Brief Biodata

Puneetpal Singh, M.Sc., PhD Email: singh.puneet@rediffmail.com

Assistant Professor Phones: +91-175-2280049 (Res.)

Department of Human Genetics +91-175-3046278 (Office)

Punjabi University, Patiala Mobile: +91-9646448947

Web Page: http://www.puneetp.com

Education:

PhD- Human Genetics	(1999)	
M.Sc Human Genetics	(1991)	First Division
B.Sc Medical	(1989)	First Division
PGDCA	(2005)	First Division
UGC NET Cleared	(1995)	

Teaching Experience: 7 years **Post Doctoral Research Experience:** 11 years

Honours/Scholarships/Accreditations/Awards:

- 1. Rewarded an independent research project sanctioned by CSIR (2007-2010)
- 2. Post-doctoral fellowship by CSIR (2002-2007)
- 3. Young Scientist Award by International Congress of Human Genetics Vienna, Austria (2001)
- 4. Senior Research fellowship by CSIR (1998-2000)
- 5. Research fellowship by UGC (1992-1996)
- 6. Received merit scholarship in Matriculation examination (1985)

Research Grants:

- 1. A Study to investigate endothelial dysfunction as preclinical marker for osteoporosis by DST (2017-2020).
- 2. Investigation of eNOS and ACE gene in essential hypertension for the risk of osteoporosis by UGC, (2013-2015).

- 3. Genetic testing of some selected neurotransmitter genes for the risk of depression in type 2 diabetic subjects of northwest India by UGC, (2013-2016).
- 4. CRP gene polymorphism and its relationship with CRP concentrations in coronary heart disease by CSIR, (2007-2010).
- 5. DNA polymorphism of ApoAI-CIII-AIV gene cluster in coronary heart diseases by CSIR, (2002-2007).
- 6. Apolipoprotein haplotypes as preclinical markers for CHDs by CSIR (1998-2001)

Significant Research Findings:

- A Novel haplotype within CRP for the risk of CHD has been revealed (Singh PP etal., Mol Bio Reports, PMID: 24965144)
- 2. A predictive CRP marker for Early Hematoma Growth and Early Neurological Worsening has been found which is associated with increased mortality (Di Napoli M. et al. 2014, Stroke, PMID: 24262327)
- 3. A risky haplotype within eNOS has been revealed causing increased risk of osteoporosis in postmenopausal women (Singh M, Singh P et al.2013, J Bone Miner Metab, PMID: 24213241)
- 4. A <u>Pioneering research on SNP-SNP interaction within APOE gene has been unravelled</u> that significantly influences plasma lipids in postmenopausal osteoporosis (Singh M, Singh PP, et al. 2010, Rheumatol Int, PMID: 20340021).
- 5. A Novel susceptible haplotype within APOE gene has been exposed which influences BMD and intensifies the osteoporosis risk in postmenopausal women of Northwest India (Singh M, Singh PP et al., 2010, Maturitas, PMID: 20663622)
- 6. <u>A Novel Susceptible haplotype in the Apolipoprotein AI-CIII-AIV gene cluster has been discovered</u> which is detrimental to Northwest Indians having Coronary Heart Disease (Singh PP et al. 2008, Int J Cardiol, PMID: 17825930).
- 7. First report on gene-gene interactive effect of Apolipoproteins E and A-I as genetic modulators on triglycerides in Coronary Heart Disease (Singh PP et al. 2008; Int J Cardiol, PMID: 18378026).

8. <u>A Novel haplotype is revealed in the Apolipoprotein AI-CIII-AIV gene cluster</u> which confers exacerbating risk of CHD in the patients having type2 Diabetes Mellitus (Singh PP et al. 2007, Diab Vasc Dis Risk, PMID: 17654446).

Invited Editorials: "Is Plasma Fibrinogen Useful in Evaluating Ischemic Stroke

Patients? Why, How, and When" by Journal Stroke of American Heart Association (Napoli MD and Singh PP, 2009, PMID:

19299637).

"Genomic consequences of Musculo-skeletal Pain" (Submitted

to International Journal of Orthopaedics)

Edited Book: Depression: A Silent Culprit in Health and Disease by Bentham

Science Publications (eISBN: 978-1-68108-145-8)

(http://fliphtml5.com/homepage/nwvsy)

Pain: Causes, Concerns and Consequences by Bentham Science

Publications (eISBN: 978-1-68108-371-1)

(http://fliphtml5.com/nwvsy/qprb)

Book Chapter: MicroRNA: a diligent conjurer in the exposition of diabetes in

Bentham ebook: FRONTIERS IN CLINICAL DRUG RESEARCH

Diabetes & Obesity. I

Editorial Member: Clinical Medicine Review in Cardiology (USA)

Executive Board Member of Reviews in Health Care (ITALY),

Internet Journal of Forensic Science (UK)

International Journal of Orthopaedics (Hong Kong)

Life Member: Indian Society of Human Genetics

Punjab Academy of Sciences

Mutagen Society of India

Haemophilia Federation of India

Project Reviewer: Project review panel by ICMR, New Delhi

Invited Reviewer: International Journal of Cardiology, Clinical Chemistry and

Laboratory Medicine, Reviews in Health care, European Journal of Human Genetics, Annals of Human Genetics, Metabolism, Clinical Chemistry and Laboratory Medicine, Osteoporosis International, Human Biology, Annals of Human Biology,

Molecular Biology Reports

Areas of Expertise: Human Genetics, Molecular Genetics, Medical Genetics,

Neurogenetics, Genetics and disease especially, Hemophilia, Coronary Heart Disease, Hypertension, Stroke, Osteoporosis,

Depression, Musculoskeletal Pain, Depression etc.

Research Publications: http://publicationslist.org/singh.puneet

60; 30 (International), 30 (National)

Citation Index: (http://scholar.google.co.in/citations?user=IApyGKMAAAAJ&hl)

Total Impact factor=95.29, Citations: 716, h Index-13 and i-10index-16

Significant Publications

- **1.** Mozhgan Saeidi, Ali Soroush, Saeid Komasi and Puneetpal Singh. A hybrid cardiac rehabilitation is as effective as a hospital-based program in reducing chest pain intensity and discomfort Korean J Pain 2017; 30 (4): 265-271.
- **2.** Mastana SS, Bhatti JS, Singh P, Wiles A, Holland J. Genetic variation of MHC Class I polymorphic Alu insertions (POALINs) in three sub-populations of the East Midlands, UK. Ann Hum Biol. 2017; 44(6):562-567.
- 3. Doody NE, Dowejko MM, Akam EC, Cox NJ, Bhatti JS, Singh P, Mastana SS. The Role of TLR4, TNF- α and IL-1 β in Type 2 Diabetes Mellitus Development within a North Indian Population. Ann Hum Genet. 2017; 81(4):141-146.
- 4. Khullar S, Dhillon H, Kaur G, Sharma R, Mehta K, Aggarwal R, Singh M, Singh P. The prevalence and predictors of cognitive impairment in type 2 diabetic population of Punjab, India. J Soc Health Diab.2017. 1: 47-53.
- 5. Kaur G, Dhillon H, Sharma R, Mehta K, Khullar S, Singh M, Singh P. Risk of Depression in Subjects with Type 2 Diabetes is Modulated by a Genetic Variant within DRD4 Gene: North Indian Diabetes-Depression Link Exploration Study (NIDDLES). Int J Helath Sci Res 2016.6 (8): 1-5.
- **6.** Dhillon H, Khullar S, Kaur G, Sharma R, Mehta K, Walia JPS, Singh M, Singh P Prevalence and predictors of musculoskeletal pain in the population of Punjab Int J Sci Res 2016. 6(12): 248-258.
- 7. Dhillon H, Khullar S, Kaur G, Sharma R, Mehta K, Walia JPS, Singh M, Singh P SNP-SNP interactions within catechol-O-methyltransferase (COMT) gene influence sleep

quality in subjects having chronic musculoskeletal pain-A Genetic Exploration of Musculoskeletal Pain Study (GEMPS). Int J Adv Res. 2016. 4(7): 2270-2274.

- **8.** Khullar S, Dhillon H, Kaur G, Sharma R, Mehta K, Aggarwal R, Singh M, Singh P. The Prevalence and Predictors of Depression in Type 2 Diabetic Population of Punjab. Community Ment Health J. 2016. 52(4):479-83.
- **9.** Singh P, Khullar S, Singh M, Kaur G, Mastana S. Diabetes to cardiovascular disease: is depression the potential missing link? Med Hypotheses. 2015; 84(4): 370-8.
- **10.** Khullar S, Singh M, Singh P. The predictors of type 2 diabetes mellitus in Punjab, India. Int J Health Sci Res. 2015. 5(11): 321-328.
- 11. Singh P, Singh M, Nagpal HS, Kaur T, Khullar S, Kaur G, Dhillon H, Di Napoli M, Mastana S. A novel haplotype within C-reactive protein gene influences CRP levels and coronary heart disease risk in Northwest Indians. Mol Biol Rep. 2014; 41:5851-62.
- **12.** Singh M, Singh P, Singh S, Juneja PK and Kaur TP. A susceptibility haplotype within the endothelial nitric oxide synthase gene influences bone mineral density in hypertensive women. 2014; Journal of bone and mineral metabolism 32:580-587.
- 13. Di Napoli M, Parry-Jones AR, Smith CJ, Hopkins SJ, Slevin M, Masotti L, Campi V, Singh P, Papa F, Popa-Wagner A, Tudorica V, Godoy DA. C-reactive protein predicts hematoma growth in intracerebral hemorrhage. Stroke 2014;45(1):59-65.
- **14.** Singh M, Singh P, Singh S, Juneja PK and Kaur TP Vitamin D receptor (VDR) gene polymorphism influences the risk of osteoporosis in postmenopausal women of Northwest India. 2013; Archives of osteoporosis 8: 1-2.

- **15.** Singh M, Singh P, Singh S, Juneja PK and Kaur TP A haplotype derived from the common variants at the -1997G/T and Sp1 binding site of the COL1A1 gene influences risk of postmenopausal osteoporosis in India. Rheumatol Int 2013; 33: 501-506.
- **16.** Singh P, Di Napoli M, Singh M. Letter by Singh et al regarding article, "Apolipoprotein isoform e4 does not increase coronary heart disease risk in carriers of low-density lipoprotein receptor mutations". Circ Cardiovasc Genet. 2012 Apr 1;5(2):e13.
- **17.** Di Napoli M, Elkind MS, Godoy DA, Singh P, Papa F, Popa-Wagner A. Role of C-reactive protein in cerebrovascular disease: a critical review. Expert Rev Cardiovasc Ther. 2011;9(12):1565-84.
- **18.** Singh P, Di Napoli M, Singh M. Letter by Singh et al regarding article,"Apolipoprotein E polymorphisms and postprandial triglyceridemia before and after fenofibrate treatment in the GOLDN study". Circ Cardiovasc Genet. 2011 Feb;4(1):e5.
- **19.** Singh M, Singh P, Juneja PK, Singh S, Kaur T. SNP-SNP interactions within APOE gene plasma lipids in postmenopausal osteoporosis. Rheumatol Int. 2011; 31:421-423.
- **20.** Singh M, Singh P, Singh S, Juneja PK and Kaur TP. A susceptible haplotype within APOE gene influences BMD and intensifies the osteoporosis risk in postmenopausal women of Northwest India. Maturitas 2010; 67: 239-244.
- **21.** Di Napoli M, Singh P. Is plasma fibrinogen useful in evaluating ischemic stroke patients?: why, how, and when. Stroke. 2009; 40(5):1549-52.
- **22.** Singh P, Singh M, Kaur T. Role of apolipoproteins E and A-I: epistatic villains of triglyceride mediation in coronary heart disease. Int J Cardiol. 2009;134(3):410-2.

- **23.** Singh M, Singh P. Factor VIII gene haplotypes and linkage disequilibrium for the indirect genetic analysis of hemophilia A in India. Clin Appl Thromb Hemost.2009; 15(3):334-9.
- **24.** Singh M, Singh P. Factor IX gene haplotypes and its relevance for the indirect genetic analysis of haemophilia B in its Indian perspective. Blood Coagul Fibrinolysis. 2008; 19(5):429-32.
- **25.** Singh P, Singh M, Kaur TP, Grewal SS. A novel haplotype in ApoAI-CIII-AIV gene region is detrimental to Northwest Indians with coronary heart disease. Int J Cardiol 2008;130(3):e93-5.
- **26.** Singh PP, Singh M, Bhatnagar DP, Kaur TP, Gaur SK. Apolipoprotein E polymorphism and its relation to plasma lipids in coronary heart disease. Indian J Med Sci. 2008; 62(3):105-12.
- **27.** Singh M, Singh P, Kaur H. Plasma protein variations in hemophiliacs receiving factor replacement therapy. Indian J Pediatr. 2007;74(5):459-62.
- **28.** Singh P, Singh M, Gaur S, Kaur T. The ApoAI-CIII-AIV gene cluster and its relation to lipid levels in type 2 diabetes mellitus and coronary heart disease: determination of a novel susceptible haplotype. Diab Vasc Dis Res. 2007; 4(2):124-9.
- **29.** Singh PP, Singh M, Mastana SS. APOE distribution in world populations with new data from India and the UK. Ann Hum Biol. 2006; 33(3):279-308.
- **30.** Singh PP, Naz I, Gilmour A, Singh M, Mastana S. Association of APOE (Hha1) and ACE (I/D) gene polymorphisms with type 2 diabetes mellitus in North West India. Diabetes Res Clin Pract. 2006; 74(1):95-102.

- **31.** Mastana S, Lee D, Singh PP, Singh M. Molecular genetic variation in the East Midlands, England: analysis of VNTR, STR and Alu insertion/deletion polymorphisms. Ann Hum Biol. 2003; 30(5):538-50.
- **32.** Singh PP, Singh M, Mastana SS. Genetic heterogeneity of Apo CII locus in north India. Anthropol Anz. 2002; 60(2):161-7.
- **33.** Singh P, Singh M, Mastana SS. Genetics of apolipoprotein H (beta2-glycoprotein I) polymorphism in India. Ann Hum Biol. 2002; 29(3):247-55.
- **34.** Singh PP, Singh M, Mastana SS. Genetic variation of apolipoproteins in North Indians. Hum Biol. 2002; 74(5):673-82.
- **35.** Mastana S, Singh PP. Population genetic study of the STR loci (HUMCSF1PO, HUMTPOX, HUMTHO1, HUMLPL, HUMF13A01, HUMF13B, HSFESFPS and HUMVWA) in North Indians. Ann Hum Biol. 2002; 29(6):677-84.
- 36. Singh P, Singh M, Gerdes U, Mastana SS. Apolipoprotein E polymorphism in India: high APOE*E3 allele frequency in Ramgarhia of Punjab. Anthropol Anz. 2001; 59(1):27-34.