

Manuel THERY

Born in Paris, 21st of February 1978.

18 Boulevard de Strasbourg, Paris, France.

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- 2013 Set-up the “Physics of Cytoskeleton and Morphogenesis” unit at the Hopital Saint Louis in Paris.
 - 2011 **Hability to Direct Research** from the University of Grenoble.
 - 2009 Found the “Physics of Cytoskeleton and Morphogenesis” lab with Laurent Blanchoin in the Life Science Division of the **Atomic Energy Research Center (CEA)**, Grenoble, France.
 - 2008 **Recruitment as a permanent researcher at the Atomic Energy Research Center (CEA).**
 - 2006/08 **Post-doctoral training**, CEA, iRTSV, Biochip Lab, Grenoble, France.
 - 2002/05 **PhD**, University Paris7, UFR de Physique, Institut Curie, Supervised by **Michel Bornens** : Control of the polarity of adherent cells.
 - 2001/02 **Master Physics Biology Interfaces**, University Paris 7 Institut Pasteur.
 - 98/2001 **Engineering school : Ecole Supérieure de Physique et de Chimie Industrielles de la Ville de Paris (ESPCI)**, directed by **Pierre Gilles De Gennes**.
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Associate Editor at Cytoskeleton, Wiley Online Library

Industry

Foundation of the french company **CYTOO** dedicated to micropatterned substrates fabrication for cell biology applications, 2008.

Awards

EMBO Young Investigator Program, 2014-2016

ERC Starting Grant, LS3, 2013-2017

Claude Paoletti Prize from the CNRS, 2012

Young researcher award from the French society of Cell Biology, 2010.

Young researcher award from the French society of Biophysics, 2008.

Nine Choucroun prize from the IBPC (Institut de Biologie Physico-chimique), 2007.

Patents

- European patent 2011/063676, Devices and methods for controlling actin filaments growth and organization using micropatterned sites.
- European patent 2011/305123.9, Use of micropatterned soft substrate for measuring of cell traction forces.
- European patent 2011/305122.1, Soft substrate for cell culture and process for preparing the same.
- WO 2010/046459, Device to constrain multicellular arrangements in stable, stationary and reproducible configuration.
- WO 2005/026313, Methods and device for adhesive control of internal cell organisation.

Selected Conferences in International meetings

8th Symposium on Physics of Living Matters, Cambridge, **United Kingdom**, 2013

2nd EMBO conference on Morphogenesis of Multicellular Systems, EMBL, **Germany**, 2012

35th Annual meeting of the German Society of Cell Biology, Dresden, **Germany**, 2012

German Biophysical Society workshop on Forces in Biomolecular Systems , Venice, **Italy**, 2012

High Content and Screening Analysis Symposium, CRG, Barcelona, **Spain**, 2010

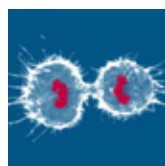
54th Annual meeting of the American Society of Biophysics, San Francisco, **USA**, 2010.

2nd Mechanobiology Workshop, Singapore, **Republic of Singapore**, 2008.

45th Annual conference of the Japanese Biophysical Society, Yokohama, **Japan**, 2007

Annual meetings of the American Society of Cell Biology, **USA**, 2004, 2006, 2010 and 2012.

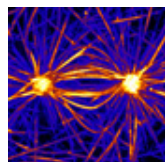
Publication List



Human Bone Marrow Mesenchymal Stem Cells Regulate Biased DNA Segregation in Response to Cell Adhesion Asymmetry

Freida D, Lecourt S, Cras A, Vanneaux V, Letort G, Gidrol X, Guyon L, Larghero J* & Théry M*.

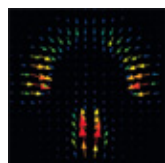
Cell Reports, online October 17th, 2013.



Microtubule sliding activity of a kinesin-8 promotes spindle assembly and spindle length control.

Su X, Arellano-Santoyo H, Portran D, Gaillard J, Vantard M, Théry M, Pellman D.

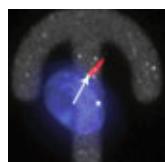
Nature Cell Biology, 15(8):948-57, 2013.



β 1- and α v-class integrins cooperate to regulate myosin-II during rigidity sensing of fibronectin-based microenvironments.

Schiller HB, Hermann M, Polleux J, Vignaud T, Zanivan S, Friedel CC, Sun Z, Raducanu A, Gottschalk K, Théry M, Mann M and Fässler R.

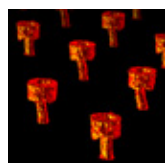
Nature Cell Biology, 15(6):625-36, 2013.



Probing ciliogenesis using micropatterned substrates.

Pitaval A., Christ A., Curtet A., Tseng Q., Théry M.

Methods in Enzymology, 525 : 109-130, 2013.



Fabrication of three-dimensional electrical connections by means of directed actin self-organization.

Galland R, Leduc P, Guérin C, Peyrade D, Blanchoin L* & Théry M*.

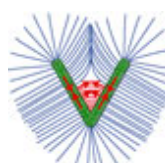
Nature Materials, 12 : 416–421, 2013.



Quantification of MAP and molecular motor activities on geometrically controlled microtubule networks.

Portran D, Gaillard J, Vantard M* & Théry M*.

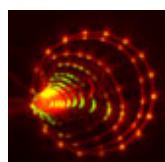
Cytoskeleton. 70(1) : 12-23, 2013



Directed cytoskeleton self-organization.

Vignaud T, Blanchoin L, Théry M

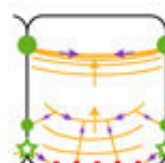
Trends Cell Biology, 22(12) : 671-682, 2012.



Actin network architecture determines myosin motor activity.

Reymann AC, Boujemaa-Paterski R, Martiel JL, Guérin C, Cao W, Chin HF, De La Cruz E, Théry M* & Blanchoin L*.

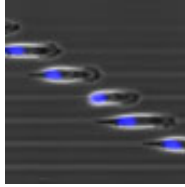
Science, 336(6086):1310-4, 2012.



Spatial segregation between cell-cell and cell-matrix adhesions.

Burute M, Théry M.

Current Opinion in Cell Biology. 24(5):628-36, 2012.



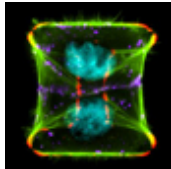
The first world cell race.

Maiuri P, Terriac E, Paul-Gilloteaux P, Vignaud T, McNally K, Onuffer J, Thorn K, Nguyen PA, Georgoulia N, Soong D, Jayo A, Beil N, Beneke J, Hong Lim JC, Pei-Ying Sim C, Chu YS; WCR participants, Jiménez-Dalmaroni A, Joanny JF, Thiery JP, Erfle H, Parsons M, Mitchison TJ, Lim WA, Lennon-Duménil AM, Piel M* & Thery M*. *Current Biology*. 2012 Sep 11;22(17):R673-5.



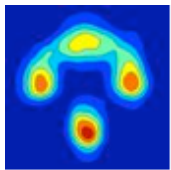
Reprogramming cell shape with live nano-patterning.

Vignaud T, Galland R, Tseng Q, Blanchoin L, Colombelli J, Thery M. *Journal of Cell Science*, 125:2134-2140, 2012.



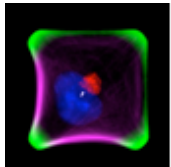
Spatial organization of the extra-cellular matrix regulates cell-cell junction positioning.

Tseng Q, Duchemin-Pelletier E, Deshiere A, Balland M, Guillou H, Filhol O, Thery M. *Proceedings of National Academy of Science U S A*. 109 (5) 1506-1511, 2012.



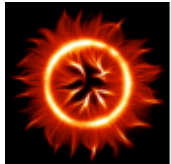
A new micropatterning method of soft substrates reveals that different tumorigenic signals can promote or reduce cell contraction levels.

Tseng Q, Wang I, Duchemin-Pelletier E, Azioune A, Carpi N, Gao J, Filhol O, Piel M, Thery M* & Balland M*. *Lab On Chip*, 11:2231-40, 2011.



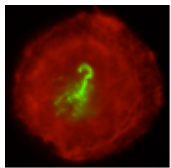
Cell micropatterning as a tool to decipher cell morphogenesis and functions.

Thery M. *Journal of Cell Science*, 123: 4201-4213, 2010. Review.



Nucleation geometry governs ordered actin networks structures.

Reymann AC, Martiel JL, Cambier T, Blanchoin L, Boujemaa-Paterski R* & Thery M*. *Nature Materials*, 9(10):827-32, 2010.



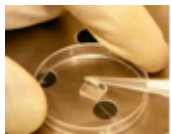
Cell shape and contractility regulate ciliogenesis in cell cycle arrested cells.

Pitaval A, Tseng Q, Bornens M, Thery M. *Journal of Cell Biology*, 191(2): 303-12, 2010.



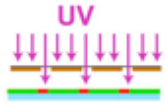
Protein micropatterns a direct printing protocol using deep UVs.

Azioune A, Carpi N, Tseng Q, Thery M, Piel M. *Methods in Cell Biology*. 97:133-46, 2010.



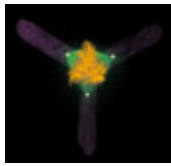
Adhesive micropatterns for cells: a microcontact printing protocol.

Thery M and Piel M. *Cold Spring Harbor Protocol*, (7) pdb.prot5255, 2009.



Simple and rapid process for single cell micro-patterning.

Azioune A., Storch M, Bornens M, They M, Piel M.
Lab On Chip, 9, 1640-2, 2009.



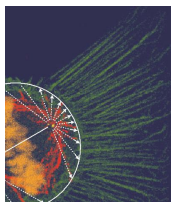
Mechanisms to suppress multipolar divisions in cancer cells with extra centrosomes.

Kwon M, Godinho SA, Chandhok NS, Ganem NJ, Azioune A, They M, Pellman D.
Genes and Development, 22(16):2189-203, 2008



Get round and stiff for mitosis.

They M, Bornens M.
Human Frontier Science Program Journal, 2(2): 65-71, 2008.



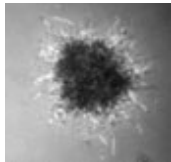
Experimental and theoretical study of mitotic spindle orientation.

They M, Jimenez-Dalmaroni A, Racine V, Bornens M, Julicher F.
Nature, 447(7143): 493-6, 2007.



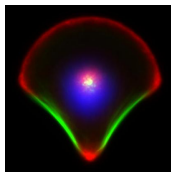
Comparative study and improvement of current cell micro-patterning techniques.

Fink J*, They M*, Azioune A, Dupont R, Chatelain F, Bornens M, Piel M.
Lab On Chip, 7: 672-680, 2007.



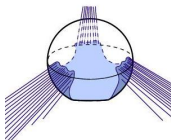
The universal dynamics of cell spreading.

Cuvelier D, They M, Chu Y, Dufour S, Thiéry JP, Bornens M, Nassoy P, Mahadevan L.
Current Biology, 17(8): 694-9, 2007.



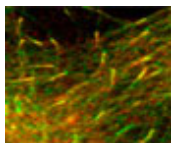
Anisotropy of cell adhesive microenvironment governs cell internal organization and orientation of polarity.

They M, Racine V, Piel M, Pepin A, Dimitrov A, Chen Y, Sibarita JB, Bornens M.
Proceedings of National Academy of Science U S A. 103(52):19771-6, 2006.



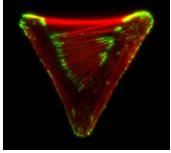
Cell shape and cell division.

They M, Bornens M.
Current Opinion in Cell Biology, 18(6):648-57, 2006. Review.



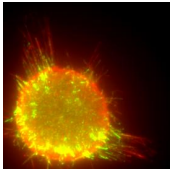
Tubulin tyrosination is a major factor affecting the recruitment of CAP-Gly proteins at microtubule plus ends.

Peris L, They M, Faure J, Saudi Y, Lafanechere L, Chilton JK, Gordon-Weeks P, Galjart N, Bornens M, Wordeman L, Wehland J, Andrieux A, Job D.
Journal of Cell Biology, 174(6):839-49, 2006.



Cell distribution of stress fibres in response to the geometry of the adhesive environment.

They M, Pepin A, Dressaire E, Chen Y, Bornens M.
Cell Motility and the Cytoskeleton, 63(6):341-55, 2006.



The extracellular matrix guides the orientation of the cell division axis.

They M, Racine V, Pepin A, Piel M, Chen Y, Sibarita JB, Bornens M.
Nature Cell Biology, 7(10):947-53, 2005.

* = co-corresponding authors or co-first authors