Stanford

Allison Banuelos

Postdoctoral Scholar, Stem Cell Biology and Regenerative Medicine

Bio

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Stanford University , STMRM-PHD (2025)
- Bachelor of Science, California State University, Fullerton , Biochemistry (2019)

STANFORD ADVISORS

- Irving Weissman, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **CCR5 marks a subset of mouse hematopoietic stem cells that are myeloid primed and expand with age.** *Proceedings of the National Academy of Sciences of the United States of America*
  Yılmaz, L., Banuelos, A., Baez, M., Le, U., Georgeos, N., Zukowska, M., Zhang, A., Sinha, R., Weissman, I. L.
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- **FLT3 ligand facilitates long-term ex vivo expansion of human hematopoietic stem cells by maintaining lymphoid reconstitution potential**
  Miyauchi, M., Banuelos, A., Mack, P., Suchy, F., Tan, T., Charlesworth, C., Homma, S., Zhang, J., Kayamori, K., Yilmaz, L., Bhadury, J., Karigane, D., Nakauchi, et al
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- **Macrophages release neuraminidase and cleaved calreticulin for programmed cell removal.** *Proceedings of the National Academy of Sciences of the United States of America*
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- **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
- **Lineage-tracing hematopoietic stem cell origins in vivo to efficiently make human HLF+ HOXA+ hematopoietic progenitors from pluripotent stem cells.** *Developmental cell*
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  2024
- **CXCR2 inhibition in G-MDSCs enhances CD47 blockade for melanoma tumor cell clearance.** *Proceedings of the National Academy of Sciences of the United States of America*
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- **Anti-GD2 synergizes with CD47 blockade to mediate tumor eradication.** *Nature medicine*
  Theruvath, J., Menard, M., Smith, B. A., Linde, M. H., Coles, G. L., Dalton, G. N., Wu, W., Kiru, L., Delaidelli, A., Sotillo, E., Silberstein, J. L., Geraghty, A. C., Banuelos, et al

1800

- **Inter-cellular CRISPR screens reveal regulators of cancer cell phagocytosis.** *Nature*

  Kamber, R. A., Nishiga, Y., Morton, B., Banuelos, A. M., Barkal, A. A., Vences-Catalan, F., Gu, M., Fernandez, D., Seoane, J. A., Yao, D., Liu, K., Lin, S., Spees, et al

  2021

- **Combining CD47 blockade with trastuzumab eliminates HER2-positive breast cancer cells and overcomes trastuzumab tolerance.** *Proceedings of the National Academy of Sciences of the United States of America*

  Upton, R., Banuelos, A., Feng, D., Biswas, T., Kao, K., McKenna, K., Willingham, S., Ho, P. Y., Rosental, B., Tal, M. C., Raveh, T., Volkmer, J., Pegram, et al

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  Li, J., Brickler, T., Banuelos, A., Marjon, K., Shcherbina, A., Banerjee, S., Bian, J., Narayanan, C., Weissman, I. L., Chetty, S.

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- **Humanized anti-CD47 monoclonal antibody magrolimab (Hu5F9-G4) plus trastuzumab potentiates antibody-dependent cellular phagocytosis (ADCP), and cooperate to inhibit human HER2+breast cancer (BC) xenografts growth in vivo**

  Upton, R., Feng, D., Banuelos, A. M., Biswas, T., Willingham, S., Kao, K. S., McKenna, K., Rosenthal, B., Tal, M. C., Volkmer, J., Pegram, M. D., Weissman, I. L.

  AMER ASSOC CANCER RESEARCH.2021

- **Proteomic analysis of young and old mouse hematopoietic stem cells and their progenitors reveals post-transcriptional regulation in stem cells.** *eLife*

  Zaro, B. W., Noh, J. J., Mascetti, V. L., Demeter, J., George, B., Zukowska, M., Gulati, G. S., Sinha, R., Flynn, R. A., Banuelos, A., Zhang, A., Wilkinson, A. C., Jackson, et al

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- **Overexpression of CD47 is associated with brain overgrowth in 16p11.2 deletion syndrome** *bioRxiv*

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  2019

- **Mass spectrometry analysis of mouse hematopoietic stem cells and their progenitors reveals differential expression within and between proteome and transcriptome throughout adult and aged hematopoiesis** *bioRxiv*

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  2019

- **Programmed cell removal by calreticulin in tissue homeostasis and cancer** *NATURE COMMUNICATIONS*

  Feng, M., Marjon, K. D., Zhu, F., Weissman-Tsukamoto, R., Levett, A., Sullivan, K., Kao, K. S., Markovic, M., Bump, P. A., Jackson, H. M., Choi, T. S., Chen, J., Banuelos, et al

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