



Jonathan Maltzman

Associate Professor of Medicine (Nephrology)

Medicine - Nephrology

 NIH Biosketch available Online

Bio

ACADEMIC APPOINTMENTS

- Associate Professor, Medicine - Nephrology
- Member, Cardiovascular Institute
- Member, Maternal & Child Health Research Institute (MCHRI)

ADMINISTRATIVE APPOINTMENTS

- Director of Basic Research, Division of Nephrology, (2015- present)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- American Society of Transplantation, Board of Directors (2018 - 2021)
- Federation of Clinical Immunology Societies, Secretary / Treasurer (2017 - present)

PROFESSIONAL EDUCATION

- BS, MIT , Biology (1989)
- PhD, University of Pennsylvania School of Medicine , Immunology (1997)
- MD, University of Pennsylvania School of Medicine , Medicine (1997)
- Internship/Residency, University of Chicago Hospitals , Internal Medicine (2000)
- Fellowship, University of Pennsylvania School of Medicine , Nephrology (2003)

Teaching

COURSES

2020-21

- Translational Immunology: IMMUNOL 209 (Win, Spr)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Kartik Bhamidipati, Payton Marshall

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Immunology (Phd Program)
- Nephrology (Fellowship Program)

Publications

PUBLICATIONS

- **SARS-CoV-2 Vaccination and Antibody Testing in Immunosuppressed Populations: You Can't Tell the Players Without a Scorecard.** *Transplantation*
Woodle, E. S., Gebel, H. M., Montgomery, R. A., Maltzman, J. S.
2021
- **SARS-CoV-2 Vaccination, Immune Responses, and Antibody Testing in Immunosuppressed Populations: Tip of the Iceberg.** *Transplantation*
Woodle, E. S., Gebel, H. M., Montgomery, R. A., Maltzman, J. S.
2021
- **It's good to have Gremlins in the zone.** *Science immunology*
Gustafson, C. E., Maltzman, J. S.
2021; 6 (60)
- **Association of Premature Immune Aging and Cytomegalovirus After Solid Organ Transplant** *FRONTIERS IN IMMUNOLOGY*
Higdon, L. E., Gustafson, C. E., Ji, X., Sahoo, M. K., Pinsky, B. A., Margulies, K. B., Maecker, H. T., Goronzy, J., Maltzman, J. S.
2021; 12
- **Immunological yin-yang after pregnancy.** *Science immunology*
Maltzman, J. S.
2021; 6 (57)
- **The ONE Study: One Small Step for Patient Care, a Giant Leap for Cell Therapy** *AMERICAN JOURNAL OF KIDNEY DISEASES*
Lamarche, C., Maltzman, J. S.
2021; 77 (2): 297–99
- **Anti-HLA and anti-SARS-CoV2 Antibodies in Kidney Transplant Recipient with COVID-19.** *Transplant international : official journal of the European Society for Organ Transplantation*
Gandolfini, I. n., Zanelli, P. n., Palmisano, A. n., Salvetti, D. n., Parmigiani, A. n., Maltzman, J. S., Labate, C. n., Fiaccadori, E. n., Cravedi, P. n., Maggiore, U. n.
2021
- **Association of Premature Immune Aging and Cytomegalovirus After Solid Organ Transplant.** *Frontiers in immunology*
Higdon, L. E., Gustafson, C. E., Ji, X., Sahoo, M. K., Pinsky, B. A., Margulies, K. B., Maecker, H. T., Goronzy, J., Maltzman, J. S.
2021; 12: 661551
- **Aging Tregs need DCAFinating.** *Science immunology*
Dong, D., Maltzman, J. S.
2020; 5 (52)
- **Sestrins teach old T cells new tricks.** *Science immunology*
Maltzman, J. S.
2020; 5 (47)
- **Development and Validation of a Multiplex, Bead-Based Assay to Detect Antibodies Directed Against SARS-CoV-2 Proteins.** *Transplantation*
Bray, R. A., Lee, J. H., Brescia, P. n., Kumar, D. n., Nong, T. n., Shih, R. n., Woodle, E. S., Maltzman, J. S., Gebel, H. M.
2020
- **The ONE Study: One Small Step for Patient Care, a Giant Leap for Cell Therapy.** *American journal of kidney diseases : the official journal of the National Kidney Foundation*
Lamarche, C. n., Maltzman, J. S.
2020
- **To debug or not to debug, a question worth asking.** *Science immunology*
Higdon, L. E., Maltzman, J. S.
2019; 4 (41)
- **Transplantation Alters Function and Clonality of Cytomegalovirus-Responsive T Cells**
Higdon, L. E., Schaffert, S., Saligrama, N., Davis, M. M., Khatri, P., Maltzman, J. S.

LIPPINCOTT WILLIAMS & WILKINS.2019

- **Single cell immune profiling in transplantation research** *AMERICAN JOURNAL OF TRANSPLANTATION*
Higdon, L. E., Schaffert, S., Khatri, P., Maltzman, J. S.
2019; 19 (5): 1278–87
- **Optimization of single-cell plate sorting for high throughput sequencing applications** *JOURNAL OF IMMUNOLOGICAL METHODS*
Higdon, L. E., Cain, C. J., Colden, M. A., Maltzman, J. S.
2019; 466: 17–23
- **Single cell immune profiling in transplantation research.** *American journal of transplantation : official journal of the American Society of Transplantation and the American Society of Transplant Surgeons*
Higdon, L. E., Schaffert, S., Khatri, P., Maltzman, J. S.
2019
- **Duel(ling) precursors in thymic Treg development.** *Science immunology*
Maltzman, J. S.
2019; 4 (36)
- **Duel(ling) precursors in thymic Treg development.** *Science immunology*
Maltzman, J. S.
2019; 4 (36)
- **To debug or not to debug, a question worth asking.** *Science immunology*
Higdon, L. E., Maltzman, J. S.
2019; 4 (41)
- **Optimization of single-cell plate sorting for high throughput sequencing applications.** *Journal of immunological methods*
Higdon, L. E., Cain, C. J., Colden, M. A., Maltzman, J. S.
2018
- **Inflammatory macrophage-associated 3-gene signature predicts subclinical allograft injury and graft survival.** *JCI insight*
Azad, T. D., Donato, M. n., Heylen, L. n., Liu, A. B., Shen-Orr, S. S., Sweeney, T. E., Maltzman, J. S., Naesens, M. n., Khatri, P. n.
2018; 3 (2)
- **The outstanding questions in transplantation: It's about time...** *AMERICAN JOURNAL OF TRANSPLANTATION*
Azzi, J., Raimondi, G., Mas, V., Riella, L. V., Elfadawy, N., Safa, K., Wojciechowski, D., Kanak, M., Nog, R., Maltzman, J. S., Ford, M. L., Pober, J. S., Luo, et al
2018; 18 (1): 271–72
- **Expanding the Toolkit for the Study of Allospecific B and T Cell Responses** *TRANSPLANTATION*
Higdon, L. E., Maltzman, J. S.
2017; 101 (11): 2661–62
- **T cells expand after solid organ transplantation in the absence of CMV disease.** *American journal of transplantation*
Higdon, L. E., Trofe-Clark, J., Liu, S., Margulies, K. B., Sahoo, M. K., Blumberg, E., Pinsky, B. A., Maltzman, J. S.
2017
- **Virtual Global Transplant Laboratory Standard Operating Procedures for Blood Collection, PBMC Isolation, and Storage.** *Transplantation direct*
Higdon, L. E., Lee, K., Tang, Q., Maltzman, J. S.
2016; 2 (9)
- **Differentially Expressed Gene Transcripts Using RNA Sequencing from the Blood of Immunosuppressed Kidney Allograft Recipients** *PLOS ONE*
Dorr, C., Wu, B., Guan, W., Muthusamy, A., Sanghavi, K., Schladt, D. P., Maltzman, J. S., Scherer, S. E., Brott, M. J., Matas, A. J., Jacobson, P. A., Oetting, W. S., Israni, et al
2015; 10 (5)
- **Regulatory T Cells Require TCR Signaling for Their Suppressive Function** *JOURNAL OF IMMUNOLOGY*
Schmidt, A. M., Lu, W., Sindhava, V. J., Huang, Y., Burkhardt, J. K., Yang, E., Riese, M. J., Maltzman, J. S., Jordan, M. S., Kambayashi, T.
2015; 194 (9): 4362-4370

- **AST Cutting Edge of Transplantation 2013 Meeting Report: A Comprehensive Look at B Cells and Antibodies in Transplantation** *AMERICAN JOURNAL OF TRANSPLANTATION*
Mengel, M., Chong, A., Rothstein, D. M., Zorn, E., Maltzman, J. S.
2014; 14 (3): 524-530
- **T-Cell Costimulatory Blockade in Organ Transplantation** *COLD SPRING HARBOR PERSPECTIVES IN MEDICINE*
Maltzman, J. S., Turka, L. A.
2013; 3 (12)
- **An obligate cell-intrinsic function for CD28 in Tregs** *JOURNAL OF CLINICAL INVESTIGATION*
Zhang, R., Huynh, A., Whitcher, G., Chang, J., Maltzman, J. S., Turka, L. A.
2013; 123 (2): 580-593
- **Homeostatic Division Is Not Necessary for Antigen-Specific CD4(+) Memory T Cell Persistence** *JOURNAL OF IMMUNOLOGY*
Corbo-Rodgers, E., Wiehagen, K. R., Staub, E. S., Maltzman, J. S.
2012; 189 (7): 3378-3385
- **Foxp4 Is Dispensable for T Cell Development, but Required for Robust Recall Responses** *PLOS ONE*
Wiehagen, K. R., Corbo-Rodgers, E., Li, S., Staub, E. S., Hunter, C. A., Morrisey, E. E., Maltzman, J. S.
2012; 7 (8)
- **Cutting Edge: IL-2 Signals Determine the Degree of TCR Signaling Necessary To Support Regulatory T Cell Proliferation In Vivo** *JOURNAL OF IMMUNOLOGY*
Zou, T., Satake, A., Corbo-Rodgers, E., Schmidt, A. M., Farrar, M. A., Maltzman, J. S., Kambayashi, T.
2012; 189 (1): 28-32
- **Site-specific accumulation of recently activated CD4+Foxp3+ regulatory T cells following adoptive transfer** *EUROPEAN JOURNAL OF IMMUNOLOGY*
Lieberman, S. M., Kim, J. S., Corbo-Rodgers, E., Kambayashi, T., Maltzman, J. S., Behrens, E. M., Turka, L. A.
2012; 42 (6): 1429-1435
- **Oral ivermectin as an unexpected initiator of CreT2-mediated deletion in T cells** *NATURE IMMUNOLOGY*
Corbo-Rodgers, E., Staub, E. S., Zou, T., Smith, A., Kambayashi, T., Maltzman, J. S.
2012; 13 (3): 197-198
- **Probucol ameliorates renal and metabolic sequelae of primary CoQ deficiency in Pdss2 mutant mice** *EMBO MOLECULAR MEDICINE*
Falk, M. J., Polyak, E., Zhang, Z., Peng, M., King, R., Maltzman, J. S., Okwuego, E., Horyn, O., Nakamaru-Ogiso, E., Ostrovsky, J., Xie, L. X., Chen, J. Y., Marbois, et al
2011; 3 (7): 410-427
- **Conditional deletion of SLP-76 in mature T cells abrogates peripheral immune responses** *EUROPEAN JOURNAL OF IMMUNOLOGY*
Wu, G. F., Corbo, E., Schmidt, M., Smith-Garvin, J. E., Riese, M. J., Jordan, M. S., Laufer, T. M., Brown, E. J., Maltzman, J. S.
2011; 41 (7): 2064-2073
- **T cell receptor signal strength in T-reg and iNKT cell development demonstrated by a novel fluorescent reporter mouse** *JOURNAL OF EXPERIMENTAL MEDICINE*
Moran, A. E., Holzappel, K. L., Xing, Y., Cunningham, N. R., Maltzman, J. S., Punt, J., Hogquist, K. A.
2011; 208 (6): 1279-1289
- **Antiviral memory CD8 T-cell differentiation, maintenance, and secondary expansion occur independently of MyD88** *BLOOD*
Rahman, A. H., Zhang, R., Blosser, C. D., Hou, B., DeFranco, A. L., Maltzman, J. S., Wherry, E. J., Turka, L. A.
2011; 117 (11): 3123-3130
- **Loss of tonic T-cell receptor signals alters the generation but not the persistence of CD8(+) memory T cells** *BLOOD*
Wiehagen, K. R., Corbo, E., Schmidt, M., Shin, H., Wherry, E. J., Maltzman, J. S.
2010; 116 (25): 5560-5570
- **Ablation of SLP-76 signaling after T cell priming generates memory CD4 T cells impaired in steady-state and cytokine-driven homeostasis** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Bushar, N. D., Corbo, E., Schmidt, M., Maltzman, J. S., Farber, D. L.
2010; 107 (2): 827-831

- **Conditional gene expression: A new tool for the transplantologist** *AMERICAN JOURNAL OF TRANSPLANTATION*
Maltzman, J. S., Turka, L. A.
2007; 7 (4): 733-740
- **Conditional deletion reveals a cell-autonomous requirement of SLP-76 for thymocyte selection** *JOURNAL OF EXPERIMENTAL MEDICINE*
Maltzman, J. S., Koor, L., Clements, J. L., Koretzky, G. A.
2005; 202 (7): 893-900
- **Role of EGR1 in regulation of stimulus-dependent CD44 transcription in B lymphocyte** *MOLECULAR AND CELLULAR BIOLOGY*
Maltzman, J. S., Carman, J. A., Monroe, J. G.
1996; 16 (5): 2283-2294
- **Transcriptional regulation of the Icam-1 gene in antigen receptor- and phorbol ester-stimulated B lymphocytes: Role for transcription factor EGR1** *JOURNAL OF EXPERIMENTAL MEDICINE*
Maltzman, J. S., Carman, J. A., Monroe, J. G.
1996; 183 (4): 1747-1759
- **MOLECULAR EVIDENCE FOR THE EXPRESSION OF NICOTINIC ACETYLCHOLINE-RECEPTOR ALPHA-CHAIN IN MOUSE THYMUS** *JOURNAL OF IMMUNOLOGY*
Wheatley, L. M., Urso, D., TUMAS, K., Maltzman, J., Loh, E., Levinson, A. I.
1992; 148 (10): 3105-3109
- **EXPRESSION OF THE V-BETA-5.1 GENE BY MURINE PERIPHERAL T-CELLS IS CONTROLLED BY MHC GENES AND SKEWED TO THE CD8+ SUBSET** *JOURNAL OF IMMUNOLOGY*
Liao, N. S., Maltzman, J., Raulet, D. H.
1990; 144 (3): 844-848
- **POSITIVE SELECTION DETERMINES T-CELL RECEPTOR V-BETA-14 GENE USAGE BY CD8+ T-CELLS** *JOURNAL OF EXPERIMENTAL MEDICINE*
Liao, N. S., Maltzman, J., Raulet, D. H.
1989; 170 (1): 135-143