CURRICULUM VITAE

NAME: **Shiva M. SINGH**

ADDRESS: Office: 307 Molecular Genetics Unit, Western Science Centre
Department of Biology, University of Western Ontario
London, Ontario, Canada N6A 5B7

CURRENT POSITION: Professor (Molecular Genetics), Department of Biology
Faculty of Science, UWO

Division of Medical Genetics, Dept. of Paediatrics
Faculty of Medicine and Dentistry, UWO

Division of Developmental Disability, Dept of Psychiatry
Faculty of Medicine and Dentistry, UWO

Associate Scientist, Molecular Medical Genetics
Child Health Research Institute (CHRI), London

Graduate Faculty, Graduate Program in Biology, UWO
Graduate Faculty, Graduate Program in Neuroscience, UWO

Senior Research Fellow (2004-2007)
(Ontario Mental Health Foundation)

RESEARCH FOCUS:

General: **Molecular (Epi-) Genetics and Neurogenomics**

Specific: Molecular analysis of disease causing genetic mutations as a means to understand the functioning of the brain, with current focus on Schizophrenia, Narcolepsy, Alcoholism, Fetal Alcohol Syndrome, Aging, Neurofibromatosis I and other Cancers.

http://www.uwo.ca/biology/Faculty/Singh/

DEGREES EARNED:

Degree	University	Year
B.Sc.	University of Gorakhpur , India	1963
M.Sc.	University of Agra, India	1965
Ph.D.	University of Alberta, Edmonton, Canada	1970

ACADEMIC POSITIONS HELD:

Dates	Position	Department	Institution
2004-2007	Senior Research Fellow		OMHF
2003-2004	Distinguished Research Professor (Science)		U. Western Ontario
2001-	Professor	Biology (Mol. Genetics)	U. Western Ontario
1993-1999	Chairman	Program in Genetics	U. Western Ontario
1991-1994	Co-Chair	Molecular Biology Graduate Program, UWO	
1989-2001	Professor	Zoology (Mol. Genetics))	U. Western Ontario
1986-present	Associate Scientist	Molecular Genetics	Child Health Res. Institute, LHSC
1986-1990	C0-Director	Mol. Medical Genetics	Child Health Res. Institute, LHSC
1985-1986	Visiting Scientist	Molecular Biology	LaJolla Cancer Res. Fdn.
1883-1989	Associate Professor	Zoology	U. Western Ontario
1979-present	Hon. Lecturer	Paediatrics (Medicine)	U. Western Ontario
1978-1983	Assistant Professor	Zoology (Genetics)	U. Western Ontario
1974-1978	Lecturer	Biology	Dalhousie Univ., Halifax Nova Scotia, Canada
1965-1967	Sr. Lecturer	Genetics and Breeding	Govt. Agricultural College, Kanpur, India

GRADUATE RESEARCH SUPERVISION: (degree completed last ten years only)

Julie Treadwell, Ph.D. (completed)	PDF, Neurogenomics, NRC, Ottawa
Michelle Harrisson, Ph.D. (completed)	Lecturer, UWO
R. Bundalo-Kalaba, M.Sc. (completed)	Research Assistant, Robarts Res. Inst.
Katina Kam, M.Sc. (completed)	Dentistry, Toronto
Yang Zhang, M.Sc. (Completed)	Scientist, Ohio State University
Michael Lewis, M.Sc. (completed)	Optometrist
Kim Grant, M.Sc. (completed)	Genetics Research Associate, UWO
Patrick McDonald, M.Sc. (completed)	Ph.D. Student, UWO
Paromita Deb-Rinker, Ph.D. (completed)	PDF, Neurogenomics, NRC, Ottawa
Debora Mancini-Dinardo Ph.D. (completed)	PDF, (Tilghman), Princeton University
K.Raihan Uddin, M.Sc. (completed)	Bioinformatics Associate, UWO
Dorothy Reimer, Ph.D. (completed)	Scientist, BC Cancer Research
Kathleen Hill, Ph.D. (completed)	Professor, UWO
Nicholas Schisler, Ph.D. (completed)	Professor, South Carolina
Michael Coulthart, P.D.F. (completed)	Scientist, Health Canada, Winnipeg
Christine Tagliabracci, M.Sc. (completed)	Teacher (High School), London, Ont.
Indira Pillay, M.Sc. (completed)	Doctor of Chiropractic Medicine
Andor Kiss, M.Sc. (completed)	Ph. D. Student, University of Illinois
Xiaomin Song, M.Sc. (completed)	Research Scientist, Pharmacea, St. Louise
Timothy Klempan, M.Sc. (completed)	PDF, McGill University
Tillie Chiu, M.Sc. (completed)	Genetic Counsellor, CHEO, Ottawa
P.McDonald, Ph.D.	(in progress)
B.Murphy, Ph.D.	(in progress)
Julia Weng, Ph.D.	(in progress)

UNDERGRADUATE RESEARCH SUPERVISION (LAST FIVE YEARS)

P.Lansoo (Research)	Summer (Medicine)

K.Black (Research)	Thesis Research
M.Shah (Research)	Thesis Research
K.Black (Research)	Summer
B.Minimma (Research)	Summer NSERC
M.George (Research)	Summer NSERC
M.George (Research)	Thesis Research
R.Bandolo (Research)	Summer
E.Davenport (Research)	Summer (Medicine I)
R.Bandalo-Kabila (Research)	Thesis Research
A.Bingham (Research)	Summer NSERC
K.Grant (Research)	Summer NSERC
R.Bandolo-Kabila (Research)	Summer
E.Davenport (Research)	Summer Research Medicine II
K.Grant (Research)	Thesis Research
L.Osburn (Research)	Thesis Research
R.Dixit (Research)	
F.Raja (Research)	Summer
K.Grant (Research)	Summer NSERC
D. Kirouac (Research)	Summer NSERC
D. Kirouac (Research)	Thesis Research
S. Chaudhary (Research)	Thesis Research
M.Kleiber (Research)	Summer NSERC
M.Kleiber (Research)	Thesis Research
M.Hunt	Thesis Research
W. McTavish	Thesis Research
J.Jones (Research)	Summer NSERC
K.Pawluk (Research)	Summer NSERC
E.Ow (Research)	Summer NSERC
E.Ow (Research)	Thesis Research

A.Mu (Research)	Summer NSERC
A.Mu (research)	Thesis Research
M.Calcagno (Research)	Summer NSERC

CONTRIBUTION TO TEACHING:

Development of Courses and Programs in Genetics: As a background, I was hired as the first geneticist in the Faculty of Science (1978), with a mandate to develop recently hatched Honors Program in Genetics. This initiative was undertaken by the Faculty of Science with responsibility to run the interdepartmental and interfaculty Program in Genetics. I realized early that there was a lot of work to be done to bring "genetics" to UWO. Specifically, there was an urgent need for course and program development. It was needed to meet the demands and catch up with growing impact of genetic break through on a daily basis. The attempts made were not always rewarded. None the less, we were successful in introducing a foundation course in genetics (Bio 281b). I was involved in the design and the teaching of this course with an enrollment of >600 in 1990s (now ~12,00) for the first seven years. I also played a key role in designing modern courses in genetics for the third and fourth year students, as I served as the Chair of the Program in Genetics. Since then, I have been responsible for the teaching of Human Genetics (Bio 392a) and Human Molecular Genetics (Bio 460b). It is important to point out that our prediction of interest in the student population was found to be true. Their popularity among students from a number of faculties supports the role of genetics in any university education. This impression is also apparent in my direct contact with students as the Program Chair, Honors Program in Genetics (1990-1996 and 2005- to date). Finally, there was a need to introduce the field of modern genetics to UWO research community including graduate education. I am pleased to say that we made progress on this front as well.

In a nutshell, genetics program development, course designs and teaching of a number of such courses is where I have spent over 26 years of my time as a university professor. This development needed a steady effort with focus on excellence. The result is obvious. Genetics

program and courses are among the most successful in the Faculty. Specifically, we have an internationally recognized Honors Program in Genetics (the only one of its kind in Canada). The excellence of our graduates is apparent in their success in national and provincial scholarships, successful admission to professional programs of their choice and graduate education in programs across the globe (over 60% end up doing Ph.D. and serve as researchers, academics and administrators).

Although my efforts (including being Chair, Honors Program in Genetics) to develop an undergraduate program have been satisfying, the results at graduate level remain to be realized. In this context, our first attempt to develop a Collaborative Program in Molecular Biology (I served as Co-Chair) failed for variety of reasons. I am not discouraged with this experience. It has taught me about the complexity of university organization and function. My commitment to develop interdisciplinary graduate programs is as strong as ever. Such interdisciplinary graduate programs are needed at UWO to fully realize its goals and potential as a research intensive university. I am eager to continue to put my ideas, energy and time to this end in this, the new climate of the development of inter-disciplinary graduate programs at this university. In this context, I offer graduate courses on specialized topics in genetics on a regular basis, where I try to involve faculty from variety of disciplines. As an example I offered a course on Ethical Issues in genetics in collaboration with Prof. Barry Hoffmaster (Philosophy) and Mark Perry (Law), which had the highest enrollment of all our graduate courses. As apparent from the reaction, the course was rated as a "superb learning experience" by graduate students. However, I probably learn more from the students than they learned from me. I am thankful and delighted with the opportunity of interaction with students.

SERVICE AND ADMINISTRATION:

PHILOSOPHY: As privileged academics, I enjoy frontier research and introduce the excitement of research results to students, scientific community and society with never ending

energy in search of excellence. As academics, our legacy remains new knowledge, new generation of trainees to take up the challenge and most important, contribution to an educated society. I believe in contributing to the society by service on decision making bodies and committees. To this end I have served on a large number of local, national and international organization (consultations, scientific bodies, funding agencies, program development etc) over 25 years. Some of these are highlighted below.

PUBLICATIONS IN INTERNATIONAL MEETINGS AND JOURNALS:

Refereed Research Publications: ***Life time total 175*** **(example since 1990, only)**

Murphy, BC, R.O'Reilly and SM Singh. 2005. Site-specific cytosine methylation in S-COMT promoter in 31 brain regions with implications for studies involving schizophrenia. American Journal of Medical (Neuropsychiatric) Genetics: 133(1):37-42.

Singh, SM, P.McDonald, BC Murphy and E.O'Reilly. 2004. Incidental neurodevelopmental episodes in the etiology of schizophrenia: An expanded model involving epigenetics and development. Clin Genet. 65(6):435-440.

Wang, Y. K.Hill, SM Singh and L.Kari 2004. Spectrum of genomic signatures: From di nucleotides to Chaos Game Representation. Gene 346C: 173-185

Treadwell JA, K Pagniello, SM Singh. 2004. Genetic segregation of brain gene expression identifies retinaldehyde binding protein 1 and ayntaxin 12 as potential contributors to ethanol preference in mice. Behavior Genetics 34: 425-439

Treadwell JA and SM Singh 2004. Microarray analysis of mouse brain gene expression following acute ethanol treatment. Neurochemical Research 29:357-369.

Murphy, BC, R.O'Reilly and SM Singh. 2004. Site-specific cytosine methylation in S-COMT promoter in 31 brain regions with implications for studies involving schizophrenia. American Journal of Medical (Neuropsychiatric) Genetics (in press Sept 13, 2004)

Singh, SM, P.McDonald, BC Murphy and E.O'Reilly. 2004. Incidental neurodevelopmental episodes in the etiology of schizophrenia: An expanded model involving epigenetics and development. Clin Genet. 65(6):435-440.

Wang, Y. K.Hill, SM Singh and L.Kari 2004. Spectrum of genomic signatures: From di-nucleotides to Chaos Game Representation. Gene (in press)

Loney, KD, KR. Uddin and SM Singh 2003. Strain-specific brain metallothionine II (MT II) gene

expression, its ethanol responsiveness a,d association with ethanol preference in mice. Alcoholism: Clinical and Experimental Research 27:388-395.

Singh, SM, B.Murphy and R.O'Reilly 2003. Involvement of gene-diet/drug interaction in DNA methylation and its contribution to complex diseases: from cancer to schizophrenia. Clinical Genetics 64:451-460

McDonald, P. M.Lewis, B. Murphy, R.O'Reilly and SM Singh 2003. Appraisal of genetic and Epigenetic congruity of a monozygotic twin pair discordant for schizophrenia. Jour. Med Genetics 40:e 1-6.

Singh, SM, BC Murphy and R.O'Reilly 2002. Monozygotic twins with chromosome 22q11 deletion and discordant phenotypes: updates with an epigenetic hypothesis. Jour Med Genetics. 39: 71e

Singh, SM, B. Murphy and R.O'Reilly. 2002. Epigenetic contributors to the discordance of monozygotic twins. Clinical Genetics 62:97-103.

Harrison, M. and SM Singh. 2002. Genetics and differential expression of NADH:Ubiquinone oxidoreductase B8 subunit in brains of genetic strains of mice differing in voluntary alcohol connsumption (VAC). BBA: Gene Structure and Function 1579:164-172.

Murphy, B., Tillie Chiu, M. Harrison, Raihan K. Uddin, and Shiva M. Singh 2002. Examination of ethanol responsive liver and brain specific gene expression in the mouse strains with variable ethanol preferences, using cDNA expression arrays. Biochemical Genetics 40:395-410.

Song, X. and SM Singh (2001) Distribution and molecular characterization of mRNA-binding proteins specific to the (U)15 region of 3'UTR of the mouse catalase (*Cas-1*). DNA andCell Biology 6: 339 348.

Deb-Rinker, P., R.L.O'Reilly, E.F.Torrey and S.M.Singh. (2001) Molecular Characterization of a2.7 kb, 12q13-specific, retroviral related sequence isolated by RDA from monozygotic twins discordant for schizophrenia. Genome 45:381-390

George, C.F.P. and S.M. Singh. (2000) Hypocretin (orexin) pathway to sleep. Lancet 355 (January 1, 2000): 6

Deb-Rinker, P., T.A. Klempan, R.I. O'Reilly, E.F.Torrey and S.M. Singh. 1999 Molecular characterization of a MSRV-like sequence identified by RDA from monozygotic twin pairs discordant for schizophrenia. Genomics 61:133-144

Mancini, D.N., S.M.Singh, T.K.Archer and D.I.Rodenhiser. 1999. Site-specific DNA methylation in Neurofibromatosis (NF1) promoter interferes with binding of CREB and SP1 transcription factors. Oncogene 18:4108-4119

Deb, P., T.A. Klempan, R.I. O'Reilly and S.M. Singh. 1999. Search for retroviral related DNA polymorphisms using RAPD PCR in Schizophrenia. Biochimica et Biophysica Acta 1453 : 216-220

Mancini, D.N., D.I. Rodenhiser, P.S. Ainsworth, F.P. O'Malley, S.M. Singh, W. Xing, and T.K. Archer.

1998. CpG methylation within the S' regulatory region of the BRCA1 gene is tumor specific and includes a putative CREB binding site. Oncogene 16:1161-1169.

Deb, P., T.A. Klempan, R O'Reilly and S.M. Singh. 1998. A single-primer based retroviral-related DNA polymorphism shared by two distinct human populations. Genome 41:662-668

Mancini, D., S.M. Singh, P. Ainsworth, D.I Rodenhiser 1997. Constitutively methylated cpG dinucleotide as mutation hot-spots in the retinoblastoma (Rb) gene. Amer. J. Hum. Genet. 61: 80 -87.

Hill, KA. and S.M. Singh. 1997. The evolution of species-type specificity in the global DNA sequence organization of mitochondrial genomes. Genome 40:342-356.

Rodenhiser, D.I., S.D. Andrews, D.N. Mancini, J.H. Jung and S.M. Singh. 1997. Homonucleotide tracts, short aspects and CpG/CpNpG motifs are frequent sites for hetregeneous mutations in the Neurofibromatosis type1 (NF1) tumour suppressor gene. Mutation Research 373:185-195.

Rodenhiser, D., K. Hovland, J.H. Jung, J.M.R Gillett, P. Ainsworth, M. Coulter-Mackie and S.M. Singh. 1997. A five base pair deletion within exon 39 of the Neurofibromatosis type 1 (NF1) gene. Human Mutations 9:473.

Tagliabracci, C. and S.M. Singh. 1996. Genetic regulation of gene-specific mRNA by ethanol in vivo and its possible role in ethanol preference in a cross with RI lines in mice. Biochemical Genetics: 34(5/6):219-238.

Reimer, D.L. and S.M. Singh. 1996. Distinct mRNA-binding proteins interacting with short repeat sequences of the 3'UTR may be involved in the post-transcriptional regulation of the mouse catalase gene (Cas-1). DNA and Cell Biol. 15:317-328.

O'Reilly, R.L. and S.M. Singh. 1996. Retroviruses and schizophrenia revisited. Am. J. Medical Genetics (Neuropsychiatric Genetics) 67:19-24.

Singh, S.M., C.F.P. George, R.N. Ott, C. Rattazzi, C. Guilleminault, W.C. Dement and E. Mignot. 1996. IgH (-switch & -1) region restriction fragment length polymorphism in human narcolepsy. J. Clinical Immunology 16:208-215.

Rodenhiser, D., P. Chakraborty, J. Andrews, P. Ainsworth, D. Mancini, E. Lopes and S.M. Singh. 1996. Heterogeneous point mutations in the BRCA1 breast cancer susceptibility gene occur in high frequency at the site of homonucleotide tracts, short repeats and methylatable CpG/CpNpG motifs. Oncogene 12:2623-2629.

Andrews, J.D., D.N. Mancini, S.M. Singh and D.I. Rodenhiser 1996. Site and sequence specific methylation in the neurofibromatosis (NF1) gene includes C5839T: the site of the recurrent substitution mutation in exon 31. Human Molecular Genetics 5:503-507.

Reimer, D.L., J. Bailey and S.M. Singh. 1994. Complete cDNA sequences of the mouse Cas-1 and the multilevel regulation of the antioxidant enzyme catalase. Genomics 21:325-336.

Bond, S.L. and S.M. Singh. 1994. A sequence analysis of the cytosolic acetaldehyde dehydrogenase gene (Ahd-2) in mouse strains with variable ethanol preferences. Biochemical Medicine and Metabolic Biology 52:155-159.

Wigle, M. and S.M. Singh. 1994. RFLP and methylation studies on five genes of the mouse (Mus musculus) chromosome 11. Life Science Advances-Genetics.13:19-23

O'Reilly, R.L., L. Bogue and S.M. Singh. 1994. Pharmacogenetic response to antidepressant in a multicase family with affective disorder. Biol. Psy.36:467-471.

Rodenhiser, D.I, M.B. Coulter-Mackie and S.M. Singh. 1993. DNA methylation in the Neurofibromatosis type 1 (NF1) gene region of 17q1 1.2. Human Molecular Genetics 2:439-444.

Rodenhiser, D.I., P. Ainswonh, M.B. Coulter-Mackie, S.M. Singh and J.H. Jung. 1993. A genetic study of Neurofibromatosis type 1 (NF1) in Southwestern Ontario. II. A PCR-based approach to molecular and prenatal diagnosis using linkage. J. Medical Genetics 30:363-368.

Hill, K.A., N.A. Schisler and S.M. Singh. 1992. Chaos game representation (CGR) of coding regions of alcohol dehydrogenase genes from phylogenetically divergent species. J. Molecular Evolution 35:261-269.

Mignot, E., X. Lin., J Kalil, C. George, S.M. Singh, M. Billiard, J Montplaisir, 3. Arrigoni, C. Guilleminault, W.C. Dement, and F.C. Grumet. 1992. DQB1-0602 (DQw1) is not present in most non DR2 caucasian narcoleptics. Sleep 15:415-422.

Ditta, S.D., C.E.P. George and S.M. Singh. 1992. GLA-D region restriction fragments in families with DR2-negative Narcolepsy patients. Sleep 15:48-57.

Schisler, N.J. and S.M. Singh. 1991. A quantitative genetic analysis of tissue specific catalase activity in *Mus musculus*. Biochemical Genetics 29:65-89.

Rodenhiser, D.I., M.B. Coulter-Mackie, J.H. Jung and S.M. Singh. 1991. A genetic study of Neurofibromatosis in Southwestern Ontario. I. Population, familial segregation of phenotypes and molecular linkage. J. Medical Genetics 28:746-751.

George, C.& S.M.Singh. 1991.Juvenile onset narcolepsy syndrome in a Turner syndrome. Sleep14:267-69.

Elliot, J., M.B. Coulter-Mackie, J.H. Jung, D.I. Rodenhiser and S.M. Singh. 1991. A method for transforming lymphocytes from very small blood volumes suitable for paediatric sample. Human Genetics 86:615-616.

Bond, S.L., M.R. Wigle and S.M. Singh. 1991. Acetaldehyde dehydrogenase (Ahd-2) associated DNA polymorphism in mouse strains with variable ethanol preferences. Alcoholism: Clinical and Experimental Research 15:304-307.

El-Hage, S. and S.M. Singh. 1990. Temporal expression of genes encoding Free-radical metabolizing

enzymes is associated with higher mRNA levels during *in utero* development in mice. Developmental Genetics 11:149-159.

El-Hage, S. and S.M. Singh. 1990. A five fold reduction in sister chromatid exchanges following implantation is not directly related to the expression of embryonic genes responsible for oxygen radical metabolism. Mutation Research 232:217-226.

Reimer, D.L. and S.M. Singh. 1990. *In situ* hybridization studies on murine catalase mRNA expression during embryonic development. Developmental Genetics 11:318-325.

Bond, S.L. and S.M. Singh. 1990. Studies with cDNA probes on the *in vivo* effect of ethanol on expression of genes of alcohol metabolism. Alcohol & Alcoholism 25:385-394.

Singh, S.M., C.F.P. George, M.H. Kryger, J.H. Jung. 1990. Genetic heterogeneity in Narcolepsy. Lancet 335:726-727.

Recent Reviews: (Life time total 21)

George, CFP and SM Singh. (2000) Hypocretin (orexin) pathway to sleep. Invited commentary. Lancet 355 (January 1, 2000): 6

Singh, R.S., S.M.Singh and R.S.Pandeya (1999) Genetic Resources and Biotechnology; Introduction Genome 42:551-553

Reimer, D.L., M.B. Bally and S.M. Singh. 1997. Human gene therapy: principles and modern advances. Biotechnology Annual Reviews vol.3:59-110.

Singh, S.M., D.I. Rodenhiser, R.N. Ott, J.H. Jung, and P.J. Ainsworth. 1996. Strategies and applications of DNA level diagnosis in genetic diseases: past experiences and future directions. Biotechnology Annual Reviews (Vol II):407-444.

Refereed (Published) Abstracts: ***Life time Total 155*** **(example Since 1990 only):**

Loney, KD, R Uddin and SM Singh 2004. Metallothionine genes (MT-I,II,III) and ethanol preference: Studies involving expression in the brain and MT-I/MT-II knockout mice. Amer J Hum Genet #2115:386.

Murphy, BC, R O'Reilly and SM Singh. 2004. Epigenetic implications in Schizophrenia: site specific cytosine methylation in S-COMT promoter on 22q11. Amer J Hum Genet #1120:215.

Uddin, R, JA Treadwell and SM Singh. 2004. Ethanol responsive metabolome: An insight in the regulatory network involving transacting factors and cis-acting motifs. Amer J Hum Genet #2077:380.

Zhang, Y, R O'Reilly and SM Singh 2004. Mutational studies on *PRODH* gene located in VCFS critical region of 22Q11 in patients with schizophrenia. Amer J Hum Genet #2336:423.

Murphy, BC, R.O'Reilly and SM Singh 2004. Methylation studioes on the COMT gene of Chrpmpsome 22q11 in schizophrenia. World Congress on Psychiatric Genetics. Amer J Medical Genetics 130B: 82

Zhang, Y, BC Murphy, V.Siu, Y.Fan, R.O'Reilly and SM Singh 2004. Molecular characterization of a novel 22q11 delation in a VCFS patient with mild psychiatric disorders. Woirld Conress on Psychaitric Genetics. Amer J Medical Genetics 130B: 81

Treadwell, JA , KB Pagniello and SM Singh 2003. Genetic analysis of ethanol responsive genes in the brains of C57BL/6J and DBA/2J mice. Neurogenomics (Brain Research Symposium).

Loney, KD, K Kam, KR Uddin and SM Singh 2003. Brain expression of MT-II as a possible contributor to ethanol preference in mice. Neurogenomics (Brain Research Symposium).

Harrison, M. J Treadwell, and SM Singh 2002. Global gene expression in the brain: Variability among mouse strains revealed by GENECHIPs. Bulletin Genetics Society of Canada.

Grant, K., M.Harrison, Treadwell J and SM Singh. 2002. Studies on genomewide altered expression in the brain in response to ethanol in mice. Bulletin Genet Society ofCanada

Treadwell, J.R., K.R.Uddin, M.L.Harrison, S.M.Singh. 2001 Identification of pharmacologically relevant cDNAs using mRNA-differential display and genetic strains of mice with special reference to alcohol response. Amer.J.Human.Genet.67(4): 354

Murphy, B.C., M.L.Harrison, R.K.Uddin, T.Chiu, J.A.Treadwell, S.M.Singh.2000. Expression array profile based identification of candidate genes for complex response phenotypes with special reference to alcohol. Amer. J. Hum. Genet. 67(4): 340

Deb-Rinker, P., R.L.O'Reilly, B.C.Murphy, S.M.Singh. 2000. Importance of differential methylation of a 12q13 specific RDA-derived retroviral related sequence (gb AF135486) in schizophrenia. Amer.J.Hum.Genet. 67(4): 338

Black, A.K., P.A.Lansoo, N.J.Schisler, B.C.Murphy, S.M.Singh.2000. Regulatory features of Cas-1 genomic organization and evolution associated with oxygen radical metabolism, health and disease. Amer.J.Hum.Genet. 67(4): 180

Deb-Rinker, P., R.L.O'Reilly, S.M.Singh.2000. Methylation difference in a retroviral related sequence as a contributor to the neurodevelopmental hypothesis of schizophrenia. Schizophrenia Research 41: 25

Deb-Rinker, P., R.O'reilly, E.F.Torrey and S.M.Singh. 2000. Retroviral-related sequences obtained by RDA from discordant MZ twins are heavily methylated and placentally expressed. Schizophrenia Research. 41; 23-24.

Treadwell, J.R., K.R.Uddin, M.L.Harrison, S.M.Singh. 2000. Identification of pharmacologically relevant cDNAs using mRNA-differential display and genetic strains of mice with special reference to alcohol response. Amer.J.Human.Genet.67(4): 354

Murphy, B.C., M.L.Harrison, R.K.Uddin, T.Chiu, J.A.Treadwell, S.M.Singh.2000. Expression array profile based identification of candidate genes for complex response phenotypes with special reference to alcohol. Amer. J. Hum. Genet. 67(4): 340

Deb-Rinker, P., R.L.O'Reilly, B.C.Murphy, S.M.Singh. 2000. Importance of differential methylation of a 12q13 specific RDA-derived retroviral related sequence (gb AF135486) in schizophrenia. Amer.J.Hum.Genet. 67(4): 338

Black, A.K., P.A.Lansoo, N.J.Schisler, B.C.Murphy, S.M.Singh.2000. Regulatory features of Cas-1 genomic organization and evolution associated with oxygen radical metabolism, health and disease. Amer.J.Hum.Genet. 67(4): 180

Deb-Rinker, P., R.L.O'reilly, S.M.Singh.2000. Methylation difference in a retroviral related sequence as a contributor to the neurodevelopmental hypothesis of schizophrenia. Schizophrenia Research 41:25

Deb-Rinker, P., R.O'reilly, E.F.Torrey and S.M.Singh. 2000. Retroviral-related sequences obtained by RDA from discordant MZ twins are heavily methylated and placentally expressed. Schizophrenia Research. 41; 23-24.

Deb-Rinker, P., P.McDonald, M.Lewis, R.O'Reilly and S.M. Singh 1999. Molecular characterization of four endogenous retroviral-related sequences identified by representational difference analysis from three sets of monozygotic twins discordant for schizophrenia. Amer. J..Hum.Genetics 65(4): A268

Harrison, M., K.Uddin, J.Treadwell, B.C.Murphy, and S.M.Singh. 1999. mRNA differential display identifies novel strain specific ethanol responsive (SSER) cDNAs involved in alcohol preference. Amer J. Hum. Genetics 65 (4): A273

Murphy, B..C., T.Chiu, P.MacDonald, and S.M.Singh. 1999. Ethanol responsive genes contributing to alcoholism identified by cDNA expression arrays. Amer J. Hum. Genetics 65(4):463.

Deb-Rinker, P., T.Klempan, R.O'Reilly, E.F.Torrey and S.M.Singh. 1999. Molecular characterization of a MSRV-like sequence identified by RDA from monozygotic twin pairs discordant for schizophrenia. Molecular Psychiatry 4(S1):S4

Mancini, D.,P.Ainsworth, F.OíMalley, S.Singh, T.Archer, D.Rodenhiser. 1998. CpG methylation at transcription factor binding sites within the BRCA1 5íregulatory region in tumours and an MCF7 cell line. Am. J. Hum. Genet. 63:A77.

Rodenhiser, D., D.Mancini, S.M.Singh and T.Archer 1998. Site specific DNA methylation in the neurofibromatosis (NF1) promoter inter-feres with binding of CREB and SP1 transcription factors. Am. J. Hum. Genet. 63:A190.

Chiu, T., M.Harrison, B.Murphy, K.R.Uddin, S.M.Singh 1998. Strain specific ethanol responsive (SSER) cDNAs identified by differential displays: A novel strategy to ellucidate the complex etiology of alcohol responses/effects. Am. J. Hum. Genet. 63:A323.

Deb, P., T.A.Klempan, R.OíReilly, E.F.Torry and S.M.Singh. 1998. A MSRV/ERV-9-like sequence

identified by representational difference analysis (RDA) from discordant monozygotic twin pairs as a candidate contributor to schizophrenia. Am. J. Hum. Genet. 63:A324.

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