

## *Curriculum vitae*

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**Name:** Marcel B Mettlen

**Office Address:** 6000 Harry Hines Blvd,  
NL5.120GA (MC: 9039)

**Work Phone:** 214-648-3885

**Work E-Mail:** [Marcel.mettlen@utsouthwestern.edu](mailto:Marcel.mettlen@utsouthwestern.edu)

**Place of Birth:** Sankt Vith (Belgium)

### **Education**

Year	Degree	Field of Study (Thesis advisor for PhDs)	Institution
1999	B.Sc	Cell Biology	ICP and Louvain University, Brussels, Belgium
2001	MS	Cell Biology	ICP and Louvain University, Brussels, Belgium
2006	Ph.D	Biomedical Sciences (Prof. Pierre Jean Courtoy)	ICP and doctoral school BCM (Biochemistry, Cell biology and Microbiology), Louvain University Medical School, Brussels, Belgium.

### **Postdoctoral Training**

Year(s)	Titles	Specialty/Discipline (Lab PI for postdoc research)	Institution
2006-2010	Research associate	Membrane traffic (Prof. Sandra Schmid)	The Scripps Research Institute, La Jolla, CA
2010-2012	Sr. Staff scientist	Membrane traffic (Prof. Sandra Schmid)	The Scripps Research Institute, La Jolla, CA
2012-2014	Sr. Research Scientist	Membrane traffic (Prof. Sandra Schmid)	UTSW medical center, Dallas, TX

### **Faculty Academic Appointments**

Year(s)	Academic Title	Department	Academic Institution
2014-	Assistant professor	Cell Biology	UTSW medical center, Dallas, TX

## Honors and Awards

Year	Name of Honor/Award	Awarding Organization
2008-2010	AHA research fellow	American heart association

## Other Professional Positions

Year(s)	Position Title	Institution
2010-2011	Consultant in cell biology	Lifetechnologies

## Major Administrative/Leadership Positions

Year(s)	Position Title	Institution
2012-	Director of research and collaborations	UTSW medical center

## Professional Societies

Dates	Society Name, member
2006-	American Society of cell biology

## Editorial Activities

Year(s)	Journal Name
<u>Ad Hoc Reviewer</u>	
2014	Traffic
2015	Molecular Biology of the Cell

## Bibliography

### Peer-Reviewed Publications

#### Original Research Articles (\* indicates equal contribution)

1. Aguet F., Antonescu C.N.\*, **Mettlen M.\***, Schmid S.L., Danuser G. (2013). Advances in analysis of low signal-to-noise images link dynamin and AP2 to the Functions of an Endocytic Checkpoint. *Dev. Cell*, 26 (3): 279-291.
2. Sharma S., Quintana A., Findlay G.M., **Mettlen M.**, Baust B., Jain M., Nilsson R., Rao A., Hogan P.G. (2013) An siRNA screen for NFAT activation identifies septins as coordinators of store-operated Ca<sup>2+</sup> entry. *Nature*. Jul 11;499 7457):238-42.
3. Kim J.D., Kang H., Larrivée B., Lee M.Y., **Mettlen M.**, Schmid S.L., Roman B.L., Qyang Y., Eichmann A., Jin S.W. (2012) Context-dependent proangiogenic function of bone morphogenetic protein signaling is mediated by disabled homolog 2. *Dev Cell*; 23(2):441-8.
4. Christie J.M., Hitomi K., Arvai A.S., Hartfield K.A., **Mettlen M.**, Pratt A.J., Tainer J.A., Getzoff

	E.D. (2012) Structural tuning of the fluorescent protein iLOV for improved photostability. <i>J. Biol. Chem.</i> (22): 1868-78.
5.	Nunez D., Antonescu C., <b>Mettlen M.</b> , Liu A., Schmid S.L., Loerke D., Danuser G. (2011) Hotspots Organize Clathrin-Mediated Endocytosis by Efficient Recruitment and Retention of Nucleating Resources. <i>Traffic</i> . 2011 Dec;12 (12):1868-78.
6.	Loerke D. *, <b>Mettlen M.</b> *, Schmid S.L., and Danuser G. (2011). Measuring the hierarchy of molecular events during clathrin-mediated endocytosis. <i>Traffic</i> . July 12, 815-825.
7.	<b>Mettlen M.</b> , Loerke D., Danuser G., and Schmid S.L. (2010). Cargo and Adaptor Specific Mechanisms Regulate Clathrin Mediated Endocytosis. <i>J. Cell Biol.</i> March 22, 919-933.
8.	<b>Mettlen M.*</b> , Stoeber M.*, Loerke D., Antonescu C.N., Danuser G., and Schmid S.L. (2009). Endocytic accessory proteins are functionally distinguished by their differential effects on the maturation of clathrin-coated pits. <i>Mol. Biol. Cell</i> 20, 3251-3260.
9.	Loerke D.*, <b>Mettlen M.*</b> , Yarar D., Jaqaman K., Jaqaman H., Danuser G., and Schmid S.L. (2009). Cargo and Dynamin Regulate Clathrin-Coated Pit Maturation. <i>PLoS Biol.</i> 7, e57.
10.	Jaqaman K., Loerke D., <b>Mettlen M.</b> , Kuwata H., Grinstein S., Schmid S.L., Danuser G. (2008). Robust single-particle tracking in live-cell time-lapse sequences. <i>Nat Methods.</i> 8:695-702.
11.	de Diesbach P., Medts T., Carpentier S., D'Auria L., Van Der Smissen P., Platek A., <b>Mettlen M.</b> , Caplanusi A., van den Hove M.F., Tyteca D., Courtoy P.J. (2008). Differential subcellular membrane recruitment of Src may specify its downstream signalling. <i>Exp Cell Res.</i> 314:1465-79.
12.	González-Ramos R, Van Langendonck A, Defrère S, Lousse JC, <b>Mettlen M</b> , Guillet A, Donnez J. (2007). Agents blocking the nuclear factor-kappaB pathway are effective inhibitors of endometriosis in an in vivo experimental model. <i>Gynecol Obstet Invest.</i> 65 (3):174-186.
13.	Platek A., Vassilev V.S., de Diesbach P., Tyteca D., <b>Mettlen M.</b> , and Courtoy P. J. (2007). Constitutive diffuse activation of phosphoinositide 3-kinase at the plasma membrane by v-Src suppresses the chemotactic response to PDGF by abrogating the polarity of PDGF receptor signalling. <i>Exp Cell Res.</i> 313: 1090-105.
14.	<b>Mettlen M.</b> , Platek A., Van Der Smissen P., Carpentier S., Amyere M., de Diesbach P., Tyteca D., and Courtoy P. J. (2006). Src triggers circular ruffling and macropinocytosis at the apical surface of polarized MDCK cells. <i>Traffic.</i> 7 (5): 589-603.
15.	Defrère S., Van Langendonck A., González Ramos R., Jouret M., <b>Mettlen M.</b> and Donnez J. (2006). Quantification of endometriotic lesions in a murine model by fluorimetric and morphometric analyses. <i>Human reproduction</i> 21: 810-817.
16.	Emonard H., Bellon G., De Diesbach Ph., <b>Mettlen M.</b> , Hornebeck W. and Courtoy P.J. (2005). Regulation of MMPs activity by the low-density lipoprotein receptor-related protein (LRP). A new function for an old friend. <i>Biochimie.</i> 87: 369-76.
17.	Platek, A., <b>Mettlen M.</b> , Camby I., Kiss R., Amyere M. and Courtoy P. J., (2004). v-Src accelerates spontaneous motility via phosphoinositide 3-kinase, phospholipase C and phospholipase D, but abrogates chemotaxis in Rat-1 and MDCK cells. <i>J. Cell Sci.</i> 117:4849-61.
18.	Tyteca D., Van Der Smissen P., <b>Mettlen M.</b> , Van Bambeke F., Tulkens P. M., Mingeot-Leclercq M. P. and Courtoy P. J. (2002). Azithromycin, a lysosomotropic antibiotic, has distinct effects on fluid-phase and receptor-mediated endocytosis, but does not impair phagocytosis in J744 macrophages. <i>Exp. Cell Res.</i> 281: 86-100.

### Reviews, Chapters, Monographs and Editorials

1.	<b>Mettlen M.</b> , Danuser G. (2014). Imaging and Modeling the dynamics of clathrin-mediated endocytosis. <i>Cold Spring Harbor Perspectives in Biology</i> . 2014 Aug 28: 77-93
2.	Schmid SL, <b>Mettlen M.</b> (2013). <a href="#">Cell biology: Lipid switches and traffic control</a> . <i>Nature</i> . 2013 Jul 11;499(7457):161-2.
	Amyere M., <b>Mettlen M.</b> , Van Der Smissen P., Platek A., Payrastra B., Veithen A., Courtoy P. J. (2002) Origin, originality, functions, subversions and molecular signaling of macropinocytosis. <i>Int. J. Med. Microbiol.</i> 291:487-94.

### Proceedings of Meetings

1.	<b>Mettlen M.</b> , Pucadyil T. Ramachandran R., and Schmid S.L. (2009). Dissecting dynamin's role in clathrin-mediated endocytosis. <i>Biochem Soc. Trans.</i> 37, 1022-1026.
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