

Name : **Dr. Hari Om Singh**
 Designation : Scientist 'C'
 Date of Birth : 01/03/1978
 Department : Molecular Biology
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Educational Qualification:

Degree	Year	Institution / University
PhD	2009	SGPGIMS Lucknow (C.S.J.M. Kanpur University Kanpur), UP, India
MSc	2001	Centre for Biotechnology, APS University Rewa, MP, India
BSc	1998	Allahabad University (Central University), UP, India

Area of Research Interest:

Association based Genetic studies in complex and multifactorial disease such as Cancer, HIV, CVDs. Genetic Variability and Disease susceptibility, Epigenetics, Pharmacogenetics

Awards and Honors

Senior Research fellowship and Research Associateship from Indian Council of Medical Research (ICMR), New Delhi, India

- Junior Research fellowship from Department of Biotechnology (DBT), New Delhi, India
- Ist prize for Paper presentation: on "Association of GSTT1 and GSTM1 Genetic Polymorphism in Cervical Cancer". Symposium cum Training Programme for Building Capacity, NIPCID. Guwahati Asam 24-26 Oct, 2005.
- Ist prize for Poster presentation: Singh Hariom, Mittal Balraj. CCR5-Δ32 Polymorphism and Susceptibility to Cervical Cancer: Association with Early Stage of Cervical Cancer. 27th Annual Convention of Indian Association for Cancer Research. Networking Research to Applications & International Symposium on Frontiers in Functional Genomics at Ahmedabad February 7-9; 2008

Research Experience

Scientist C	Department of Molecular Biology, National AIDS Research Institute, Pune	Sep 2015 – till date
Scientist B	Department of Molecular Virology, National AIDS Research Institute, Pune	Aug 2010 – Aug 2015
ICMR-RA	Department of Microbiology, SGPGIMS, Lucknow, India	Feb 2010 – Jul 2010
ICMR-SRF	Department of Neurosurgery, SGPGIMS, Lucknow,	Aug 2009 – Jan

	India	2010
PhD student	Department of Genetics, SGPGIMS, Lucknow, India	Jul 2006 – Jul 2009
JRF	Department of Genetics, SGPGIMS, Lucknow, India	Feb 2005 – Jul 2006
JRF	Division of Microbiology, CIRG, Mathura, India	Feb 2004 – May 2004
JRF	Division of Genetic Resource of Biotechnology, CIMAP, Lucknow, India	Jul 2002 – Jul 2003
Biotech Trainee	National Botanical Research Institute, Lucknow, India	Feb 2001 – Jul 2001

List of Publications: 18 Paper Published, 1 book chapter, 1 gene sequence

1. **HariOm Singh**, Sonam Lata, Vijay Nema, Manisha Ghate, Raman R.Gangakhedkar. CYP1A1m1 and CYP2C9*2 and*3polymorphism and Risk to develop ARV associated hepatotoxicity and its severity. *APMIS*-2016-207 - (4397) (Accepted): 2016
2. **HariOm Singh**, Shruti D Marathe, Sumitra Nain, Vijay Nema, Manisha Ghate, Raman R.Gangakhedkar. Impact of variants of MMP-7(-181A>G) gene in susceptibility to development of HAND and its severity. *APMIS*. 2016 Nov;124(11):966-972
3. **HariOm Singh**, Shruti D Marathe, Sumitra Nain, Vijay Nema, Manisha Ghate, Raman R.Gangakhedkar. Genetic variation of MMP-2 & MMP-9 polymorphism in susceptibility to development of HAND and its severity. *J Gene Med*. 2016 Sep;18(9):250-7.
4. **HariOm Singh**, Shruti D Marathe, Sumitra Nain, Vijay Nema, Manisha V Ghate, Raman.R.Gangakhedkar. APOBEC3B deletion impacts on susceptibility to acquire HIV-1 and its advancement among Individuals in Western India. *APMIS*. 2016 Oct;124(10):881-7
5. **HariOm Singh**, Shruti Marathe, Sumitra Nain Mansa Angadi, Shradha Bapat, Jyoti Pawar, Vijay Nema, Manisha Ghate, Seema Sahay, R.R.Gangakhedkar .Coding region variant 186H/R in Exon 4 of APOBEC3G among individuals of Western India. *APMIS*. 2016 May;124(5):401-5
6. **Singh HO**, **Lata S**, **Angadi M**, **Bapat S**, **Pawar J**, **Nema V**, **Ghate MV**, **Sahay S**, **Gangakhedkar RR**. Impact of GSTM1, GSTT1 and GSTP1 gene polymorphism and risk of ARV-associated hepatotoxicity in HIV-infected individuals and its modulation. *Pharmacogenomics J*. 2015 Dec 15
7. Supriya D. Mahajan*, Asmita Gaekwad, Jyoti Pawar, Srikanth Tripathy, Manisha Ghate, Jayanta Bhattacharya, **HariOm Singh**, Stanley A. Schwartz, Ramesh Paranjape and Raman Gangakhedkar. Cardiac Morbidity in an HIV-1 Lipodystrophy Patient Cohort Expressing the TNF- α -238 G/A Single Nucleotide Gene Polymorphism. *Curr HIV Res*. 2015; 13(2):98-108.
8. Sumitra Nain,* Anu Sharma, **HariOm Singh**, Sarvesh Paliwal. Recent Advances in use of Semicarbazones as Anticonvulsant Agents: A Review. *J. Biomed. Ther. Sci*. 2015, 2(1), 1-7
9. **Hari Om Singh**, **Amita Singh**, **TN Dhole** and **Sumitra Nain**. Effect of Ormeloxifene for Management of Dysfunctional Uterine Bleeding. *Biochem Physiol* 2015, 4:3

10. **Hari Om Singh, Amita Singh, TN Dhole and Sumitra Nain.** Factor associated to Bacterial Vaginosis in Nonpregnant women of North Indian population. **J Biotechnol Biomater** 2015, 5:3
11. **Hari OS, Sonali G and Sumitra N.** Awareness and Trends of Blood Cholesterol and Susceptibility to Develop Heart Disease. **Adv Genet Eng** 2015, 4:3
12. Gangwar R, Mittal B. Srivastava Shuti, **Singh H**, Mittal R Genetic Variants of DNA Repair Gene XPC Modulating Susceptibility to Cervical Cancer in North India. **Onco Res** 2010; 18:1-100
13. **Singh H**, Jain M, Mittal B: TGF- β 1 (-509C/T) Gene Polymorphisms and Susceptibility to Cervical Cancer. **Onco Res.** 2009; 18(1):41-5.
14. **Singh H**, Sachan R, Devi S, Pandey S N, Mittal B. Association of GSTM1, GSTT1 and GSTM3 gene polymorphisms and susceptibility to cervical cancer in North Indian population. **Am J Obstet Gynecol.** 2008; 198:303-6.
15. **Singh H**, Sachan R, Geol H, Mittal B. Genetic Variations in Interleukin-1 receptor antagonist and Interleukin-1 β genes and cervical cancer. **British J. Obstetrics and Gynecology** 2008; 115:633–638.
16. **Singh H**, Sachan R, Jain M, Mittal B. CCR5- Δ 32 Polymorphism and Susceptibility to Cervical Cancer: Association with Early Stage of Cervical Cancer. **Oncol Res.** 2008; 17:87-91.
17. **Singh H**, Jain M, Sachan R, Mittal B. TNF- α (-308G/A) and IL-10(-819C/T) Promoter Polymorphisms and Risk of Cervical Cancer. **Int. J Gynecological Cancer** 2009; 19(7):1190-1194.
18. **Singh H**, Jain M, Mittal B: MMP-7(-181 A/G) Gene Polymorphisms and Risk for Cervical Cancer. **Gynecol Oncol.** 2008; 110:71-5.

Book chapter

Sumitra Nain, Garima Mathur, Pragati Karana, and HariOm Singh. Physical and Chemical Properties of Nanobiomaterials. Pharmaceutical Technology (Nanobiomaterials Applications in Drug Delivery) **Apple Academic Press. Mar, 2017**

Gene sequence

Jagtap, D.D., Gupte, D.S., Thakar, M.R., **Singh, H.O.**, Pandey, S., C, S.K. and Paranjape, R.S. Molecular characterization of tetherin/BST-2 gene promoter in Indian HIV infected long term non progressors. **GenBank-2014**

Brief Work

My work is focusing on 2 issues, one is drug-induced toxicity and other one is acquisition of HIV-1 and disease progression. Under first issue, I am looking Genetic variations associated with Metabolism, transporter genes with development of ARV associated hepatotoxicity and its severity, development of NRTI- induced toxicity & its severity. Similarly, I am looking influence of inflammatory pathway genes with the development of HAND and modulation of pathogenesis of HAND. Under second issue, I am looking Impact of Genetic variations of innate immune responsive genes with acquisition of HIV-1 and

disease progression. Also, I am looking the genetic variations and methylation pattern of metabolizing enzyme and transporter genes with thromboembolic events in CVDs patients.

My lab standardized the CYP2B6 genotyping test to know the status of NNRTI drug metabolizers and this drug is involved in liver and brain toxicity which can be done on demand of clinician. Also I am standardizing the genotyping test of HLAB57:01 allele to know the presence of 01 allele, 01 allele is associated with Abacavir (ABC) - induced hypersensitivity.