

Richard Perez, MD

- Clinical Scholar, Anesthesiology, Perioperative and Pain Medicine
- Postdoctoral Scholar, Anesthesiology, Perioperative and Pain Medicine

CLINICAL OFFICE (PRIMARY)

- **Anesthesia**

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Bio

BIO

Dr. Richard Perez is a board-certified, fellowship-trained pain management specialist with Stanford Health Care. He is also a clinical scholar in the Department of Anesthesiology, Perioperative & Pain Medicine, Division of Pain Medicine at Stanford University School of Medicine.

Dr. Perez cares for people living with complex chronic pain, nerve-related pain, and musculoskeletal pain conditions. He specializes in nonsurgical therapies, such as nerve blocks, to relieve pain. He takes a highly personalized and compassionate approach to pain medicine, informed by a deep understanding of the biology of pain.

As an active physician-researcher, Dr. Perez studies how changes in cells contribute to chronic pain and immune-related disease. He uses advanced genetic technologies to analyze patterns across individual immune and nervous system cells. His work aims to understand what causes chronic pain, supporting the development of more targeted and effective therapies.

Dr. Perez has published his findings in leading peer-reviewed journals, including Science, Science Translational Medicine, Nature Communications, and British Journal of Anaesthesia. He has also presented to peers at meetings of the American Academy of Pain Medicine, American Society of Anesthesiologists, and International Anesthesia Research Society.

Dr. Perez is a member of the American Society of Anesthesiologists and the International Anesthesia Research Society.

CLINICAL FOCUS

- Pain Medicine

ACADEMIC APPOINTMENTS

- Clinical Scholar, Anesthesiology, Perioperative and Pain Medicine

HONORS AND AWARDS

- Resident Research Award for the Class of 2025, Department of Anesthesiology, Perioperative & Pain Medicine, Stanford University School of Medicine

- Kosaka Best Abstract Award, International Anesthesia Research Society Annual Meeting
- Commendation for Exceptional Volunteerism and Community Service, University of California, San Francisco

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, International Anesthesia Research Society (2024 - present)
- Member, American Society of Anesthesiologists (2024 - present)

PROFESSIONAL EDUCATION

- Board Certification: Anesthesia, American Board of Anesthesiology (2026)
- Fellowship: Stanford University Pain Management Fellowship (2026) CA
- Residency: Stanford University Anesthesiology Residency (2025) CA
- Internship: Stanford University Internal Medicine Residency (2022) CA
- Doctor of Medicine, University of California San Francisco (2021)
- Medical Education: University of California at San Francisco School of Medicine (2021) CA
- Bachelor of Science, New York University (2016)

Publications

PUBLICATIONS

- **Translatome profiling of spinal cord astrocytes reveals distinct gene signatures associated with acute and chronic pain.** *iScience*
Siliezar-Doyle, J., Perez, R. K., Stauffenberg, E., Nippert, A. R., Tawfik, V. L.
2026; 29 (5): 115719
- **Comparative transcriptomic meta-analysis reveals elevated TCL1A expression in human circulating immune cells across chronic pain conditions.** *British journal of anaesthesia*
Perez, R. K., Tawfik, V. L.
2025
- **Transcriptomic Meta-Analysis of Human Circulating Immune Cells Across Chronic Pain Syndromes Reveals Shared Genetic Signatures**
Perez, R., Tawfik, V.
LIPPINCOTT WILLIAMS & WILKINS.2025: 657-658
- **Deciphering the Translomic Perturbations Associated with Acute and Chronic Pain in Mouse Spinal Cord Astrocytes**
Perez, R., Siliezar-Doyle, J., Tawfik, V.
LIPPINCOTT WILLIAMS & WILKINS.2024: 505
- **Coordinated, multicellular patterns of transcriptional variation that stratify patient cohorts are revealed by tensor decomposition** *NATURE BIOTECHNOLOGY*
Mitchel, J., Gordon, M., Perez, R. K., Biederstedt, E., Bueno, R., Ye, C., Kharchenko, P. V.
2025; 43 (7): 1192-1201
- **Neuronal and behavioral responses to naturalistic texture im-ages in macaque monkeys.** *The Journal of neuroscience : the official journal of the Society for Neuroscience*
Ziemba, C. M., Goris, R. L., Stine, G. M., Perez, R. K., Simoncelli, E. P., Movshon, J. A.
2024
- **Profound Coronary Vasospasm Associated with Intraoperative Ketamine Administration: A Case Report.** *A&A practice*
Perez, R. K., Lighthall, G.
2024; 18 (5): e01786
- **Deciphering the Mouse Spinal Cord Astrocyte Translatome at Acute and Chronic Timepoints of Complex Regional Pain Syndrome**
Lugo, J., Perez, R. K., Nippert, A. R., Wu, S., Tawfik, V. L.
CHURCHILL LIVINGSTONE.2024: 11

- **SURGE: uncovering context-specific genetic-regulation of gene expression from single-cell RNA sequencing using latent-factor models** *GENOME BIOLOGY*
Strober, B. J., Tayeb, K., Popp, J., Qi, G., Gordon, M., Perez, R., Ye, C., Battle, A.
2024; 25 (1): 28
- **A myeloid program associated with COVID-19 severity is decreased by therapeutic blockade of IL-6 signaling** *ISCIENCE*
Hackney, J. A., Shivram, H., Heiden, J., Overall, C., Orozco, L., Gao, X., Kim, E., West, N., Qamra, A., Chang, D., Chakrabarti, A., Choy, D. F., Combes, et al
2023; 26 (10): 107813
- **Single-cell RNA-seq reveals cell type-specific molecular and genetic associations to lupus** *SCIENCE*
Perez, R. K., Gordon, M., Subramaniam, M., Kim, M., Hartoularos, G. C., Targ, S., Sun, Y., Ogorodnikov, A., Bueno, R., Lu, A., Thompson, M., Rappoport, N., Dahl, et al
2022; 376 (6589): 153+
- **Author Correction: CSC software corrects off-target mediated gRNA depletion in CRISPR-Cas9 essentiality screens.** *Nature communications*
Perez, A. R., Sala, L., Perez, R. K., Vidigal, J. A.
2022; 13 (1): 1893
- **CloudPred: Predicting Patient Phenotypes From Single-cell RNA-seq.** *Pacific Symposium on Biocomputing. Pacific Symposium on Biocomputing*
He, B., Thomson, M., Subramaniam, M., Perez, R., Ye, C. J., Zou, J.
2022; 27: 337-348
- **CSC software corrects off-target mediated gRNA depletion in CRISPR-Cas9 essentiality screens.** *Nature communications*
Perez, A. R., Sala, L., Perez, R. K., Vidigal, J. A.
2021; 12 (1): 6461
- **Type I interferon autoantibodies are associated with systemic immune alterations in patients with COVID-19** *SCIENCE TRANSLATIONAL MEDICINE*
van der Wijst, M. G. P., Vazquez, S. E., Hartoularos, G. C., Bastard, P., Grant, T., Bueno, R., Lee, D. S., Greenland, J. R., Sun, Y., Perez, R., Ogorodnikov, A., Ward, A., Mann, et al
2021; 13 (612): eabh2624
- **Optimized design of single-cell RNA sequencing experiments for cell-type-specific eQTL analysis** *NATURE COMMUNICATIONS*
Mandric, I., Schwarz, T., Majumdar, A., Hou, K., Briscoe, L., Perez, R., Subramaniam, M., Hafemeister, C., Satija, R., Ye, C., Pasaniuc, B., Halperin, E.
2020; 11 (1): 5504
- **Anaesthesiologists as translational scientists** *BRITISH JOURNAL OF ANAESTHESIA*
Castellanos, J. G., Perez, A. R., Perez, R. K.
2020; 124 (4): 373-376
- **Laminar Differences in Responses to Naturalistic Texture in Macaque V1 and V2** *JOURNAL OF NEUROSCIENCE*
Ziemba, C. M., Perez, R. K., Pai, J., Kelly, J. G., Hallum, L. E., Shooner, C., Movshon, J.
2019; 39 (49): 9748-9756
- **Advent of CRISPR Based Immunotherapy in Hematologic Malignancies.** *Journal of oncopathology and clinical research*
Perez, R. K., Chen, R., Kang, R., Perez, A. R.
2018; 2 (1)
- **Computational Oncology.** *Journal of oncopathology and clinical research*
Perez, R. K., Kang, R., Chen, R., Castellanos, J. G., Milewski, A. R., Perez, A. R.
2018; 2 (1)