# Dean H Betts

## List of Publications by Citations



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|---|---|---|---|
| 74 papers | 2,251 citations | 29 h-index | 45 g-index |
| 84 ext. papers | 2,476 ext. citations | 3.4 avg, IF | 4.81 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 74 | Isolation of mesenchymal stem cells from equine umbilical cord blood. *BMC Biotechnology*, **2007**, 7, 26 | 3.5 | 150 |
| 73 | Apoptosis in the early bovine embryo. *Zygote*, **2000**, 8, 57-68 | 1.6 | 127 |
| 72 | Genetic regulation of embryo death and senescence. *Theriogenology*, **2001**, 55, 171-91 | 2.8 | 120 |
| 71 | Permanent embryo arrest: molecular and cellular concepts. *Molecular Human Reproduction*, **2008**, 14, 445-53 | 4.4 | 93 |
| 70 | High levels of p66shc and intracellular ROS in permanently arrested early embryos. *Free Radical Biology and Medicine*, **2007**, 42, 1201-10 | 7.8 | 93 |
| 69 | The effects of antibodies to heat shock protein 70 in fertilization and embryo development. *Molecular Human Reproduction*, **2001**, 7, 829-37 | 4.4 | 89 |
| 68 | Characterization and Immunomodulatory Effects of Canine Adipose Tissue- and Bone Marrow-Derived Mesenchymal Stromal Cells. *PLoS ONE*, **2016**, 11, e0167442 | 3.7 | 69 |
| 67 | Stress-inducible phosphoprotein 1 has unique cochaperone activity during development and regulates cellular response to ischemia via the prion protein. *FASEB Journal*, **2013**, 27, 3594-607 | 0.9 | 65 |
| 66 | Chondrogenic potential of mesenchymal stromal cells derived from equine bone marrow and umbilical cord blood. *Veterinary and Comparative Orthopaedics and Traumatology*, **2009**, 22, 363-70 | 1.2 | 63 |
| 65 | 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, 1077-82 | 11.5 | 61 |
| 64 | Telomerase activity and telomere detection during early bovine development. *Genesis*, **1999**, 25, 397-403 | | 56 |
| 63 | Gene expression regulating blastocyst formation. *Theriogenology*, **1999**, 51, 117-33 | 2.8 | 56 |
| 62 | The early embryo response to intracellular reactive oxygen species is developmentally regulated. *Reproduction, Fertility and Development*, **2011**, 23, 561-75 | 1.8 | 55 |
| 61 | p66shc, but not p53, is involved in early arrest of in vitro-produced bovine embryos. *Molecular Human Reproduction*, **2004**, 10, 383-92 | 4.4 | 54 |
| 60 | Differential involvement of Na(+),K(+)-ATPase isozymes in preimplantation development of the mouse. *Developmental Biology*, **2000**, 222, 486-98 | 3.1 | 52 |
| 59 | Ouabain sensitivity and expression of Na/K-ATPase alpha- and beta-subunit isoform genes during bovine early development. *Molecular Reproduction and Development*, **1997**, 46, 114-26 | 2.6 | 50 |
| 58 | The impact of oocyte maturation media on early bovine embryonic development. *Molecular Reproduction and Development*, **2006**, 73, 1255-70 | 2.6 | 48 |

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| 57 | Characterization of canine embryonic stem cell lines derived from different niche microenvironments. *Stem Cells and Development*, **2009**, 18, 1167-78 | 4.4 | 47 |
| 56 | Global gene expression response to telomerase in bovine adrenocortical cells. *Biochemical and Biophysical Research Communications*, **2005**, 335, 925-36 | 3.4 | 47 |
| 55 | The oxidative stress adaptor p66Shc is required for permanent embryo arrest in vitro. *BMC Developmental Biology*, **2007**, 7, 132 | 3.1 | 44 |
| 54 | Na/K-ATPase-mediated 86Rb+ uptake and asymmetrical trophectoderm localization of alpha1 and alpha3 Na/K-ATPase isoforms during bovine preattachment development. *Developmental Biology*, **1998**, 197, 77-92 | 3.1 | 42 |
| 53 | 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, 815-28 | 3.8 | 40 |
| 52 | Expression profiles of p53 and p66shc during oxidative stress-induced senescence in fetal bovine fibroblasts. *Experimental Cell Research*, **2004**, 299, 36-48 | 4.2 | 39 |
| 51 | Proteomic analysis of extracellular matrices used in stem cell culture. *Proteomics*, **2011**, 11, 3983-91 | 4.8 | 37 |
| 50 | 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 | 3.1 | 35 |
| 49 | Mass spectrometry-based proteomic analysis of the matrix microenvironment in pluripotent stem cell culture. *Molecular and Cellular Proteomics*, **2012**, 11, 1924-36 | 7.6 | 33 |
| 48 | Improved isolation protocol for equine cord blood-derived mesenchymal stromal cells. *Cytotherapy*, **2009**, 11, 443-7 | 4.8 | 33 |
| 47 | Different culture media requirements of IVF and nuclear transfer bovine embryos. *Reproduction in Domestic Animals*, **2004**, 39, 462-7 | 1.6 | 32 |
| 46 | Stem cell therapy for joint problems using the horse as a clinically relevant animal model. *Expert Opinion on Biological Therapy*, **2007**, 7, 1621-6 | 5.4 | 30 |
| 45 | Concepts for the clinical use of stem cells in equine medicine. *Canadian Veterinary Journal*, **2008**, 49, 1009-17 | 0.5 | 29 |
| 44 | The role of telomeres and telomerase reverse transcriptase isoforms in pluripotency induction and maintenance. *RNA Biology*, **2016**, 13, 707-19 | 4.8 | 28 |
| 43 | The long and short of it: the role of telomeres in fetal origins of adult disease. *Journal of Pregnancy*, **2012**, 2012, 638476 | 2.5 | 27 |
| 42 | Genomic stability and physiological assessments of live offspring sired by a bull clone, Starbuck II. *Theriogenology*, **2007**, 67, 116-26 | 2.8 | 25 |
| 41 | Telomere length status of somatic cell sheep clones and their offspring. *Molecular Reproduction and Development*, **2007**, 74, 1525-37 | 2.6 | 24 |
| 40 | Low oxygen delays fibroblast senescence despite shorter telomeres. *Biogerontology*, **2008**, 9, 19-31 | 4.5 | 24 |

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| 39 | Telomere length analysis in goat clones and their offspring. *Molecular Reproduction and Development*, **2005**, 72, 461-70 | 2.6 | 24 |
| 38 | The p66(Shc) adaptor protein controls oxidative stress response in early bovine embryos. *PLoS ONE* , **2014**, 9, e86978 | 3.7 | 22 |
| 37 | Synaptically-competent neurons derived from canine embryonic stem cells by lineage selection with EGF and Noggin. *PLoS ONE*, **2011**, 6, e19768 | 3.7 | 22 |
| 36 | The impact of chromosomal alteration on embryo development. *Theriogenology*, **2006**, 65, 166-77 | 2.8 | 22 |
| 35 | Alternative splicing and expression analysis of bovine DNA methyltransferase 1. *Developmental Dynamics*, **2008**, 237, 1051-9 | 2.9 | 19 |
| 34 | p66Shc activation promotes increased oxidative phosphorylation and renders CNS cells more vulnerable to amyloid beta toxicity. *Scientific Reports*, **2018**, 8, 17081 | 4.9 | 19 |
| 33 | Long telomeres bypass the requirement for telomere maintenance in human tumorigenesis. *Cell Reports*, **2012**, 1, 91-8 | 10.6 | 17 |
| 32 | Connexin43 Mutant Patient-Derived Induced Pluripotent Stem Cells Exhibit Altered Differentiation Potential. *Journal of Bone and Mineral Research*, **2017**, 32, 1368-1385 | 6.3 | 15 |
| 31 | Lactate preconditioning promotes a HIF-1-mediated metabolic shift from OXPHOS to glycolysis in normal human diploid fibroblasts. *Scientific Reports*, **2020**, 10, 8388 | 4.9 | 13 |
| 30 | Canine Pluripotent Stem Cells: Are They Ready for Clinical Applications?. *Frontiers in Veterinary Science*, **2015**, 2, 41 | 3.1 | 13 |
| 29 | Treatment with AICAR inhibits blastocyst development, trophectoderm differentiation and tight junction formation and function in mice. *Molecular Human Reproduction*, **2017**, 23, 771-785 | 4.4 | 12 |
| 28 | 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, 118-29 | | 11 |
| 27 | Small-Molecule Induction of Canine Embryonic Stem Cells Toward Naïve Pluripotency. *Stem Cells and Development*, **2016**, 25, 1208-22 | 4.4 | 9 |
| 26 | Telomerase activity in clinically normal dogs and dogs with malignant lymphoma. *American Journal of Veterinary Research*, **2001**, 62, 1442-6 | 1.1 | 9 |
| 25 | P66Shc, a key regulator of metabolism and mitochondrial ROS production, is dysregulated by mouse embryo culture. *Molecular Human Reproduction*, **2016**, 22, 634-47 | 4.4 | 9 |
| 24 | The use of induced pluripotent stem cells in domestic animals: a narrative review. *BMC Veterinary Research*, **2020**, 16, 477 | 2.7 | 8 |
| 23 | Osteogenic differentiation of equine cord blood multipotent mesenchymal stromal cells within coralline hydroxyapatite scaffolds in vitro. *Veterinary and Comparative Orthopaedics and Traumatology*, **2011**, 24, 354-62 | 1.2 | 8 |
| 22 | Dynamic regulation of connexins in stem cell pluripotency. *Stem Cells*, **2020**, 38, 52-66 | 5.8 | 8 |

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| 21 | Quantitative analysis of telomerase activity and telomere length in domestic animal clones. *Methods in Molecular Biology*, **2006**, 325, 149-80 | 1.4 | 7 |
| 20 | Derivation and culture of canine embryonic stem cells. *Methods in Molecular Biology*, **2013**, 1074, 69-83 | 1.4 | 7 |
| 19 | Elevated p66Shc is associated with intracellular redox imbalance in developmentally compromised bovine embryos. *Molecular Reproduction and Development*, **2013**, 80, 22-34 | 2.6 | 6 |
| 18 | In vitro developmental potential of nuclear transfer embryos cloned with enucleation methods using pre-denuded bovine oocytes. *Reproduction in Domestic Animals*, **2011**, 46, 1035-42 | 1.6 | 6 |
| 17 | Analysis of Mitochondrial Dimensions and Cristae Structure in Pluripotent Stem Cells Using Transmission Electron Microscopy. *Current Protocols in Stem Cell Biology*, **2018**, 47, e67 | 2.8 | 6 |
| 16 | Metabolic plasticity during transition to naïve-like pluripotency in canine embryo-derived stem cells. *Stem Cell Research*, **2018**, 30, 22-33 | 1.6 | 6 |
| 15 | Viable iPSC mice: a step closer to therapeutic applications in humans?. *Molecular Human Reproduction*, **2010**, 16, 57-62 | 4.4 | 5 |
| 14 | 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 | 8.3 | 4 |
| 13 | Pannexin 1 binds β-catenin to modulate melanoma cell growth and metabolism. *Journal of Biological Chemistry*, **2021**, 296, 100478 | 5.4 | 4 |
| 12 | Low levels of X-inactive specific transcript in somatic cell nuclear transfer embryos derived from female bovine freemartin donor cells. *Sexual Development*, **2012**, 6, 151-9 | 1.6 | 3 |
| 11 | Early pregnancy diagnosis by serum progesterone and ultrasound in sheep carrying somatic cell nuclear transfer-derived pregnancies. *Reproduction in Domestic Animals*, **2008**, 43, 207-11 | 1.6 | 3 |
| 10 | 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 | 3 | 2 |
| 9 | Localization of β-subunits and comparison of β-subunit transcript levels in single cultured and in vivo bovine blastocysts. *Theriogenology*, **1997**, 47, 316 | 2.8 | 2 |
| 8 | Extracellular vesicles, microRNA and the preimplantation embryo: non-invasive clues of embryo well-being. *Reproductive BioMedicine Online*, **2021**, 42, 39-54 | 4 | 2 |
| 7 | Delivering Antisense Morpholino Oligonucleotides to Target Telomerase Splice Variants in Human Embryonic Stem Cells. *Methods in Molecular Biology*, **2016**, 1341, 133-42 | 1.4 | 1 |
| 6 | Knockdown of p66Shc Alters Lineage-Associated Transcription Factor Expression in Mouse Blastocysts. *Stem Cells and Development*, **2018**, 27, 1479-1493 | 4.4 | 1 |
| 5 | 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 | 3.1 | 1 |
| 4 | CD-1 mouse fertility rapidly declines and is accompanied with early pregnancy loss under conventional housing conditions. *Theriogenology*, **2018**, 108, 245-254 | 2.8 | 0 |

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| 3 | Differential localization patterns of pyruvate kinase isoforms in murine naïve, formative, and primed pluripotent states. *Experimental Cell Research*, **2021**, 405, 112714 | 4.2 | 0 |
| 2 | Flow Cytometric Characterization of Pluripotent Cell Protein Markers in Naïve, Formative, and Primed Pluripotent Stem Cells.. *Methods in Molecular Biology*, **2022**, 2490, 81-92 | 1.4 | |
| 1 | 3D Immunofluorescent Image Colocalization Quantification in Mouse Epiblast Stem Cells.. *Methods in Molecular Biology*, **2022**, 2490, 69-79 | 1.4 | |