

## Complete list of publications

### *Peer-reviewed articles*

1. Suzuki-Horiuchi, Y, Schmitz, H, Barlassina, C, Eccles, D, Sinn, M, Ortmeier, C, Moritz, S and **Gentile, L†**. Transcription Factors Active in the Anterior Blastema of *Schmidtea mediterranea*. *Biomolecules*. 2021; 11:1782-.
2. F Bornert, F, Clauss, F, Hua, G, Idoux-Gillet, Y, Keller, L, Fernandez De Grado, G, Offner, D, Smaida, R, Wagner, Q, Fioretti, F, Kuchler-Bopp, S, Schulz, G, Wenzel, W, **Gentile, L**, Risser, L, Müller, B, Huck, O, Benkirane-Jessel, N. Mechanistic Illustration: How Newly-Formed Blood Vessels Stopped by the Mineral Blocks of Bone Substitutes Can Be Avoided by Using Innovative Combined Therapeutics. *Biomedicines*. 2021; 9:952-.
3. Favreau H, Pijnenburg L, Seitlinger J, Fioretti F, Keller K, Scipioni K, Adriaensen H, Kuchler-Bopp S, Ehlinger M, Mainard D, Rosset P, Hua G, **Gentile L**, Benkirane-Jessel N. Osteochondral repair combining therapeutics implant with mesenchymal stem cells spheroids. *Nanomedicine*. 2020; 29:102253-.
4. Tran TA, Hesler M, Moriones OH, Jimeno-Romero A, Fischer B, Bastús NG, Puentes V, Wagner S, Kohl YL, **Gentile L†**. Iron oxide nanoparticles: effects on regeneration and homeostasis in planarians. *ALTEX*. 2019; 36:583-596.
5. Keller L, Pijnenburg L, Idoux-Gillet Y, Bornert F, Benameur L, Tabrizian M, Auvray P, Rosset P, Gonzalo-Daganzo RM, Gómez Barrena E, **Gentile L**, Benkirane-Jessel N. Preclinical safety study of a combined therapeutic bone wound dressing for osteoarticular regeneration. *Nat Comm*. 2019; 10:2156-2165.
6. Vukosavljevic B, Hittinger M, Hachmeister H, Pilger C, Murgia X, Gepp MM, **Gentile L**, Huwer H, Schneider-Daum N, Huser T, Lehr CM, Windbergs M. Vibrational spectroscopic imaging and live cell video microscopy for studying differentiation of primary human alveolar epithelial cells. *J Biophotonics*. 2019; 12:e201800052.
7. Fischer B, Meier A, Dehne A, Salhotra A, Tran TA, Neumann S, Schmidt K, Meiser I, Neubauer JC, Zimmermann H, **Gentile L†**. A complete workflow for the differentiation and dissociation of hiPSC-derived cardiospheres. *Stem Cell Res*. 2018; 32:65-72.
8. Van Roten A, Zohir-Barakat A, Wauters A, Tran TA, Mouton S, Noben JP, **Gentile L†**, Smeets K. A carcinogenic trigger to study the function of tumor suppressor genes in *Schmidtea mediterranea*. *Dis Model Mech*. 2018; 11: dmm032573
9. Owlarn S, Klenner F, Schmidt D, Rabert F, Tomasso A, Reuter H, Mulaw M, Moritz M, Weidinger G, **Gentile L**, Bartscherer K. Generic wound signals initiate regeneration in missing-tissue contexts. *Nature Comm*. 2018.
10. Gepp MM, Fischer B, Schulz A, Dobringer J, **Gentile L**, Vásquez JA, Neubauer JC, Zimmermann H. Bioactive surfaces from seaweed-derived alginates for the cultivation of human stem cells. *J Applied Phycology*. 2017; 1-11
11. Fischer B, Schulz A, Gepp MM, Neubauer J, **Gentile L**, Zimmermann H. 3D printing of hydrogels in a temperature controlled environment with high spatial resolution. *Cur Direct Biomedic Engineering*. 2016; 2:109–112.

12. Vogg MC, Owlarn S, Pérez-Rico YA, Xie J, Suzuki Y, **Gentile L**, Wu W, Bartscherer K. Stem cell dependent formation of a functional anterior regeneration pole in planarians requires Zic and Forkhead transcription factors. *Dev Biol.* 2014; 390:136-48.
13. Sabour D, Xu X, Chung AC, Le Menuet D, Ko K, Tapia N, Araúzo-Bravo MJ, **Gentile L**, Greber B, Hübner K, Sebastiano V, Wu G, Schöler HR, Cooney AJ. Germ cell nuclear factor regulates gametogenesis in developing gonads. *PLoS One.* 2014; 9:e103985.
14. Böser A, Drexler HCA, Reuter H, Schmitz H, Wu G, Schöler HR, **Gentile L**, Bartscherer K. SILAC proteomics of planarians identifies Ncoa5 as a conserved component of pluripotent stem cells. *Cell Rep.* 2013; 5:1142-55.
15. Wu G, Han D, Gong Y, Sebastiano V, **Gentile L**, Singhal N, Adachi K, Fishedick G, Ortmeier C, Sinn M, Radstaak M, Tomilin A, Schöler HR. Establishment of totipotency does not depend on Oct4A. *Nat Cell Biol.* 2013; 15:1089-97.
16. Böser a, Drexler HCA, Reuter H, Wu G, Schöler H, **Gentile L**, Bartscherer K. Silac proteomics of planarians identifies conserved components of pluripotent stem cells. *Regenerative Medicine* 2013; 8:106.
17. Moritz S, Stöckle F, Ortmeier C, Schmitz H, Rodríguez-Esteban R, Key G, **Gentile L**†. Large-scale immunoscreening of planarian cell plasma membrane proteome reveals heterogeneity of the stem cells in the S/G2/M phase. *Int. J. Dev. Biol.* 2012; 56:117-125.
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20. Wu G, Liu N, Rittelmeyer I, Sharma AD, Sgodda M, Zaehres H, Bleidissel M, Greber B, **Gentile L**, Han DW, Rudolph C, Steinemann D, Schambach A, Ott M, Schöler HR, Cantz T. Generation of healthy mice from gene-corrected disease-specific induced pluripotent stem cells. *PLoS Biol.* 2011; 9:e1001099.
21. Schmitz H, **Gentile L**†. The class V Pou transcription factor Smed-pou5 maintains the identity of the adult stem cells in *Schmidtea mediterranea*. *Regenerative Medicine.* 2011; 6:397.
22. Sabour D, Araúzo-Bravo MJ, Hübner K, Ko K, Greber B, **Gentile L**, Stehling M, Schöler HR. Identification of genes specific to mouse primordial germ cells through dynamic global gene expression. *Hum Mol Genet.* 2011; 20:115-25.
23. Wu G, **Gentile L**, Fuchikami T, Sutter J, Psathaki K, Esteves TC, Araúzo-Bravo MJ, Ortmeier C, Verberk G, Abe K, Schöler HR. Initiation of trophectoderm lineage specification in mouse embryos is independent of Cdx2. *Development.* 2010; 137:4159-69.
24. Sebastiano V\*, Dalvai M\*, **Gentile L\***, Schubart K, Sutter J, Wu GM, Tapia N, Esch D, Ju JY, Hübner K, Bravo MJ, Schöler HR, Cavaleri F, Matthias P. Oct1 regulates

- trophoblast development during early mouse embryogenesis. *Development*. 2010; 137:3551-60.
25. Sternecker J, Stehling M, Bernemann C, Araúzo-Bravo MJ, Greber B, **Gentile L**, Ortmeier C, Sinn M, Wu G, Ruau D, Zenke M, Brintrup R, Klein DC, Ko K, Schöler HR. Neural induction intermediates exhibit distinct roles of Fgf signaling. *Stem Cells*. 2010; 28:1772-81.
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  27. Balbach ST, Esteves TC, Brink T, **Gentile L**, McLaughlin KJ, Adjaye JA, Boiani M. Governing cell lineage formation in cloned mouse embryos. *Developmental biology*. 2010; 343:71-83.
  28. Wu G, **Gentile L**, Do JT, Cantz T, Sutter J, Psathaki K, Araúzo-Bravo MJ, Ortmeier C, Schöler HR. Efficient derivation of pluripotent stem cells from siRNA-mediated Cdx2-deficient mouse embryos. *Stem Cells Dev*. 2011; 20:485-93.
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  30. Fernández-Taboada E, Moritz S, Zeuschner D, Stehling M, Schöler HR, Saló E, **Gentile L** †. Smed-SmB, a member of the LSm protein superfamily, is essential for chromatoid body organization and planarian stem cell proliferation. *Development*. 2010; 137:1055-65.
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  36. Han DW, Do JT, **Gentile L**, Stehling M, Lee HT, Schöler HR. Pluripotential reprogramming of the somatic genome in hybrid cells occurs with the first cell cycle. *Stem Cells*. 2008; 26:445-54.
  37. Cavaleri FM, Balbach ST, **Gentile L**, Jauch A, Böhm-Steuer B, Han YM, Schöler HR, Boiani M. Subsets of cloned mouse embryos and their non-random relationship to development and nuclear reprogramming. *Mech Dev*. 2008; 125:153-66.

38. Do JT, Han DW, **Gentile L**, Sobek-Klocke I, Stehling M, Lee HT, Schöler HR. Erasure of cellular memory by fusion with pluripotent cells. *Stem Cells*. 2007; 25:1013-20.
39. Sternecker J, Stehling M, **Gentile L**, Ortmeier C, Han DW, Boiani M, Zenke M, Schöler HR. Isolation and characterization of neural induction intermediates. *Regenerative Medicine*. 2007; 2:S13.
40. Cavaleri FM, **Gentile L**, Schöler HR, Boiani M. Recombinant human albumin supports development of somatic cell nuclear transfer embryos in mice: toward the establishment of a chemically defined cloning protocol. *Cloning and stem cells*. 2006; 8:24-40.
41. Boiani M\*, **Gentile L\***, Gambles VV, Cavaleri F, Redi CA, Schöler HR. Variable reprogramming of the pluripotent stem cell marker Oct4 in mouse clones: distinct developmental potentials in different culture environments. *Stem Cells*. 2005; 23:1089-104.
42. Sebastiano V\*, **Gentile L\***, Garagna S, Redi CA, Zuccotti M. Cloned pre-implantation mouse embryos show correct timing but altered levels of gene expression. *Mol Reprod Dev*. 2005; 70:146-54.
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44. **Gentile L**, Monti M, Sebastiano V, Merico V, Nicolai R, Calvani M, Garagna S, Redi CA, Zuccotti M. Single-cell quantitative RT-PCR analysis of Cpt1b and Cpt2 gene expression in mouse antral oocytes and in preimplantation embryos. *Cytogenet Genome Res*. 2004; 105:215-21.

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### **Reviews**

1. Tran TA, **Gentile L‡**. A lineage CLOUD for planarian stem cells. *Seminars in Cell & Developmental Biology*. 2018; 87:22-29.
2. **Gentile L**, Cebrià F, Bartscherer K. The planarian flatworm: an in vivo model for stem cell biology and nervous system regeneration. *Dis Model Mech*. 2011; 4:12-9.

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### **Book chapters**

1. Balbach ST, Cavaleri FM, **Gentile L**, Araúzo-Bravo MJ, Schöler HR. Observing and Manipulating Pluripotency in Normal and Cloned Mouse Embryos. in: Baharvand H. *Trends in Stem Cell Biology and Technology*. 2009; 101-121.

***Non peer-reviewed articles***

1. Schmitz H, Stehling M, **Gentile L**. Selbstheilung und potenzielle Unsterblichkeit bei Planarien. *BIOspektrum*. 2014; 20:51-54.
2. Schöler HR, Hübner K, **Gentile L**, Boiani M. From Es cells to oocytes. *Differentiation*. 2004; 72:252.
3. **Gentile L**, Merico V, Monti M, Redi CA, Sebastiano V, Zuccotti M, Garagna S. Expression of Carnitine Palmitoyl-Transferase 1 and 2 during mouse preimplantation development. *Rendiconti Lincei*. 2003; 14:217-229.
4. Merico V, Monti M, Sebastiano V, **Gentile L**, Zuccotti M, Garagna S, Redi CA. Centromere localization changes in oocyte nuclei during mouse folliculogenesis. *Rendiconti Lincei*. 2003. 14:109-115.
5. Sebastiano V, **Gentile L**, Merico V, Monti M, Zuccotti M, Garagna S, Redi CA. A single cell sensitive RT-PCR for the study of gene expression in mouse preimplantation development. *Rendiconti Lincei*. 2003; 14:117-126.