

Publications

2020

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[A. Kauzlaric](#); [S. M. Jang](#); [M. Morchikh](#); [M. Cassano](#); [E. Planet](#) et al. : **KAP1 targets actively transcribed genomic loci to exert pleomorphic effects on RNA polymerase II activity**; *Philosophical Transactions of the Royal Society B: Biological Sciences*. 2020-02-10. DOI : 10.1098/rstb.2019.0334.

Detailed record: <https://infoscience.epfl.ch/record/275504?ln=en>

2019

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[A. De Iaco](#); [S. Verp](#); [S. Offner](#); [D. Grun](#); [D. Trono](#) : **DUX is a non-essential synchronizer of zygotic genome activation**; *Development*. 2019-12-05. DOI : 10.1242/dev.177725.

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[G. Fonti](#); [M. J. Marcaida](#); [L. C. Bryan](#); [S. Traeger](#); [A. S. Kalantzi](#) et al. : **KAP1 is an antiparallel dimer with a functional asymmetry**; *Life Science Alliance*. 2019-08-01. DOI : 10.26508/lsa.201900349.

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[P. Helleboid](#); [M. Heusel](#); [J. Duc](#); [C. Piot](#); [C. W. Thorball](#) et al. : **The interactome of KRAB zinc finger proteins reveals the evolutionary history of their functional diversification**; *The EMBO Journal*. 2019-08-12. DOI : 10.15252/embj.2018101220.

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[W. Chen](#); [P. C. Schwalie](#); [E. V. Pankevich](#); [C. Gubelmann](#); [S. K. Raghav](#) et al. : **ZFP30 promotes adipogenesis through the KAP1-mediated activation of a retrotransposon-derived Pparg2 enhancer**; *Nature Communications*. 2019-04-18. DOI : 10.1038/s41467-019-09803-9.

Detailed record: <https://infoscience.epfl.ch/record/267666?ln=en>

Full text: <http://infoscience.epfl.ch/record/267666/files/Final%20Version.pdf>

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[Y. Sun](#); [J. R. Keown](#); [M. M. Black](#); [C. Raclot](#); [N. Demarais](#) et al. : **A Dissection of Oligomerization by the TRIM28 Tripartite Motif and the Interaction with Members of**

the Krab-ZFP Family; *Journal of Molecular Biology*. 2019-06-28. DOI : 10.1016/j.jmb.2019.05.002.

Detailed record: <https://infoscience.epfl.ch/record/267665?ln=en>

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[J. Pontis](#); [E. Planet](#); [S. Offner](#); [P. Turelli](#); [J. Duc](#) et al. : **Hominoid-Specific Transposable Elements and KZFPs Facilitate Human Embryonic Genome Activation and Control Transcription in Naive Human ESCs**; *Cell Stem Cell*. 2019-03-27. DOI : 10.1016/j.stem.2019.03.012.

Detailed record: <https://infoscience.epfl.ch/record/265350?ln=en>

Full text: <http://infoscience.epfl.ch/record/265350/files/Publication.pdf>

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[A. De Iaco](#); [A. Coudray](#); [J. Duc](#); [D. Trono](#) : **DPPA2 and DPPA4 are necessary to establish a 2C-like state in mouse embryonic stem cells**; *EMBO reports*. 2019-04-04. DOI : 10.15252/embr.201847382.

Detailed record: <https://infoscience.epfl.ch/record/265202?ln=en>

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[N. Takahashi](#); [A. Coluccio](#); [C. W. Thorball](#); [E. Planet](#); [H. Shi](#) et al. : **ZNF445 is a primary regulator of genomic imprinting**; *Genes & Development*. 2019-01-01. DOI : 10.1101/gad.320069.118.

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[C. Unzu](#); [E. Planet](#); [N. Brandenberg](#); [F. Fusil](#); [M. Cassano](#) et al. : **Pharmacological induction of a progenitor state for the efficient expansion of primary human hepatocytes**; *Hepatology*. 2018-12-14. DOI : 10.1002/hep.30425.

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[G. C. Pereira](#); [L. Sanchez](#); [P. M. Schaugency](#); [A. Rubio-Roldan](#); [J. A. Choi](#) et al. : **Properties of LINE-1 proteins and repeat element expression in the context of amyotrophic lateral sclerosis**; *Mobile Dna*. 2018-12-15. DOI : 10.1186/s13100-018-0138-z.

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[K. Kawano](#); [A. J. Doucet](#); [M. Ueno](#); [R. Kariya](#); [W. An](#) et al. : **HIV-1 Vpr and p21 restrict LINE-1 mobility**; *Nucleic Acids Research*. 2018-07-31. DOI : 10.1093/nar/gky688.

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[S. M. Jang](#); [A. Kauzlaric](#); [J.-P. Quivy](#); [J. Pontis](#); [B. Rauwel](#) et al. : **KAP1 facilitates reinstatement of heterochromatin after DNA replication**; *Nucleic Acids Research*. 2018-06-28. DOI : 10.1093/nar/gky580.

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[A. Coluccio](#); [G. Ecco](#); [J. Duc](#); [S. Offner](#); [P. Turelli](#) et al. : **Individual retrotransposon integrants are differentially controlled by KZFP/KAP1-dependent histone methylation, DNA methylation and TET-mediated hydroxymethylation in naïve embryonic stem cells**; *Epigenetics & Chromatin*. 2018-02-26. DOI : 10.1186/s13072-018-0177-1.

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2017

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[G. Ecco](#); [M. Imbeault](#); [D. Trono](#) : **KRAB zinc finger proteins**; *Development*. 2017. DOI : 10.1242/dev.132605.

Detailed record: <https://infoscience.epfl.ch/record/230578?ln=en>

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[A. De Iaco](#); [E. Planet](#); [A. Coluccio](#); [S. Verp](#); [J. Duc](#) et al. : **DUX-family transcription factors regulate zygotic genome activation in placental mammals**; *Nature Genetics*. 2017. DOI : 10.1038/ng.3858.

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[M. Cassano](#); [S. Offner](#); [E. Planet](#); [A. Piersigilli](#); [S. M. Jang](#) et al. : **Polyphenic trait promotes liver cancer in a model of epigenetic instability**; *Hepatology*. 2017. DOI : 10.1002/hep.29182.

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[A. Kauzlaric](#); [G. Ecco](#); [M. Cassano](#); [J. Duc](#); [M. Imbeault](#) et al. : **The mouse genome displays highly dynamic populations of KRAB-zinc finger protein genes and related genetic units**; *PLoS One*. 2017. DOI : 10.1371/journal.pone.0173746.

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[A. Isakova](#); [R. Groux](#); [M. Imbeault](#); [P. Rainer](#); [D. Alpern](#) et al. : **SMiLE-seq identifies binding motifs of single and dimeric transcription factors**; *Nature methods*. 2017. DOI : 10.1038/nmeth.4143.

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[D. Trono](#) : **Switzerland and the Digital Health Revolution**; *Chimia*. 2016. DOI : 10.2533/chimia.2016.851.

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[L. Naldini](#); [D. Trono](#); [I. M. Verma](#) : **Lentiviral vectors, two decades later**; *Science*. 2016. DOI : 10.1126/science.aah6192.

Detailed record: <https://infoscience.epfl.ch/record/222093?ln=en>

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[D. Trono](#) : **Transposable Elements, Polydactyl Proteins, and the Genesis of Human-Specific Transcription Networks**; *Cold Spring Harbor symposia on quantitative biology*. 2016. DOI : 10.1101/sqb.2015.80.027573.

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[G. Ecco](#); [H. M. Rowe](#); [D. Trono](#) : **A Large-Scale Functional Screen to Identify Epigenetic Repressors of Retrotransposon Expression**; *Methods in molecular biology (Clifton, N.J.)*. 2016. DOI : 10.1007/978-1-4939-3372-3_25.

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[T. W. Theunissen](#); [M. Friedli](#); [Y. He](#); [E. Planet](#); [R. C. O'Neil](#) et al. : **Molecular Criteria for Defining the Naive Human Pluripotent State**; *Cell stem cell*. 2016. DOI : 10.1016/j.stem.2016.06.011.

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[A. Kapopoulou](#); [L. Mathew](#); [A. Wong](#); [D. Trono](#); [J. D. Jensen](#) : **The evolution of gene expression and binding specificity of the largest transcription factor family in primates**; *Evolution*. 2016. DOI : 10.1111/evo.12819.

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[J.-E. Dietrich](#); [L. Panavaite](#); [S. Gunther](#); [S. Wennekamp](#); [A. C. Groner](#) et al. : **Venus trap in the mouse embryo reveals distinct molecular dynamics underlying specification of first embryonic lineages**; *EMBO reports*. 2015. DOI : 10.15252/embr.201540162.

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[B. Rauwel](#); [S. M. Jang](#); [M. Cassano](#); [A. Kapopoulou](#); [I. Barde](#) et al. : **Release of human cytomegalovirus from latency by a KAP1/TRIM28 phosphorylation switch**; *eLife*. 2015. DOI : 10.7554/eLife.06068.

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