

Liste de publications de BMOL

Articles dans des revues avec comité de lecture

2024

- Juhlen, R. G., Grauer, L., Martinelli, V., Rencurel, C., & Fahrenkrog, B. (2024). Alteration of actin cytoskeletal organisation in fetal akinesia deformation sequence. *Scientific reports*, 14(1), 1742. doi:10.1038/s41598-023-50615-1
- D'Aria, S., Maquet, C., Li, S., Dhup, S., Lepez, A., Köhler, A., Van Hee, V., Dadhich, R., Andris, F., Nemanazyy, I., Sonveaux, P., Machiels, B., Gillet, L., & Braun, M. Y. (2024). Expression of the monocarboxylate transporter MCT1 is required for virus-specific mouse CD8+ T cell memory development. *Proceedings of the National Academy of Sciences of the United States of America*, 121(13), e2306763121.
- Fraikin, N., & Van Melderen, L. (2024). Single-cell evidence for plasmid addiction mediated by toxin–antitoxin systems. *Nucleic acids research*, 52(4), 1847-1859. doi:10.1093/nar/gkae018
- Bright, S. S., Erby, M. L., Poynton, F. F., Monteyne, D., Perez-Morga, D., Gunnlaugsson, T., Williams, C. D., & Elmes, R. R. (2024). Tracking the cellular uptake and phototoxicity of Ru(ii)-polypyridyl-1,8-naphthalimide Tröger's base conjugates. *RSC Chemical Biology*, 5(4), 344-359. doi:10.1039/d3cb00206c
- Trevino, T., Fogel, A., Otkiran, G., Niladhuri, S., Sanborn, M., Class, J., Almousawi, A., Vanhollebeke, B., Tai, L. M., Rehman, J., Richner, J. M., & Lutz, S. E. (2024). Engineered Wnt7a ligands rescue blood–brain barrier and cognitive deficits in a COVID-19 mouse model. *Brain*. doi:10.1093/brain/awae031
- Desmecht, S., Latka, A., Ceyssens, P.-J., Garcia-Pino, A., Gillis, A., Lavigne, R., Lima Mendez, G., Matthijnssens, J., Vázquez, R., Venneman, J., Wagemans, J., Briers, Y., & Thiry, D. (2024). Meeting Report of the Second Symposium of the Belgian Society for Viruses of Microbes and Launch of the Phage Valley. *Viruses*, 16(2), 299. doi:10.3390/v16020299
- Tsimpos, P., Desiderio, S., Cabochette, P., Poelvoorde, P., Kricha, S., Vanhamme, L., Pouillard, C., & Bellefroid, E. (2024). Loss of G9a does not phenocopy the requirement for Prdm12 in the development of the nociceptive neuron lineage. *Neural Development*, 19(1), 1. doi:10.1186/s13064-023-00179-7
- Bodac, A., Mayet, A., Rana, S., Pascual, J., Bowler, A. D., Roh, V., Fournier, N., Craciun, L., Demetter, P., Radtke, F., & Meylan, E. (2024). Bcl-xL targeting eliminates ageing tumor-promoting neutrophils and inhibits lung tumor growth. *EMBO molecular medicine*, 16(1), 158-184. doi:10.1038/s44321-023-00013-x
- Guarini, N. P., Saliba, E., & André, B. (2024). Phosphoregulation of the yeast Pma1 H+- ATPase autoinhibitory domain involves the Ptk1/2 kinases and the Glc7 PP1 phosphatase and is under TORC1 control. *PLOS genetics*, 20(1), e1011121. doi:10.1371/journal.pgen.1011121

2023

Guérin, C., Behr, M., Sait, J., Mol, A., El Jaziri, M., & Baucher, M. (2023). Evidence for poplar PtaPLATZ18 in the regulation of plant growth and vascular tissues development. *Frontiers in Plant Science*, 14, 1302536.

Wolff, P., Labar, G., Lechner, A., Van Elder, D., Soin, R., Gueydan, C., Kruys, V., Droogmans, L., & Roovers, M. (2023). The *Bacillus subtilis* *ywbD* gene encodes RlmQ, the 23S rRNA methyltransferase forming m7G2574 in the A-site of the peptidyl transferase center. *RNA*. doi:10.1261/rna.079853.123

Lecordier, L., Heo, P., Graversen, J. H., Hennig, D., Skytthe, M. K., Cornet d'Elzius, A., Pincet, F., Perez-Morga, D., & Pays, E. (2023). Apolipoproteins L1 and L3 control mitochondrial membrane dynamics. *Cell reports*, 42(12), 113528. doi:10.1016/j.celrep.2023.113528

Vermeiren, S., Cabochette, P., Dannawi, M., Desiderio, S., Sabaté San José, A., Achouri, Y., Kricha, S., Sitte, M., Salinas-Riester, G., Vanhollebeke, B., Brunet, J.-F. J., & Bellefroid, E. (2023). Prdm12 represses the expression of the visceral neuron determinants Phox2a/b in developing somatosensory ganglia. *iScience*, 26(12), 108364. doi:10.1016/j.isci.2023.108364

Leeman-Neill, R., Song, D., Bizarro, J., Wacheul, L., Rothschild, G., Singh, S., Yang, Y., Sarode, A., Gollapalli, K., Wu, L., Zhang, W., Chen Y, Y., Lauring, M., Whisenant, E., Bhavsar, S., Lim, J., Swerdlow, S., Bhagat, G., Zhao, Q., Berchowitz, L., Lafontaine, D., Wang, J., & Basu, U. (2023). Noncoding mutations cause super-enhancer retargeting resulting in protein synthesis dysregulation during B cell lymphoma progression. *Nature genetics*, 55(12), 2160-2174. doi:10.1038/s41588-023-01561-1

Naarmann-de Vries, I., Zorbas, C., Lemsara, A., Piechotta, M., Ernst, F. G., Wacheul, L., Lafontaine, D., & Dieterich, C. (2023). Comprehensive identification of diverse ribosomal RNA modifications by targeted nanopore direct RNA sequencing and JACUSA2. *RNA biology*, 20(1), 652-665. doi:10.1080/15476286.2023.2248752

Megarioti, A. A., Esch, B. B., Athanasopoulos, A., Koulouris, D., Makridakis, M., Lygirou, V., Samiotaki, M., Zoidakis, J., Sophianopoulou, V., André, B., Fröhlich, F., & Gournas, C. (2023). Ferroptosis-protective membrane domains in quiescence. *Cell reports*, 42(12), 113561. doi:10.1016/j.celrep.2023.113561

El soufi, G., Di Jorio, L., Gerber, Z., Cluzel, N., Van Assche, J., Delafoy, D., Olaso, R., Daviaud, C., Loustau, T., Schwartz, C., Trebouet, D., Hernalsteens, O., Marechal, V., Raffestin, S., Rousset, D., Van Lint, C., Deleuze, J. F., Boni, M., OBEPINE consortium, O., Rohr, O., Villain-Gambier, M., & Wallet, C. (2023). Highly efficient and sensitive membrane-based concentration process allows quantification, surveillance, and sequencing of viruses in large volumes of wastewater. *Water research*.

Chauvin, A., Bittencourt, C., Galais, M., Sauvage, L., Bellefroid, M., Van Lint, C., Op De Beeck, A., Snyders, R., & Reniers, F. (2023). Deposition of TiO_x and N-TiO_x by dielectric barrier discharge at atmospheric pressure. *Surface & coatings technology*.

Rousseau, C. J., Fraikin, N., Zedek, S., & Van Melderen, L. (2023). Are envelope stress responses essential for persistence to #-lactams in Escherichia coli? *Antimicrobial agents and chemotherapy*, e0032923. doi:10.1128/aac.00329-23

Cappe, B., Vadi, M., Sack, E., Wacheul, L., Verstraeten, B., Dufour, S., Franck, J., Xie, W., Impens, F., Hendrix, A., Lafontaine, D., Vandenebeele, P., & Riquet, F. (2023). Systematic compositional analysis of exosomal extracellular vesicles produced by cells undergoing apoptosis, necroptosis and ferroptosis. *Journal of Extracellular Vesicles*, 12(10). doi:10.1002/jev2.12365

Beauvois, S. G., Flaughnati, N., Ilbert, M., Boyer, M., Gavello-Fernandez, E., Fronzes, R., Jurenas, D., & Journet, L. (2023). The tip protein PAAR is required for the function of the type VI secretion system. *Microbiology spectrum*, e0147823. doi:10.1128/spectrum.01478-23

Dominguez Molina, L., Talavera Perez, A., Cepauskas, A., Kurata, T., Echemendia Blanco, D., Hauryliuk, V., & Garcia-Pino, A. (2023). Biochemical and X-ray analyses of the players involved in the faRel2/aTfaRel2 toxin-antitoxin operon. *Acta Crystallographica Section F: Structural Biology Communications*, 79(Pt 10), 247-256. doi:10.1107/S2053230X23007288

Lafontaine, D. (2023). When two became three: Shaping the nucleolus with Treacle. *Cell reports*, 42(9), 113060. doi:10.1016/j.celrep.2023.113060

Lberman, N., Rothi, H., Gerashchenko, M., Zorbas, C., Boulias, K., MacWhinnie, F., Ying, A. K., Flood Taylor, A., Al Haddad, J., Shibuya, H., Roach, L., Dong, A., Dellacona, S., Lafontaine, D., Gladyshev, V. N., & Greer, E. L. (2023). 18S rRNA methyltransferases DIMT1 and BUD23 drive intergenerational hormesis. *Molecular cell*, 83(18), 3268-3282.e7. doi:10.1016/j.molcel.2023.08.014

Le Moine, M., Azouz, A., Sánchez Sánchez, G., Dejolier, S., Nguyen, M., Thomas, S., Shala, V., Dreidi, H., Denanglaire, S., Libert, F., Vermijlen, D., Andris, F., & Goriely, S. (2023). Homeostatic PD-1 signaling restrains EOMES-dependent oligoclonal expansion of liver-resident CD8 T cells. *Cell reports*, 42(8), 112876. doi:10.1016/j.celrep.2023.112876

Lafontaine, D. (2023). In phase with the nucleolus. *Cell Research*, 33(8), 579-580. doi:10.1038/s41422-023-00801-7

Ernits, K., Saha, C. K., Brodiazhenko, T., Chouhan, B., Shenoy, A., Buttress, J., Duque-Pedraza, J., Bojar, V., Nakamoto, J., Kurata, T., Egorov, A., Shyrokoval, L., Johansson, M. J. O., Mets, T., Rustamova, A., Džigurski, J., Tenson, T., Garcia-Pino, A., Strahl, H., Elofsson, A., Hauryliuk, V., & Atkinson, G. C. (2023). The structural basis of hyperpromiscuity in a core combinatorial network of type II toxin–antitoxin and related phage defense systems. *Proceedings of the National Academy of Sciences of the United States of America*, 120(33). doi:10.1073/pnas.2305393120

Maseko, S. B., Brammerloo, Y., Van Molle, I., Sogues, A., Martin, C., Gorgulla, C., Plant, E., Olivet, J., Blavier, J., Ntombela, T., Delvigne, F., Arthanari, H., El Hajj, H., Bazarbachi, A., Van Lint, C., Salehi-Ashtiani, K., Remaut, H., Ballet, S., Volkov, A. N., & Twizere, J.-C.

(2023). Identification of small molecule antivirals against HTLV-1 by targeting the hDLG1-Tax-1 protein-protein interaction. *Antiviral research*, 217, 105675.

Armalyte, J., Cepauskas, A., Šakalyt#, G., Martinkus, J., Skerniškyt#, J., Martens, C., Sužiedeliene, E., Garcia-Pino, A., & Jurenas, D. (2023). A polyamine acetyltransferase regulates the motility and biofilm formation of *Acinetobacter baumannii*. *Nature communications*, 14(1). doi:10.1038/s41467-023-39316-5

Plant, E., Bellefroid, M., & Van Lint, C. (2023). A complex network of transcription factors and epigenetic regulators involved in bovine leukemia virus transcriptional regulation. *Retrovirology*, 20(1). doi:10.1186/s12977-023-00623-w

Roumeguere, T., Noyon, C., Van Antwerpen, P., Poelvoorde, P., Bar, I., Abdulsater, F., Rousseau, A., Delporte, C., Vanhamme, L., Vanhaeverbeek, M., Delree, P., & Zouaoui Boudjeltia, K. (2023). Role of Myeloperoxidase in ROS Generation and Inflammation Response on Prostate Epithelial Cells. *Inflammation*. doi:10.1007/s10753-023-01846-x

De Timary Vanden Berghe De Binckum, G., Rousseau, C., Van Melderen, L., & Scheid, B. (2023). Shear-enhanced sorting of ovoid and filamentous bacterial cells using Pinch Flow Fractionation. *Lab on a chip*, 23, 659.

Jaumaux, F., Petit, K., Martin, A., Rodriguez-Villalobos, H., Vermeersch, M., Perez-Morga, D., & Gabant, P. (2023). Selective Bacteriocins: A Promising Treatment for *Staphylococcus aureus* Skin Infections Reveals Insights into Resistant Mutants, Vancomycin Resistance, and Cell Wall Alterations. *Antibiotics*, 12(6), 947. doi:10.3390/antibiotics12060947

Bowakim-Anta, N., Acolty, V., Azouz, A., Yagita, H., Leo, O., Goriely, S., Oldenhove, G., & Moser, M. (2023). Chronic CD27-CD70 costimulation promotes type 1-specific polarization of effector Tregs. *Frontiers in immunology*, 14, 1023064. doi:10.3389/fimmu.2023.1023064

Liang, M., Hody, C., Yammine, V., Soin, R., Sun, Y., Lin, X., Tian, X., Meurs, R., Perdrau, C., Delacourt, N., Oumalis, M., Andris, F., Conrard, L., Kruys, V., & Gueydan, C. (2023). eIF4EHP promotes Ldh mRNA translation in and fruit fly adaptation to hypoxia. *EMBO reports*, e56460. doi:10.15252/embr.202256460

Parab, S., Card, O. O., Chen, Q., America, M., Buck, L. L., Quick, R. R., Horrigan, W. W., Levkowitz, G., Vanhollebeke, B., & Matsuoka, R. R. (2023). Local angiogenic interplay of Vegfc/d and Vegfa controls brain region-specific emergence of fenestrated capillaries. *eLife*, 12. doi:10.7554/eLife.86066

Latka, A., Aertsen, A., Boeckaerts, D., Blasdel, B. B., Ceyssens, P.-J., Garcia-Pino, A., Gillis, A., Lavigne, R., Lima Mendez, G., Matthijnssens, J., Onsea, J., Peeters, E., Pirnay, J.-P., Thiry, D., Vandenheuvel, D., Van Mechelen, E., Venneman, J., Verbeken, G., Wagemans, J., & Briers, Y. (2023). Foundation of the Belgian Society for Viruses of Microbes and Meeting Report of Its Inaugural Symposium. *Viruses*, 15(5), 1213. doi:10.3390/v15051213

Shinyuy, L. M., Loe, G. G., Jansen, O., Mamede, L., Ledoux, A., Noukimi, S. F., Abenwie, S. N., Ghogomu, S. M., Souogui, J., Robert, A., Demeyer, K., & Frédéric, M. (2023). Secondary Metabolites Isolated from *Artemisia afra* and *Artemisia annua* and Their Anti-

Malarial, Anti-Inflammatory and Immunomodulating Properties—Pharmacokinetics and Pharmacodynamics: A Review. *Metabolites*, 13(5), 613. doi:10.3390/metabo13050613

Chatterjee, D., Zhang, Y., Ngassaki-Yoka, C.-D., Dutilleul, A., Khalil, S., Hernalsteens, O., Wiche Salinas, T. R., Dias, J., Huicheng, C., Smail, Y., Goulet, J.-P., Brendan, B., Routy, J.-P., Van Lint, C., & Ancuta, P. (2023). Identification of Aryl Hydrocarbon Receptor as a Barrier to HIV-1 Infection and Outgrowth in CD4+ T-Cells (C. Van Lint and P. Ancuta are co-corresponding authors). *Cell reports*, 42(6), doi:10.1016/j.celrep.2023.112634, 112634.

DeWulf, B., Minsart, L., Verdonk, F., Kruys, V., Piagnerelli, M., Maze, M., & Saxena, S. (2023). High Mobility Group Box 1 (HMGB1): Potential Target in Sepsis-Associated Encephalopathy. *Cells*, 12(7), 1088. doi:10.3390/cells12071088

Bisilliat Donnet, C., Acolty, V., Azouz, A., Taquin, A., Henin, C., Cafarelo, S. T., Denanglaire, S., Mazzone, M., Oldenhove, G., Leo, O., Goriely, S., & Moser, M. (2023). PHD2 Constrains Antitumor CD8+ T-cell Activity. *Cancer immunology research*, 11(3), 339-350. doi:10.1158/2326-6066.CIR-22-0099

Saxena, S., Nuyens, V., Rodts, C., Jamar, K. E., Albert, A., Seidel, L., Cherkaoui-Malki, M., Boogaerts, J. G., Wulff, H., Maze, M., Kruys, V., & Vamecq, J. (2023). Involvement of KCa3.1 channel activity in immediate perioperative cognitive and neuroinflammatory outcomes. *BMC anesthesiology*, 23(1), 80. doi:10.1186/s12871-023-02030-2

Oms, T., Schlechtweg, T., Cayron, J., & Van Melderen, L. (2023). Population and Single-Cell Analysis of Antibiotic Persistence in Escherichia coli. *Journal of Visualized Experiments*,(193). doi:10.3791/64550

Tamman, H., Ernits, K., Roghanian, M., Ainelo, A., Julius, C., Perrier, A., Talavera Perez, A., Ainelo, H., Dugauquier, R., Zedek, S., Thureau, A., Pérez, J., Mendez, G. L., Hallez, R., Atkinson, G. C., Hauryliuk, V., & Garcia-Pino, A. (2023). Structure of SpoT reveals evolutionary tuning of catalysis via conformational constraint. *Nature Chemical Biology*. doi:10.1038/s41589-022-01198-x

Kapetanakis, G., Santos Sousa, L., Felten, C., Mues, L., Gabant, P., Van Nedervelde, L., Georis, I., & André, B. (2023). Deletion of QDR genes in a bioethanol-producing yeast strain reduces propagation of contaminating lactic acid bacteria. *Scientific reports*, 13(1), 4986. doi:10.1038/s41598-023-32062-0

Pasternak, A. A., Rohr, O., Van Lint, C., & Kula-Pacurar, A. (2023). Editorial: The relevance of molecular mechanisms in HIV-1 latency and reactivation from latency. *Frontiers in Cellular and Infection Microbiology*, 13, 1213356. doi:10.3389/fcimb.2023.1190867

Caruso, M., Meurant, S., Detraux, D., Mathieu, A., Gilson, M., Dieu, M., Fattaccioli, A., Demazy, C., Najimi, M., Sokal, E. E., Arnould, T., Verfaillie, C., Lafontaine, D., & Renard, P. (2023). The global downregulation of protein synthesis observed during hepatogenic maturation is associated with a decrease in TOP mRNA translation. *Stem Cell Reports*, 18(1), 254-268. doi:10.1016/j.stemcr.2022.11.020

Van Dyck, A., Masin, L., Bergmans, S., Schevenels, G., Beckers, A., Vanhollebeke, B., & Moons, L. (2023). A new microfluidic model to study dendritic remodeling and

mitochondrial dynamics during axonal regeneration of adult zebrafish retinal neurons.
Frontiers in Molecular Neuroscience, 16, 1196504. doi:10.3389/fnmol.2023.1196504

Ainelo, A., Caballero-Montes, J., Bulvas, O., Ernits, K., Coppelters'T Wallant, K., Takada, H., Craig, S., Mazzucchelli, G., Zedek, S., Pichová, I. I., Atkinson, G. C., Talavera Perez, A., Martens, C., Hauryliuk, V., & Garcia-Pino, A. (2023). The structure of DarB in complex with Rel NTD reveals nonribosomal activation of Rel stringent factors. *Science advances*, 9(3). doi:10.1126/sciadv.ade4077

2022

Amadou Hassane, H., Behr, M., Guérin, C., Sibout, R., Mol, A., Baragé, M., El Jaziri, M., & Baucher, M. (2022). A Higher Lignin Content in ugt72b37 Poplar Mutants Indicates a Role of Monolignol Glycosylation in Xylem Lignification. *Forests*, 13, 2167.

Renard, T., Gueydan, C., & Aron, S. (2022). DNA methylation and expression of the egfr gene are associated with worker size in monomorphic ants. *Scientific Reports*, 12(1), 21228. doi:10.1038/s41598-022-25675-4

Davenne, T., Percier, P., Larbanoix, L., Moser, M., Leo, O., Meylan, E., Goriely, S., Gérard, P., Wauthoz, N., Laurent, S., Amighi, K., & Rosiere, R. (2022). Inhaled dry powder cisplatin increases antitumour response to anti-PD1 in a murine lung cancer model. *Journal of controlled release*, 353, 317-326. doi:10.1016/j.jconrel.2022.11.055

Pan, M., Zorbas, C., Sugaya, M., Ishiguro, K., Kato, M., Nishida, M., Zhang, H. F., Candeias, M. M., Okamoto, A., Ishikawa, T., Soga, T., Aburatani, H., Sakai, J., Matsumura, Y., Suzuki, T., Proud, C. G., Lafontaine, D., & Osawa, T. (2022). Glutamine deficiency in solid tumor cells confers resistance to ribosomal RNA synthesis inhibitors. *Nature communications*, 13(1), 3706. doi:10.1038/s41467-022-31418-w

Jurenas, D., Rey, M., Byrne, D., Chamot-Rooke, J., Terradot, L., & Cascales, E. (2022). *Salmonella* antibacterial Rhs polymorphic toxin inhibits translation through ADP-ribosylation of EF-Tu P-loop. *Nucleic acids research*, 50(22), 13114-13127. doi:10.1093/nar/gkac1162

Zhang, T., Tamman, H., Coppeters'T Wallant, K., Kurata, T., LeRoux, M., Srikant, S., Brodiazhenko, T., Cepauskas, A., Talavera Perez, A., Martens, C., Atkinson, G. C., Hauryliuk, V., Garcia-Pino, A., & Laub, M. T. (2022). Direct activation of a bacterial innate immune system by a viral capsid protein. *Nature (London)*, 612(7938), 132-140. doi:10.1038/s41586-022-05444-z

Ngale Njume, F., Razzauti Sanfeliu, A., Soler García, M., Perschin, V., Fazeli, G., Bourez, A., Delporte, C., Ghogomu Mbigha, S., Poelvoorde, P., Pichard, S., Birck, C., Poterszman, A., Souopgui, J., Van Antwerpen, P., Stigloher, C., Vanhamme, L., & Laurent, P. (2022). A lipid transfer protein ensures nematode cuticular impermeability. *iScience*, 25(11), 105357. doi:10.1016/j.isci.2022.105357

Maso, L., Vascon, F., Chinellato, M., Goormaghtigh, F., Bellio, P., Campagnaro, E., Van Melderen, L., Ruzzene, M., Pardon, E., Angelini, A., Celenza, G., Steyaert, J., Tondi, D., & Cendron, L. (2022). Nanobodies targeting LexA autocleavage disclose a

novel suppression strategy of SOS-response pathway. *Structure*, 30(11), 1479-1493.e9. doi:10.1016/j.str.2022.09.004

Mabille, D., Dirkx, L., Thys, S., Vermeersch, M., Montenye, D., Govaerts, M., Hendrickx, S., Takac, P., Van Weyenbergh, J., Pintelon, I., Delputte, P., Maes, L., Perez-Morga, D., Timmermans, J.-P., & Caljon, G. (2022). Impact of pulmonary African trypanosomes on the immunology and function of the lung. *Nature communications*, 13(1), 7083. doi:10.1038/s41467-022-34757-w

Pasquereau, S., Galais, M., Bellefroid, M., Pachón Angona, I., Morot-Bizot, S., Ismaili, L., Van Lint, C., & Herbein, G. (2022). Ferulic acid derivatives block coronaviruses HCoV-229E and SARS-CoV-2 replication in vitro. (C. Van Lint and G. Herbein are co-senior authors, equal contribution). *Scientific reports*, 12(1), 20309. doi:10.1038/s41598-022-24682-9

Horáková, E., Lecordier, L., Cunha, P., Sobotka, R., Changmai, P., Langedijk, C. C., Van Den Abbeele, J., Vanhollebeke, B., & Lukeš, J. (2022). Heme-deficient metabolism and impaired cellular differentiation as an evolutionary trade-off for human infectivity in Trypanosoma brucei gambiense. *Nature communications*, 13(1), 7075. doi:10.1038/s41467-022-34501-4

Ellis, J. L., Evason, K. K., Zhang, C., Fourman, M. M., Liu, J., Ninov, N., Delous, M., Vanhollebeke, B., Fiddes, I., Otis, J. J., Houvras, Y., Farber, S. S., Xu, X., Lin, X., Stainier, D. Y. R., & Yin, C. (2022). A missense mutation in the proprotein convertase gene furinb causes hepatic cystogenesis during liver development in zebrafish. *Hepatology Communications*, 6(11), 3083-3097. doi:10.1002/hep4.2038

Vogel, I., Acolty, V., Keler, T., Goriely, S., Leo, O., & Moser, M. (2022). Agonistic anti-CD27 antibody ameliorates EAE by suppressing IL-17 production. *European Journal of Immunology*, 52(10), 1620-1629. doi:10.1002/eji.202149698

Jurenas, D., & Cascales, E. (2022). T6SS: killing two bugs with one stone. *Trends in microbiology*, 30(1), 1-2. doi:10.1016/j.tim.2021.10.006

Planas-Sitjà, I., Deneubourg, J.-L., Lafontaine, D., Wacheul, L., & Cronin, A. A. (2022). Differential Gene Expression Correlates with Behavioural Polymorphism during Collective Behaviour in Cockroaches. *Animals*, 12(18), 2354. doi:10.3390/ani12182354

Mathieu, V., Laguera, B., Masi, M., Dulanto, S. A., Bingham, T., Hernandez, L. W., Sarlah, D., Evidente, A., Lafontaine, D., Kornienko, A., & Lane, M. A. (2022). Amaryllidaceae Alkaloids Decrease the Proliferation, Invasion, and Secretion of Clinically Relevant Cytokines by Cultured Human Colon Cancer Cells. *Biomolecules*, 12(9), 1267. doi:10.3390/biom12091267

Essola, B., Himpens, J., Ndamba, E. J., Limgba, A., Djomo Tamchom, D., Landenne, J., Ngaroua, E., Hermans, M. P., Mboudou, E. T., Lingier, P., Souopgui, J., & Loi, P. (2022). Prospective, randomized clinical trial of laparoscopic totally extraperitoneal inguinal hernia repair using conventional versus custom-made (mosquito) mesh performed in Cameroon: a short-term outcomes. *Surgical endoscopy*, 36(9), 6558-6566. doi:10.1007/s00464-022-09046-8

Mahavy, C., Mol, A., Andrianarisoa, B., Duez, P., El Jaziri, M., Baucher, M., & Rasamiravaka, T. (2022). The xanthophyll carotenoid lutein reduces the invasive potential of *Pseudomonas aeruginosa* and increases its susceptibility to tobramycin. *International journal of molecular sciences*, 23(13), 7199.

Roovers, M. L., Labar, G., Wolff, P., Feller, A., Van Elder, D., Soin, R., Gueydan, C., Kruys, V., & Droogmans, L. (2022). The *Bacillus subtilis* open reading frame *ysgA* encodes the SPOUT methyltransferase *RlmP* forming 2'-O-methylguanosine at position 2553 in the A-loop of 23S rRNA. *RNA*, 28(9), 1185-1196. doi:10.1261/rna.079131.122

Yengo, B. N., Shintouo, C. M., Hotterbeekx, A., Yaah, N. E., Shey, R. A., Quanico, J., Baggerman, G., Ayong, L., Vanhamme, L., Njemini, R., Souopgui, J., Colebunders, R. L., & Ghogomu, S. M. (2022). Immunoinformatics Design and Assessment of a Multiepitope Antigen (OvMCBL02) for Onchocerciasis Diagnosis and Monitoring. *Diagnostics*, 12(6), 1440. doi:10.3390/diagnostics12061440

Van Melderen, L. (2022). iTDtest: an Easy-to-Handle and Visual Assay To Detect Tolerant and Persister Cells in an Antibiotic Combination Regimen. *mBio*, 13(3), e0036222. doi:10.1128/mbio.00362-22

Potemberg, G., Demars, A., Barbieux, E., Reboul, A., Stubbe, F. X., Galia, M., Lagneaux, M., Comein, A., Denis, O., Perez-Morga, D., Vanderwinden, J.-M., De Bolle, X., & Muraille, E. (2022). Genome-wide analysis of *Brucella melitensis* genes required throughout intranasal infection in mice. *PLoS Pathogens*, 18(6), e1010621. doi:10.1371/journal.ppat.1010621

Bortolin-Cavaillé, M. L., Quillien, A., Thalalla Gamage, S., Thomas, J., Sas-Chen, A., Sharma, S., Plisson-Chastang, C., Vandel, L., Blader, P., Lafontaine, D., Schwartz, S., Meier, J. J., & Cavaillé, J. (2022). Probing small ribosomal subunit RNA helix 45 acetylation across eukaryotic evolution. *Nucleic acids research*, 50(11), 6284-6299. doi:10.1093/nar/gkac404

Quail, D., Amulic, B., Aziz, M., Barnes, B., Eruslanov, E., Fridlender, Z., Goodridge, H., Granot, Z., Hidalgo, A., Huttenlocher, A., Kaplan, M. J., Malanchi, I., Merghoub, T., Meylan, E., Mittal, V., Pittet, M. J., Rubio-Ponce, A., Udalova, I., van den Berg, T. K., Wagner, D. D., Wang, P., Zychlinsky, A., de Visser, K. E., Egeblad, M., & Kubes, P. (2022). Neutrophil phenotypes and functions in cancer: A consensus statement. *The Journal of experimental medicine*, 219(6). doi:10.1084/jem.20220011

Behr, M., Speeckaert, N., Kurze, E. K., Morel, O., Prévost, M., Mol, A., Mahamadou Amoudou, N., Barage, M., Renaut, J., Schwab, W., El Jaziri, M., & Baucher, M. (2022). Leaf necrosis resulting from down-regulation of poplar glycosyltransferase UGT72A2. *Tree physiology*, 42(5), 1084–1099. doi:10.1093/treephys/tpab161

O'Donohue, M.-F., Da Costa, L. L., Lezzerini, M., Unal, S., Joret, C., Bartels, M., Brilstra, E., Scheijde-Vermeulen, M., Wacheul, L., De Keersmaecker, K., Vereecke, S., Labarque, V., Saby, M., Lefevre, S. D., Platon, J., Montel-Lehry, N., Laugero, N., Lacazette, E., van Gassen, K. K., Houtkooper, R. R., Simsek-Kiper, P. Ö. P., Leblanc, T., Yarali, N., Cetinkaya, A., Akarsu, N. A., Gleizes, P.-E., Lafontaine, D., & MacInnes, A. W. (2022). HEATR3 variants impair nuclear import of uL18 (RPL5) and drive Diamond-Blackfan anemia. *Blood*, 139(21), 3111-3126. doi:10.1182/blood.2021011846

Ouali, R., Vieira, L. R., Salmon, D., & Bousbata, S. (2022). Rhodnius prolixus Hemolymph Immuno-Physiology: Deciphering the Systemic Immune Response Triggered by Trypanosoma cruzi Establishment in the Vector Using Quantitative Proteomics. *Cells*, 11(9), 1449. doi:10.3390/cells11091449

America, M., Bostaille, N., Eubelen, M., Martin, M., Stainier, D. Y., & Vanhollebeke, B. (2022). An integrated model for Gpr124 function in Wnt7a/b signaling among vertebrates. *Cell reports*, 39(9), 110902. doi:10.1016/j.celrep.2022.110902

Pinjusic, K., Dubey, O. A., Egorova, O., Nassiri, S., Meylan, E., Faget, J., & Constam, D. B. (2022). Activin-A impairs CD8 T cell-mediated immunity and immune checkpoint therapy response in melanoma. *Journal for ImmunoTherapy of Cancer*, 10(5), e004533. doi:10.1136/jitc-2022-004533

Primo Planta, C., Navarre, M. C., Chaumont, F., & André, B. (2022). Plasma membrane H⁺-ATPases promote TORC1 activation in plant suspension cells. *iScience*, 25(5), 104238. doi:10.1016/j.isci.2022.104238

Jurenas, D., Fraikin, N., Goormaghtigh, F., & Van Melderen, L. (2022). Biology and evolution of bacterial toxin–antitoxin systems. *Nature review, Microbiology*, 20(6), 335-350. doi:10.1038/s41579-021-00661-1

Verdikt, R., Bendoumou, M., Bouchat, S., Nestola, L., Pasternak, A. O., Darcis, G., Avettand-Fenoel, V., Vanhulle, C., Ait-Ammar, A., Santangelo, M., Plant, E., Douce, V. L., Delacourt, N., Cicilioniye, A., Necsoi, C., Corazza, F., Passaes, C. P. B., Schwartz, C., Bizet, M., Fuks, F., Sáez-Cirión, A., Rouzioux, C., De Wit, S., Berkhout, B., Gautier, V., Rohr, O., & Van Lint, C. (2022). Novel role of UHRF1 in the epigenetic repression of the latent HIV-1. *EBioMedicine*, 79, 103985. doi:10.1016/j.ebiom.2022.103985

Nahaboo, W., Eski, S. E., Despin-Guitard, E., Vermeersch, M., Versaevel, M., Saykali, B., Monteyne, D., Gabriele, S., Magin, T. M., Schwarz, N., Leube, R. E., Zwijsen, A., Perez-Morga, D., Singh, S. P., & Migeotte, I. (2022). Keratin filaments mediate the expansion of extra-embryonic membranes in the post-gastrulation mouse embryo. *EMBO journal*, 41(7), e108747. doi:10.15252/embj.2021108747

Bellefroid, M., Rodari, A., Galais, M., Krijger, P., Tjalsma, S., Nestola, L., Plant, E., Vos, E., Cristinelli, S. S., Van Driessche, B., Vanhulle, C., Ait-Ammar, A., Burny, A., Ciuffi, A., De Laat, W., & Van Lint, C. (2022). Role of the cellular factor CTCF in the regulation of bovine leukemia virus latency and three-dimensional chromatin organization. *Nucleic acids research*, 50(6), 3190-3202. doi:10.1093/nar/gkac107

Speeckaert, N., El Jaziri, M., Baucher, M., & Behr, M. (2022). UGT72, a Major Glycosyltransferase Family for Flavonoid and Monolignol Homeostasis in Plants. *Biology*, 11(3), 441. doi:10.3390/biology11030441

Montiel, V., Lobysheva, I., Gérard, L., Vermeersch, M., Perez-Morga, D., Castelein, T., Mesland, J. B., Hantson, P., Collienne, C., Gruson, D., van Dievoet, M. A., Persu, A., Beauloye, C., Dechamps, M., Belkhir, L., Robert, A., Derive, M., Laterre, P.-F., Danser, A. J. J. J. A., Wittebole, X., & Balligand, J. L. (2022). Oxidative stress-induced endothelial

dysfunction and decreased vascular nitric oxide in COVID-19 patients. *EBioMedicine*, 77, 103893. doi:10.1016/j.ebiom.2022.103893

Williamson, G., Brito, A. S., Bizior, A., Tamburrino, G., Dias Mirandela, G., Harris, T., Hoskisson, P. A., Zachariae, U., Marini, A. M., Boeckstaens, M., & Javelle, A. (2022). Coexistence of Ammonium Transporter and Channel Mechanisms in Amt-Mep-Rh Twin-His Variants Impairs the Filamentation Signaling Capacity of Fungal Mep2 Transceptors. *mBio*, 13(2), e0291321. doi:10.1128/mbio.02913-21

Martin, M., Vermeiren, S., Bostaille, N., Eubelen, M., Spitzer, D., Vermeersch, M., Profaci, C. C., Pozuelo Fernandez, E., Toussay, X., Raman-Nair, J., Tebabi, P., America, M., De Groote, A., Sanderson, L., Cabochette, P., Freitas Vale Germano, R., Torres, D., Boutry, S., de Kerchove d'Exaerde, A., Bellefroid, E., Phoenix, T. N., Devraj, K., Lacoste, B., Daneman, R., Liebner, S., & Vanhollebeke, B. (2022). Engineered Wnt ligands enable blood-brain barrier repair in neurological disorders. *Science*, 375(6582):eabm4459.

Ajouaou, Y., Azouz, A., Taquin, A., Denanglaire, S., Hind, H. H., Krayem, M., Andris, F., Moser, M., Goriely, S., & Leo, O. (2022). The oxygen sensor Prolyl hydroxylase domain 2 regulates the in vivo suppressive capacity of regulatory T cells. *eLife*, 11. doi:10.7554/eLife.70555

Shey, R. A., Ghogomu, S. M., Nebangwa, N. D., Shintouo, C. M., Yaah, N. E., Yengo, B. N., Nongley, N. F., Esoh, K. K., Tchatchoua, N. M. T., Mbachick, T. T., Dede, A. F., Lemoge, A. A., Ngwese, R. A., Asa, B. F., Ayong, L., Njemini, R., Vanhamme, L., & Souopgui, J. (2022). Rational design of a novel multi-epitope peptide-based vaccine against Onchocerca volvulus using transmembrane proteins. *Frontiers in Tropical Diseases*, 3, 1046522. doi:10.3389/ftd.2022.1046522

Piagnerelli, M., Vanderelst, J.-C., Rousseau, A., Monteyne, D., Perez-Morga, D., Biston, P., & Zouaoui Boudjeltia, K. (2022). Red Blood Cell Shape and Deformability in Patients With COVID-19 Acute Respiratory Distress Syndrome. *Frontiers in physiology*, 13, 849910. doi:10.3389/fphys.2022.849910

Delhermite, J., Tafforeau, L., Sharma, S., Marchand, V., Wacheul, L., Lattuca, R., Desiderio, S., Motorin, Y., Bellefroid, E., & Lafontaine, D. (2022). Systematic mapping of rRNA 2'-O methylation during frog development and involvement of the methyltransferase Fibrillarin in eye and craniofacial development in *Xenopus laevis*. *PLoS genetics*, 18(1), e1010012. doi:10.1371/journal.pgen.1010012

Finet, O., Yague-Sanz, C., Krüger, L. K., Tran, P., Migeot, V., Louski, M., Nevers, A., Rougemaille, M., Sun, J., Ernst, F. G., Wacheul, L., Wery, M., Morillon, A., Dedon, P., Lafontaine, D., & Hermand, D. (2022). Transcription-wide mapping of dihydrouridine reveals that mRNA dihydrouridylation is required for meiotic chromosome segregation. *Molecular cell*, 82(2), 404-419.e9. doi:10.1016/j.molcel.2021.11.003