References

Alexander, T., Nolte, C. and Krumlauf, R. (2009). *Hox* genes and segmentation of the hindbrain and axial skeleton. *Annu Rev Cell Dev Biol*. **25**:431-456

Anderson, R., Fässler, R., Georges-Labouesse, E., Hynes, R.O., Bader, B.L., Kreidberg, J.A., Schaible, K., Heasman, J. and Wylie,C. (1999). Mouse primordial germ cells lacking beta1 integrins enter the germline but fail to migrate normally to the gonads. *Development* **126**(8):1655-1664.

Avilion, A.A., Nicolis, S.K., Pevny, L.H., Perez, L., Vivian, N. and Lovell-Badge, R. (2003). Multipotent cell lineages in early mouse development depend on SOX2 function. *Genes Dev.* **17**(1):126-140.

Bang, A.G., Papalopulu, N., Goulding, M.D. and Kintner, C. (1999). Expression of *Pax-3* in the lateral neural plate is dependent on a *Wnt*-mediated signal from posterior nonaxial mesoderm. *Dev Biol.* **212**(2):366-80

Bernex, F., De Sepulveda, P., Kress, C., Elbaz, C., Delouis, C. and Panthier, J.J. (1996). Spatial and temporal patterns of c-*kit*-expressing cells in $W^{lacZ/+}$ and W^{lacZ}/W^{lacZ} mouse embryos. *Development* **122**(10):3023-3033.

Blumberg, B., Wright, C.V.E., De Robertis, E.M. and Cho, K.W.Y. (1991). Organizer-specific homeobox genes in *Xenopus laevis* embryos. *Science* **253**(5016):194-196.

Braat, A.K., Zandbergen, T., van de Water, S., Goos, H.J. and Zivkovic, D. (1999). Characterization of zebrafish primordial germ cells: morphology and early distribution of *vasa* RNA. *Dev Dyn.* **216**(2):153-167.

Bustin, S.A. (2000). Absolute quantification of mRNA using real-time reverse transcription polymerase chain reaction assays. *J Mol Endocrinol* **25**: 169−193.

Camp, E, Sánchez-Sánchez, A.V., García-España, A., Desalle, R., Odqvist, L., Enrique O'Connor, J. and Mullor, J.L. (2009). Nanog regulates proliferation during early fish development. *Stem Cells.* **27**(9):2081-2091.

Chambers, I., Colby, D., Robertson, M., Nichols, J., Lee, S., Tweedie, S. and Smith, A. (2003). Functional expression cloning of Nanog, a pluripotency sustaining factor in embryonic stem cells. *Cell* **113**(5), 643-655.

Chambers, I., Silva, J, Colby, D, Nichols, J, Nijmeijer, B, Robertson, M, Vrana, J, Jones, K, Grotewold, L and Smith, A. (2007). Nanog safeguards pluripotency and mediates germline development. *Nature* **450**, 1230-1234.

Chambers, I. and Tomlinson, S.R. (2009)**.** The transcriptional foundation of pluripotency. *Development* **136**(14):2311-2322.

Chen,Y. and Schier, A.F. (2001). The zebrafish Nodal signal Squint functions as a morphogen. *Nature* **411**(6837):607-610.

Cho, K.W., Blumberg, B., Steinbeisser, H. and De Robertis, E.M. (1991). Molecular nature of Spemann's organizer: the role of the *Xenopus* homeobox gene *goosecoid*. *Cell* **67**(6):1111-1120.

Christian, J.L., McMahon, J.A., McMahon, A.P. and Moon, R.T. (1991). *Xwnt*-8, a Xenopus *Wnt*-1/*int*-1-related gene responsive to mesoderm-inducing growth factors, may play a role in ventral mesodermal patterning during embryogenesis. *Development* **111**(4):1045-1055.

Christian, J.L. and Moon, R.T. (1993) Interactions between *Xwnt*-8 and Spemann organizer signaling pathways generate dorsoventral pattern in the embryonic mesoderm of *Xenopus. Genes and Development* **7**:13-28.

Conlon, F.L., Lyons, K.M., Takaesu, N., Barth, K.S., Kispert, A., Herrmann, B. and Robertson, E.J. (1994). A primary requirement for *Nodal* in the formation and maintenance of the primitive streak in the mouse. *Development* **120**(7):1919-1928.

Dick, A., Hild, M., Bauer, H., Imai, Y., Maifel, H., Schier, A.F., Talbot, W.S., Bouwmeester,T. and Hammerschmidt, M. (2000). Essential role of *Bmp7* (*snailhouse*) and its prodomain in dorsoventral patterning of the zebrafish embryo. *Development* **127**(2): 343-354.

Ding, S., Wu, X., Li, G., Han, M., Zhuang, Y. and Xu, T. (2005). Efficient transposition of the *piggyBac* (*PB*) transposon in mammalian cells and mice. *Cell.* **122**(3):473-483.

Dixon, J.E., Allegrucci, C., Redwood, C., Kump, K., Bian, Y., Chatfield, J., Chen, Y.H., Sottile, V., Voss, S.R., Alberio, R. and Johnson, A.D. (2010). Axolotl *Nanog* activity in mouse embryonic stem cells demonstrates that ground state pluripotency is conserved from urodele amphibians to mammals. *Development* **137**(18):2973-2980.

Dougan,S.T., Warga, R.M., Kane, D.A., Schier, A.F. and Talbot, W.S. (2003). The role of the zebrafish *nodal*-related genes *squint* and *cyclops* in patterning of mesendoderm. *Development* **130**(9): 1837-1851.

Driever, W. (1995). Axis formation in zebrafish. *Curr.Opin.Genet.Dev.* **5**(5):610-618.

Erter, C.E., Solnica-Krezel, L. and Wright C.V.E. (1998). *Zebrafish nodal-related 2* encodes an early mesendodermal inducer signaling from the extraembryonic yolk syncytial layer. *Dev. Biol.* **204**(2):361-372.

Ewen, K.A. and Koopman, K. (2010). Mouse germ cell development: From specification to sex determination. *Molecular and Cellular Endocrinology* **323**: 76–93.

Feldman, B., Dougan, S.T., Schier, A.F. and Talbot, W.S. (2000). Nodal-related signals establish mesendodermal fate and trunk neural identity in zebrafish. *Curr Biol.* **10**(9):531-534.

Freeman, W.M., Walker, S.J., and Vrana, K.E. (1999). Quantitative RT-PCR: Pitfalls and Potential. *BioTechiniques* **26**: 112-125.

Frohnhöfer, H.G. and Nüsslein-Volhard, C. (1986). Organization of anterior pattern in the *Drosophila* embryo by the maternal gene *bicoid*. *Nature* **324**, 120-125.

Godin,I.,Wylie,C. and Heasman, J. (1990).Genital ridges exert long-range effects on mouse primordial germ cell numbers and direction of migration in culture. *Development* **108**,357-363.

Hammerschmidt, M., Pelegri, F., Mullins, M.C., Kane, D.A., van Eeden, F.J., Granato, M., Brand, M., Furutani-Seiki, M., Haffter, P., Heisenberg, C.P., Jiang, Y.J., Kelsh, R.N., Odenthal, J., Warga, R.M. and Nusslein-Volhard, C. (1996). *dino* and *mercedes*, two genes regulating dorsal development in the zebrafish embryo. *Development* **123**, 95–102.

Hanna, J.H., Saha, K, and Jaenisch, R. (2010). Pluripotency and cellular reprogramming: facts, hypotheses, unresolved issues.*Cell* **143**(4): 508-525.

Harvey, R.P. (1996)**.** *NK-2* homeobox genes and heart development, *Dev. Biol.* **178**: 203–216.

Heisenberg, C.P. and Nüsslein-Volhard, C. (1997). The function of *silberblick* in the positioning of the eye anlage in the zebrafish embryo. *Dev Biol.* **184**(1):85-94.

Hellsten, U., Harland, R. M., Gilchrist, M. J., Hendrix, D., Jurka, J., Kapitonov, V., Ovcharenko, I., Putnam, N. H., Shu, S., Taher, L. et al. (2010). The genome of the Western clawed frog *Xenopus tropicalis*. *Science* **328**, 633-636.

Higuchi, R., Fockler, C., Dolinger, G. and Watson. R. (1993). Kinetic PCR analysis: real-time monitoring of DNA amplification reactions. *Biotechnology* **11**(9):1026-1030.

Hill, R.E., Jones, P.F., Rees, A.R., Sime, C.M., Justice, M.J., Copeland, N.G., Jenkins, N.A., Graham, E. and Davidson, D.R. (1989). A new family of mouse homeobox-containing genes: molecular structure, chromosomal location, and developmental expression of *Hox-7.1*. *Genes Dev.* **3**(1):26-37.

Hsieh, J.C., Kodjabachian, L., Rebbert, M.L., Rattner, A., Smallwood, P.M., Samos, C.H., Nusse, R., Dawid, I.B., and Nathans, J. (1999). A new secreted protein that binds to Wnt proteins and inhibits their activities. *Nature* **398**, 431–436.

Hoppler, S., Brown, J.D. and Moon,R.T. (1996). Expression of a dominant-negative Wnt blocks induction of MyoD in *Xenopus* embryos. *Genes & Development* **10**: 2805-2817.

Houston, D.W. and King, M.L. (2000). Germ plasm and molecular determinants of germ cell fate. *Curr Top Dev Biol.* **50**:155-181.

Iimura, T., Denans, N. and Pourquié, O. (2009). Establishment of *Hox* vertebral identities in the embryonic spine precursors. *Curr Top Dev Biol.* **88**:201-234.

Ikenishi, K., Kotani, M. and Tanabe, K. (1974). Ultrastructural changes associated with UV irradiation in the "germinal plasm" of *Xenopus laevis*. **36**(1):155-168.

Imai, Y., Gates, M.A., Melby, A.E., Kimelman, D., Schier, A.F. and Talbot, W.S. (2001). The homeobox genes *vox* and *vent* are redundant repressors of dorsal fates in zebrafish. *Development* **128**, 2407-2420.

Johnson, A.D., Crother, B., White, M,E., Patient, R., Bachvarova, R.F., Drum, M. and Masi, T. (2003). Regulative germ cell specification in axolotl embryos: a primitive trait conserved in the mammalian lineage. *Philos Trans R Soc Lond B Biol Sci.* **358**(1436):1371-1379.

Johnson, D.S., Mortazavi, A., Myers, R.M. and Wold, B. (2007). Genome-wide mapping of *in vivo* protein-DNA interactions. *Science* **316**(5830):1497-1502.

Jones, C.M., Kuehn, M.R., Hogan, B.L.M., Smith, J.C. and Wright, C.V.E. (1995). Nodal-related signals induce axial mesoderm and dorsalize mesoderm during gastrulation. *Development* **121**(11):3651-3662.

Joseph, E.M. and Melton, D.A. (1997). *Xnr4*: a *Xenopus* nodal-related gene expressed in the Spemann organizer. *Dev. Biol.* **184**(2):367-372.

Jothi, R., Cuddapa, S., Barsk, A., Cui, K. and Zhao, K. (2008). Genome-wide identification of *in vivo* protein-DNA binding sites from ChIP-Seq data. *Nucleic Acids Res.* **36**(16):5221-5531.

Karin, M. (1990). Too many transcription factors: positive and negative interactions. *New Biol.* **2**(2):126-131.

Kawahara, A., Wilm, T., Solnica-Krezel, L. and Dawid, I.B. (2000a). Antagonistic role of *vega1* and *bozozok*/*dharma* homeobox genes in organizer formation. *Proc Natl Acad Sci* U S A. **97**(22):12121-12126.

Kawahara, A., Wilm, T., Solnica-Krezel, L. and Dawid, I.B. (2000b). Functional interaction of *vega2* and *goosecoid* homeobox genes in zebrafish. *Genesis* **28**, 58-67.

Kelly, G.M., Greenstein, P., Erezyilmaz, D.F. and Moon, R.T. (1995). Zebrafish *wnt8* and *wnt8b* share a common activity but are involved in distinct developmental pathways. *Development* **121**(6):1787-1799.

Kimmel, C.B., Ballard, W.W., Kimmel, S.R., Ullmann, B. and Schilling, T.F. (1995). Stages of embryonic development of the zebrafish. *Dev Dyn.* **203**(3):253-310.

Kim, Y. and Nirenberg, M. (1989). *Drosophila NK*-homeobox genes. *Proc Natl Acad Sci* U S A. **86**(20):7716-7720.

Kishimoto, Y., Lee, K.H., Zon, L., Hammerschmidt, M. and Schulte-Merker, S. (1997). The molecular nature of zebrafish *swirl*: BMP2 function is essential during early dorsoventral patterning. *Development* **22**, 4457-4466.

Knaut, H., Pelegri, F., Bohmann, K., Schwarz, H. and Nüsslein-Volhard, C. (2000). Zebrafish *vasa* RNA but not its protein is a component of the germ plasm and segregates asymmetrically before germline specification. *J Cell Biol.* **149**(4): 875–888.

Köprunner, M., Thisse, C., Thisse, B. and Raz, E. (2001). A zebrafish *nanos*-related gene is essential for the development of primordial germ cells. *Genes Dev.* **15**(21):2877-2285.

Krieg, P.A. and Melton, D.A. (1984). Functional messenger RNAs are produced by SP6 in vitro transcription of cloned cDNAs. *Nucleic Acids Res* **12**(18): 7057-7070.

Latchman, D.S. (1997). Transcription factors: an overview. *Int J Biochem Cell Biol.* **29**(12):1305-1312.

Lavial, F., Acloque, H., Bertocchini, F., Macleod, D.J., Boast, S., Bachelard, E., Montillet, G., Thenot, S., Sang, H.M., Stern, C.D., Samarut, J. and Pain, B. (2007). The Oct4 homologue PouV and Nanog regulate pluripotency in chicken embryonic stem cells. *Development* **134**(19):3549-3563.

Lawson, K.A., Dunn, N.R., Roelen, B.A., Zeinstra, L.M., Davis, A.M., Wright, C.V., Korving, J.P. and Hogan, B.L. (1999). *Bmp4* is required for the generation of primordial germ cells in the mouse embryo. *Genes Dev.* **13**(4):424-436.

Lekven, A.C., Thorpe, C.J., Waxman, J.S. and Moon, R.T. (2001). Zebrafish *wnt8* encodes two wnt8 proteins on a bicistronic transcript and is required for mesoderm and neurectoderm patterning. *Dev Cell.* **1**(1):103-114.

Liang, Z and Biggin, M.D. (1998). *Eve* and *ftz* regulate a wide array of genes in blastoderm embryos: the selector homeoproteins directly or indirectly regulate most genes in *Drosophila*. *Development* **125**(22): 4471-4482.

Martínez-Barberá, J.P., Toresson, H., Da Rocha, S. and Krauss, S. (1997). Cloning and expression of three members of the zebrafish Bmp family: Bmp2a, Bmp2b and Bmp4. *Gene* **198**(1-2):53-59.

Matsui,Y.,Zsebo,K.M. and Hogan, B.L. (1990). Embryonic expression of a haematopoietic growth factor encoded by the *SI* locus and the ligand for c-kit. *Nature* **347**,667-669.

McCurley,A.T. and Gallard, G.V. (2008). Characeriztion of housekeeping genes inzebrafish: male-female differences and effects of tissue type, developmental stage and chemical treatment. *BMC Molecular Biology* **9**:102.

McGinnis, W., Levine, M.S., Hafen, E., Kuroiwa, A. and Gehring, W.J. (1984). A conserved DNA sequence in homoeotic genes of the *Drosophila* Antennapedia and bithorax complexes. *Nature* **308**(5958):428-433.

McGrew, L.L., Hoppler, S. and Moon, R.T. (1997). Wnt and FGF pathways cooperatively pattern anteroposterior neural ectoderm in *Xenopus*. *Mech Dev.* **69**(1-2):105-114.

McGrew, L.L., Lai, C.J. and Moon, R.T. (1995). Specification of the anteroposterior neural axis through synergistic interaction of the Wnt signaling cascade with *noggin* and *follistatin*. *Dev Biol.* **172**(1):337-342.

Melby, A. E., Beach, C., Mullins, M. and Kimelman, D. (2000). Patterning the early zebrafish by the opposing actions of *bozozok* and *vox*/*vent*. *Dev.Biol.* **224**, 275-285.

Melton, D.A., Krieg, P.A., Rebagliati, M.R., Maniatis, T., Zinn, K. and Green, M.R. (1984). Efficient *in vitro* synthesis of biologically active RNA and RNA hybridization probes from plasmids containing a bacteriophage SP6 promoter. *Nucleic Acids Res* **12**(18): 7035-7056.

Mitsui, K., Tokuzawa, Y., Itoh, H., Segawa, K., Murakami, M., Takahashi, K., Maruyama, M., Maeda, M. and Yamanaka, S. (2003). The homeoprotein Nanog is required for maintenance of pluripotency in mouse epiblast and ES cells. *Cell* **113**(5):631-642.

Mullin, N.P., Yates, A., Rowe, A.J., Nijmeijer, B., Colby, D., Barlow, P.N., Walkinshaw, M.D. and Chambers, I. (2008). The pluripotency rheostat Nanog functions as a dimer. *Biochem.J.* **411**,227-231.

Narlikar, G.J., Fan, H.Y. and Kingston, R.E. (2002). Cooperation between complexes that regulate chromatin structure and transcription. *Cell* **108** (4): 475–487.

Nguyen,V.H., Schmid, B., Trout, J., Connors, S.A., Ekker, M. and Mullins, M.C. (1998). Ventral and lateral regions of the zebrafish gastrula, including the neural crest progenitors, are established by a *bmp2b*/*swirl* pathway of genes. *Dev Biol.* **199**(1):93-110.

Nichols, J., Zevnik, B., Anastassiadis, K., Niwa, H., Klewe-Nebenius, D., Chambers, I., Schöler, H. and Smith, A. (1998). Formation of pluripotent stem cells in the mammalian embryo depends on the POU transcription factor Oct4. *Cell* **95**(3):379-391.

Nikaido, M., Tada, M., Saji, T. and Ueno, N. (1997). Conservation of BMP signaling in zebrafish mesoderm patterning. *Mech Dev.* **61**(1-2):75-88.

Niwa, H., Miyazaki, J. and Smith, A.G. (2000). Quantitative expression of Oct-3/4 defines differentiation, dedifferentiation or self-renewal of ES cells. *Nat Genet.* **24**(4):372-376.

Nüsslein-Volhard, C. and Wieschaus, E. (1980). Mutations affecting segment number and polarity in *Drosophila*. *Nature* **287**, 795 – 801.

Nüsslein-Volhard, C., Wieschaus, E. and Kluding, H. (1984). Mutations affecting the pattern of the larval cuticle in *Drosophila melanogaster*. *Development Genes and Evolution* **193**(5): 267-282.

Postlethwait, J.H. and Schneiderman, H.A. (1969). A clonal analysis of determination in *Antennapedia* a homoeotic mutant of *Drosophila melanogaster*. *Proc Natl Acad Sci* U S A. **64**(1):176-183.

Pyati, U.J., Webb, A.E. and Kimelman, D. (2005). Transgenic zebrafish reveal stage-specific roles for Bmp signaling in ventral and posterior mesoderm development. *Development* **132**(10):2333-2343.

Ramel, M.C. and Lekven, A.C. (2004).Repression of the vertebrate organizer by Wnt8a is mediated by Vent and Vox. *Development* **131**(16): 3991-4000.

Raz, E. (2002). Primordial germ cell development in zebrafish. *Cell and Developmental Biology* **13**: 489-495.

Raz, E. (2003). Primordial germ-cell development: the zebrafish perspective. *Nat. Rev. Genet.* **4**(9):690-700.

Ryan, D.M., Matthew, B., Anthony, F., Martin, H., Martin, K., Trevor, J.P,, Helen, M., Richard, V., Steven, J.M.J. and Marco, A.M. (2008). Profiling the HeLa S3 transcriptome using randomly primed cDNA and massively parallel short-read sequencing. *BioTechniques* **45** (1): 81–94

Saffman, E.E. and Lasko, P. (1999). Germline development in vertebrates and invertebrates. *Cell Mol Life Sci.* **55**(8-9):1141-1163.

Saga, Y. (2008). Mouse germ cell development during embryogenesis. *Current Opinion in Genetics and Development* **18**(4), 337-341.

Sánchez-Sánchez, A.V., Camp, E,, Leal-Tassias, A., Atkinson, S.P., Armstrong, L., Díaz-Llopis, M. and Mullor, J.L. (2010). Nanog regulates primordial germ cell migration through Cxcr4b. *Stem Cells.* **28**(9):1457-1464.

Schier, A.F. and Talbot, W.S. (2005). Molecular genetics of axis formation in zebrafish. *Annu. Rev. Genet.* **39**:561-613.

Schmid, B., Fürthauer, M., Connors, S.A., Trout, J., Thisse, B., Thisse, C. and Mullins, M.C. (2000). Equivalent genetic roles for *bmp7*/*snailhouse* and *bmp2b*/*swirl* in dorsoventral pattern formation. *Development* 127(5):957-967.

Schulte-Merker, S, Hammerschmidt, M., Beuchle, D., Cho, K.W., De Robertis, E.M. and Nüsslein-Volhard, C. (1994). Expression of zebrafish *goosecoid* and *no tail* gene products in wild-type and mutant *no tail* embryos. *Development* **120**(4):843-852.

Schulte-Merker, S., Lee, K.J., McMahon, A.P. and Hammerschmidt, M. (1997). The zebrafish organizer requires *chordino*. *Nature* **387**, 862-863.

Scott, M.P. and Weiner, A.J. (1984). Structural relationships among genes that control development: sequence homology between the Antennapedia, Ultrabithorax, and fushi tarazu loci of *Drosophila*. *Proc Natl Acad Sci* U S A. **81**(13): 4115–4119.

Silva, J., Nichols, J., Theunissen, T.W., Guo, G., van Oosten, A.L., Barrandon, O., Wray, J., Yamanaka, S., Chambers, I. and Smith, A. (2009). Nanog is the gateway to the pluripotent ground state. *Cell* **138**(4):722-737.

Smith, W.C. and Harland, R.M. (1991). Injected *Xwnt-8* RNA acts early in Xenopus embryos to promote formation of a vegetal dorsalizing center. *Cell* **67**(4): 753-765.

Stachel, S.E., Grunwald, D.J. and Myers, P.Z. (1993). Lithium perturbation and *goosecoid* expression identify a dorsal specification pathway in the pregastrula zebrafish.. *Development* **117**(4):1261-1274.

Stadtfeld, M. and Hochedlinger, K. (2010). Induced pluripotency: history, mechanisms, and applications. *Genes Development* **24**(20): 2239-2263.

Stickney, H.L., Imai, Y., Draper, B., Moens, C. and Talbot, W.S. (2007). Zebrafish *bmp4* functions during late gastrulation to specify ventroposterior cell fates. *Dev Biol.* **310**(1):71-84.

Sutasurya, L.A. and Nieuwkoop, P.D. (1974). The induction of the primordial germ cells in the urodeles. *Wilhelm Roux' Archiv* **175**, 199-220.

Takahashi, K., Tanabe, K., Ohnuki, M., Narita, M., Ichisaka, T., Tomoda, K. and Yamanaka, S. (2007). Induction of pluripotent stem cells from adult human fibroblasts by defined factors. *Cell* **131**(5):861-872.

Takahashi, K. and Yamanaka, S. (2006). Induction of pluripotent stem cells from mouse embryonic and adult fibroblast cultures by defined factors. *Cell* **126**, 663-676.

Tang, R., Dodd, A., Lai, D., Mcnabb, W. and Love,D.R. (2007). Validation of zebrafish *(Danio rerio*) reference genes for quantitative real-time RT-PCR normalization. **39**(5):384-390.

Thisse, C., Thisse, B., Schilling, T.F. and Postlethwait, J.H. (1993). Structure of the zebrafish *snail1* gene and its expression in wild-type, *spadetail* and *no tail* mutant embryos. *Development* **119**(4), 1203-1215.

Tissier-Seta, J.P., Mucchielli , M.L., Mark, M., Mattei, M.G., Goridis, C. and Brunet, J.F. (1995). *Barx1*, a new mouse homeodomain transcription factor expressed in cranio-facial ectomesenchyme and the stomach. *Mech Dev.* **51**(1):3-15.

Tullius, T. (1995). Homeodomains: together again for the first time. *Structure* **3**(11):1143-1145.

Vandesompele, J., De Preter, K., Pattyn, F., Poppe, B., Van Roy, N., De Paepe, A. and Speleman,F. (2002). Accurate normalization of real-time quantitative RT-PCR data by geometric averaging of multiple internal control genes. *Genome Biol* **3** (34): 1-11.

Wang, J., Levasseur, D.N. and Orkin, S.H. (2008). Requirement of Nanog dimerization for stem cell self-renewal and pluripotency. *Proc.Natl.Acad.Sci.*USA **105**, 6326-6331.

Wang, Z., Gerstein, M. and Snyder, M. (2009). RNA-Seq: a revolutionary tool for transcriptomics. *Nature Reviews Genetics* **10** (1): 57–63.

Weidinger, G., Wolke, U., Köprunner, M., Klinger, M. and Raz, E. (1999). Identification of tissues and patterning events required for distinct steps in early migration of zebrafish primordial germ cells. *Development* **126**(23):5295-5307.

Weidinger, G., Wolke, U., Köprunner, M., Thisse, C., Thisse, B. and Raz, E. (2002). Regulation of zebrafish primordial germ cell migration by attraction towards an intermediate target. *Development* **129**(1):25-36.

Wellik, D.M. (2009). *Hox* genes and vertebrate axial pattern. *Curr Top Dev Biol.* **88**:257-278.

Welstead, G.G., Brambrink, T. and Jaenisch, R.(2008) Generating iPS cells from MEFS through forced expression of Sox-2, Oct-4, c-Myc, and Klf4. *J Vis Exp* **14**, 734.

Wu,C. and Alwine, J.C. (2004). Secondary structure as a functional feature in the downstream region of mammalian polyadenylation signals. *Mol. Cell Biol.* **24** (7): 2789–2796.

Xu, L., Glass, C.K. and Rosenfeld, M.G. (1999). Coactivator and corepressor complexes in nuclear receptor function. *Curr. Opin. Genet. Dev.* **9** (2): 140–147.

Yamaguchi, S., Kurimoto, K., Yabuta, Y., Sasaki, H., Nakatsuji, N., Saitou, M. and Tada, T. (2009). Conditional knockdown of *Nanog* induces apoptotic cell death in mouse migrating primordial germ cells. *Development* **136**(23):4011-4020.

Yamaguchi, S., Kimura, H., Tada, M., Nakatsuji, N. and Tada, T. (2005). Nanog expression in mouse germ cell development. *Gene Expr. Patterns* **5**, 639–646.

Yamanaka, S. (2009). Elite and stochastic models for induced pluripotent stem cell generation. *Nature* **460**, 49-52.

Ying Y, Qi, X. and Zhao, G.Q. (2001). Induction of primordial germ cells from murine epiblasts by synergistic action of BMP4 and BMP8B signalling pathways. *Proc.Natl.Acad.Sci* U.S.A **98**(14):7858-7862.

Ying, Y., Qi, X. and Zhao, G.Q. (2002). Induction of primordial germ cells from pluripotent epiblast. *ScientificWorldJournal* **26**(2): 801-810.

Ying, Y. and Zhao, G.Q. (2001). Cooperation of endoderm-derived BMP2 and extraembryonic ectoderm-derived BMP4 in primordial germ cell generation in the mouse. *Dev Biol.* **232**(2):484-492.

Yoon, C., Kawakami, K. and Hopkins, N. (1997). Zebrafish *vasa* homologue RNA is localized to the cleavage planes of 2- and 4-cell-stage embryos and is expressed in the primordial germ cells. *Development* **124**(16): 3157-3165.

Yu, J., Hu, K., Smuga-Otto, K., Tian, S., Stewart, R., Slukvin, I. and Thomson, J. (2009). Human induced pluripotent stem cells free of vector and transgene sequences. *Science* **324**(5928): 797–801.

Yu, J., Vodyanik, M.A., Smuga-Otto, K., Antosiewicz-Bourget, J., Frane, J.L., Tian, S., Nie, J., Jonsdottir, G.A., Ruotti, V., Stewart, R., Slukvin, I.I. and Thomson, J.A. (2007). Induced pluripotent stem cell lines derived from human somatic cells. *Science* **318** (5858): 917– 1920.

Zhou, X., Sasaki, H., Lowe, L., Hogan, B.L.M. and Kuehn, M.R. (1993). *Nodal* is a novel TGF-beta-like gene expressed in the mouse node during gastrulation. *Nature* **361**: 543 – 547.

Zust, B. and Dixon, K.E. (1975). The effect of u.v. irradiation of the vegetal pole of *Xenopus laevis* eggs on the presumptive primordial germ cells. *Embryo, exp. Morph.* **34**(1): 209-220.