



Maneesh Kumar Misra

Clinical Associate Professor, Pathology

CONTACT INFORMATION

- **Administrative Contact**

Kaia Pham - Administrative Associate

Email kaiap@stanford.edu

Tel (650)-724-9741

Bio

BIO

Dr. Maneesh Kumar Misra, MS, PhD, F(ACHI) is Co-Director Histocompatibility, Immunogenetics and Disease profiling laboratory, and the Associate Professor of Clinical Pathology. He is certified by the American College of Histocompatibility and Immunogenetics. His research and scholarly interests include allogeneic transplantation, autoimmunity, hematopoietic stem cell transplantation, immunogenetics, and solid organ transplantation. His research mainly focuses on the detection and functional characterization of alloantibodies in the setting of clinical allogeneic transplantation. He has identified and characterized several novel HLA alleles, authored more than 25 peer-reviewed publications, and coauthored a book. Maneesh received his PhD from Banaras Hindu University Institute of Medical Sciences in India, and subsequently held research positions at the Sanjay Gandhi Postgraduate Institute of Medical Sciences. He then completed a postdoctoral fellowship at the University of California, San Francisco School of Medicine, and an American Society for Histocompatibility and Immunogenetics approved Director-in-training clinical fellowship in transplant immunology and immunogenetics at the University of Chicago Pritzker School of Medicine

ACADEMIC APPOINTMENTS

- Clinical Associate Professor, Pathology
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Stanford Medicine Children's Health Center for IBD and Celiac Disease

ADMINISTRATIVE APPOINTMENTS

- Co-Director of Histocompatibility, Immunogenetics, and Disease Profiling Laboratory, Stanford Blood Center, (2024- present)

HONORS AND AWARDS

- Career Advancement for Postdoc/Biological Science Division Travel Award, The University of Chicago (2019)
- Immunology Review Honorarium, British Society for Immunology (2018)
- The Best of Genes and Immunity Research Paper, Genes and Immunity Journal (2018)
- Best Poster Award in Most Innovative Research Category, American Society for Histocompatibility and Immunogenetics (2015)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member Regional Education Workshop Planning Committee, American Society of Histocompatibility, and Immunogenetics (2023 - present)
- Member Editorial Board, Human Immunology, an official journal of American Society of Histocompatibility, and Immunogenetics (2022 - present)
- Member Editorial Board, Frontiers in Genetics Journal (2022 - present)
- Inspector ASHI accredited laboratories, American Society of Histocompatibility, and Immunogenetics (2021 - present)
- Member, Society of Immune Polymorphism (2021 - present)
- Member Abstract Review Committee, American Society of Histocompatibility, and Immunogenetics (2020 - present)
- Member Publication Committee, American Society of Histocompatibility and Immunogenetics (2019 - present)
- Member, American Society of Histocompatibility, and Immunogenetics (2016 - present)

PROFESSIONAL EDUCATION

- ASHI Certified HLA Lab Director, American Society for Histocompatibility and Immunogenetics , HLA
- Fellow, American College of Histocompatibility and Immunogenetics , Histocompatibility and Immunogenetics
- Clinical Fellow, The University of Chicago Medicine , Transplant Immunology and Immunogenetics (2020)
- Postdoctoral Scholar, University of California San Francisco, School of Medicine , Immunogenetics (2018)
- PhD, Banaras Hindu University , Transplant Immunology and Immunogenetics (2015)

COMMUNITY AND INTERNATIONAL WORK

- Investigator HLA COVID19 Consortium
- Editor of specialty research topic HLA in Personalized Medicine

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

My research goal is to utilize the cutting edge of state of art histocompatibility testing to better understand the humoral and cellular responses in clinical transplantation, and to translate this knowledge into improved treatment, and transplant outcome.

Publications

PUBLICATIONS

- **Identification of a novel biomarker of antibody-mediated rejection in heart transplantation: synergistic effect of anti-nuclear antibodies and de novo donor-specific IgG HLA antibodies.** *Frontiers in immunology*
Misra, M. K., McMullen, P., Kim, G. H., Marino, S. G.
2025; 16: 1550779
- **Editorial: HLA in personalized medicine.** *Frontiers in genetics*
Misra, M. K., Mostafa, A., Charron, D.
2024; 15: 1480936
- **Spherotech-EDTA combined serum treatment reduces background more effectively as compared to One Lambda Adsorb Out™ and LIFECODES Serum Cleaner in Luminex-based solid-phase immunoassays for HLA antibody detection.** *HLA*
Misra, M. K., Weidner, J. G., Upchurch, R. L., Mankey, A. M., Fernandez-Viña, M. A., Marino, S. G.
2023
- **Next-generation sequencing identifies two novel HLA-DPB1 alleles: HLA-DPB1*1069:01 and DPB1*1072:01.** *HLA*
Misra, M. K., Brown, N. K., Marino, S. G.
2024; 103 (2): e15368

- **Identification of Candidate mRNA Genes and Their Potential MicroRNA Targets in Lung Cancer Induced by Smoking Tobacco.** *Frontiers in bioscience (Scholar edition)*
Mishra, A. K., Mumtaz, N., Misra, M. K.
2023; 15 (4): 13
- **Exceptional diversity of KIR and HLA class I in Egypt.** *HLA*
Montero-Martin, G., Kichula, K. M., Misra, M. K., de Brito Vargas, L., Marin, W. M., Hollenbach, J. A., Fernandez-Vina, M. A., Elfishawi, S., Norman, P. J.
2023
- **A splice acceptor variant in HLA-DRA affects the conformation and cellular localization of the class II DR alpha-chain.** *Immunology*
Didonna, A., Damotte, V., Shams, H., Matsunaga, A., Caillier, S. J., Dandekar, R., Misra, M. K., Mofrad, M. R., Oksenberg, J. R., Hollenbach, J. A.
2021; 162 (2): 194-207
- **HLA Matching in Cardiac Transplantation - Impact on Cardiac Allograft Vasculopathy, Rejection and Donor Specific Antibodies**
Holzhauser, L., Misra, M., Miller, T., Kalantari, S., Smith, B., Ann Nguyen, Chung, B., Sarswat, N., Kim, G., Marino, S., Grinstein, J.
CHURCHILL LIVINGSTONE INC MEDICAL PUBLISHERS.2020: S157
- **Effective desensitization for a strong donor-specific HLA antibody in a case of HLA-mismatched allogeneic hematopoietic cell transplantation.** *HLA*
Misra, M. K., Xin, J. J., Brown, N. K., Weidner, J. G., Upchurch, R. L., Bishop, M. R., Wool, G. D., Artz, A. S., Marino, S. R.
2019; 94 (3): 307-311
- **A specific amino acid motif of HLA-DRB1 mediates risk and interacts with smoking history in Parkinson's disease** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Hollenbach, J. A., Norman, P. J., Creary, L. E., Damotte, V., Montero-Martin, G., Caillier, S., Anderson, K. M., Misra, M. K., Nemat-Gorgani, N., Osoegawa, K., Santaniello, A., Renschen, A., Marin, et al
2019; 116 (15): 7419–24
- **Structure-based selection of human metabolite binding P4 pocket of DRB1*15:01 and DRB1*15:03, with implications for multiple sclerosis.** *Genes and immunity*
Misra, M. K., Damotte, V., Hollenbach, J. A.
2019; 20 (1): 46-55
- **Report from the Killer-cell Immunoglobulin-like Receptors (KIR) component of the 17th International HLA and Immunogenetics Workshop**
Misra, M. K., Augusto, D. G., Martin, G., Nemat-Gorgani, N., Sauter, J., Hofmann, J. A., Traherne, J. A., Gonzalez-Quezada, B., Gorodezky, C., Bultitude, W. P., Marin, W., Vierra-Green, C., Anderson, et al
ELSEVIER SCIENCE INC.2018: 825–33
- **The immunogenetics of neurological disease.** *Immunology*
Misra, M. K., Damotte, V., Hollenbach, J. A.
2018; 153 (4): 399-414
- **Co-stimulatory CD28 and transcription factor NFKB1 gene variants affect idiopathic recurrent miscarriages.** *Journal of human genetics*
Misra, M. K., Singh, B., Mishra, A., Agrawal, S.
2016; 61 (12): 1035-1041
- **Association of functional genetic variants of CTLA4 with reduced serum CTLA4 protein levels and increased risk of idiopathic recurrent miscarriages.** *Fertility and sterility*
Misra, M. K., Mishra, A., Phadke, S. R., Agrawal, S.
2016; 106 (5): 1115-1123.e6
- **Association of functional genetic variants of transcription factor Forkhead Box P3 and Nuclear Factor-κB with end-stage renal disease and renal allograft outcome.** *Gene*
Misra, M. K., Mishra, A., Pandey, S. K., Kapoor, R., Sharma, R. K., Agrawal, S.
2016; 581 (1): 57-65
- **Non-Classical Human Leukocyte Antigen-G Allelic Diversity Among North Indians** *ANTHROPOLOGY*
Prakash, S., Misra, M. K., Agrawal, .
2016; 2 (1): 1-9

- **HUMAN METABOLITES BIND TO THE P4 POCKET OF HLA-DRB1*15:01, WITH IMPLICATIONS FOR MULTIPLE SCLEROSIS SUSCEPTIBILITY**
Misra, M. K., Hollenbach, J. A.
ELSEVIER SCIENCE INC.2016: 75
- **Genetic associations of killer immunoglobulin like receptors and class I human leukocyte antigens on childhood acute lymphoblastic leukemia among north Indians.** *Human immunology*
Misra, M. K., Prakash, S., Moulik, N. R., Kumar, A., Agrawal, S.
2016; 77 (1): 41-46
- **Genetic variation in Micro-RNA genes of host genome affects clinical manifestation of symptomatic Human Cytomegalovirus infection.** *Human immunology*
Misra, M. K., Mishra, A., Pandey, S. K., Kapoor, R., Sharma, R. K., Agrawal, S.
2015; 76 (10): 765-9
- **The transcription factor Forkhead Box P3 gene variants affect idiopathic recurrent pregnancy loss.** *Placenta*
Saxena, D., Misra, M. K., Parveen, F., Phadke, S. R., Agrawal, S.
2015; 36 (2): 226-31
- **Implication of HLA-G 5' upstream regulatory region polymorphisms in idiopathic recurrent spontaneous abortions.** *Reproductive biomedicine online*
Agrawal, D., Prakash, S., Misra, M. K., Phadke, S. R., Agrawal, S.
2015; 30 (1): 82-91
- **Cytotoxic T-lymphocyte antigen 4 gene polymorphism influences the incidence of symptomatic human cytomegalovirus infection after renal transplantation.** *Pharmacogenetics and genomics*
Misra, M. K., Pandey, S. K., Kapoor, R., Sharma, R. K., Agrawal, S.
2015; 25 (1): 19-29
- **Platelet-specific collagen receptor glycoprotein VI gene variants affect recurrent pregnancy loss.** *Fertility and sterility*
Siddesh, A., Parveen, F., Misra, M. K., Phadke, S. R., Agrawal, S.
2014; 102 (4): 1078-1084.e3
- **Genetic variants of MicroRNA-related genes in susceptibility and prognosis of end-stage renal disease and renal allograft outcome among north Indians.** *Pharmacogenetics and genomics*
Misra, M. K., Pandey, S. K., Kapoor, R., Sharma, R. K., Agrawal, S.
2014; 24 (9): 442-50
- **HLA-G gene expression influenced at allelic level in association with end stage renal disease and acute allograft rejection.** *Human immunology*
Misra, M. K., Pandey, S. K., Kapoor, R., Sharma, R. K., Kapoor, R., Prakash, S., Agrawal, S.
2014; 75 (8): 833-9
- **Association of CTLA-4 gene polymorphism with end-stage renal disease and renal allograft outcome.** *Journal of interferon & cytokine research : the official journal of the International Society for Interferon and Cytokine Research*
Misra, M. K., Kapoor, R., Pandey, S. K., Sharma, R. K., Agrawal, S.
2014; 34 (3): 148-61
- **Wireless Technology in Health prospective**
MISHRA, A., Misra, M. K.
LAP LAMBERT ACADEMIC PUBLISHING, GERMANY.2014
- **Association of HLA-G promoter and 14-bp insertion-deletion variants with acute allograft rejection and end-stage renal disease.** *Tissue antigens*
Misra, M. K., Prakash, S., Kapoor, R., Pandey, S. K., Sharma, R. K., Agrawal, S.
2013; 82 (5): 317-26