All Publications Marie-Emilie Terret
(* corresponding author):

Cytoplasmic forces functionally reorganize nuclear condensates in oocytes. Al Jord A*, Letort G, Chanet S, Tsai F-C, Antoniewski C, Eichmuller A, Da Silva C, Huynh J-R, Gov N S, Voituriez R, Terret ME, Verlhac M-H. BioRxiv 2021.03.15.434387.

An interpretable and versatile machine learning approach for oocyte phenotyping. Letort G *, Eichmuller A, Da Silva C, Nikalayevich E, Crozet F, Salle J, Minc N, Labrune E, Wolf JP, Terret ME, Verlhac M-H. J Cell Sci. jcs.260281 (2022).

MYO10 promotes transzonal projection (TZP)-dependent germ line-somatic contact during mammalian folliculogenesis. Granados-Aparici S, Volodarsky-Perel A, Yang Q, Anam S, Tulandi T, Buckett W, Son WY, Younes G, Chung JT, Jin S, Terret ME, Clarke HJ. Biol Reprod ioac078 (2022).

Myosin-X is dispensable for spindle morphogenesis and positioning in mouse oocyte. Crozet F, Da Silva C, Verlhac M-H*, Terret ME*. Development 148: dev199364 (2021).

Artificially decreasing cortical tension generates aneuploidy in mouse oocytes. Bennabi I, Crozet F°, Nikalayevich E°, Chaigne A, Letort G, Manil-Segalen M, Campillo C, Cadart C, Othmani A, Attia R, Sykes C, Genovesio A, Verlhac M-H*, Terret ME*. Nat Commun 11: 1649-1663 (2020).

Active diffusion in oocytes non-specifically centers large objects during Prophase I and Meiosis I. Colin A, Letort G, Razin N, Almonacid M, Ahmed W, Betz T, Terret ME, Gov NS, Voituriez R, Gueroui Z*, Verlhac M-H*. J Cell Biol 219: e201908195 (2020).

A computational model of the early stages of acentriolar meiotic spindle assembly. Letort G*, Bennabi I, Dmitrieff S, Nedelec F, Verlhac M-H, Terret ME*. Mol Biol Cell 30:863-875 (2019).

Chromosome structural anomalies due to aberrant spindle forces exerted at gene editing sites in meiosis. Manil-Ségalen M, Łuksza M, Kanaan J, Marthiens V, Lane SIR, Jones KT, Terret ME, Basto R, Verlhac M-H. J Cell Biol 217: 3416-3430 (2018).

Shifting meiotic to mitotic spindle assembly in oocytes disrupts chromosome alignment. Bennabi I, Quéguiner I, Kolano A, Boudier T, Mailly P, Verlhac M-H*, Terret ME*. EMBO Rep 19: 368-381 (2018).

F-actin mechanics control spindle centring in the mouse zygote. Chaigne A, Campillo C, Gov NS, Voituriez R, Sykes C, Verlhac M-H*, Terret ME*. Nat Commun. 7:10253 (2016).

A narrow window of cortical tension guides asymmetric spindle positioning in the mouse oocyte. Chaigne A, Campillo C, Gov NS, Voituriez R, Sykes C, Verlhac M-H*, Terret ME*. Nat Commun. 6:6027 (2015).

A soft cortex is essential for asymmetric spindle positioning in mouse oocytes. Chaigne A, Campillo C, Gov NS, Voituriez R, Azoury J, Umaña-Diaz C, Almonacid M, Queguiner I, Nassoy P, Sykes C, Verlhac M-H*, Terret ME*. Nat Cell Biol. 15(8):958-66 (2013).

Mps1 directs the assembly of Cdc20 inhibitory complexes during interphase and mitosis to control M phase timing and spindle checkpoint signaling. Maciejowski J, George KA, Terret ME, Zhang C, Shokat KM, Jallepalli PV. J Cell Biol. 190(1):89-100 (2010).

Cohesin acetylation speeds the replication fork. Terret ME, Sherwood R, Rahman S, Qin J, Jallepalli PV. Nature. 462(7270):231-4 (2009).

The SIOD disorder protein SMARCAL1 is an RPA-interacting protein involved in replication fork restart. Ciccia A, Bredemeyer AL, Sowa ME, Terret ME, Jallepalli PV, Harper JW, Elledge SJ. Genes Dev. 23(20):2415-25 (2009).

Requirements for Cdk7 in the assembly of Cdk1/cyclin B and activation of Cdk2 revealed by chemical genetics in human cells. Larochelle S, Merrick KA, Terret ME, Wohlbold L, Barboza NM, Zhang C, Shokat KM, Jallepalli PV, Fisher RP. Mol Cell. 25(6):839-50 (2007).

A centriole- and RanGTP-independent spindle assembly pathway in meiosis I of vertebrate oocytes. Dumont J, Petri S, Pellegrin F, Terret ME, Bohnsack MT, Rassinier P, Georget V, Kalab P, Gruss OJ, Verlhac M-H. J Cell Biol.176(3):295-305 (2007).

The regulation of competence to replicate in meiosis by Cdc6 is conserved during evolution. Lemaître JM, Bocquet S, Terret ME, Namdar M, Aït-Ahmed O, Kearsey S, Verlhac M-H, Méchali M. Mol Reprod Dev. 69(1):94-100 (2004).

The meiosis I-to-meiosis II transition in mouse oocytes requires separase activity. Terret ME°, Wassmann K°, Waizenegger I, Maro B, Peters JM, Verlhac M-H. Curr Biol. 13(20):1797-802 (2003).

DOC1R: a MAP kinase substrate that control microtubule organization of metaphase II mouse oocytes. Terret ME, Lefebvre C, Djiane A, Rassinier P, Moreau J, Maro B, Verlhac M-H.
Development. 130(21):5169-77 (2003).

Meiotic spindle stability depends on MAPK-interacting and spindle-stabilizing protein (MISS), a new MAPK substrate. Lefebvre C, Terret ME, Djiane A, Rassinier P, Maro B, Verlhac M-H. J Cell Biol. 157(4):603-13 (2002).

RINGO efficiently triggers meiosis resumption in mouse oocytes and induces cell cycle arrest in embryos. Terret ME, Ferby I, Nebreda AR, Verlhac M-H. Biol Cell. 93(1-2):89-97 (2001).

Meiotic maturation of the mouse oocyte requires an equilibrium between cyclin B synthesis and degradation. Ledan E, Polanski Z, Terret ME, Maro B. Dev Biol. 232(2):400-13 (2001).

Reviews and book chapters Marie-Emilie Terret

Cortical tension of the oocyte and euploidy: the right balance. Bennabi I*, Verlhac M-H, Terret ME*. Med Sci 36:965-968 (2020).

Nuclear positioning as an integrator of cell fate. Almonacid M*, Terret ME, Verlhac M-H. Current Opin Cell Biol 56:122-129 (2019.)

Book edition in Methods in Molecular Biology at Springer Protocols by Verlhac M-H & Terret ME. Doi.org/10.1007/978-1-4939-8603-3 (2018).

Control of nucleus positioning in mouse oocytes. Almonacid M, Terret ME, Verlhac M-H. Semin Cell Dev Biol. pii: S1084-9521(17)30358-0 (2017).

Asymmetries and Symmetries in the Mouse Oocyte and Zygote. Chaigne A, Terret ME, Verlhac M-H. Results Probl Cell Differ. 61:285-299 (2017).

Meiotic spindle assembly and chromosome segregation in oocytes. Bennabi I, Terret ME, Verlhac M-H. J Cell Biol. 215(5):611-619 (2016).

Oocyte Maturation and Development. Verlhac M-H, Terret ME. F1000Research. 5. pii: F1000 Faculty Rev-309 (2016).

Cortex softening: a prerequisite for the asymmetry of oocyte first division. Chaigne A, Verlhac M-H, Terret ME. Med Sci (Paris). 30(1):18-21 (2014).

Actin-based spindle positioning: new insights from female gametes. Almonacid M, Terret ME, Verlhac M-H. J Cell Sci. 127(Pt 3):477-83 (2014).

Mouse oocyte, a paradigm of cancer cell. Terret ME*, Chaigne A, Verlhac M-H*. Cell Cycle. 12(21):3370-6 (2013).

Spindle positioning in mammalian oocytes. Chaigne A, Verlhac M-H, Terret ME. Exp Cell Res. 318(12):1442-7 (2012).

Control of the oocyte-to-embryo transition by the ubiquitin-proteolytic system in mouse and C. elegans. Verlhac M-H, Terret ME, Pintard L. Curr Opin Cell Biol. 22(6):758-63 (2010).

Oogenesis: The Universal Process. Terret ME. Wiley-Blackwell 2010, 313-341.

[Cohesin acetylation: a sesame for replication forks to break free]. Terret ME. Med Sci (Paris). 26(3):238-41 (2010).

Functional dissection of mitotic regulators through gene targeting in human somatic cells. Berdougo E, Terret ME, Jallepalli PV. Methods Mol Biol. 545:21-37 (2009).

[Meiotic weakness: the first division]. Terret ME, Wassmann K. Med Sci (Paris). 24(2):197-203 (2008).

Meiosis: separase strikes twice. Terret ME, Jallepalli PV. Nat Cell Biol. 8(9):910-1 (2006).

[Specificities of meiosis in the mouse oocyte]. Verlhac M-H, Lefebvre C, Terret ME, Pahlavan G, Rassinier P et Maro B. Med Sci (Paris). Vol. 17, N° 10; p.1046-52 (2001).