



## Oscar Silva

Clinical Assistant Professor, Pathology

### CLINICAL OFFICE (PRIMARY)

- **Department of Pathology**

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### Bio

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#### BIO

Oscar is an academic hematopathologist who completed anatomic and clinical pathology residency and hematopathology fellowship at Stanford in 2020. Prior to Stanford, he received his MD and PhD from UCLA. His interests include immunology, the pathogenesis and diagnosis of lymphomas, and global health.

#### CLINICAL FOCUS

- Hematopathology
- Anatomical and Clinical Pathology
- Anatomic and Clinical Pathology

#### ACADEMIC APPOINTMENTS

- Clinical Assistant Professor, Pathology
- Member, Maternal & Child Health Research Institute (MCHRI)

#### PROFESSIONAL EDUCATION

- Medical Education: UCLA David Geffen School Of Medicine (2015) CA
- Fellowship: Stanford University Hematopathology Fellowship (2018) CA
- Board Certification: Anatomic and Clinical Pathology, American Board of Pathology (2020)
- Board Certification: Hematopathology, American Board of Pathology (2021)
- Residency: Stanford University Pathology Residency (2020) CA
- M.D., University of California, Los Angeles (2015)
- Ph.D, University of California, Los Angeles , Immunology (2013)

## Teaching

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### COURSES

#### 2025-26

- Pathology Clerkship: PATH 302A (Spr)

#### 2024-25

- Pathology Clerkship: PATH 302A (Spr)

## Publications

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### PUBLICATIONS

- **SSTR2 expression in EBV-positive and EBV-negative lymphomas.** *Journal of hematopathology*  
Brar, N., Barrios-Menéndez, J. C., Charville, G. W., Briercheck, E. L., Natkunam, Y., Valvert, F., Silva, O.  
2026; 19 (1)
- **Dynamics of BCMA expression in patients with relapsed/refractory multiple myeloma receiving BCMA-directed CAR-T therapy.** *Blood cancer journal*  
Rana, M. S., Fernandez-Pol, S., Jensen, A., Hovanky, V., Velayati, A., Oak, J. S., Silva, O., Ames, E., Muffly, L. S., Sahaf, B., Arai, S., Kennedy, V. E., Bharadwaj, et al  
2026
- **TP53 genetic alterations are highly recurrent in Epstein-Barr virus-negative aggressive NK-cell leukemia: insights from an institutional experience and comprehensive literature review.** *American journal of clinical pathology*  
Gonzalez Mancera, M., Wilk, A. J., Oak, J., Natkunam, Y., Silva, O.  
2026; 165 (4)
- **Acute Erythroid Leukemia Clonally Evolved from Myeloid Neoplasms**  
Fitzpatrick, M., Yuan, J., Akuma, D., Allbee, A., Bledsoe, J., Capa, I., Chen, M., Chen, P., Chen, X., Cheng, J., Gisriel, S., Haque, M., Hasserjian, et al  
ELSEVIER SCIENCE INC.2026
- **Clinicopathologic Features of Pediatric Acute Erythroid Leukemia: A Distinct Entity Worthy of Recognition in Future Classifications**  
Chen, C., Kovach, A., Yuan, J., Li, P., Bledsoe, J., Gong, S., Wertheim, G., Siegele, B., Zhu, G., Wu, X., Fitzpatrick, M., Hasserjian, R., Cheng, et al  
ELSEVIER SCIENCE INC.2026
- **Automated grading of castleman disease histopathology using an attention-based multiple-instance learning model**  
Morrison, M., O'fallon, B., Hutchings, A., Dewey, M., English, P., Rangel, A., Zuromski, L., Knight, K., Bowen, A., Kearns, K., Shaw, K., Sankar, J., Alnoor, et al  
ELSEVIER.2025: 3002
- **Multimodal discovery of distinct tumor ecosystems for classic Hodgkin lymphoma**  
Su, S., Subramanian, A., Flerlage, T., Flerlage, J., Rossi, C., Alig, S., Younes, S., Silva, O., Luna-Fineman, S., Park, N., Noordenbos, T., Schroers-Martin, J., Moding, et al  
ELSEVIER.2025: 1783-1784
- **Primary Splenic Nodular Lymphocyte Predominant Hodgkin Lymphoma (NLPHL): First Reported Case in a Young Child.** *Pediatric and developmental pathology : the official journal of the Society for Pediatric Pathology and the Paediatric Pathology Society*  
Vergara, J. S., Marks, L. J., Silva, O.  
2025: 10935266251368431
- **The Evolution and Recent Advances in Diagnostic Criteria for Idiopathic Multicentric Castleman Disease.** *American journal of hematology*  
Alnoor, F., Spies, N. C., Kumar, J., Samghabadi, P., Silva, O., Luo, M. X., Chisholm, K. M., Zhang, J., Rangel, A., Ng, D., Li, P., Ohgami, R. S.  
2025
- **C1C-Rearrangements in Pediatric Acute Erythroid Leukemia/Erythroblastic Sarcoma.** *Pediatric blood & cancer*  
Chang-Graham, A. L., Nguyen, T., Oak, J., Silva, O., Gruber, T. A.

2025: e31848

- **ALK+ anaplastic large cell lymphoma expressing CD33 and myeloid nuclear differentiation antigen.** *Blood*  
Gonzalez Mancera, M., Silva, O.  
2025; 145 (10): 1098
- **Mapping the Tumor Microenvironment of Pediatric Classic Hodgkin Lymphoma Unveils a Unique Spatial Composition and Prognostic Microenvironment Populations**  
Younes, S., Subramanian, A., Zhao, S., Li, Y., Mulholland, J., Miranda, M., Castellano, M., Binkley, M., Luna-Fineman, S., Natkuna, Y., Silva, O.  
ELSEVIER SCIENCE INC.2025
- **Deciphering response dynamics and treatment resistance from circulating tumor DNA after CAR T-cells in multiple myeloma.** *Nature communications*  
Hosoya, H., Carleton, M., Tanaka, K., Sworder, B., Syal, S., Sahaf, B., Maltos, A. M., Silva, O., Stehr, H., Hovanky, V., Duran, G., Zhang, T., Liedtke, et al  
2025; 16 (1): 1824
- **Unicentric Castleman Disease: Updates and Novel Insights Into Spindle Cell Proliferations and Aggressive Forms of a Localized Disease.** *International journal of laboratory hematology*  
Alnoor, F., Rangel, A., Luo, M., Silva, O., Chisholm, K. M., O'Malley, D., Warnke, R., Kumar, J., Ohgami, R. S.  
2024
- **Global view of haematolymphoid tumor classifications and their application in low- and middle-income countries.** *Histopathology*  
Fedoriw, Y., Silva, O., Znaor, A., Macintyre, E.  
2024
- **HHV-8+ diffuse large B-cell lymphoma with EBV coinfection occurring posttransplant.** *Blood*  
Wang, T., Silva, O.  
2024; 144 (6): 677
- **Geographic EBV variants confound disease-specific variant interpretation and predict variable immune therapy responses.** *Blood advances*  
Briercheck, E. L., Ravishankar, S., Ahmed, E. H., Carias Alvarado, C. C., Silva, O., Solórzano-Ortiz, E., Siliezar Tala, M. M., Stevenson, P. A., Xu, Y., Wohns, A. W., Enriquez-Vera, D., Barrionuevo, C., Yu, et al  
2024
- **p53 immunohistochemistry as an ancillary tool for rapid assessment of residual disease in TP53-mutated acute myeloid leukemia and myelodysplastic syndromes.** *American journal of clinical pathology*  
Brar, N., Lawrence, L., Fung, E., Zehnder, J. L., Greenberg, P. L., Mannis, G. N., Zhang, T. Y., Gratzinger, D., Oak, J., Silva, O., Kurzer, J., Tan, B., Menke, et al  
2024
- **The clinical, molecular, and prognostic features of the 2022 WHO and ICC classification systems for myelodysplastic neoplasms.** *Leukemia research*  
Khanna, V., Lu, R., Kumar, J., Molina, A., Stehr, H., Spiteri, E., Spinner, M., Silva, O., Fernandez-Pol, S., Tan, B., Greenberg, P. L.  
2023; 136: 107433
- **Somatostatin Receptor (SSTR2) Expression in EBV-Positive and EBV-Negative Lymphomas from Guatemala**  
Brar, N., Charville, G., Natkunam, Y., Valvert, F., Briercheck, E., Silva, O.  
ELSEVIER SCIENCE INC.2023: S1102-S1104
- **Localization, Quantity, and Persistence of SARS-CoV2 Vaccine mRNA and Spike Antigen in Lymph Nodes of Pediatric Vaccinees**  
Miller, T., Wang, A., Colburg, D., Boyd, S., Silva, O.  
ELSEVIER SCIENCE INC.2023: S1196-S1197
- **Clinicopathologic Features of Human Monkeypox Lymphadenitis.** *Histopathology*  
Qian, Z. J., Gong, R., Mann, D. S., Walding, K., Miller, T., Nicholas, V., Kappagoda, S., Pinsky, B. A., Silva, O., Lau, H. D.  
2023
- **Hepatosplenic T-cell lymphoma with STAT5B and SETD2 mutations recurring as cells with NK-cell immunophenotype.** *Blood*  
Khodadoust, M., Silva, O.  
2023; 141 (5): 555

- **LymphoML: An interpretable artificial intelligence-based method identifies morphologic features that correlate with lymphoma subtype**  
Shankar, V., Yang, X., Krishna, V., Tan, B., Silva, O., Rojansky, R., Ng, A., Valvert, F., Briercheck, E., Weinstock, D., Natkunam, Y., Fernandez-Pol, S., Rajpurkar, et al  
edited by Hegselmann, S., Parziale, A., Shanmugam, D., Tang, S., Asiedu, M. N., Chang, S., Hartvigsen, T., Singh, H.  
JMLR-JOURNAL MACHINE LEARNING RESEARCH.2023: 528-558
- **Correlation of Mutational Profiles and Cytogenetics with Morphologic Dysplasia in Myelodysplastic Syndromes**  
Kumar, J., Khanna, V., Lu, R., Stehr, H., Spinner, M. A., Silva, O., Fernandez-Pol, S., Oak, J. S., Greenberg, P. L., Tan, B.  
AMER SOC HEMATOLOGY.2022: 4053-4055
- **Characterization of Clinical, Molecular, and Prognostic Features of the WHO 2022 Classification System for Myelodysplastic Neoplasms (MDS)**  
Khanna, V., Lu, R., Kumar, J., Stehr, H., Spinner, M. A., Silva, O., Fernandez-Pol, S., Oak, J. S., Tan, B., Greenberg, P. L.  
AMER SOC HEMATOLOGY.2022: 6955-6957
- **The Tabula Sapiens: A multiple-organ, single-cell transcriptomic atlas of humans.** *Science (New York, N.Y.)*  
Jones, R. C., Karkanas, J., Krasnow, M. A., Pisco, A. O., Quake, S. R., Salzman, J., Yosef, N., Bulthaupt, B., Brown, P., Harper, W., Hemenez, M., Ponnusamy, R., Salehi, et al  
2022; 376 (6594): eabl4896
- **Case Report: Castleman Disease With an Associated Stromal Spindle Cell Proliferation, PDGFRB Mutation and p53 Expression: Clonal Origins of a Rare Disease.** *Frontiers in oncology*  
Singh, K. I., Gollapudi, S., Kumar, J., Butzmann, A., Small, C., Kreimer, S., Saglam, E. A., Warnke, R., Silva, O., Ohgami, R. S.  
2022; 12: 857606
- **Cell types of origin of the cell-free transcriptome.** *Nature biotechnology*  
Vorperian, S. K., Moufarrej, M. N., Tabula Sapiens Consortium, Quake, S. R., Jones, R. C., Karkanas, J., Krasnow, M., Pisco, A. O., Quake, S. R., Salzman, J., Yosef, N., Bulthaupt, B., Brown, P., et al  
2022
- **Increased double-negative alpha beta plus T cells reveal adult-onset autoimmune lymphoproliferative syndrome in a patient with IgG4-related disease** *HAEMATOLOGICA*  
Brar, N., Spinner, M. A., Baker, M. C., Advani, R. H., Natkunam, Y., Lewis, D. B., Silva, O.  
2022; 107 (1): 347-350
- **Case Report: Mature Plasmacytoid Dendritic Cell Proliferation Associated With a Lymphoid Neoplasm.** *Frontiers in oncology*  
Fei, F., Liedtke, M., Silva, O.  
2022; 12: 903113
- **Immune imprinting, breadth of variant recognition, and germinal center response in human SARS-CoV-2 infection and vaccination.** *Cell*  
Röltgen, K., Nielsen, S. C., Silva, O., Younes, S. F., Zaslavsky, M., Costales, C., Yang, F., Wirz, O. F., Solis, D., Hoh, R. A., Wang, A., Arunachalam, P. S., Colburg, et al  
2022
- **RNA splicing programs define tissue compartments and cell types at single cell resolution.** *eLife*  
Olivieri, J. E., Dehghanasiri, R., Wang, P. L., Jang, S., de Morree, A., Tan, S. Y., Ming, J., Ruohao Wu, A., Tabula Sapiens Consortium, Quake, S. R., Krasnow, M. A., Salzman, J.  
2021; 10
- **The RNA-binding protein IGF2BP3 is critical for MLL-AF4-mediated leukemogenesis.** *Leukemia*  
Tran, T. M., Philipp, J., Bassi, J. S., Nibber, N., Draper, J. M., Lin, T. L., Palanichamy, J. K., Jaiswal, A. K., Silva, O., Paing, M., King, J., Katzman, S., Sanford, et al  
2021
- **Polytypic T-cell prolymphocytic leukemia.** *Blood*  
Ames, E., Silva, O.  
2021; 137 (15): 2125
- **Classic Hodgkin lymphoma in Guatemalan children of age less than six years: analysis of immune regulatory pathways and the tumor microenvironment.** *Leukemia & lymphoma*  
Silva, O., Charu, V., Ewalt, M. D., Metcalf, R. A., Zhao, S., Castellanos, E. M., Orellana, E., Natkunam, Y., Luna-Fineman, S.

2021: 1–13

- **Low-cost transcriptional diagnostic to accurately categorize lymphomas in low- and middle-income countries.** *Blood advances*  
Valvert, F. n., Silva, O. n., Solórzano-Ortiz, E. n., Puligandla, M. n., Siliézar Tala, M. M., Guyon, T. n., Dixon, S. L., López, N. n., López, F. n., Carías Alvarado, C. C., Terbrueggen, R. n., Stevenson, K. E., Natkunam, et al  
2021; 5 (10): 2447–55
- **Nonleukemic T/B mixed phenotype acute leukemia with PHF6 and NOTCH1 mutations.** *Blood*  
Silva, O., Kurzer, J.  
2021; 138 (9): 818
- **Chronic lymphoproliferative disorder of NK cells with TNFAIP3 and DNMT3A mutations.** *Blood*  
Bulterys, P. L., Silva, O.  
2021; 137 (24): 3460
- **Additional considerations related to the elusive boundaries of EBV-associated T/NK-cell lymphoproliferative disorders.** *Haematologica*  
Fernandez-Pol, S., Silva, O., Natkunam, Y.  
2019; 104 (3): e125–e126
- **Defining the elusive boundaries of chronic active Epstein-Barr virus infection.** *Haematologica*  
Fernandez-Pol, S., Silva, O., Natkunam, Y.  
2018; 103 (6): 924–27
- **A Feedback-Based Training Module Improves Tumor Cellularity Estimation for Molecular Testing**  
Weiel, J. J., Silva, O., Mooney, K. L., Lin, C., Kunder, C. A.  
NATURE PUBLISHING GROUP.2017: 144A
- **Discs Large Homolog 1 Splice Variants Regulate p38-Dependent and -Independent Effector Functions in CD8+T Cells** *PLOS ONE*  
Silva, O., Crocetti, J., Humphries, L. A., Burkhardt, J. K., Miceli, M. C.  
2015; 10 (7)
- **Selective Phosphorylation of the Dlg1AB Variant Is Critical for TCR-Induced p38 Activation and Induction of Proinflammatory Cytokines in CD8(+) T Cells** *JOURNAL OF IMMUNOLOGY*  
Crocetti, J., Silva, O., Humphries, L. A., Tibbs, M. D., Miceli, M. C.  
2014; 193 (6): 2651-2660
- **Dantrolene Enhances Antisense-Mediated Exon Skipping in Human and Mouse Models of Duchenne Muscular Dystrophy** *SCIENCE TRANSLATIONAL MEDICINE*  
Kendall, G. C., Mokhonova, E. I., Moran, M., Sejbuk, N. E., Wang, D. W., Silva, O., Wang, R. T., Martinez, L., Lu, Q. L., Damoiseaux, R., Spencer, M. J., Nelson, S. F., Miceli, et al  
2012; 4 (164)
- **Characterization of In Vivo Dlg1 Deletion on T Cell Development and Function** *PLOS ONE*  
Humphries, L. A., Shaffer, M. H., Sacirbegovic, F., Tomassian, T., McMahon, K., Humbert, P. O., Silva, O., Round, J. L., Takamiya, K., Haganir, R. L., Burkhardt, J. K., Russell, S. M., Miceli, et al  
2012; 7 (9)
- **Caveolin-1 Orchestrates TCR Synaptic Polarity, Signal Specificity, and Function in CD8 T Cells** *JOURNAL OF IMMUNOLOGY*  
Tomassian, T., Humphries, L. A., Liu, S. D., Silva, O., Brooks, D. G., Miceli, M. C.  
2011; 187 (6): 2993-3002