

Stanford



Jack Castelli

Postdoctoral Scholar, Stem Cell Transplantation

Bio

PROFESSIONAL EDUCATION

- Bachelor of Science, University of Toronto (2020)
- Doctor of Philosophy, University of Washington (2025)
- Ph.D., University of Washington , Molecular Medicine and Mechanisms of Disease
- H.B.Sc., University of Toronto , Molecular Genetics and Microbiology

STANFORD ADVISORS

- Matthew Porteus, Postdoctoral Faculty Sponsor

Research & Scholarship

LAB AFFILIATIONS

- Matthew Porteus (7/7/2025)

Publications

PUBLICATIONS

- **In vivo production of an anti-HIV antibody in mice by non-viral gene knock-in in primate hematopoietic stem and progenitor cells.** *Molecular therapy : the journal of the American Society of Gene Therapy*
Castelli, J. M., Poljakov, K., Jwa, Y., Cunningham, R., Cassidy, M. E., Gray, M. D., Sanchez Gaytan, J. N., Enstrom, M. R., Gastelum, G., Wang, Z., Linton, J. D., Rongvaux, A., Taylor, et al
2026
- **CRISPR-AuNP: physicochemical optimization of a gold nanoparticle platform for cost-effective and modular non-viral gene editing in HSPCs.** *Gene therapy*
Gottimukkala, K. S., Lane, D. D., Cunningham, R., Malik, H. S., Jwa, Y., Cassidy, M. E., Castelli, J. M., Enstrom, M. R., Poljakov, K., Gastelum, G., Ho, S. H., Tassa, C., Adair, et al
2026
- **The functional landscape of coding variation in the familial hypercholesterolemia gene LDLR.** *Science (New York, N.Y.)*
Tabet, D. R., Coté, A. G., Lancaster, M. C., Weile, J., Rayhan, A., Fotiadou, I., Kishore, N., Li, R., Kuang, D., Knapp, J. J., Carrero, C. S., Taverniti, O., Axakova, et al
2025: eady7186
- **Cyprocide selectively kills nematodes via cytochrome P450 bioactivation** *NATURE COMMUNICATIONS*
Knox, J., Burns, A. R., Cooke, B., Cammalleri, S. R., Kitner, M., Ching, J., Castelli, J. M. P., Puumala, E., Snider, J., Koury, E., Collins, J. B., Geissah, S., Dowling, et al
2024; 15 (1): 5529

- **Cas9 RNP Physiochemical Analysis for Enhanced CRISPR-AuNP Assembly and Function.** *bioRxiv : the preprint server for biology*
Lane, D. D., Gottimukkala, K. S., Cunningham, R. A., Jwa, S., Cassidy, M. E., Castelli, J. M., Adair, J. E.
2024