

Stanford



Elizabeth Mellins

Professor of Pediatrics (Human Gene Therapy) at the Lucile Salter Packard Children's Hospital

Pediatrics - Human Gene Therapy

Bio

ACADEMIC APPOINTMENTS

- Professor - Med Center Line, Pediatrics - Human Gene Therapy
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Wu Tsai Neurosciences Institute

ADMINISTRATIVE APPOINTMENTS

- Member, Cellular and Molecular Immunology Study Section (CMI-B), NIH, (2016-2021)
- Scientific Advisory Board, Arthritis National Research Foundation, (2014-2024)
- Chair, Postdoctoral Education Committee, Stanford Program in Immunology, (2013-2022)
- Advisory Board, Nature Reviews Rheumatology, (2005-2015)
- Member, Medical and Scientific Advisory Council, Arthritis Foundation (national), (2003-2006)
- Member, CMI-B Study Section, NIH, (2002-2007)
- Developer and co-Director, Introduction to Medicine for PhDs, Stanford School of Medicine, (2001-2011)
- First Chair and Founder, Childhood Arthritis and Rheumatology Research Alliance, (2000-2004)

HONORS AND AWARDS

- Distinguished Service Award, American Association of Immunologists (2005)
- Within Our Reach grant recipient, ACR Research & Education Fund (2007)

PROFESSIONAL EDUCATION

- M.D., Harvard Medical School, Medicine (1978)

COMMUNITY AND INTERNATIONAL WORK

- Understanding Childhood Arthritis Network
- Childhood Arthritis and Rheumatology Research Alliance

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Our lab focuses on the study of antigen presentation by major histocompatibility complex (MHC) class II molecules. We have been particularly interested in the molecular mechanisms and intracellular steps involved in the generation of complexes between MHC class II molecules and peptides. Our basic work in this area

has elucidated the roles of invariant chain and HLA-DM, two molecules which regulate peptide-loading of class II molecules. We continue to study basic molecular mechanisms in antigen presentation by MHC class II molecules, focusing now on particular events in antigen presentation by B cells. In addition, we have an active program to understand the molecular basis of class II associations with autoimmune diseases. We have developed novel hypotheses in this area, which we have tested in animal models.

Ongoing studies deal with:

1. Analysis of the biosynthesis, structure, and structure/function relationships of the HLA-DM and HLA-DO molecules.
2. Regulation of class II-restricted antigen presentation by professional antigen presenting cells, particularly B cells.
3. Mechanistic basis of HLA allele association with autoimmune disease
4. Disease mechanisms in systemic idiopathic juvenile arthritis

CLINICAL TRIALS

- Observational Study of Pediatric Rheumatic Diseases: The CARRA Registry, Recruiting

Teaching

COURSES

2017-18

- Ethics, Science, and Society: IMMUNOL 258 (Spr)

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Debopam Ghosh, Shamma Rahman

Doctoral Dissertation Reader (NonAC)

Justin Arredondo-Guerrero

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Cancer Biology (Phd Program)
- Immunology (Phd Program)

Publications

PUBLICATIONS

- **Response to: 'Successful treatment of plasma exchange for refractory systemic juvenile idiopathic arthritis complicated with macrophage activation syndrome and severe lung disease' by Sato et al.** *Annals of the rheumatic diseases*
Saper, V. E., Chen, G., Guillerman, R. P., Khatri, P., Cron, R. Q., Mellins, E. D.
2020
- **Inflammatory Bowel Disease in Children with Systemic Juvenile Idiopathic Arthritis.** *The Journal of rheumatology*
Maller, J., Fox, E., Park, K. T., Paul, S. S., Baszis, K., Borocco, C., Prahalad, S., Quartier, P., Reinhardt, A., Schonenberg-Meinema, D., Shipman, L., Terreri, M. T., Simard, et al
2020
- **In vivo clonal expansion and phenotypes of hyporetin-specific CD4+ T cells in narcolepsy patients and controls.** *Nature communications*
Jiang, W., Birtley, J. R., Hung, S., Wang, W., Chiou, S., Macaubas, C., Kornum, B., Tian, L., Huang, H., Adler, L., Weaver, G., Lu, L., Ildstad-Minnihan, et al
2019; 10 (1): 5247
- **Synergy between B cell receptor/antigen uptake and MHCII peptide editing relies on HLA-DO tuning.** *Scientific reports*
Jiang, W., Adler, L. N., Macmillan, H., Mellins, E. D.
2019; 9 (1): 13877

- **Human Intestinal Enteroids Model MHC-II in the Gut Epithelium** *FRONTIERS IN IMMUNOLOGY*
Wosen, J. E., Iltad-Minnihan, A., Co, J. Y., Jiang, W., Mukhopadhyay, D., Fernandez-Becker, N. Q., Kuo, C. J., Amieva, M. R., Mellins, E. D.
2019; 10
- **Severe autoinflammation in four patients with C-terminal variants in CDC42 successfully treated with IL-1beta inhibition.** *The Journal of allergy and clinical immunology*
Gernez, Y., de Jesus, A. A., Alsaleem, H., Macaubas, C., Roy, A., Lovell, D., Jagadeesh, K. A., Alehashemi, S., Erdman, L., Grimley, M., Talarico, S., Bacchetta, R., Lewis, et al
2019
- **Pic gamma 2/Tmem178 dependent pathway in myeloid cells modulates the pathogenesis of cytokine storm syndrome** *JOURNAL OF AUTOIMMUNITY*
Mahajan, S., Decker, C. E., Yang, Z., Veis, D., Mellins, E. D., Faccio, R.
2019; 100: 62–74
- **Epitope Selection for HLA-DQ2 Presentation: Implications for Celiac Disease and Viral Defense** *JOURNAL OF IMMUNOLOGY*
Hung, S., Hou, T., Jiang, W., Wang, N., Qiao, S., Chow, I., Liu, X., van der Burg, S. H., Koelle, D. M., Kwok, W. W., Sollid, L. M., Mellins, E. D.
2019; 202 (9): 2558–69
- **Tmem178 negatively regulates store-operated calcium entry in myeloid cells via association with STIM1.** *Journal of autoimmunity*
Yang, Z., Yan, H., Dai, W., Jing, J., Yang, Y., Mahajan, S., Zhou, Y., Li, W., Macaubas, C., Mellins, E. D., Shih, C., Fitzpatrick, J. A., Faccio, et al
2019
- **US Adult Rheumatologists' Perspective on the Transition Process for Young Adults with Rheumatic Conditions.** *Arthritis care & research*
Zisman, D., Samad, A., Ardoin, S. P., Chira, P., White, P., Lavi, I., von Scheven, E., Lawson, E. F., Hing, M., Mellins, E. D.
2019
- **Novel CDC42 Mutation Causes Severe Autoinflammatory Syndrome Responsive to IL-1 Inhibition**
Gernez, Y., Kirbey, M., Balagas, J. M., Macaubas, C. I., Canna, S., Lewis, D. B., Mellins, E., Bacchetta, R., Weinacht, K. G.
SPRINGER/PLENUM PUBLISHERS.2019: S69
- **HLA associations in inflammatory arthritis: emerging mechanisms and clinical implications.** *Nature reviews. Rheumatology*
Busch, R., Kollnberger, S., Mellins, E. D.
2019
- **Human Intestinal Enteroids Model MHC-II in the Gut Epithelium.** *Frontiers in immunology*
Wosen, J. E., Iltad-Minnihan, A., Co, J. Y., Jiang, W., Mukhopadhyay, D., Fernandez-Becker, N. Q., Kuo, C. J., Amieva, M. R., Mellins, E. D.
2019; 10: 1970
- **Emergent high fatality lung disease in systemic juvenile arthritis.** *Annals of the rheumatic diseases*
Saper, V. E., Chen, G., Deutsch, G. H., Guillerman, R. P., Birgmeier, J., Jagadeesh, K., Canna, S., Schuler, G., Deterding, R., Xu, J., Leung, A. N., Bouzoubaa, L., Abulaban, et al
2019
- **Pulse-Chase Analysis for Studies of MHC Class II Biosynthesis, Maturation, and Peptide Loading.** *Methods in molecular biology (Clifton, N.J.)*
Hou, T., Rinderknecht, C., Ghosh, D., Hadjinicolaou, A. V., Busch, R., Mellins, E. D.
2019; 1988: 315–41
- **Epithelial MHC Class II Expression and Its Role in Antigen Presentation in the Gastrointestinal and Respiratory Tracts** *FRONTIERS IN IMMUNOLOGY*
Wosen, J. E., Mukhopadhyay, D., Macaubas, C., Mellins, E. D.
2018; 9
- **Epithelial MHC Class II Expression and Its Role in Antigen Presentation in the Gastrointestinal and Respiratory Tracts.** *Frontiers in immunology*
Wosen, J. E., Mukhopadhyay, D., Macaubas, C., Mellins, E. D.
2018; 9: 2144
- **Genetic architecture distinguishes systemic juvenile idiopathic arthritis from other forms of juvenile idiopathic arthritis: clinical and therapeutic implications** *ANNALS OF THE RHEUMATIC DISEASES*
Ombrello, M. J., Arthur, V. L., Remmers, E. F., Hinks, A., Tachmazidou, I., Grom, A. A., Foell, D., Martini, A., Gattorno, M., Ozen, S., Prahalad, S., Zeff, A. S., Bohnsack, et al
2017; 76 (5)

- **The Other Function: Class II-Restricted Antigen Presentation by B Cells** *FRONTIERS IN IMMUNOLOGY*
Adler, L. N., Jiang, W., Bhamidipati, K., Millican, M., Macaubas, C., Hung, S., Mellins, E. D.
2017; 8
- **The Killer Immunoglobulin-like Receptor KIR3DL1 in Combination with HLA-Bw4 Is Associated with Pediatric Acute-onset Neuropsychiatric Syndrome (PANS)**
Frankovich, J., Anderson, K., Montero-Martin, G., Chan, A., Thienemann, M., Farhadian, B., Willett, T., Mellins, E., Madden, A., Murphy, T., Swedo, S., Fernandez-Vina, M., Hollenbach, et al
WILEY.2020: 255–57
- **Pediatric Acute-onset Neuropsychiatric Syndrome (PANS) Is Characterized by a Novel Subset of Monocytes with Markers Associated with Crossing the Blood Brain Barrier (BBB)**
Rahman, S., Gaertner, F., Houghton, J., Macaubas, C., Chan, A., Columbo, L., Frankovich, J., Mellins, E.
WILEY.2020: 262–63
- **Psoriatic arthritis in childhood: A commentary on the controversy.** *Clinical immunology (Orlando, Fla.)*
Stoll, M. L., Mellins, E. D.
2020: 108396
- **US Adult Rheumatologists' Perspectives on the Transition Process for Young Adults With Rheumatic Conditions** *ARTHRITIS CARE & RESEARCH*
Zisman, D., Samad, A., Ardoin, S. P., Chira, P., White, P., Lavi, I., von Scheven, E., Lawson, E. F., Hing, M., Mellins, E. D.
2020; 72 (3): 432–40
- **Drug Reaction and High Fatality Lung Disease in Systemic Onset Juvenile Idiopathic Arthritis (sJIA)**
Saper, V., Mellins, E., Kwong, B.
MOSBY-ELSEVIER.2020: AB95
- **Response to: 'Effectiveness and safety of ruxolitinib for the treatment of refractory systemic idiopathic juvenile arthritis like associated with interstitial lung disease: case report' by Bader-Meunier et al.** *Annals of the rheumatic diseases*
Saper, V. E., Chen, G., Khatri, P., Mellins, E. D.
2020
- **Combined Assay for Detecting Autoantibodies to Nucleic Acids and Apolipoprotein H in Patients with Systemic Lupus Erythematosus.** *Methods in molecular biology (Clifton, N.J.)*
Khatri, S., Mellins, E. D., Torok, K. S., Bukhari, S. A., Astakhova, K.
2020; 2063: 57–71
- **Retinoic Acid and Lymphotoxin Signaling Promote Differentiation of Human Intestinal M Cells.** *Gastroenterology*
Ding, S., Song, Y., Brulois, K. F., Pan, J., Co, J. Y., Ren, L., Feng, N., Yasukawa, L. L., Sánchez-Tacuba, L., Wosen, J. E., Mellins, E. D., Monack, D. M., Amieva, et al
2020
- **Diacylglycerol Kinase zeta Regulates Macrophage Responses in Juvenile Arthritis and Cytokine Storm Syndrome Mouse Models.** *Journal of immunology (Baltimore, Md. : 1950)*
Mahajan, S., Mellins, E. D., Faccio, R.
2019
- **Multiplex Serum Analysis Identifies Potential Biomarkers of Systemic Juvenile Idiopathic Arthritis, Macrophage Activation Syndrome, and Associated Pulmonary Alveolar Proteinosis: Evidence for Independently-regulated Hyperinflammatory and Eosinophilic Inflammation**
Chen, G., Schulert, G., De Jesus, A., Saper, V., Schneider, C., Trapnell, B., Grom, A. A., Goldbach-Mansky, R., Mellins, E., Khatri, P., Canna, S.
WILEY.2019
- **Systemic Juvenile Idiopathic Arthritis-Lung Disease: Characterization and Risk Factors**
Schulert, G., Yasin, S., Carey, B., Chalk, C., Thuy Do, Schapiro, A., Husami, A., Watts, A., Brunner, H., Huggins, J., Mellins, E., Morgan, E., Ting, T., et al
WILEY.2019
- **Systemic Juvenile Idiopathic Arthritis-Lung Disease: Characterization and Risk Factors.** *Arthritis & rheumatology (Hoboken, N.J.)*
Schulert, G. S., Yasin, S., Carey, B., Chalk, C., Do, T., Schapiro, A. H., Husami, A., Watts, A., Brunner, H. I., Huggins, J., Mellins, E. D., Morgan, E. M., Ting, et al
2019

- **Tmem178 negatively regulates store-operated calcium entry in myeloid cells via association with STIM1** *JOURNAL OF AUTOIMMUNITY*
Yang, Z., Yan, H., Dai, W., Jing, J., Yang, Y., Mahajan, S., Zhou, Y., Li, W., Macaubas, C., Mellins, E. D., Shih, C., Fitzpatrick, J. J., Faccio, et al
2019; 101: 94–108
- **Citrullinated Peptide Epitope Targets Therapeutic Nanoparticles to Human Neutrophils.** *Bioconjugate chemistry*
Khatri, S., Hansen, J., Mendes, A. C., Chronakis, I. S., Hung, S. C., Mellins, E. D., Astakhova, K.
2019
- **Multiparameter Mass Cytometry By Time-of-Flight Spectrometry (CyTOF) Phenotyping in Pediatric Localized Scleroderma**
Mirizio, E., Mellins, E. D., Macaubas, C., Maecker, H. T., Gartner, F., Konnikova, L., Schollaert-Fitch, K., Torok, K. S.
WILEY.2018
- **Interleukin-1 in monocyte activation phenotypes in systemic juvenile idiopathic arthritis: Observations from a clinical trial of riloncept, an interleukin-1 inhibitor** *CLINICAL IMMUNOLOGY*
Zhang, Y., Gupta, S., Iltad-Minnihan, A., Ayyangar, S., Hay, A. D., Pascual, V., Ilowite, N. T., Macaubas, C., Mellins, E. D.
2018; 194: 9–18
- **IL1RN Variation Influences Both Disease Susceptibility and Response to Recombinant Human Interleukin-1 Receptor Antagonist Therapy in Systemic Juvenile Idiopathic Arthritis** *ARTHRITIS & RHEUMATOLOGY*
Arthur, V. L., Shuldiner, E., Remmers, E. F., Hinks, A., Grom, A. A., Foell, D., Martini, A., Gattorno, M., Ozen, S., Prahalad, S., Zeff, A. S., Bohnsack, J. F., Ilowite, et al
2018; 70 (8): 1319–30
- **Interleukin-1 in monocyte activation phenotypes in systemic juvenile idiopathic arthritis: Observations from a clinical trial of riloncept, an interleukin-1 inhibitor.** *Clinical immunology (Orlando, Fla.)*
Zhang, Y., Gupta, S., Iltad-Minnihan, A., Ayyangar, S., Hay, A. D., Pascual, V., Ilowite, N. T., Macaubas, C., Mellins, E. D.
2018; 194: 9–18
- **The Genetic Profile of Rheumatoid Factor-Positive Polyarticular Juvenile Idiopathic Arthritis Resembles That of Adult Rheumatoid Arthritis** *ARTHRITIS & RHEUMATOLOGY*
Hinks, A., Marion, M. C., Cobb, J., Comeau, M. E., Sudman, M., Ainsworth, H. C., Bowes, J., Becker, M. L., Bohnsack, J. F., Haas, J., Lovell, D. J., Mellins, E. D., Nelson, et al
2018; 70 (6): 957–62
- **Juvenile Psoriatic Arthritis: A Report from the GRAPPA 2017 Annual Meeting** *JOURNAL OF RHEUMATOLOGY*
Zisman, D., Stoll, M. L., Aviel, Y., Mellins, E. D.
2018; 45 (6): 11–16
- **Juvenile Psoriatic Arthritis: A Report from the GRAPPA 2017 Annual Meeting.** *The Journal of rheumatology. Supplement*
Zisman, D., Stoll, M. L., Butbul Aviel, Y., Mellins, E. D.
2018; 94: 11–16
- **DO:DM tunes antigen presentation in a BCR affinity-dependent manner**
Jiang, W., Adler, L. N., Macmillan, H., Mellins, E.
AMER ASSOC IMMUNOLOGISTS.2018
- **Macrophage dependent pathways modulate the pathogenesis of cytokine storm syndrome**
Mahajan, S., Decker, C., Mellins, E., Faccio, R.
AMER ASSOC IMMUNOLOGISTS.2018
- **A myeloid population potentially corresponding to myeloid monocytic suppressor cells (MoMDSCs) is increased in the blood of Rheumatoid Arthritis patients and associated with osteoclastogenesis**
Macaubas, C., Gaertner, F., Yeh, C., Rajasekaran, N., Iltad-Minnihan, A., Nakamura, M. C., Mellins, E. D.
AMER ASSOC IMMUNOLOGISTS.2018
- **Single-walled carbon nanotubes target neutrophils and Ly-6C(hi) monocytes and localize to joints in murine models of arthritis**
Hung, S., Rajasekaran, N., Zhu, S., Ma, Z., Ghosn, E., Mellins, E. D.
AMER ASSOC IMMUNOLOGISTS.2018
- **Detection of autoimmune antibodies in localized scleroderma by synthetic oligonucleotide antigens** *PLOS ONE*
Samuelsen, S., Jorgensen, C., Mellins, E. D., Torok, K. S., Astakhova, K.

2018; 13 (4): e0195381

- **Autoantibody Profiling in Lupus Patients using Synthetic Nucleic Acids** *SCIENTIFIC REPORTS*
Klecka, M., Thybo, C., Macaubas, C., Solov'yov, I., Simard, J., Balboni, I., Fox, E., Voss, A., Mellins, E. D., Astakhova, K.
2018; 8: 5554
- **Adiposity in Juvenile Psoriatic Arthritis** *JOURNAL OF RHEUMATOLOGY*
Samad, A., Stoll, M. L., Lavi, I., Hsu, J. J., Strand, V., Robinson, T. N., Mellins, E. D., Zisman, D., CARRA Legacy Registry In
2018; 45 (3): 411–18
- **PLC gamma 2 differentially modulates pro-inflammatory macrophages through DAG and Calcium pathways in arthritic complications.**
Mahajan, S., Decker, C., Mellins, E., Faccio, R.
WILEY.2017: S286
- **Interferon Gamma (IFN-gamma) Subpopulations in Skin Homing T Cells of Localized Scleroderma**
Macaubas, C., Mirizio, E., Schollaert-Fitch, K., Mellins, E. D., Torok, K. S.
WILEY.2017
- **The MHC class II antigen presentation pathway in human monocytes differs by subset and is regulated by cytokines** *PLOS ONE*
Lee, J., Tam, H., Adler, L., Iltad-Minnihan, A., Macaubas, C., Mellins, E. D.
2017; 12 (8): e0183594
- **The Juvenile Psoriatic Arthritis Cohort in the CARRA Registry: Clinical Characteristics, Classification, and Outcomes** *JOURNAL OF RHEUMATOLOGY*
Zisman, D., Gladman, D. D., Stoll, M. L., Strand, V., Lavi, I., Hsu, J. J., Mellins, E. D.
2017; 44 (3): 342-351
- **Paediatric rheumatic diseases: Navigating the transition from paediatric to adult care.** *Nature reviews. Rheumatology*
Lawson, E. F., Mellins, E. D.
2017; 13 (3): 138–39
- **New frontiers in the treatment of systemic juvenile idiopathic arthritis.** *F1000Research*
Canny, S., Mellins, E.
2017; 6: 971
- **Genetic architecture distinguishes systemic juvenile idiopathic arthritis from other forms of juvenile idiopathic arthritis: clinical and therapeutic implications.** *Annals of the rheumatic diseases*
Ombrello, M. J., Arthur, V. L., Remmers, E. F., Hinks, A., Tachmazidou, I., Grom, A. A., Foell, D., Martini, A., Gattorno, M., Özen, S., Prahalad, S., Zeff, A. S., Bohnsack, et al
2016
- **Enhancing translational research in paediatric rheumatology through standardization.** *Nature reviews. Rheumatology*
Yeung, R. S., Albani, S., Feldman, B. M., Mellins, E., Prakken, B., Wedderburn, L. R.
2016; 12 (11): 684-690
- **Synthetic oligonucleotide antigens modified with locked nucleic acids detect disease specific antibodies** *SCIENTIFIC REPORTS*
Samuelsen, S. V., Solov'yov, I. A., Balboni, I. M., Mellins, E., Nielsen, C. T., Heegaard, N. H., Astakhova, K.
2016; 6
- **Genetic Architecture of Systemic Juvenile Idiopathic Arthritis Distinguishes It from Oligoarticular and Polyarticular Forms of Juvenile Idiopathic Arthritis**
Ombrello, M. J., Arthur, V., Remmers, E. F., Hinks, A., Grom, A., Foll, D., Martini, A., Gattorno, M., Ozen, S., Prahalad, S., Zeff, A., Bohnsack, J. F., Ilowite, et al
WILEY.2016
- **Altered signaling in systemic juvenile idiopathic arthritis monocytes** *CLINICAL IMMUNOLOGY*
Macaubas, C., Wong, E., Zhang, Y., Nguyen, K. D., Lee, J., Milojevic, D., Sheno, S., Stevens, A. M., Ilowite, N., Saper, V., Lee, T., Mellins, E. D.
2016; 163: 66-74
- **The Systemic Juvenile Idiopathic Arthritis Cohort of the Childhood Arthritis and Rheumatology Research Alliance Registry: 2010-2013.** *The Journal of rheumatology*
Janow, G., Schanberg, L. E., Setoguchi, S., Hasselblad, V., Mellins, E. D., Schneider, R., Kimura, Y.
2016; 43 (9): 1755–62

- **Ligand Selection and Trafficking for MHC II** *ENCYCLOPEDIA OF IMMUNOBIOLOGY, VOL 2: MOLECULAR IMMUNOLOGY*
Mellins, E. D., Ratcliffe, M. J., Colonna, M., Elliott, T., Mantovani, A., Martin, A.
2016; 247–54
- **Novel Phospholipid-Protein Conjugates Allow Improved Detection of Antibodies in Patients with Autoimmune Diseases.** *PloS one*
Samuelsen, S. V., Maity, A., Nybo, M., Macaubas, C., Lønstrup, L., Balboni, I. M., Mellins, E. D., Astakhova, K.
2016; 11 (6)
- **HLA-DRB1*11 and variants of the MHC class II locus are strong risk factors for systemic juvenile idiopathic arthritis** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Ombrello, M. J., Remmers, E. F., Tachmazidou, I., Grom, A., Foell, D., Haas, J., Martini, A., Gattorno, M., Ozen, S., Prahalad, S., Zeff, A. S., Bohnsack, J. F., Mellins, et al
2015; 112 (52): 15970-15975
- **Tmem178 acts in a novel negative feedback loop targeting NFATc1 to regulate bone mass** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Decker, C. E., Yang, Z., Rimer, R., Park-Min, K., Macaubas, C., Mellins, E. D., Novack, D. V., Faccio, R.
2015; 112 (51): 15654-15659
- **HLA-DM and HLA-DO: Bi-directional regulation of function, tuned by pH**
Jiang, W., Strohmman, M., Wang, N., Hou, T., Mellins, E. D.
PERGAMON-ELSEVIER SCIENCE LTD.2015: 148
- **Comparison of biomarkers for systemic juvenile idiopathic arthritis** *PEDIATRIC RESEARCH*
Shenoi, S., Ou, J., Ni, C., Macaubass, C., Gersuk, V. H., Wallace, C. A., Mellins, E. D., Stevens, A. M.
2015; 78 (5): 554-559
- **Comparison of biomarkers for systemic juvenile idiopathic arthritis.** *Pediatric research*
Shenoi, S., Ou, J., Ni, C., Macaubas, C., Gersuk, V. H., Wallace, C. A., Mellins, E. D., Stevens, A. M.
2015; 78 (5): 554-559
- **Inflammatory Bowel Disease in Children with Systemic Juvenile Idiopathic Arthritis**
Fox, E., Hsu, J., Chalom, E., Sertial, S., Park, K. T., Simard, J. F., Quartier, P., Terreri, M., Baszis, K., Borocco, C., Prahalad, S., Reinhardt, A., Schonenberg, et al
WILEY-BLACKWELL.2015
- **US Adult Rheumatologists Perspective on the Transition Process for Young Adults with Rheumatic Conditions**
Zisman, D., White, P., Chira, P., Ardoin, S. P., Lawson, E. F., von Scheven, E., Lavi, I., Tarter, L., Mellins, E. D.
WILEY-BLACKWELL.2015
- **Adiposity in Children with Juvenile Psoriatic Arthritis (JPsA)**
Samad, A., Stoll, M. L., Lavi, I., Gupta, K., Hsu, J., Strand, V., Mellins, E. D., Zisman, D., CARRA Registry Investigators
WILEY-BLACKWELL.2015
- **Juvenile Psoriatic Arthritis Manifestations in a Cohort of 361 Patients from US and Canada**
Zisman, D., Stoll, M. L., Gladman, D. D., Strand, V., Lavi, I., Hsu, J., Mellins, E. D., CARRA Registry Investigators
WILEY-BLACKWELL.2015
- **Viral Vectors Take On HIV Infection** *NEW ENGLAND JOURNAL OF MEDICINE*
Mellins, E. D., Kay, M. A.
2015; 373 (8): 770–72
- **Synthesis of Phospholipid-Protein Conjugates as New Antigens for Autoimmune Antibodies** *MOLECULES*
Maity, A., Macaubas, C., Mellins, E., Astakhova, K.
2015; 20 (6): 10253-10263
- **Immunological Basis for Rapid Progression of Diabetes in Older NOD Mouse Recipients Post BM-HSC Transplantation** *PLOS ONE*
Wang, N., Rajasekaran, N., Hou, T., Macaubas, C., Mellins, E. D.
2015; 10 (5)
- **HLA-DO inhibition of HLA-DM catalytic function is regulated by acid-promoted HLA-DO inactivation**

- Jiang, W., Strohma, M., Somasundaram, S., Ayyangar, S., Wang, N., Hou, T., Macmillan, H., Mellins, E.
AMER ASSOC IMMUNOLOGISTS.2015
- **Alternative pathways of osteoclastogenesis in inflammatory arthritis.** *Nature reviews. Rheumatology*
Adamopoulos, I. E., Mellins, E. D.
2015; 11 (3): 189–94
 - **Optimized purification strategies for the elimination of non-specific products in the isolation of GAD65-specific monoclonal autoantibodies.** *F1000Research*
Jiang, W., Macmillan, H., Madec, A. M., Mellins, E. D.
2015; 4: 135
 - **pH-susceptibility of HLA-DO tunes DO/DM ratios to regulate HLA-DM catalytic activity.** *Scientific reports*
Jiang, W., Strohma, M. J., Somasundaram, S., Ayyangar, S., Hou, T., Wang, N., Mellins, E. D.
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 - **Demographic, Clinical and Treatment Characteristics of the Childhood Arthritis and Rheumatology Research Alliance Registry Systemic JIA Cohort**
Janow, G. L., Schanberg, L., Setoguchi, S., Mellins, E. D., Schneider, R., Kimura, Y., CARRA Registry Investigators
WILEY-BLACKWELL.2014: S999–S1000
 - **HLA-DRB1*1101, Regulatory Variants of the MHC, and a Regulatory Region Near an Intergenic Long Noncoding RNA on Chromosome 1 Are Risk Factors for Systemic Juvenile Idiopathic Arthritis.**
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