

LIST OF PUBLICATIONS

JEROME GOUTTENOIRE

Original articles

1. Valcourt U, **Gouttenoire J**, Moustakas A, Herbage D, Mallein-Gerin F. Functions of TGF- β family Type I receptors and Smad proteins in the hypertrophic maturation and osteoblastic differentiation of chondrocytes. *J Biol Chem* 2002;277:33545-33558.
2. Bluteau G, **Gouttenoire J**, Conrozier T, Mathieu P, Vignon E, Richard M, Herbage D, Mallein-Gerin F. Differential gene expression analysis in a rabbit model of osteoarthritis induced by anterior cruciate ligament section. *Biorheology* 2002;39:247-258.
3. Ronzière M-C, Roche S, **Gouttenoire J**, Herbage D, Freyria A-M. Ascorbate modulation of bovine chondrocyte growth, matrix protein gene expression and synthesis in three-dimensional collagen sponges. *Biomaterials* 2003;24:851-861.
4. Valcourt U*, **Gouttenoire J***, Aubert-Foucher E, Herbage D, Mallein-Gerin F. Alternative splicing of type II procollagen pre-mRNA in chondrocytes is oppositely regulated by BMP-2 and TGF- β 1. *FEBS Lett.* 2003;545:115-119. (* authors contributed equally)
5. **Gouttenoire J**, Valcourt U, Ronziere M-C, Aubert-Foucher E, Mallein-Gerin F, Herbage D. Modulation of collagen synthesis in normal and osteoarthritic cartilage. *Biorheology* 2004;41:535-542.
6. Ronziere M-C, Aubert-Foucher E, **Gouttenoire J**, Bernaud J, Herbage D, Mallein- Gerin F. Integrin alpha1beta1 mediates collagen induction of MMP-13 expression in MC615 chondrocytes. *Biochim Biophys Acta* 2005;1746:55-64.
7. Cortial D, **Gouttenoire J**, Rousseau C-F, Ronziere M-C, Piccardi N, Msika P, Herbage D, Mallein-Gerin F, Freyria A-M. Activation by IL-1 of bovine articular chondrocytes in culture within a 3D collagen-based scaffold - an *in vitro* model to address the effect of compounds with therapeutic potential in osteoarthritis. *Osteoarthritis Cartilage* 2006;14:631-640.
8. **Gouttenoire J**, Valcourt U, Bougault C, Aubert-Foucher E, Arnaud E, Giraud L, Mallein- Gerin F. Knockdown of the intraflagellar transport protein IFT46 stimulates selective gene expression in mouse chondrocytes and affects early development in zebrafish. *J Biol Chem* 2007;282:30960-30973.
9. Bellecave P, **Gouttenoire J**, Gajer M, Brass V, Koutsoudakis G, Blum HE, Bartenschlager R, Nassal M, Moradpour D. Hepatitis B and C virus coinfection: A novel model system reveals the absence of direct viral interference. *Hepatology* 2009;50:46-55.
10. **Gouttenoire J**, Castet V, Montserret R, Arora N, Raussens V, Ruysschaert JM, Diesis E, Blum HE, Penin F, Moradpour D. Identification of a novel determinant for membrane association in hepatitis C virus nonstructural protein 4B. *J Virol* 2009;83:6257-6268.
11. **Gouttenoire J**, Montserret R, Kennel A, Penin F, Moradpour D. An Amphipathic α -helix at the C terminus of hepatitis C virus nonstructural protein 4B mediates membrane association. *J Virol* 2009;83:11378-11384.
12. Ripoli M, D'Aprile A, Quarato G, Sarasin-Filipowicz M, **Gouttenoire J**, Scrima R, Cela O, Boffoli D, Heim MH, Moradpour D, Capitanio N, Piccoli C. Hepatitis C virus-linked mitochondrial dysfunction promotes hypoxia-inducible factor 1 α -mediated glycolytic adaptation. *J Virol* 2010;84:647-660.

13. Bellecave P, Sarasin-Filipowicz M, Donzé O, Kennel A, **Gouttenoire J**, Meylan E, Terracciano L, Tschopp J, Sarrazin C, Berg T, Moradpour D, Heim MH. Cleavage of mitochondrial antiviral signaling protein in the liver of patients with chronic hepatitis C correlates with a reduced activation of the endogenous interferon system. *Hepatology* 2010;51:1127-1136.
14. **Gouttenoire J**, Bougault C, Aubert-Foucher E, Perrier E, Ronzière MC, Sandell L, Lundgren-Akerlund E, Mallein-Gerin F. BMP-2 and TGF- β 1 differentially control expression of type II procollagen and α 10 and α 11 integrins in mouse chondrocytes. *Eur J Cell Biol* 2010;89:307-314.
15. Brass V, **Gouttenoire J**, Wahl A, Pal Z, Blum HE, Penin F, Moradpour D. Hepatitis C virus RNA replication requires a conserved structural motif within the transmembrane domain of the NS5B RNA-dependent RNA polymerase. *J Virol* 2010;84:11580-11584.
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18. Paul D, Romero-Brey I, **Gouttenoire J**, Stoitsova S, Krijnse-Locker J, Moradpour D, Bartenschlager R. NS4B self-interaction through conserved C-terminal elements is required for the establishment of functional HCV replication complexes. *J Virol* 2011;85:6963-6976.
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20. Lange CM, Miki D, Ochi H, Nischalke HD, Bojunga J, Bibert S, Morikawa K, **Gouttenoire J**, Cerny A, Dufour JF, Gorgievski-Hrisoho M, Heim MH, Malinverni R, Müllhaupt B, Negro F, Semela D, Katalik Z, Müller T, Spengler U, Berg T, Chayama K, Moradpour D, Bochud PY; Hiroshima Liver Study Group; Swiss Hepatitis C Cohort Study Group. Genetic analyses reveal a role for vitamin D insufficiency in HCV-associated hepatocellular carcinoma development. *PLoS One* 2013;8:e64053.
21. Morikawa K*, **Gouttenoire J***, Hernandez C, Dao Thi VL, Tran HT, Lange CM, Dill MT, Heim MH, Donzé O, Penin F, Quadroni M, Moradpour D. Quantitative proteomics identifies the membrane-associated peroxidase GPx8 as a cellular substrate of the hepatitis C virus NS3-4A protease. *Hepatology* 2014;59:423-433. (* authors contributed equally)
22. Lange CM, Bellecave P, Dao Thi VL, Tran HT, Penin F, Moradpour D, **Gouttenoire J**. Determinants for membrane association of the hepatitis C virus NS2 protease domain. *J Virol* 2014;88:6519-6523.
23. Boukadida C, Marnata C, Montserret R, Cohen L, Blumen B, **Gouttenoire J**, Moradpour D, Penin F, Martin A. NS2 proteins of GB virus B and hepatitis C virus share common protease activities and membrane topologies. *J Virol*. 2014;88:7426-7444.
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- during epithelial-mesenchymal transition and promotes tumor cell proliferation in non-small cell lung cancer. *Cancer Metab* 2014;2:11.
- 26. Fogeron ML, Badillo A, Jirasko V, **Gouttenoire J**, Paul D, Lancien L, Moradpour D, Bartenschlager R, Endo Y, Meier BH, Penin F, Böckmann A. Wheat germ cell-free expression: two detergents with a low critical micelle concentration allow for production of soluble HCV membrane proteins. *Protein Expr Purif* 2014;105C:39-46.
 - 27. **Gouttenoire J**, Montserret R, Paul D, Castillo R, Meister S, Bartenschlager R, Penin F and Moradpour D. Aminoterminal amphipathic α -Helix AH1 of hepatitis C virus nonstructural protein 4B possesses a dual role in RNA replication and virus production. *PLoS Pathog* 2014;10:e1004501.
 - 28. Welsch C, Haselow K, **Gouttenoire J**, Schneider M, Morikawa K, Martinez Y, Susser S, Sarrazin C, Zeuzem S, Antes I, Moradpour D, Lange CM. Hepatitis C virus variants resistant to macrocyclic NS3-4A protease inhibitors subvert IFN- β induction by efficient MAVS cleavage. *J Hepatol* 2015;62:779-784.
 - 29. Dao Thi VL, Debing Y, Wu X, Rice CM, Neyts J, Moradpour D*, **Gouttenoire J***. Sofosbuvir inhibits hepatitis E virus replication in vitro and results in an additive effect when combined with ribavirin. *Gastroenterology* 2016;150:82-85. (* authors contributed equally)
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 - 31. Lenggenhager D*, **Gouttenoire J***, Malehmir M, Bawohl M, Honcharova-Biletska H, Kreutzer S, Semela D, Neuweiler J, Hürlimann S, Aepli P, Fraga M, Sahli R, Terracciano L, Rubbia-Brandt L, Müllhaupt B, Sempoux C, Moradpour D§, Weber A§. Visualization of hepatitis E virus RNA and proteins in the human liver. *J Hepatol* 2017;67:471-479. (* or § authors contributed equally)
 - 32. Farhat R, Ankavay M, Lebsir N, **Gouttenoire J**, Jackson CL, Wychowski C, Moradpour D, Dubuisson J, Rouillé Y, Cocquerel L. Identification of GBF1 as a cellular factor required for hepatitis E virus RNA replication. *Cell Microbiol* 2018;20:e12804.
 - 33. Wu X*, Dao Thi VL*, Liu P, Takacs CN, Xiang K, Andrus L, **Gouttenoire J**, Moradpour D, Rice CM. Pan-genotype hepatitis E virus replication in stem cell-derived hepatocellular systems. *Gastroenterology* 2018;54:663-674.e7. (* authors contributed equally)
 - 34. Saleh M*, Welsch C*, Cai C, Doebring C, **Gouttenoire J**, Friedrich J, Haselow K, Sarrazin C, Badenhoop K, Moradpour D, Zeuzem S, Rueschenbaum S, Lange CM. Differential modulation of hepatocellular innate immune pathways by synthetical calcitriol analogs. *J Steroid Biochem Mol Biol* 2018;183:142-151. (* authors contributed equally)
 - 35. Saleh M, Rüschenbaum S, Welsch C, Zeuzem S, Moradpour D, **Gouttenoire J**, Lange CM. Glycogen synthase kinase 3 β enhances hepatitis C virus replication by supporting miR-122. *Frontiers in Microbiology* 2018;9:2949.
 - 36. **Gouttenoire J***, Pollán A, Abrami L, Oechslin N, Matter M, Dao Thi VL, Szkolnicka D, Oppiger J, Mauron J, van der Goot G, Moradpour D*. Palmitoylation mediates membrane association of hepatitis E virus ORF3 protein and is required for infectious particle secretion. *PLoS Pathog* 2018;14:e1007471. (* corresponding authors)
 - 37. Sahli R, Fraga M, Semela D, Moradpour D, **Gouttenoire J**. Rabbit HEV in immunosuppressed patients with hepatitis E acquired in Switzerland. *J Hepatol* 2019;70:1023-1025.

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40. Tran HTL, Morikawa K, Anggakusuma, Zibi R, Dao Thi VL, Penin F, Heim MH, Quadroni M, Pietschmann T, **Gouttenoire J***, Moradpour D*. OCIAD1 is a host mitochondrial substrate of the hepatitis C virus NS3-4A protease. *PloS one* 2020;15:e0236447. (* authors contributed equally)

Review articles

1. **Gouttenoire J**, Penin F, Moradpour D. Hepatitis C virus nonstructural protein 4B: a journey into unexplored territory. *Rev Med Virol* 2010;20:117-129.
2. Morikawa K, Lange CM, **Gouttenoire J**, Brass V, Penin F, Moradpour D. Nonstructural protein 3-4A: the Swiss army knife of hepatitis C virus. *J Viral Hepat* 2011;18:305-315.
3. Debing Y, Moradpour D, Neyts J, **Gouttenoire J**. Update on hepatitis E virology: Implications for clinical practice. *J Hepatol*. 2016;65:200-212.
4. Fraga M, **Gouttenoire J**, Sahli R, Moradpour D. Akute und chronische Hepatitis E. *Ther Umsch* 2017;74:109-113.

Editorials

1. **Gouttenoire J**, Moradpour D, Penin F. Surprises from the crystal structure of the hepatitis C virus NS2-3 protease. *Hepatology* 2006;44:1690-1693.
2. **Gouttenoire J**, Moradpour D. A mouse model for hepatitis E virus infection. *J Hepatol*. 2016;64:1003-1005.
3. **Gouttenoire J**, Szkolnicka D, Moradpour D. Treatment of chronic hepatitis E with ribavirin: lessons from deep sequencing. *Gut* 2016;65:1583-1584.
4. Gilgenkrantz H, **Gouttenoire J**, Mallet V. Un modèle murin pour une infection chronique méconnue : l'hépatite E ! *Med Sci* 2016;32:812-814.
5. Oechslin N, Moradpour D, **Gouttenoire J**. Hepatitis E virus finds its path through the gut. *Gut* 2020: in press.

Book chapters

1. Mallein-Gerin F and **Gouttenoire J**. RNA extraction from cartilage. In: *Cartilage and Osteoarthritis. Volume 1: Cellular and Molecular Tools*. Sabatini M, Pastoureaud P and De Ceuninck F, eds. Humana Press, Totowa, NJ, 2004:101-104.
2. Mallein-Gerin F and **Gouttenoire J**. Gene expression analysis in cartilage by *in situ* hybridization. In: *Cartilage and Osteoarthritis. Volume 1: Cellular and Molecular Tools*. Sabatini M, Pastoureaud P and De Ceuninck F, eds. Humana Press, Totowa, NJ, 2004:105-108.