

Blastoderm

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A Blastoderm is the layer of cells formed at one pole of the yolky egg of birds. The yolk prevents the division from taking place through the egg, resulting in meroblastic cleavage during the many cleavage divisions. At the pole containing less yolk, the ovum divides and subdivides, forming the blastoderm, which gradually spreads around the yolk and forms the embryo. The blastoderm is comprised of two layers, the epiblast and the hypoblast, which enclose the fluid-filled blastocoel cavity. This embryonic stage is the avian equivalent of birds. ([From the Wikipedia article Blastoderm.](#))

Recent Publications on Blastoderm:



- [Zebrafish *aplnra* functions in epiboly.](#)
*ABSTRACT: BACKGROUND: The zebrafish, *Danio rerio*, possesses the paralogous...*20th November, 2009
- BMC Res Notes. 2009 Nov 19;2(1):231. ([DOI Direct Link](#))
- [DNA replication times the cell cycle and contributes to the mid-blastula transition in *Drosophila* embryos.](#)
*We examined the contribution of S phase in timing cell cycle progression...*18th November, 2009
Department of Biochemistry and Biophysics, University of California, San- J Cell Biol. 2009 Oct 5;187(1):7-14. Epub 2009 Sep 28. ([DOI Direct Link](#))
- [Storage time and eggshell colour of pheasant eggs vs. the number of blastodermal cells and hatchability results.](#)
*The aim of this study was to investigate the number of the embryo...*13th November, 2009
Department of Poultry Science, Poznan University of Life Sciences, Witosza- Folia Biol (Krakow). 2009;57(3-4):121-30.
- [Tissue distribution of cells derived from the area opaca in heterospecific quail-chick blastodermal chimeras.](#)
*Abstract The objective of the current study was to determine the tissue...*11th November, 2009
Department of Histology and Embryology, Faculty of Veterinary Medicine,- J Anat. 2009 Nov 9. ([DOI Direct Link](#))
- [Expression of mRNA for 3HADH in manipulated embryos to produce germline chimeric chickens.](#)
*Germline chimeric chickens were produced by the transfer of primordial...*27th October, 2009
Department of Animal Science, Nippon Veterinary and Life Science- Cytotechnology. 2009 Oct 24. ([DOI Direct Link](#))
- [Ultrastructural analysis of lipid incorporation in the embryonic silkworm, *Bombyx mori*.](#)
*Insect eggs store many lipid droplets as an energy source for embryonic...*16th October, 2009
Department of Biology, Faculty of Medicine, Hamamatsu University School of- Zoolog Sci. 2009 May;26(5):321-4. ([DOI Direct Link](#))

- [Tetracycline-dependent expression of the human erythropoietin gene in transgenic chickens.](#)
*A critical problem in the production of transgenic animals is the...*2nd October, 2009
Department of Physiology, Catholic University of Daegu School of Medicine,- Transgenic Res. 2009 Oct 1. ([DOI Direct Link](#))
- [Canalization of gene expression in the Drosophila blastoderm by gap gene cross regulation.](#)
*Developing embryos exhibit a robust capability to reduce phenotypic...*15th September, 2009
Department of Applied Mathematics and Statistics, and Center for- PLoS Biol. 2009 Mar;7(3):e1000049. Epub 2009 Mar 10. ([DOI Direct Link](#))
- [Identifying cis-regulatory sequences by word profile similarity.](#)
*BACKGROUND: Recognizing regulatory sequences in genomes is a continuing...*5th September, 2009
University of California Berkeley and University of California San- PLoS One. 2009 Sep 4;4(9):e6901. ([DOI Direct Link](#))
- [miR-184 has multiple roles in Drosophila female germline development.](#)
*Posttranscriptional regulation plays a crucial role in germline and early...*2nd September, 2009
Laboratory of Developmental Neurogenetics, Rockefeller University, New- Dev Cell. 2009 Jul;17(1):123-33. ([DOI Direct Link](#))
- [Using total internal reflection fluorescence \(TIRF\) microscopy to visualize cortical actin and microtubules in the Drosophila syncytial embryo.](#)
*The Drosophila syncytial embryo is a powerful developmental model system...*1st September, 2009
Department of Biological Sciences, Carnegie Mellon University, Pittsburgh,- Dev Dyn. 2009 Oct;238(10):2622-32. ([DOI Direct Link](#))
- [Robust and ubiquitous GFP expression in a single generation of chicken embryos using the avian retroviral vector, RCASBP.](#)
*Functional genomics in avian models has lagged behind that of mammals, and...*14th August, 2009
Murdoch Childrens Research Institute, University of Melbourne, Department- Differentiation. 2009 Jun;77(5):473-82. Epub 2009 Apr 22. ([DOI Direct Link](#))
- [Developmental roles of 21 Drosophila transcription factors are determined by quantitative differences in binding to an overlapping set of thousands of genomic regions.](#)
*BACKGROUND: We previously established that six sequence-specific...*25th July, 2009
Genomics Division, Lawrence Berkeley National Laboratory, Cyclotron Road- Genome Biol. 2009;10(7):R80. Epub 2009 Jul 23. ([DOI Direct Link](#))
- [Left-right asymmetry in the chick embryo requires core planar cell polarity protein Vangl2.](#)
*Consistent left-right patterning is a fascinating and biomedically...*22nd July, 2009
Center for Regenerative and Developmental Biology, The Forsyth Institute,- Genesis. 2009 Jul 20;47(11):719-728. ([DOI Direct Link](#))
- [The nuclear receptor E75A has a novel pair-rule-like function in patterning the milkweed bug, Oncopeltus fasciatus.](#)
*Genetic studies of the fruit fly Drosophila have revealed a hierarchy of...*8th July, 2009
Department of Biology, University of Washington, Seattle, WA 98195-1800,- Dev Biol. 2009 Oct 1;334(1):300-10. Epub 2009 Jul 4. ([DOI Direct Link](#))

Blastoderm Patents:



- 7049480- [Methods of enucleating an avian oocyte or zygote using two-photon laser scanning](#)

[microscopy](#)

- 7249569- [Methods for injecting avian eggs](#)
- 7259291- [Enucleation of avian eggs by gamma irradiation](#)
- 7259292- [Methods of producing transgenic gramineae plants having resistance to iron deficiency](#)
- 7276593- [Proteins and nucleic acids encoding same](#)
- 7312374- [Production of a transgenic avian by cytoplasmic injection](#)
- 7314968- [Transgenic fish and .beta.-catenin signaling pathway model](#)
- 7319945- [Automated methods for simulating a biological network](#)
- 7323619- [Method for producing transgenic birds and fish](#)
- 7335362- [Methods of treating pre-eclampsia or eclampsia](#)
- 7338654- [Glycosylated interferon alpha obtained from a transgenic chicken](#)
- 7247473- [Motor proteins and methods for their use](#)
- 7202347- [Antibodies to ELF-3 protein](#)
- 7176304- [RNA interference mediated inhibition of vascular endothelial growth factor and vascular endothelial growth factor receptor gene expression using short interfering nucleic acid \(siNA\)](#)
- 7060450- [Screening assays for agonists and antagonists of the hedgehog signaling pathway](#)
- 7083909- [Composition containing gamete or embryo and animal white yolk and the use thereof](#)
- 7089879- [Methods for manipulating air cells within avian eggs](#)
- 7122309- [High throughput screening assay for detecting a DNA sequence](#)
- 7129084- [Production of humanized antibodies in transgenic animals](#)
- 7129390- [Poultry Derived Glycosylated Interferon Alpha 2b](#)
- 7132586- [Protein production system](#)
- 7135562- [Avian iFABP gene expression controlling region](#)
- 7144732- [Vertebrate embryonic pattern-inducing proteins and uses related thereto](#)
- 7165507- [Methods and apparatus for accurately positioning a device within the subgerminal cavity of avian eggs](#)
- 7339090- [Microinjection devices and methods of use](#)
- 7351876- [Efficient nuclear transfer with primordial gametes](#)
- 7476776- [Method for improving germline transmission efficiency of avian primordial germ cells](#)
- 7511120- [Glycosylated G-CSF obtained from a transgenic chicken](#)
- 7514099- [Lipid nanoparticle based compositions and methods for the delivery of biologically active molecules](#)
- 7517864- [RNA interference mediated inhibition of vascular endothelial growth factor and vascular endothelial growth factor receptor gene expression using short interfering nucleic acid \(siNA\)](#)
- 7521591- [Transgenic chickens that lay eggs containing exogenous proteins](#)
- 7524626- [Rapid production of high titer virus](#)
- 7534929- [Avians expressing heterologous protein](#)
- 7550650- [Production of a transgenic avian by cytoplasmic injection](#)
- 7554004- [Allelic series of genomic modifications in cells](#)
- 7611892- [Prostate-specific or testis-specific nucleic acid molecules, polypeptides, and diagnostic and therapeutic methods](#)
- 7459547- [Methods and compositions for controlling efficacy of RNA silencing](#)
- 7445774- [Glycosylated interferon .alpha.](#)
- 7435591- [Compositions and methods for increasing animal size growth rate](#)
- 7354718- [Molecular dissection method using trans-splicing to designed spliced leader sequences, genes, and constructs thereof](#)
- 7378086- [Retroviral vector having an ovalbumin promoter](#)
- 7381712- [In vivo transfection in avians](#)
- 7402665- [Nucleic acid encoding a poly-\(ADP\) ribose polymerase enzyme and uses thereof](#)
- 7404969- [Lipid nanoparticle based compositions and methods for the delivery of biologically active molecules](#)
- 7407659- [Methods of diagnosing pre-eclampsia or eclampsia](#)
- 7413901- [Method of forming vertebrate pancreas in vitro](#)

- 7418922- [Methods for injecting and sampling material through avian egg membranes](#)
- 7423018- [Kinesin-like proteins and methods of use](#)
- 7427603- [Method of enhancing proliferation and/or hematopoietic differentiation of stem cells](#)
- 7617795- [Methods and apparatus for injecting and sampling material through avian egg membranes](#)

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Send comments and feedback to:

Peter Barfoot Managing Director, BioPortfolio Ltd.

UK Tel: (+44) 1300 321501

USA Voicemail and Fax: (+1) 415 680 2472

[Peter Barfoot peter.barfoot@bioportfolio.com](mailto:peter.barfoot@bioportfolio.com)

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