

CURRICULUM VITAE

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Educational Qualification: M.Sc., Ph. D.

Research Experience/ Positions held:

Duration	Research Institution	Position
Feb 2015 onwards	National Institute of Pathology, Safdarjang Hospital Campus, New Delhi	Scientist-C
March 2010 – Jan 2015	Dept Transplant Immunology & Immunogenetics, All India Institute of Medical Sciences, New Delhi	Senior Research Officer
June 2007 – Feb 2010	Dept Transplant Immunology & Immunogenetics, All India Institute of Medical Sciences, New Delhi	Research officer

Scholarships and Awards:

1. Best Oral Presentation Award in 5th Federation of Immunological Societies of Asia-Oceania (FIMSA) Congress, March 14-17, 2012, New Delhi.
2. Best Poster Award in 8th FIMSA/ IIS Advanced Immunology Course, New Delhi, India March 1-5, 2006.
3. Travel grant by ICMR-INSERM to visit INSERM for training at Dept. of Immunology, St Vincent Hospital Paris, France.
4. Travel grant by ASEATTA to attend Third International Summer School in Bangkok and 30th Annual Scientific Meeting in Chiang Mai, Thailand.
5. Travel grant by CSIR and Immunology Foundation to attend the 4th Asian Congress on Autoimmunity held in Singapore from September 11-13, 2009.

6. Best Oral Presentation award in 33rd Annual Conference of the Australasian and South East Asian Tissue Typing Association (ASEATTA-2009), New Delhi, India November 12-15, 2009.

Research Projects:

1. As Principal Investigator: Study of HLA-DR3 and/ or DQ2 restricted CD4+T cells in Type 1 diabetes in North India (SERB, 2016-2018).
2. As co-investigator: ICMR-INSERM co-funded project entitled “Functional characterization of HLA class I restricted T cells in Type 1 diabetes” (ICMR-INSERM 2014-2016).

Publications:

1. **Kumar N**, Kaur G, Kanga U, Mehra NK, Neolia SC, Tandon N, Zucman SC. CTLA4+49G allele associates with early onset of type 1 diabetes in North Indians. *Int J Immunogenet* 2015 Dec; 42(6): 445-52.
2. **Kumar N**, Kaur G, Kanga U, Tandon N, Zucman SC, Mehra N. Association of PTPN22 +1858C/T polymorphism with Type 1 diabetes in patients from North India. *Int J Immunogenet* 2014; 41: 318-323.
3. Mishra G, **Kumar N**, Kaur G, Jain S, Tiwari PK, Mehra NK. Distribution of HLA-A, B and DRB1 alleles in Sahariya tribe of North Central India: An association with pulmonary tuberculosis. *Infect Genet Evol.* 2014 Mar;22:175-82.
4. **Kumar N**, Kaur G, Tandon N, Kanga U, Mehra N. Genomic evaluation of HLA-DR3+ve haplotypes associated with type 1 diabetes. *Ann N Y Acad Sci.* 2013 Apr; 1283(1): 91-6.
5. Kaur G, Sharma G, **Kumar N**, Kaul MH, Bansal RA, Vajpayee M, Wig N, Sharma SK, Mehra NK. Genomic architecture of HIV-I infection: current status and challenges. *Ind J Med Res* 2013; **138**: 663-681.
6. **Kumar N**, Sharma G, Kaur G, Tandon N, Bhatnagar S, Mehra N. Major Histocompatibility Complex class I chain related gene-A (MIC-A) microsatellite polymorphism shows secondary association with Type 1 diabetes and Celiac Disease in North Indians. *Tissue Antigens* 2012; **80**: 356-362.
7. **Kumar N**, Kaur G, Tandon N, Mehra N. Tumor necrosis factor-associated susceptibility to type 1 diabetes is caused by linkage disequilibrium with HLA-DR3 haplotypes. *Human Immunology* 2012; **73**: 566–573.
8. Kaur G, **Kumar N**, Nandakumar R, Rapthap CC, Sharma G, Neolia S, Kumra H, Mahalwar P, Garg A, Kumar S, Kaur J, Hakim M, Kumar L, Mehra NK. Utility of saliva and hair follicles in donor selection for hematopoietic stem cell transplantation and chimerism monitoring. *Chimerism*; 2012; 3: 1-9.
9. Senbagavalli P, **Kumar N**, Kaur G, Mehra NK, Geeta ST, Ramanathan VD. MHC class III (C2, C4, factor B) and C3 gene variants in patients with pulmonary tuberculosis. *Human Immunology* 2011; 72(2): 173-178.

10. **Kumar N**, Kaur G, Mehra NK. Genetic determinants of type 1 diabetes- Immune response genes. *Biomarkers in Medicine* April 2009; 3(2): 153-173.
11. **Kumar N**, Kaur G, Tandon N, Mehra NK. Allotyping human complement factor B in Asian Indian type 1 diabetic patients. *Tissue Antigens* 2008; 72(6): 517-524.
12. Kaur G, **Kumar N**, Szilagyi A, Blasko Bernadett, Fust G, Rajczy K, Pozsonyi E, Hosso A, Petranyi G, Mehra N. The European AH8.1 and Asian Indian HLA-B8-DR3 recombinant haplotypes differ in C4A and C4B gene copy numbers and other central MHC polymorphisms. *Human Immunology* 2008; 69, 580–587.
13. Mehra NK, **Kumar N**, Kaur G, Kanga U, Tandon N. Biomarkers of susceptibility to type 1 diabetes with special reference to the Indian population. *Ind J Med Res*, March 2007; 125, 321-344.
14. Kaur G, Singh P, Rapphap CC, **Kumar N**, Vajpayee M, Sharma SK, Wanchu A, Mehra NK. Polymorphism in the *CCR5* Gene Promoter and HIV-1 Infection in North Indians. *Human Immunology* 2007: 68, 454-461.
15. Morahan G, Kaur G, Singh M, Rapphap CC, Katoch K, **Kumar N**, Mehra NK. Association of variants in the *IL12B* gene with leprosy and tuberculosis. *Tissue Antigens*, 2007: Vol 69, 234-236.
16. Kaur G, Rapphap CC, **Kumar N**, Kumar S, Neolia S, Mehra NK. Frequency distribution of cytokine gene polymorphisms in the healthy North Indian population. *Tissue Antigens*, 2007 Feb;69 (2):113-20.
17. Kaur G, Singh P, **Kumar N**, Rapphap CC, Sharma G, Vajpayee M, Wig N, Sharma SK, Mehra NK. Distribution of *CCR2* polymorphism in HIV-1-infected and healthy subjects in North India. *Int J Immunogenet* 2007; 34:3, 153–156
18. Abel M, Cellier C, **Kumar N**, Cerf-Bensussan N, Schmitz J, Caillat-Zucman S. Adulthood-Onset Celiac Disease Is Associated with Intercellular Adhesion Molecule-1 (ICAM-1) Gene Polymorphism. *Human Immunology*, 2006: 67, 612-617.
19. Kanga U, Tandon N, Marwaha RK, Khanna R, Bhattacharya B, Singh S, **Kumar N**, NK Mehra. Immunogenetic association and Thyroid autoantibodies in Juvenile Autoimmune Thyroiditis in North India. *Clin Endocrinol*, 2006: Vol 64; 5: 573-579.

Abstracts published in International Journals:

1. Mehra NK, **Kumar N**, Kaur G. Type 1 diabetes associated HLA-DR3 haplotypes are unique in the Indian population. *Human Immunology*, Volume 72, issue (October, 2011), p. S106.
2. **Kumar N**, Kaur G, Tandon N, Mehra NK. Multiple HLA-DR3 haplotypes associated with Type 1 diabetes in North Indians. *Tissue Antigens* 2008; (Abstract) Vol 72.
3. **Kumar N**, Sood P, Tiku VR, Kumar S, Kumar D, Neolia S, Kaur G, Juneja R, Ramakrishnan S. Genetic basis of susceptibility to rheumatic heart disease in the the Asian Indian population. *Tissue Antigens* 2008; (Abstract) Vol 72.
4. Kanga U, Tandon N, Radha V, **Kumar N**, Hakim M, Saxena A, Mourya M, Krishnan D, Vishwanathan M, Mehra N. Immunogenetic association of Type 1 diabetes in various population groups from India. *Tissue Antigens* 2008; (Abstract) Vol 72.
5. Kanga U, Tandon U, **Kumar N**, Khanna R, Philip E, Zucman SC, Mehra NK. Humoral and immunogenetic profile of type 1 diabetes mellitus in Asian Indian. *Tissue Antigens*: (Abstract) Vol 66, 459, 2005.

6. Kumar S, Kaur G, **Kumar N**, Rapphap CC, Seth S, Mehra NK. Molecular analysis of HLA-B5 CREG and related alleles in influencing susceptibility to takayasu aortoarteritis. *Tissue Antigens* 2005; (Abstract) Vol 66.
7. Kanga U, Tandon N, **Kumar N**, Marwaha RK, Khanna R, Bhattacharya B, Kumar SK, Singh S, Mehra NK. Immunogenetic association and thyroid autoantibodies in juvenile autoimmune thyroiditis. *Tissue Antigens* (Abstract) Vol 66, 459, 2005.

Chapters in Books & Conference proceedings

1. Mehra NK, **Kumar N**. Immunology of Organ and Haematopoietic Stem Cell Transplantation. API Textbook of Medicine, 10th Edition 2015.
2. Gurvinder Kaur, Gaurav Sharma, **Neeraj Kumar**, Mrinali H Kaul, Rhea A Bansal, Madhu Vajpayee, Naveet Wig, Surender K Sharma, Narinder K Mehra. Genomic architecture of HIV-1 infection: Current status and challenges. From Genome Science to Genetic Medicine: Opportunities and Challenges. Ranbaxy Sciences Foundation: Proceedings of 19th Annual Symposium "Gains of Genomic Research in Biology and Medicine, New Delhi, 2014: 89-128.
3. **Kumar N**, Kaur G, Kanga U, Tandon N, Zucman SC and Mehra NK (2013). CTLA4 +49G allele in combination with HLA-DR3 associates with type 1 diabetes as well as its onset in North Indians. *Front. Immunol. Conference Abstract: 15th International Congress of Immunology (ICI). Front. Immunol. doi:10.3389/conf.fimmu.2013.02.00566.*
4. Narinder Mehra, Gaurav Sharma, Gurvinder Kaur, **Neeraj Kumar**. From genome science to genetic medicine: Opportunities and challenges. Ranbaxy Sciences Foundation: Proceedings of 19th Annual Symposium "Gains of Genomic Research in Biology and Medicine, New Delhi, 2013: 55-69.
5. Mehra NK, **Kumar N**, Siddiqui J. 5th FIMSA International Congress of Immunology: Translational Immunology in Health and Disease. *Eur J Immunol* 2012; **42**: 2206–2210.
6. Mehra N, **Kumar N**. Conference Scene: The 4th Asian Congress on Autoimmunity. Immunotherapy, Mar 2010, Vol. 2, No. 2, Pages 145-150.
7. Prashant Sood, M.S. Bindra, **Neeraj Kumar** and N.K. Mehra. Immunogenetic aspects of recurrent spontaneous abortions. Current Paradigm of Reproductive Immunology, 2009: ISBN: 978-81-308-0373-9 Editors: A. H. Bandivdekar and C. P. Puri
8. Kaur G, **Kumar N**, Kanga U, Tandon N, Narinder K Mehra. Immunogenetic aspects of autoimmune disease. Ranbaxy Sciences Foundation: Proceedings of 12th Annual Symposium "Immunotherapeutics & Disease Management, New Delhi, 2005: 111-118.
9. Kaur G, CC Rapphap, J Mytilineos, K Schmelzer K, Gue Tae Chae, H Han, S Agrawal, D Majumdar, P Pratsidou Gertsi, D Tsakalidis, **N Kumar**, NK Mehra. Cytokine gene polymorphism in leprosy and tuberculosis: a multicentric study in the 13IHCW In HLA 2002; Immunobiology of Human MHC; Proceedings of the 13th International Histocompatibility Workshop and Conference 13IHCW eds. John A Hansen, Bo Dupont, IHCW press WA, USA, 2004.

Presentations in Conferences & Workshops:

Oral presentations:

1. *Divergence of HLA-B8-DR3 haplotypes in the north Indian population.* 2nd Scientific Conference of the Indian Society For Histocompatibility and Immunogenetics, AIIMS New Delhi, February 17-19, 2005.
2. *Association of DR3-DQ2 haplotypes with GAD65 autoantibodies in North Indian Type 1 Diabetic patients.* 8th FIMSA/ IIS Advanced Immunology Course, New Delhi, India March 1-5, 2006.
3. *Genomic analysis of diabetes associated HLA-DR3 positive haplotypes in North India.* Third International Summer School on Immunogenetics, Bangkok, Thailand, November 17-20, 2006.
4. *Humoral immune response and its genetic association in North Indian type 1 diabetic patients.* ASEATTA 30th Annual Scientific Meeting, Chiangmai, Thailand, November 22-24, 2006.
5. *Association of Cytotoxic T-Lymphocyte Associated Antigen-4 (CTLA-4) exon1 A49G polymorphism with Type 1 diabetes in North India.* 4th Asian Congress on Autoimmunity, Singapore, September 11-13, 2009.
6. *Role of CTLA-4 polymorphism in Type 1 diabetes.* 33rd Annual Conference of the Australasian and South East Asian Tissue Typing Association (ASEATTA-2009), New Delhi, India November 12-15, 2009.
7. *A comparative analysis of BF allelic variants and haplotypes in Type 1 diabetes.* International seminar on complement in health and disease. New Delhi, January 27, 2010.
8. *Comparative genomics of type 1 diabetes associated with HLA-DR3+ve haplotypes in North Indians.* 5th Federation of Immunological Societies of Asia-Oceania (FIMSA) Congress, March 14-17, 2012, New Delhi.
9. *Status of non-HLA genes governing susceptibility to type 1 diabetes in the North Indian population.* 36th annual Asia Pacific Histocompatibility and Immunogenetic Association (APHIA) conference, Nov 14-17th, 2012, Adelaide, South Australia.

Poster presentations:

1. *Genetic architecture of rheumatic fever and rheumatic heart disease.* Lancefield, Porto Heli, Greece, June 22 – 26, 2008.
2. *Genetic basis of susceptibility to rheumatic heart disease in the Asian Indian population.* 15th IWHC Reo de Jenero Brazil, September 2008.
3. *Genetic risks conferred by multiple HLA-DR3 extended haplotypes and CTLA-4 exon 1 +49G allele in the North Indian T1D patients.* "ISHG 2009"-34th Annual Conference of the Indian Society of Human Genetics. New Delhi, March 17-20, 2009.
4. *Major histocompatibility chain related gene-a (MIC-A) microsatellite polymorphism is associated with type 1 diabetes and celiac disease in north Indians.* APHIA 2010 conference, Queenstown, New Zealand, November 16-19, 2010.

5. *CTLA4 +49G allele in combination with HLA-DR3 associates with type 1 diabetes as well as its onset in North Indians.* 15th International congress of Immunology (ICI 2013), Milan, Italy, August 22-27th, 2013.

Memberships:

- 1) Life member, Indian Society for Histocompatibility and Immunogenetics (ISHI).
- 2) Member & Councillor, Asia Pacific Histocompatibility and Immunogenetic Association (APHIA).
- 3) Life member, Indian Immunology Society (IIS).
- 4) Life member, Type 1 Diabetes Genetic Consortium (T1DGC).