Dean H Betts

List of Publications by Year
in descending order

78 papers	2,731 citations	136940 32 h-index	189881 50 g-index
84 all docs	84 docs citations	84 times ranked	3030 citing authors

#	ARTICLE	IF	CITATIONS
1	Isolation of mesenchymal stem cells from equine umbilical cord blood. BMC Biotechnology, 2007, 7, 26.	3.3	183
2	Apoptosis in the early bovine embryo. Zygote, 2000, 8, 57-68.	1.1	150
3	Genetic regulation of embryo death and senescence. Theriogenology, 2001, 55, 171-191.	2.1	136
4	Permanent embryo arrest: molecular and cellular concepts. Molecular Human Reproduction, 2008, 14, 445-453.	2.8	107
5	The effects of antibodies to heat shock protein 70 in fertilization and embryo development. Molecular Human Reproduction, 2001, 7, 829-837.	2.8	101
6	High levels of p66shc and intracellular ROS in permanently arrested early embryos. Free Radical Biology and Medicine, 2007, 42, 1201-1210.	2.9	97
7	Stressâ€inducible phosphoprotein 1 has unique cochaperone activity during development and regulates cellular response to ischemia<i>via</i>the prion protein. FASEB Journal, 2013, 27, 3594-3607.	0.5	86
8	Characterization and Immunomodulatory Effects of Canine Adipose Tissue- and Bone Marrow-Derived Mesenchymal Stromal Cells. PLoS ONE, 2016, 11, e0167442.	2.5	84
9	Telomerase activity and telomere detection during early bovine development. Genesis, 1999, 25, 397-403.	2.1	71
10	Chondrogenic potential of mesenchymal stromal cells derived from equine bone marrow and umbilical cord blood. Veterinary and Comparative Orthopaedics and Traumatology, 2009, 22, 363-370.	0.5	69
11	Reprogramming of telomerase activity and rebuilding of telomere length in cloned cattle. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 1077-1082.	7.1	68
12	Gene expression regulating blastocyst formation. Theriogenology, 1999, 51, 117-133.	2.1	66
13	The early embryo response to intracellular reactive oxygen species is developmentally regulated. Reproduction, Fertility and Development, 2011, 23, 561.	0.4	65
14	Differential Involvement of Na+,K+-ATPase Isozymes in Preimplantation Development of the Mouse. Developmental Biology, 2000, 222, 486-498.	2.0	57
15	p66shc, but not p53, is involved in early arrest of in vitro-produced bovine embryos. Molecular Human Reproduction, 2004, 10, 383-392.	2.8	57
16	The impact of oocyte maturation media on early bovine embryonic development. Molecular Reproduction and Development, 2006, 73, 1255-1270.	2.0	55
17	Ouabain sensitivity and expression of Na/K-ATPase Î±- and Î²-subunit isoform genes during bovine early development. Molecular Reproduction and Development, 1997, 46, 114-126.	2.0	54
18	Characterization of Canine Embryonic Stem Cell Lines Derived From Different Niche Microenvironments. Stem Cells and Development, 2009, 18, 1167-1178.	2.1	51

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19	The oxidative stress adaptor p66Shc is required for permanent embryo arrest in vitro. BMC Developmental Biology, 2007, 7, 132.	2.1	50
20	Global gene expression response to telomerase in bovine adrenocortical cells. Biochemical and Biophysical Research Communications, 2005, 335, 925-936.	2.1	48
21	Na/K-ATPase-Mediated86Rb+Uptake and Asymmetrical Trophectoderm Localization of Î±1 and Î±3 Na/K-ATPase Isoforms during Bovine Preattachment Development. Developmental Biology, 1998, 197, 77-92.	2.0	47
22	S-adenosylhomocysteine treatment of adult female fibroblasts alters X-chromosome inactivation and improves in vitro embryo development after somatic cell nuclear transfer. Reproduction, 2008, 135, 815-828.	2.6	44
23	Lactate preconditioning promotes a HIF-1Î±-mediated metabolic shift from OXPHOS to glycolysis in normal human diploid fibroblasts. Scientific Reports, 2020, 10, 8388.	3.3	43
24	Expression profiles of p53 and p66shc during oxidative stress-induced senescence in fetal bovine fibroblasts. Experimental Cell Research, 2004, 299, 36-48.	2.6	42
25	Role of chromosome stability and telomere length in the production of viable cell lines for somatic cell nuclear transfer. BMC Developmental Biology, 2006, 6, 41.	2.1	40
26	Improved isolation protocol for equine cord blood-derived mesenchymal stromal cells. Cytotherapy, 2009, 11, 443-447.	0.7	40
27	Stem cell therapy for joint problems using the horse as a clinically relevant animal model. Expert Opinion on Biological Therapy, 2007, 7, 1621-1626.	3.1	39
28	Proteomic analysis of extracellular matrices used in stem cell culture. Proteomics, 2011, 11, 3983-3991.	2.2	39
29	Mass Spectrometryâ€"based Proteomic Analysis of the Matrix Microenvironment in Pluripotent Stem Cell Culture. Molecular and Cellular Proteomics, 2012, 11, 1924-1936.	3.8	38
30	p66Shc activation promotes increased oxidative phosphorylation and renders CNS cells more vulnerable to amyloid beta toxicity. Scientific Reports, 2018, 8, 17081.	3.3	35
31	Different Culture Media Requirements of IVF and Nuclear Transfer Bovine Embryos. Reproduction in Domestic Animals, 2004, 39, 462-467.	1.4	34
32	Telomere length analysis in goat clones and their offspring. Molecular Reproduction and Development, 2005, 72, 461-470.	2.0	34
33	The Long and Short of It: The Role of Telomeres in Fetal Origins of Adult Disease. Journal of Pregnancy, 2012, 2012, 1-8.	2.4	34
34	The role of telomeres and telomerase reverse transcriptase isoforms in pluripotency induction and maintenance. RNA Biology, 2016, 13, 707-719.	3.1	33
35	Concepts for the clinical use of stem cells in equine medicine. Canadian Veterinary Journal, 2008, 49, 1009-17.	0.0	30
36	Telomere length status of somatic cell sheep clones and their offspring. Molecular Reproduction and Development, 2007, 74, 1525-1537.	2.0	29

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37	The p66Shc Adaptor Protein Controls Oxidative Stress Response in Early Bovine Embryos. PLoS ONE, 2014, 9, e86978.	2.5	29
38	Genomic stability and physiological assessments of live offspring sired by a bull clone, Starbuck II. Theriogenology, 2007, 67, 116-126.	2.1	28
39	Low oxygen delays fibroblast senescence despite shorter telomeres. Biogerontology, 2008, 9, 19-31.	3.9	27
40	The impact of chromosomal alteration on embryo development. Theriogenology, 2006, 65, 166-177.	2.1	24
41	Synaptically-Competent Neurons Derived from Canine Embryonic Stem Cells by Lineage Selection with EGF and Noggin. PLoS ONE, 2011, 6, e19768.	2.5	24
42	Connexin43 Mutant Patientâ€Derived Induced Pluripotent Stem Cells Exhibit Altered Differentiation Potential. Journal of Bone and Mineral Research, 2017, 32, 1368-1385.	2.8	24
43	Alternative splicing and expression analysis of bovine DNA methyltransferase 1. Developmental Dynamics, 2008, 237, 1051-1059.	1.8	23
44	Canine Pluripotent Stem Cells: Are They Ready for Clinical Applications?. Frontiers in Veterinary Science, 2015, 2, 41.	2.2	20
45	The use of induced pluripotent stem cells in domestic animals: a narrative review. BMC Veterinary Research, 2020, 16, 477.	1.9	20
46	Long Telomeres Bypass the Requirement for Telomere Maintenance in Human Tumorigenesis. Cell Reports, 2012, 1, 91-98.	6.4	19
47	Treatment with AICAR inhibits blastocyst development, trophectoderm differentiation and tight junction formation and function in mice. Molecular Human Reproduction, 2017, 23, 771-785.	2.8	17
48	Pannexin 1 binds Î²-catenin to modulate melanoma cell growth and metabolism. Journal of Biological Chemistry, 2021, 296, 100478.	3.4	17
49	P66Shc, a key regulator of metabolism and mitochondrial ROS production, is dysregulated by mouse embryo culture. Molecular Human Reproduction, 2016, 22, 634-647.	2.8	14
50	Dynamic regulation of connexins in stem cell pluripotency. Stem Cells, 2020, 38, 52-66.	3.2	14
51	Oleic Acid Counters Impaired Blastocyst Development Induced by Palmitic Acid During Mouse Preimplantation Development: Understanding Obesity-Related Declines in Fertility. Reproductive Sciences, 2020, 27, 2038-2051.	2.5	14
52	Extracellular vesicles, microRNA and the preimplantation embryo: non-invasive clues of embryo well-being. Reproductive BioMedicine Online, 2021, 42, 39-54.	2.4	14
53	Use of Somatic Cell Nuclear Transfer to Study Meiosis in Female Cattle Carrying A Sex-Dependent Fertility-Impairing X-Chromosome Abnormality. Cloning and Stem Cells, 2007, 9, 118-129.	2.6	11
54	Small-Molecule Induction of Canine Embryonic Stem Cells Toward NaÃ¯ve Pluripotency. Stem Cells and Development, 2016, 25, 1208-1222.	2.1	11

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55	Analysis of Mitochondrial Dimensions and Cristae Structure in Pluripotent Stem Cells Using Transmission Electron Microscopy. Current Protocols in Stem Cell Biology, 2018, 47, e67.	3.0	10
56	Telomerase activity in clinically normal dogs and dogs with malignant lymphoma. American Journal of Veterinary Research, 2001, 62, 1442-1446.	0.6	9
57	Cell Therapy in Veterinary Medicine as a Proof-of-Concept for Human Therapies: Perspectives From the North American Veterinary Regenerative Medicine Association. Frontiers in Veterinary Science, 2021, 8, 779109.	2.2	9
58	Osteogenic differentiation of equine cord blood multipotent mesenchymal stromal cells within coralline hydroxyapatite scaffolds in vitro. Veterinary and Comparative Orthopaedics and Traumatology, 2011, 24, 354-362.	0.5	8
59	Metabolic plasticity during transition to naÃ¯ve-like pluripotency in canine embryo-derived stem cells. Stem Cell Research, 2018, 30, 22-33.	0.7	8
60	Derivation and Culture of Canine Embryonic Stem Cells. Methods in Molecular Biology, 2013, 1074, 69-83.	0.9	8
61	Quantitative Analysis of Telomerase Activity and Telomere Length in Domestic Animal Clones. , 2006, 325, 149-180.		7
62	<i>In Vitro</i> Developmental Potential of Nuclear Transfer Embryos Cloned with Enucleation Methods using Preâ€denuded Bovine Oocytes. Reproduction in Domestic Animals, 2011, 46, 1035-1042.	1.4	7
63	Targeted expression profiling reveals distinct stages of early canine fibroblast reprogramming are regulated by 2-oxoglutarate hydroxylases. Stem Cell Research and Therapy, 2020, 11, 528.	5.5	7
64	Elevated p66Shc is associated with intracellular redox imbalance in developmentally compromised bovine embryos. Molecular Reproduction and Development, 2013, 80, 22-34.	2.0	6
65	Differential localization patterns of pyruvate kinase isoforms in murine naÃ¯ve, formative, and primed pluripotent states. Experimental Cell Research, 2021, 405, 112714.	2.6	6
66	Early Pregnancy Diagnosis by Serum Progesterone and Ultrasound in Sheep Carrying Somatic Cell Nuclear Transferâ€Derived Pregnancies. Reproduction in Domestic Animals, 2008, 43, 207-211.	1.4	5
67	Viable iPSC mice: a step closer to therapeutic applications in humans?. Molecular Human Reproduction, 2010, 16, 57-62.	2.8	5
68	Analysis of TERT Isoforms across TCGA, GTEx and CCLE Datasets. Cancers, 2021, 13, 1853.	3.7	5
69	Free fatty acid treatment of mouse preimplantation embryos demonstrates contrasting effects of palmitic acid and oleic acid on autophagy. American Journal of Physiology - Cell Physiology, 2022, 322, C833-C848.	4.6	4
70	Low Levels of X-Inactive Specific Transcript in Somatic Cell Nuclear Transfer Embryos Derived from Female Bovine Freemartin Donor Cells. Sexual Development, 2012, 6, 151-159.	2.0	3
71	Knockdown of p66Shc Alters Lineage-Associated Transcription Factor Expression in Mouse Blastocysts. Stem Cells and Development, 2018, 27, 1479-1493.	2.1	3
72	Localization of Î±-subunits and comparison of Î±-subunit transcript levels in single cultured and in vivo bovine blastocysts. Theriogenology, 1997, 47, 316.	2.1	2

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73	Delivering Antisense Morpholino Oligonucleotides to Target Telomerase Splice Variants in Human Embryonic Stem Cells. Methods in Molecular Biology, 2015, 1341, 133-142.	0.9	2
74	CD-1 mouse fertility rapidly declines and is accompanied with early pregnancy loss under conventional housing conditions. Theriogenology, 2018, 108, 245-254.	2.1	2
75	Effects of palmitic acid on localization of embryo cell fate and blastocyst formation gene products. Reproduction, 2022, 163, 133-143.	2.6	1
76	Stem cell roles in reproduction: what is the basic science?. Molecular Human Reproduction, 2010, 16, 791-792.	2.8	0
77	Flow Cytometric Characterization of Pluripotent Cell Protein Markers in NaÃ¯ve, Formative, and Primed Pluripotent Stem Cells. Methods in Molecular Biology, 2022, 2490, 81-92.	0.9	0
78	3D Immunofluorescent Image Colocalization Quantification in Mouse Epiblast Stem Cells. Methods in Molecular Biology, 2022, 2490, 69-79.	0.9	0