al

2023: OF1-OF7

Post-infusion CAR T-Reg cells identify patients resistant to CD19-CAR therapy NATURE MEDICINE

Good, Z., Spiegel, J. Y., Sahaf, B., Malipatlolla, M. B., Ehlinger, Z. J., Kurra, S., Desai, M. H., Reynolds, W. D., Lin, A., Vandris, P., Wu, F., Prabhu, S., Hamilton, et al

2022

• Advancing T cell-based cancer therapy with single-cell technologies. Nature medicine

Bucktrout, S. L., Banovich, N. E., Butterfield, L. H., Cimen-Bozkus, C., Giles, J. R., Good, Z., Goodman, D., Jonsson, V. D., Lareau, C., Marson, A., Maurer, D. M., Munson, P. V., Stubbington, et al 2022; 28 (9): 1761-1764

• Identification of cell types in multiplexed in situ images by combining protein expression and spatial information using CELESTA. *Nature methods* Zhang, W., Li, I., Reticker-Flynn, N. E., Good, Z., Chang, S., Samusik, N., Saumyaa, S., Li, Y., Zhou, X., Liang, R., Kong, C. S., Le, Q., Gentles, et al

• GD2-CAR T cell therapy for H3K27M-mutated diffuse midline gliomas. Nature

Majzner, R. G., Ramakrishna, S., Yeom, K. W., Patel, S., Chinnasamy, H., Schultz, L. M., Richards, R. M., Jiang, L., Barsan, V., Mancusi, R., Geraghty, A. C., Good, Z., Mochizuki, et al 2022.

• SINGLE CELL RNA SEQUENCING FROM THE CSF OF SUBJECTS WITH H3K27M+DIPG/DMG TREATED WITH GD2 CAR T-CELLULAR THERAPY

Mochizuki, A., Ramakrishna, S., Good, Z., Patel, S., Chinnasamy, H., Yeom, K., Schultz, L., Richards, R., Campen, C., Reschke, A., Mahdi, J., Toland, A., Baggot, et al.

OXFORD UNIV PRESS INC.2021: 39

• Transient rest restores functionality in exhausted CAR-T cells through epigenetic remodeling. Science (New York, N.Y.)

Weber, E. W., Parker, K. R., Sotillo, E., Lynn, R. C., Anbunathan, H., Lattin, J., Good, Z., Belk, J. A., Daniel, B., Klysz, D., Malipatlolla, M., Xu, P., Bashti, et al 2021; 372 (6537)

 Molecular Imaging of Chimeric Antigen Receptor T Cells by ICOS-ImmunoPET. Clinical cancer research: an official journal of the American Association for Cancer Research

Simonetta, F., Alam, I. S., Lohmeyer, J. K., Sahaf, B., Good, Z., Chen, W., Xiao, Z., Hirai, T., Scheller, L., Engels, P., Vermesh, O., Robinson, E., Haywood, et al 2020

• Reversal of epigenetic aging and immunosenescent trends in humans. Aging cell

Fahy, G. M., Brooke, R. T., Watson, J. P., Good, Z., Vasanawala, S. S., Maecker, H., Leipold, M. D., Lin, D. T., Kobor, M. S., Horvath, S. 2019: e13028

• Computational and Systems Immunology: A Student's Perspective. Trends in immunology

Good, Z., Glanville, J., Gee, M. H., Davis, M. M., Khatri, P. 2019

Proliferation tracing with single-cell mass cytometry optimizes generation of stem cell memory-like T cells. Nature biotechnology

Good, Z., Borges, L., Vivanco Gonzalez, N., Sahaf, B., Samusik, N., Tibshirani, R., Nolan, G. P., Bendall, S. C. 2019

 $\bullet\,$ c-Jun overexpression in CAR T cells induces exhaustion resistance. Nature

Lynn, R. C., Weber, E. W., Sotillo, E. n., Gennert, D. n., Xu, P. n., Good, Z. n., Anbunathan, H. n., Lattin, J. n., Jones, R. n., Tieu, V. n., Nagaraja, S. n., Granja, J. n., de Bourcy, et al
2019

• Single-cell developmental classification of B cell precursor acute lymphoblastic leukemia at diagnosis reveals predictors of relapse. *Nature medicine* Good, Z., Sarno, J., Jager, A., Samusik, N., Aghaeepour, N., Simonds, E. F., White, L., Lacayo, N. J., Fantl, W. J., Fazio, G., Gaipa, G., Biondi, A., Tibshirani, et al 2018; 24 (4): 474–83

• Automated mapping of phenotype space with single-cell data NATURE METHODS

Samusik, N., Good, Z., Spitzer, M. H., Davis, K. L., Nolan, G. P. 2016; 13 (6): 493-?

- Lymph node-independent liver metastasis in a model of metastatic colorectal cancer NATURE COMMUNICATIONS Enquist, I. B., Good, Z., Jubb, A. M., Fuh, G., Wang, X., Junttila, M. R., Jackson, E. L., Leong, K. G. 2014; 5
- Biomarkers of Residual Disease, Disseminated Tumor Cells, and Metastases in the MMTV-PyMT Breast Cancer Model PLOS ONE
 Franci, C., Zhou, J., Jiang, Z., Modrusan, Z., Good, Z., Jackson, E., Kouros-Mehr, H.
 2013; 8 (3)
- Heterotrimeric G(i)/G(o) proteins modulate endothelial TLR signaling independent of the MyD88-dependent pathway AMERICAN JOURNAL OF PHYSIOLOGY-HEART AND CIRCULATORY PHYSIOLOGY

Dauphinee, S. M., Voelcker, V., Tebaykina, Z., Wong, F., Karsan, A. 2011; 301 (6): H2246-H2253

 Understanding the Mechanism of Virus Removal by Q Sepharose Fast Flow Chromatography During the Purification of CHO-Cell Derived Biotherapeutics BIOTECHNOLOGY AND BIOENGINEERING

Strauss, D. M., Lute, S., Tebaykina, Z., Frey, D. D., Ho, C., Blank, G. S., Brorson, K., Chen, Q., Yang, B. 2009; 104 (2): 371-380

PRESENTATIONS

- Targeting tumor re-initiating cells in colorectal cancer (scientific talk) Discovery Oncology Department Meeting at Genentech, Inc. (April 18, 2013)
- Characterization of processing bodies in T and B lymphocytes (M.Sc. defense) M.Sc. Thesis Defense, University of British Columbia (April 16, 2012)
- Identification of colorectal tumor re-initiating cell niche (scientific talk) Colorectal Cancer Meeting, Genentech, Inc. (November 25, 2011)
- How immune cells remember (speed poster presentation) ImmunoVancouver 2011 Conference at the University of British Columbia (June 7, 2011)
- The role of mRNA processing bodies (P-bodies) in CD8+ memory T cells (scientific talk and poster) Canadian Society for Immunology 2011 Meeting at the Chateau Lake Louise (April 10, 2011)
- The role of mRNA processing bodies (P-bodies) in CD8+ memory T cells (scientific talk) Life Sciences Institute Graduate Student Association Research Day 2011 at the University of British Columbia (March 11, 2011)
- Finding the Achilles' heel of an incurable cancer: the role of the Rap GTPases in multiple myeloma homing and pathogenesis (poster presentation) Life Sciences Institute Graduate Student Association Research Day 2009 at the University of British Columbia (March 13, 2009)
- Understanding viral clearance: mechanism of virus interaction with the QSFF chromatography resin (scientific talk) Presentation to the PR&D vice president and senior staff at Genentech, Inc. (December 5, 2007)
- Understanding virus safety: mechanism of virus interaction with the Q-Sepharose Fast Flow chromatography resin (poster presentation) Summer intern poster day at Genentech, Inc. (August 9, 2007)