

CURRICULUM VITAE

Personal Information:

Name: Juan Carlos Izpisua Belmonte
Address: The Salk Institute for Biological Studies
Gene Expression Laboratory
10010 North Torrey Pines Road
La Jolla, CA 92037-1099
USA
Telephone: (858) 453-4100, Extension 1130
Fax: (858) 453-2573
E-mail: belmonte@salk.edu
Date of Birth: December 16, 1960
Place of Birth: Hellín, Spain

Degrees:

1980-1985 University of Valencia, Spain. M. Sc. (Honors). Pharmacology
1985-1987 University of Bologna, Italy and University of Valencia, Spain
Ph.D. Graduate Student. Biochemistry and Pharmacology
Prof. José Cabo

Positions:

1988-1991 European Molecular Biology Laboratories (EMBL). Heidelberg, Germany,
Postdoctoral Fellow, Prof. Denis Duboule
1992-1993 University of California, Los Angeles, USA.
Postdoctoral Fellow, Prof. Eddy De Robertis
1993-1998 The Salk Institute, San Diego, USA. Assistant Professor
1993- University of California, San Diego, USA. Adjunct Professor
1998- 2000 The Salk Institute, San Diego, USA. Associate Professor
2000- The Salk Institute, San Diego, USA. Professor
2005-2013 Center of Regenerative Medicine, Barcelona, Director
2015- Catholic University of San Antonio, Murcia. Extraordinary Professor

HONORS AND AWARDS

1980-1985	“Premio Extraordinario”. Distinction Medal to the top student of the 1980 generation. University of Valencia. Spain
1987	“Giuseppe Plancher” Award Colegio de España, Italy
1996	Basil O’Connor Research Scholar Award
1996	Pew Scholar Award
1997	President William Clinton Career Award
1998	Catedra Banco Bilbao/Vizcaya. Spanish Visiting Professor Award
1999	Catedra Iberdrola. Spanish Visiting Professor Award
1999	National Science Foundation Creativity Award
2000	Research Professor. Spanish Research Council. CSIC
2000	American Heart Association Established Investigator Award
2001	Faculty of 1000
2004	Naming of “Izpisua Belmonte” High School Hellin, Albacete
2006	Gold Medal of Castilla-La Mancha
2006	Medal from the Spanish College of Pharmacy
2009	Honorary Doctorate from University of Granada
2009	Elected Member to the Catalanian Royal Academy of Doctors
2010	Ellison Medical Foundation Senior Scholar Award
2011	Roger Guillemin Nobel Chair
2011	Académico de Honor de la Academia de Farmacia Santa María de España de la Región de Murcia
2012	Doctor Benepres Honor Prize
2014	Honorary Member of the Spanish Society of Transplantation (SET)
2014	Honorary Doctorate from Universidad Catolica de Murcia
2014	Honorary Professor of the Universidad Catolica de Murcia
2014	Premio La Tribuna of Albacete
2014	McKnight Technological Innovations in Neurosciences Award
2015	Medal of the Transplant Society of Catalonia
2015	Premio Nacional de Investigacion Cientifica 2015 FCCR
2015	Honorary Academic Member of the Real Academia de Medicina y Cirugía de la Región de Murcia
2015	Honorary Academic Member of the National Spanish Academy of Pharmacy
2015	Member of the National Academy of Sciences Committee on Germ-Line Editing
2016	Pew Scholars National Advisory Committee
2016	Premio Expansion
2016	Premio Fundacion Fernandez Cruz
2016	NIH Pioneer Award

CONFERENCES

Juan Carlos Izpisua Belmonte has been invited as a speaker to more than 350 international conferences and has given over 50 plenary lectures .

EDITORIAL BOARDS

Advances in Regenerative Biology, American Journal of Stem Cells, BMC Developmental Biology, Cell Discovery, Cell Research, Current Stem Cell Reports, Development, Developmental Biology, Development Genes & Evolution, Development Growth and Differentiation, Elsevier Journals, International Journal of Clinical Cardiology, International Journal of Developmental Biology, ISRN Developmental Biology, Journal of Cardiovascular Medicine and Cardiology, Journal of Medical Sciences, Medical Sciences, OA Biotechnology, Protein & Cell, Stem Cell Reports, Stem Cell Research, Stem Cell Research and Therapy, World Research Journal of Developmental Biology, World Research Journal of Stem Cells, World Research Journal of Transactions on Database Systems

GRANT AGENCY REVIEWS

AAAS, AFM, AICR, AHA, ANEP, CDRF Global, ERC, European Commission, French National Research Agency, Human Frontier Science Program Organization, India Alliance, Israel Science Foundation, Medical Research Council, NIH, NSF, Telethon, Vidi Programme, Wellcome Trust Centre and others.

JOURNAL REVIEWS

BioEssays, Biotechnology Journal, Blood, BMC Biology, BMC Cancer, BMC Cell Biology, BMC Developmental Biology, BMC Genomics, Cardiovascular Research, Cell, Cell Metabolism, Cell Proliferation, Cell Reports, Cell Research, Cell Stem Cell, Cellular and Molecular Life Sciences, Current Biology, Current Opinion in Genetics and Development, Cytotherapy, Development, Development, Genes and Evolution, Development, Growth and Differentiation, Developmental Biology, Developmental Cell, Developmental Dynamics, Differentiation, Disease Models & Mechanisms, EMBO, EMBO Journal, EMBO Reports, Encyclopedia of Molecular Cell Biology and Molecular Medicine, Epigenomics, FASEB Journal, Genes & Development, Genome Biology, Heart and Vessels, Human Molecular Genetics, Human Reproduction, International Journal of Biochemistry and Cell Biology, International Journal of Developmental Biology, ISRN Developmental Biology, IUBMB Life, Journal of Cell Biology, Journal of Cell Science, Journal of Clinical Investigation, Journal of Experimental Medicine, Journal of Molecular Medicine, Journal of Neurological Sciences, Journal of Neuroscience, Journal of Tissue Engineering and Regenerative Medicine, Journal of Vascular Research, Journal of Visualized Experiments, Liver International, Mechanisms of Development, Molecular Human Reproduction, Molecular Systems Biology, Molecular Therapy, Nature, Nature Biotechnology, Nature Cell Biology, Nature Communications, Nature Genetics, Nature Medicine, Nature Methods, Nature Protocols, Nature Reviews Cancer,

Nature Reviews Genetics, Nature Reviews Molecular Cell Biology, Nature Structural and Molecular Biology, Neuroscience, Oncogene, PLoS Biology, PLoS Genetics, PLoS ONE, PNAS, Science, Scienc, Translational Medicine, Stem Cells, Stem Cells and Development, Stem Cell Reports, Stem Cell Research, Stem Cell Research and Therapy, Tissue Engineering, Trends in Genetics, Trends in Molecular Medicine, Trends in Pharmacological Science, WIREs Developmental Biology, Wound Repair and Regeneration, Zebrafish and others.

PATENTS

Involvement of Wnts in Disease Limb Initiation and Left-Right Axis in Determination
 Tissue and Organ Positioning Proteins and Use Thereof
 Induced Pluripotent Stem Cells and Methods of Use
 Induced Pluripotent Stem Cell Generation Using Two Factors and p53 Inactivation
 Generation of Genetically Corrected Disease-free Induced Pluripotent Stem Cells
 Generation of Induced Pluripotent Stem Cells from Cord Blood
 Generation of Mouse Induced Pluripotent Stem Cells by Transient Expression of a Single Non-Viral Polycistronic Vector
 Direct Transgeneration of Hematopoietic Progenitor Cells from Mesenchymal Stem Cells
 Induced Pluripotent Stem Cells and Methods of Use
 Robust and Efficient Differentiation of Human Pluripotent Stem Cells to Multipotent Vascular Progenitors
 Progressive Degeneration of Human Neural Stem Cells Caused By Pathogenic LRRK2
 Cord Blood-derived Neurons by Expression of SOX2
 Generation of Vascular Progenitor Cells
 Methods for Reprogramming a Somatic Cell
 Activin/BMP-2 Chimeric Ligands Direct Adipose-Derived Stem Cells to Chondrogenic Differentiation
 Methods for Heart Regeneration
 Systems and Methods for Culturing Nephron Progenitor Cells
 Gene editing technologies for non-dividing cells (HITI)
 Mammalian Chimeric Complementation-

PUBLICATIONS

1. Lipid composition, fluidity and enzymatic activities of rat liver plasma and mitochondrial membranes in dietary obese rats.
Izpisua JC, Barber T, Cabo J, Hrelia S, Rossi CA, Parenti Castelli G, Lercker G, Biagi PL, Bordoni A, Lenaz G.
Int. J. Obesity (1989) 13:531-542.
2. Effect of a hyperlipidic diet on lipid composition, fluidity, and $Na^+-K^+-ATPase$ activity of rat erythrocyte membranes.
Bordoni A, Biagi PL, Parenti Castelli G, Hrelia S, Rossi CA, Lercker G, Izpisua JC, Barber T, Cabo J, a Lenaz G.
Membrane Biochem. (1989) 8:11-18.
3. Coordinate expression of the murine Hox-5 complex homeobox-containing genes during limb pattern formation.
Dollé, P., Izpisua Belmonte, J. C., Falkenstein, H., Renucci, A. and Duboule, D.
Nature (1989) 342:767-772.
4. Primary structure and embryonic expression pattern of the mouse Hox-4.3 homeobox gene.
Izpisua-Belmonte, J.C., Dollé, P., Renucci, A., Zappavigna, V., Falkenstein, H. and Duboule, D.
Development (1990) 110:733-745.
5. Expression of the homeobox Hox-4 genes and the specification of position in chick wing development.
Izpisua Belmonte, J.C., Tickle, C., Dollé, P., Wolpert, L. and Duboule, D.
Nature (1991) 350:585-589.
6. Murine genes related to the *Drosophila AbdB* homeotic genes are sequentially expressed during development of the posterior part of the body.
Izpisua Belmonte, J.C., Falkenstein, H., Dollé, P., Renucci, A. and Duboule, D.
EMBO J. (1991) 10:2279-2289.
7. HOX4 genes encode transcription factors with potential auto- and cross-regulatory capacities.
Zappavigna, V., Renucci, A., Izpisua Belmonte, J. C., Urier, G., Peschle, C. and Duboule, D.
EMBO J. (1991) 10:4177-4187.
8. HOX-4 genes and the morphogenesis of mammalian genitalia.
Dollé, P., Izpisua Belmonte, J. C., Brown, J., Tickle, C. and Duboule, D.
Genes Dev. (1991) 5:1767-1776.
9. The Hox-4.8 gene is localized at the 5' extremity of the HOX-4 complex and is expressed at the posterior end of the body during development.
Dollé, P., Izpisua Belmonte, J. C., Boncinelli, E. and Duboule, D.
Mech. Dev. (1991) 36(1-2):3-13.
10. HOX-4 genes and the molecular basis of vertebrate limb pattern formation.
Izpisua Belmonte, J. C., Tickle, C., Dollé, P. and Duboule, D.
Seminars in Dev. Biol. (1991) 2:385-391.
11. The misexpression of posterior HOX-4 genes in *talpid (ta3)* mutant wings correlates with the absence of anteroposterior polarity.
Izpisua Belmonte, J. C., Ede, D., Tickle, C. and Duboule, D.
Development (1992) 114:959-963.
12. Expression of HOX-4 genes in the chick wing links pattern formation to the epithelial-mesenchymal

interactions that mediate growth.

Izpisua Belmonte, J.C., Brown, J.M., Duboule, D. and Tickle, C.

EMBO J. (1992) 11:1451-1457.

13. Comparison of mouse and human HOX-4 complexes defines conserved sequences involved in the regulation of Hox-4.4.
Renucci, A., Zappavigna, V., Zakany, J., Izpisua Belmonte, J. C., Bürki, K. and Duboule, D.
EMBO J. (1992) 11:1459-1468.
14. HOX-4 gene expression in mouse/chicken heterospecific grafts of signaling regions to limb buds reveals similarities in patterning mechanisms.
Izpisua Belmonte, J. C., Brown, J. M., Crawley, D., Duboule, D. and Tickle, C.
Development (1992) 115:553-560.
15. The murine even-skipped-like gene *Evx-2* is closely linked to the Hox-4 complex, but is transcribed in the opposite direction.
Bastian, H., Gruss, P., Duboule, D. and Izpisua Belmonte, J.C.
Mammalian Genome (1992) 3:241-243.
16. Homeobox genes and pattern formation in the vertebrate limb.
Izpisua-Belmonte, J. C. and Duboule, D.
Dev. Biol. (1992) 152:26-36.
17. Targeted misexpression of Hox-4.6 in the avian limb bud causes apparent homeotic transformations.
Morgan, B., Izpisua Belmonte, J. C., Duboule, D. and Tabin C.
Nature (1992) 358:236-239.
18. The homeobox gene *gooseoid* and the origin of organizer cells in the early chick blastoderm.
Izpisua Belmonte, J. C., De Robertis, E., Storey, K. and Stern, C.
Cell (1993) 74:645-659.
19. Hox genes and the morphogenesis of the vertebrate limb.
Dollé, P., Izpisua Belmonte, J.C., Brown, J., Tickle, C. and Duboule, D.
Prog. Clin. Biol. Res. (1993) 383A:11-20.
20. Reconstruction from serial sections: a tool for developmental biology. Application to Hox genes expression in chicken wing buds.
Olivo, J., Izpisua Belmonte, J. C., Tickle, C., Boulin, C. and Duboule, D.
BioImaging (1993) 1:115-158.
21. Expression of the zebrafish gene *hlx-1* in the prechordal plate and during CNS development.
Fjose, A., Izpisua Belmonte, J. C., Fromental, C. and Duboule, D.
Development (1994) 120:71-81.
22. Expression of genes encoding bone morphogenetic proteins and sonic hedgehog in Talpid (*ta3*) limb buds: their relationships in the signaling cascade involved in limb patterning.
Francis-West, P. H., Robertson, K., Ede, D. A., Rodriguez, C., Izpisua Belmonte, J.C., Houston, B., Burt, D. W., Gribbin, C., Brickell, P. M. and Tickle, C.
Dev. Dynamics (1995) 203:187-197.
23. Fibroblast Growth Factors induce additional limb development from the flank of chick embryos.
Cohn, M., Izpisua Belmonte, J. C., Abud, H., Heath, J. K. and Tickle, C.
Cell (1995) 80:739-746.
24. Mouse embryos lacking RXRa are resistant to retinoic-acid-induced limb defects.
Sucov, H., Izpisua Belmonte, J. C., Gañan, Y. and Evans R.
Development (1995) 121:3997-4003.

25. Gene expression, polarizing activity and skeletal patterning in reaggregated hind limb mesenchyme. Hardy, A., Richardson, M. K., Philippa, H., Francis-West, P. H., Rodriguez, C., Izpisua Belmonte, J. C., Duprez, D. and Wolpert, L.
Development (1995) 121:4329-4337.
26. Dorsal cell fate specified by chick *Lmx1* during vertebrate limb development. Vogel, A., Rodriguez, C., Warnken W. and Izpisua Belmonte, J. C.
Nature (1995) 378:716-720.
27. Evidence that *Shh* cooperates with a retinoic acid inducible co-factor to establish ZPA-like activity. Ogura, T., Alvarez, S., Vogel, A., Rodriguez, C., Evans, R. and Izpisua Belmonte, J.C.
Development (1996) 122:537-542.
28. Teleost *HoxD* and *HoxA* genes: comparison with tetrapods and functional evolution of the *HOXD* complex. Van der Hoeven, F., Sordino, P., Fraudeau, N., Izpisua Belmonte, J.C. and Duboule, D.
Mech. Dev. (1996) 54:9-21.
29. Involvement of FGF-8 in initiation, outgrowth, and patterning of the vertebrate limb. Vogel, A., Rodriguez, C. and Izpisua Belmonte, J. C.
Development (1996) 122:1737-1750.
30. The limb field mesoderm determines initial limb bud anteroposterior asymmetry and budding independent of *sonic hedgehog* or apical ectodermal gene expressions. Ros, M., Lopez Martinez, A., Simandl, B. K., Rodriguez, C., Izpisua Belmonte, J. C., Dahn, R. and Fallon, J.
Development (1996) 122:2319-2330.
31. *Shh*, *HoxD*, *Bmp-2*, and *Fgf-4* gene expression during development of the polydactylous *talpid2*, *diplopodia1*, and *diplopodia4* mutant chick limb buds. Rodriguez, C., Kos, R., Macias, D., Abbott, U. K. and Izpisua Belmonte, J. C.
Dev. Genetics (1996) 19:26-32.
32. Radical *fringe* positions the apical ectodermal ridge at the dorsoventral boundary of the vertebrate limb. Rodriguez-Esteban, C., Schwabe, J.W.R., De La Peña, J., Foys, B., Eshelman, B. and Izpisua Belmonte, J.C.
Nature (1997) 386:360-366.
33. Segregating expression domains of two gooseoid genes during the transition from gastrulation to neurulation in chick embryos. Lemaire, L., Röser, T., Izpisua Belmonte, J. C. and Kessel, M.
Development (1997) 124:1443-1452.
34. *Crescent*, a novel chick gene encoding a Frizzled-like Cysteine-Rich Domain, is expressed in anterior regions during early embryogenesis. Pfeffer, P., De Robertis, E. and Izpisua Belmonte, J. C.
Int. J. Dev. Biol. (1997) 41(3):449-458.
35. Outgrowth and patterning of the vertebrate limb. Schwabe, J.W.R., Rodriguez-Esteban, C., De La Peña, J., Tavares, A., Ng, J., Banayo, E.M., Foys, B., Eshelman, B., Magallon, J., Tam, R. and Izpisua Belmonte, J.C.
Cold Spring Harbor Symposia on Biology, (1997) Vol. LXII, pp. 431-435.
36. *Gooseoid* misexpression alters the morphology and Hox gene expression of the developing chick limb bud.

- Heanue, T.A., Johnson, R.L., Izpisua Belmonte, J.C., Stern, C.D., DeRobertis, E.M. and Tabin, C.J. **Mech. Dev.** (1997) 69:31-37.
37. Role of Rel/NF-KB transcription factors during the outgrowth of the vertebrate limb. Kanegae, Y., Tavares, A.T., Izpisua Belmonte, J.C. and Verma, I.M. **Nature** (1998) 392:611-614.
38. Molecular architecture of the vertebrate limb. Capdevila, J., Rodriguez-Esteban, C. and Izpisua Belmonte, J. C. **Scientific American** (1998) 12: 23-37 (Sp. edit.).
39. Distinct WNT pathways regulating AER formation and dorsoventral polarity in the chick limb bud. Kengaku, M., Capdevila, J., Rodriguez-Esteban, C., De La Peña, J., Johnson, R.L., Izpisua Belmonte, J.C. and Tabin, C.J. **Science** (1998) 280:1274-1277.
40. Tbx genes and limb identity in chick embryo development. Isaac, A., Rodriguez-Esteban, C., Ryan, A., Altabef, M., Tsukui, T., Patel, K., Tickle, C. and Izpisua Belmonte, J.C. **Development** (1998) 125:1867-1875.
41. Limbs are moving...where are they going? Schwabe, J.W.R., Rodriguez-Esteban, C. and Izpisua Belmonte, J.C. **Trends in Genetics** (1998) 14:229-235.
42. *Pitx2* determines left-right asymmetry of internal organs in vertebrates. Ryan, A., Blumberg, B., Rodriguez-Esteban, C., Yonei-Tamura, S., Tamura, K., Tsukui, T., De La Peña, J., Sabbagh, W., Greenwald, J., Choe, S., Norris, D.P., Robertson, E.J., Evans, R.M., Rosenfeld, M.G. and Izpisua Belmonte, J.C. **Nature** (1998) 394:545-551.
43. *Lhx2*, a vertebrate homologue of *apterous*, regulates vertebrate limb outgrowth. Rodriguez-Esteban, C., Schwabe, J.W.R., De La Peña, J., Rincon-Limas, D.E., Magallon, J., Botas, J. and Izpisua Belmonte, J.C. **Development** (1998) 125:3925-3934.
44. The role of *Alx-4* in the establishment of anteroposterior polarity during vertebrate limb outgrowth. Takahashi, M., Tamura, K., Büscher, D., Masuya, H., Yonei-Tamura, S., Matsumoto, K., Naitoh-Matsuo, M., Takeuchi, J., Ogura, K., Shiroishi, T., Ogura, T. and Izpisua Belmonte, J.C. **Development** (1998) 125:4417-4425.
45. Outgrowth and patterning of the vertebrate limb. Molecular and cellular basis of pattern formation during vertebrate limb development. Ng, J.K., Tamura, K., Büscher, D. and Izpisua Belmonte, J.C. **Current Topics in Dev. Biol.** (1999) 41:37-66.
46. *Sonic Hedgehog (shh)* expression in developing and regenerating Axolotl limbs. Torok, M.A., Gardiner, D.M., Izpisua Belmonte, J.C. and Bryant, S.V. **J. of Exp. Zool.** (1999) 284:197-206.
47. Role of the Bicoid-related homeodomain factor Pitx1 in specifying hindlimb morphogenesis and pituitary development. Szeto, D.P., Rodriguez-Esteban, C., Ryan, A.K., O'Connell, S.M., Liu, F., Kioussi, C., Gleiberman, A.S., Izpisua Belmonte, J.C. and Rosenfeld, M.G. **Genes Dev.** (1999) 13:484-494.
48. Spatially and temporally-restricted expression of two T-box genes during zebrafish embryogenesis.

- Yonei-Tamura, S., Tamura, K., Tsukui, T. and Izpisua Belmonte, J.C.
Mech. Dev. (1999) 80:219-221.
49. Conservation of the expression and function of *apterous* orthologs in *Drosophila* and mammals.
 Rincon-Limas, D.E., Lu, C.-H., Canal, I., Calleja, M., Rodriguez Esteban, C., Izpisua Belmonte, J.C.
 and Botas, J.
Proc. Natl. Acad. Sci. USA (1999) 96:2165-2170.
50. Muscle development during vertebrate limb outgrowth.
 Büscher, D. and Izpisua Belmonte, J.C.
Cell & Tissue Res. (1999) 296:131-139.
51. The T-Box genes *Tbx4* and *Tbx5* regulate limb outgrowth and identity.
 Rodriguez-Esteban, C., Tsukui, T., Yonei, S., Magallon, J., Tamura, K. and Izpisua Belmonte, J.C.
Nature (1999) 398:814-818.
52. IKK1-deficient mice exhibit abnormal development of skin and skeleton.
 Li, Q., Lu, Q., Hwang, J.Y., Büscher, D., Lee, K.-F., Izpisua Belmonte, J.C. and Verma, I.M.
Genes Dev. (1999) 13:1322-1328.
53. How the body tells left from right.
 Izpisua Belmonte, J.C.
Scientific American (1999) 280:46-51.
54. Control of digit formation by activin signalling.
 Merino, R., Macias, D., Gañan, Y., Rodriguez-Leon, J., Economides, A.N., Rodriguez-Esteban, C.,
 Izpisua Belmonte, J.C. and Hurle, J.M.
Development (1999) 126:2161-2170.
55. Extracellular modulation of the Hedgehog, Wnt and TGF- β signalling pathways during embryonic
 development.
 Capdevila, J. and Izpisua Belmonte, J.C.
Curr. Opin. Genet. Dev. (1999) 9:427-433.
56. Origin and development of the avian tongue muscles.
 Huang, R., Zhi, Q., Izpisua Belmonte, J.C., Christ, B. and Ketan, P.
Anat. Embryol. (1999) 200:137-152.
57. RLIM inhibits functional activity of LIM homeodomain transcription factors via recruitment of the
 histone deacetylase complex.
 Bach, I., Rodriguez-Esteban, C., Carriere, C., Bhushan, A., Krones, A., Rose, D.W., Glass, C.K.,
 Andersen, B., Izpisua Belmonte, J.C. and Rosenfeld, M.G.
Nature Genet. (1999) 22:394-399.
58. *DIO-1* is a gene involved in onset of apoptosis *in vitro*, whose misexpression disrupts limb
 development.
 Garcia-Domingo, D., Leonardo, E., Grandien, A., Martinez, P., Albar, J.P., Izpisua Belmonte, J.C. and
 Martinez-A., C.
Proc. Natl. Acad. Sci. USA (1999) 96:7992-7997.
59. Dysregulation of trace element composition in ovariectomized cynomolgus monkey bones.
 Yamada, G., Nakamura, S., Fukuzaki, K., Izumi, H., Horai, N., Nagata, R., Minami, T., Tohno, Y.,
 Suzuki, K., Haraguchi, R., Miyado, K., Toyoda, T., Izpisua Belmonte, J.C., Maruyama, I. and
 Kitajima, I.
Cell. & Mol. Biol. (1999) 44:1205-1213.
60. The novel Cer-like protein Caronte mediates the establishment of embryonic left-right asymmetry.

- Rodriguez-Esteban, C., Capdevila, J., Economides, A.N., Pascual, J., Ortiz, A. and Izpisua Belmonte, J.C.
Nature (1999) 401:243-251.
61. Pitx2 regulates lung asymmetry, cardiac positioning and pituitary and tooth morphogenesis.
 Lin, C.R., Kioussi, C., O'Connell, S., Briata, P., Szeto, D., Liu, F., Izpisua Belmonte, J.C. and Rosenfeld, M.G.
Nature (1999) 401:279-282.
62. Transcription factors during limb development.
 Tavares, A., Capdevila, J. and Izpisua Belmonte, J.C.
Scientific American (Sp. edit.) (1999) 4, 30-32
63. Multiple left-right asymmetry defects in *Shh*^{-/-} mutant mice unveil a convergence of the Shh and Retinoic Acid pathways in the control of *Lefty-1*.
 Tsukui, T., Capdevila, J., Tamura, K., Ruiz-Lozano, P., Rodriguez-Esteban, C., Yonei-Tamura, S., Magallon, J., Chandraratna, R.A.S., Chien, K., Blumberg, B., Evans, R.M. and Izpisua Belmonte, J.C.
Proc. Natl. Acad. Sci. USA (1999) 96:11376-11381.
64. Molecular basis of left-right asymmetry.
 Tamura, K., Yonei-Tamura, S. and Izpisua Belmonte, J.C.
Dev. Growth Differ. (1999) 41:645-656.
65. Control of vertebrate limb outgrowth by the proximal factor *Meis2* and distal antagonism of BMPs by Gremlin.
 Capdevila, J., Tsukui, T., Rodriguez-Esteban, C., Zappavigna, V. and Izpisua Belmonte, J.C.
Mol. Cell (1999) 4: 839-849.
66. Differential expression of *Tbx4* and *Tbx5* in Zebrafish fin buds.
 Tamura, K., Yonei-Tamura, S. and Izpisua Belmonte, J.C.
Mech. Dev. (1999) 87:181-184.
67. Knowing left from right: the molecular basis of laterality defects.
 Capdevila, J. and Izpisua Belmonte, J.C.
Mol. Med. Today (2000) 6:112-118.
68. Mechanisms of left-right determination in vertebrates.
 Capdevila, J., Vogan, K.J., Tabin, C.J. and Izpisua Belmonte, J.C.
Cell (2000) 101:9-21.
69. Mesenchyme with Fgf-10 expression is responsible for regenerative capacity in *Xenopus* limb buds.
 Yokoyama, H., Yonei-Tamura, S., Endo, T., Izpisua Belmonte, J.C., Tamura, K. and Ide, H.
Developmental Biol. (2000) 219:18-29.
70. Evidence that members of the Cut/Cux/CDP family may be involved in AER positioning and polarizing activity during chick limb development.
 Tavares, A.T., Tsukui, T., and Izpisua Belmonte, J.C.
Development (2000) 127:5133-5144.
71. Establishing a left-right axis in the embryo.
 Ryan, A.K. and Izpisua Belmonte, J.C.
IUBMB Life (2000) 50:1-11.
72. Asymmetric Nodal signaling in the zebrafish diencephalons positions the pineal organ.
 Liang, J.O., Etheridge, A., Hantsoo, L., Rubinstein, A.L., Nowak, S.J., Izpisua Belmonte, J.C., and Halpern, M.E.
Development (2000) 127:5101-5112.

73. Left-right axis determination.
Ruiz-Lozano, P., Ryan, A.K. and Izpisua Belmonte, J.C.
Trends in Cardiovascular Med. (2000) 10:258-262.
74. Perspectives on the evolutionary origin of tetrapod limbs.
Capdevila, J. and Izpisua Belmonte, J.C.
Jnl. of Exp. Zool. (2000) 288:287-303.
75. Wnt signals control FGF-dependent limb initiation and AER induction in the chick embryo.
Kawakami, Y., Capdevila, J., Büscher, D., Itoh, T., Rodriguez-Esteban, C., and Izpisua Belmonte, J.C.
Cell (2001) 104:891-900.
76. Development of the limb neuromuscular system.
Sharma, K. and Izpisua Belmonte, J.C.
Curr. Opin. Cell Biol. (2001) 13:204-210.
77. Wnt signaling and PKA control *Nodal* expression and left-right determination in the chick embryo.
Rodriguez-Esteban, C., Capdevila, J., Kawakami, Y. and Izpisua Belmonte, J.C.
Development (2001) 128:3189-3195.
78. Developmental expression of chick *Twist* and its regulation during limb patterning.
Tavares, A.T., Izpisua Belmonte, J.C. and Rodriguez-Leon, J.
Intl. Jnl. of Dev. Biol. (2001) 45:707-713.
79. *Dickkopf1* is required for embryonic head induction and limb morphogenesis in the mouse.
Mukhopadhyay, M., Shtrom, S., Rodriguez-Esteban, C., Chen, L., Tsukui, T., Gomer, L., Dorward, D.W., Glinka, A., Grinberg, A., Huang, S.-P., Niehrs, C., Izpisua Belmonte, J.C. and Westphal, H.
Developmental Cell (2001) 1:423-434.
80. Cómo distingue el cuerpo la izquierda de la derecha?
Rodriguez-Esteban, C., Raya, A., Capdevila, J. and Izpisua Belmonte, J.C.
Investigacion y Ciencia (2001) 300:62-69.
81. Patterning mechanisms controlling vertebrate limb development.
Capdevila, J. and Izpisua Belmonte, J.C.
Ann. Rev. Cell Dev. Biol. (2001) 17:87-132.
82. Expression of the chick *vascular endothelial growth factor D* gene during limb development.
Diaz Trelles, R., Rodriguez Leon, J., Kawakami, Y., Simoes, S. and Izpisua Belmonte, J.C.
Mechanisms of Development (2002) 116:239-242.
83. The limb identity gene *Tbx5* promotes limb initiation by interacting with *Wnt-2b* and *Fgf-10*.
Ng, J., Kawakami, Y., Büscher, D., Raya, A., Itoh, T., Koth, C., Rodríguez Esteban, C., Rodriguez Leon, J., Garrity, D.M., Fishman, M.C. and Izpisua Belmonte, J.C.
Development (2002) 129:5161-5170.
84. Limb Development, Special Issue.
Hurle, J.M. and Izpisua Belmonte, J.C. (Ed.).
Intl. Jnl. of Dev. Biol., (2002) Volume 46, Issue No. 7.
85. Structural basis of BMP signalling inhibition by the cystine knot protein Noggin.
Groppe, J., Greenwald, J., Wiater, E., Rodriguez-Leon, J., Economides, A.N., Kwiatkowski, W., Affolter, M., Vale, W.W., Izpisua Belmonte, J.C. and Choe, S.
Nature (2002) 420:636-642.
86. MKP3 mediates the cellular response to FGF8 signalling in the vertebrate limb.
Kawakami, Y., Rodriguez-Leon, J., Koth, C.M., Büscher, D., Itoh, T., Raya, A., Ng, J.K., Rodriguez Esteban, C., Takahashi, S., Henrique, D., Schwarz, M.F., Asahara, H. and Izpisua Belmonte, J.C.

- Nature Cell Biology** (2003) 5:513-519.
87. Notch activity induces *Nodal* expression and mediates the establishment of left-right asymmetry in vertebrate embryos.
Raya, A., Kawakami, Y., Rodriguez-Esteban, C., Büscher, D., Koth, C.M., Itoh, T., Morita, M., Raya, R.M., Dubova, I., Grego Bessa, J., de la Pompa, J.L. and Izpisua Belmonte, J.C.
Genes Dev. (2003) 17:1213-1218.
 88. Structural basis of BMP signaling inhibition by Noggin a novel twelve-membered cystine knot protein.
Groppe, J., Greenwald, J., Wiater, E., Rodriguez-Leon, J., Economides, A.N., Kwiatkowski, W., Baban, K., Affolter, M., Vale, W.W., Izpisua Belmonte, J.C. and Choe, S.
The Jnl. of Bone and Joint Surgery (2003) 85-A, Suppl. 3:52-58.
 89. Activation of Notch signaling pathway precedes heart regeneration in zebrafish.
Raya, A., Koth, C.M., Büscher, D., Kawakami, Y., Itoh, T., Raya, R.M., Sternik, G., Tsai, H.-J., Rodriguez-Esteban, C. and Izpisua Belmonte, J.C.
PNAS, Special Supplement on Stem Cells and the Future of Regenerative Medicine. (2003) 100:11889-11895.
 90. Notch activity acts as a sensor for extracellular calcium during vertebrate left-right determination.
Raya, A., Kawakami, Y., Rodriguez-Esteban, C., Ibañes, M., Rasskin-Gutman, D., Rodriguez-León, J., Büscher, D., Feijó, J.A. and Izpisua Belmonte, J.C.
Nature. (2004) 427:121-128.
 91. Notch promotes epithelial-mesenchymal transitions during heart development and transformation.
Timmerman, L.A., Grego-Bessa, J., Bertrán, E., Pérez-Pomares, J.M., Diez, J., Aranda, S., Palomo, S., Raya, A., McCormick, F., Izpisua Belmonte, J.C. and de la Pompa, J.L.
Genes and Development. (2004) 18(1):99-115
 92. PPAR γ signaling exacerbates mammary gland tumor development.
Saez, E., Rosenfeld, J., Livolsi, A., Lombardo, E., Olson, P., Nelson, M., Banayo, E., Cardiff, R.D., Izpisua Belmonte, J.C. and Evans, R.M.
Genes and Development. (2004) 18(5):528-540.
 93. Theoretical morphology developmental asymmetries.
Rasskin-Gutman, D. and Izpisua Belmonte, J.C.
BioEssays. (2004) 26(4):405-412.
 94. Characterization of dermacan, a novel zebrafish lectican gene, expressed in dermal bones.
Kang, J.S., Oohashi, T., Kawakami, Y., Bekku, Y., Izpisua Belmonte, J.C. and Ninomiya, Y.
Mechanisms of Development. (2004) 121(3):301-312.
 95. Identification of p53 regulators by genome-wide functional analysis.
Huang Q, Raya A, DeJesus P, Chao SH, Quon KC, Caldwell JS, Chanda SK, Izpisua-Belmonte JC, Schultz PG.
Proc. Natl. Acad. Sci. USA. (2004) 101(10):3456-3461.
 96. Notochord differentiation by the T-box gene *ntl* in zebrafish is regulated by NF κ B.
Correa, R., Tergaonkar, V., Ng, J., Izpisua-Belmonte, J.C., and Verma, I.
Molecular Cell Biology. (2004) 24(12):5257-5268.
 97. Sequential transfer of left-right information during vertebrate embryo development.
Raya, A. and Izpisua Belmonte, J.C.
Curr. Op. Gen. and Dev. (2004) 14:575-581
 98. Unveiling the establishment of left-right asymmetry in the chick embryo.
Raya, A. and Izpisua Belmonte, J.C.

- Mech. Dev.** (2004) 121:1043-1054.
99. Sp8 and Sp9 regulate Fgf8 expression and limb outgrowth in vertebrate embryos.
Kawakami, Y., Rodriguez Esteban, C., Matsui, T., Rodriguez-Leon, J., Kato, S. and Izpisua Belmonte, J.C.
Development. (2004) 31:4763-4774.
100. The zebrafish as a model of heart regeneration.
Raya, A., Consiglio, A., Kawakami, Y., Rodriguez-Esteban, C., and Izpisua-Belmonte, J.C.
Cloning and Stem Cells. (2004) 6(4):345-351
101. Embryos at the core of life.
Rasskin-Gutman, D. and Izpisua Belmonte, J.C.
Development (2004) 130: 5564-5566.
102. Nodal Cilia Dynamics and the Specification of the Left/Right Axis in Early Embryo Development.
Buceta, J., Ibanes, M., Rasskin-Gutman, D., Okada, Y., Hirokawa, N., and Izpisua Belmonte, J.C.
Biophysical Journal. (2005) 89:2199-2209.
103. Non-canonical Wnt signaling regulates midline convergence of organ primordia during zebrafish development.
Matsui, T., Raya, A., Kawakami, Y., Callol, C., Capdevila, J., Rodriguez-Esteban, C., and Izpisua Belmonte, J.C.
Genes and Development. (2005) 19:164-175
104. Transcriptional co-activator PGC-1 regulates chondrogenesis via association with Sox 9.
Kawakami, Y., Tsuda, M., Takahashi, S., Taniguchi, N., Rodriguez-Esteban, C., Zemmyo, M., Furumatsu, T., Lotz, M., Izpisua Belmonte, J.C. and Asahara, H.
PNAS. (2005) 102: 2414-2419
105. Expression of Fgf19 in the developing eye.
Francisco-Morcillo, J., Sanchez-Calderon, H., Kawakami, Y., Izpisua Belmonte, J.C., Hidalgo-Sanchez, M., Martin-Partido, G.
Developmental Brain Research. (2005) 156:104-109
106. A Novel Field Approach to 3D Gene Expression Pattern Characterization.
Da Fontoura Costa, L., Travencolo, B.A.N., Azeredo, A., Beletti, M.E., Rasskin-Gutman, D., Sternik, G., Izpisua Belmonte, J.C., Ibanes, M., and Muller, G.
Applied Physics Letters. (2005) 86: 143901-143903
107. Zebrafish Ikb kinase 1 (Ikk1) negatively regulates NF-kB activity.
Correa, R., Matsui, T., Tergaonkar, V., Rodriguez-Esteban, C., Izpisua Belmonte, J.C., Verma, I.
Current Biology. (2005) 15: 1291-1295
108. Retinoic acid signaling links left-right asymmetric patterning and bilaterally symmetric somitogenesis in the zebrafish embryo.
Kawakami, Y., Raya, A., Raya, R.M., Rodriguez-Esteban, C., Izpisua Belmonte, J.C.
Nature. (2005) 435: 165-171
109. Mechanism of Ciliated Organ Flow: a Conserved Symmetry Breaking Event in Left-Right Axis Determination.
Okada, Y., Takeda, S., Tanaka Y., Izpisua Belmonte, J.C., and Hirokawa, N.
Cell. (2005) 121:633-644
110. Epicardial RXR α is required for myocardial growth and coronary artery formation.
Merki, E., Zamora, M., Raya, A., Kawakami, Y., Zhang, X., Burch, J., Kubalak, S., Kaliman, P., Izpisua Belmonte, J.C., Chien, K., Ruiz-Lozano, P.

- PNAS.** (2005) 102:18455-18460
111. A functional genomics approach to the mode of action of apratoxin A.
Leusch, H., Chanda, S.K., Raya, R.M., DeJesus, P.D., Orth, A.P. Walker, J.R., Izpisua Belmonte, J.C., Schultz, P.
Nature Chemical Biology. (2006) 2:158-167
 112. Maintenance of embryonic stem cell pluripotency by Nanog-mediated reversal of mesoderm specification.
Suzuki, A., Raya, A., Kawakami, Y., Morita, M., Matsui, T., Nakashima, K., Gage, F.H., Rodriguez-Esteban, C., Izpisua Belmonte, J.C.
Nature Clinical Practice Cardiovascular Medicine. (2006) 3:S114-S122
 113. Vertebrate left-right asymmetry: a convergence of divergences.
Raya, A., Izpisua Belmonte, J.C.
Nature Reviews Genetics. (2006) 7:283-293
 114. High resolution episcopic microscopy: a rapid technique for high detailed 3D analysis of gene activity in the context of tissue architecture and morphology.
Weninger, W.J., Geyer, S.H., Mohun, T.J., Rasskin-Gutman, D., Matsui, T., Ribeiro, I., Costa, L., Izpisua Belmonte, J.C., Muller, G. B.
Anatomy and Embryology. (2006) 211:213-221
 115. Understanding embryonic heart development as a tool for cardiac cell based therapy.
Soler-Botija, C., Cervera, R.P., Oishi, I., Raya, R.M., Dubova, I., Rodriguez-Esteban, C., Izpisua Belmonte, J.C.
Annals of Pediatrics. (2006) 64:15-22
 116. Nanog binds to Smad1 and blocks BMP-induced differentiation of embryonic stem cells.
Suzuki, A., Raya, A., Kawakami, Y., Morita, M., Matsui, T., Nakashima, K., Gage, F.H., Rodriguez-Esteban, C., and Izpisua Belmonte, J.C.
PNAS. (2006) 103:10294-10299
 117. Cell lineage transport: a mechanism for molecular gradient formation.
Ibanes, M., Rasskin-Gutman, D., Kawakami, Y., and Izpisua Belmonte, J.C.
Nature Molecular Systems Biology. (2006) 2:57
 118. Regulation of primary cilia formation and left-right patterning in zebrafish by *duboraya*, a novel mediator of non-canonical Wnt signaling.
Oishi, I., Kawakami, Y., Raya, A., Callol-Massot, C., Izpisua Belmonte, J.C.
Nature Genetics. (2006) 38:1316-1322
 119. The role of TGF β s and Sox9 during limb chondrogenesis.
Kawakami, Y., Rodriguez-Leon, J., Izpisua Belmonte, J.C.
Current Opinion in Cell Biology. (2006) 18:723-729
 120. Wnt/ β -catenin signaling regulates vertebrate limb regeneration.
Kawakami, Y., Rodriguez Esteban, C., Raya, M., Kawakami, H., Marti, M., Dubova, I., and Izpisua Belmonte, J.C.
Genes and Development. (2006) 20:3232-3237.
 121. Miles apart-mediated regulation of cell-Fibronectin interaction is required for proper myocardial migration in zebrafish.
Matsui, T., Raya, A., Callol, C., Kawakami, Y., Oishi, I., Rodriguez-Esteban, C., and Izpisua Belmonte, J.C.
Nature Clinical Practice Cardiovascular Medicine. (2007) 4:S77-S82.

122. Lysosomal cathepsins in embryonic programmed cell death.
Zuzarte-Luis, V., Montero, J.A., Kawakami, Y., Izpisua Belmonte, J.C., and Hurler, J.
Developmental Biology. (2007) 301:205-217.
123. El pez cebra: la navaja suiza de la biología.
Rojas-Munoz, A., Bernad Miana, A., and Izpisua Belmonte, J.C.
Investigacion y Ciencia. (2007) 366:62-69.
124. Tbx2 and Tbx3 regulate the dynamics of cell proliferation during heart regionalization and looping.
Ribeiro, R., Kawakami, Y., Buscher, D., Raya, A., Rodriguez-Leon, J., Morita, M., Rodriguez Esteban, C., Izpisua Belmonte, J.C.
PLoS One. (2007) 4:e398.
125. Sp8 exhibits reciprocal induction with Fgf8 but has an opposing effect on anterior-posterior cortical area patterning
Sahara, S., Kawakami, Y., Izpisua Belmonte, J.C., O'Leary, D.D.M.
Neural Development. (2007) 2:10.
126. Bioelectricity and epimorphic regeneration.
Stewart, S., Rojas-Munoz, A., and Izpisua Belmonte, J.C.
Bioessays. (2007) 29(11):1133-1137.
127. BMP-3 and BMP-6 Structures Illuminate the Nature of Binding Specificity with Receptors.
Allendorph, G.P., Isaacs, M.J., Kawakami, Y., Izpisua Belmonte, J.C., Choe, S.
Biochemistry. (2007) 46:12238-12247.
128. Development of a European Human Embryonic Stem Cell Registry – hESCreg.
Borstlap J, Kurtz A, Stacey G, Elstner A, Damaschun A, Arán B, Gerlach JC, Izpisua JC, Veiga A
Regenerative Medicine (2007) 3:945-951.
129. Albumin-associated Lipids Regulate Human Embryonic Stem Cell Self-Renewal.
Garcia-Gonzalo, F.R. and Izpisua Belmonte, J.C.
PLoS ONE. (2008) 3:e1384.
130. Tbx3 controls hepatic stem cell fate in liver development by suppressing p19^{ARF} expression.
Suzuki, A., Sayaka, S., Buscher, D., Izpisua Belmonte, J.C., and Taniguchi, H.
Development. (2008) 135:1589-1595
131. Retinoic Acid Regulation of the Mesp-Ripply Feedback Loop During Vertebrate Segmental Patterning.
Moreno, T.A., Jappelli, R., Brenner, S., Izpisua Belmonte, J.C., and Kintner, C.
Developmental Biology. (2008) 315:317-330.
132. Directional gut looping is mediated by changes in the extracellular matrix and in cell:cell adhesion.
Kurpios, N.A., Ibanes, M., Davis, N.M., Lui, W., Katz, T., Martin, J.F., Izpisua Belmonte, J.C. and Tabin, C.J.
PNAS. (2008) 105:8499-8506.
133. Pitx2 regulates gonad morphogenesis.
Rodriguez-Leon, J., Rodriguez Esteban, C., Marti, M., Santiago-Josefat, B., Dubova, I., Rubiralta, X., and Izpisua Belmonte, J.C.
PNAS. (2008) 105:11242-11247.
134. *NFIX*-One Gene, Two Knockouts, Multiple Effects.
Pekarik, V. and Izpisua Belmonte, J.C.
Journal of Biology. (2008) 7:29.
135. Theoretical and experimental approaches to understand morphogen gradients.

- Ibanes, M and Izpisua Belmonte, J.C.
Nature Molecular Systems Biology. (2008) 4:176.
136. Insights into the establishment of left-right asymmetries in vertebrates.
 Raya, A. and Izpisua Belmonte, J.C.
BDRC: Embryo Today. (2008) 84(2):81-94.
137. Highly efficient generation of induced pluripotent stem cells from human keratinocytes.
 Aasen, T., Raya, A., Barrero, M.J., Garreta, E., Consiglio, A., Gonzalez, F., Vassena, R., Bilic, J., Pekarik, V., Tiscornia, G., Edel, M., Boue, S. and Izpisua Belmonte, J.C.
Nature Biotechnology. (2008) 26:1276-1284.
138. The Forkhead protein, FoxJ1, specified node-like cilia in *Xenopus* and Zebrafish embryos.
 Stubbs, J., Oishi, I., Izpisua Belmonte, J.C. and Kintner, C.
Nature Genetics. (2008) 40:1454-1460.
139. Molecular cloning and developmental expression of a hyaluronan and proteoglycan link protein gene, *crtl1/hapln1*, in zebrafish.
 Kang, J.S., Kawakami, Y., Bekku, Y., Ninomiya, Y., Izpisua Belmonte, J.C., and Oohashi, T.
Zoological Science. (2008) 25:912-918.
140. *Sall* genes regulate region specific morphogenesis in the limb by modulating Hox activities.
 Kawakami, Y., Uchiyama, Y., Rodriguez Esteban, C., Toshiaki, I., Kawakami, H., Marti, M., Kmita, M., Monaghan-Nicols, P., Nishinakamura, R. and Izpisua Belmonte, J.C.
Development. (2009) 136:585-594.
141. Derivació de línies de cèl·lules mare embrionàries humanes.
 B. Aran, I.Rodríguez, A.Raya, Y.Muñoz, P.N.Barri, J.C.Izpisua, A.Veiga.
Biologia de la Reproducció. Treballs de la SCB (2009) 59:263-275.
142. Cursos de Formació Continuada 2009
 A.Veiga, B.Aran, J.C. Izpisua.
Consejo General de Colegios Oficiales de Farmaceuticos. (2009)
143. Generation of cardiomyocytes from new human embryonic stem cell lines derived from poor-quality blastocysts.
 Raya, A., Rodriguez-Piza, I., Aran, B., Consiglio, A., Barri, P., Veiga, A., and Izpisua Belmonte, J.C.
73rd Cold Spring Harbor Laboratory Symposium. (2009) 73:1-9.
144. ErbB2 and ErbB3 regulate amputation-induced proliferation and migration during vertebrate regeneration.
 Rojas-Muñoz, A., Rajadhyksha, S., Gilmour, D., van Bebber, F., Rodríguez-Esteban, C., Nüsslein-Volhard, C., & Izpisua Belmonte, J.C.
Developmental Biology. (2009) 327: 177-190.
145. A new method for detection and quantification of heartbeat parameters in *Drosophila*, zebrafish, and embryonic mouse hearts.
 Fink, M., Chu, A., Ruiz-Lozano, P., Callol, C., Izpisua Belmonte, J.C., Giles, W., Bodmer, R. and Ocorr, K.
Biotechniques. (2009) 46: 101-113.
146. Cilia-Where Two Wnts Collide.
 Jopling, C. and Izpisua Belmonte, J.C.
Zebrafish. (2009) 6: 15-19.
147. Beyond Early Development: *Xenopus* as an emerging model for the study of regenerative mechanisms.

- Beck, C., Izpisua Belmonte, J.C. and Christen, B.
Developmental Dynamics. (2009) 238:1226-1248
148. Generation of mouse induced pluripotent stem cells by transient expression of a single non-viral polycistronic vector.
 Gonzalez, F., Barragan Monasterio, M., Tiscornia, G., Montserrat Pulido, N., Vassena, R., Batlle Morera, L., Rodriguez Piza, I. and Izpisua Belmonte, J.C.
PNAS. (2009) 106:8918-8922.
149. Blockade of Cripto binding to cell surface GRP78 inhibits oncogenic Cripto signaling via MAPk/PI3K and Smad2/3 pathways.
 Kelber, J.A., Panopoulos, A.D., Shani, G., Booker, E.C., Belmonte, J.C., Vale, W.W. and Gray, P.C.
Oncogene. (2009) 28: 2324-2336.
150. Disease-corrected haematopoietic progenitors from Fanconi anaemia induced pluripotent stem cells.
 Raya, A., Rodriguez-Piza, I., Guenechea, G., Vassena, R., Navarro, S., Barrero, M.J., Consiglio, A., Rio, P., Sleep, E., Tiscornia, G., Garreta, E., Aasen, T., Veiga, A., Verma, I., Bueren, J. and Izpisua Belmonte, J.C.
Nature. (2009) 460:53-61.
151. Stem Cell Research in Spain: If Only They Were Windmills.
 Raya, A. and Izpisua Belmonte, J.C.
Cell Stem Cell. (2009) 4:483-486
152. Linking the p53 tumour suppressor pathway to somatic cell reprogramming.
 Kawamura, T., Suzuki, J., Wang, Y.V., Menendez, S., Batlle, L., Wahl, G. and Izpisua Belmonte, J.C.
Nature. (2009) 460:1140-1144. NIHMSID # 134470.
153. Compensatory growth mechanisms regulated by BMP and FGF signaling pathways mediate liver regeneration in zebrafish after partial hepatectomy.
 Kan, N., Junghans, D. and Izpisua Belmonte, J.C.
FASEB. (2009) 23:3516-3525.
154. Generation of induced pluripotent stem cells from human cord blood using *OCT4* and *SOX2*.
 Giorgetti, A., Montserrat, N., Aasen, T., Rodriguez-Piza, I., Vassena, R., Gonzalez, F., Boue, S., Barrero, M.J., Aran Corbella, B., Raya, A., Torrebadella, M., Veiga, A. and Izpisua Belmonte, J.C.
Cell Stem Cell. (2009) 5:353-357. NIHMSID # 147979.
155. Induced pluripotent stem cells and reprogramming: seeing the science through the hype.
 Izpisua Belmonte, J.C., Ellis, J., Hochedlinger, K. and Yamanaka, S.
Nature Reviews Genetics. (2009) 10:878-883.
156. Reprogramming of human fibroblasts to induced pluripotent stem cells under xeno-free conditions.
 Rodriguez-Piza, I., Richaud-Patin, Y., Vassena, R., Gonzalez, F., Barrero, M.J., Veiga, A., Raya, A. and Izpisua Belmonte, J.C.
Stem Cells. (2009) 28:36-44.
157. A histone demethylase is necessary for regeneration in zebrafish.
 Stewart, S., Tsun, Z.Y. and Izpisua Belmonte, J.C.
PNAS. (2009) 106:19889-19894.
158. Left-right asymmetry determination.
 Ibanes, M. and Izpisua Belmonte, J.C.
Wiley Interdisciplinary Reviews: Systems Biology and Medicine. (2009) Sept/Oct 2009:210-219.
159. Embryonic Stem Cell-like Cells Derived from Adult Human Testis.
 Mizrak, S.C., Chikhovskaya, J.V., Sadri-Ardekani, H., van Daalen, S., Korver, C.M., Hovingh, S.E.,

- Roepers-Gajadien, H.L., Raya, A., Fluiter, K., de Reijke, Th.M., de la Rosette, J.J.M.C.H., Izpisua Belmonte, J.C., van der Veen, F., de Rooij, D.G. and van Pelt, A.M.M.
Human Reproduction. (2010) 25:158-167.
160. BMP and Activin membrane-bound inhibitor (BAMBI) reveal the involvement of the TGF- β family in pain modulation.
Tramullas, M., Diaz, A., San-Emeterio, E.P., Morchon, N., Lantero, A., Merino, D., Buscher, D., Merino, R., Hurler, J.M., Izpisua Belmonte, J.C. and Hurler, M.
Journal of Neuroscience. (2010) 30:1502–1511.
161. Human and mouse adipose-derived cells support feeder-independent induction of pluripotent stem cells.
Sugii, S., Kida, Y., Kawamura, T., Suzuki, J., Vassena, R., Yin, Y.Q., Lutz, M., Berggren, W.T., Izpisua Belmonte, J.C. and Evans, R.M.
PNAS. (2010) 107:3558-3563.
162. Isolation and cultivation of human keratinocytes from skin or plucked hair for the generation of induced pluripotent stem cells.
Aasen, T. and Izpisua Belmonte, J.C.
Nature Protocols. (2010) 5:371-382.
163. A protocol describing the genetic correction of somatic human cells and subsequent generation of iPS cells.
Raya, A., Rodriguez-Piza, I., Navarro, S., Richaud, Y., Guenechea, G., Sanchez-Danes, A., Consiglio, A., Bueren, J. and Izpisua Belmonte, J.C.
Nature Protocols. (2010) 5:647-660.
164. Regeneration and reprogramming compared.
Christen, B., Robles, V., Paramonov, I., Raya, M. and Izpisua Belmonte, J.C.
BMC Biology. (2010) 8:5.
165. Transcriptomics approach to investigate zebrafish heart regeneration.
Sleep, E., Boue, S., Jopling, C., Raya, M., Raya, A. and Izpisua Belmonte, J.C.
Journal of Cardiovascular Medicine. (2010) 11:369-80.
166. Rem2 GTPase maintains survival of human embryonic stem cells as well as enhancing reprogramming by regulating p53 and cyclin D1.
Edel, M., Menchon, C., Menendez, S., Consiglio, A., Raya, A. and Izpisua Belmonte, J.C.
Genes and Development. (2010) 24:561–573.
167. Zebrafish heart regeneration occurs by cardiomyocyte dedifferentiation and proliferation.
Jopling, C., Raya, M., Sleep, E., Marti, M., Raya, A. and Izpisua Belmonte, J.C.
Nature. (2010) 464:606-609.
168. Generation of induced pluripotent stem cells from human cord blood cells with only 2 factors: Oct4 and Sox 2.
Giorgetti, A., Montserrat, N., Rodriguez-Piza, I., Azqueta, C., Veiga, A., and Izpisua Belmonte, J.C.
Nature Protocols. (2010) 5:811-820.
169. BMP-2/6 Heterodimer Is More Effective than BMP-2 or BMP-6 Homodimers as Inductor of Differentiation of Human Embryonic Stem Cells.
Valera, E., Issacs, M., Kawakami, Y., Izpisua Belmonte, J.C. and Choe, S.
PLoS ONE. (2010) 5:e11167.
170. Understanding the molecular basis for cardiomyocyte cell cycle regulation: new insights in cardiac regeneration after injury?

- Montserrat, N., Jopling, C. and Izpisua Belmonte, J.C.
Expert Review of Cardiovascular Therapy. (2010) 8:1043-1045.
171. Derivation of human embryonic stem cells at the Center for Regenerative Medicine in Barcelona
 Aran B, Rodriguez-Pizà I, Raya A, Consiglio A, Muñoz Y, Barri PN, Izpisua JC, Veiga A
In Vitro Cellular & Developmental Biology - Animal. (2010) 46:356-366.
172. Reprogramming with defined factors: from induced pluripotency to induced transdifferentiation.
 Masip, M., Veiga, A., Izpisua Belmonte, J.C. and Simon, C.
Molecular Human Reproduction. (2010) 16:856-868.
173. Identification of a novel progenitor cell population from adult human cardiac adipose tissue with potential for cardiac repair.
 Bayes-Genis, A., Soler-Botija, C., Farre, J., Sepulveda, P., Raya, A., Roura, S., Prat-Vidal, C., Galvez, C., Anastasio Montero, J., Buscher, D. and Izpisua Belmonte, J.C.
Journal of Molecular and Cellular Cardiology. (2010) 49:771-780.
174. Turning human epidermis into pancreatic endoderm.
 Santamaria, P., Rodriguez-Piza, I., Clemente-Casares, X., Yamanouchi, J., Aasen, T., Raya, A. and Izpisua Belmonte, J.C.
The Review of Diabetic Studies. (2010) 7:151-160.
175. BMP-2 and BMP-6 heterodimer illustrates the nature of ligand-receptor assembly.
 Issacs, M.J., Kawakami, Y., Allendorph, G., Yoon, J., Izpisua Belmonte, J.C. and Choe, S.
Molecular Endocrinology. (2010) 24:1469-1477.
176. The cell cycle and pluripotency: Is there a direct link?
 Edel, M. and Izpisua Belmonte, J.C.
Cell Cycle. (2010) 9:2694-2695.
177. Analysis of Human and Mouse Reprogramming of Somatic Cells to Induced Pluripotent Stem Cells. What is in the Plate?
 Boue, S., Paramonov, I., Barrero, M.J. and Izpisua Belmonte, J.C.
PLoS ONE. (2010) 5:e12664.
178. Rem2 GTPase controls proliferation and apoptosis of neurons during embryo development
 Edel, M. and Izpisua Belmonte, J.C.
Cell Cycle. (2010) 9:3414-3422.
179. p53:Guardian of reprogramming.
 Menendez, S., Camus, S. and Izpisua Belmonte, J.C.
Cell Cycle. (2010) 9:3887-3891.
180. Epigenetic Mechanisms that Regulate Cell Identity.
 Barrero, M.J., Boue, S. and Izpisua Belmonte, J.C.
Cell Stem Cell. (2010) 5:565-570.
181. Stem Cell Research in Spain.
 Veiga, A., Raya, A. and Izpisua, J.C.
2010 World Stem Cell Summit. (2010)
182. MicroRNAs in stem cell function and fate.
 Tiscornia, G. and Izpisua Belmonte, J.C.
Genes and Development. (2010) 24: 2732-2741.
183. High-efficient generation of induced pluripotent stem cells from human astrocytes.
 Ruiz, S., Brennand, K., Panopoulos, A.D., Herrerias, A. Gage, F.H. and Izpisua Belmonte, J.C.
PLoS ONE. (2010) 5:e15526.

184. Generation of Pig iPS Cells: A Model for Cell Therapy.
Montserrat N, Bahima EG, Batlle L, Häfner S, Rodrigues AM, Gonzalez F, Izpisua Belmonte JC.
J Cardiovasc Transl Res. (2010) 4:121-130.
185. Dynamic Changes in the Copy Number of Pluripotency and Cell Proliferation Genes in Human ES and iPS Cells during Reprogramming and Time in Culture.
Laurent, L.C., Ulitsky, I., Slavin, I., Tran, H., Schork, A., Morey, R., Lynch, C., Harness, J., Lee, S., Barrero, M.J., Martynova, M., Muller, F.-J., Semechkin, R., Galat, V., Gottesfeld, J., Izpisua Belmonte, J.C., Murray, C., Keirstead, H., Park, H.-S., Schmidt, U., Laslett, A., Nievergelt, C., Shamir, R. and Loring, J.
Cell Stem Cell. (2011) 8:106-118.
186. Differentiation, transdifferentiation and reprogramming: three routes to regeneration.
Jopling, C., Boue, S. and Izpisua Belmonte, J.C.
Nature Reviews Molecular Cell Biology. (2011) 12:79-89.
187. Cell fate conversion by mRNA.
Li, M., Sancho-Martinez, I. and Izpisua Belmonte, J.C.
Stem Cell Research and Therapy. (2011) 2:5.
188. Cre-LoxP-regulated expression of monoclonal antibodies driven by an ovalbumin promoter in primary oviduct cells.
Oishi, I., Kim, S., Yoshii, K., Rodriguez Esteban, C. and Izpisua Belmonte, J.C.
BMC Biotechnology. (2011) 11:5.
189. A high proliferation rate is required for cell reprogramming and maintenance of human embryonic stem cell identity.
Ruiz, S., Panopoulos, A.D., Herrerias, A., Bissig, K-D, Lutz, M., Berggren, W.T., Verma, I. and Izpisua Belmonte, J.C.
Current Biology. (2011) 21: 45-52.
190. Somatic coding mutations in human induced pluripotent stem cells.
Gore, A., Li, Z., Fung, H.L., Young, J., Agarwal, S., Antosiewicz-Bourget, J., Canto, I., Giorgetti, A., Israel, M., Kiskinis, E., Lee, J.H., Loh, Y.H., Manos, P.D., Montserrat, N., Panopoulos, A.D., Ruiz, S., Wilbert, M., Yu, J., Kirkness, E.F., Izpisua Belmonte, J.C., Rossi, D.J., Thomson, J., Eggan, K., Daley, G.Q., Goldstein, L.S.B. and Zhang, K.
Nature. (2011) 471:46-7.
191. Regenerating the Epigenome.
Barrero, M.J. and Izpisua Belmonte, J.C.
EMBO Reports. (2011) 12:208-215.
192. Modelling Long QT Syndrome with iPS cells: Be still, my beating heart...
Tiscornia, G., Montserrat, N. and Izpisua Belmonte, J.C.
Circulation Research. (2011) 108:648-649.
193. Simple generation of human induced Pluripotent stem cells using Poly(β -Amino Esters) as non-viral gene delivery system.
Montserrat, N., Garreta Bahima, E., Gonzalez, F., Gutierrez, J., Eguizabal, C., Ramos Perez, V., Borros, S., Izpisua Belmonte, J.C.
Journal of Biological Chemistry. (2011) 286:12417-28.
194. Methods for making iPS cells: reprogramming à la carte.
Gonzalez, F., Boue, S. and Izpisua Belmonte, J.C.
Nature Reviews Genetics. (2011) 12:231-242.

195. iPSCs: Induced Back to Controversy.
Panopoulos, A., Ruiz, S. and Izpisua Belmonte, J.C.
Cell Stem Cell. (2011) 8:347-348.
196. iPS cells forgive but do not forget.
Barrero, M.J. and Izpisua Belmonte, J.C.
Nature Cell Biology. (2011) 13:523–525
197. Recapitulation of premature ageing with iPSCs from Hutchinson-Gilford progeria syndrome.
Liu, G-H, Barkho, B.Z., Ruiz, S., Diep, D., Qu, J., Yang, S-L, Panopoulos, A.D., Suzuki, K., Kurian, L., Walsh, C., Thompson, J., Boue, S., Fung, H.L., Sancho-Martinez, I., Zhang, K., Yates III, J. and Izpisua Belmonte, J.C.
Nature. (2011) 472:221-5.
198. Rapid and highly efficient generation of induced pluripotent stem cells from human umbilical vein endothelial cells.
Panopoulos, A., Ruiz, S., Yi, F., Herrerias, A., Batchelder, E.M. and Izpisua Belmonte, J.C.
PLoS ONE. (2011) 6:e19743.
199. Human cord blood reprogrammed into embryonic-like stem cells.
Giorgetti, A., Fazzina, R., Li, M. and Izpisua Belmonte, J.C.
ISBT Science Series. (2011) 6:107-111.
200. The cell cycle inhibitor p27Kip1 controls self-renewal and pluripotency of human embryonic stem cells by regulating the cell cycle, Brachyury and Twist.
Menchon, C., Edel, M. and Izpisua Belmonte, J.C.
Cell Cycle. (2011) 10:1435-1447.
201. A protocol to assess cell cycle and apoptosis in human and mouse pluripotent cells.
Edel, M., Menchon, C., Andres Vacquero, J.M. and Izpisua Belmonte, J.C.
Cell Communication and Signaling. (2011) 9:8
202. Disease correction, the iPSC way. Advances in iPSC-based therapy.
Sancho-Martinez, I., Li, M. and Izpisua Belmonte, J.C.
Clinical Pharmacology and Therapeutics. (2011) Advanced Online Publication March 9, 2011.
203. Targeted Gene Correction of Laminopathy-Associated LMNA Mutations in Patient-Specific iPSCs.
Liu, G.H., Suzuki, K., Qu, J., Sancho-Martinez, I., Yi, F., Li, M., Kumar, S., Nivet, E., Kim, J., Soligalla, R.D., Dubova, I., Goebel, A., Plongthongkum, N., Fung, H.L., Zhang, K., Loring, J.F., Laurent, L.C., Izpisua Belmonte, J.C.
Cell Stem Cell. (2011) 8:688-694.
204. LSD1 regulates the balance between self-renewal and differentiation in human embryonic stem cells.
Adamo, A., Sese, B., Boue, S., Castano, J., Paramonov, I., Barrero, M.J. and Izpisua Belmonte, J.C.
Nature Cell Biology. (2011) 13:652-660.
205. Complete meiosis from human induced pluripotent stem cells.
Eguizabal, C., Montserrat, N., Vassena, R., Barragan, M., Garreta, E., Garcia-Quevedo, L., Vidal, F., Giorgetti, A., Veiga, A. and Izpisua Belmonte, J.C.
Stem Cells. (2011) 29:1186-1195.
206. Pluripotency of Male Germline Stem Cells.
Kim, S. and Izpisua Belmonte, J.C.
Molecules and Cells. (2011) 32(2):113-21.
207. Efficient Generation of Hematopoietic Precursors and Progenitors from Human Pluripotent Stem Cell Lines.

- Woods, N-B, Parker, A.S., Moraghebi, R., Lutz, M.K., Firth, A.L., Brennand, K.J., Berggren, W.T., Raya, A., Izpisua Belmonte, J.C., Gage, F.H. and Verma, I.M.
Stem Cells. (2011) 29:1158–1164.
208. Study of pluripotency markers in zebrafish embryos and transient ES cell cultures.
Robles, V., Marti, M. and Izpisua Belmonte, J.C.
Zebrafish. (2011) 8(2):57-63.
209. Ablation of Dido3 compromises lineage commitment of stem cells in vitro and during early embryonic development.
Futterer, A., Raya, A., Liorente, M., Izpisua Belmonte, J.C., de la Pompa, J.L., Klatt, P., and Martinez-A, C.
Cell Death and Differentiation. (2011) 19(1):132-43.
210. Waves of early transcriptional activation and pluripotency program initiation during human preimplantation development.
Vassena, R., Boue, S., Gonzalez Roca, E., Aran, B., Auer, H., Veiga, A., and Izpisua Belmonte, J.C.
Development. (2011) 138:3699-3709.
211. Anaerobicizing into Pluripotency.
Panopoulos, A.D. and Izpisua Belmonte, J.C.
Cell Metabolism. (2011) 14:143-4.
212. A Src-Tks5 Pathway Is Required for Neural Crest Cell Migration during Embryonic Development.
Murphy, D.A., Diaz, B., Bromann, P.A., Tsai, J.H., Kawakami, Y., Maurer, J., Stewart, R.A., Izpisua Belmonte, J.C., and Courtneidge, S.A.
PLoS ONE. (2011) 6:e22499.
213. iPS cells versus ES cells: Close enough or yet too far apart?
Bilic, J. and Izpisua Belmonte, J.C.
Stem Cells. (2011) 30(1):33-41.
214. Islet1-mediated activation of the β -catenin pathway is necessary for hindlimb initiation in mice.
Kawakami, Y., Marti, M., Kawakami, H., Itoh, J., Quach, T., Johnson, A., Sahara, S., O’Leary, D.D.M., Nakagawa, Y., Lewandoski, M., Pfaff, S., Evans, S., and Izpisua Belmonte, J.C.
Development. (2011) 138(20):4465-73.
215. Diseases in a Dish: modeling human genetic disorders using induced pluripotent cells.
Tiscornia, G. and Izpisua Belmonte, J.C.
Nature Medicine. (2011) 17(12):1570-6.
216. LSD1 and Pluripotency: A new player in the network.
Adamo, A., Barrero, M.J. and Izpisua Belmonte, J.C.
Cell Cycle. (2011) 10(19):3215-6.
217. No factor left behind: generation of transgene free induced pluripotent stem cells.
Li, M. and Izpisua Belmonte, J.C.
American Journal of Stem Cells. (2011) 1(1):75-80.
218. Efficient Generation of A9 Midbrain Dopaminergic Neurons by Lentiviral Delivery of LMX1A in Human Embryonic Stem Cells and iPS Cells.
Sanchez-Danes A., Consiglio A., Richaud Y., Rodríguez-Pizà I., Dehay B., Edel M., Bové J., Memo M., Vila M., Raya A., and Izpisua Belmonte J.C.
Human Gene Therapy. (2011) 23(1):56-69.
219. Efficient correction of hemoglobinopathy-causing mutations by homologous recombination in integration-free patient iPSCs

- Li, M., Suzuki, K., Qu, J., Saini, P., Dubova, I., Yi, F., Lee, J., Sancho-Martinez, I., Liu, G-H, and Izpisua Belmonte, J.C.
Cell Research. (2011) 21:1740–1744.
220. The metabolome of induced pluripotent stem cells reveals metabolic changes occurring in somatic cell reprogramming.
 Panopoulos, A.D., Yanes, O., Ruiz, S., Kida, Y.S., Diep, D., Tautenhahn, R., Herrerias, A., Batchelder, E.M., Plongthongkum, N., Lutz, M., Berggren, W.T., Zhang, K., Evans, R.M., Suizdak, G., and Izpisua Belmonte, J.C.
Cell Research. (2011) 22(1):168-77.
221. Histone H1 variants are differentially expressed and incorporated into chromatin during differentiation and reprogramming to pluripotency.
 Terme, J.-M., Sese, B., Millan-Ariño, L., Mayor, R., Izpisua Belmonte, J.C., Barrero, M.J., and Jordan, A.
Journal of Biological Chemistry. (2011) 286(41):35347-57.
222. The labyrinth of nuclear programming.
 Sancho-Martinez, I., Nivet, E., Izpisua Belmonte, J.C.
Journal of Molecular Cell Biology. (2011) 3, 327–329.
223. Purging and isolating pluripotent cells, "sweet" dreams become true?
 Sancho-Martinez, I., Nivet, E., Izpisua Belmonte, J.C.
Cell Research. (2011) (11):1526-7.
224. Increased dosage of tumor suppressors limits the tumorigenicity of iPS cells without affecting their pluripotency.
 Menendez, S., Camus, S., Herreria, A., Paramonov, I., Batlle Morera, L., Collado, M., Pekarik, V., Maceda, I., Edel, M., Consiglio, A., Sanchez, A., Li, H., Serrano, M. and Izpisua Belmonte, J.C.
Aging Cell. (2012) 11:41-50.
225. iPS cells versus ES cells: Close enough or yet too far apart?
 Bilic, J. and Izpisua Belmonte, J.C.
Stem Cells. (2012) 30:33–41
226. Ablation of Dido3 compromises lineage commitment of stem cells in vitro and during early embryonic development.
 Futterer, A., Raya, A., Liorente, M., Izpisua Belmonte, J.C., de la Pompa, J.L., Klatt, P., and Martinez-A, C.
Cell Death and Differentiation. (2012) 19:132-143.
227. Skeletal muscle regeneration in *Xenopus* tadpoles and zebrafish larvae
 Cavaco Rodrigues, A.M., Christen, B., Marti, M., and Izpisua Belmonte, J.C.
BMC Developmental Biology. (2012) 12:9.
228. p38 α MAPK regulates myocardial regeneration in zebrafish
 Jopling, C., Suñè, G., Morera, C., and Izpisua Belmonte, J.C.
Cell Cycle. (2012) 11(6):1195-201.
229. Rejuvenating liver and pancreas through cell transdifferentiation
 Yi, F., Liu, G-H, and Izpisua Belmonte, J.C.
Cell Research. (2012) 22:616-619.
230. Human induced pluripotent stem cells derived hepatocytes: rising promise for disease modeling, drug development and cell therapy
 Yi, F., Liu, G-H, and Izpisua Belmonte, J.C.

- Protein & Cell.** (2012) 3(4): 246–250
231. Reprogramming based gene therapy for inherited red blood cell disorders
Xu, X., Qu, J., Suzuki, K., Li, M., Zhang, W., Liu, G-H, and Izpisua Belmonte, J.C.
Cell Research. (2012) 22:941-944.
232. Induced pluripotent stem cells in clinical hematology: potentials, progress, and remaining obstacles
Panopoulos, A.D. and Izpisua Belmonte, J.C.
Current Opinion in Hematology. (2012) 19(4):256-60.
233. Induced neural stem cells: a new tool for studying neural development and neurological disorders
Liu, G-H, Yi, F., Suzuki, K., Qu, J., and Izpisua Belmonte, J.C.
Cell Research. (2012) 22(7):1087-91.
234. Small molecule-mediated TGF Type II receptor degradation promotes cardiomyogenesis in embryonic stem cells
Willems, E., Cabral-Teixeira, J., Schade, D., Cai, W., Reeves, P., Bushway, P., Lanier, M., Walsh, C., Kirchhausen, T., Izpisua Belmonte, J.C., Cashman, J., and Mercola, M.
Cell Stem Cell. (2012) 11, 242-252.
235. Accumulation of instability in serial differentiation and reprogramming of parthenogenetic human cells
Vassena, R., Montserrat, N., Carrasco Canal, B., Aran, B., de Oñate, L., Veiga, A., and Izpisua Belmonte, J.C.
Human Molecular Genetics. (2012). 21(15):3366-73.
236. Gating neural development and aging via nuclear pores.
Liu, G-H, Li, M., Qu, J., and Izpisua Belmonte, J.C.
Cell Research. (2012). 22:1212-1214.
237. Gametogenesis in a dish
Gu, Y., Liu, G-H, and Izpisua Belmonte, J.C.
Cell Research. (2012). 22(10):1422-5.
238. Transient downregulation of Bmp signalling induces extra limbs in vertebrates
Christen, B., Cavaco Rodrigues, A.M., Barragán Monasterio, M., Fabregat Roig, C., and Izpisua Belmonte, J.C.
Development. (2012) 139, 2557-2565.
239. Generation of induced pluripotent stem cells from human renal proximal tubular cells with only two transcription factors: OCT4 and SOX2
Montserrat, N., Ramírez-Bajo, M.J., Xia, Y., Sancho-Martinez, I., Moya-Rull, D., Miquel-Serra, L., Yang, S., Nivet, E., Cortina, C., González, F., Izpisua Belmonte, J.C., and Josep M. Campistol
The Journal of Biological Chemistry. (2012). 287(29):24131-8.
240. Development and validation of an automated high-throughput system for zebrafish in vivo screenings.
Letamendia A., Quevedo C., Ibarbia I., Virto J.M., Holgado O., Diez M., Izpisua Belmonte J.C., Callol-Massot C.
PLoS One. (2012). 7(5):e36690.
241. Cardiosphere-derived cells for heart regeneration
Masuda, S., Montserrat, N., Okamura, D., Suzuki K., and Izpisua Belmonte, J.C.
The Lancet. (2012). 379(9835): 2425-2426.
242. Cord blood-derived neuronal cells by ectopic expression of Sox2 and c-Myc
Giorgetti, A., Marchetto, M., Li, M., Yu, D., Fazzina, R., Mu, Y., Adamo, A., Paramonov, I., Castaño Cardoso, J., Barragan Monasterio, M., Bardy, C., Cassiani-Ingoni, R. Liu, G-H, Gage F.H., and

- Izpisua Belmonte, J.C.
PNAS. (2012). 109(31):12556-61.
243. Establishment of hepatic and neural differentiation platforms of Wilson's disease specific induced pluripotent stem cells
 Yi, F., Qu, J., Suzuki, K., Kim, NY, Liu, G-H, and Izpisua Belmonte, J.C.
Protein & Cell. (2012). 3(11):855-63.
244. DNA Hypermethylation in Somatic Cells Correlates with Higher Reprogramming Efficiency
 Barrero MJ, Berdasco M, Paramonov I, Bilic J, Vitaloni M, Esteller M, and Izpisua Belmonte, J.C.
Stem Cells. (2012). 30(8):1696-702.
245. Navigating the epigenetic landscape of pluripotent stem cells
 Li, M., Liu, G-H, and Izpisua Belmonte, J.C.
Nature Reviews Molecular Cell Biology. (2012) 13, 524-535.
246. Vitrified blastocysts from Preimplantation Genetic Diagnosis (PGD) as a source for human Embryonic Stem Cell (hESC) derivation
 Aran, B, Sole, M., Rodriguez-Pizà, I., Parriego, M., Muñoz, Y., Boada, M., Barri, P.N., Izpisua Belmonte, J.C., and Veiga, A.
Journal of Assisted Reproduction and Genetics. (2012). 29(10):1013-20.
247. Post-translational modulation of pluripotency
 Cai, N., Li, M., Qu, J., Liu, G-H, and Izpisua Belmonte, J.C.
Journal of Molecular Cell Biology. (2012). 4(4):262-5.
248. Huntington's disease: Dancing in a dish
 Zhang, K., Yi, F., Liu, G-H, and Izpisua Belmonte, J.C.
Cell Research. (2012). 22(12):1627-30.
249. Lineage conversion methodologies meet the reprogramming toolbox
 Sancho-Martinez, I., Baek, S.H., and Izpisua Belmonte, J.C.
Nature Cell Biology. (2012). 14(9):892-9.
250. Identification of a specific reprogramming-associated epigenetic signature in human induced pluripotent stem cells
 Ruiz, S., Diep, D., Gore, A., Panopoulos, A.D., Montserrat, N., Plongthongkum, N., Kumar, S., Fung, H.-L., Giorgetti, A., Bilic, J., Batchelder, E.M., Zaehres, H., Kan, N.G., Schöler, H.R., Mercola, M., Zhang, K. and Izpisua Belmonte, J.C.
PNAS. (2012). 109(40):16196-201.
251. Progressive degeneration of human neural stem cells caused by pathogenic LRRK2
 Liu, G.-H., Qu, J., Suzuki, K., Li, M., Montserrat, N., Yi, F., Xu, X., Ruiz, S., Zhang, W., Ren, B., Wagner, U., Kim, A., Li, Y., Goebel, A., Kim, J., Soligalla, R.D., Dubova, I., Thompson, J., Yates, J., Rodriguez Esteban, C., Sancho-Martinez, I. and Izpisua Belmonte, J.C.
Nature. (2012). 491(7425):603-7.
252. Activity of the oral MEK inhibitor trametinib in patients with advanced melanoma: a phase 1 dose-escalation trial
 Masuda, S. and Izpisua Belmonte, J.C.
The Lancet Oncology. (2012).13(10): e409.
253. The dawn of angiogenesis modeling: regenerating vasculature from human pluripotent stem cells
 Yi, F., Qu, J., Liu, G.-H., and Izpisua Belmonte, J.C.
Cell Research. (2012). 23(1):3-5.
254. In vitro generation of platelets through direct conversion: first report in My Knowledge (iMK)

- Masuda, S., Li, M., and Izpisua Belmonte, J.C.
Cell Research. (2012). 23(2):176-8.
255. iPSC technology to study human aging and aging-related disorders
 Liu, G.-H., Ding, Z., and Izpisua Belmonte, J.C.
Current Opinion in Cell Biology. (2012). 24(6):765-74.
256. Generation of a drug-inducible reporter system to study cell reprogramming in human cells
 Ruiz, S., Panopoulos, A.D., Montserrat, N., Multon, M.-C., Daury, A., Rocher, C., Spanakis, E., Batchelder, E.M., Orsini, C., Deleuze, J.-F., and Izpisua Belmonte, J.C.
Journal of Biological Chemistry. (2012). 287(48):40767-78.
257. Retos de la medicina regenerativa
 Barrero, M.J. and Izpisua Belmonte, J.C.
Investigacion y Ciencia. (2012). November, 2012.
258. Neuronopathic Gaucher's Disease: induced pluripotent stem cells for disease modelling and testing chaperone activity of small compounds
 Tiscornia, G., Lorenzo Vivas, E., Matalonga, L., Berniakovich, I., Barragán Monasterio, M., Eguizábal Argai, C., Gort, L., González, F., Ortiz Mellet, C., García Fernández, J.M., Ribes, A., Veiga, A., and Izpisua Belmonte, J.C.
Human Molecular Genetics. (2012). 22(4):633-45.
259. Beating in a dish: new hopes for cardiomyocyte regeneration
 Gu, Y., Yi, F., Liu, G.-H., and Izpisua Belmonte, J.C.
Cell Research. (2012). 23(3):314-6.
260. N-acetylcysteine protects induced pluripotent stem cells from in vitro stress: impact on differentiation outcome
 Berniakovich, I., Laricchia-Robbio, L., and Izpisua Belmonte, J.C.
The International Journal of Developmental Biology. (2012). 56:729 - 735.
261. Compound screening platform using human induced pluripotent stem cells to identify small molecules that promote chondrogenesis
 Yang, S.-L., Harnish, E., Leeuw, T., Dietz, U., Batchelder, E., Wright, P.S., Peppard, J., August, P., Volle-Challier, C., Bono, F., Herbert, J.-M. and Izpisua Belmonte, J.C.
Protein & Cell. (2012). 3(12):934-42.
262. Hypoxia induces myocardial regeneration in zebrafish
 Jopling, C., Suñe, G., Faucherre, A., Fabregat, C. and Izpisua Belmonte, J.C.
Circulation. (2012). 126:3017-3027.
263. Cell cycle gene-specific control of transcription has a critical role in proliferation of primordial germ cells
 Okamura, D., Maeda, I., Taniguchi, H., Tokitake, Y., Ikeda, M., Ozato, K., Mise, N., Abe, K., Noce, T., Izpisua Belmonte, J.C., and Matsui, Y.
Genes and Development. (2012). 26(22):2477-82.
264. New march towards the regeneration of sensation and cognition: hear more, see more and learn more
 Zhang, K., Yi, F., Liu, G.-H., and Izpisua Belmonte, J.C.
Journal of Molecular Cell Biology. (2012). 5(2):151-3.
265. Conversion of human fibroblasts to angioblast-like progenitor cells
 Kurian, L., Sancho-Martinez, I., Nivet, E., Aguirre, A., Moon, K., Pendaries, C., Volle-Challier, C., Bono, F., Herbert, J.-M., Pulecio, J., Xia, Y., Li, M., Montserrat, N., Ruiz, S., Dubova, I., Rodriguez,

- C., Denli, A.M., Boscolo, F.S., Thiagarajan, R.D., Gage, F., Loring, J.F., Laurent, L.C., and Izpisua Belmonte, J.C.
Nature Methods. (2012). 10(1):77-83.
266. Reprogramming development and aging: cell differentiation as a malleable process
 Izpisua Belmonte, J.C.
Current Opinion in Cell Biology. (2012). 24(6):713-5.
267. Cut and Paste: restoring cellular function by gene correction
 Liu, G-H, Sancho-Martinez, I., and Izpisua Belmonte, J.C.
Cell Research. (2012) 22(2): 283–284
268. Resetting Parkinson’s disease patient-derived cells to unveil new pathological marks
 Nivet, E., Liu, G.-H., Montserrat, N., and Izpisua Belmonte, J.C.
Médecine/Sciences. (2013). (4):353-5.
269. The microenvironment and resistance to personalized cancer therapy
 Masuda, S. and Izpisua Belmonte, J.C.
Nature Reviews Clinical Oncology. (2013). 10(2):79.
270. Characterization of pluripotent stem cells
 Marti, M., Mulero, L., Pardo, C., Morera, C., Carrió, M., Laricchia-Robbio, L., and Izpisua Belmonte, J.C.
Nature Protocols. (2013). 8(2):223-53.
271. Analysis of protein coding mutations in hiPSCs and their possible functions during somatic cell reprogramming
 Ruiz, S., Gore, A., Li, Z., Panopoulos, A.D., Montserrat, N., Fung, H.-L., Giorgetti, A., Bilic, J., Batchelder, E.M., Zaehres, H., Schöler, H.R., Zhang, K., and Izpisua Belmonte, J.C.
Nature Communications. (2013). 4:1382.
272. Switching cell fate, ncRNAs coming to play
 Guan, D., Zhang, W., Zhang, W., Liu, G.-H., and Izpisua Belmonte, J.C.
Cell Death and Disease. (2013). 4:e464.
273. Conversion of pericytes to neurons: a new guest at the reprogramming convention
 Nivet, E., Sancho-Martinez, I., and Izpisua Belmonte, J.C.
Stem Cell Research & Therapy. (2013). 4(1):2.
274. Surf the Waves of Reprogramming
 Sancho-Martinez, I. and Izpisua Belmonte, J.C.
Nature. (2013). 493:310-311.
275. Prospects on hESC-derived pancreatic progenitor expansion
 Sui, L., Liu, G.-H., and Izpisua Belmonte, J.C.
Cell Research. (2013). 23(5):592-4.
276. Autophagic control of cell “stemness”
 Pan H., Cai N., Li M., Liu, G.-H., and Izpisua Belmonte, J.C.
EMBO Molecular Medicine. (2013). 5, 327–331.
277. Dedifferentiation, Transdifferentiation, and Reprogramming: Future Directions in Regenerative Medicine
 Eguizabal, C., Montserrat, N., Veiga, A., and Izpisua Belmonte, J.C.
Seminars in Reproductive Medicine. (2013). 31:82–94.

278. Activin/ BMP2 chimeric ligands direct adipose-derived stem cells to chondrogenic differentiation
Peran, M., Ruiz, S., Kwiatkowski, W., Marchal, J.A., Yang, S-L., Aranega, A., Choe, S. , and Izpisua Belmonte, J.C.
Stem Cell Research. (2013). 10, 464-476.
279. Reprogramming Towards Heart Regeneration: Stem Cells and Beyond
Aguirre, A., Sancho-Martinez, I., and Izpisua Belmonte, J.C.
Cell Stem Cell (2013). 12(3):275-84.
280. Correspondence: Cotransplantation of MSCs and HSCs
Masuda, S. and Izpisua Belmonte, J.C.
Transplantation (2013). 95(10):e62-3.
281. Polycomb complex recruitment in pluripotent stem cells
Barrero, M.J. and Izpisua Belmonte, J.C.
Nature Cell Biology (2013). 15(4):348-350.
282. Correspondence: At the crossroads of targeted treatment and resistance in melanoma
Masuda, S. and Izpisua Belmonte, J.C.
The Lancet Oncology (2013). 14(4): e136-e137.
283. Macrohistone Variants Preserve Cell Identity by Preventing the Gain of H3K4me2 during
Reprogramming to Pluripotency
Barrero, M.J., Sese, B., Kuebler, B., Bilic, J., Boue, S., Marti, M., and Izpisua Belmonte, J.C.
Cell Reports (2013). 3(4):1005-11.
284. Isolation and *in vitro* culture of primary cardiomyocytes from adult zebrafish hearts
Sander, V., Sune, G., Jopling, C., Morera, C., and Izpisua Belmonte, J.C.
Nature Protocols. (2013). 8(4):800-809.
285. Niche-less maintenance of HSCs by 2i
Masuda, S., Li, M., and Izpisua Belmonte, J.C.
Cell Research (2013). (4):458-9.
286. SMYD2 is induced during differentiation and participates in early development.
Sese, B., Barrero, M.J., Fabregat, M.C., Sander, V. and Izpisua Belmonte, J.C.
International Journal of Developmental Biology. (2013) 57:357-364.
287. Macro histone variants are critical for the differentiation of human pluripotent cells.
Barrero, M.J., Sese, B., Marti, M. and Izpisua Belmonte, J.C.
Journal of Biological Chemistry. (2013) 288(22):16110-6.
288. Direct conversion of human fibroblasts into retinal pigment epithelium-like cells by defined factors
Zhang, K., Liu, G.-H., Yi, F., Montserrat, N., Hishida, T., Rodriguez Esteban, C. and Izpisua Belmonte, J.C.
Protein & Cell (2013). 5:48-58.
289. “TET-on” pluripotency
Wang, P., Qu, J., Wu, M.Z., Zhang, W., Liu, G.-H. and Izpisua Belmonte, J.C.
Cell Research (2013). 23(7):863-5.
290. Mitochondrial regulation in pluripotent stem cells
Xu, X., Duan, S., Yi, F., Ocampo, A., Liu, G.-H. and Izpisua Belmonte, J.C.
Cell Metabolism (2013). 18(3):325-32.
291. Concealing cellular defects in pluripotent stem cells
Zhang, W., Qu, J., Suzuki, K., Liu, G.-H. and Izpisua Belmonte, J.C.

- Trends in Cell Biology** (2013). 23(12):587-592.
292. Reprogramming of human fibroblasts to pluripotency with lineage specifiers.
Montserrat, N., Nivet, E., Sancho-Martinez, I., Hishida, T., Kumar, S., Miquel, L., Cortina, C., Hishida, Y., Xia, Y., Rodriguez Esteban, C. and Izpisua Belmonte, J.C.
Cell Stem Cell (2013). 13(3):341-50.
293. Global DNA methylation and transcriptional analyses of human ESC-derived cardiomyocytes.
Gu, Y., Liu, G.-H., Plongthongkum, N., Benner, C., Yi, F., Qu, J., Suzuki, K., Yang, J., Zhang, W., Li, M., Montserrat, N., Crespo, I., Del Sol, A., Esteban Rodriguez, C., Zhang, K. and Izpisua Belmonte, J.C.
Protein & Cell (2013). 5:59-68.
294. Advances in cellular reprogramming: Moving toward a reprieve from immunogenicity
Gallegos, T., Sancho-Martinez, I. and Izpisua Belmonte, J.C.
Immunology Letters (2013). 155(1-2):14-7.
295. Regulation of Somatic Stem Cell Function by DNA Methylation and Genomic Imprinting
Li, M., Kim, N.Y., Masuda, S. and Izpisua Belmonte, J.C.
Cell & Tissue Transplantation & Therapy (2013). 2013:5 19-23.
296. A cut above the rest: targeted genome editing technologies in human pluripotent stem cells
Li, M., Suzuki, K., Kim, N.Y., Liu, G.-H. and Izpisua Belmonte, J.C.
Journal of Biological Chemistry (2013). 289(8):4594-9.
297. Will SCNT-ESCs Be Better than iPSCs for Personalized Regenerative Medicine?
Sancho-Martinez, I. and Izpisua Belmonte, J.C.
Cell Stem Cell (2013). (2):141-2
298. MCAD Mediated Intercellular Interactions Activate Satellite Cell Division
Marti, M., Montserrat, N., Pardo, C., Mulero, L., Miquel-Serra, L., Miquel-Cavaco, A., Vaquero, J.A., Kuebler, B., Morera, C., Barrero, M.J. and Izpisua Belmonte, J.C.
Journal of Cell Science (2013). 126(Pt 22):5116-31.
299. Chemically induced pluripotent stem cells (CiPSCs): a transgene-free approach
Masuda, S., Wu, J., Hishida, T., Pandian, G., Sugiyama, H. and Izpisua Belmonte, J.C.
Journal of Molecular Cell Biology (2013) 5(5):354-5.
300. Oncofetal Gene SALL4 in Aggressive Hepatocellular Carcinoma
Masuda, S., Suzuki, K. and Izpisua Belmonte, J.C.
The New England Journal of Medicine (2013) 369;12: 1171.
301. Heart Regeneration: A Tale of Cell Reprogramming
Aguirre, A., Sancho-Martinez, I., and Izpisua Belmonte, J.C.
Circulation Research (2013). 113:1109-1111.
302. Gating pluripotency via nuclear pores
Yang, J., Cai, N., Yi, F., Liu, G.-H., Qu, J. and Izpisua Belmonte, J.C.
Trends in Molecular Medicine (2013) 20(1):1-7.
303. Directed differentiation of human pluripotent cells to ureteric bud kidney progenitor-like cells
Xia, Y., Nivet, E., Sancho-Martinez, I., Gallegos, T., Suzuki, K., Okamura, D., Wu, M.-Z., Dubova, I., Rodriguez Esteban, C., Montserrat, N., Campistol, J.M. and Izpisua Belmonte, J.C.
Nature Cell Biology (2013) 15(12):1507-15.
304. MicroRNAs Contribute to iPSC-Somatic Donor Memory
Vitaloni, M., Pulecio, J., Bilic, J., Kuebler, B., Laricchia-Robbio, L. and Izpisua Belmonte, J.C.
Journal of Biological Chemistry (2013) 289(4):2084-98.

305. Generation of iPSCs from Genetically Corrected Brca2 Hypomorphic Cells: Implications in Cell Reprogramming and Stem Cell Therapy
Navarro, S., Moleiro, V., Molina-Estevez, F.J., Lozano, M.L., Chinchon, R., Almarza, E., Quintana-Bustamante, O., Mostoslavsky, G., Maetzig, T., Galla, M., Heinz, N., Schiedlmeier, B., Torres, Y., Modlich, U., Samper, E., Segovia, J.C., Raya, A., Güenechea, G., Izpisua Belmonte, J.C., and Bueren, J.A.
Stem Cells (2014) 32(2):436-46.
306. Regenerative medicine: Transdifferentiation in vivo
Fu, L., Zhu, X., Yi, F., Liu, G.-H. and Izpisua Belmonte, J.C.
Cell Research (2014) 24:141-142.
307. Ageing: Genetic rejuvenation of old muscle
Li, M. and Izpisua Belmonte, J.C.
Nature (2014) 506(7488):304-5.
308. Designer nodal/BMP2 chimeras mimic nodal signaling, promote chondrogenesis, and reveal a BMP2-like structure.
Esquivies, L., Blackler, A., Peran, M., Rodriguez-Esteban, C., Izpisua Belmonte, J.C., Booker, E., Gray, P.C., Ahn, C., Kwiatkowski, W. and Choe, S.
Journal of Biological Chemistry. (2014) 289(3):1788-97.
309. Direct reprogramming of porcine fibroblasts to neural progenitors
Xu, X.-L., Yang, J.-P., Fu, L.-N., Ren, R.-T., Yi, F., Suzuki, K., Liu, K., Ding, Z.-C., Qu, J., Zhang, W.-Q., Li, Y., Yuan, T.-T., Yuan, G.-H., Sui, L.-N., Guan, D., Duan, S.-L., Pan, H.-Z., Wang, P., Zhu, X.-P., Montserrat, N., Li, M., Bai, R.-J., Liu, L., Izpisua Belmonte, J.C. and Liu, G.-H.
Protein & Cell. (2014) 5:4-7.
310. The Lysine-Specific Demethylase 1 is a novel substrate of protein kinase CK2
Costa, R., Arrigoni, G., Cozza, G., Lolli, G., Battistutta, R., Izpisua Belmonte, J.C., Pinna, L.A. and Sarno, S.
BBAPAP (2014) 1844:722-9.
311. Re: Serum miR-21 as a diagnostic and prognostic biomarker in colorectal cancer.
Masuda, S. and Izpisua Belmonte, J.C.
Journal of the National Cancer Institute (2014) 106(3):djt457.
312. Mathematical approaches to modeling development and reprogramming
Morris, R., Sancho-Martinez, I., Sharpee, T.O. and Izpisua Belmonte, J.C.
PNAS (2014) 111(14):5076-82.
313. A chemical approach to “rewire” neural progenitor cells
Wu, M.-Z., Li, M., Liu, G.-H. and Izpisua Belmonte, J.C.
Cell Research. (2014) 24(6):641-2.
314. New Strategies in Kidney Regeneration and Tissue Engineering
Uzarski, J.S., Xia, Y., Izpisua Belmonte, J.C. and Wertheim, J.A.
Current Opinion in Nephrology and Hypertension (2014) 23(4):399-405.
315. Targeted gene correction in human disease-specific induced pluripotent stem cells minimally impacts whole-genome mutational load
Suzuki, K., Yu, C., Qu, J., Li, M., Yao, X., Yuan, T., Goebel, A., Tang, S., Ren, R., Aizawa, E., Zhang, F., Xu, X., Soligalla, R.D., Chen, F., Kim, J., Kim, N.Y., Liao, H.-K., Benner, C., Rodriguez Esteban, C., Kin, Y., Liu, G.-H., Li, Y. and Izpisua Belmonte, J.C.
Cell Stem Cell. (2014) 15:31-36.

316. A Novel Suppressive Effect of Alcohol Dehydrogenase 5 in Neuronal Differentiation
Wu, K., Ren, R., Su, W., Wen, B., Zhang, Y., Yi, F., Qiao, X., Yuan, T., Wang, J., Liu, L., Izipisua Belmonte, J.C., Liu, G.-H. and Chen, C.
Journal of Biological Chemistry. (2014). 289(29):20193-9.
317. Conversion of human fibroblasts into monocyte-like progenitor cells
Pulecio, J., Nivet, E., Sancho-Martinez, I., Vitaloni, M., Guenechea, G., Xia, Y., Kurian, L., Dubova, I., Bueren, J., Laricchia-Robbio, L. and Izipisua Belmonte, J.C.
Stem Cells. (2014). 32:2923–2938.
318. Modeling Fanconi Anemia pathogenesis and therapeutics using integration-free patient-derived iPSCs.
Liu, G.-H., Suzuki, K., Li, M., Qu, J., Montserrat, N., Tarantino, C., Gu, Y., Yi, F., Xu, X., Zhang, W., Ruiz, S., Plongthonglum, N., Zhang, K., Masuda, S., Nivet, E., Tsunekawa, Y., Soligalla, R.D., Goebel, A., Aizawa, E., Kim, N.Y., Kim, J., Dubova, I., Li, Y., Ren, R., Benner, C., del Sol, A., Bueren, J., Trujillo, J.P., Surralles, J., Cappelli, E., Dufour, C., Rodriguez Esteban, C. and Izipisua Belmonte, J.C.
Nature Communications. (2014) 5:4330.
319. Regeneration: making muscle from hPSCs
Zhu, X., Fu, L., Yi, F., Liu, G.-H., Ocampo, A., Qu, J. and Izipisua Belmonte, J.C.
Cell Research. (2014) 24:1159-1161.
320. A recipe for targeted therapy in prostate cancer
Masuda, S. and Izipisua Belmonte, J.C.
Nature Reviews Urology. (2014) 11(7):419.
321. Worming towards transdifferentiation, one (epigenetic) step at a time
Beyret, E. and Izipisua Belmonte, J.C.
Developmental Cell. 30:641-642.
322. Re: Stem Cells Loaded with Multimechanistic Oncolytic Herpes Simplex Virus Variants for Brain Tumor Therapy
Krause, M., Sancho-Martinez, I. and Izipisua Belmonte, J.C.
Journal of the National Cancer Institute. (2014) 107(1):368.
323. Reprogramming by lineage specifiers: Blurring the lines between pluripotency and differentiation
Sancho-Martinez, I., Ocampo, A. and Izipisua Belmonte, J.C.
Current Opinion in Genetics and Development. (2014) 28:57–63.
324. *In vivo* activation of a conserved microRNA program induces robust mammalian heart regeneration.
Aguirre, A., Montserrat, N., Zachiggnna, S., Nivet, E., Hishida, T., Krause, M.N., Kurian, L., Ocampo, A., Vazquez-Ferrer, E., Rodriguez Esteban, C., Kumar, S., Moresco, J.J., Yates, J.R., Sancho-Martinez, I., Giacca, M. and Izipisua Belmonte, J.C.
Cell Stem Cell (2014) 15, 589–604.
325. La reprogramación regenerativa abre las puertas a nuevas y revolucionarias terapias para el tratamiento de enfermedades cardíacas
Aguirre, A., Montserrat, N. and Izipisua Belmonte, J.C
Genetica Medica News (2014) 11:19-20.
326. Efficient generation of integration-free iPSCs from non-invasively acquired human somatic cells
Ding, Z., Sui, L., Ren, R., Liu, Y., Xu, X., Fu, L., Bai, R., Yuan, T., Hao, Y., Pan, H., Zhang, W., Liu, W., Yu, H., Yu, X., Yang, Z., Li, J., Wang, X., Izipisua Belmonte, J.C., Liu, G.-H., Yi, F. and Qu, J.
Protein & Cell (2014) ePub ahead of print.
327. A designer's guide to pluripotency
Wu, J., and Izipisua Belmonte, J.C.

- Nature** (2014) 516, 172-173.
328. 4 Developmental Outcomes and Efficiency of Two CRISPR/Cas9 Microinjection Methods in Bovine Zygotes
Bogliotti, Y.S., Vilariño, M., Chitwood, J.L., Wu, J., Mutto, A., Mucci, N., Belmonte, J.C. and Ross, P.J.
Reproduction, Fertility and Development 27, 94
329. Roles for noncoding RNAs in cell-fate determination and regeneration
Li, M., and Izpisua Belmonte, J.C.
Nature Structural & Molecular Biology, (2015) 22, 2-4.
330. Stem cells. Holding your breath for longevity.
Ocampo, A. and Izpisua Belmonte, J.C.
Science (2015) 347(6228):1319-20.
331. Efficient delivery and functional expression of transfected modified mRNA in human Embryonic Stem Cell-derived Retinal Pigmented Epithelial cells
Hansson, M. L., Albert, S., Somermeyer, L. G., Peco, R., Mejía-Ramirez, E., Montserrat, N., and Izpisua Belmonte, J.C.
Journal of Biological Chemistry (2015) 290(9):5661-72.
332. Use of the CRISPR/Cas9 system as an intracellular defense against HIV-1 infection in human cells
Liao, H.-K., Gu, Y., Diaz, A., Marlett, J., Takahashi, Y., Li, M., Suzuki, K., Xu, R., Hishida, T., Chang, C.-J., Young, J., and Izpisua Belmonte, J.C.
Nature Communications (2015) 10;6:6413.
333. Regenerative medicine: targeted genome editing *in vivo*
Wang, L., Wu, J., Fang, W., Liu, G.-H., and Izpisua Belmonte, J.C.
Cell Research (2015) 25(3):271-2.
334. Identification of Novel Long Noncoding RNAs Underlying Vertebrate Cardiovascular Development
Kurian, L., Aguirre, A., Sancho-Martinez, I., Benner, C., Hishida, T., Nguyen, T.B., Reddy, P., Nivet, E., Krause, M.N., Nelles, D.A., Rodriguez Esteban, C., Campistol, J., Yeo, G.W. and Izpisua Belmonte, J.C.
Circulation (2015) 131(14):1278-90.
335. Oxidative Stress Mediates Cardiomyocyte Apoptosis in a Human Model of Danon Disease and Heart Failure
Hashem, S.I., Perry, C.N., Bauer, M., Han, S., Clegg, S.D., Ouyang, K., Deacon, D.C., Spinharney, M., Panopoulos, A.D., Izpisua Belmonte, J.C., Frazer, K.A., Chen, J., Gong, Q., Zhou, Z., Chi, N.C., Adler, E.D.
Stem Cells (2015) 33(7):2343-50.
336. Brains, Genes and Primates
Izpisua Belmonte, J.C., Callaway, E.M., Churchland, P., Caddick, S.J., Feng, G., Homanics, G.E., Lee, K-F, Leopold, D.A., Miller, C.T., Mitchell, J.F., Mitalipov, S., Muotri, A.R., Movshon, J.A., Okano, H., Reynolds, J.H., Ringach, D., Sejnowski, T.J., Silva, A.C., Strick, P.L., Wu, J. and Zhang, F.
Neuron (2015) 86:617-631.
337. An alternative pluripotent state confers interspecies chimaeric competency
Wu, J., Okamura, D., Li, M., Suzuki, K., Luo, C., Ma, L., He, Y., Li, Z., Benner, C., Tamura, I.,

- Krause, M.N., Nery, J.R., Du, T., Zhang, Z., Hishida, T., Takahashi, Y., Aizawa, E., Kim, N.Y., Lajara, J., Guillen, P., Campistol, J.M., Rodriguez Esteban, C., Ross, P., Saghatelian, A., Ren, B., Ecker, J. and Izpisua Belmonte, J.C. (2015)
Nature (2015) 521:316-321.
338. Selective elimination of mitochondrial mutations in the germline by genome editing
Reddy, P., Ocampo, A., Suzuki, K., Luo, J., Bacman, S.R., Williams, S.L., Sugawara, A., Okamura, D., Tsunekawa, Y., Wu, J., Lam, D., Xiong, X., Montserrat, N., Rodriguez Esteban, C., Liu, G.-H., Sancho-Martinez, I., Manau, D., Civico, S., Cardellach, F., del Mar O’Callaghan, M., Campistol, J., Zhao, H., Campistol, J.M., Moraes, C.T. and Izpisua Belmonte, J.C.
Cell (2015) 161: 459-469.
339. A Human Stem Cell Model of Werner Syndrome Uncovers Heterochromatin Degeneration as an Aging Driver
Zhang, W., Li, J., Suzuki, K., Qu, J., Wang, P., Zhou, J., Liu, X., Ren, R., Xu, X., Ocampo, A., Yuan, T., Yang, J., Li, Y., Shi, L., Guan, D., Pan, H., Duan, S., Ding, Z., Li, M., Yi, F., Bai, R., Wang, Y., Chen, C., Yang, F., Li, X., Wang, Z., Aizawa, E., Goebel, A., Soligalla, R.D., Reddy, P., Rodriguez Esteban, C., Tang, F., Liu, G.-H. and Izpisua Belmonte, J.C.
Science (2015) 348(6239):1160-3.
340. Metabolic Rescue in Pluripotent Cells from Patients with mtDNA Disease
Ma, H., Folmes, C. D.L., Wu, J., Morey, R., Mora-Castilla, S., Ocampo, A., Ma, L., Poulton, J., Wang, X., Ahmed, R., Kang, E., Lee, Y., Hayama, T., Li, Y., Van Dyken, C., Gutierrez, N. M., Tippner-Hedges, R., Koski, A., Mitalipov, N., Amato, P., Wolf, D.P., Huang, T., Terzic, A., Laurent, L., Izpisua Belmonte, J.C. and Mitalipov, S.
Nature (2015) 524:234-238.
341. Stem cell, CRISPR and HIV
Liao, H.K., Li, M., Martinez Martinez, L. and Izpisua Belmonte, J.C.
Cell Cycle (2015) 14:13, 1-2
342. Olfactory stem cells reveal MOCOS as a new player in autism spectrum disorders
Feron, F., Gepner, B., Lacassagne, E., Stephan, D., Mesnage, B., Blanchard, M.-P., Boulanger, N., Tardif, C., Deveze, A., Rousseau, S., Suzuki, K., Izpisua Belmonte, J.C., Khrestchatisky, M, Nivet, E. and Erard Garcia, M.
Molecular Psychiatry (2015) August 4 Epub Ahead of Print.
343. Betaglycan knock-down causes embryonic angiogenesis defects in zebrafish
Kamaid, A., Molina-Villa, T., Mendoza, V., Pujades, C., Maldonado, E., Izpisua Belmonte, J.C. and Lopez-Casillas, F.
The Journal of Genetics and Development (2015) 53: 583–603.
344. Hypoxia drives breast tumor malignancy through a TET-TNF α -p38-MAPK signalling axis.
Wu, M.-Z., Chen, S.-F., Nieh, S., Benner, C., Ger, L.-P., Jan, C.-I., Ma, L., Chen, C.-H., Hishida, T., Chang, H.-T., Lin, Y.-S., Montserrat, N., Gascon, P., Sancho-Martinez, I., and Izpisua Belmonte, J.C.,
Cancer Research (2015) 75(18):3912-24.
345. Functional compensation between Myc and PI3K signaling supports self-renewal of embryonic stem cells.
Hishida T, Nakachi Y, Mizuno Y, Katano M, Okazaki Y, Ema M, Takahashi S, Hirasaki M, Suzuki A, Ueda A, Nishimoto M, Hishida-Nozaki Y, Vazquez-Ferrer E, Sancho-Martinez I,

- Izpisua Belmonte JC, Okuda A.
Stem Cells (2015) 33(3):713-25.
346. Creating Patient-specific Neural Cells for the In Vitro Study of Brain Disorders
 Brennand, K., Marchetto, M. C., Benvenisty, N., Brustle, O., Ebert, A., Izpisua Belmonte, J. C., Kaykas, A., Lancaster, M., Livesey, R., McConnell, M., McKay, R., Morrow, E., Muotri, A., Panchision, D. M., Rubin, L. L., Sawa, A., Soldner, F., Song, H., Studer, L., Temple, S., Vaccarino, F., Wu, J., Vanderhaeghen, P., Gage, F. H., Jaenisch, R.
Stem Cell Reports (2015) 5(6):933-45.
347. Activin A/BMP2 chimera AB235 drives efficient re differentiation of long term cultured autologous chondrocytes
 Jimenez, G., Lopez Ruiz, E., Kwiatkowski, W., Montanez, E., Arrebola, F., Carrillo, E., Gray, P., Izpisua Belmonte, J.C., Choe, S., Peran, M. and Marchal, J.A.
Scientific Reports (2015) 5:16400.
348. Metabolic Exit from naïve pluripotency
 Wu, J. and Izpisua Belmonte, J.C.
Nature Cell Biology (2015) 17(12):1519-21.
349. Dynamic Pluripotent Stem Cell States and Their Applications
 Wu, J. and Izpisua Belmonte, J.C.
Cell Stem Cell (2015) 17:509-525.
350. PTEN deficiency reprograms human neural stem cells towards a glioblastoma stem cell-like phenotype
 Duan, S., Yuan, G., Liu, X., Ren, R., Li, J., Zhang, W., Wu, J., Xu, X., Fu, L., Li, Y., Yang, J., Zhang, W., Bai, R., Yi, F., Suzuki, K., Gao, H., Rodriguez Esteban, C., Zhang, C., Izpisua Belmonte, J.C., Chen, Z., Wang, X., Jiang, T., Qu, J., Tang, F. and Liu, G.-H.
Nature Communications (2015) 6:10068.
351. Establishment of human iPSC-based models for the study and targeting of glioma initiating cells
 Sancho-Martinez, I., Nivet, E., Xia, Y., Hishida, T., Aguirre, A., Ocampo, A., Ma, L., Morey, R., Krause, M.N., Zembrzycki, A., Ansorge, O., Vazquez-Ferrer, E., Dubova, I., Reddy, P., Lam, D., Hishida, Y., Wu, M.-Z., Rodriguez Esteban, C., O'Leary, D., Wahl, G.M., Verma, I. M., Laurent, L. C. and Izpisua Belmonte, J.C.
Nature Communications (2015) 7:10743.
352. Mending a Faltering Heart
 Li, M. and Izpisua Belmonte, J.C.
Circulation Research (2015) 118(2):344-51.
353. Understanding the molecular mechanisms of reprogramming
 Krause, M.N., Sancho-Martinez, I and Izpisua Belmonte, J.C.
BBRC (2015) pii: S0006-291X(15)30989-X.
354. Regenerative strategies for kidney engineering
 Montserrat, N., Garreta, E. and Izpisua Belmonte, J.C.
FEBS Journal (2016) ePub ahead of Print.
355. The XEN of Reprogramming
 Beyret, E. and Izpisua Belmonte, J.C.
Cell Research (2016) 26(2):147-8.
356. Modeling xeroderma pigmentosum associated neurological pathologies with patients-derived

iPSCs

Fu, L., Xu, X., Ren, R., Wu, J., Zhang, W., Yang, J., Ren, X., Wang, S., Zhao, Y., Sun, L., Yu, Y., Wang, Z., Yang, Z., Yuan, Y., Qiao, J., Izpisua Belmonte, J.C., Qu, J. and Liu, G.

Protein Cell (2016) Epub ahead of print Feb. 13

357. The Molecular Harbingers of Early Mammalian Embryo Patterning

Wu, J. and Izpisua Belmonte, J.C.

Cell (2016) 165:13-15.

358. Loss of MAX results in meiotic entry in mouse embryonic and germline stem cells

Suzuki, A., Hirasaki, M., Hishida, T., Wu, D., Okamura, D., Ueda, A., Nishimoto, M., Nakachi, Y., Mizuno, Y., Okazaki, Y., Matsui, Y., Izpisua Belmonte, J.C. and Okuda, A.

Nature Communications (2016) 7:11056.

359. An Overview of Mammalian Pluripotency

Wu, J., Yamauchi, T. and Izpisua Belmonte, J.C.

Development (2016) 143:1644-8.

360. Garreta, E., de Oñate, L., Fernandez-Santos, M.E., Oria Fernandez, R., Tarantino, C., Climent, A., Marco, A., Samitier, M., Martinez, E., Valls-Margarit, M., Matasanz, R., Taylor, D.A., Fernandez Aviles, F., Izpisua Belmonte, J.C. and Montserrat, N.

Myocardial Commitment from Human Pluripotent Stem Cells: Rapid Production of Human Heart Grafts

Journal of Biomaterials (2016) 98:64-78.

361. Eguizabal, C., Herrera, L., de Oñate, L., Montserrat, N., Hajkova, P. and Izpisua Belmonte, J.C.

Epigenetic Changes Characterization During Human Gonadal Primordial Germ Cells Reprogramming

Stem Cells (2016) Jun 14 Epub Ahead of Print.

362. Li, M. and Izpisua Belmonte, J.C.

Looking to the future following 10 years of induced pluripotent stem cell technologies

Nature Protocols (2016) 11:1579-85.

363. Sancho-Martinez, I. and Izpisua Belmonte, J.C.

Reprogramming strategies for the establishment of novel human cancer models

Cell Cycle (2016) Jun Epub Ahead of Print.

364. Stem cells: a renaissance in human biology research

Wu, J. and Izpisua Belmonte, J.C.

Cell (2016) 165:1572-85.

365. Anti-aging strategies based on cellular reprogramming

Ocampo, A., Reddy, P. and Izpisua Belmonte, J.C.

Trends in Molecular Medicine (2016) 22:725-38.

366. Cellular Metabolism and Induced Pluripotency

Wu, J., Ocampo, A. and Izpisua Belmonte, J.C.

Cell (2016) 166:1371–1385.

367. Capture of functional mammalian nephron progenitors in culture

Li, Z., Araoka, T., Wu, J., Liao, H.-K., Li, M., Lazo, M., Zhou, B., Sui, Y., Wu, M.-Z., Tamura, I., Xia, Y., Beyret, E., Matsusaka, T., Pastan, I., Rodriguez Esteban, C., Guillen, I., Guillen, P., Campistol, J.M. and Izpisua Belmonte, J.C.

Cell Stem Cell (2016) S1934-5909(16)30211-9.

368. Anti-aging strategies based on cellular reprogramming
Wu, J., Platero Luengo, A., Gil, M.A., Suzuki, K., Cuello, C., Morales Valencia, M., Parrilla, I., Martinez, C.A., Nohalez, A., Roca, J., Martinez, E.A. and Izpisua Belmonte, J.C.
Reproduction in Domestic Animals (2016) 51 Suppl 2:18-24.
369. Stem Cells and Interspecies Chimeras
Wu, J., Greely, H.T., Jaenisch, R., Nakauchi, H., Rossant, J., and Izpisua Belmonte, J.C.
Nature (2016) 540:51-59.
370. Mitochondrial replacement in human oocytes carrying pathogenic mitochondrial DNA mutations.
Kang, E., Wu, J., Marti Gutierrez, N., Koski, A., Tippner-Hedges, R., Agaronyan, K., Platero Luengo, A., Martinez Redondo, P., Ma, H., Lee, Y., Hayama, T., Van Dyken, C., Wang, X., Luo, S., Ahmed, R., Li, Y., Ji, D., Kayali, R., Cinnigolu, C., Olson, S., Jensen, J., Battaglia, D., Lee, D., Wu, D., Wolf, D.P., Huang, T., Dmitry, T., Izpisua Belmonte, J.C., Amato, P. and Mitalipov, S.
Nature (2016) 540(7632):270-275.
371. *In vivo* genome editing via CRISPR-Cas9 mediated homology-independent targeted integration
Suzuki, K., Tsunekawa, Y., Hernandez-Benitez, R., Wu, J., Zhu, J., Kim, E., Hatanaka, F., Yamamoto, M., Araoka, T., Li, Z., Kurita, M., Hishida, T., Li, M., Aizawa, E., Chen, S., Goebel, A., Soligalla, R.D., Qu, J., Jiang, T., Skowronska-Krawczyk, D., Rodriguez Esteban, C., Lajara, J., Nuñez, E., Guillen, P., Campistol, J.M., Matsuzaki, F., Liu, G.-H., Magistretti, P., Zhang, K., Callaway, E., Zhang, K and Izpisua Belmonte, J.C.
Nature (2016) 540(7631):144-149.
372. Metabolite Network Analysis Reveals Role of MDM2 in Diabetic Nephropathy
Saito, R., Rocanin-Arjo, A., You, Y.-H., Darshi, M., Van Espen, B., Pu, M., Romoli, S., Natarajan, L., Ju, W., Kretzler, M., Nelson, R., Ono, K., Thomasova, D., Mulay, S., Ideker, T., Izpisua Belmonte, J.C., Anders, H.J. and Sharma, K.
Journal of Clinical Investigation (2016) 1(17):e87877.
373. Human Organs from Animal Bodies
Izpisua Belmonte, J.C.
Scientific American (2016) 315(5):32-37.
374. Genome editing in human pluripotent stem cells: a systematic approach unrevealing pancreas development and disease.
Garreta, E., Marco, A., Izpisua Belmonte, J.C. and Montserrat, N.
Stem Cell Investigation (2016) 14;3:76.
375. *In vivo* amelioration of aging hallmarks by partial reprogramming
Ocampo, A., Reddy, P., Martinez-Redondo, P., Platero-Luengo, A., Hatanaka, F., Hishida, T., Li, M., Lam, D., Kurita, M., Beyret, E., Araoka, T., Vazquez-Ferrer, E., Donoso, D., Roman, J.L., Xu, J., Rodriguez Esteban, C., Nuñez, G., Nuñez-Delicado, E., Campistol, J.M., Guillen, I., Guillen, P. and Izpisua Belmonte, J.C.
Cell (2016) 167(7):1719-1733.e12.
376. The Ground Rules of Pluripotency Regulatory Networks
Li, M. and Izpisua Belmonte, J.C.
Nature Reviews Genetics (2017) ePub Ahead of Print Jan 3.
377. Interspecies chimerism with human pluripotent stem cells

- Wu, J., Platero Luengo, A., Sakurai, M., Sugawara, A., Gil, M.A., Yamauchi, T., Suzuki, K., Soledad Bogliotti, Y., Cuello, C., Morales Valencia, M., Okamura, D., Luo, J., Vilarino, M., Parrilla, I., Soto, D., Martinez, C.A., Hishida, T., Martinez, L., Sanchez, S., Wang, H., Nohalez, A., Suzuki, E., Martinez-Redondo, P., Ocampo, A., Reddy, P., Roca, J., Maga, E.A., Rodriguez Esteban, C., Berggren, W.T., Nuñez, E., Lajara, J., Guillen, I., Guillen, P., Campistol, J.M., Martinez, E.A., Ross, P.J. and Izpisua Belmonte, J.C.
Cell (2017) 168(3):473-486.e15.
378. Non-coding microRNAs for cardiac regeneration: exploring novel alternatives inducing heart healing
Garreta, E., Pardo, P., Izpisua Belmonte, J.C. and Montserrat, N.
Non-coding RNA Research (2016) In Press.
379. Developmental Competence of Porcine Genome Edited Zygotes
Gil, M.A., Martinez, C.A., Nohalez, A., Parrilla, I., Roca, J., Wu, J., Ross, P.J., Cuello, C., Izpisua, J.C. and Martinez, E.A.
Molecular Reproduction and Development (2017) In Press.
380. CRISPR/Cas9-mediated Targeted Gene Correction in Amyotrophic Lateral Sclerosis Patient iPSCs
Wang, L., Yi, F., Fu, L., Yang, J., Wang, S., Wang, Z., Suzuki, K., Qiao, J., Izpisua Belmonte, J.C., Yang, Z., Yuan, Y., Qu, J. and Liu, G.-H.
Protein and Cell (2017) In Press.
381. Expressional analysis of transcription factors expressed in the anterior side of limb buds.
Yokoyama, S., Furukawa, S., Kitada, S., Mori, M., Saito, T., Kawakami, K., Izpisua Belmonte, J.C., Kawakami, Y., Ito, Y., Sato, T. and Asahara, H.
PLoS ONE (2017) In Press
382. Aberrant iPSC methylation is associated with motif enrichment and gene expression changes in a clone-specific manner independent of genetics.
Panopoulos, A., Smith, E.N., Arias, A.D., Shepard, P.J., Hishida, Y., Modesto, V., Diffenderfer, K.E., Conner, C., Biggs, W., Sandoval, E., D'Antonio-Chronowska, A., Berggren, W.T., Izpisua Belmonte, J.C. and Frazer, K.
Cell Stem Cell (2017) In Press.
383. iPSCs from monozygotic twins reveal the role of genetic background in reprogramming-associated epigenetic changes
Panopoulos, A.D., Smith, E.N., Arias, A.D., Shepard, P.J., Hishida, Y., Modesto, V., Diffenderfer, K.E., Conner, C., Biggs, W., Sandoval, E., D'Antonio-Chronowska, A., Berggren, W.T., Izpisua Belmonte, J.C. and Frazer, K.A.
Cell Stem Cell (2017) In Press
384. Targeted CpG island methylation in human pluripotent stem cells
Takahashi, Y., Suzuki, K., Martinez Redondo, P., Wu, J., Li, M., Liao, H.-K., Wu, M.-Z., Hishida, T., Nikolaievich Shokhirev, M., Rodriguez Esteban, C., Sancho-Martinez, I. and Izpisua Belmonte, J.C.
Science (2017) In press
385. Human and Mouse Stem Cells with Embryonic and Extraembryonic Developmental Potency
Yang, Y., Liu, B., Xu, J., Wang, J., Wu, J., Shi, C., Xu, Y., Dong, J., Sun, F., Wang, C., Lai, W., Zhu, J., Xiong, L., Yang, W., Yamauchi, T., Sugawara, A., Li, Z., Chi, X., Zhang, H., Li, X., Yin, M., Zhu, D., Shen, H., Izpisua Belmonte, J.C. and Deng, H.

Cell (2017)

Book Chapters:

386. The Hox-4 genes and the molecular bases of pattern formation.
Zappavigna, V., Dollé, P., Izpisua Belmonte, J. C. and Duboule, D.
FISME. (1990) Monduzzi Editore., pp. 1-14.
387. A comparison of the expression domains of the murine HOX-4, RARs and CRABP genes suggest possible functional relationships during patterning of the vertebrate limb.
Dollé, P., Ruperte, E., Izpisua Belmonte, J.C., Falkenstein, H., Chambon, P. and Duboule, D.
Developmental patterning of the vertebrate limb, (1991) Hinchliffe et al., eds.), Plenum Press, New York, pp. 65-73.
388. Hox-4 genes, retinoic acid, and the specification of positional information during chick wing morphogenesis.
Izpisua Belmonte, J. C., Dollé, P., Tickle, C., Wolpert, L. and Duboule, D.
Retinoids in Normal Development and Teratogenesis. (1992) Oxford Univ. Press series, pp. 241-248.
389. Subtractive hybridization and construction of cDNA libraries.
Blumberg, B. and Izpisua Belmonte, J.C.
Molecular Embryology: Methods and Protocols (1999) (Sharpe, P.T. and I. Mason, Ed.), Humana Press, N.J., Vol. 97:555-574.
390. Differential display of eukaryotic mRNA.
Tugores-Cester, A. and Izpisua Belmonte, J. C.
Molecular Embryology: Methods and Protocols (1999) (Sharpe, P.T. and I., Mason, Ed.), Humana Press, N.J., Vol. 97:575-590.
391. Asymmetry.
Ryan, A.K. and Izpisua Belmonte, J.C.
McGraw-Hill 2001 Yearbook of Science & Technology (2000) (Licker, M.D., Publisher), McGraw Hill Book Co., N.Y., pp. 30-32.
392. Perspectives on the evolutionary origin of tetrapod limbs.
Capdevila, J. and Izpisua Belmonte, J.C.
The Character Concept in Evolutionary Biology (2001) (Wagner, G.P., Ed.), Academic Press, CA, pp. 531-558.
393. Regulation of nodal in the chick by Caronte, FGF8 and Wnt8c.
Izpisua Belmonte, J.C., Rodriguez-Esteban, C. and Capdevila, J.
Axis Formation in Vertebrate Embryos: a Comparative Approach (2001) (Altman, J.S. and C. Coath, Ed.), Human Frontier Science Program, pp. 168-175.
394. Insights into the molecular basis of vertebrate forelimb and hindlimb identity.
Kawakami, Y., Tsukui, T., Ng, J.K., and Izpisua Belmonte, J.C.
Patterning in Vertebrate Development: Frontiers in Molecular Biology (2001) (C. A. Tickle, Ed.), Oxford University Press, pp. 198-213.
395. *PITX/RIEG* gene family.
Izpisua Belmonte, J.C.
Encyclopedia of Molecular Medicine (2002) (Creighton, T.E., Ed.), John Wiley & Sons, Inc., pp. 2506-2509.

396. Differentiation of embryonic stem cells into cardiomyocytes.
Raya, A., Büscher, D., Kawakami, Y., Schwarz, M.-F and Izpisua Belmonte, J.C.
Mesenchymal Stem Cells: Biology and Potential Clinical Uses (2003) (Ministerio de Sanidad Y Consumo, Ed.), Fundacion Valenciana de Estudios Avanzados, pp. 105-119.
397. Control of left-right (L/R) determination in vertebrates by the Hedgehog signaling pathway.
Capdevila, J. and Izpisua Belmonte, J.C.
Handbook of Cell Signaling (2003) (Bradshaw, R. and E. Dennis, Ed.), Elsevier Science. pp. 799-803.
398. Cardiac laterality and congenital heart disease.
Ruiz-Lozano, P., Raya, A., Chien, K.R. and Izpisua Belmonte, J.C.
Molecular Basis of Cardiovascular Disease, 2nd Edition (2004) (Lenehan, A., Ed.), Elsevier. pp. 238-248.
399. Induction of ectopic limb outgrowth in chick with FGF-8.
Raya, A., Rodriguez Esteban, C. and Izpisua Belmonte, J.C.
Key Experiments for Practical Developmental Biology (2005) (Marí-Beffa, M. & J. Knight, Ed.), Cambridge University Press. pp. 99-105.
400. Left-right asymmetry in humans.
Raya, A., Izpisua Belmonte, J.C.
Encyclopedia of Life Sciences (2006) John Wiley & Sons, Ltd: Chichester
401. Selection of embryos for stem cell derivation: can we optimize the process?
Veiga, A., Vicenta Camarasa, M., Aran, B., Izpisua, J.C.
Stem Cells in Reproductive Medicine: Basic Science and Therapeutic Potential. (2006) (Pellicer and Simon, Ed.)
402. Modeling Developmental Asymmetries.
Rasskin-Gutman D, Ibanes M, Izpisua-Belmonte JC.
Modeling Biology: Structures, Behaviors, Evolution, in The Vienna Series in Theoretical Biology (2007) (Laubichler, M.D. and Müller, G.B.), The MIT Press
403. Subtractive hybridization and construction of cDNA libraries.
Blumberg, B. and Izpisua Belmonte, J.C.
Molecular Embryology: Methods and Protocols, Second Edition (2008) (Sharpe, P.T. and I. Mason, Ed.), Humana Press, N.J.
404. Differential display of eukaryotic mRNA.
Tugores-Cester, A. and Izpisua Belmonte, J. C.
Molecular Embryology: Methods and Protocols, Second Edition (2008) (Sharpe, P.T. and I., Mason, Ed.), Humana Press, N.J.
405. Maintenance of embryonic stem cell pluripotency by Nanog-mediated dedifferentiation of committed mesoderm progenitors.
Suzuki, A., Raya, A., Kawakami, Y., Morita, M., Matsui, T., Nakashima, K., Gage, F.H., Rodriguez-Esteban, C., Izpisua Belmonte, J.C.
Regulatory Networks in Stem Cells. (2008) (Rajasekhar, V.K. and Vemuri, M.C.), Humana Press, N.J.
406. Epigenetic Mechanisms Controlling Mesodermal Specification.
Barrero, M.J. and Izpisua Belmonte, J.C.
StemBook (2008) (Girard, L. and Chien, K.), Harvard Stem Cell Institute, MA.
407. Keratinocyte induced pluripotent stem cells: from hair to where?

- Aasen, T. and Izpisua Belmonte, J.C.
Stem Cells and Regenerative Medicine. (2009) Springer Science (Humana).
408. Chapter 9: Induced pluripotent stem cells from cord blood CD133+ cells using Oct4 and Sox2.
 Giorgetti, A., Montserrat, N. and Izpisua Belmonte, J.C.
Lineage-Specific Differentiation of Human Embryonic and Induced Pluripotent Stem Cells Methods and Protocol. (2011) Springer Protocol Handbook Series.
409. Chapter 15: Retroviral-vector based approaches for the generation of human induced pluripotent stem cells from fibroblasts and keratinocytes.
 Panopoulos, A., Ruiz, S. and Izpisua Belmonte, J.C.
Lineage-Specific Differentiation of Human Embryonic and Induced Pluripotent Stem Cells Methods and Protocol. (2011) Springer Protocol Handbook Series.
410. Plucked hair: how to get stem cells and induced pluripotent stem cells for future clinical applications.
 Montserrat, N. and Izpisua Belmonte, J.C.
Handbook of Hair in Health and Disease. (2011) Wageningen Academic Publishers.
411. Cellules Mare Embrionaries: Que en Sabem Despres de Trenta Anys D'Investigacio?
 Montserrat, N., Aran, B., and Izpisua Belmonte, J.C.
Treballs de la SCB (2012) 63: 215-233
412. Translating stem cells to the clinic. From modeling disease to cellular products
 Nivet, E., Sancho-Martinez, I. and Izpisua Belmonte, J.C.
Encyclopedia of Molecular Cell Biology and Molecular Medicine. (2012).
413. On the Search for Reliable Human Aging Models: Understanding Aging by Nuclear Reprogramming
 Sancho-Martinez, I., Nivet, E. and Izpisua Belmonte, J.C.
Research and Perspectives in Neurosciences 20. (2013).
414. MicroRNA Regulation of Stem Cell Fate and Reprogramming
 Vivas, E.L., Tiscornia, G. and Izpisua Belmonte, J.C.
MicroRNAs in Medicine. (2013).
415. iPSC Disease Modeling of Laminopathies
 Liu, G.-H., Yang, J., Ocampo, A., Qu, J., Suzuki, K. and Izpisua Belmonte, J.C.
Human iPS Cells in Disease Modelling. (2013).
416. Regenerative strategies in cardiovascular medicine
 Izpisua Belmonte, J.C.
Atherosclerosis Update 2014, Tokyo, Japan. (2014).
417. Lineage Reprogramming Towards Kidney Regeneration
 Xia, Y., Montserrat, N., Campistol, J.M. and Izpisua Belmonte, J.C.
Kidney Transplantation, Bioengineering and Regeneration. (2015) Elsevier.
418. iPSC Disease Modeling of Laminopathies
 Liu, G.-H., Yang, J., Ding, Z., Ocampo, A., Qu, J., Suzuki, K. and Izpisua Belmonte, J.C.
Human iPS Cells in Disease Modeling. (2015) Springer.