Stanford

Grayson E. Rodriguez, PhD

Postdoctoral Scholar, Molecular and Cellular Physiology

Bio

HONORS AND AWARDS

- Mechanisms and Innovations in Cardiovascular Disease T32 Training Grant Fellowship, Stanford University Cardiovascular Institute (2025-present)
- Representation in Science Postdoctoral Scholar, Parker Institute for Cancer Immunotherapy (2024-2025)
- Graduate Research Fellowship Program, National Science Foundation (2020-2024)
- Stanford Graduate Fellowship, Stanford Office of the Vice Provost and Graduate Education (2019-2024)
- Fifty 50, Fifty Years (2022)
- ADVANCE Summer Institute Scholar, Stanford Office of Graduate Education (2019)
- Royal Society of Chemistry Certificate of Excellence, MIT Chemistry Department (2019)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Stanford University , Immunology (2025)
- Bachelor of Science, Massachusetts Institute of Technology , Chemistry and Biology (2019)

STANFORD ADVISORS

- Kristy Red-Horse, Postdoctoral Research Mentor
- Christopher Garcia, Postdoctoral Faculty Sponsor

PATENTS

- Kenan Christopher Garcia, Grayson Rodriguez, Leon Lih-Ren Su, Gita Chu Abhiraman, Pingdong Tao.. "United States Patent PCT/U20S24/059408 Trikine engineered signaling proteins", Jun 19, 2025
- Kenan Christopher Garcia, Leon Lih-Ren Su, Grayson Rodriguez. " Patent WO2024015723A1 Tunable cytokine receptor signaling domains", Jan 18, 2024

LINKS

- graysonrodriguez.com: http://www.graysonrodriguez.com

Publications

PUBLICATIONS

- **Predicting Targeted and Immunotherapeutic Response Outcomes in Melanoma With Single-Cell Raman Spectroscopy and Artificial Intelligence.** *JCO precision oncology*

  Chang, K., Serasanambati, M., Ogunlade, B., Hsu, H. J., Agolia, J., Stiber, A., Gu, J., Chadokiya, J., Rodriguez, G. E., Singh, P., Sharma, S., Gonçalves, A., Verma, et al

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- **Facile induction of immune tolerance by an interleukin-2-TGFβ surrogate agonist.** *Nature*

  Sun, Q., Barrett, A. K., Ogishi, M., Lyu, H., Jiang, H., Liu, H., Zhao, Y., Rodriguez, G. E., Tao, P., Obenaus, M., Householder, K. D., Tang, Q., Lanz, et al

  2026

- **Rewiring STAT signaling from the cell surface with Trikine immunotherapeutics.** *Science (New York, N.Y.)*
  Rodriguez, G. E., Zhao, Y., Nishiga, Y., Peprah, F., Shen, J., Abhiraman, G. C., Ogishi, M., Zhang, C., Saco, J., Waghray, D., Serasanambati, M., Torres, L., Simone, et al
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- **Spontaneous and experimental models of lymph node metastasis.** *Nature protocols*
  Breuer, C. B., Xiong, Z., Wang, A., Rodriguez, G. E., Abhiraman, G. C., Garcia, K. C., Reticker-Flynn, N. E.
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- **Expanding the cytokine receptor alphabet reprograms T cells into diverse states.** *Nature*
  Zhao, Y., Ogishi, M., Pal, A., Su, L. L., Tao, P., Jiang, H., Rodriguez, G. E., Chen, X., Sun, Q., Rysavy, L. W., Limsuwannarot, S., Waghray, D., Kalbasi, et al
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- **Redirecting immune signaling with cytokine adaptors.** *Nature communications*
  Abhiraman, G. C., Householder, K. D., Rodriguez, G. E., Glassman, C. R., Saxton, R. A., Breuer, C. B., Wilson, S. C., Su, L., Yen, M., Hsu, C., Pillarisetty, V. G., Reticker-Flynn, N. E., Garcia, et al
  2025; 16 (1): 2432

- **Cytokines 2024: 12th Annual Meeting of the International Cytokine and Interferon Society.** *Journal of interferon & cytokine research : the official journal of the International Society for Interferon and Cytokine Research*
  Rodriguez, G.
  2025

- **Structure of the interleukin-5 receptor complex exemplifies the organizing principle of common beta cytokine signaling.** *Molecular cell*
  Caveney, N. A., Rodriguez, G. E., Pollmann, C., Meyer, T., Borowska, M. T., Wilson, S. C., Wang, N., Xiang, X., Householder, K. D., Tao, P., Su, L. L., Saxton, R. A., Piehler, et al
  2024

- **Structural insights reveal interplay between LAG-3 homodimerization, ligand binding, and function.** *Proceedings of the National Academy of Sciences of the United States of America*
  Silberstein, J. L., Du, J., Chan, K. W., Frank, J. A., Mathews, I. I., Kim, Y. B., You, J., Lu, Q., Liu, J., Philips, E. A., Liu, P., Rao, E., Fernandez, et al
  2024; 121 (12): e2310866121

- **Structural insights into the mechanism of leptin receptor activation.** *Nature communications*
  Saxton, R. A., Caveney, N. A., Moya-Garzon, M. D., Householder, K. D., Rodriguez, G. E., Burdsall, K. A., Long, J. Z., Garcia, K. C.
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- **Biochemical and Functional Evaluation of the Intramolecular Disulfide Bonds in the Zinc-Chelating Antimicrobial Protein Human S100A7 (Psoriasin)** *BIOCHEMISTRY*
  Cunden, L. S., Brophy, M., Rodriguez, G. E., Flaxman, H. A., Nolan, E. M.
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