



## Recent patent applications in epigenetics

Patent number	Description	Assignee	Inventor	Priority application date	Publication date
CN 101525592	A novel human parthenogenetic embryonic stem cell line with two active X chromosomes prepared by promoting pronucleus from oocyte, inducing embryo formation, maintaining undifferentiated cells and obtaining stem cell line; useful in genetic and epigenetic research, and in regeneration therapy for treating various diseases.	Guangzhou Medical College (Guangzhou, China)	Sun X	3/7/2008	9/9/2009
WO 2008021288, EP 2069535	Diagnosing breast and/or colorectal cancer in a human by determining in a test sample a somatic mutation in a gene or its encoded cDNA or protein, which is indicative of breast or colorectal cancer.	Johns Hopkins University (Baltimore)	Barber T, Jones S, Kinzler KW, Lin J, Mandelker D, Parsons DW, Sjöblom T, Velculescu VE, Vogelstein B, Wood LD, Parsons WD	8/11/2006	2/21/2008, 6/17/2009
WO 2009049916, EP 2053131	A method of determining methylation at cytosine residues in DNA comprising treating the test sample with a reagent that comprises electrophilic/oxidizing species and selectively reacts with 5-methylcytosine residues; useful for analyzing DNA methylation patterns in epigenetics and for quantifying methyltransferase activity.	Ludwig Maximilian University of Munich (Munich)	Bareyt S, Carell T, Mueller M	10/19/2007	4/23/2009, 4/29/2009
KR 2009035372	A method of inducing differentiation of spinal cord oligodendrocyte by culturing human embryonic stem cells to form an embryoid, and culturing the embryoid in proliferation induction culture medium, and then in differentiation induction culture medium. The method is useful for inducing differentiation of spinal cord oligodendrocyte from human embryonic stem cells to prepare cell therapy composition for treating spinal cord disease and spinal cord injury.	Korea University Industry & Academy Cooperation Foundation (Seoul)	Gil J, Kim J	10/5/2007	4/9/2009
WO 2009015283, WO 2009015283	A new polypeptide for forming a histone complex for identifying histone demethylase-histone binding modulator comprising a specific amino acid sequence of human-specific Phe-His-Asp (PHD) finger-containing protein of a lysine-specific histone demethylase complex.	Harvard College (Cambridge, MA, USA), Emory University (Atlanta)	Cheng X, Collins RE, Horton JR, Lan F, Shi Y	7/24/2007	1/2/2009, 4/9/2009
WO 2006031745, US 20060073501	A method of sequencing a target nucleic acid by generating overlapping fragments of the target nucleic acid, contacting fragments with an array of capture oligonucleotides, measuring the mass of hybridized fragments and constructing a nucleotide sequence.	Boecker S, Sequenom (San Diego), van den Boom DJ	Boecker S, van den Boom DJ	9/10/2004	3/23/2006, 4/6/2006
US 6872868	A method for genetic transformation of zygotes by placing exogenous genetic material into the zygote nucleus.	Ohio University (Athens, OH, USA)	Hoppe PC, Wagner TE	5/24/1995	3/29/2005
WO 1999063943, US 20040033198	A method of increasing methylation of DNA in an unborn offspring, resulting in changes in the epigenetically determined phenotype, inhibition of parasitic DNA sequences and a decrease in the susceptibility to tumor formation.	Cooney CA, Wolff GL	Cooney CA, Wolff GL	6/12/1998, 3/29/2003	12/16/1999, 2/19/2004

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