



Sheri Krams

Senior Associate Dean, Graduate Education and Postdoctoral Affairs and
Professor of Surgery (Abdominal Transplantation)

Surgery - Abdominal Transplantation

CONTACT INFORMATION

- **Administrative Contact**

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Bio

ACADEMIC APPOINTMENTS

- Professor, Surgery - Abdominal Transplantation
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)

ADMINISTRATIVE APPOINTMENTS

- Senior Associate Dean for Graduate Education and Postdoctoral Affairs, Stanford, (2020- present)

HONORS AND AWARDS

- Elected Fellow of the American Society of Transplantation (FAST), American Society of Transplantation (2015)
- Stanford School of Medicine Excellence in Teaching Award., Stanford School of Medicine (2014)
- AST Basic Science Investigator Award, American Society of Transplantation (2013)
- International Basic Science Mentor Award, The Transplantation Society (2010)
- Stanford Immunology Faculty Mentor Award, Stanford Immunology (2009)
- School of Medicine Faculty Fellows, Stanford University School of Medicine (2007)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Chair of pre-doctoral Admissions, Stanford immunology (2012 - 2020)
- Executive Committee Member, Community of Basic Scientists, American Society of Transplantation (2012 - 2015)
- Committee of Graduate Admissions and Policies (CGAP), Stanford University (2010 - present)
- Transplantation and Tolerance Study Section, NIH (2010 - 2014)
- Education Committee, American Society of Transplantation (2009 - 2012)
- Chair, Basic Sciences Committee, American Society of Transplantation (2007 - 2009)
- Cellular and Molecular Immunology Study Section, NIH (2003 - 2005)

PROFESSIONAL EDUCATION

- PostDoc, UCSF , Transplantation (1993)
- PhD, University of California, Davis , Immunology (1989)

PATENTS

- Sheri Krams. "United States Patent 9,623,040 Immunomodulation by controlling expression levels of microRNAs in dendritic cells", Leland Stanford Junior University, Apr 18, 0017

LINKS

- Krams lab: <http://med.stanford.edu/kramsmartinezlabs.html>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

NK Cell Responses to EBV

Natural killer (NK) are regarded as critical in the early immune response to EBV, but their role in controlling expansion of infected B cells is not understood. Our studies using computational cellular deconvolution approaches of public gene array data sets indicate that NK cells are increased in EBV+ PTLD tumor lesions, and in vitro studies demonstrate that NKG2A+ is expressed on NK cells which recognize and kill autologous EBV-infected B cells. Further, the non-classical MHC molecule, HLA-E, the ligand for NKG2A, is expressed on EBV+ B cell lymphoma lines and peptides from EBV latent cycle proteins can bind to HLA-E. We suggest that NKG2A+ NK cells recognize and respond to EBV+ B cells, and that NKG2A functions as a checkpoint molecule. Further, we predict that targeting the NKG2A/HLA-E interaction can potentiate the ability of NKG2A+ immune cells to mediate cytotoxicity against EBV+ B cell lymphomas. Current projects include: 1) Determining the influence of EBV peptide binding to HLA-E in the reactivity of NKG2A+ NK cells, determining the natural peptidome for HLA-E expressed on EBV+ B cell lymphoma lines. 2) Establishing the phenotype and function of NKG2A+ NK cells & NKG2A+ T cells in patients who develop EBV+ PTLD using patient samples and mass cytometry (CyTOF). We anticipate these studies will yield a new understanding of the immune response to EBVs, will increase our knowledge of the regulation and function of NKG2A+ immune cells, and will provide the basis of innovative and much needed therapeutic approaches for EBV+ PTLD and other EBV-associated malignancies.

Exosomes in Immune Responses

Solid organ transplantation is currently the treatment of choice for children with a variety of end-stage organ diseases. The success of clinical transplantation is dependent on the use of potent immunosuppressive drugs to prevent rejection of the allograft. However, even with our arsenal of immunosuppressive agents, nearly half of pediatric transplant recipients will have a rejection episode in the first-year post-transplant. Clearly, acute rejection remains a major hurdle in pediatric solid organ transplantation. Exosomes are nanometric (50-150nm) membrane vesicles that are released, into blood and other body fluids, by most cell types and can transfer cytosolic proteins and nucleic acids. We have shown that exosomes contain and transfer microRNAs (miRs) between cells that allow for local and distant intercellular communication. MicroRNAs, short non-coding RNA molecules can post-transcriptionally regulate messenger RNA transcripts, resulting in translational repression. On going projects are focused on sequencing the exosome miRNome, analyze TCR and immunoglobulin heavy chain repertoires, and a multi-parameter analysis of the alloimmune response by mass cytometry with the goal of identifying biomarkers associated with and predictive of graft outcomes.

Plasmacytoid Dendritic Cell-Mediated Graft Prolongation

Dendritic cells (DCs) are antigen-presenting cells (APCs) important for initiating and coordinating the immune response. Plasmacytoid dendritic cells (pDCs) are a subset of DCs and multiple studies report a tolerogenic phenotype of immature pDCs. Using experimental models of transplantation, our studies demonstrate that donor pDCs prolongs allograft survival. To determine factors unique to the tolerogenic phenotype of pDCs we performed a microRNA (miRNA) microarray, and our results show that the miR-181 family of miRNAs is increased in pDCs. Likewise, pDCs deficient in miR-181a fail to prolong allograft survival. Semaphorin 4a, which is involved in immunomodulation and is required for the function and stability of regulatory T (Treg) cells, is decreased in miR-181 deficient pDCs. Together our results show a critical role for miR-181 regulating the tolerogenic potential of pDCs and additional studies will be focused on developing novel therapeutics for graft prolongation.

CLINICAL TRIALS

- COVID-19: Pediatric Research Immune Network on SARS-CoV-2 and MIS-C, Not Recruiting
- EBV Infection in Transplant, Not Specified

Teaching

COURSES

2025-26

- Advanced English for Non-Native Speakers: INDE 254 (Spr, Sum)
- Advanced Immunology III: IMMUNOL 203 (Sum)

2024-25

- Advanced English for Non-Native Speakers: INDE 254 (Spr, Sum)
- Advanced Immunology III: IMMUNOL 203 (Sum)

2023-24

- Advanced Immunology III: IMMUNOL 203 (Sum)

2022-23

- Advanced Immunology III: IMMUNOL 203 (Sum)
- No Pride in Stigma: Exploring viral outbreaks and the stigmas perpetuated against LGBTQ+ communities: BIOS 211 (Spr)

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Ashley Haluck Kangas, Josselyn Peña

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Immunology (Phd Program)

Publications

PUBLICATIONS

- **Six-Month Outcomes in Children With COVID-19 or Multisystem Inflammatory Syndrome in Children.** *Hospital pediatrics*
Howard, L. M., Wilkinson, J. D., Calvert, A., Stopczynski, T., Klintworth, S. R., Soslow, J. H., Spieker, A. J., Moore, P. E., Hilmes, M. A., Dalal, A. S., Ruth, N., Mahle, W. T., Schneider, et al
2026
- **NKG2A+ NK cell cytotoxicity of Epstein-Barr virus infected B cells is mediated through the NKG2D and NKp30 activating receptors.** *Journal of immunology (Baltimore, Md. : 1950)*
Pena, J. K., Zhang, W., Badshah, J. S., Ledezma-Soto, C., Jenkins, K. C., Toh, J., Kirchner, V. A., Esquivel, C. O., Martinez, O. M., Krams, S. M.
2026; 215 (2)

- **IL-17A-producing $\gamma\delta$ T cells and classical monocytes are associated with a rapid alloimmune response following vascularized composite allotransplantation in mice**
Tajima, T., Zhang, W., Han, S., Reitsma, A., Harden, J., Fuentes, S., Sonehara, A., Esquivel, C., Martinez, O. M., Krams, S. M.
OXFORD UNIV PRESS.2025
- **Single cell analysis reveals functional T cell deficits in transplant recipients with chronic Epstein-Barr Virus DNAemia compared to individuals with controlled infection**
Vizcarra, E. A., Liang, I., Esquivel, C. O., Krams, S. M., Martinez, O. M.
OXFORD UNIV PRESS.2025
- **IL-17A-producing $\gamma\delta$ T cells and classical monocytes are associated with a rapid alloimmune response following vascularized composite allotransplantation in mice.** *Frontiers in immunology*
Tajima, T., Zhang, W., Han, S., Reitsma, A., Harden, J. T., Fuentes, S., Sonehara, A., Esquivel, C. O., Martinez, O. M., Krams, S. M.
2025; 16: 1584916
- **SENP2 as a critical regulator in liver ischemia-reperfusion injury.** *The international journal of biochemistry & cell biology*
Zhang, L., Han, S., Martinez, O., Krams, S.
2025: 106741
- **Defining Gene Signature of Tumor-Associated Macrophages in Intrahepatic Cholangiocarcinoma as Target for Immunotherapy Using Single Cell and Bulk RNA Sequencing** *Livers*
Badshah, J. S., Lee, R., Reitsma, A., Melcher, M. L., Martinez, O. M., Krams, S. M., Delitto, D. J., Kirchner, V. A.
2025; 5 (4): 1-17
- **Multi-modal analysis reveals tumor and immune features distinguishing EBV-positive and EBV-negative post-transplant lymphoproliferative disorders.** *Cell reports. Medicine*
Toh, J., Reitsma, A. J., Tajima, T., Younes, S. F., Ezeiruaku, C., Jenkins, K. C., Peña, J. K., Zhao, S., Wang, X., Lee, E. Y., Glass, M. C., Kalesinskas, L., Ganesan, et al
2024: 101851
- **Graft-derived extracellular vesicles transport miRNAs to modulate macrophage polarization after heart transplantation.** *American journal of transplantation : official journal of the American Society of Transplantation and the American Society of Transplant Surgeons*
Zhang, L., Han, S., Enriquez, J., Martinez, O. M., Krams, S.
2024
- **Interleukin-33 and liver natural killer cells: A novel perspective on antitumor activity in liver fibrosis.** *Hepatology research : the official journal of the Japan Society of Hepatology*
Imaoka, Y., Ohira, M., Imaoka, K., Bekki, T., Nakano, R., Yano, T., Tanaka, Y., Nakayama, T., Akabane, M., Tajima, T., Yokota, S., Krams, S. M., Martinez, et al
2024
- **Epstein-Barr virus-associated post-transplant lymphoproliferative disorders in pediatric transplantation: A prospective multicenter study in the United States.** *Pediatric transplantation*
Tajima, T., Martinez, O. M., Bernstein, D., Boyd, S. D., Gratzinger, D., Lum, G., Sasaki, K., Tan, B., Twist, C. J., Weinberg, K., Armstrong, B., Desai, D. M., Mazariegos, et al
2024; 28 (4): e14763
- **Investigating the role of Natural Killer cells in the control of latent Epstein-Barr virus infection**
Pena, J., Zhang, W., Esquivel, C., Martinez, O., Krams, S.
AMER ASSOC IMMUNOLOGISTS.2024
- **Immunophenotypic profiling reveals novel T cell subset associated with "tolerance" in pediatric transplant recipients**
Zhang, W., Rao, M., Amouzgar, M., Reitsma, A., Pena, J., Nova, P., Shah, A., Bendall, S., Esquivel, C., Martinez, O., Krams, S.
AMER ASSOC IMMUNOLOGISTS.2024
- **Application of Mass Cytometry Platforms to Solid Organ Transplantation.** *Transplantation*
Zhang, W., Sen, A., Pena, J. K., Reitsma, A., Alexander, O. C., Tajima, T., Martinez, O. M., Krams, S. M.
2024
- **Evaluating Predictors of Quality in Liver NK Cells Among Deceased Donors** *CELL TRANSPLANTATION*
Imaoka, Y., Ohira, M., Nakayama, T., Akabane, M., Tajima, T., Yokota, S., Krams, S. M., Martinez, O. M., Esquivel, C. O., Sasaki, K., Ohdan, H.

2024; 33

- **Evaluating Predictors of Quality in Liver NK Cells Among Deceased Donors.** *Cell transplantation*
Imaoka, Y., Ohira, M., Nakayama, T., Akabane, M., Tajima, T., Yokota, S., Krams, S. M., Martinez, O. M., Esquivel, C. O., Sasaki, K., Ohdan, H.
2024; 33: 9636897241283289
- **Impact of Induction Therapy on Rejection in Pediatric Transplantation: A Multicenter Study in the US**
Tajima, T., Chin, C., Desai, D. M., Fishbein, T. M., Mazariegos, G. V., Tekin, A., Venick, R., Krams, S. M., Martinez, O. M., Esquivel, C. O.
LIPPINCOTT WILLIAMS & WILKINS.2023: S495
- **311.2: Risk factors for Epstein-Barr virus DNAemia in pediatric transplantation: A multicenter study in the United States.** *Transplantation*
Tajima, T., Bernstein, D., Boyd, S. D., Gratzinger, D., Lum, G., Sasaki, K., Tan, B., Weinberg, K., Armstrong, B., Brown, M., Chin, C., Desai, D.,
Fishbein, et al
2023; 107 (10S1): 71-72
- **Highlights from the 12th congress of the international pediatric transplant association, Austin, Texas 2023.** *Pediatric transplantation*
Chinnakotla, S., Esquivel, C., Twombly, K., Posfay-Barbe, K., Krams, S. M.
2023: e14592
- **High-dimensional profiling of pediatric immune responses to solid organ transplantation.** *Cell reports. Medicine*
Rao, M., Amouzgar, M., Harden, J. T., Lapasaran, M. G., Trickey, A., Armstrong, B., Odum, J., Debnam, T., Esquivel, C. O., Bendall, S. C., Martinez,
O. M., Krams, S. M.
2023: 101147
- **Epstein-Barr virus-associated post-transplant lymphoproliferative disorders in pediatric transplantation: A prospective multicenter study in the United States**
Tajima, T., Bernstein, D., Boyd, S. D., Gratzinger, D., Lum, G., Sasaki, K., Tan, B., Twist, C. J., Weinberg, K., Robien, M. A., Brown, M., Armstrong,
B., Desai, et al
WILEY.2023
- **High-resolution natural killer cell phenotyping by mass cytometry in pediatric transplant recipients**
Zhang, W., Pena, J. K., Boonrat, P., Harden, J. T., Esquivel, C. O., Martinez, O. M., Krams, S. M.
WILEY.2023
- **Extracellular vesicle microRNAs are decreased in pediatric solid-organ transplant recipients during EBV plus post-transplant lymphoproliferative disorder**
Sen, A., Enriquez, J., Rao, M., Esquivel, C. O., Martinez, O. M., Krams, S. M.
WILEY.2023
- **Mutations In Latent Membrane Protein 1 of Epstein-Barr Virus are Associated with Increased Risk for Post-Transplant Lymphoproliferative Disorder in Children.** *American journal of transplantation : official journal of the American Society of Transplantation and the American Society of Transplant Surgeons*
Martinez, O. M., Krams, S. M., Robien, M. A., Lapasaran, M. G., Arvedson, M. P., Reitsma, A., Balachandran, Y., Harris-Arnold, A., Weinberg, K.,
Boyd, S. D., Armstrong, B., Trickey, A., Twist, et al
2023
- **IDENTIFYING NOVEL GENE TARGETS FOR DIAGNOSIS AND TREATMENT OF HCC IN ASIAN AND CAUCASIAN POPULATIONS BASED ON WHOLE GENOME SEQUENCING**
Hong, S., Badshah, J., Aliwaisi, A., Sasaki, K., Pruett, T., Melcher, M., Bonham, C., Gallo, A., Martinez, O., Krams, S., Pham, K., Busque, S.,
Reitsma, et al
ELSEVIER SCIENCE INC.2023: S28
- **Human IL-10-producing B cells have diverse states that are induced from multiple B cell subsets.** *Cell reports*
Glass, M. C., Glass, D. R., Oliveria, J. P., Mbiribindi, B., Esquivel, C. O., Krams, S. M., Bendall, S. C., Martinez, O. M.
2022; 39 (3): 110728
- **Mutations in latent membrane protein 1 of Epstein Barr virus are associated with increased risk of post-transplant lymphoproliferative disorder**
Martinez, O. M., Krams, S. M., Robien, M., Lapasaran, M. M., Arvedson, M., Reitsma, A., Weinberg, K., Boyd, S., Armstrong, B., Twist, C.,
Gratzinger, D., Tan, B., Trickey, et al
WILEY.2022

- **Host microRNAs are decreased in pediatric solid-organ transplant recipients during EBV+ Post-transplant Lymphoproliferative Disorder.** *Frontiers in immunology*
Sen, A., Enriquez, J., Rao, M., Glass, M., Balachandran, Y., Syed, S., Twist, C. J., Weinberg, K., Boyd, S. D., Bernstein, D., Trickey, A. W., Gratzinger, D., Tan, et al
2022; 13: 994552
- **High-resolution phenotyping of early acute rejection reveals a conserved alloimmune signature.** *Cell reports*
Harden, J. T., Wang, X. n., Toh, J. n., Sang, A. X., Brown, R. A., Esquivel, C. O., Martinez, O. M., Krams, S. M.
2021; 34 (9): 108806
- **Epstein-Barr virus peptides derived from latent cycle proteins alter NKG2A+NK cell effector function.** *Scientific reports*
Mbiribindi, B., Pena, J. K., Arvedson, M. P., Moreno Romero, C., McCarthy, S. R., Hatton, O. L., Esquivel, C. O., Martinez, O. M., Krams, S. M.
2020; 10 (1): 19973
- **Hyaluronan synthesis inhibition impairs antigen presentation and delays transplantation rejection.** *Matrix biology : journal of the International Society for Matrix Biology*
Marshall, P. L., Nagy, N. n., Kaber, G. n., Barlow, G. L., Ramesh, A. n., Xie, B. J., Linde, M. H., Haddock, N. L., Lester, C. A., Tran, Q. L., de Vries, C. n., Hargil, A. n., Malkovskiy, et al
2020
- **Establishment of Heterotopic Hind Limb Transplantation Model in the Mouse.** *Transplantation proceedings*
Wang, X. n., Harden, J. T., Sang, A. X., Esquivel, C. O., Martinez, O. n., Krams, S. M.
2020
- **Genomic variations in EBNA3C of EBV associate with posttransplant lymphoproliferative disorder.** *JCI insight*
Maloney, E. M., Busque, V. A., Hui, S. T., Toh, J. n., Fernandez-Vina, M. n., Krams, S. M., Esquivel, C. O., Martinez, O. M.
2020; 5 (6)
- **Epstein-Barr Virus Latent Membrane Protein 1 Regulates Host B Cell MicroRNA-155 and Its Target FOXO3a via PI3K p110 alpha Activation** *FRONTIERS IN MICROBIOLOGY*
Hatton, O., Smith, M. M., Alexander, M., Mandell, M., Sherman, C., Stesney, M. W., Hui, S., Dohrn, G., Medrano, J., Ringwalt, K., Harris-Arnold, A., Maloney, E. M., Krams, et al
2019; 10
- **Epstein-Barr Virus Latent Membrane Protein 1 Regulates Host B Cell MicroRNA-155 and Its Target FOXO3a via PI3K p110α Activation.** *Frontiers in microbiology*
Hatton, O., Smith, M. M., Alexander, M., Mandell, M., Sherman, C., Stesney, M. W., Hui, S. T., Dohrn, G., Medrano, J., Ringwalt, K., Harris-Arnold, A., Maloney, E. M., Krams, et al
2019; 10: 2692
- **Differential role of natural killer group 2D in recognition and cytotoxicity of hepatocyte-like cells derived from embryonic stem cells and induced pluripotent stem cells** *AMERICAN JOURNAL OF TRANSPLANTATION*
Cisneros, T., Dillard, D. W., Qu, X., Arredondo-Guerrero, J., Castro, M., Schaffert, S., Martin, R., Esquive, C. O., Krams, S. M., Martinez, O. M.
2019; 19 (6): 1652–62
- **Dual blockade of the PI3K/Akt/mTOR pathway inhibits posttransplant Epstein-Barr virus B cell lymphomas and promotes allograft survival** *AMERICAN JOURNAL OF TRANSPLANTATION*
Sang, A. X., McPherson, M. C., Ivison, G. T., Qu, X., Rigdon, J., Esquivel, C. O., Krams, S. M., Martinez, O. M.
2019; 19 (5): 1305–14
- **Characterization of genomic alterations in EBV plus PTL D**
Krams, S. M., Arvedson, M., Maloney, E., Balachandran, Y., McPherson, M., Boyd, S. D., Esquivel, C. O., Martinez, O. M.
WILEY.2019
- **Genomic diversity of Epstein-Barr Virus in post-transplant lymphoproliferative disorder**
Martinez, O., Maloney, E., Busque, V., Hui, S., Esquivel, C. O., Krams, S.
WILEY.2019
- **Natural killer cells as modulators of alloimmune responses** *CURRENT OPINION IN ORGAN TRANSPLANTATION*
Mbiribindi, B., Harden, J. T., Pena, J. K., Krams, S. M.
2019; 24 (1): 37–41

- **Differential role of natural killer group 2D in recognition and cytotoxicity of hepatocyte-like cells derived from embryonic stem cells and induced pluripotent stem cells.** *American journal of transplantation : official journal of the American Society of Transplantation and the American Society of Transplant Surgeons*
Cisneros, T., Dillard, D. W., Qu, X., Arredondo-Guerrero, J., Castro, M., Schaffert, S., Martin, R., Esquivel, C. O., Krams, S. M., Martinez, O. M.
2018
- **Dual blockade of the PI3K/Akt/mTOR pathway inhibits post-transplant Epstein-Barr virus B cell lymphomas and promotes allograft survival.** *American journal of transplantation : official journal of the American Society of Transplantation and the American Society of Transplant Surgeons*
Sang, A. X., McPherson, M. C., Ivison, G. T., Qu, X., Rigdon, J., Esquivel, C. O., Krams, S. M., Martinez, O. M.
2018
- **Prospective Analysis of EBV plus PTLD in a Multi-Center Study of Pediatric Transplant Recipients**
Martinez, O. M., Krams, S. M., Lapasaran, M., Boyd, S. D., Bernstein, D., Twist, C., Weinberg, K., Gratzinger, D., Tan, B., Armstrong, B., Ikle, D., Brown, M., Robien, et al
LIPPINCOTT WILLIAMS & WILKINS.2018: S319
- **Genomic Status of the Epstein Barr Virus and Virus-Associated PI3K/Akt/mTOR Pathway Dysregulation in Post-Transplant Lymphoproliferative Disorder**
McPherson, M., Balachandran, Y., Boyd, S. D., Zimmermann, H., Trappe, R. U., Esquivel, C. O., Krams, S. M., Martinez, O. M.
LIPPINCOTT WILLIAMS & WILKINS.2018: S95
- **Delineation of the Viral and Host Cell Genomic Alterations in EBV-positive PTLD**
Balachandran, Y., McPherson, M., Boyd, S. D., Esquivel, C. O., Krams, S., Martinez, O. M.
LIPPINCOTT WILLIAMS & WILKINS.2018: S319
- **Identifying shared patterns in the T cell receptor repertoire specific to IE-1 CMV**
Lucia Perez, M., Rubelt, F., Luque, S., Krams, S. M., Esquivel, C. O., Bestard, O., Martinez, O. M.
LIPPINCOTT WILLIAMS & WILKINS.2018: S141
- **Application of Mass Cytometry for Analysis of the Alloimmune Response in a Model of Vascularized Composite Allotransplantation**
Harden, J. T., Sang, A. X., Qu, X., Esquivel, C., Martinez, O. M., Krams, S. M.
LIPPINCOTT WILLIAMS & WILKINS.2018: S198
- **Epstein-Barr Virus Genome Variation in Post-Transplant Lymphoproliferative Disorder**
Maloney, E., Busque, V. A., Hui, S., Krams, S. M., Esquivel, C. O., Martinez, O. M.
LIPPINCOTT WILLIAMS & WILKINS.2018: S95
- **Elucidation of the miRNome in EBV-positive and EBV-negative PTLD**
Balachandran, Y., Zimmermann, H., Esquivel, C. O., Krams, S., Trappe, R. U., Martinez, O. M.
LIPPINCOTT WILLIAMS & WILKINS.2018: S96
- **NK Cell Recognition of Peptides Encoded by EBV Latent Cycle Proteins**
Mbiribindi, B., Moreno, C., Esquivel, C. O., Martinez, O. M., Krams, S. M.
LIPPINCOTT WILLIAMS & WILKINS.2018: S283
- **Micro-RNAs in transplant tolerance** *CURRENT OPINION IN ORGAN TRANSPLANTATION*
Harden, J. T., Krams, S. M.
2018; 23 (1): 66–72
- **Dynamics of Viral and Host Immune Cell MicroRNA Expression during Acute Infectious Mononucleosis** *FRONTIERS IN MICROBIOLOGY*
Kaul, V., Weinberg, K. I., Boyd, S. D., Bernstein, D., Esquivel, C. O., Martinez, O. M., Krams, S. M.
2018; 8
- **Inhibition of Multiple Nodes in the PI3K/Akt/mTOR Pathway Synergistically Suppresses Post-Transplant B Cell Lymphomas**
Sang, A., McPherson, M., Ivison, G., Qu, X., Rigdon, J., Esquivel, C., Krams, S., Martinez, O.
WILEY.2018: 20
- **Natural killer cells as modulators of alloimmune responses.** *Current opinion in organ transplantation*
Mbiribindi, B. n., Harden, J. T., Pena, J. K., Krams, S. M.

2018

- **The Immune Response to Epstein Barr Virus and Implications for Posttransplant Lymphoproliferative Disorder.** *Transplantation*
Martinez, O. M., Krams, S. M.

2017

- **Absence of miR-182 Augments Cardiac Allograft Survival.** *Transplantation*
Wei, L., Kaul, V., Qu, X., Xiong, X., Lau, A. H., Iwai, N., Martinez, O. M., Krams, S. M.
2017; 101 (3): 524-530
- **Identifying specificity groups in the T cell receptor repertoire.** *Nature*
Glanville, J. n., Huang, H. n., Nau, A. n., Hatton, O. n., Wagar, L. E., Rubelt, F. n., Ji, X. n., Han, A. n., Krams, S. M., Pettus, C. n., Haas, N. n., Arlehamn, C. S., Sette, et al
2017
- **Dynamics of Viral and Host Immune Cell MicroRNA Expression during Acute Infectious Mononucleosis.** *Frontiers in microbiology*
Kaul, V. n., Weinberg, K. I., Boyd, S. D., Bernstein, D. n., Esquivel, C. O., Martinez, O. M., Krams, S. M.
2017; 8: 2666
- **NKG2A-Expressing Natural Killer Cells Dominate the Response to Autologous Lymphoblastoid Cells Infected with Epstein-Barr Virus** *FRONTIERS IN IMMUNOLOGY*
Hatton, O., Strauss-Albee, D. M., Zhao, N. Q., Haggadone, M. D., Pelpola, J. S., Krams, S. M., Martinez, O. M., Blish, C. A.
2016; 7
- **Applying Mass Cytometry to the Analysis of Lymphoid Populations in Transplantation.** *American journal of transplantation*
Krams, S. M., Schaffert, S., Lau, A. H., Martinez, O. M.
2016
- **Mass cytometry reveals a distinct immunoprofile of operational tolerance in pediatric liver transplantation.** *Pediatric transplantation*
Lau, A. H., Vitalone, M. J., Haas, K., Shawler, T., Esquivel, C. O., Berquist, W. E., Martinez, O. M., Castillo, R. O., Krams, S. M.
2016
- **Epstein-Barr virus-associated lymphoepithelial carcinoma after pediatric liver transplant** *LIVER TRANSPLANTATION*
Sang, A. X., Harris-Arnold, A., Kambham, N., Martinez, O. M., Krams, S. M., Strichartz, D., Esquivel, C. O.
2016; 22 (6): 849-53
- **Liver microRNA Profile of Induced Allograft Tolerance.** *Transplantation*
Vitalone, M. J., Wei, L., Fujiki, M., Lau, A. H., Littau, E., Esquivel, C., Martinez, O. M., Krams, S. M.
2016; 100 (4): 781-790
- **Glycyrrhizin protects against focal cerebral ischemia via inhibition of T cell activity and HMGB1-mediated mechanisms.** *Journal of neuroinflammation*
Xiong, X., Gu, L., Wang, Y., Luo, Y., Zhang, H., Lee, J., Krams, S., Zhu, S., Zhao, H.
2016; 13 (1): 241-?
- **Epstein-Barr Virus Modulates Host Cell MicroRNA-194 to Promote IL-10 Production and B Lymphoma Cell Survival** *AMERICAN JOURNAL OF TRANSPLANTATION*
Harris-Arnold, A., Arnold, C. P., Schaffert, S., Hatton, O., Krams, S. M., Esquivel, C. O., Martinez, O. M.
2015; 15 (11): 2814-2824
- **NKp46 clusters at the immune synapse and regulates NK cell polarization** *FRONTIERS IN IMMUNOLOGY*
Hadad, U., Thauland, T. J., Martinez, O. M., Butte, M. J., Porgador, A., Krams, S. M.
2015; 6
- **MicroRNAs as master regulators of immune responses in transplant recipients.** *Current opinion in organ transplantation*
Kaul, V., Krams, S.
2015; 20 (1): 29-36
- **The interplay between Epstein-Barr virus and B lymphocytes: implications for infection, immunity, and disease.** *Immunologic research*
Hatton, O. L., Harris-Arnold, A., Schaffert, S., Krams, S. M., Martinez, O. M.
2014; 58 (2-3): 268-276

- **NK cells after transplantation: friend or foe.** *Immunologic research*
Hadad, U., Martinez, O., Krams, S. M.
2014; 58 (2-3): 259-267
- **Moderate Hypothermia Inhibits Brain Inflammation and Attenuates Stroke-Induced Immunodepression in Rats** *CNS NEUROSCIENCE & THERAPEUTICS*
Gu, L., Xiong, X., Ito, T., Lee, J., Xu, B., Krams, S., Steinberg, G. K., Zhao, H.
2014; 20 (1): 67-75
- **Differential expression and functions of microRNAs in liver transplantation and potential use as non-invasive biomarkers.** *Transplant immunology*
Wei, L., Gong, X., Martinez, O. M., Krams, S. M.
2013; 29 (1-4): 123-129
- **Natural Killer Cell-Activating Receptor NKG2D Mediates Innate Immune Targeting of Allogeneic Neural Progenitor Cell Grafts** *STEM CELLS*
Phillips, L. K., Gould, E. A., Babu, H., Krams, S. M., Palmer, T. D., Martinez, O. M.
2013; 31 (9): 1829-1839
- **PI3K Inhibition Augments the Efficacy of Rapamycin in Suppressing Proliferation of Epstein-Barr Virus (EBV) plus B Cell Lymphomas** *AMERICAN JOURNAL OF TRANSPLANTATION*
Furukawa, S., Wei, L., Krams, S. M., Esquivel, C. O., Martinez, O. M.
2013; 13 (8): 2035-2043
- **Syk-Induced Phosphatidylinositol-3-Kinase Activation in EpsteinBarr Virus Posttransplant Lymphoproliferative Disorder** *AMERICAN JOURNAL OF TRANSPLANTATION*
Hatton, O., Lambert, S. L., Phillips, L. K., Vaysberg, M., Natkunam, Y., Esquivel, C. O., Krams, S. M., Martinez, O. M.
2013; 13 (4): 883-890
- **NKp46 Expression Accelerates the Formation of the NK Cell Lytic Immune Synapse** *13th American Transplant Congress (ATC)*
Hadad, U., Thauland, T., BUTTE, M., Krams, S.
WILEY-BLACKWELL.2013: 491-492
- **MicroRNA 194 Regulates Apoptosis in Epstein Barr Virus plus B Cell Lymphomas Associated with Post-Transplant Lymphoproliferative Disorder.** *13th American Transplant Congress (ATC)*
Harris-Arnold, A., Lambert, S., Krams, S., Martinez, O.
WILEY-BLACKWELL.2013: 96-96
- **PI3K delta Inhibition Augments the Efficacy of mTOR Inhibitor Rapamycin on the Proliferation of Epstein-Barr Virus (EBV) plus B Cell Lymphomas.** *13th American Transplant Congress (ATC)*
Furukawa, S., Hatton, O., Krams, S., Esquivel, C., Martinez, O.
WILEY-BLACKWELL.2013: 96-97
- **T Cells Contribute to Stroke-Induced Lymphopenia in Rats** *PLOS ONE*
Gu, L., Xiong, X., Wei, D., Gao, X., Krams, S., Zhao, H.
2013; 8 (3)
- **Src Kinase and Syk Activation Initiate PI3K Signaling by a Chimeric Latent Membrane Protein 1 in Epstein-Barr Virus (EBV) plus B Cell Lymphomas** *PLOS ONE*
Hatton, O., Lambert, S. L., Krams, S. M., Martinez, O. M.
2012; 7 (8)
- **Differential Expression of MicroRNAs During Allograft Rejection** *AMERICAN JOURNAL OF TRANSPLANTATION*
Wei, L., Wang, M., Qu, X., MAH, A., Xiong, X., Harris, A. G., Phillips, L. K., Martinez, O. M., Krams, S. M.
2012; 12 (5): 1113-1123
- **Modulation of IL-10 Specific B Cell microRNAs by Latent Membrane Protein 1 and Epstein-Barr Virus** *24th Annual Meeting of the European-Association-for-Cardiothoracic-Surgery*
Harris-Arnold, A., Lambert, S., Krams, S., Martinez, O.
WILEY-BLACKWELL.2012: 162-162

- **EBV-Induced PI3K/Akt/mTOR Signaling Regulates B Cell microRNA Expression in Post-Transplant Lymphoproliferative Disorder (PTLD)** *24th Annual Meeting of the European-Association-for-Cardiothoracic-Surgery*
Hatton, O., Harris, A., Lund, P., Krams, S. M., Marintez, O. M.
WILEY-BLACKWELL.2012: 186–186
- **Changes in natural killer cell subsets in pediatric liver transplant recipients** *PEDIATRIC TRANSPLANTATION*
Pham, B., Piard-Ruster, K., Silva, R., Gallo, A., Esquivel, C. O., Martinez, O. M., Krams, S. M.
2012; 16 (2): 176-182
- **Syk Activation of Phosphatidylinositol 3-Kinase/Akt Prevents HtrA2-dependent Loss of X-linked Inhibitor of Apoptosis Protein (XIAP) to Promote Survival of Epstein-Barr Virus plus (EBV plus) B Cell Lymphomas** *JOURNAL OF BIOLOGICAL CHEMISTRY*
Hatton, O., Phillips, L. K., Vaysberg, M., Hurwich, J., Krams, S. M., Martinez, O. M.
2011; 286 (43): 37368-37378
- **HIGH DOSES OF CALCINEURIN INHIBITORS ARE ASSOCIATED WITH LOW LEVELS OF T REGULATORY CELLS IN PEDIATRIC LIVER TRANSPLANT RECIPIENTS.**
Piard-Ruster, K. S., Silva, R., Berquist, W., Pham, B., Gallo, A., Krams, S. M., Esquivel, C. O., Martinez, O. M.
WILEY-BLACKWELL.2011: 57–57
- **The effect of MICA antigens on transplant outcomes: A systematic review.** *Journal of evidence-based medicine*
Lu, J., Luo, L., Guo, Y., Long, D., Wei, L., Shan, J., Feng, L., Li, S., Yang, x., Lu, Y., Krams, S., Li, Y.
2011; 4 (2): 106-121
- **Rejection of Small Intestinal Allografts Associates with a Unique Signature of microRNAs** *American Transplant Congress*
Krams, S. M., Wei, L., Pham, B., Harris, A., Castillo, R. O., Esquivel, C. O., Martinez, O.
WILEY-BLACKWELL.2011: 133–133
- **Neural Stem/Progenitor Cells Are Targets for Natural Killer Cell-Mediated Killing** *American Transplant Congress*
Phillips, L. K., GOULD, E. A., Palmer, T. D., Krams, S. M., Martinez, O. M.
WILEY-BLACKWELL.2011: 439–439
- **Targeting Akt for Treatment of Post-Transplant Lymphoproliferative Disorder (PTLD)** *American Transplant Congress*
Hatton, O., Lambert, S., Krams, S. M., Esquivel, C. O., Martinez, O. M.
WILEY-BLACKWELL.2011: 137–137
- **Moderate Hypothermia Attenuates Peripheral Immunodepression Caused by Stroke in Rats** *International Stroke Conference*
Gu, L., Xiong, X., Ito, T., Lee, J., Krams, S., Steinberg, G. K., Zhao, H.
LIPPINCOTT WILLIAMS & WILKINS.2011: E302–E303
- **Glycyrrhizin Protects Against Focal Ischemia and Attenuates Peripheral Immunosuppression in Rats** *International Stroke Conference*
Xiong, X., Gu, L., Li, L., Lee, J., Li, M., Xu, L., Giffard, R., Krams, S. M., Steinberg, G. K., Zhao, H.
LIPPINCOTT WILLIAMS & WILKINS.2011: E67–E68
- **Distinct Roles for the NK Cell-Activating Receptors in Mediating Interactions with Dendritic Cells and Tumor Cells** *JOURNAL OF IMMUNOLOGY*
Wai, L., Garcia, J. A., Martinez, O. M., Krams, S. M.
2011; 186 (1): 222-229
- **Toll-Like Receptor 4 Contributes to Small Intestine Allograft Rejection** *TRANSPLANTATION*
Krams, S. M., Wang, M., Castillo, R. O., Ito, T., Phillips, L., Higgins, J., Kambham, N., Esquivel, C. O., Martinez, O. M.
2010; 90 (12): 1272-1277
- **Acute Rejection of Small Intestine Allografts Is Associated With Increased Expression of Toll-like Receptors** *TRANSPLANTATION PROCEEDINGS*
Castillo, R. O., Wang, M., Ito, T., Higgins, J., Esquivel, C. O., Krams, S. M., Martinez, O. M.
2010; 42 (7): 2676-2678
- **Identification of the rat NKG2D ligands, RAE1L and RRLT, and their role in allograft rejection** *EUROPEAN JOURNAL OF IMMUNOLOGY*
Zhuo, M., Fujiki, M., Wang, M., Piard-Ruster, K., Wai, L., Wei, L., Martinez, O. M., Krams, S. M.
2010; 40 (6): 1748-1757

- **MicroRNAs as Immune Regulators: Implications for Transplantation** *AMERICAN JOURNAL OF TRANSPLANTATION*
Harris, A., Krams, S. M., Martinez, O. M.
2010; 10 (4): 713-719
- **Effect of CP690,550 on the Jak/STAT Pathway in Adult Kidney Recipients.** *10th American Transplant Congress*
Silva, R., Martinez, O. M., Krams, S. M., Busque, S.
WILEY-BLACKWELL.2010: 145–145
- **Toll-Like Receptor 4 Contributes to Rejection of Small Intestine Allografts.** *10th American Transplant Congress*
Krams, S. M., Wang, M., Castillo, R. O., Ito, T., Esquivel, C. O., Martinez, O. M.
WILEY-BLACKWELL.2010: 312–312
- **Syk Inhibits Lymphoma Migration to the Lymph Node in a Xenotransplantation Model of Epstein Barr Virus (EBV) plus Post-Transplant Lymphoproliferative Disorder (PTLD)** *10th American Transplant Congress*
Hatton, O., Lambert, S., Vaysberg, M., Krams, S. M., Esquivel, C. O., Martinez, O. M.
WILEY-BLACKWELL.2010: 62–62
- **Natural Killer Cell Activation Receptor Expression Is Increased Post-Transplant in Pediatric Liver Transplant Recipients.** *10th American Transplant Congress*
Pham, B., Silva, R., Piard-Ruster, K., Gallo, A., Esquivel, C. O., Martinez, O. M., Krams, S. M.
WILEY-BLACKWELL.2010: 486–486
- **Syk Inhibits Lymphoma Migration to the Lymph Node in a Xenotransplantation Model of Epstein Barr Virus (EBV) plus Post-Transplant Lymphoproliferative Disorder (PTLD)** *10th American Transplant Congress*
Hatton, O., Lambert, S., Vaysberg, M., Krams, S. M., Esquivel, C. O., Martinez, O. M.
WILEY-BLACKWELL.2010: 62–62
- **Natural Killer Cell Activation Receptor Expression Is Increased Post-Transplant in Pediatric Liver Transplant Recipients.** *10th American Transplant Congress*
Pham, B., Silva, R., Piard-Ruster, K., Gallo, A., Esquivel, C. O., Martinez, O. M., Krams, S. M.
WILEY-BLACKWELL.2010: 486–486
- **Induced Tolerance to Rat Liver Allografts Involves the Apoptosis of Intra-graft T Cells and the Generation of CD4(+)CD25(+)FoxP3(+) T Regulatory Cells** *LIVER TRANSPLANTATION*
Fujiki, M., Esquivel, C. O., Martinez, O. M., Strober, S., Uemoto, S., Krams, S. M.
2010; 16 (2): 147-154
- **Activation of the JAK/STAT Pathway in Epstein Barr Virus(+)-Associated Posttransplant Lymphoproliferative Disease: Role of Interferon-gamma** *AMERICAN JOURNAL OF TRANSPLANTATION*
Vaysberg, M., Lambert, S. L., Krams, S. M., Martinez, O. M.
2009; 9 (10): 2292-2302
- **Decreases in circulating CD4(+)CD25(hi)FOXP3(+) cells and increases in intra-graft FOXP3(+) cells accompany allograft rejection in pediatric liver allograft recipients** *PEDIATRIC TRANSPLANTATION*
Stenard, F., Nguyen, C., Cox, K., Kambham, N., Umetsu, D. T., Krams, S. M., Esquivel, C. O., Martinez, O. M.
2009; 13 (1): 70-80
- **Tumor-derived Variants of Epstein-Barr Virus Latent Membrane Protein 1 Induce Sustained Erk Activation and c-Fos** *JOURNAL OF BIOLOGICAL CHEMISTRY*
Vaysberg, M., Hatton, O., Lambert, S. L., Snow, A. L., Wong, B., Krams, S. M., Martinez, O. M.
2008; 283 (52): 36573-36585
- **Epstein-Barr virus, rapamycin, and host immune responses** *CURRENT OPINION IN ORGAN TRANSPLANTATION*
Krams, S. M., Martinez, O. M.
2008; 13 (6): 563-568
- **Syk drives Epstein Barr virus-infected B cell lymphoma growth and survival through activation of the PI3K/Akt pathway** *8th American Transplant Congress*
Hatton, O., Lambert, S., Vaysberg, M., Sharman, J., Krams, S. M., Esquivel, C. O., Martinez, O. M.
WILEY-BLACKWELL.2008: 477–477

- **Rapamycin, but not cyclosporine or FK506, alters natural killer cell function** *TRANSPLANTATION*
Wai, L., Fujiki, M., Takeda, S., Martinez, O. M., Krams, S. M.
2008; 85 (1): 145-149
- **Mutations to bid cleavage sites protect hepatocytes from apoptosis after ischemia/reperfusion injury** *TRANSPLANTATION*
Riddle-Taylor, E., Nagasaki, K., Lopez, J., Esquivel, C. O., Martinez, O. M., Krams, S. M.
2007; 84 (6): 778-785
- **Mutations to bid cleavage sites protect hepatocytes from apoptosis following ischemia/reperfusion injury.** *7th American Transplant Congress*
Riddle, E., Nagasaki, K., Stenard, F., Lopez, J., Martinez, O. M., Esquivel, C. O., Krams, S. M.
WILEY-BLACKWELL.2007: 435-435
- **The activating receptor, NKP30, is important in the interactions between natural killer cells and dendritic cells.** *7th American Transplant Congress*
Wai, L., Su, W., Krams, S. M.
WILEY-BLACKWELL.2007: 327-327
- **CD30 activation induces T cell apoptosis through the mitochondrial pathway.** *7th American Transplant Congress*
Ruster, K. S., Hsieh, C. L., Krams, S. M., Martinez, O. M.
WILEY-BLACKWELL.2007: 334-334
- **SYK is a novel target for treatment of Epstein Barr virus-infected B cell lymphomas in post-transplant lymphoproliferative disease.** *7th American Transplant Congress*
Hatton, O., Vaysberg, M., Sharman, J., Krams, S. M., Esquivel, C. O., Martinez, O. M.
WILEY-BLACKWELL.2007: 317-318
- **Peripheral regulatory T cells (CD4+CD25+FOXP3+) as a marker for rejection in pediatric liver transplant patients.** *7th American Transplant Congress*
Stenard, F., Nguyen, C., Cox, K., Khambam, N., Krams, S., Esquivel, C., Martinez, O.
WILEY-BLACKWELL.2007: 278-279
- **Rapamycin inhibits proliferation of Epstein-Barr virus-positive B-cell lymphomas through modulation of cell-cycle protein expression** *TRANSPLANTATION*
Vaysberg, M., Balatoni, C. E., Nepomuceno, R. R., Krams, S. M., Martinez, O. M.
2007; 83 (8): 1114-1121
- **EBV can protect latently infected B cell lymphomas from death receptor-induced apoptosis** *JOURNAL OF IMMUNOLOGY*
Snow, A. L., Lambert, S. L., Natkunam, Y., Esquivel, C. O., Krams, S. M., Martinez, O. M.
2006; 177 (5): 3283-3293
- **NKp30 is a functional activation receptor on a subset of rat natural killer cells** *EUROPEAN JOURNAL OF IMMUNOLOGY*
Hsieh, C. L., Nagasaki, K., Martinez, O. M., Krams, S. M.
2006; 36 (8): 2170-2180
- **Reproduction and pregnancy in transplant recipients: current practices.** *Progress in transplantation*
McKay, D. B., Adams, P. L., Bumgardner, G. L., Davis, C. L., Fine, R. N., Krams, S. M., Martinez, O. M., Murphy, B., Pavlakis, M., Tolkoff-Rubin, N., Sherman, M. S., Josephson, M. A.
2006; 16 (2): 127-132
- **EBV+ B lymphoma cell lines from patients with post-transplant lymphoproliferative disease are resistant to TRAIL-induced apoptosis** *AMERICAN JOURNAL OF TRANSPLANTATION*
Snow, A. L., Vaysberg, M., Krams, S. M., Martinez, O. M.
2006; 6 (5): 976-985
- **IFN-gamma, produced by NK cells that infiltrate liver allografts early after transplantation, links the innate and adaptive immune responses** *AMERICAN JOURNAL OF TRANSPLANTATION*
Obara, H., Nagasaki, K., Hsieh, C. L., Ogura, Y., Esquivel, C. O., Martinez, O. M., Krams, S. M.
2005; 5 (9): 2094-2103
- **Keratins as susceptibility genes for end-stage liver disease** *GASTROENTEROLOGY*

- Ku, N. O., Lim, J. K., Krams, S. M., Esquivel, C. O., Keeffe, E. B., Wright, T. L., Parry, D. A., Omary, M. B.
2005; 129 (3): 885-893
- **lfn-gamma, produced by NK cells recruited to liver allografts early after transplantation, links the innate and adaptive immune responses, produced by NK cells recruited to liver allografts early after transplantation, links the innate and adaptive immune responses.** *6th American Transplant Congress*
Nagasaki, K., Obara, H., Hsieh, C., Esquivel, C. O., Martinez, O. M., Krams, S. M.
WILEY-BLACKWELL.2005: 434-434
 - **Prolonged graft survival and decreased expression of IFN-gamma in the absence of NK cells** *6th American Transplant Congress*
Hsieh, C. L., Ohara, H., Nagasaki, K., Martinez, O. M., Krams, S. M.
WILEY-BLACKWELL.2005: 574-574
 - **Identification, cloning, and characterization of a novel rat natural killer receptor, RNKp30: A molecule expressed in liver allografts** *TRANSPLANTATION*
Hsieh, C. L., Ogura, Y., Obara, H., Ali, U. A., Rodriguez, G. M., Nepomuceno, R. R., Martinez, O. M., Krams, S. M.
2004; 77 (1): 121-128
 - **NK cells recruited to liver allografts are a source of IFN-gamma.** *5th American Transplant Congress*
Obara, H., Martinez, O. M., Ogura, Y., Hsieh, C. L., Esquivel, C. O., Krams, S. M.
WILEY-BLACKWELL.2004: 249-249
 - **Rapamycin inhibits NK cell function.** *5th American Transplant Congress*
Takeda, S., Hsieh, C., Ohara, H., Martinez, O. M., Krams, S. M.
WILEY-BLACKWELL.2004: 526-526
 - **NK receptor, rat NKp30, is a polymorphic glycoprotein involved in the immune response during allogeneic liver transplantation.** *5th American Transplant Congress*
Hsieh, C. L., Ogura, Y., Obara, H., Ali, U., Su, W. W., Rodriguez, G., Nepomuceno, R., Martinez, O. M., Krams, S. M.
WILEY-BLACKWELL.2004: 510-510
 - **Rapamycin inhibits the interleukin 10 signal transduction pathway and the growth of Epstein Barr virus B-cell lymphomas** *CANCER RESEARCH*
Nepomuceno, R. R., Balatoni, C. E., Natkunam, Y., Snow, A. L., Krams, S. M., Martinez, O. M.
2003; 63 (15): 4472-4480
 - **Keratin 8 and 18 mutations are risk factors for developing liver disease of multiple etiologies** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Ku, N. O., Darling, J. M., Krams, S. M., Esquivel, C. O., Keeffe, E. B., Sibley, R. K., Lee, Y. M., Wright, T. L., Omary, M. B.
2003; 100 (10): 6063-6068
 - **Depletion of an asialo GM1 cell population prolongs graft survival and leads to donor specific tolerance** *90th Annual Meeting of the American-Association-for-Immunologists*
Obara, H., Hsieh, C. L., Martinez, O. M., Krams, S. M.
FEDERATION AMER SOC EXP BIOL.2003: C112-C112
 - **Identification of Epstein-Barr virus-specific CD8(+) T lymphocytes in the circulation of pediatric transplant recipients** *TRANSPLANTATION*
Falco, D. A., Nepomuceno, R. R., Krams, S. M., Lee, P. P., DAVIS, M. M., Salvatierra, O., Alexander, S. R., Esquivel, C. O., Cox, K. L., Frankel, L. R., Martinez, O. M.
2002; 74 (4): 501-510
 - **CD30 expression identifies the predominant proliferating T lymphocyte population in human alloimmune responses** *JOURNAL OF IMMUNOLOGY*
Chan, K. W., Hopke, C. D., Krams, S. M., Martinez, O. M.
2002; 169 (4): 1784-1791
 - **Constitutive activation of Jak/STAT proteins in Epstein-Barr virus-infected B-cell lines from patients with posttransplant lymphoproliferative disorder.** *TRANSPLANTATION*
Nepomuceno, R. R., Snow, A. L., Beatty, P. R., Krams, S. M., Martinez, O. M.
2002; 74 (3): 396-402

- **NK cells and transplantation** *TRANSPLANT IMMUNOLOGY*
Hsieh, C. L., Obara, H., Ogura, Y., Martinez, O. M., Krams, S. M.
2002; 9 (2-4): 111-114
- **Cloning of a novel NK receptor, rat NKp30, from liver allografts and characterization of its expression**
Hsieh, C. L., Ogura, Y., Obara, H., Martinez, O., Krams, S.
FEDERATION AMER SOC EXP BIOL.2002: A1034–A1034
- **New approaches to inducing the death of alloreactive lymphocytes** *CLINICAL AND EXPERIMENTAL IMMUNOLOGY*
Krams, S. M.
2001; 126 (3): 371-373
- **Resistance to Fas-mediated apoptosis in EBV-infected B cell lymphomas is due to defects in the proximal Fas signaling pathway** *JOURNAL OF IMMUNOLOGY*
Snow, A. L., Chen, L. J., Nepomuceno, R. R., Krams, S. M., Esquivel, C. O., Martinez, O. M.
2001; 167 (9): 5404-5411
- **Apoptotic pathways in primary biliary cirrhosis and autoimmune hepatitis** *LIVER*
Fox, C. K., Furtwaengler, A., Nepomuceno, R. R., Martinez, O. M., Krams, S. M.
2001; 21 (4): 272-279
- **Apoptosis and allograft rejection in the absence of CD8(+) T cells** *TRANSPLANTATION*
Ogura, Y., Martinez, O. M., Villanueva, J. C., Tait, J. F., Strauss, H. W., Higgins, J. P., Tanaka, K., Esquivel, C. O., Blankenberg, F. G., Krams, S. M.
2001; 71 (12): 1827-1834
- **Activated CD30+T cells proliferate in response to alloantigen and infiltrate rejecting allografts.**
Chan, K. W., Nepomuceno, R. R., Ogura, Y., Silva, R., Krams, S. M., Martinez, O. M.
LIPPINCOTT WILLIAMS & WILKINS.2000: S340–S340
- **Radiolabeled annexin V imaging: Diagnosis of allograft rejection in an experimental rodent model of liver transplantation** *RADIOLOGY*
Ogura, Y., Krams, S. M., Martinez, O. M., Kopiwoda, S., Higgins, J. P., Esquivel, C. O., Strauss, H. W., Tait, J. F., Blankenberg, F. G.
2000; 214 (3): 795-800
- **Significance of detecting Epstein-Barr-Specific sequences in the peripheral blood of asymptomatic pediatric liver transplant recipients** *3rd International Congress on Pediatric Transplantation*
Krieger, N. R., Martinez, O. M., Krams, S. M., Cox, K., So, S., Esquivel, C. O.
JOHN WILEY & SONS INC.2000: 62–66
- **Involvement of Fas-Fas ligand interactions in graft rejection.** *International reviews of immunology*
Martinez, O. M., Krams, S. M.
1999; 18 (5-6): 527-546
- **Posttransplant lymphoproliferative disorders and gastrointestinal manifestations of Epstein-Barr virus infection in children following liver transplantation** *TRANSPLANTATION*
Cao, S., Cox, K., Esquivel, C. O., Berquist, W., Concepcion, W., Ojogho, O., Monge, H., Krams, S., Martinez, O., So, S.
1998; 66 (7): 851-856
- **Effect of cyclosporine and tacrolimus on the growth of Epstein-Barr virus-transformed B-cell lines** *16th Annual Meeting of the American-Society-of-Transplant-Physicians*
Beatty, P. R., Krams, S. M., Esquivel, C. O., Martinez, O. M.
LIPPINCOTT WILLIAMS & WILKINS.1998: 1248–55
- **CD30 expression identifies a functional alloreactive human T-lymphocyte subset** *TRANSPLANTATION*
Martinez, O. M., Villanueva, J., Abtahi, S., Beatty, P. R., Esquivel, C. O., Krams, S. M.
1998; 65 (9): 1240-1247
- **CD8(+) cells are not necessary for allograft rejection or the induction of apoptosis in an experimental model of small intestinal transplantation** *JOURNAL OF IMMUNOLOGY*
Krams, S. M., Hayashi, M., Fox, C. K., Villanueva, J. C., Whitmer, K. J., BURNS, W., Esquivel, C. O., Martinez, O. M.
1998; 160 (8): 3673-3680

- **Pathways of biliary epithelial cell apoptosis in primary biliary cirrhosis**
Fox, C. K., Martinez, O. M., Krams, S. M.
FEDERATION AMER SOC EXP BIOL.1998: A285–A285
- **Human hepatocytes produce an isoform of Fas that inhibits apoptosis** *TRANSPLANTATION*
Krams, S. M., Fox, C. K., Beatty, P. R., Cao, S., Villanueva, J. C., Esquivel, C. O., Martinez, O. M.
1998; 65 (5): 713-721
- **Apoptosis as a mechanism of tissue injury in liver allograft rejection** *SEMINARS IN LIVER DISEASE*
Krams, S. M., Martinez, O. M.
1998; 18 (2): 153-167
- **Involvement of IL-10 in the autonomous growth of EBV-transformed B cell lines** *JOURNAL OF IMMUNOLOGY*
Beatty, P. R., Krams, S. M., Martinez, O. M.
1997; 158 (9): 4045-4051
- **T cell receptor usage by cytotoxic T lymphocytes against autologous human melanoma** *ANTICANCER RESEARCH*
Leong, S. P., Liliental, J., Krams, S. M., Zhou, Y. M., GRANBERRY, M. E., Martinez, O. M.
1996; 16 (6B): 3355-3361
- **Production of IL-4 and IL-10 does not lead to immune quiescence in vascularized human organ grafts** *TRANSPLANTATION*
Lang, T., Krams, S. M., Martinez, O. M.
1996; 62 (6): 776-780
- **Elevations in IFN-gamma, IL-5, and IL-10 in patients with the autoimmune disease primary biliary cirrhosis: Association with autoantibodies and soluble CD30** *CLINICAL IMMUNOLOGY AND IMMUNOPATHOLOGY*
Krams, S. M., Cao, S., Hayashi, M., Villanueva, J. C., Martinez, O. M.
1996; 80 (3): 311-320
- **Immunoregulatory cytokines in chronic hepatitis C virus infection: Pre- and posttreatment with interferon alfa** *HEPATOLOGY*
Cacciarelli, T. V., Martinez, O. M., Gish, R. G., Villanueva, J. C., Krams, S. M.
1996; 24 (1): 6-9
- **Elevations in IFN-gamma, IL-5, and IL-10 in patients with the autoimmune disease, primary biliary cirrhosis. Association with autoantibodies and soluble CD30.**
Krams, S. M., Cao, S., Hayashi, M., Esquivel, C. O., Martinez, O. M.
W B SAUNDERS CO-ELSEVIER INC.1996: A1240–A1240
- **Apoptosis as a mechanism of cell death in liver allograft rejection (reply)** *TRANSPLANTATION*
Krams, S. M., Martinez, O. M.
1996; 61 (1): 168-169
- **Expression of cytokines and immune mediators during chronic liver allograft rejection** *14th Annual Meeting of the American-Society-of-Transplant-Physicians*
Hayashi, M., Martinez, O. M., GARCIKENNEDY, R., So, S., Esquivel, C. O., Krams, S. M.
WILLIAMS & WILKINS.1995: 1533–38
- **Elevated biliary interleukin 5 as an indicator of liver allograft rejection.** *Transplant immunology*
Lang, T., Krams, S. M., Berquist, W., Cox, K. L., Esquivel, C. O., Martinez, O. M.
1995; 3 (4): 291-298
- **THE USE OF NON-HEART-BEATING CADAVER DONORS IN EXPERIMENTAL LIVER-TRANSPLANTATION** *TRANSPLANTATION*
Tojimbara, T., Kennedy, R. G., BURNS, W., Hayashi, M., Krams, S., Martinez, O., So, S., Esquivel, C. O.
1995; 60 (10): 1179-1180
- **AN INCREASED INCIDENCE OF EPSTEIN-BARR-VIRUS INFECTION AND LYMPHOPROLIFERATIVE DISORDER IN YOUNG-CHILDREN ON FK506 AFTER LIVER-TRANSPLANTATION** *13th Annual Meeting of the American-Society-of-Transplant-Physicians*
Cox, K. L., LAWRENCEMIYASAKI, L. S., GARCIKENNEDY, R., Lennette, E. T., Martinez, O. M., Krams, S. M., Berquist, W. E., So, S. K., Esquivel, C. O.
WILLIAMS & WILKINS.1995: 524–29

- **APOPTOSIS AS A MECHANISM OF CELL-DEATH IN LIVER ALLOGRAFT-REJECTION** *13th Annual Meeting of the American-Society-of-Transplant-Physicians*
Krams, S. M., Egawa, H., QUINN, M. B., Villanueva, J. C., GARCIAKENNEDY, R., Martinez, O. M.
WILLIAMS & WILKINS.1995: 621–25
- **VIRAL AND IMMUNOLOGICAL ASPECTS OF EPSTEIN-BARR-VIRUS INFECTION IN PEDIATRIC LIVER-TRANSPLANT RECIPIENTS** *13th Annual Meeting of the American-Society-of-Transplant-Physicians*
Martinez, O. M., Villanueva, J. C., LAWRENCEMIYASAKI, L., QUINN, M. B., Cox, K., Krams, S. M.
WILLIAMS & WILKINS.1995: 519–24
- **DIFFERENTIAL PATTERNS OF CIRCULATING INTERCELLULAR-ADHESION MOLECULE-1 (CICAM-1) AND VASCULAR CELL-ADHESION MOLECULE-1 (CVCAM-1) DURING LIVER ALLOGRAFT-REJECTION** *13th Annual Meeting of the American-Society-of-Transplant-Physicians*
Lang, T., Krams, S. M., Villanueva, J. C., Cox, K., So, S., Martinez, O. M.
WILLIAMS & WILKINS.1995: 584–89
- **DISTINCT PATTERNS OF TH2 CYTOKINE PRODUCTION DURING IMMUNE ACTIVATION IN PEDIATRIC LIVER ALLOGRAFT RECIPIENTS** *XVth World Congress of the Transplantation-Society*
Lang, T., Krams, S. M., Villanueva, J. C., Cox, K., So, S., Esquivel, C., Martinez, O. M.
ELSEVIER SCIENCE INC.1995: 1146–47
- **HETEROGENEITY OF AUTOREACTIVE T-CELL CLONES SPECIFIC FOR THE E2 COMPONENT OF THE PYRUVATE-DEHYDROGENASE COMPLEX IN PRIMARY BILIARY-CIRRHOSIS** *JOURNAL OF EXPERIMENTAL MEDICINE*
VANDEWATER, J., ANSARI, A., Prindiville, T., Coppel, R. L., RICALTON, N., Kotzin, B. L., Liu, S. J., Roche, T. E., Krams, S. M., Munoz, S., Gershwin, M. E.
1995; 181 (2): 723-733
- **APOPTOSIS AS A MECHANISM OF CELL-DEATH IN A RAT MODEL OF LIVER ALLOGRAFT-REJECTION** *XVth World Congress of the Transplantation-Society*
Krams, S. M., Egawa, H., QUINN, M. B., Martinez, O. M.
ELSEVIER SCIENCE INC.1995: 466–67
- **INTERLEUKIN-12 - A POSSIBLE CYTOTOXIC T-LYMPHOCYTE DIFFERENTIATION FACTOR IN ALLOGRAFT RECIPIENTS** *XVth World Congress of the Transplantation-Society*
Gish, R. G., Krams, S. M., Martinez, O. M.
ELSEVIER SCIENCE INC.1995: 459–60
- **LONG-TERM NONRESPONSIVENESS TO A LIVER ALLOGRAFT MAY BE CYTOKINE-MEDIATED** *XVth World Congress of the Transplantation-Society*
Egawa, H., Martinez, O. M., QUINN, M. B., Villanueva, J. C., So, S., Esquivel, C. O., Krams, S. M.
ELSEVIER SCIENCE INC.1995: 241–42
- **CHARACTERIZATION OF CYTOKINE EXPRESSION IN AN ANIMAL-MODEL OF ACUTE LIVER ALLOGRAFT-REJECTION** *XVth World Congress of the Transplantation-Society*
Egawa, H., Martinez, O. M., QUINN, M. B., So, S., Esquivel, C. O., Krams, S. M.
ELSEVIER SCIENCE INC.1995: 505–6
- **MOLECULAR MARKERS OF EPSTEIN-BARR-VIRUS INFECTION IN THE CIRCULATION OF TRANSPLANT RECIPIENTS** *XVth World Congress of the Transplantation-Society*
Martinez, O. M., Villanueva, J. C., LAWRENCEMIYASAKI, L., QUINN, M. B., Gish, R., Cox, K., So, S., Esquivel, C. O., Krams, S. M.
ELSEVIER SCIENCE INC.1995: 1211–12
- **CIRCULATING INTERCELLULAR-ADHESION MOLECULE-1 AND VASCULAR CELL-ADHESION MOLECULE-1 IN PEDIATRIC LIVER RECIPIENTS** *XVth World Congress of the Transplantation-Society*
Lang, T., Krams, S. M., Villanueva, J. C., So, S. K., Berquist, W. E., Cox, K. L., Esquivel, C. O., Martinez, O. M.
ELSEVIER SCIENCE INC.1995: 1148–49
- **ACUTE LIVER ALLOGRAFT-REJECTION IN THE RAT - AN ANALYSIS OF THE IMMUNE RESPONSE** *TRANSPLANTATION*
Egawa, H., Martinez, O. M., QUINN, M. B., Villanueva, J. C., So, S., Esquivel, C. O., Krams, S. M.
1995; 59 (1): 97-102
- **CYTOKINE PATTERNS AND CYTOTOXIC MEDIATORS IN PRIMARY BILIARY-CIRRHOSIS** *HEPATOLOGY*

Martinez, O. M., Villanueva, J. C., Gershwin, M. E., Krams, S. M.
1995; 21 (1): 113-119

- **Liver transplantation at California Pacific Medical Center, San Francisco, California.** *Clinical transplants*
Esquivel, C. O., Martinez, O., Krams, S., Lim, J., So, S. K., Concepcion, W., Cox, K. L., Keeffe, E. B.
1994: 163-171
- **NEW IMMUNOLOGICAL INSIGHTS INTO MECHANISMS OF ALLOGRAFT-REJECTION** *GASTROENTEROLOGY CLINICS OF NORTH AMERICA*
Krams, S. M., Ascher, N. L., Martinez, O. M.
1993; 22 (2): 381-400
- **IL-2 AND IL-5 GENE-EXPRESSION IN RESPONSE TO ALLOANTIGEN IN LIVER ALLOGRAFT RECIPIENTS AND INVITRO** *11TH ANNUAL MEETING OF THE AMERICAN SOC OF TRANSPLANT PHYSICIANS*
Martinez, O. M., VILLANEUVA, J. C., Lake, J., Roberts, J. P., Ascher, N. L., Krams, S. M.
LIPPINCOTT WILLIAMS & WILKINS.1993: 1159-66
- **EVIDENCE FOR A NONCLASSICAL PATHWAY OF GRAFT-REJECTION INVOLVING INTERLEUKIN-5 AND EOSINOPHILS** *18TH ANNUAL MEETING OF THE AMERICAN SOC OF TRANSPLANT SURGEONS*
Martinez, O. M., Ascher, N. L., Ferrell, L., Villanueva, J., Lake, J., Roberts, J. P., Krams, S. M., LORBER
WILLIAMS & WILKINS.1993: 909-18
- **T-CELL RECEPTOR-V-ALPHA GENE USE IN SEQUENTIAL LIVER ALLOGRAFT BIOPSIES** *JEAN HAMBURGER MEMORIAL CONGRESS / 14TH INTERNATIONAL CONGRESS OF THE TRANSPLANTATION SOC*
Krams, S. M., Martinez, O. M., Villanueva, J. C., Lake, J., Roberts, J. P., Ascher, N. L.
ELSEVIER SCIENCE INC.1993: 84-85
- **INTRAGRAFT EOSINOPHILIA AND INTERLEUKIN-5 MESSENGER-RNA ACCOMPANY LIVER ALLOGRAFT-REJECTION** *JEAN HAMBURGER MEMORIAL CONGRESS / 14TH INTERNATIONAL CONGRESS OF THE TRANSPLANTATION SOC*
Martinez, O. M., Krams, S. M., Villanueva, J. C., Ferrell, L., Lake, J., Roberts, J. P., Ascher, N. L.
ELSEVIER SCIENCE INC.1993: 126-27
- **MOLECULAR ASPECTS OF EARLY STAGES OF BREAST-CANCER PROGRESSION** *Workshop on Chemoprevention of Breast Cancer*
Smith, H. S., Lu, Y., Deng, G. R., Martinez, O., Krams, S., Ljung, B. M., Thor, A., Lagios, M.
WILEY-LISS.1993: 144-152
- **CHARACTERIZATION AND EPITOPE MAPPING OF HUMAN MONOCLONAL-ANTIBODIES TO PDC-E2, THE IMMUNODOMINANT AUTOANTIGEN OF PRIMARY BILIARY-CIRRHOSIS** *JOURNAL OF AUTOIMMUNITY*
Leung, P. S., Krams, S., Munoz, S., SURH, C. P., ANSARI, A., Kenny, T., Robbins, D. L., Fung, J., Starzl, T. E., Maddrey, W., Coppel, R. L., Gershwin, M. E.
1992; 5 (6): 703-718
- **INTRAGRAFT CYTOKINE PROFILE DURING HUMAN LIVER ALLOGRAFT-REJECTION** *17TH ANNUAL MEETING OF THE AMERICAN SOC OF TRANSPLANT SURGEONS*
Martinez, O. M., Krams, S. M., Sterneck, M., Villanueva, J. C., Falco, D. A., Ferrell, L. D., Lake, J., Roberts, J. P., Ascher, N. L.
WILLIAMS & WILKINS.1992: 449-56
- **CYTOKINE AND T-CELL RECEPTOR GENE-EXPRESSION AT THE SITE OF ALLOGRAFT-REJECTION** *10TH ANNUAL MEETING OF THE AMERICAN SOC OF TRANSPLANT PHYSICIANS*
Krams, S. M., Falco, D. A., Villanueva, J. C., Rabkin, J., Tomlanovich, S. J., Vincenti, F., Amend, W. J., Melzer, J., Garovoy, M. R., Roberts, J. P., Ascher, N. L., Martinez, O. M.
WILLIAMS & WILKINS.1992: 151-56
- **IMPAIRED KIDNEY GRAFT-SURVIVAL IN FLOW CYTOMETRIC CROSSMATCHED POSITIVE DONOR-SPECIFIC TRANSFUSION RECIPIENTS** *13TH INTERNATIONAL CONGRESS OF THE TRANSPLANTATION SOC*
BOUHABIB, J. C., Krams, S., Colombe, B. W., Lou, C., BUBAR, O. T., Yousif, B., Amend, W. J., Salvatierra, O., Melzer, J., Garovoy, M. R.
ELSEVIER SCIENCE INC.1991: 403-4
- **ANALYSIS OF HEPATIC LYMPHOCYTE-T AND IMMUNOGLOBULIN DEPOSITS IN PATIENTS WITH PRIMARY BILIARY-CIRRHOSIS** *HEPATOLOGY*
Krams, S. M., VANDEWATER, J., Coppel, R. L., Esquivel, C., Roberts, J., ANSARI, A., Gershwin, M. E.

1990; 12 (2): 306-313

● **GENERATION OF BILIARY LESIONS AFTER TRANSFER OF HUMAN-LYMPHOCYTES INTO SEVERE COMBINED IMMUNODEFICIENT (SCID) MICE** *JOURNAL OF EXPERIMENTAL MEDICINE*

Krams, S. M., Dorshkind, K., Gershwin, M. E.

1989; 170 (6): 1919-1930

● **MOLECULAR DEFINITIONS, AUTOEPITOPES, AND ENZYMIC-ACTIVITIES OF THE MITOCHONDRIAL AUTO-ANTIGENS OF PRIMARY BILIARY-CIRRHOSIS** *SEMINARS IN LIVER DISEASE*

VANDEWATER, J., Surh, C. D., Leung, P. S., Krams, S. M., FREGEAU, D., Davis, P., Coppel, R., MACKAY, I. R., Gershwin, M. E.

1989; 9 (2): 132-137

● **IMMUNIZATION OF EXPERIMENTAL-ANIMALS WITH DIHYDROLIPOAMIDE ACETYLTRANSFERASE, AS A PURIFIED RECOMBINANT POLYPEPTIDE, GENERATES MITOCHONDRIAL ANTIBODIES BUT NOT PRIMARY BILIARY-CIRRHOSIS** *HEPATOLOGY*

Krams, S. M., Surh, C. D., Coppel, R. L., ANSARI, A., Ruebner, B., Gershwin, M. E.

1989; 9 (3): 411-416