

## **CURRICULUM VITAE**

Name : Clément Mettling

Email : clm@igh.cnrs.fr

Born in 1961 in Colmar (France)

Nationality : French

### **University:**

1979/1983: BSc in Biochemistry, Strasbourg University

1983/1987: PhD studies in Pierre Chambon's laboratory (supervisor: Geoff Richards), Laboratoire de Génétique Moléculaire des Eucaryotes, Strasbourg.

9. 10. 1987: PhD in molecular biology, Strasbourg University.

### **Research positions**

1987/1989 : post-doc fellow in molecular neurobiology in Geoff Raisman's laboratory (supervisor: Roger Morris), National Institute for Medical Research, London)

1989/1990 : post-doct fellow in molecular neurobiology, Chris Henderson's laboraroty, Centre de Recherches de Biochimie Macromoléculaire, Montpellier.

1990: tenure position at the CNRS (French National Scientific Research Center)

1990/1997 : molecular neurobiology, Chris Henderson's laboratory, Montpellier

1994 Oct-Dec : "visiting scientist" in Cheng-Kou Chou's laboratory, Veterans General Hospital, Taipei, Taiwan.

1998/2009: virology in Pierre Corbeau's laboratory, Institut de Génétique Humaine, Montpellier.

2009/2010: visiting scientist in Sunny Sun's laboratory (human genetics), National Cheng-Kung University, Tainan, Taiwan.

2010/present: virology in Pierre Corbeau's laboratory, Institut de Génétique Humaine, Montpellier. Visiting Scientist in Michel Raymond's laboratory, Institut des Sciences de l'Evolution de Montpellier--

## Teaching experience.

Lectures to graduate students.

Scientific animation for school children.

Jury member for M1 and M2 students.

## Research Grants

1999-2000 : “construction of a new inducible expression system” Rhone-Poulenc/Avantis 12,500 euros plus a two-years post-doc salary

2006-2007 : “Identification of the signaling components activated by HIV-1 via CCR5 or CXCR4 using differential proteomic analysis” National Agency for AIDS Research 70,000 euros.

## Publications

**Mettling C.**, Bourouis M. and Richards G.

Allelic variation at the nucleotide level in *Drosophila* glue genes. ***Mol. Gen. Genet.*** (1985) 201: 265-268.

**Mettling C.**, Giangrande A. and Richards G.

The *Drosophila* Sgs-3 gene: an *in vivo* test of intron fonction. ***J. Mol. Biol.*** (1987) 196: 223-226.

Giangrande A., **Mettling C.** and Richards G.

Sgs-3 transcript levels are determined by multiple remote sequence elements. ***EMBO J.*** (1987) 6: 3079-3084.

**Mettling C.**, Giangrande A. and Richards G.

The use of oligonucleotide probes in studies of insect gene activity in development. ***J. Insect Physiol.*** (1988) 34: 679-684.

Martin M., **Mettling C.**, Giangrande A., Ruiz C. and Richards G.

Regulatory elements and interactions in the *Drosophila* 68C glue gene cluster. ***Developmental Genetics*** (1989) 10: 689-697.

Giangrande A., **Mettling C.**, Martin M., Ruiz C. and Richards G.

*Drosophila* Sgs-3 TATA: effects of point mutations on expression *in vivo* and protein binding *in vitro* with staged nuclear extracts. ***EMBO J.*** (1989) 8: 3459-3466.

Danciger E., **Mettling C.**, Vidal M., Morris R. and Margolis F.

The OMP gene: its structure and olfactory neuron specific expression in transgenic mice. ***Proc. Natl. Acad. Sci.*** (1989) 86: 8565-8569.

Henderson C., Bloch-Gallego E., Camu W., Gouin A. and **Mettling C.**

Neurotrophic factors in development and plasticity of spinal neurons. *Restor. Neurol. Neurosci.* (1993) 5 15-28.

Henderson C., Camu W., **Mettling C.**, Gouin A., Poulsen K., Karihaloo M., Rullamas J., Evans T., McMahon S., Armanini M., Berkemeier L., Phillips H., and Rosenthal A. Neurotrophins promote motor neuron survival and are present in embryonic limb bud. *Nature* (1993) 363: 266-270.

**Mettling C.**, Camu W. and Henderson C. Embryonic wing and leg motoneurons have intrinsically different survival properties. *Development* (1993) 118: 1149-1156.

Henderson C., Bloch-Gallego E., Camu W., Gouin, Lemeulle C. and **Mettling C.** Motoneuron survival factors : biological roles and therapeutic potential. *Neuromusc. Disord.* (1993) 3: 455-458.

Gouin A., Camu W., Bloch-Gallego E., **Mettling C.** and Henderson C.E. Facteurs de croissance et de survie des motoneurones spinaux *C-R-Seances-Soc-Biol-Fil.* (1993) 187: 47-61

**Mettling C.**, Gouin A., El M'Hamdi H., Bloch-Gallego E., Camu W., Buisson B., Tanaka H., Davies A. and Henderson C.E. Survival of newly post-mitotic motoneurons is transiently independent of exogenous trophic support *J. Neurosci.* (1995) 15: 3128-3137

Romey M., Pallares N., Mange A., **Mettling C.**, Peytavi R., Demaille J. and Claustres M. A naturally occurring sequence variation that creates a YY1 element is associated with increased cystic fibrosis transmembrane conductance regulator gene expression. *J. Biol. Chem.* (2000) 275(5):3561-3567

Lin Y-L., **Mettling C.**, Chou C-K. Rap1 Suppressed Tumorigenesis Is Concomitant with the Interference in Ras Effector Signaling. *FEBS Letters* (2000): 467(2-3),184-188

Lin Y-L, **Mettling C** and Chou C-K. Complexes Formation between Insulin Receptor and Extracellular signal-regulated Kinases ERKs. *MCBRC* (2000): 4, 234-238

Lin Y-L, **Mettling C**, Portales P, Reynes J, Clot J and Corbeau P. Cell surface CCR5 density determines the postentry efficiency of R5 HIV infection *Proc. Natl. Acad. Sci.* (2002) 99(24):15590-15595.

Lin Y-L., Shiao M-S, **Mettling C.** and Chou C-K. Cholesterol requirement of Hepatitis B surface antigen (HBsAg) secretion *Virology* (2003) 314,253-260.

Lin Y-L, Noël D., **Mettling C**, Réant B, Clot J, Jorgensen C and Corbeau P

Feline immunodeficiency virus vectors for efficient transduction of primary human synoviocytes: application to an original model of rheumatoid arthritis. (2004) *Human Gene Therapy* 15 : 588-596

Portales P, Guerrier T, **Mettling C**, Lin Y-L, Baillat V, Merle de Boever C, Lemoing V, Segondy M, Clot J, Reynes J, Corbeau P.  
Vitamin E supplementation increases CCR5 expression in HIV-1 infected subjects (2004) *Clinical Nutrition* 23:1244-1245.

C Crozet , YL Lin, **C Mettling**, P Corbeau, S Lehmann, V Perrier  
Inhibition of PrPSc replication by lentiviral gene transfert of dominant negative PrP variants. (2004) *J. Cell Science* 117, 5591-5597.

Bachrach E, Dreja H, Lin Y-L, **Mettling C**, Pinet V, Corbeau P and Piechaczyk M  
Effect of virion surface gp120 density on infection by HIV-1 and viral production by infected cells. (2005) *Virology* 332, 418-29.

YL Lin, **C Mettling**, P Portales, B Réant, J Clot, P Corbeau  
G protein signaling triggered by R5 Human Immunodeficiency Virus type 1 increases virus replication efficiency in primary T lymphocytes (2005) *J. Virol* 79:7938-41.

Guichou JF, Viaud J, **Mettling C**, Subra G, Lin YL, Chavanieu A.  
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Cell surface CCR5 density determines the intensity of T cell migration towards rheumatoid arthritis synoviocytes. (2007) *Clin Immunol*. 123:148-54

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Unintegrated HIV-1 provides an inducible and functional reservoir in untreated and highly active antiretroviral therapy-treated patients. (2007) *Retrovirology*. 29:60

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Lin YL, **Mettling C**, Portales P, Rouzier R, Clot J, Reynes J and Corbeau P. The chemokine CCL5 regulates the in vivo cell surface expression of its receptor, CCR5. (2008) *AIDS* 22:430

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De Vidi I, Boursier G, Delouche N, Portalès P, Cadars E, Bouthier M, **Mettling C**, Lin YL, Thouvenot E, Carlander B, Camu W, Antel JP, Bar-Or A, Zephir H, Vermersch P, De Seze J, Corbeau P, Eliaou JF, Vincent T. Strategy for anti-aquaporin-4 auto-antibody identification and quantification using a new cell-based assay (2011) *Clin Immunol*. 138:239-46.

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Duquenne C, Psomas C, Gimenez S, Carles MJ, Barbuat C, Lavigne JP, Sotto A, Reynes J, Guglielmi P, **Mettling C**, Francois V, Corbeau P.

The two human CXCR4 isoforms display different HIV receptor activities: consequences for the emergence of X4 strains (2014) **J. Immunol.** 193: 4188.

Debaisieux S, Lachambre S, Gross A, **Mettling C**, Chopard C, Besteiro S, Yezid H, Mesnard JM and Beaumelle B.

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Wu YW, **Mettling C**, Wu SR, Yu CY, Perng GC, Lin YS, and Lin YL.

Autophagy-associated dengue vesicles promote viral transmission avoiding antibody neutralization. (2016) **Sci. Rep.** 6, 32243; doi: 10.1038/srep32243.

Faurie C, **Mettling C**, Bchir MA, Hadmoko DS, Heitz C, Lesani ED, Willinger M and Raymond M.

Evidence of genotypic adaptation to the exposure to volcanic risk at the dopamine receptor DRD4 locus (2016) **Sci Rep.** 6:37745. doi: 10.1038/srep37745.

Lin YL, Silva MJ, Coquel F, Cadoret JC, **Mettling C**, Nieminuszczy J, Dardillac E, Barthe A, Promonet A, Cribier A, Sarrazin A, Baldacci G, Niedzwiedz W, Lopez B, Benkirane M and Pasero P.

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