Unit name: INSTITUT JACQUES MONOD UMR 7592
Director's name (current contract): Giuseppe BALDACCI
Director's name (next contract):

E1 – Juliette AZIMZADEH

Peer reviewed reviews

E1-1 Basquin C. and Azimzadeh J. (2016). Basal bodies across eukaryotes series: Basal bodies in the freshwater planarian Schmidtea mediterranea. **Cilia**.

E1-2 Azimzadeh, J. (2014). Exploring the evolutionary history of centrosomes. **Philos. Trans. R. Soc. Lond. B Biol. Sci.** 369(1650).

Other publications

E1-3 Meunier, A. and Azimzadeh, J. (2016). Multiciliated cells in Animals. **Cold Spring Harb Perspect Biol,** 8:a028233.

E1-4 Basquin, C., Orfila, A.M. and Azimzadeh, J. (2015). The planarian Schmidtea mediterranea as a model for studying motile cilia and multiciliated cells. **Methods Cell Biol.** 127:243-62.

E2 – Guillaume BALAVOINE

Peer reviewed publications

E2-1 **Aubusson-Fleury A, Balavoine G, Lemullois M, Bouhouche K, Beisson J, Koll F.** (2017) Centrin diversity and basal body patterning across evolution: new insights from *Paramecium*. *Biol Open*. pii: bio.024273.

E2-2 **Gazave E, Lemaitre Q, Balavoine G.** (2017) The Notch pathway in the annelid *Platynereis*: Insights into chaetogenesis and neurogenesis processes. *Open Biology*, 7(2). pii: 160242.

E2-3 **Starunov V, Dray N, Belikova E, Kerner P, Vervoort M, Balavoine G.** (2015) A metameric origin for the annelid pygidium? *BMC Evol Biol.* **15**:25.

E2-4 **Gazave E, Guillou A, Balavoine G.** (2014) History of a prolific family: the Hes/Hey-related genes of the annelid *Platynereis*. *Evodevo*. **5**:29.

E2-5 **Gazave E, Béhague J, Laplane L, Guillou A, Préau L, Demilly A, Balavoine G, Vervoort M**. (2013) Posterior elongation in the annelid *Platynereis dumerilii* involves stem cells molecularly related to primordial germ cells. *Dev Biol.* **382**:246-67.

E2-6 **Hui JH, McDougall C, Monteiro AS, Holland PW, Arendt D, Balavoine G & Ferrier DE.** (2012) Extensive chordate and annelid macrosynteny reveals ancestral homeobox gene organisation. *Mol Biol Evol*. **29**:157–165.

Peer reviewed reviews

E2-7 **Balavoine G.** (2014) Segment formation in Annelids: patterns, processes and evolution. *Int J Dev Biol.* **58**:469-483.

Other publications

E2-8 **Balavoine, G.** (2014) Evolutionary Developmental Biology and Its Contribution to a New Synthetic Theory. in Handbook of Evolutionary Thinking in the Sciences. Eds T. Heams, P. Hunemann, G. Lecointre and M. Silberstein. Springer, Dordrecht, pp 443-470.

E3 – Giuseppe BALDACCI

Peer reviewed publications

E3-1 **Hadjadj D*, Denecker T*, Maric C, Fauchereau F, Baldacci G, Cadoret J-C.** Automation of the replication timing protocol and analyses. 2017 (Submitted). ***** co first authors

E3-2 **Hadjadj D, Kim SJ, Denecker D, Ben Driss L, Cadoret JC, Maric C, Baldacci G*, Fauchereau F***. A hypothesis-driven approach identifies CDK4 and CDK6 inhibitors as candidate drugs for treatments of adrenocortical carcinomas. 2017, *acceptable for publication in Oncotarget, pending minor revision)*

E3-3 J. Brustel, N. Kirstein, F. Izard, C. Grimaud, P. Prorok, C. Cayrou, G. Schotta, A. A.F. Abdelsamie, J. Déjardin, M. Mechali, **G. Baldacci**, C. Sardet, **J.C. Cadoret**, A. Schepers & E. Julien. Histone H4K20 tri-methylation at late-firing origins ensures timely heterochromatin replication. 2017, EMBO journal, in press.

E3-4 Pagan C, Goubran-Botros H, Delorme R, Benabou M, Lemière N, Murray K, Amsellem F, Callebert J, Chaste P, Jamain S, **Fauchereau F**, Huguet G, Maronde E, Leboyer M, Launay JM, Bourgeron T. Disruption of melatonin synthesis is associated with impaired 14-3-3 and miR-451 levels in patients with autism spectrum disorders. *Scientific Reports 2017, accepted for publication.*

E3-5 Hatem E, Azzi S, El Banna N, He T, Haneman-Masurel A, Masson V, Dingli F, Loew D, Leger T, Garcia C, Camadro JM, **Baldacci G**, Eid P, Huang ME. Auranofin/vitamin C drug combination efficiently killd cancer cells with low PTGR1 expression through hydrogen peroxide generation. 2017, *submitted for publication*.

E3-6 **Hadjadj D, Denecker T, Maric C, Fauchereau F, Baldacci G, Cadoret JC**. "Characterization of the replication timing program of 6 human model cell lines." Genomic Data. 2016 Jul 15;9:113−7. doi: 10.1016/j.gdata.2016.07.003.

E3-7 **Fauchereau F**, Shalev S, Chervinsky E, Beck-Fruchter R, Legois B, Fellous M, Caburet S, Veitia RA. A non-sense MCM9 mutation in a familial case of primary ovarian insufficiency. Clin Genet. 2016 May;89(5):603-7. doi: 10.1111/cge.12736.

E3-8 Schaap P, Barrantes I, Minx P, Anderson RW, Bénard M, Biggar KK, Buchler N, Bundschuh R, Chen X, Fronick C, Fulton L, Golderer G, Jahn N, Knoop V, Landweber L, **Maric C**, Miller D, Noegel A, Peace R, Pierron G, Sasaki N, Sasaki T, Schallenbarg−Rüdinger M, Schleicher M, Singh R, Spaller T, Storey KB, Suzuki T, Tomlinson C, Tyson JJ, Warren W, Werner ER, Werner−Felmayer G, Wilson RK, Winckler T, Gott J, Glöckner G, Marwan W. (2015). "ThePhysarum polycephalum genome reveals extensive use of prokaryotic two−component and metazoan−type tyrosine kinase signaling." Genome Biol Evol. 2015 Nov 27;8(1):109−25. doi: 10.1093/gbe/evv237.

E3-9 Pinel P, Lalanne C, Bourgeron T, **Fauchereau F**, Poupon C, Artiges E, Le Bihan D, Dehaene-Lambertz G, Dehaene S. Genetic and Environmental Influences on the Visual Word Form and Fusiform Face Areas. Cereb Cortex. 2015 Sep;25(9):2478-93.

E3-10 Goaster JL, Bourée P, Ifergan C, Tangy F, Olivier R, **Haenni AL**. Herpes Viral Origin of the Parsonage-Turner Syndrome: Highlighting of Serological Immune Anti-Herpes Deficiency Cured by Anti-Herpes Therapy. Case Rep Neurol. 2015 May 13;7(2):110-4. doi: 10.1159/000381945. eCollection 2015 May 13.

E3-11 **Baldacci G**, Hoffmann JS, **Cadoret JC**. Impact of the DNA polymerase Theta on the DNA replication program. Genom Data. 2014 Dec 5;3:90-3. doi:10.1016/j.gdata.2014.11.014.

E3-12 **Maric C**, Bénard M. Replication forks reverse at high frequency upon replication stress in Physarum polycephalum. Chromosoma. 2014 Dec;123(6):577−85. doi: 10.1007/s00412-014-0471-z.

E3-13 Fernandez-Vidal A*, Guitton-Sert L*, **Cadoret JC*,** Drac M, Schwob E, **Baldacci G**, Cazaux C, Hoffmann JS. A role for DNA polymerase θ in the timing of DNA replication. Nat Commun. 2014 Jul 3;5:4285. doi: 10.1038/ncomms5285. * co first authors

E3-14 Picard F, **Cadoret JC**, Audit B, Arneodo A, Alberti A, Battail C, Duret L, Prioleau MN. The spatiotemporal program of DNA replication is associated with specific combinations of chromatin marks in human cells. PLoS Genet. 2014 May1;10(5):e1004282. doi: 10.1371/journal.pgen.1004282.

E3-15 Becker J, Czamara D, Scerri TS, Ramus F, Csépe V, Talcott JB, Stein J, Morris A, Ludwig KU, Hoffmann P, Honbolygó F, Tóth D, **Fauchereau F**, Bogliotti C, Iannuzzi S, Chaix Y, Valdois S, Billard C, George F, Soares-Boucaud I, Gérard CL, van der Mark S, Schulz E, Vaessen A, Maurer U, Lohvansuu K, Lyytinen H, Zucchelli M, Brandeis D, Blomert L, Leppänen PH, Bruder J, Monaco AP, Müller-Myhsok B, Kere J, Landerl K, Nöthen MM, Schulte-Körne G, Paracchini S, Peyrard-Janvid M,Schumacher J. Genetic analysis of dyslexia candidate genes in the European cross-linguistic NeuroDys cohort. Eur J Hum Genet. 2014 May;22(5):675-80. doi:10.1038/ejhg.2013.199.

E3-16 Pizon V, Rybina S, Gerbal F, Delort F, Vicart P, **Baldacci G**, Karsenti E. MURF2B, a novel LC3-binding protein, participates with MURF2A in the switch between autophagy and ubiquitin proteasome system during differentiation of C2C12 muscle cells. PLoS One. 2013 Oct 4;8(10):e76140. doi:10.1371/journal.pone.0076140.

E3-17 Fontebasso AM, Schwartzentruber J, Khuong-Quang DA, Liu XY, Sturm D, Korshunov A, Jones DT, Witt H, Kool M, Albrecht S, Fleming A, **Hadjadj D**, Busche S, Lepage P, Montpetit A, Staffa A, Gerges N, Zakrzewska M, Zakrzewski K, Liberski PP, Hauser P, Garami M, Klekner A, Bognar L, Zadeh G, Faury D, Pfister SM, Jabado N, Majewski J. Mutations in SETD2 and genes affecting histone H3K36

methylation target hemispheric high-grade gliomas. Acta Neuropathol. 2013 May;125(5):659-69. doi: 10.1007/s00401-013-1095-8.

E3-18 Liu XY, Gerges N, Korshunov A, Sabha N, Khuong-Quang DA, Fontebasso AM, Fleming A, **Hadjadj D**, Schwartzentruber J, Majewski J, Dong Z, Siegel P, Albrecht S, Croul S, Jones DT, Kool M, Tonjes M, Reifenberger G, Faury D, Zadeh G, Pfister S, Jabado N. Frequent ATRX mutations and loss of expression in adult diffuse astrocytic tumors carrying IDH1/IDH2 and TP53 mutations. Acta Neuropathol. 2012 Nov;124(5):615-25. doi: 10.1007/s00401-012-1031-3.

E3-19 Soler N, Craescu CT, Gallay J, Frapart YM, Mansuy D, Raynal B, **Baldacci G**, Pastore A, Huang ME, Vernis L. A S-adenosylmethionine methyltransferase-like domain within the essential, Fe-S-containing yeast protein Dre2. FEBS J. 2012 Jun;279(12):2108-19. doi: 10.1111/j.1742-4658.2012.08597.x.

E3-20 Hassan-Zadeh V, Chilaka S, **Cadoret JC**, Ma MK, Boggetto N, West AG, Prioleau MN. USF binding sequences from the HS4 insulator element impose early replication timing on a vertebrate replicator. PLoS Biol. 2012;10(3):e1001277. Doi: 10.1371/journal.pbio.1001277.

E3-21 Leblond CS, Heinrich J, Delorme R, Proepper C, Betancur C, Huguet G, Konyukh M, Chaste P, Ey E, Rastam M, Anckarsäter H, Nygren G, Gillberg IC, Melke J, Toro R, Regnault B, **Fauchereau F**, Mercati O, Lemière N, Skuse D, Poot M, Holt R, Monaco AP, Järvelä I, Kantojärvi K, Vanhala R, Curran S, Collier DA, Bolton P, Chiocchetti A, Klauck SM, Poustka F, Freitag CM, Waltes R, Kopp M, Duketis E, Bacchelli E, Minopoli F, Ruta L, Battaglia A, Mazzone L, Maestrini E, Sequeira AF, Oliveira B, Vicente A, Oliveira G, Pinto D, Scherer SW, Zelenika D, Delepine M, Lathrop M, Bonneau D, Guinchat V, Devillard F, Assouline B, Mouren MC, Leboyer M, Gillberg C, Boeckers TM, Bourgeron T. Genetic and functional analyses of SHANK2 mutations suggest a multiple hit model of autism spectrum disorders. PLoS Genet. 2012 Feb;8(2):e1002521. doi: 10.1371/journal.pgen.1002521.

E3-22 Pinel P, **Fauchereau F**, Moreno A, Barbot A, Lathrop M, Zelenika D, Le Bihan D, Poline JB, Bourgeron T, Dehaene S. Genetic variants of FOXP2 and KIAA0319/TTRAP/THEM2 locus are associated with altered brain activation in distinct language-related regions. J Neurosci. 2012 Jan 18;32(3):817-25. doi: 10.1523/JNEUROSCI.5996-10.2012.

Peer reviewed reviews

E3-23 Gómez-Arreaza A, **Haenni AL**, Dunia I, Avilán L. Viruses of parasites as actors in the parasite-host relationship: A "ménage à trois". Acta Trop. 2017 Feb;166:126-132. doi: 10.1016/j.actatropica. 2016.11.028. Epub 2016 Nov 19.

E3-24 Patiño C, **Haenni AL**, Urcuqui-Inchima S. NF90 isoforms, a new family of cellular proteins involved in viral replication? Biochimie. 2015 Jan;108:20-4. doi: 10.1016/j.biochi.2014.10.022. Epub 2014 Nov 4.

Other publications

E3-25 ***Les Big Data à découvert*, 2017, CNRS Editions Paris.**

E3-26 Mokrane Bouzeghoub, Rémy Mosseri, coordinators.

E3-27 S Abiteboul, **G Baldacci**, P Besse, O Cappé, A Cappy, C Jeandel, D Joly, B Jouve, S Laugier, Y Maday, C Nédellec, J-N Patillon, M-C Rousset, H Touzet. Editors.

E3-28 **Baldacci G**, Mosseri R: Introduction to "De l'infiniment petit à l'infiniment grand.

Book chapters

E3-29 **Biology for osteopathy, 2017, De Boeck editions, Paris**

E3-30 **Jean-Charles Cadoret**: two chapters concerning respectively Molecular Biology and Cellular Biology

E3-31 **Fabien Fauchereau**: one chapter concerning Genetics

E4 – Nicolas BORGHI

Peer reviewed publications

E4-1 "Complementary molecular cues ensure a robust microtubule-dependent nuclear positioning in the *Drosophila* oocyte", Nat. Comm. In press. Tissot N., Lepesant J-A., Bernard F., Legent K., Bosveld F., Martin C., Orestis F., Bellaïche Y., Coppey-Moisan M., Guichet A.

E4-2 "Coordination between Intra- and Extracellular Forces Regulates Focal Adhesion Dynamics", Nano Letters 17 (2017) 399-406. Sarangi BR, Gupta M, Doss BL, Tissot N, Lam F, Mège RM, Borghi N, Ladoux B.

E4-3 "Vinculin head-tail interaction defines multiple early mechanisms for stem cell rigidity sensing", Integrative Biology 8 (2016) 693-703. Z. Liu, P. Bun, N. Audugé, M. Coppey-Moisan, N. Borghi.

E4-4 "A high-throughput direct fluorescence resonance energy transfer-based assay for analyzing apoptotic proteases using flow cytometry and fluorescence lifetime measurements", Anal Biochem, 2015; 491:10-7. Suzuki M, Sakata I, Sakai T, Tomioka H, Nishigaki K, Tramier M, Coppey-Moisan M.

E4-5 "Intranuclear dynamics of the Nup107-160 complex." Mol Biol Cell. 2015; 26:2343-56. Morchoisne-Bolhy S, Geoffroy MC, Bouhlel IB, Alves A, Audugé N, Baudin X, Van Bortle K, Powers MA, Doye V.

E4-6 "Mechanical checkpoint for persistent cell polarization in adhesion-naive fibroblasts." *Biophys J*. 107 (2014) 324-35. Bun P, Liu J, Turlier H, Liu Z, Uriot K, Joanny JF, Coppey-Moisan M.

E4-7 "Golgi sorting regulates organization and activity of GPI proteins at apical membranes." *Nat Chem Biol*. 10 (2014) 350-7. Paladino S, Lebreton S, Tivodar S, Formiggini F, Ossato G, Gratton E, Tramier M, Coppey-Moisan M, Zurzolo C.

Peer reviewed reviews

E4-8 "FRET-based Molecular Tension Microscopy", *Methods*. 94 (2016) 33-42. C. Gayrard, N. Borghi.

E4-9 "Time-domain fluorescence lifetime imaging microscopy: a quantitative method to follow transient protein-protein interactions in living cells" Cold Spring Harb Protoc. 2015 ; 6:508-21. Padilla-Parra S, Audugé N, Tramier M, Coppey-Moisan M.

E4-10 "Visualizing Microtubule Networks During Drosophila Oogenesis Using Fixed and Live Imaging." Methods Mol Biol. 2015; 1328:99-112. Legent K, Tissot N, Guichet A.

Other publications

E4-11 "Experimental approaches in mechanotransduction: From molecules to pathology." *Methods*. 94 (2016) 1-3. Borghi N, Farge E, Lavelle C.

E4-12 "Measuring forces and stresses in situ in living tissues", bioRxiv doi: http://dx.doi.org/10.1101/016394. C. Aegerter, W. Ahmed, A. Baldit, A. Barakat, L. Beauzamy, N. Borghi, F. Brochard-Wyart, G. W. Brodland, O. Campas, C. Campillo, R. Clément, S. Cox, H. Delanoë-Ayari, J. Dumortier, C. Gayrard, F. Graner, K. Guevorkian, B. Guirao, A. Hallou, T. Hiiragi, S. Hilgenfeldt, S. Ishihara, E. Kolb, Y. Kondo, P. Kurowski, F. Lanfranconi, L. Le Goff, P.-F. Lenne, J.-L. Maître, P. Marcq, V. Nier, E. Raspaud, U. Schulze, K. Sugimura, S. Tlili, H. Turlier.

E5 – Jean-Michel CAMADRO

Peer reviewed publications

1) Higlights

E5-1 Mutation in the Fe-S scaffold protein Isu bypasses frataxin deletion. Yoon H, Golla R, **Lesuisse E**, Pain J, Donald JE, Lyver ER, Pain D, Dancis A. Biochem J. **2012** Jan 1;441(1):473-80. doi: 10.1042/BJ20111637. PMID: 21936771

E5-2 Methylene blue rescues heart defects in a Drosophila model of Friedreich's ataxia. Tricoire H, Palandri A, **Bourdais A**, **Camadro JM**, Monnier V. Hum Mol Genet. **2014** Feb 15;23(4):968-79. doi: 10.1093/hmg/ddt493. Epub **2013** Oct 8. PMID: 24105471

E5-3 A Yeast/Drosophila Screen to Identify New Compounds Overcoming Frataxin Deficiency. **Seguin A**, Monnier V, Palandri A, Bihel F, Rera M, Schmitt M, **Camadro JM***, Tricoire H, **Lesuisse E**. (* corresponding author). Oxid Med Cell Longev. **2015**;**2015**:565140. doi: 10.1155/**2015**/565140. Epub **2015** Oct 11. PMID: 26523199

E5-4 Changes in glutathione-dependent redox status and mitochondrial energetic strategies are part of the adaptive response during the filamentation process in Candida albicans. **Guedouari H**, **Gergondey R**, **Bourdais A**, **Vanparis O**, Bulteau AL, **Camadro JM**, **Auchère F**. Biochim Biophys Acta. 2014 Sep;1842(9):1855-69. doi: 10.1016/j.bbadis.2014.07.006. Epub 2014 Jul 10. PMID: 25018088

E5-5 The adaptive metabolic response involves specific protein glutathionylation during the filamentation process in the pathogen Candida albicans. **Gergondey R**, Garcia C, **Serre V, Camadro JM, Auchère F**. Biochim Biophys Acta. **2016** Jul;1862(7):1309-23. doi: 10.1016/j.bbadis.2016.04.004. Epub 2016 Apr 13. PMID: 27083931

E5-6 Modulation of the specific glutathionylation of mitochondrial proteins in the yeast *Saccharomyces cerevisiae* under basal and stress conditions. **Gergondey R**, Garcia C, Marchand CH, Lemaire SD, **Camadro JM, Auchère F**. Biochem J. **2017** Mar 15;474(7):1175-1193. doi: 10.1042/BCJ20160927. PMID: 28167699

E5-7 The metacaspase (Mca1p) has a dual role in farnesol-induced apoptosis in Candida albicans. Léger T, Garcia C, Ounissi M, **Lelandais G, Camadro JM**. Mol Cell Proteomics. **2015** Jan;14(1):93-108. doi: 10.1074/mcp.M114.041210. Epub **2014** Oct 27. PMID: 25348831

E5-8 A comparative study of iron uptake mechanisms in marine microalgae: iron binding at the cell surface is a critical step. Sutak R, Botebol H, **Blaiseau PL**, Léger T, Bouget FY, **Camadro JM**, **Lesuisse E**. Plant Physiol. **2012** Dec;160(4):2271-84. doi: 10.1104/pp.112.204156. Epub **2012** Oct 2. PMID: 23033141

E5-9 A novel protein, ubiquitous in marine phytoplankton, concentrates iron at the cell surface and facilitates uptake.
Morrissey J, Sutak R, Paz-Yepes J, Tanaka A, Moustafa A, Veluchamy A, Thomas Y, Botebol H, Bouget FY, McQuaid JB, Tirichine L, Allen AE, **Lesuisse E**, Bowler C. Curr Biol. **2015** Feb 2;25(3):364-71. doi: 10.1016/j.cub.**2014**.12.004. Epub **2014** Dec 31. PMID: 25557662

E5-10 Central role for ferritin in the day/night regulation of iron homeostasis in marine phytoplankton. Botebol H*, **Lesuisse E***, Šuták R, Six C, Lozano JC, Schatt P, Vergé V, Kirilovsky A, Morrissey J, Léger T, **Camadro JM**, Gueneugues A, Bowler C, Blain S, Bouget FY. (* co-first authors) Proc Natl Acad Sci U S A. **2015** Nov 24;112(47):14652-7. doi: 10.1073/pnas.1506074112. Epub **2015** Nov 9. PMID: 26553998

E5-11 Ostreococcus tauri is a new model green alga for studying iron metabolism in eukaryotic phytoplankton. **Lelandais G**, Scheiber I, Paz-Yepes J, Lozano JC, Botebol H, Pilátová J, Žárský V, Léger T, **Blaiseau PL**, Bowler C, Bouget FY, **Camadro JM**, Sutak R, **Lesuisse E**. BMC Genomics. **2016** May 3;17:319. doi: 10.1186/s12864-016-2666-6. PMID: 27142620

E5-12 Imaging mass spectrometry reveals modified forms of histone H4 as new biomarkers of microvascular invasion in hepatocellular carcinomas. Poté N, Alexandrov T, Le Faouder J, Laouirem S, Léger T, Mebarki M, Belghiti J, **Camadro JM**, Bedossa P, Paradis V. Hepatology. **2013** Sep;58(3):983-94. doi: 10.1002/hep.26433. Epub **2013** Jul 30. PMID: 23553687

E5-13 Progression from cirrhosis to cancer is associated with early ubiquitin post-translational modifications: identification of new biomarkers of cirrhosis at risk of malignancy. Laouirem S, Le Faouder J, Alexandrov T, Mestivier D, Léger T, Baudin X, Mebarki M, Paradis V, **Camadro JM***, Bedossa P*. (* co-senior authors) J Pathol. **2014** Dec;234(4):452-63. doi: 10.1002/path.4398. Epub **2014** Sep 12. PMID: 24979321

E5-14 Proteomics profiling of urine reveals specific titin fragments as biomarkers of Duchenne muscular dystrophy. Rouillon J, Zocevic A, Leger T, Garcia C, **Camadro JM**, Udd B, Wong B, Servais L, Voit T, Svinartchouk F. Neuromuscul Disord. **2014** Jul;24(7):563-73. doi: 10.1016/j.nmd.**2014**.03.012. Epub **2014** Apr 13. PMID: 24813925

E5-15 A mitochondrial origin for frontotemporal dementia and amyotrophic lateral sclerosis through CHCHD10 involvement. Bannwarth S, Ait-El-Mkadem S, Chaussenot A, Genin EC, Lacas-Gervais S, Fragaki K, Berg-Alonso L, Kageyama Y, **Serre V**, Moore DG, Verschueren A, Rouzier C, Le Ber I, Augé G, Cochaud C, Lespinasse F, N'Guyen K, de Septenville A, Brice A, Yu-Wai-Man P, Sesaki H, Pouget J, Paquis-Flucklinger V. Brain. **2014** Aug;137(Pt 8):2329-45. doi: 10.1093/brain/awu138. Epub **2014** Jun 16. PMID: 24934289

E5-16 Serum proteomic profiling reveals fragments of MYOM3 as potential biomarkers for monitoring the outcome of therapeutic interventions in muscular dystrophies. Rouillon J, Poupiot J, Zocevic A, Amor F, Léger T, Garcia C, **Camadro JM**, Wong B, Pinilla R, Cosette J, Coenen-Stass AM, Mcclorey G, Roberts TC, Wood MJ, Servais L, Udd B, Voit T, Richard I, Svinartchouk F. Hum Mol Genet. **2015** Sep 1;24(17):4916-32. doi: 10.1093/hmg/ddv214. Epub **2015** Jun 9. PMID: 26060189

Other peer reviewed publications

Mechanisms of iron- and copper-frataxin interactions Han THL, **Camadro, JM, Santos R**, **Lesuisse E**, El Hage Chahine, JM, Ha-Duong NT Metallomics **2017**, MT-ART-02-2017-000031.R1, in press

E5-17 Dysfunction of mitochondrial Lon protease and identification of oxidized protein in mouse brain following exposure to MPTP: Implications for Parkinson disease. Bulteau AL, Mena NP, **Auchère F**, Lee I, Prigent A, Lobsiger CS, **Camadro JM**, Hirsch EC. Free Radic Biol Med. **2017** Mar 30;108:236-246. doi: 10.1016/j.freeradbiomed.**2017**.03.036. PMID: 28365360

E5-18 Acclimation of a low iron adapted Ostreococcus strain to iron limitation through cell biomass lowering. Botebol H, **Lelandais G**, Six C, **Lesuisse E**, Meng A, Bittner L, Lecrom S, Sutak R, Lozano JC, Schatt P, Vergé V, Blain S, Bouget FY. Sci Rep. **2017** Mar 23;7(1):327. doi: 10.1038/s41598-017-00216-6.PMID: 28336917

E5-19 A novel CISD2 mutation associated with a classical Wolfram syndrome phenotype alters Ca2+ homeostasis and ER-mitochondria interactions. Rouzier C, Moore D, Delorme C, Lacas-Gervais S, Ait-El-Mkadem S, Fragaki K, Burté F, **Serre V**, Bannwarth S, Chaussenot A, Catala M, Yu-Wai-Man P, Paquis-Flucklinger V. Hum Mol Genet. **2017** Mar 6. doi: 10.1093/hmg/ddx060. [Epub ahead of print] PMID: 28335035

E5-20 Compound heterozygosity for severe and hypomorphic *NDUFS2* mutations cause non-syndromic LHON-like optic neuropathy. Gerber S, Ding MG, Gérard X, Zwicker K, Zanlonghi X, Rio M, **Serre V**, Hanein S,

Munnich A, Rotig A, Bianchi L, Amati-Bonneau P, Elpeleg O, Kaplan J, Brandt U, Rozet JM. J Med Genet. **2017** May;54(5):346-356. doi: 10.1136/jmedgenet-**2016**-104212. Epub **2016** Dec 28. PMID: 28031252

E5-21 Mutations in MDH2, Encoding a Krebs Cycle Enzyme, Cause Early-Onset Severe Encephalopathy. Ait-El-Mkadem S, Dayem-Quere M, Gusic M, Chaussenot A, Bannwarth S, François B, Genin EC, Fragaki K, Volker-Touw CL, Vasnier C, **Serre V**, van Gassen KL, Lespinasse F, Richter S, Eisenhofer G, Rouzier C, Mochel F, De Saint-Martin A, Abi Warde MT, de Sain-van der Velde MG, Jans JJ, Amiel J, Avsec Z, Mertes C, Haack TB, Strom T, Meitinger T, Bonnen PE, Taylor RW, Gagneur J, van Hasselt PM, Rötig A, Delahodde A, Prokisch H, Fuchs SA, Paquis-Flucklinger V. Am J Hum Genet. **2017** Jan 5;100(1):151-159. doi: 10.1016/j.ajhg.**2016**.11.014. Epub **2016** Dec 15. PMID: 27989324

E5-22 Tma108, a putative M1 aminopeptidase, is a specific nascent chain-associated protein in Saccharomyces cerevisiae. Delaveau T, Davoine D, Jolly A, Vallot A, Rouvière JO, Gerber A, Brochet S, Plessis M, Roquigny R, Merhej J, Leger T, Garcia C, **Lelandais G**, Laine E, Palancade B, Devaux F, Garcia M. Nucleic Acids Res. **2016** Oct 14;44(18):8826-8841. Epub **2016** Aug 31. PMID: 27580715

E5-23 Insights into Brain Glycogen Metabolism: The structure of human brain glycogen phosphorylase. Mathieu C, de la Sierra-Gallay IL, Duval R, Xu X, Cocaign A, Léger T, Woffendin G, **Camadro JM**, Etchebest C, Haouz A, Dupret JM, Rodrigues-Lima F. J Biol Chem. **2016** Aug 26;291(35):18072-83. doi: 10.1074/jbc.M116.738898. Epub **2016** Jul 8. PMID: 27402852

E5-24 A Network of Paralogous Stress Response Transcription Factors in the Human Pathogen Candida glabrata. Merhej J, Thiebaut A, Blugeon C, Pouch J, Ali Chaouche Mel A, **Camadro JM**, Le Crom S, **Lelandais G**, Devaux F. Front Microbiol. **2016** May 9;7:645. doi: 10.3389/fmicb.**2016**.00645. eCollection **2016**. PMID: 27242683

E5-25 The Metacaspase (Mca1p) Restricts O-glycosylation During Farnesol-induced Apoptosis in Candida albicans. Léger T, Garcia C, **Camadro JM**. Mol Cell Proteomics. **2016** Jul;15(7):2308-23. doi: 10.1074/mcp.M116.059378. Epub **2016** Apr 28. PMID: 27125826

E5-26 Label-Free Quantitative Proteomics in Yeast. Léger T, Garcia C, Videlier M, **Camadro JM**. Methods Mol Biol. **2016**;1361:289-307. doi: 10.1007/978-1-4939-3079-1_16.PMID: 26483028

E5-27 ChIPseq in Yeast Species: From Chromatin Immunoprecipitation to High-Throughput Sequencing and Bioinformatics Data Analyses. **Lelandais G**, Blugeon C, Merhej J. Methods Mol Biol. **2016**;1361:185-202. doi: 10.1007/978-1-4939-3079-1_11. PMID: 26483023

E5-28 Fermentation and alternative respiration compensate for NADH dehydrogenase deficiency in a prokaryotic model of DJ-1-associated Parkinsonism. Messaoudi N, Gautier V, Dairou J, Mihoub M, **Lelandais G**, Bouloc P, Landoulsi A, Richarme G. Microbiology. **2015** Nov;161(11):2220-31. doi: 10.1099/mic.0.000181. Epub **2015** Sep 15. PMID: 26377309

E5-29 Yap7 is a transcriptional repressor of nitric oxide oxidase in yeasts, which arose from neofunctionalization after whole genome duplication. Merhej J, Delaveau T, Guitard J, Palancade B, Hennequin C, Garcia M, **Lelandais G**, Devaux F. Mol Microbiol. **2015** Jun;96(5):951-72. doi: 10.1111/mmi.12983. Epub **2015** Mar 28. PMID: 25732006

E5-30 Identification of a novel ARL13B variant in a Joubert syndrome-affected patient with retinal impairment and obesity.Thomas S, Cantagrel V, Mariani L, **Serre V**, Lee JE, Elkhartoufi N, de Lonlay P, Desguerre I, Munnich A, Boddaert N, Lyonnet S, Vekemans M, Lisgo SN, Caspary T, Gleeson J, Attié-Bitach T. Eur J Hum Genet. **2015** May;23(5):621-7. doi: 10.1038/ejhg.2014.156. Epub 2014 Aug 20. PMID: 25138100

E5-31 Screening of CHCHD10 in a French cohort confirms the involvement of this gene in frontotemporal dementia with amyotrophic lateral sclerosis patients. Chaussenot A, Le Ber I, Ait-El-Mkadem S, Camuzat A, de Septenville A, Bannwarth S, Genin EC, **Serre V**, Augé G; French research network on FTD and FTD-ALS., Brice A, Pouget J, Paquis-Flucklinger V. Neurobiol Aging. **2014** Dec;35(12):2884.e1-4. doi: 10.1016/j.neurobiolaging.**2014**.07.022. Epub **2014** Jul 24. PMID: 25155093

E5-32 A thermolabile aldolase A mutant causes fever-induced recurrent rhabdomyolysis without hemolytic anemia. Mamoune A, Bahuau M, Hamel Y, **Serre V**, Pelosi M, Habarou F, Nguyen Morel MA, Boisson B, Vergnaud S, Viou MT, Nonnenmacher L, Piraud M, Nusbaum P, Vamecq J, Romero N, Ottolenghi C, Casanova JL, de Lonlay P. PLoS Genet. **2014** Nov 13;10(11):e1004711. doi: 10.1371/journal.pgen.1004711. eCollection **2014** Nov. PMID: 25392908

E5-33 bPeaks: a bioinformatics tool to detect transcription factor binding sites from ChIPseq data in yeasts and other organisms with small genomes. Merhej J, Frigo A, Le Crom S, **Camadro JM**, Devaux F, **Lelandais G**. Yeast. **2014** Oct;31(10):375-91. doi: 10.1002/yea.3031. Epub **2014** Jul 28. PMID: 25041923

E5-34 Tissue- and cell-specific mitochondrial defect in Parkin-deficient mice. Damiano M, Gautier CA, Bulteau AL, Ferrando-Miguel R, Gouarne C, Paoli MG, Pruss R, **Auchère F**, L'Hermitte-Stead C, Bouillaud F, Brice A, Corti O, Lombès A. PLoS One. **2014** Jun 24;9(6):e99898. doi: 10.1371/journal.pone.0099898. eCollection **2014**. PMID: 24959870

E5-35 Efficient gene targeting and removal of foreign DNA by homologous recombination in the picoeukaryote Ostreococcus. Lozano JC, Schatt P, Botebol H, Vergé V, **Lesuisse E**, Blain S, Carré IA, Bouget FY. Plant J. **2014** Jun;78(6):1073-83. doi: 10.1111/tpj.12530. Epub **2014** May 23. PMID: 24698018

E5-36 Quantitative multiplex PCR of short fluorescent fragments for the detection of large intragenic POLG rearrangements in a large French cohort. Rouzier C, Chaussenot A, **Serre V**, Fragaki K, Bannwarth S, Ait-El-Mkadem S, Attarian S, Kaphan E, Cano A, Delmont E, Sacconi S, Mousson de Camaret B, Rio M, Lebre AS, Jardel C, Deschamps R, Richelme C, Pouget J, Chabrol B, Paquis-Flucklinger V. Eur J Hum Genet. **2014** Apr;22(4):542-50. doi: 10.1038/ejhg.**2013**.171. Epub **2013** Aug 7. PMID: 23921535

E5-37 In situ proteomic analysis by MALDI imaging identifies ubiquitin and thymosin-β4 as markers of malignant intraductal pancreatic mucinous neoplasms. Rebours V, Le Faouder J, Laouirem S, Mebarki M, Albuquerque M, **Camadro JM**, Léger T, Ruszniewski P, Lévy P, Paradis V, Bedossa P, Couvelard A. Pancreatology. **2014** Mar-Apr;14(2):117-24. doi: 10.1016/j.pan.**2013**.12.001. Epub **2013** Dec 17. PMID: 24650966

E5-38 Giardia intestinalis incorporates heme into cytosolic cytochrome b_5. Pyrih J, Harant K, Martincová E, Sutak R, **Lesuisse E**, Hrdý I, Tachezy J. Eukaryot Cell. **2014** Feb;13(2):231-9. doi: 10.1128/EC.00200-13. Epub **2013** Dec 2. PMID: 24297440

E5-39 Different iron sources to study the physiology and biochemistry of iron metabolism in marine micro-algae. Botebol H, Sutak R, Scheiber IF, **Blaiseau PL**, Bouget FY, **Camadro JM, Lesuisse E**. Biometals. **2014** Feb;27(1):75-88. doi: 10.1007/s10534-013-9688-1. Epub **2013** Nov 27. PMID: 24281777

E5-40 The basis for evolution of DNA-binding specificity of the Aft1 transcription factor in yeasts. Gonçalves IR, **Conde e Silva N**, Garay CL, **Lesuisse E**, **Camadro JM**, **Blaiseau PL**. Genetics. **2014** Jan;196(1):149-60. doi: 10.1534/genetics.113.157693. Epub **2013** Oct 30. PMID: 24172132

E5-41 Potent reversible inhibition of myeloperoxidase by aromatic hydroxamates. Forbes LV, Sjögren T, **Auchère F**, Jenkins DW, Thong B, Laughton D, Hemsley P, Pairaudeau G, Turner R, Eriksson H, Unitt JF, Kettle AJ. J Biol Chem. **2013** Dec 20;288(51):36636-47. doi: 10.1074/jbc.M113.507756. Epub **2013** Nov 5. PMID: 24194519

E5-42 Interaction between methionine synthase isoforms and MMACHC: characterization in cblG-variant, cblG and cblC inherited causes of megaloblastic anaemia. Fofou-Caillierez MB, Mrabet NT, Chéry C, Dreumont N, Flayac J, Pupavac M, Paoli J, Alberto JM, Coelho D, **Camadro JM**, Feillet F, Watkins D, Fowler B, Rosenblatt DS, Guéant JL. Hum Mol Genet. **2013** Nov 15;22(22):4591-601. doi: 10.1093/hmg/ddt308. Epub **2013** Jul 3. PMID: 23825108

E5-43 Aromatic L-amino acid decarboxylase deficiency is a cause of long-fasting hypoglycemia. Arnoux JB, Damaj L, Napuri S, **Serre V**, Hubert L, Cadoudal M, Simard G, Ceballos I, Christa L, de Lonlay P. J Clin Endocrinol Metab. **2013** Nov;98(11):4279-84. doi: 10.1210/jc.**2013**-2740. Epub **2013** Sep 13. PMID: 24037885

E5-44 Global stress response in a prokaryotic model of DJ-1-associated Parkinsonism. Messaoudi N, Gautier V, Kthiri F, **Lelandais G**, Mihoub M, Joseleau-Petit D, Caldas T, Bohn C, Tolosa L, Rao G, Tao K, Landoulsi A, Bouloc P, Richarme G. J Bacteriol. **2013** Mar;195(6):1167-78. doi: 10.1128/JB.02202-12. Epub **2013** Jan 4. PMID: 23292772

E5-45 Human mitochondrial ferritin improves respiratory function in yeast mutants deficient in iron-sulfur cluster biogenesis, but is not a functional homologue of yeast frataxin. Sutak R, **Seguin A**, Garcia-Serres R, Oddou JL, Dancis A, Tachezy J, Latour JM, **Camadro JM**, **Lesuisse E**. Microbiologyopen. **2012** Jun;1(2):95-104. doi: 10.1002/mbo3.18. PMID: 22950017

E5-46 Homocysteinylation of neuronal proteins contributes to folate deficiency-associated alterations of differentiation, vesicular transport, and plasticity in hippocampal neuronal cells. Akchiche N, Bossenmeyer-Pourié C, Kerek R, Martin N, Pourié G, Koziel V, Helle D, Alberto JM, Ortiou S, **Camadro JM**, Léger T, Guéant JL, Daval JL. FASEB J. **2012** Oct;26(10):3980-92. doi: 10.1096/fj.12-205757. Epub **2012** Jun 19. PMID: 22713523

E5-47 Apn1 AP-endonuclease is essential for the repair of oxidatively damaged DNA bases in yeast frataxin-deficient cells. **Lefevre S, Brossas C, Auchère F**, Boggetto N, **Camadro JM*, Santos R***. (***** co-senior authors) Hum Mol Genet. **2012** Sep 15;21(18):4060-72. doi: 10.1093/hmg/dds230. Epub **2012** Jun 16. PMID: 22706278

E5-48 Oxidative stress induces mitochondrial fragmentation in frataxin-deficient cells. **Lefevre S, Sliwa D**, Rustin P, **Camadro JM, Santos R**. Biochem Biophys Res Commun. **2012** Feb 10;418(2):336-41. doi: 10.1016/j.bbrc.**2012**.01.022. Epub **2012** Jan 17. PMID: 22274609

E5-49 The yeast metacaspase is implicated in oxidative stress response in frataxin-deficient cells. **Lefevre S, Sliwa D, Auchère F, Brossas C**, Ruckenstuhl C, Boggetto N, **Lesuisse E**, Madeo F, **Camadro JM, Santos R**. FEBS Lett. **2012** Jan 20;586(2):143-8. doi: 10.1016/j.febslet.2011.12.002. Epub 2011 Dec 7. PMID: 22155640

E5-50 Comparative electrochemical study of superoxide reductases. Cordas CM, Raleiras P, **Auchère F**, Moura I, Moura JJ. Eur Biophys J. **2012** Feb;41(2):209-15. doi: 10.1007/s00249-011-0777-1. Epub 2011 Dec 6. PMID: 22143105

E5-51 Changes in mitochondrial glutathione levels and protein thiol oxidation in Δyfh1 yeast cells and the lymphoblasts of patients with Friedreich's ataxia. Bulteau AL, **Planamente S**, Jornea L, Dur A, **Lesuisse E**, **Camadro JM**, **Auchère F**. Biochim Biophys Acta. 2012 Feb;1822(2):212-25. doi: 10.1016/j.bbadis.2011.11.003. Epub 2011 Nov 11. PMID: 22200491

E5-52 Inactivation of mitochondrial aspartate aminotransferase contributes to the respiratory deficit of yeast frataxin-deficient cells. **Sliwa D**, Dairou J, **Camadro JM**, **Santos R**. Biochem J. **2012** Feb 1;441(3):945-53. doi: 10.1042/BJ20111574. PMID: 22010850

E6 – Jérôme COLLIGNON

Peer reviewed publications

E6-1 Souilhol C*, Perea-Gomez A*, Camus A, Beck-Cormier S, Vandormael-Pournin S, Escande M, Collignon J and Cohen- Tannoudji M. (2015). Notch activation interferes with cell fate specification in the gastrulating mouse embryo. *Development* **142**, 3649-3660.

E6-2 Cajal M, Creuzet S, Papanayotou C, Sabéran-Djoneidi D, Chuva de Sousa Lopes SM, Zwijsen A, Collignon J and Camus A. (2014). A conserved role for non-neural ectoderm cells in early neural development. *Development* **141**, 1-12.

E6-3 Jego G, Lanneau D, De Thonel A, Berthenet K, Hazoumé A, Droin N, Hamman A, Girodon F, Bellaye PS, Wettstein G, Jacquel A, Duplomb L, Le Mouël A, Papanayotou C, Christians E, Bonniaud P, Lallemand-Mezger V, Solary E, Garrido C. (2014). Dual regulation of SPI1/PU.1 transcription factor by heat shock factor 1 (HSF1) during macrophage differentiation of monocytes. *Leukemia* **28**, 1676-86.

E6-4 Papanayotou C, Benhaddou A, Camus A, Perea-Gomez A, Jouneau A, Mezger V, Langa F, Ott S, Sabéran-Djoneidi D, Collignon J. (2014). A novel *Nodal* enhancer dependent on pluripotency factors and Smad2/3 signaling conditions a regulatory switch during epiblast maturation. *PLoS Biol* **12**(6): e1001890.

E6-5 Mazari E, Zhao X, Migeotte I, Collignon J, Gosse C, Perea-Gomez A. (2014). A microdevice to locally electroporate embryos with high efficiency and reduced cell damage. *Development* **141**, 2349-59

E6-6 Cases O, Perea-Gomez A, Aguiar DP, Nykjaer A, Amsellem S, Chandellier J, Umbhauer M, Cereghini S, Madsen M, Collignon J, Verroust P, Riou JF, Creuzet SE, Kozyraki R. (2013). Cubilin, a high affinity receptor for Fgf8, is required for cell survival in the developing vertebrate head. *J Biol Chem*. **288**, 16655-70.

E6-7 Dobreva MP, Lhoest L, Pereira PN, Umans L, Camus A, Chuva de Sousa Lopes SM, Zwijsen A. (2012). Periostin as a biomarker of the amniotic membrane. *Stem Cells Int.* 2012:987185.

E6-8 Cajal M, Lawson KA, Hill B, Moreau A, Rao J, Ross A, Collignon J, Camus A. (2012). Clonal and molecular analysis of the prospective anterior neural boundary in the mouse embryo. *Development* **139**, 423-36.

E6-9 Pereira PN, Dobreva MP, Maas E, Cornelis FM, Moya IM, Umans L, Verfaillie CM, Camus A, de Sousa Lopes SM, Huylebroeck D, Zwijsen A. (2012). Antagonism of Nodal signaling by BMP/Smad5 prevents ectopic primitive streak formation in the mouse amnion. *Development* **139**, 3343-54.

Peer-reviewed reviews

E6-10 Papanayotou C and Collignon J. (2014). Activin/Nodal signalling before implantation: setting the stage for embryo patterning. *Phil. Trans. R. Soc. B* 369: 20130539.

Other publications

E6-11 Turner DA, Glodowski CR, Alonso-Crisostomo L, Baillie-Johnson P, Hayward PC, Collignon J, Gustavsen C, Serup P, Schröter C, and Martinez Arias A. (2016). Interactions between Nodal and Wnt signalling Drive Robust Symmetry-Breaking and Axial Organisation in Gastruloids (Embryonic Organoids). *bioRxiv* 051722.

E6-12 Perea-Gomez A and Meilhac S. (2014). Formation of the anterior-posterior axis in mammals. In Principles of Developmental Genetics (ed. L.Wolpert and C. Tickle). Amsterdam: Elsevier.

E6-13 Mazari E and Perea-Gomez A. (2014). Electrifying news for embryologists. thenode.biologists.com

E7 – Virginie COURTIER-ORGOGOZO

Peer reviewed publications

E7-1 Rhebergen F, Courtier-Orgogozo V, Dumont J, Schilthuizen M, Lang M (2016) *Drosophila pachea* asymmetric lobes are part of a grasping device and stabilize one-sided mating. ***BMC Evolutionary Biology*** 16(1): 176.

E7-2 Lang M, Nagy O, Lang C, Orgogozo V (2016) High throughput preparation of fly genomic DNA in 96-well format using a paint-shaker. ***Fly*** 9(3):138-44.

E7-3 Peluffo AE, Nuez I, Debat V, Savisaar R, Stern DL & Orgogozo V (2015). A Major Locus Controls a Genital Shape Difference Involved in Reproductive Isolation Between *Drosophila yakuba* and *Drosophila santomea*. ***G3: Genes| Genomes| Genetics***, g3-115.

E7-4 Lang M, Polihronakis Richmond M, Acurio AE, Markow TA, & Orgogozo V (2014) Radiation of the Drosophila nannoptera species group in Mexico. ***Journal of Evolutionary Biology*** *27*(3):575-584.

E7-5 Yassin A, Orgogozo V (2013) Coevolution between Male and Female Genitalia in the *Drosophila melanogaster* Species Subgroup. ***PLoS ONE*** 8(2):e57158.

E7-6 Lang M, Murat S, Clark AG, Gouppil G, Blais C, Matzkin LM, Guittard E, Yoshiyama-Yanagawa T, Kataoka H, Niwa R, Lafont R, Dauphin-Villemant C and Orgogozo V (2012) Mutations in the *neverland* gene turned *Drosophila pachea* into an obligate specialist species. ***Science*** 337(6102):1658-61.

E7-7 Yassin A, Gidaszewskib N, Albert B, Hivert J, Rast A, David JR, Orgogozo V, Debat V (2012) The Drosophilidae (Diptera) of the Sparse Islands, with the Description of a Novel Association with *Leptadenia madagascariensis* Decne (Apocynaceae). ***Fly*** 6(4):298-302.

E7-8 Lang M, Orgogozo V (2012) Distinct copulation positions in *Drosophila pachea* males with symmetric or asymmetric external genitalia. ***Contributions to Zoology*** 81:87-94.

Peer reviewed reviews

E7-9 Courtier-Orgogozo V, Morizot B, Boëte C (2017) Agriculture Pest Control with CRISPR-based gene drive: Time for public debate. ***EMBO reports***. In press.

E7-10 Martin A, Courtier-Orgogozo V (2017) Morphological evolution repeatedly caused by mutations in signaling ligand genes. *Diversity and Evolution of Butterfly Wing Patterns : An Integrative Approach*. Eds. Sekimura T, Nijout F. In press.

E7-11 Orgogozo V, Peluffo A, Morizot B (2016) The "Mendelian gene" and the "molecular gene": two relevant concepts of genetic units. ***Current Topics in Developmental Biology*** 119:1-26.

E7-12 Orgogozo V (2015). Replaying the tape of life in the twenty-first century. ***Interface Focus***, *5*(6), 20150057.

E7-13 Orgogozo V, Morizot B & Martin A (2015). The differential view of genotype–phenotype relationships. ***Frontiers in Genetics*** 6:179.

E7-14 Martin A, Orgogozo V (2013) The loci of repeated evolution: a catalogue of genetic hotspots of phenotypic variation. ***Evolution*** 67(5):1235–1250.

Other publications

Bibliography

E7-15 *Orgogozo V, Martin A, Evolution and Development: Genes and Mutations Underlying Phenotypic Variation. In* Oxford Bibliographies in Evolutionary Biology. *Ed. Jonathan Losos. New York: Oxford University Press.*

E8 – Valérie DOYE

Peer reviewed publications

E8-1 Bonnet, A., A.R. Grosso, A. Elkaoutari, E. Coleno, A. Presle, S.C. Sridhrara, G. Janbon, V. Geli, S.F. de Almeida, and B. Palancade, *Introns protect eukaryotic genomes from transcription-associated genetic instability*. In revision **Mol. Cell.**

E8-2 Martino, L., Morchoisne-Bolhy, S., Cheerambathur, D.K., Van Hove, L., Dumont, J., Joly, N., Desai, A., Doye, V. and Pintard, L. *Channel Nucleoporins recruit the Polo-like kinase PLK-1 to the Nuclear Pore Complexes in prophase to direct Nuclear Envelope Breakdown.* In revision **Dev. Cell.**

E8-3 Romana S, Radford-Weiss I, Lapierre JM, Doye V , Geoffroy MC . *Formation of Nup98-containing nuclear bodies in HeLa sublines is linked to genomic rearrangements affecting chromosome 11.* **Chromosoma**. 125(4):789-805. doi: 10.1007/s00412-015-0567-0.

E8-4 Babour A, Shen Q, Dos-Santos J, Murray S, Gay A, Challal D, Fasken M, Palancade B, Corbett A, Libri D, Mellor J, Dargemont (2016). C. *The Chromatin Remodeler ISW1 Is a Quality Control Factor that Surveys Nuclear mRNP Biogenesis.* **Cell**. 2016 Nov 17;167(5):1201-1214.e15. doi: 10.1016/j.cell.2016.10.048.

E8-5 Delaveau T, Davoine D, Jolly A, Vallot A, Rouvière JO, Gerber A, Brochet S, Plessis M, Roquigny R, Merhej J, Leger T, Garcia C, Lelandais G, Laine E, Palancade B, Devaux F, Garcia M (2016) *Tma108, a putative M1 aminopeptidase, is a specific nascent chain-associated protein in Saccharomyces cerevisiae.* **Nucleic Acids Res.** 44:8826-8841.

E8-6 Fritzen R, Delbos F, De Smet A, Palancade B, Canman CE, Aoufouchi S, Weill JC, Reynaud CA, Storck S. (2016). *A single aspartate mutation in the conserved catalytic site of Rev3L generates a hypomorphic phenotype in vivo and in vitro.* **DNA Repair** (Amst). 46:37-46. doi: 10.1016/j.dnarep.2016.07.002.

E8-7 Bonnet A, Palancade B. (2015) *Intron or no intron: a matter for nuclear pore complexes.* **Nucleus**. 6:455-61. doi: 10.1080/19491034.2015.1116660.

E8-8 Bonnet A, Bretes H, Palancade B . (2015) *Nuclear pore components affect distinct stages of intron-containing gene expression.* **Nucleic Acids Res.** 43(8):4249-61. doi: 10.1093/nar/gkv280.

E8-9 Morchoisne-Bolhy S, Geoffroy MC, Bouhlel IB, Alves A, Audugé N, Baudin X, Van Bortle K, Powers MA, Doye V . (2015) *Intranuclear dynamics of the Nup107-160 complex.* **Mol Biol Cell.** 26:2343-56. doi: 10.1091/mbc.E15-02-0060.

E8-10 Floch AG, Tareste D, Fuchs PF, Chadrin A, Naciri I, Léger T, Schlenstedt G, Palancade B*, Doye V*. *Nuclear pore targeting of the yeast Pom33 nucleoporin depends on karyopherin and lipid binding.* **J Cell Sci.** 128(2):305-16. doi: 10.1242/jcs.158915.
=> **editorial Comment** : J. Cell Science. "In this issue: *How Pom33 is targeted to the NPC".*

E8-11 Merhej J, Delaveau T, Guitard J, Palancade B, Hennequin C, Garcia M, Lelandais G, Devaux F. (2015). *Yap7 is a transcriptional repressor of nitric oxide oxidase in yeasts, which arose from neofunctionalization after whole genome duplication.* **Mol Microbiol.** 96:951-72. doi: 10.1111/mmi.12983.

E8-12 Bretes H, Rouviere JO, Leger T, Oeffinger M, Devaux F, Doye V, Palancade B(2014) *Sumoylation of the THO complex regulates the biogenesis of a subset of mRNPs.* **Nucleic Acids Res.** 5043-58. doi: 10.1093/nar/gku124.

E8-13 Kim DI, Birendra KC, Zhu W, Motamedchaboki K, Doye V, Roux KJ. (2014) *Probing nuclear pore complex architecture with proximity-dependent biotinylation.* **Proc Natl Acad Sci U S A.** 111:E2453-61. doi: 10.1073/pnas.1406459111.

E8-14 Hu DJ, Baffet AD, Nayak T, Akhmanova A, Doye V, Vallee RB. (2013) *Dynein recruitment to nuclear pores activates apical nuclear migration and mitotic entry in brain progenitor cells.* **Cell.** 154(6):1300-13. doi: 10.1016/j.cell.2013.08.024.

E8-15 Dreyfus T, Doye V, Cazals F. (2013) *Probing a continuum of macro-molecular assembly models with graph templates of complexes.* **Proteins**.81:2034-44. doi: 10.1002/prot.24313.

E8-16 Dreyfus T, Doye V, Cazals F. (2012) *Assessing the reconstruction of macromolecular assemblies with toleranced models.* **Proteins.** 80:2125-36. doi: 10.1002/prot.24092

Peer reviewed reviews

E8-17 Souquet B, Doye V. (2015) *Bending or Building: Multifaceted Functions of Amphipathic Helices in Basket Nucleoporins.* **Dev Cell.** 33(6):626-8. doi: 10.1016/j.devcel.2015.06.009.

E8-18 Floch AG, Palancade B, Doye V. (2014) *Fifty years of nuclear pores and nucleocytoplasmic transport studies: multiple tools revealing complex rules.* **Methods Cell Biol.** 122:1-40. doi: 10.1016/B978-0-12-417160-2.00001-1.

E8-19 Bonnet A, Palancade B. (2014) *Regulation of mRNA trafficking by nuclear pore complexes.* **Genes** (Basel). 2014 5(3):767-91. doi: 10.3390/genes5030767.

E8-20 Rouvière JO, Geoffroy MC, Palancade B. (2013) *Multiple crosstalks between mRNA biogenesis and SUMO.* **Chromosoma** 122:387-99. doi: 10.1007/s00412-013-0408-y.

Other publications

E8-21 Doye V. **(2014)** *Preface. Nuclear pore complexes and nucleocytoplasmic transport-methods.* **Methods Cell Biol.** 122:xix-xx. doi: 10.1016/B978-0-12-417160-2.09992-6.

E8-22 Burke B. and Doye V. (2012) *The Nuclear periphery* **Mol. Biol. Cell** 23:968 *(*ASCB Annual Meeting Highlights)

E9 – Sandra DUHARCOURT

Peer reviewed publications

Frapporti A, Arnaiz O, Eleftheriou E, Holoch D, Sperling L, Margueron R, Duharcourt S*. Transcriptional repression of transposable elements mediated by a histone H3 lysine 9 and 27 Enhancer of zeste like methyltransferase.
In preparation

Arnaiz O, Van Dijk E, Bétermier M, Lhuillier-Akakpo M, de Vanssay A, Duharcourt S, Sallet E, Gouzy J and Sperling L. Improved methods and resources for *Paramecium* genomics: Transcription Units, Gene Annotation and Gene Expression.
Under revision

E9-1 Guérin F, Arnaiz O, Boggetto N, Denby Wilkes C, Meyer E, Sperling L and Duharcourt S*. (2017). Flow cytometry sorting of nuclei enables the first global characterization of *Paramecium* germline DNA and transposable elements. ***BMC Genomics***. 2017 Apr 26;18(1):327. doi: 10.1186/s12864-017-3713-7.

E9-2 Lhuillier-Akakpo M, Guérin F, Frapporti A and Duharcourt S*. (2016). DNA deletion as a mechanism for developmentally programmed centromere loss. ***Nucleic Acids Research***. 2016 Feb 29;44(4):1553-65. doi: 10.1093/nar/gkv1110. Epub 2015 Oct 25

E9-3 Maliszewska-Olejniczak K, Gruchota J, Gromadka R, Denby Wilkes C, Arnaiz O, Mathy N, Duharcourt S, Bétermier M and K. Nowak J. (2015). TFIIS-dependent non-coding transcription regulates developmental genome rearrangements. ***PLoS Genetics***. 2015 Jul 15;11(7):e1005383. doi: 10.1371/journal.pgen.1005383. eCollection 2015 Jul. PMID:26177014

E9-4 Lhuillier-Akakpo M#, Frapporti A#, Denby Wilkes C, Matelot M, Vervoort M, Sperling L, Duharcourt S*. (2014). Local effect of Enhancer of Zeste-like reveals cooperation of epigenetic and cis-acting determinants for zygotic genome rearrangements. ***PLoS Genetics***. 2014 Sep 25;10(9):e1004665.eCollection 2014 Sep.

E9-5 Singh DP, Saudemont B, Guglielmi G, Arnaiz O, Goût JF, Prajer M, Potekhin A, Przybòs E, Aubusson-Fleury A, Bhullar S, Bouhouche K, Lhuillier-Akakpo M, Tanty V, Blugeon C, Alberti A, Labadie K, Aury JM, Sperling L, Duharcourt S, Meyer E. (2014). Genome-defence small RNAs exapted for epigenetic mating-type inheritance. ***Nature***. 2014 May 22;509(7501):447-52. Epub 2014 May 7

E9-6 Arnaiz O, Mathy N, Baudry C, Malinsky S, Aury JM, Denby Wilkes C, Garnier O, Labadie K, Lauderdale B, Le Mouël A, Marmignon A, Nowacki M, Poulain J, Prajer M, Wincker P, Meyer E, Duharcourt S, Duret L, Bétermier M*, Sperling L* (2012). The *Paramecium* germline genome provides a niche for intragenic parasitic DNA: Evolutionary Dynamics of Internal Eliminated Sequences. ***PLoS Genetics.*** 8(10):e1002984. Epub 2012 Oct 4

Peer reviewed reviews

E9-7 Bétermier M and Duharcourt S. (2014). Programmed Rearrangement in Ciliates: *Paramecium*. ***Microbiol Spectrum*** 2(6):MDNA3-0035-2014. doi: 10.1128/microbiolspec.MDNA3-0035-2014

E9-8 Coyne RS#, Lhuillier-Akakpo M#, Duharcourt S*. (2012). RNA-guided DNA rearrangements in ciliates: Is the best genome defense a good offense? ***Biology of the Cell***. 104, 1–17

Other publications
Book Chapter

E9-9 Bétermier M and Duharcourt S. (2015). Chapter 17. Programmed Rearrangement in Ciliates: *Paramecium*. In Mobile DNA III. Editors: NL Craig, M Chandler, M Gellert, AM. Lambowitz, PA Rice, SB Sandmeyer. ASM Press

E10 – Julien DUMONT

Peer reviewed publications

E10-1 Gigant, E.*, Stefanutti, M.*, Laband, K., Gluszek-Kustusz, A., Edwards, F., Maton, G., Lacroix, B., Canman, J.C., Welburn, J. & Dumont, J. Inhibition of ectopic microtubule assembly by the kinesin-13 KLP-7^{MCAK} prevents chromosome segregation and cytokinesis defects in oocytes. Development, (2017), in press

E10-2 Zhuravlev, Y., Hirsch, S., Jordan, S., Dumont, J., Shirasu-Hiza, M. & Canman, J.C. CYK-4 regulates Rac, but not Rho, during cytokinesis. MBoC, (2017), in press

E10-3 Sundaramoorthy, S., Garcia, B.A., Hirsch, S., Park, J.H., Davies, T., Dumont, J., Shirasu-Hiza, M., Kummel, A. & Canman, J.C. Low efficiency upconversion nanoparticles for high-resolution coalignment

of near-infrared and visible light paths on a light microscope. ACS Applied Materials & Interfaces, (2017), in press

E10-4 Joly, N., Martino, L., Gigant, E., Dumont, J., & Pintard, L. Microtubule-severing activity of AAA-ATPase Katanin is essential for female meiotic spindle assembly Development, 143(19):3604-3614 (2016).

E10-5 Rhebergen, T., Flor, Orgogozo, V., Dumont, J., Schilthuizen, M. & Lang, M. Drosophila pachea asymmetric lobes are part of a grasping device and stabilize one-sided mating. BMC Evolutionary Biology, 16:176 (2016).

E10-6 Hattersley, N., Cheerambathur, D., Moyle, M., Stefanutti, M., Richardson, A., Lee, K.Y., Dumont, J., Oegema, K., & Desai, A. A Nucleoporin Docks Protein Phosphatase 1 to Direct Meiotic Chromosome Segregation and Nuclear AssemblyDev. Cell 35, (5):463-477 (2016).

E10-7 Lacroix, B., Ryan, J., Dumont, J., Maddox, P.S. & Maddox, A.S. Identification of microtubule growth deceleration and its regulation by conserved and novel proteins. MBoC 1;27(9):1479-87 (2016).

E10-8 Jordan, S.N., Davies, T., Zhuravlev, Y., Dumont, J.*, Shirasu-Hiza, M.* & Canman, J.C. Cortical PAR Polarity proteins promote robust cytokinesis during asymmetric cell division. J Cell Biol 212, (1):39-49 (2016).

E10-9 Maton, G.*, Edwards, F.*, Lacroix, B., Stefanutti, M., Laband, K., Lieury, T., Kim, T., Espeut, J., Canman, J.C., & Dumont, J. Kinetochore components are required for central spindle assembly. Nat Cell Biol 17(5):697-705 (2015). Dispatched in Current Biology 25, R554–R557, (2015).

E10-10 Davies, T., Jordan, S.N., Chand, V., Sees, J.A., Laband, K., Carvalho, A., Shirasu-Hiza, M., Kovar, D., Dumont, J. & Canman, J.C. High-resolution temporal analysis reveals a functional timeline for the molecular regulation ofcytokinesis. Dev. Cell 30, (2):209-223 (2014).

E10-11 Gomes, J.E., Tavernier, N., Richaudeau, B., Formstecher, E., Boulin, T., Mains, P.E., Dumont, J. & Pintard, L. Microtubule-severing by the Katanin complex is activated by PPFR-1-dependent MEI-1 dephosphorylation. J Cell Biol 202, 431-439 (2013).

E11 – Thierry Galli

Peer reviewed publications

E11-1 Chevalier NR, Fleury V, Dufour S, Proux-Gillardeaux V§, Asnacios A§. **§ Co-senior authors**. (2017). Emergence and development of gut motility in the chicken embryo. ***PLoS One*** 12:e0172511. doi: 10.1371/journal.pone.0172511

E11-2 Cueto JA, Vanrell MC, Salassa BN, Nola S, Galli T, Colombo MI, Romano PS. (2017). SNARE proteins required during Trypanosoma cruzi parasitophorous vacuole development. ***Cell Microbiol.*** doi: 10.1111/cmi.12713. in the press.

E11-3 Pincet F, Adrien V, Yang R, Delacotte J, Rothman JE, Urbach W, Tareste D. (2016). FRAP to Characterize Molecular Diffusion and Interaction in Various Membrane Environments. ***PLoS One*** 11:e0158457. doi: 10.1371/journal.pone.0158457.

E11-4 Ghosh D, Pinto S, Danglot L, Vandewauw I, Segal A, Van Ranst N, Benoit M, Janssens A, Vennekens R, Vanden Berghe P, Galli T, Vriens J, Voets T. (2016). VAMP7 regulates constitutive membrane incorporation of the cold-activated channel TRPM8. ***Nature Comm***. 7:10489. doi: 10.1038/ncomms10489.

E11-5 Chiaruttini G, Piperno GM, Jouve M, De Nardi F, Larghi P, Peden AA, Baj G, Müller S, Valitutti S, Galli T, Benvenuti F. (2016). The SNARE VAMP7 Regulates Exocytic Trafficking of Interleukin-12 in Dendritic Cells. ***Cell Rep***. 2016 14:2624-36.

E11-6 Sikorra S, Litschko C, Müller C, Thiel N, Galli T, Eichner T, Binz T. (2016) Identification and characterization of botulinum neurotoxin A substrate binding pockets and their re-engineering for human SNAP-23. ***J Mol Biol*** 428(2 Pt A):372-84.

E11-7 Dennis MK, Delevoye C, Acosta-Ruiz A, Hurbain I, Romao M, Hesketh GG, Goff PS, Sviderskaya EV, Bennett DC, Luzio JP, Galli T, Owen DJ, Raposo G, Marks MS. (2016). BLOC-1 and BLOC-3 regulate VAMP7 cycling to and from melanosomes via distinct tubular transport carriers. ***J Cell Biol***. 214(3):293-308. doi: 10.1083/jcb.201605090.

E11-8 Molino D, Nola S, Lam SM, Verraes A, Proux-Gillardeaux V, Boncompain G, Perez F, Wenk M, Shui G, Danglot L*, Galli T*. (2015) Role of tetanus neurotoxin insensitive vesicle-associated membrane protein in membrane domains transport and homeostasis. ***Cellular logistics***:e1025182. * co-senior authors

E11-9 Koseoglu S, Peters CG, Fitch-Tewfik JL, Aisiku O, Danglot L, Galli T, Flaumenhaft R. (2015). VAMP-7 links granule exocytosis to actin reorganization during platelet activation. ***Blood***. 2015 126(5):651-60. doi: 10.1182/blood-2014-12-618744.

E11-10 Kuster A, Nola S, Dingli F, Vacca B, Gauchy C, Beaujouan JC, Nunez M, Moncion T, Loew D, Formstecher E, Galli T*, Proux-Gillardeaux V*. (2015). The Q-Soluble-N-Ethylmaleimide-Sensitive Factor Attachment Protein

Receptor (Q-SNARE) SNAP-47 Regulates Trafficking of Selected Vesicle-Associated Membrane Proteins (VAMPs). ***J Biol Chem***. 290:28056-28069. pii: jbc.M115.666362.

E11-11 Barber M, Arai Y, Morishita Y, Vigier L, Causeret F, Borello U, Ledonne F, Coppola E, Contremoulins V, Pfrieger FW, Tissir F, Govindan S, Jabaudon D, Proux-Gillardeaux V, Galli T, Pierani A. (2015). Migration Speed of Cajal-Retzius Cells Modulated by Vesicular Trafficking Controls the Size of Higher-Order Cortical Areas. ***Curr Biol.*** 25:2466-78. doi: 10.1016/j.cub.2015.08.028.

E11-12 Lagache T, Sauvonnet N, Danglot L, Olivo-Marin JC. (2015). Statistical analysis of molecule colocalization in bioimaging. Cytometry A. 87:568-79. doi: 10.1002/cyto.a.22629

E11-13 Li D, Hérault K, Zylbersztejn K, Lauterbach MA, Guillon M, Oheim M, Ropert N. (2015). Astrocyte VAMP3 vesicles undergo Ca2+ -independent cycling and modulate glutamate transporter trafficking. J Physiol. 593:2807-32. doi: 10.1113/JP270362.

E11-14 Gonzalez-Rodriguez D, Sart S, Babataheri A, Tareste D, Barakat AI, Clanet C, Husson J. (2015). Elastocapillary Instability in Mitochondrial Fission. ***Phys Rev Lett***. 2015 115:088102.

E11-15 Floch AG, Tareste D, Fuchs PF, Chadrin A, Naciri I, Léger T, Schlenstedt G, Palancade B, Doye V. (2015). Nuclear pore targeting of the yeast Pom33 nucleoporin depends on karyopherin and lipid binding. ***J Cell Sci.*** 128:305-16. doi: 10.1242/jcs.158915.

E11-16 Petkovic M, Jemaiel A, Daste F, Specht CG, Izeddin I, Vorkel D, Verbavatz JM, Darzacq X, Triller A, Pfenninger KH, Tareste D, Jackson CL, Galli T. The SNARE Sec22b has a non-fusogenic function in plasma membrane expansion. ***Nat Cell Biol***, 16(5):434-444. doi: 10.1038/ncb2937.

E11-17 Ligeon LA, Moreau K, Barois N, Bongiovanni A, Lacorre DA, Werkmeister E, Proux-Gillardeaux V, Galli T, and Lafont F. (2014). Role of VAMP3 and VAMP7 in the commitment of Yersinia pseudotuberculosis to LC3-associated pathways involving single- or double-membrane vacuoles ***Autophagy*** 10:1588-1602. . doi: 10.4161/auto.29411.

E11-18 Molino D, Van der Giessen E, Gissot L, Hématy K, Marion J, Barthelemy J, Bellec Y, Vernhettes S, Satiat-Jeunemaître B, Galli T, Tareste D, Faure JD. (2014) Inhibition of very long acyl chains sphingolipid synthesis modifies membrane dynamics during plant cytokinesis. ***BBA - Molecular and Cell Biology of Lipids*** 1841:1422-1430.

E11-19 Burgo A*, Casano AM*, Kuster A*, Arold ST, Wang G, Nola S, Verraes A, Dingli F, Loew D, Galli T. (2013) Increased activity of the Vesicular Soluble N-Ethylmaleimide-sensitive Factor Attachment Protein Receptor TI-VAMP/VAMP7 by Tyrosine Phosphorylation in the Longin Domain. ***J Biol Chem.*** 288(17):11960-72. doi: 10.1074/jbc.M112.415075.

E11-20 Larghi P, Williamson DJ, Carpier JM, Dogniaux S, Chemin K, Bohineust A, Danglot L, Gaus K, Galli T**§**, Hivroz C**§**. (2013) VAMP7 controls T cell activation by regulating the recruitment and phosphorylation of vesicular Lat at TCR-activation sites***. Nat Immunol.*** 14:723-31.doi: 10.1038/ni.2609. **§ Co-senior authors.**

E11-21 Schena F, Volpi S, Faliti CE, Penco F, Santi S, Proietti M, Schenk U, Damonte G, Salis A, Bellotti M, Fais F, Tenca C, Gattorno M, Eibel H, Rizzi M, Warnatz K, Idzko M, Ayata K, Rakhmanov M, Galli T, Martini A, Canossa M, Grassi F, Traggiai E. Dependence of immunoglobulin class switch recombination in B cells on vesicular release of ATP and CD73 ectonucleotidase activity. ***Cell Reports*** http://dx.doi.org/10.1016/j.celrep.2013.05.022.

E11-22 Zylbersztejn K, Petkovic M, Burgo A, Deck M, Garel S, Marcos S, Bloch-Gallego E, Nothias F, Serini G, Bagnard D, Binz T, Galli T. (2012). The vesicular SNARE Synaptobrevin is required for Semaphorin 3A axonal repulsion. ***J Cell Biol*** 196:37-46.

E11-23 Danglot L*, Zylbersztejn K*, Petkovic M*, Meziane H, Combe R, Champy MF, Birling MC, Pavlovic G, Bizot JC, Trovero F, Della Ragione F, Proux-Gillardeaux V, Sorg T, D'esposito M, Galli T. (2012). Absence of TI-VAMP/Vamp7 leads to increased anxiety in mice. ***J Neurosci*** 32:1962-1968.

E11-24 Cassé F, Bardou I, Danglot L, Briens A, Montagne A, Parcq J, Alahari A, Galli T, Vivien D, Docagne F (2012) Glutamate Controls tPA Recycling by Astrocytes, Which in Turn Influences Glutamatergic Signals. ***J Neurosci*** 32: 5186-5199.

E11-25 Verderio C, Bergami M, Cagnoli C, Schenk U, Riganti L, Frassoni C, Zuccaro E, Danglot L, Wilhelm C, Galli T, Canossa M, Matteoli M. (2012) TI-VAMP/VAMP7 Is The Snare Of Secretory Lysosomes Contributing To ATP Secretion From Astrocytes. ***Biol Cell*** 104:213-28.

E11-26 Danglot L, Freret T, Le Roux N, Narboux-Nême N, Burgo A, Hyenne V, Contremoulins V, Dauphin F, Bizot JC, Vodjdani G, Gaspar P, Boulouard M, Poncer JC, Galli T, Simmler MC. (2012). Vezatin is essential for dendritic spine morphogenesis and functional synaptic maturation. ***J Neurosci*** 32:9007-9022.

E11-27 Burgo A., Proux-Gillardeaux, V., Sotirakis, E., Bun, P., Casano,A., Verraes, A., Liem, R., Formstecher, E., Coppey, M. G**alli**, T. (2012). A molecular network for the transport of the TI-VAMP/VAMP7 vesicles from cell center to periphery. ***Developmental Cell*****,** 23:166–180.

Peer reviewed reviews

E11-28 T. Galli and **Proux−Gillardeaux** V. webpage and printed chapter "VAMP1/2/3/7" from "**Encyclopedia of Signaling Molecules**", **Second Edition**, (accepted) Editor Pr. Sangdun Choi and Springer. ISBN: 978-1-4614-6438-9 (Print) 978-1-4614-6438-9 (Online)

E11-29 Wojnacki J, Galli T. Membrane traffic during axon development. (2016). **Dev Neurobiol.** doi: 10.1002/dneu.22390.

E11-30 Gallo A, Vannier C, Galli T. Endoplasmic Reticulum–Plasma Membrane Associations: Structures and Functions (2016). **Annu. Rev. Cell Dev. Biol**, 32:279-301.

E11-31 Daste T, Galli T, Tareste D. Structure and function of Longin-SNAREs. (2015)**.** ***J Cell Sci*** 128:4263-72.

E11-32 Molino D, Galli T. Biogenesis and transport of membrane domains-potential implications in brain pathologies. (2014). **Biochimie** 96:75-84 doi:pii: S0300-9084(13)00328-3. 10.1016/j.biochi.2013.09.014

E11-33 T. Galli and **Proux−Gillardeaux** V . webpage (2012) and printed (2013) chapter "VAMP1/2/3/7" from "**Encyclopedia of Signaling Molecules**". 2013, XLVIII, 2030 p. 300 illus., 100 in color in 3 volumes. Editor Pr. Sangdun Choi and Springer. DOI10.1007/978−1−4419−0461−4_627, Print ISBN978−1−4419−0460−7, Online ISBN978−1−4419− 0461−4 pp 1957−1963

Other publications

Commentaries

E11-34 Marzolo MP, Faundez V, Galli T. (2015). EMBO Workshop al fin del mundo: a meeting on membrane trafficking and its implication for polarity and diseases. ***Biol Cell***. 2015 Jul;107(7):245-8.

E11-35 Kuster A, Galli T. (2014). Nobel Prize in medicine and physiology 2013--the vesicular trafficking rewarded. ***Rev Prat***. 2014 Feb;64(2):175-7.

E11-36 Galli T, Kuster A, Tareste D. (2013) Nobel Prize in Physiology and Medicine 2013 - an award for the discovery of the actors and fundamental molecular mechanisms of intracellular vesicle trafficking. ***Med Sci (Paris)***, 29(11):1055-8. doi: 10.1051/medsci/20112713024.

E11-37 Zylbersztejn K, Galli T. (2012). Membrane traffic, a new actor in axon guidance. ***Med Sci (Paris)*** 28:267-9.

E11-38 Burgo A, Formstecher E, Galli T (2012). Molecular network for the transport of intracellular vesicles from cell center to periphery. ***Med Sci (Paris)*** 28:1040-1.

Editorials

E11-39 Galli T. (2015). Continue animal research? A necessity for biological knowledge and medical progress: a scientific or philosophical question? ***Med Sci (Paris)*** 31(6-7):579-80

E11-40 Buée L, Chneiweiss H, Cossart P, Fischer A, Galli T, Hantraye P, Hérault Y, Montagutelli X, Sigaux F (2015). Oui, les modèles animaux sont nécessaires à la recherché Editorial ***Le Monde*** 13 May 2015.

E12 – Thierry GRANGE/Eva-Maria GEIGL

Peer reviewed publications

E12-1 **Bennett, E.A., Massilani, D., Lizzo, G., Daligault, J., Geigl, E.-M., Grange, T**. (2014) Library construction for ancient genomics: single strand or double strand? Biotechniques 56:289-300. DOI: 10.2144/000114176

E12-2 Nores, C., Morales-Muniz, A., Llorente Rodriguez, L., **Bennett, E.A., Geigl, E.-M**. (2015) The Iberian zebro: what kind of beast was it? Anthropozoologica 50(1):21-32.

E12-3 **Guimaraes, S**., Fernandez-Jalvo, Y., Stoetzel, E., **Gorgé, O., Bennett, E.A.,** Denys, C., **Grange, T., Geigl, E.-M**. (2016) Owl pellets: a wise DNA source for small mammal genetics. Journal of Zoology 298(1):64–74. doi:10.1111/jzo.12285

E12-4 **Côté, N.M.L., Daligault, J., Pruvost, M., Bennett, E.A., Gorgé, O., Guimaraes, S**., Capelli, N., Le Bailly, M., **Geigl*, E.-M., Grange, T.*** (2016) A New High-Throughput Approach to Genotype Ancient Human Gastrointestinal Parasites. PLoS One. 2016 11(1):e0146230. doi: 10.1371/journal.pone.0146230. eCollection 2016.

E12-5 **Gorgé O, Bennett EA, Massilani D, Daligault J, Pruvost M, Geigl EM, Grange T.** (2016) Analysis of Ancient DNA in Microbial Ecology. Methods Mol Biol. 1399:289-315. doi: 10.1007/978-1-4939-3369-3_17.

E12-6 **Guimaraes S, Pruvost M, Daligault J,** Stoetzel E, **Bennett EA, Côté NM,** Nicolas V, Lalis A, Denys C, **Geigl EM*, Grange T.*** (2016) A cost-effective high-throughput metabarcoding approach powerful enough to genotype ~44 000 year-old rodent remains from Northern Africa. Mol Ecol Resour. 2016 Jul 4. doi: 10.1111/1755-0998.12565

E12-7 **Bennett, E. A., Gorgé, O., Grange, T.,** Fernández-Jalvo, Y. and **Geigl, E.-M**. (2016) Coprolites, Paleogenomics and Bone Content Analysis. In « Azokh Cave and the Transcaucasian Corridor». Yolanda

Fernández-Jalvo, Tania King, Levon Yepiskoposyan, and Peter Andrews (eds), Springer, Vertebrate Paleobiology and Paleoanthropology Series, E. Delson and E.J. Sargis (eds), p. 271-286 DOI 10.1007/978-3-319-24924-7

E12-8 Cruz-Dávalos DI, Llamas B, Gaunitz C, Fages A, Gamba C, Soubrier J, Librado P, Seguin-Orlando A, **Pruvost M**, Alfarhan AH, Alquraishi SA, Al-Rasheid KA, Scheu A, Beneke N, Ludwig A, Cooper A, Willerslev E, Orlando L. 2016. Experimental conditions improving in-solution target enrichment for ancient DNA. Mol Ecol Resour. DOI : 10.1111/1755-0998.12595

E12-9 **Massilani, D., Guimaraes, S.,** Jean-Philip Brugal, J.-P., **Bennett, E.A.,** Tokarska, M., Arbogast, R., Baryshnikov, G., Boeskorov, G., Castel, J.-C., Davydov, S., Madelaine, S., Putelat, O., Spasskaya, N., Uerpmann, H.-P., **Grange, T.*, Geigl,E.-M**.* (2016) Past climate changes, population dynamics and the origin of Bison in Europe. BMC Biology 14:93-110. DOI 10.1186/s12915-016-0317-7

E12-10 **Ottoni, C.,** Van Neer, W., De Cupere, B., **Daligault, J., Guimaraes, S**., Peters, J., Spassov, N., Prendergast, M.E., Boivin, N., Morales-Muniz, A., Bălăşescu, A., Becker, C., Benecke, N., Boronenanț, A., Buitenhuis, H., Chahoud, J., Crowther, A., Llorente, L., Manaseryan, N., Monchot, H., Onar, V., Osypińska, M., Putelat, O., Studer, J., Wierer, U., Decorte, R., **Grange, T.*, Geigl, E.-M.*** (2017) Of cats and men: the paleogenetic history of the dispersal of cats in the ancient world. Nature Ecology & Evolution.

E12-11 **Bennett, E.A., Champlot, S**., Peters, J., Arbuckle, B.S., **Guimaraes, S**., **Pruvost, M**., Bar-David, S., Davis, S.J.M., Gautier, M., Kaczensky, P., Kuehn, R., Mashkour, M., Morales-Muñiz, M., Pucher, E., Tournepiche, J.-F., Uerpmann, H.-P., Bălăşescu, A., Germonpré, M., Y. Günden, C., Hemami, M.-R., Moullé, P.-E., Öztan, A., Uerpmann, M., Walzer, C., **Grange, T.*, Geigl, E.-M.*** (2017) Taming the Late Quaternary phylogeography of the Eurasiatic wild ass through ancient and modern DNA. PLOS ONE 12(4): e0174216. doi: 10.1371/journal.pone.0174216

E12-12 Librado, P., C. Gamba, C. Gaunitz, C. Der Sarkissian, **M. Pruvost**, A. Albrechtsen, A. Fages, N. Khan, M. Schubert, V. Jagannathan, A. Serres-Armero, L. F. K. Kuderna, I. S. Povolotskaya, A. Seguin-Orlando, S. Lepetz, M. Neuditschko, C. Thèves, S. Alquraishi, A. H. Alfarhan, K. Al-Rasheid, S. Rieder, Z. Samashev, H.-P. Francfort, N. Benecke, M. Hofreiter, A. Ludwig, C. Keyser, T. Marques-Bonet, B. Ludes, E. Crubézy, T. Leeb, E. Willerslev and L. Orlando (2017). "Ancient genomic changes associated with domestication of the horse." Science 356(6336): 442-445.

Other publications

Book chapters

E12-13 **Geigl, E.-M., Champlot, S., de Lima Guimaraes, S., Bennett, E.A., Grange, T**. (2013) Molecular Taphonomy of Spy: DNA Preservation in Bone Remains. In Rougier, H. & Semal, P., (eds.) Spy cave. 125 years of multidisciplinary research at the Betche aux Rotches (Jemeppe-sur-Sambre, Province of Namur, Belgium), Volume 1. Anthropologica et Præhistorica, 123/2012. Brussels, Royal Belgian Institute of Natural Sciences, Royal Belgian Society of Anthropology and Praehistory & NESPOS Society, pp. 371-380.

E12-14 **Bennett, E.A., Cardin, L., Geigl, E.-M**. (2013) Etude paléogénétique des momies d'Antinoé conservées au Musée des Beaux Arts de Lille. In « Les momies d'Antinoé ». Lintz, Y., Coudert, M. (eds.), p. 99-102.

E12-15 **Geigl, E.-M., and Grange, T.** Taphonomie de l'ADN ancien. (2014) In « Manuel de Taphonomie ». C. Denys et M. Patou-Mathis (eds), Editions errance, Collection archéologiques, p. 147-164.

E12-16 **Geigl, E.M**. (2015) La paléogénétique et paléogénomique. In "Messages d'os". M. Balasse, J.-P. Brugal, Y. Dauphin, **E.-M. Geigl,** C. Oberlin, I. Reiche (eds), Editions des Archives contemporaines, p. 429-431

E12-17 **Geigl, E.M. and Grange, T**. (2015) Les stratégies et enjeux de l'analyse de l'ADN ancien. In "Messages d'os". M. Balasse, J.-P. Brugal, Y. Dauphin, **E.-M. Geigl,** C. Oberlin, I. Reiche (eds), Editions des Archives contemporaines, p. 433-452

E12-18 **Pruvost,M. and Geigl, E.-M**. (2015) « Apport de la paléogénétique à l'étude des processus de domestication animale . In "Messages d'os". M. Balasse, J.-P. Brugal, Y. Dauphin, **E.-M. Geigl,** C. Oberlin, I. Reiche (eds), Editions des Archives contemporaines, p. 469-485

E12-19 **Geigl, E.M. and Grange, T**. (2015) Le génome des lignées humaines archaïques. In "Messages d'os". M. Balasse, J.-P. Brugal, Y. Dauphin, E.-M. Geigl, C. Oberlin, I. Reiche (eds), Editions des Archives contemporaines, p. 501-520

E12-20 **Geigl, E.-M., Bennett, E.A., Grange, T**. (2015) Tracing the origin of our species through paleogenomics. BIO Web of Conferences 4, 00005 (2015) DOI: 10.1051/bioconf/20150400005.

E12-21 **Geigl, Eva-Maria**, Shirli Bar-David, Albano Beja-Pereira, E. Gus Cothran, Elena Giulotto, Halszka Hrabar, Tsendsuren Oyunsuren, **Mélanie Pruvost** (2016): Genetics of wild equids. In "Wild Equids: Ecology, Conservation, and Management", J. Ransom and P. Kazcensky (eds), p. 87-104

E12-22 **Geigl, E.-M., Guimaraes, S**., Stoetzel, E., Fernandez-Jalvo, Y., Nespoulet, R., Denys, C., **Grange, T**. (2016) Analyse de la préservation de l'ADN dans les ossements des rongeurs de Témara, Maroc, en remontant dans le temps. In «Approche intégrative de la 6ème extinction : influence de l'installation des hommes modernes au Maroc sur l'évolution de la biodiversité des petits vertébrés terrestres ». Travaux de l'institut Scientifique de l'université Mohammed V de Rabat, Série générale, N° 8, 43-51

E12-23 **Geigl, E.-M., Bennett, E.A., Grange, T.** (2016) Analyse de la dégradation de l'ADN dans une phalange de la Dame du Cavillon. In "La grotte du Cavillon". H. de Lumley (ed), CNRS Editions, p. 969-975.

E12-24 Geigl, E.-M. and Grange, T. (2016) La paléogénomique, pour une lecture du passé au présent. « L'empreinte du vivant » D. Joly, D. Faure, S. Salamitou (eds)., Editions Cherche Midi, p.151-165.

E12-25 **Geigl, E.-M. et Grange, T**. (2017) Biodiversité passée et paléogénomique. « Les Big Data à Découvert », CNRS Editions. 2 pages

E13 – Antoine GUICHET

Peer reviewed publications

E13-1 Tissot N, Lepesant J-A, Bernard F, Legent K, Bosveld F, Martin C, Orestis F, Bellaïche Y, Coppey M, Guichet A. Complementary molecular cues ensure a robust microtubule-dependent nuclear positioning in the *Drosophila* oocyte. **Nature Communication** (2017)

E13-2 White PM, Serbus LR, Debec A, Codina A, Bray W, Guichet A, Lokey RS, Sullivan W (2017) Reliance of Wolbachia on High Rates of Host Proteolysis Revealed by a Genome-Wide RNAi Screen of Drosophila Cells. **Genetics** (2017).

E13-3 Le Droguen PM, Claret S, Guichet A*, Brodu V* (Corresponding authors). Microtubule-dependent apical restriction of recycling endosomes sustains adherens junctions during morphogenesis of the *Drosophila* tracheal system. **Development**. (2015)

E13-4 Claret S, Jouette J, Benoit B, Legent K, Guichet A. PI(4,5)P2, produced by the PIP5K Skittles controls apical size by tethering PAR-3 in *Drosophila* epithelial cells. ***Current Biology.*** (2014)

E13-5 Lecland N, Debec A, Delmas A, Pereira S, Malmanche N, Bouissou A, Dupré C, Jourdan A, Raynaud-Messina B, Maiato H, Guichet A. Establishment and mitotic characterization of new Drosophila acentriolar cell lines from DSas-4 mutant. **Biology Open** (2013)

E13-6 Baffet A, Benoit B, Januschke J, Audo J, Gourhand V, Roth S**,** Guichet A. Drosophila Tubulin Binding Cofactors B is required for microtubule network formation and for cell polarity. **Molecular Biology of the Cell**. 23(18) (2012).

Peer reviewed reviews

E13-7 Jouette J, Claret S, Guichet A. Phosphoinositides and cell polarity in the Drosophila egg chamber. **Springer Results and Problems in Cell Differentiation** (2017)

E13-8 Debec A, Megraw T, Guichet A Methods to establish a *Drosophila* cell line. Drosophila : **Methods Mol Biol** (2016)

E13-9 Legent K, Tissot N, Guichet A**.** Visualizing microtubule networks during Drosophila oogenesis using fixed and live imaging. **Methods Mol Biol** (2015)

E14 – Cathy JACKSON/Jean-Marc VERBAVATZ

Peer reviewed publications

E14-1 Walch L, Lakisic G, Leng W, Gautreau A, Contremoulins V, Verbavatz JM[#], Jackson CL[#]. (**2017**) GBF1 interaction with Miro regulates dynein-dependent mitochondrial morphology and positioning within cells, submitted. [#]co-corresponding authors

E14-2 Müller A, Neukam M, Ivanova A, Sönmez A, Münster C, Kretschmar S, Kalaidzidis Y, Kurth T, Verbavatz JM, Solimena M. (**2017**) A Global Approach for Quantitative Super Resolution and Electron Microscopy on Cryo and Epoxy Sections Using Self-labeling Protein Tags. **Sci Rep.** 7(1):23.

E14-3 Bacle A, Gautier R, Jackson CL, Fuchs PF[#], Vanni S[#]. (**2017**) Interdigitation between Triglycerides and Lipids Modulates Surface Properties of Lipid Droplets. **Biophys J**. 112(7):1417-1430. [#]co-corresponding authors

E14-4 Galmes R, Houcine A, van Vliet AR, Agostinis P, Jackson CL[#], Giordano F[#]. (**2016**) ORP5/ORP8 localize to endoplasmic reticulum-mitochondria contacts and are involved in mitochondrial function. **EMBO Rep**. 17:800-10. [#]co-corresponding authors

E14-5 Farhat R, Séron K, Ferlin J, Fénéant L, Belouzard S, Goueslain L, Jackson CL, Dubuisson J, Rouillé Y. (**2016**) Identification of class II ADP-ribosylation factors as cellular factors required for hepatitis C virus replication. **Cell Microbiol.** 18(8):1121-33.

E14-6 Derganc, J.‡, Čopič, A.‡ (**2016**) Membrane bending by protein crowding is affected by protein lateral confinement. ***Biochim Biophys Acta.*** 1858:1152-9. ‡corresponding authors

E14-7 Horta B.A.C., Merz P.T., Fuchs P.F.J., Dolenc J., Riniker S., Hunenberger P.H. (**2016**) A GROMOS-compatible force field for small organic molecules in the condensed phase: The 2016H66 parameter set. **Journal of Chem. Theory and Comp.** 12:3825-3850.

E14-8 Ferru-Clement R., Spanova M., Dhayal S., Morgan N.G., Helye R., Becq F, Hirose H., Antonny B., Vamparys L., Fuchs P.F.J, Ferreira T. (**2016**) Targeting surface voids to counter membrane disorders in lipointoxication-related diseases. **J Cell Science**, 129: 2368-2381.

E14-9 Moser von Filseck, J.*, Čopič, A.*, Delfosse, V.*, Vanni, S., Jackson, C.L., Bourguet, W., and Drin, G. (**2015**) Phosphatidylserine transport by ORP/Osh proteins is driven by phosphatidylinositol 4-phosphate. **Science** 349, 432-436. **co-first authors* (*Article evaluated in Faculty of 1000 Biology: 2*)

E14-10 Floch A.G., Tareste D., Fuchs P.F.J., Chadrin A., Naciri I., Leger T., Schlenstedt G., Palancade B., Doye V. (**2015**) Nuclear pore targeting of the yeast Pom33 nucleoporin depends on karyopherin- and lipid-binding. **J Cell Science** 128, 305-316.

E14-11 Botan A., Favela F., Fuchs P.F.J., Javanainen M., Kanduc M., Kulig W., Lamberg A., Loison C., Lyubartsev A., Miettinen M., Monticelli L., Maatta J., Ollila S., Retegan M., Rog T., Santuz H. and Tynkkynen J.P. (**2015**) Towards Atomistic Resolution Structure of Phosphatidylcholine Headgroup and Glycerol Backbone at Different Ambient Conditions. **Journal of Physical Chemistry** B, 119, 15075-15088.

E14-12 Petkovic M, Jemaiel A, Daste A, Specht CG, Izeddin I, Vorkel D, Verbavatz JM, Darzacq X, Triller A, Pfenninger KH, Tareste D, Jackson CL#, Galli T#. **(2014)** The SNARE Sec22b has a non-fusogenic function in plasma membrane expansion. **Nature Cell Biology**, 16:434-44. #co-corresponding authors

E14-13 Bouvet S, Golinelli-Cohen MP, Contremoulins V, Jackson CL. **(2013)** Targeting of the Arf-GEF GBF1 to lipid droplets and Golgi membranes. **J Cell Sci.** 126:4794-805.

E14-14 Farhat R, Goueslain L, Wychowski C, Belouzard S, Fénéant L, Jackson CL, Dubuisson J, Rouillé Y. (**2013**) Hepatitis C virus replication and Golgi function in brefeldin A-resistant hepatoma-derived cells. **PLoS One** 8(9):e74491.

Peer reviewed reviews

E14-15 Jackson CL, Walch L, Verbavatz JM. (**2016**) Lipids and Their Trafficking: An Integral Part of Cellular Organization. **Developmental Cell**. 39(2):139-153.

E14-16 Drin, G., Moser von Filseck, J., Čopič, A. (**2016**): New molecular mechanisms of inter-organelle lipid transport. ***Biochem Soc Trans.*** 44, 486-92.

E14-17 Walch, L., **Čopič, A.**, Jackson, C.L. (**2015**): Fatty Acid metabolism meets organelle dynamics. **Developmental Cell** 32, 657-8.

E14-18 Jackson CL and Bouvet S. **(2014)** Arfs at a Glance. **J Cell Sci.** 127:4103-9.

E14-19 Jackson CL. **(2014)** GEF-effector interactions**. Cellular Logistics** 4(2):e943616.

E14-20 Jackson CL **(2012)** An MBoC favorite: ARF is required for maintenance of yeast Golgi and endosome structure and function. **Mol Biol Cell.** 23:2822.

E14-21 Derganc, J., Antonny, B.‡, Čopič, A.‡ (**2013**): Membrane bending: the power of protein imbalance. ***Trends Biochem Sci.*** 38, 576-84. ‡*corresponding authors*

E14-22 Wong, LH, Copic, A, Levine, TP. (**2017**) Advances on the transfer of lipids by lipid transfer proteins. ***Trends Biochem Sci***, manuscript under revision.

Other publications

E14-23 ***Book Chapter:*** Jackson CL. (**2014**) Arf proteins and their regulators: at the interface between membrane lipids and the protein trafficking machinery, Chapter 8, in "Ras Superfamily Small G Proteins: Biology and Mechanisms 2", Alfred Wittinghofer, editor, Springer International Publishing, Switzerland.

E14-24 ***Meeting report :*** Jackson CL, Miller EA. **(2015)** Protein sorting to intracellular compartments. **Mol Biol Cell.** 26(6):1014.

E14-25 ***Meeting report :*** Casanova JE, Hsu VW, Jackson CL, Kahn RA, Roy CR, Stow JL, Wandinger-Ness A, Sztul E. **(2013)** Meeting report - Arf and Rab family G proteins. **J Cell Sci.** 126:5313-6

E15 – Isabelle JUPIN

Peer reviewed publications

E13-1 CHENON, M., CAMBORDE, L., CHEMINANT, S. & JUPIN, I. (2012). A viral deubiquitylating enzyme targets viral RNA-dependent RNA polymerase and affects viral infectivity.. *The EMBO Journal 31, 741-753. (if =10,12)*

Recommanded by Faculty of 1000

E13-2 ROBIN, C., BEAUREPAIRE, L., CHENON, M., JUPIN, I. & BRESSANELLI, S. (2012). In praise of impurity: 30S ribosomal S15 protein-assisted crystallization of turnip yellow mosaic virus proteinase.. Acta Crystallographica F68, 486-490. (if=0,56)

E13-3 LOMBARDI, C., AYACH, M., BEAUREPAIRE, L., CHENON, M., ANDREANI, J., GUEROIS, R., JUPIN, I.* & BRESSANELLI, S.* (2013)**** co-corresponding authors*** A Compact Viral Processing Proteinase/Ubiquitin Hydrolase from the OTU Family. *PLoS Pathogens* 9(8): e1003560. (If=8,13)

JUPIN, I.*, AYACH, M., JOMAT, L., FIEULAINE, S., & BRESSANELLI, S.* A mobile loop near the active site switches the dual activities of a viral protease/deubiquitinase***.*** *PLoS Pathogens (in revision)* **** co-corresponding authors***

MORICEAU, L., JOMAT, L., DEVIGNOT, S., BRESSANELLI, S., ALCAIDE-LORIDAN, C. & JUPIN, I. Determinants for chloroplast targeting of TYMV replication protein 98K/140K. *in preparation*

Peer reviewed reviews

E13-4 ALCAIDE-LORIDAN, C. & JUPIN, I. (2012). Ubiquitin and plant viruses : let's play together !. *Plant Physiology 160, 72–82.* (if=6,45)

Other publications

E13-5 JUPIN, I., HAENNI, A.L. & SCHIRAWSKI, J. (2012). Tymovirus, tymoviridae. Springer index of viruses, 2nd edition. C. Tidona & G Darai (eds). **89**, 1953-1962.

E13-6 JUPIN, I. (2013). A protocol for VIGS in Arabidopsis thaliana using a "one-step" TYMV-derived vector. *In*: "Virus-Induced Gen Silencing: Methods and Protocols". *Methods in Molecular Biology*. (A. Becker, ed.). Springer, New York: p. 197-210.

E13-7 PLANCHAIS, S., CAMBORDE, L. & JUPIN, I. (2016).Protocols for studying protein stability in a Arabidopsis protoplast transient expression system. *In*: "Plant Proteostasis : Methods and Protocols.". *Methods in Molecular Biology*.(R. Matthiesen & M. Lois, ed.). Springer, New York. Volume: 1450 Pages: 175-94.

E16 – Roger KARESS

Peer reviewed publications

E16-1 Althoff, F,. Karess, RE, Lehner, CF. (2012), Spindle checkpoint-independent inhibition of mitotic chromosome segregation by Drosophila Mps1 **Mol Biol. Cell** 23:2275-91.

E16-2 Menant A. and Karess RE. (2012) Inducing "Cytokinesis" without mitosis in Drosophila eggs. **Cell Cycle** 11:1-8.

E16-3 Fremont, S., Gérard, A., Galloux, M., Janvier, K., Karess, R. E., and Berlioz-Torrent, C. (2013) Beclin-1 is required for chromosome congression and proper assembly of the outer kinetochore. **EMBO Rep**. 14:364-72.

E16-4 Rubin, T, Karess, R.E., Rahmani, Z. (2014) Cenp-meta is required for sustained spindle checkpoint. **Biology Open** 3:522-8.

E16-5 Défachelles, L., Hainline, S.G, Menant, A., Lee, L.A., Karess, R. E. (2015a) A maternal effect rough deal mutation suggests that multiple pathways regulate Drosophila RZZ kinetochore recruitment. **J. Cell Sci** 128: 1204-16.

E16-6 Défachelles, L., Raich, N., Terracol, R., Baudin, X., Williams, B., Goldberg, M. R., Karess, R. E. (2015b) RZZ and Mad1 Dynamics in Drosophila Mitosis. **Chromosome Research** 23: 333-342.

E16-7 Caous, R., Pascal, A., Richard-Parpaillon, L., Karess, R. E., Giet, R. (2015) Inactivating the Spindle Assembly Checkpoint cannot suppress tumor formation by aurA mutant fly brains. **Nature Communications** 6:8879

E16-8 Duranteau, M., Montagne, J-J., Rahmani, Z. 2016 A novel mutation in the N-terminal domain of Drosophila BubR1 affects the spindle assembly checkpoint function of BubR1. **Biology Open** 5: 1674-1679

Submitted publication

Raich, N., Guihot, J., Mahmoudi, S., Emre, D., Karess, R. E. The “mitotic checkpoint” protein Mad1 contributes to interphase nuclear organization and chromatin regulation in Drosophila. (**submitted**).

Peer reviewed reviews

E16-9 Karess, R.E., Wassmann, K., Rahmani, Z. (2013) New insights into the role of BubR1 in mitosis and beyond. **Intl Rev Cell Mol Biol** 306: 223-273

E17 – Benoît LADOUX/René-Marc MÈGE

Peer reviewed publications

Magescas J, Sengmanivong L, Viau A, Mayeux A, Dang T, Burtin M, Poirier F, Terzi F, Delacour D. Spindle pole cohesion requires glycosylation-mediated stabilization of NuMA. *Sci. Reports*, in press.

E17-1 Coppin L, Ait-Hayat E, Thuillier C, Frénois F, Lahdaoui F, Stechly L, Renaud F, Barbot B, Crème E, Durand E, Froguel P, van Seuningen I, Leteurtre E, Gradjean C, Poirier F, Figeac M, Delacour D, Porchet N, Pigny P. Galectin-3 interacts with mature mRNAs involved in epithelial morphogenesis. *Sci. Reports. (2017)* 7:43927.

E17-2 Saw TB, Doostmohammadi A, Nier V, Kocgozlu L, Thampi S, Toyama Y, Marcq P, Lim CT, Yeomans JM, Ladoux B. Topological defects in epithelia govern cell death and extrusion. *Nature. (2017)* 544(7649):212-216.

E17-3 Sarangi BR, Gupta M, Doss BL, Tissot N, Lam F, Mège RM, Borghi N, Ladoux B. Coordination between Intra- and Extracellular Forces Regulates Focal Adhesion Dynamics. *Nano Lett. (2017)* 17(1):399-406.

E17-4 Hirata H, Gupta M, Vedula SR, Lim CT, Ladoux B, Sokabe M. Quantifying Tensile Force and ERK Phosphorylation on Actin Stress Fibers. *Methods Mol Biol. (2017)* 1487:223-234.

E17-5 Salomon J, Gaston C, Magescas J, Duvauchelle B, Campeotto F, Canioni D, Sengmanivong L, Mayeux A, Michaux G, Poirier F, Minc N, Schmitz J, Brousse N, Ladoux B, Goulet O, Delacour D. Contractile forces at tricellular contacts modulate epithelial organization and monolayer integrity. *Nature Commun.* (2017) 8:13998.

E17-6 Bertocchi C, Wang Y, Ravasio A, Hara Y, Wu Y, Sailov T, Baird MA, Davidson MW, Zaidel-Bar R, Toyama Y, Ladoux B, Mege RM, Kanchanawong P. Nanoscale architecture of cadherin-based cell adhesions. *Nat Cell Biol. (2017)* 19(1):28-37.

E17-7 Hafsia N, Forien M, Delacour D, Reboul P, Van Lent P, Cohen-Solal, Lioté F, Ea H.K. Galectin-3 deficiency exacerbates cartilage destruction and alters primary cilium formation. *Annals of the Rheumatic Diseases* (2016) 74(2):167-168.

E17-8 Mancini S, Mège RM, Sarels B, Strale PO. A phenomenological model of cell-cell adhesion mediated by cadherins. *J Math Biol. (2016)* Oct 25. [Epub ahead of print].

E17-9 Kocgozlu L, Saw TB, Le AP, Yow I, Shagirov M, Wong E, Mège RM, Lim CT, Toyama Y, Ladoux B. Epithelial Cell Packing Induces Distinct Modes of Cell Extrusions. *Curr Biol. (2016)* 26(21):2942-2950.

E17-10 Choi W, Acharya BR, Peyret G, Fardin MA, Mège RM, Ladoux B, Yap AS, Fanning AS, Peifer M. Remodeling the zonula adherens in response to tension and the role of afadin in this response. *J Cell Biol. (2016)* 213(2):243-60.

E17-11 Nier V, Jain S, Lim CT, Ishihara S, Ladoux B, Marcq P. Inference of Internal Stress in a Cell Monolayer. *Biophys J. 2016* 110(7):1625-35.

E17-12 Monzo P, Chong YK, Guetta-Terrier C, Krishnasamy A, Sathe SR, Yim EK, Ng WH, Ang BT, Tang C, Ladoux B, Gauthier NC, Sheetz MP. Mechanical confinement triggers glioma linear migration dependent on formin FHOD3. *Mol Biol Cell. (2016)* 27(8):1246-61.

E17-13 Spagnol ST, Lin WC, Booth EA, Ladoux B, Lazarus HM, Dahl KN. Early Passage Dependence of Mesenchymal Stem Cell Mechanics Influences Cellular Invasion and Migration. *Ann Biomed Eng. (2016)* Jul;44(7):2123-31.

E17-14 Ravasio A, Le AP, Saw TB, Tarle V, Ong HT, Bertocchi C, Mège RM, Lim CT, Gov NS, Ladoux B. Regulation of epithelial cell organization by tuning cell-substrateadhesion. *Integr Biol (Camb). (2015)* 7(10):1228-41.

E17-15 Strale PO, Duchesne L, Peyret G, Montel L, Nguyen T, Png E, Tampé R, Troyanovsky S, Hénon S, Ladoux B, Mège RM. The formation of ordered nanoclusters controls cadherin anchoring to actin and cell-cell contact fluidity. *J Cell Biol. (2015)* 210(2):333-46.

E17-16 Gupta M, Sarangi BR, Deschamps J, Nematbakhsh Y, Callan-Jones A, Margadant F, Mège RM, Lim CT, Voituriez R, Ladoux B. Adaptive rheology and ordering of cell cytoskeleton govern matrix rigidity sensing. *Nat Commun. (2015)* 6:7525.

E17-17 Dumoux M, Menny A, Delacour D, Hayward RD. A Chlamydia effector recruits CEP170 to reprogram host microtubule organization. *J. Cell Sci.* (2015) 128(18), 3420-3434.

E17-18 Guetta-Terrier C, Monzo P, Zhu J, Long H, Venkatraman L, Zhou Y, Wang P, Chew SY, Mogilner A, Ladoux B, Gauthier NC. Protrusive waves guide 3D cell migration along nanofibers. *J Cell Biol. (2015)* 211(3):683-701.
E17-19 Doostmohammadi A, Thampi SP, Saw TB, Lim CT, Ladoux B, Yeomans JM. Celebrating Soft Matter's 10th Anniversary: Cell division: a source of active stress in cellular monolayers. *Soft Matter. (2015)* 11(37):7328-36.
E17-20 Ravasio A, Cheddadi I, Chen T, Pereira T, Ong HT, Bertocchi C, Brugues A, Jacinto A, Kabla AJ, Toyama Y, Trepat X, Gov N, Neves de Almeida L, Ladoux B. Gap geometry dictates epithelial closure efficiency. *Nat Commun. (2015)* 6:7683.
E17-21 Clare DK, Dumoux M, Delacour D. *In vivo* examination of the cortical cytoskeleton in multiciliated cells using electron tomography. *Methods Cell Biol. (2015)* 129:61-82.
E17-22 Gendronneau G, Sanii S, Dang T, Deshayes F, Delacour D, Pichard E, Advedissian T, Sidhu SS, Viguier M, Magnaldo T, Poirier F. Overexpression of galectin-7 in epidermis leads to loss of cell junctions and defective skin repair. *PLoS One (2015)* 10(3):e0119031.
E17-23 Bonazzi D, Haupt A, Tanimoto H, Delacour D, Salort D, Minc N. Actin-Based Transport Adapts Polarity Domain Size to Local Cellular Curvature. *Curr Biol. (2015)* 25(20):2677-83.
E17-24 Aubry D, Gupta M, Ladoux B, Allena R. Mechanical link between durotaxis, cell polarity and anisotropy during cell migration. *Phys Biol. (2015)* 12(2):026008.
E17-25 Gupta M, Kocgozlu L, Sarangi BR, Margadant F, Ashraf M, Ladoux B. Micropillar substrates: a tool for studying cell mechanobiology. *Methods Cell Biol. (2015)*125:289-308.
E17-26 Vedula SR, Peyret G, Cheddadi I, Chen T, Brugués A, Hirata H, Lopez-Menendez H, Toyama Y, de Almeida LN, Trepat X, Lim CT, Ladoux B. Mechanics of epithelial closure over non-adherent environments. *Nat Commun. (2015)* 6:6111.
E17-27 Hirata H, Gupta M, Vedula SR, Lim CT, Ladoux B, Sokabe M. Actomyosin bundles serve as a tension sensor and a platform for ERK activation. *EMBO Rep. (2015)* 16(2):250-7.
E17-28 Ravasio A, Vaishnavi S, Ladoux B, Viasnoff V. High-resolution imaging of cellular processes across textured surfaces using an indexed-matched elastomer. *Acta Biomater. (2015)* 14:53-60.
E17-29 Brugués A, Anon E, Conte V, Veldhuis JH, Gupta M, Colombelli J, Muñoz JJ, Brodland GW, Ladoux B*, Trepat X*. Forces driving epithelial wound healing. *Nat Phys. (2014)* Sep;10(9):683-690. (*Corresponding authors)
E17-30 van Hoorn H, Harkes R, Spiesz EM, Storm C, van Noort D, Ladoux B, Schmidt T. The nanoscale architecture of force-bearing focal adhesions. *Nano Lett. (2014)* 14(8):4257-62.
E17-31 Reffay M, Parrini MC, Cochet-Escartin O, Ladoux B, Buguin A, Coscoy S, Amblard F, Camonis J, Silberzan P. Interplay of RhoA and mechanical forces in collective cell migration driven by leader cells. *Nat Cell Biol. (2014)* 16(3):217-23.
E17-32 Vedula SR, Ravasio A, Anon E, Chen T, Peyret G, Ashraf M, Ladoux B. Microfabricated environments to study collective cell behaviors. *Methods Cell Biol. (2014)* 120:235-52.
E17-33 Vedula SR, Hirata H, Nai MH, Brugués A, Toyama Y, Trepat X, Lim CT, Ladoux B. Epithelial bridges maintain tissue integrity during collective cell migration. *Nat Mater. (2014)* 13(1):87-96.
E17-34 Yao M, Qiu W, Liu R, Efremov AK, Cong P, Seddiki R, Payre M, Lim CT, Ladoux B, Mège RM*, Yan J*. Force-dependent conformational switch of α-catenin controls vinculin binding. *Nat Commun. (2014)* 5:4525. * co-corresponding authors
E17-35 Plestant C, Strale PO, Seddiki R, Nguyen E, Ladoux B, Mège RM. Adhesive interactions of N-cadherin limit the recruitment of microtubules to cell-cell contacts through organization of actomyosin. *J Cell Sci. (2014)* 127(Pt 8):1660-71.
E17-36 Clare DK, Magescas J, Piolot T, Dumoux M, Vesque C, Pichard E, Dang T, Duvauchelle B, Poirier F, Delacour D. Basal foot MTOC organizes pillar MTs required for coordination of beating cilia. *Nat Commun.*(2014) 5:4888.
E17-37 Viguier M, Advedissian T, Delacour D, Poirier F, Deshayes F. Galectins in epithelial functions. *Tissue Barriers (2014)* 2:e29103.
E17-38 Brugués A, Anon E, Conte V, Veldhuis JH, Gupta M, Colombelli J, Muñoz JJ, Brodland GW, Ladoux B*, Trepat X*. Forces driving epithelial wound healing. *Nat Phys. (2014)*10(9):683-690. (*Corresponding authors)
E17-39 Doxzen K, Vedula SR, Leong MC, Hirata H, Gov NS, Kabla AJ, Ladoux B*, Lim CT*. Guidance of collective cell migration by substrate geometry. *Integr Biol (Camb). (2013)* 5(8):1026-35.
E17-40 Leong MC, Vedula SR, Lim CT, Ladoux B. Geometrical constraints and physical crowding direct collective migration of fibroblasts. *Commun Integr Biol. (2013)* 6(2):e23197.
E17-41 Huang Y, Nguyen NT, Lok KS, Lee PP, Su M, Wu M, Kocgozlu L, Ladoux B. Multiarray cell stretching platform for high-magnification real-time imaging. *Nanomedicine (Lond). (2013)* 8(4):543-53.

E17-42 Booth-Gauthier EA, Du V, Ghibaudo M, Rape AD, Dahl KN, Ladoux B. Hutchinson-Gilford progeria syndrome alters nuclear shape and reduces cell motility in three dimensional model substrates. *Integr Biol (Camb). (2013)* 5(3):569-77.

E17-43 Thomas WA, Boscher C, Chu YS, Cuvelier D, Martinez-Rico C, Seddiki R, Heysch J, Ladoux B, Thiery JP, Mege RM, Dufour S. α-Catenin and vinculin cooperate to promote high E-cadherin-based adhesion strength. *J Biol Chem. (2013)* 288(7):4957-69.

Peer reviewed reviews

E17-44 Mège RM, Ishiyama N. Integration of Cadherin Adhesion and Cytoskeleton at Adherens Junctions. *Cold Spring Harb Perspect Biol. (2017)* Jan 17. pii: a028738.

E17-45 Gupta M, Doss B, Lim CT, Voituriez R, Ladoux B. Single cell rigidity sensing: A complex relationship between focal adhesion dynamics and large-scale actin cytoskeleton remodeling. *Cell Adh Migr. (2016)* 10(5):554-567.

E17-46 Begnaud S, Chen T, Delacour D, Mège RM, Ladoux B. Mechanics of epithelial tissues during gap closure. *Curr. Opin. Cell Biol.* (2016) 42:52-62.

E17-47 Ladoux B, Mège RM, Trepat X. Front-Rear Polarization by Mechanical Cues: From Single Cells to Tissues. *Trends Cell Biol. (2016)* 26(6):420-33.

E17-48 Delacour D, Salomon J**,** Robine S, Louvard D. The plasticity of the brush border : the yin and the yang of intestinal homesotasis. *Nat Reviews Gastroenterology and Hepatology* (*2016)* 13(3):161-174.

E17-49 Nguyen T, Mège RM. N-Cadherin and Fibroblast Growth Factor Receptors crosstalk in the control of developmental and cancer cell migrations. *Eur J Cell Biol. (2016)* 95(11):415-426.

E17-50 Ladoux B, Nelson WJ, Yan J, Mège RM. The mechanotransduction machinery at work at adherens junctions. *Integr Biol (Camb). (2015)* 7(10):1109-19.

E17-51 Dufour S, Mège RM, Thiery JP. α-catenin, vinculin, and F-actin in strengthening E-cadherin cell-cell adhesions and mechanosensing. *Cell Adh Migr. (2013)* 7(4):345-50.

E17-52 Vedula SR, Ravasio A, Lim CT, Ladoux B. Collective cell migration: a mechanistic perspective. *Physiology (Bethesda). (2013)* 28(6):370-9.

Other publications

E17-53 Gaston C, Salomon J, Goulet O, Delacour D. The Congenital Tufting Enteropathy, or when the intestine is under low tension. *Médecine/Sciences*, in press.

E17-54 Mège RM. Why would you like to publish in Biology of the Cell. *Biol Cell (2017)*, 109(3):113-114.

E17-55 Reffay M, Parrini MC, Cochet-Escartin O, Ladoux B, Buguin A, Coscoy S, Amblard F, Camonis J, Silberzan P. [Collective cell migration: a fair sharing between leader cells and supracellular coordination]. *Med Sci (Paris). (2014*) 30(8-9):736-8.

E18 – Sébastien LEON

Peer reviewed publications

E18-1 Hovsepian, J., Q. Defenouillère, V. Albanèse, L. Vachova, Z. Palkova, and S. Léon. 2017. Multilevel regulation of an α arrestin by glucose depletion controls hexose transporter endocytosis. ***J Cell Biol.*** *May 3*.

E18-2 Herrador, A., D. Livas, L. Soletto, M. Becuwe, S. Léon, and O. Vincent. 2015. Casein kinase 1 controls the activation threshold of an alpha-arrestin by multisite phosphorylation of the interdomain hinge. ***Mol Biol Cell.*** 26:2128-2138.

E18-3 Becuwe, M., and S. Léon. 2014. Integrated control of transporter endocytosis and recycling by the arrestin-related protein Rod1 and the ubiquitin ligase Rsp5. ***eLife***. 3:03307.

E18-4 Herrador, A., S. Léon, R. Haguenauer-Tsapis, and O. Vincent. 2013. A mechanism for protein monoubiquitination dependent on a trans-acting ubiquitin-binding domain. ***J Biol Chem.*** 288:16206-16211.

E18-5 Miermont, A., F. Waharte, S. Hu, M.N. McClean, S. Bottani, S. Léon, and P. Hersen. 2013. Severe osmotic compression triggers a slowdown of intracellular signaling, which can be explained by molecular crowding. ***Proc Natl Acad Sci U S A.*** 110:5725-5730.

E18-6 Ayciriex, S, M Le Guedard, N Camougrand, G Velours, M Schoene, S Léon, V Wattelet-Boyer, JW Dupuy, A Shevchenko, JM Schmitter, R Lessire, JJ Bessoule, E Testet. 2012. *YPR139c/LOA1* encodes a novel lysophosphatidic acid acyltransferase associated with lipid droplets and involved in TAG homeostasis. ***Mol Biol Cell.*** 23:233-246.

E18-7 Becuwe, M[#], N. Vieira[#], D. Lara, J. Gomes-Rezende, C. Soares-Cunha, M. Casal, R. Haguenauer-Tsapis, O. Vincent, S. Paiva*, and S. Léon*. 2012. A molecular switch on an arrestin-like protein relays glucose

signaling to transporter endocytosis. ***J Cell Biol.*** 196:247-259. (# co-first authors, * co-senior authors) (see comment "Spare the Rod1, spoil transporter endocytosis", p 181 of this issue)

E18-8 Erpapazoglou, Z., M. Dhaoui, M. Pantazopoulou, F. Giordano, M. Mari, S. Léon, G. Raposo, F. Reggiori, and R. Haguenauer-Tsapis. 2012. A dual role for K63-linked ubiquitin chains in multivesicular body biogenesis and cargo sorting. ***Mol Biol Cell.*** 23:2170-2183.

E18-9 Kanga, S., D. Bernard, A.M. Mager-Heckel, Z. Erpapazoglou, F. Mattiroli, T.K. Sixma, S. Léon, D. Urban-Grimal, I. Tarassov, and R. Haguenauer-Tsapis. 2012. A deubiquitylating complex required for neosynthesis of a yeast mitochondrial ATP synthase subunit. ***PLoS One.*** 7:e38071.

Peer-reviewed reviews

E18-10 Erpapazoglou, Z., O. Walker, and R. Haguenauer-Tsapis. 2014. Versatile roles of K63-linked ubiquitin chains in trafficking. ***Cells***. 3:1027-1088. [Invited Review]

E18-11 Becuwe, M., A. Herrador, R. Haguenauer-Tsapis, O. Vincent, and S. Léon. 2012. Ubiquitin-mediated regulation of endocytosis by proteins of the arrestin family. ***Biochem Res Int.*** 2012:242764. [Invited Review]

Other publications

E18-12 Haguenauer-Tsapis, R. 2012. An MBoC favorite: Morphological classification of the yeast *vps* mutants: evidence for a prevacuolar compartment in class E *vps* mutants**.** ***Mol Biol Cell***. 23:2622. [Invited Editorial]

E18-13 Hovsepian, J., M. Becuwe, O. Kleifeld, M.H. Glickman, and S. Léon. 2016. Studying Protein Ubiquitylation in Yeast. ***Methods Mol Biol.*** 1449:117-142. [Book Chapter / Methods]

E19 – Domenico LIBRI

Peer reviewed publications

E19-1 Luciano, P.*, El-kaoutari, A.*, Challal D.*, Jeon J., Candelli, T., Jourquin, F., Kim, J.*, Libri, D.*, and Geli, V.* (2017) Binding to RNA in vivo regulates *Set1* function, submitted

E19-2 Candelli, T., Challal, D., Briand J-B, Boulay J., Porrua O., Colin J., and Libri D. (2017) High-resolution transcription maps reveal the widespread impact of roadblock termination in S. cerevisiae, submitted

E19-3 Simonetti, F., Candelli,T., Leon, S., Libri, D., Rougemaille, M. (2016) Ubiquitination-dependent control of sexual differentiation in fission yeast. Elife – under revision

E19-4 Leonaitė, B., Han, Z., Basquin, J., Bonneau, F., Libri, D., Porrua, O., and Conti, E. (2017). Sen1 has unique structural features grafted on the architecture of the Upf1-like helicase family. EMBO J.

E19-5 Han, Z., Libri, D., and Porrua, O. (2017). Biochemical characterization of the helicase Sen1 provides new insights into the mechanisms of non-coding transcription termination. Nucleic Acids Res. 45, 1355–1370.

E19-6 Babour, A., Shen, Q., Dos-Santos, J., Murray, S., Gay, A., Challal, D., Fasken, M., Palancade, B., Corbett, A., Libri, D., et al. (2016). The Chromatin Remodeler ISW1 Is a Quality Control Factor that Surveys Nuclear mRNP Biogenesis. Cell 167, 1201–1214.e15.

E19-7 Porrua, O., and Libri, D. (2015b). Characterization of the mechanisms of transcription termination by the helicase Sen1. Methods Mol. Biol. *1259*, 313–331.

E19-8 Zhang, W., Collinet, B., Graille, M., Daugeron, M.-C., Lazar, N., Libri, D., Durand, D., and van Tilbeurgh, H. (2015). Crystal structures of the Gon7/Pcc1 and Bud32/Cgi121 complexes provide a model for the complete yeast KEOPS complex. Nucleic Acids Res. *43*, 3358–3372.

E19-9 Colin, J., Candelli, T., Porrua, O., Boulay, J., Zhu, C., Lacroute, F., Steinmetz, L.M., and Libri, D. (2014). Roadblock termination by reb1p restricts cryptic and readthrough transcription. Mol. Cell *56*, 667–680.

E19-10 Tudek*, A., Porrua*, O., Kabzinski, T., Lidschreiber, M., Kubicek, K., Fortova, A., Lacroute, F., Vanacova, S., Cramer, P., Stefl, R. and Libri, D. (2014). Molecular basis for the dual role of Nrd1p CID in transcription termination and non-coding RNA degradation. Mol. Cell, *55,* 467-81

E19-11 Mouaikel, J., Causse, S.Z., Rougemaille, M., Daubenton-Carafa, Y., Blugeon, C., Lemoine, S., Devaux, F., Darzacq, X., and Libri, D. (2013). High-Frequency Promoter Firing Links THO Complex Function to Heavy Chromatin Formation. Cell Rep *5*, 1082-1094.

E19-12 Lenstra*, T.L., Tudek*, A., Clauder, S., Xu, Z., Pachis, S.T., van Leenen, D., Kemmeren, P., Steinmetz, L.M., Libri*, D., and Holstege*, F.C. (2013). The Role of Ctk1 Kinase in Termination of Small Non-Coding RNAs. PLoS One *8*, e80495.

E19-13 Porrua, O., and Libri, D. (2013). A bacterial-like mechanism for transcription termination by the Sen1p helicase in budding yeast. Nat Struct Mol Biol *20*, 884-891.

E19-14 Rougemaille, M., Braun, S., Coyle, S., Dumesic, P.A., Garcia, J.F., Isaac, R.S., Libri, D., Narlikar, G.J., and Madhani, H.D. (2012). Ers1 links HP1 to RNAi. Proc. Natl. Acad. Sci. U.S.A. 109, 11258–11263.

E19-15 Porrua, O., Hobor, F., Boulay, J., Kubicek, K., D'Aubenton-Carafa, Y., Gudipati, R.K., Stefl, R., and Libri, D. (2012). In vivo SELEX reveals novel sequence and structural determinants of Nrd1-Nab3-Sen1-dependent transcription termination. Embo J *31*, 3935-3948.

E19-16 Gudipati, R.K., Xu, Z., Lebreton, A., Seraphin, B., Steinmetz, L.M., Jacquier, A., and Libri, D. (2012). Extensive degradation of RNA precursors by the exosome in wild-type cells. Mol Cell *48*, 409-421.

Peer reviewed reviews

E19-17 Porrua, O., Boudvillain, M., and Libri, D. (2016). Transcription Termination: Variations on Common Themes. Trends Genet. 32, 508–522.

E19-18 Libri, D. (2015). Sleeping Beauty and the Beast (of pervasive transcription). RNA *21*, 678–679.

E19-19 Porrua, O., and Libri, D. (2015a). Transcription termination and the control of the transcriptome: why, where and how to stop. Nat. Rev. Mol. Cell Biol. *16*, 190–202.

E19-20 Tudek, A., Candelli, T., and Libri, D. (2015). Non-coding transcription by RNA polymerase II in yeast: Hasard or nécessité? Biochimie.

E19-21 Jensen, T.H., Jacquier, A., and Libri, D. (2013). Dealing with pervasive transcription. Mol Cell *52*, 473-484.

E20 – Nicolas MINC

Peer reviewed publications

E20-1 Dumollard R, Minc, N, …, McDougall, A, (2017) "Cell cycle asynchrony determines cell shape at metaphase to support the invariant cleavage pattern of a chordate embryo" ***eLife***;10.7554/eLife.19290.

E20-2 Salomon J, … , Minc N, …, Delacour D. (2017) "Contractile forces at tricellular contacts modulate epithelial organization and monolayer integrity" ***Nat Commun. 8:13998.***

E20-3 Haupt A and Minc[#] N, (2017) **"**Gradients of Phosphatidylserine contribute to plasma membrane charge localization and cell polarity in fission yeast" ***Mol. Biol. Cell. 28(1):210-220***

E20-4 Pierre A, Sallé J, Wühr M, and Minc[#] N, (2016) "Generic models to predict division patterns of cleaving embryos" ***Developmental Cell. 39(6):667-682***

E20-5 Tanimoto H, Kimura[#] A, Minc[#] N, (2016) "Shape-motion relationships of centering microtubule asters" ***J Cell Biol*** 212 (7):777.

E20-6 Bosveld F, Markova P, Guirao B, martin C, Wang, Z, Pierre A, Balakireva M, Gaugue I, Ainslie A, Christophorou N, Lubensky D, Minc N, Bellaiche Y (2016), "Epithelial tricellular junctions act as interphase cell shape sensors to orient mitosis", ***Nature*** 530, 495-498.

E20-7 7. Bonazzi D, Haupt A, Tanimoto H, Delacourt D, Salort D, Minc[#] N, (2015), "Actin-based transport adpapts polarity domain size to local cellular curvature" ***Curr Biol*** 25(20):2677-83.

E20-8 Haupt A, Campetelli A, Bonazzi D, Piel M, Chang F, Minc[#] N, (2014), "Electrochemical Regulation of Budding Yeast Polarity", ***Plos Biology, 12(12):e1002029.***

E20-9 Bonazzi D, Julien JD, Seddiki R, Romao M, Piel M, Boudaoud[#] A, Minc[#] N, (2014), "Symmetry breaking in spore germination relies on an interplay between polar cap stability and spore wall mechanics." ***Developmental Cell***, 28 (5):534-546.

E20-10 Campinho P , Behrndt M, Ranft J, Risler T, Minc N and Heisenberg CP, (2013), "Tension-oriented cell divisions limit anisotropic tissue tension in epithelial spreading during zebrafish epiboly", ***Nat Cell Biol***. 15(12):1405-14.

E20-11 Proctor*. S, Minc*N., Boudaoud A. and Chang F. (2012), "Contributions of turgor pressure, the contractile ring, and septum assembly on forces in cytokinesis in fission yeast" ***Curr. Biol.***, 22(17):1601-08.

Peer reviewed reviews

E20-12 Davì V and Minc[#] N, (2015), "Mechanics and morphogenesis of fission yeast cells" ***Curr Opinion Microbiology*** 28:36-45

E20-13 Chang F and Minc[#] N, (2014), "Electrochemical control of cell and tissue polarity." ***Ann Rev Cell Dev Biol***, Vol 30

E20-14 Bonazzi D and Minc[#] N (2014), "Dissecting the Molecular Mechanisms of Electrotactic Effects" ***Adv. Wound. Care****. Vol. 3, No. 2: 139-148*

E20-15 Minc N and Piel M (2013), "Anthrax receptors position the spindle" ***Nat Cell Biol***. 24; 15(1):11-13.

E20-16 Campetelli, A. Bonazzi, D., Minc N. (2012) "Electrochemical regulation of cell polarity" ***Cytoskeleton***, 69 (9):601-12

E20-17 Minc N. and Piel M. (2012),"Predicting division plane position and orientation" ***Trends Cell Biol***., 22(4). 193-200.

Other publications

E20-18 Tanimoto, H and Minc[#] N**,** (2017) "Quantitative approaches for the study of microtubule aster motion in large eggs" ***Method Cell Biol***

E20-19 Zegman Y, Bonazzi D, Minc[#] N**,** (2015), "Measurement and Manipulation of Cell Size Parameters in Fission Yeast" ***Methods. Cell. Biol*** 125:423-36

E20-20 Chang F, Atilgan E, Burgess D. and Minc[#] N, (2014), "Manipulating Cell Shape by Placing Cells into Micro-fabricated Chambers" ***Methods. Mol. Biology***, Vol. 1136

E20-21 Minc[#] N (2014), "Microfabricated chambers as force sensors for probing forces of fungal growth." ***Methods. Cell. Biol***, *120:215-26*

E21 – Khashayar PAKDAMAN

E21-1 Finite-Time and -Size Scalings in the Evaluation of Large Deviation Functions. Part II: Numerical Approach in Continuous Time. **Guevara H. E**., Nemoto T, Lecomte V. Phys.Rev. E 95, 062134 (2017). https://doi.org/10.1103/PhysRevE.95.062134

E21-2 Discreteness Effects in Population Dynamics. **Guevara E.,** Lecomte, V. Journal of Physics. A: Mathematical and Theoretical. 49:205002 (17pp) (2016). DOI:10.1088/1751-8113/49/20/205002.

E21-3 The real Ginibre ensemble with k = O(n) real eigenvalues. **Garcia del Molino L.C., Pakdaman K** and Touboul J. and Wainrib G. Journal of Statistical Physics. 18 fev. 2016. DOI 10.1007/s10955-016-1485-0.

E21-4 Combined comparative genomic hybridization and transcriptomic analyses of ovarian granulosa cell tumors point to novel candidate driver genes. Caburet S, Anttonen M, Todeschini AL, Unkila-Kallio L, **Mestivier D,** Butzow R, Veitia RA. BMC Cancer. 2015 Apr 10;15(1):251. DOI : 10.1186/s12885-015-1283-0

E21-5 Wellposedness of some quasi-linear Schrodinger Equation. Chemin JY. **Salort D.** Science China Mathematics, 2015, 58. DOI: 10.1007/s11425-015-4993-5

E21-6 Actin-Based Transport Adapts Polarity Domain Size to Local Cellular Curvature. Bonazzi D, Haupt A, Tanimoto H, Delacour D, **Salort D**, Minc N. Curr Biol. 2015 Oct 19;25(20):2677-83. DOI: 10.1016/j.cub.2015.08.046. Epub 2015 Oct 1.

E21-7 Qualitative properties of solutions for the noisy integrate and fire model in computational neuroscience. Carrillo, JA; Perthame, B; **Salort, D**; Smets, D NONLINEARITY Volume: 28 Issue: 9 Pages: 3365-3388 DOI: 10.1088/0951-7715/28/9/3365 SEP 2015

E21-8 Progression from cirrhosis to cancer is associated with early ubiquitin post-translational modifications: identification of new biomarkers of cirrhosis at risk of malignancy. Laouirem S, Le Faouder J, Alexandrov T, **Mestivier D**, Léger T, Baudin X, Mebarki M, Paradis V, Camadro JM, Bedossa P. J Pathol. 2014 Dec;234(4):452-63. DOI: 10.1002/path.4398.

E21-9 Dietary triglycerides act on mesolimbic structures to regulate the rewarding and motivational aspects of feeding. Cansell C, Castel J, Denis RG, Rouch C, Delbes AS, Martinez S, **Mestivier D**, Finan B, Maldonado-Aviles JG, Rijnsburger M, Tschöp MH, Dileone RJ, Eckel RH, la Fleur SE, Magnan C, Hnasko TS, Luquet S. Mol Psychiatry. 2014 Apr 15. DOI: 10.1038/mp.2014.31.

E21-10 An efficient GPU acceptance-rejection algorithm for the selection of the next reaction to occur for Stochastic Simulation Algorithms. Neri Mickael, **Denis Mestivier** arXiv.org > cs > arXiv:1404.0027

E21-11 Adaptation and fatigue model for neuron networks and large time asymptotics in a nonlinear fragmentation equation. **Pakdaman K**, Perthame B, **Salort D**. J Math Neurosci. 2014 Jul 24;4:14. DOI: 10.1186/2190-8567-4-14. eCollection 2014.

E21-12 Reproduction cost reduces demographic stochasticity and enhances inter-individual compatibility. **Le Cunff Y**, **Pakdaman** K. J Theor Biol. 2014 Jul 15;360C:263-270. DOI: 10.1016/j.jtbi.2014.07.008. [Epub ahead of print]

E21-13 Evolution of aging: individual life history trade-offs and population heterogeneity account for mortality patterns across species. **Le Cunff Y**, Baudisch A, **Pakdaman K**. J Evol Biol. 2014 Aug;27(8):1706-20. DOI: 10.1111/jeb.12423.

E21-14 The heterogeneous gas with singular interaction: Generalized circular law and heterogeneous renormalized energy. **Luis Carlos Garcia del Molino, Khashayar Pakdaman**, Jonathan Touboul. arXiv.org > math-ph > arXiv:1402.7007v1

E21-15 Metastable periodic patterns in singularly perturbed state dependent delayed equations. Pellegrin X. Grotta-Ragazzo C., Malta C.P., **Pakdaman K**. Physica D: Nonlinear Phenomena Volume 271, 15 March 2014, Pages 48-63 DOI: 10.1016/j.physd.2013.11.012 arXiv:1203.4115

E21-16 Commuter mobility and the spread of infectious diseases: application to influenza in france. Charaudeau S, **Pakdaman K**, Boëlle PY. PLoS One. 2014 Jan 9;9(1):e83002. DOI: 10.1371/journal.pone.0083002.

E21-17 Synchronization in random balanced networks. **García Del Molino LC**, **Pakdaman K**, Touboul J, **Wainrib G**. Phys Rev E Stat Nonlin Soft Matter Phys. 2013 Oct;88(4 Pt 1):042824. Epub 2013 Oct 31. DOI: 10.1103/PhysRevE.88.042824 PMID:24229242

E21-18 Relaxation and self-sustained oscillations in the time elapsed neuron network model. **Pakdaman, Khashayar**; Perthame, Benoit; **Salort, Delphine**. SIAM JOURNAL ON APPLIED MATHEMATICS Volume: 73 Issue: 3 Pages: 1260-1279. DOI: 10.1137/110847962 Published: 2013

E21-19 How evolving heterogeneity distributions of resource allocation strategies shape mortality patterns. **Le Cunff Y**, Baudisch A, **Pakdaman K**. PLoS Comput Biol. 2013 Jan;9(1):e1002825. DOI: 10.1371/journal.pcbi.1002825. Epub 2013 Jan 17.

E21-20 Preface: Networks and heterogeneous media. Berestycki, Henri; Hilhorst, Danielle; Merle, Frank; Mimura, Masayasu; **Pakdaman, Khashayar**. Volume: 7 Issue: 4 Special Issue: SI Pages: I-III DOI: 10.3934/nhm.2012.7.4i Published: DEC 2012

E21-21 Phenotype-genotype relation in Wagner's canalization model. **Le Cunff Y, Pakdaman K**. J Theor Biol. 2012 Dec 7;314:69-83. DOI: 10.1016/j.jtbi.2012.08.020. Epub 2012 Aug 28.

E21-22 Asymptotic expansion and central limit theorem for multiscale piecewise-deterministic Markov processes **Pakdaman, Khashayar**; Thieullen, Michele; **Wainrib, Gilles.** STOCHASTIC PROCESSES AND THEIR APPLICATIONS Volume: 122 Issue: 6 Pages: 2292-2318. DOI: 10.1016/j.spa.2012.03.005 Published: JUN 2012

E21-23 Global attractor and asymptotic dynamics in the Kuramoto model for coupled noisy phase oscillators. Giacomin, Giambattista; **Pakdaman, Khashayar**; Pellegrin, Xavier NONLINEARITY Volume: 25 Issue: 5 Pages: 1247-1273. DOI: 10.1088/0951-7715/25/5/1247 Published: MAY 2012

E21-24 Reduction of stochastic conductance-based neuron models with time-scales separation. **Wainrib G**, Thieullen M, **Pakdaman K**. J Comput Neurosci. 2012 Apr;32(2):327-46. Epub 2011 Aug 13. DOI: 10.1007/s10827-011-0355-7

E21-25 On a voltage-conductance kinetic system for integrate and fire neural networks. Benoit Perthame, **Delphine Salort** Kinetic and related models (KRM), special issue Seiji Ukai, vol 6, no 4, pp 841-864, dec.2013. DOI :10.3934/krm.2013.6.841 arXiv:1310.2742 [math.AP

E22 – Alessandra PIERANI

Peer reviewed publications

E22-1 Gard C, Curto GG, Frarma Y, Chollet E, Duval N, **Auzié V**, Auradé F, **Vigier L**, Relaix F, **Pierani A, Causeret F***, Ribes V*. (2017) Pax3- and Pax7-mediated Dbx1 regulation orchestrates the patterning of intermediate spinal interneurons. Dev Biol (2017) in press. * Co-corresponding-authors

E22-2 **Ledonne F., Orduz D., Mercier J., Vigier L**., Grove E.A., Tissir F., Angulo M.C., **Pierani A**.* and **Coppola** E.* Targeted inactivation of Bax reveals subtype-specific mechanism of Cajal-Retzius neuron death in the postnatal cerebral cortex. Cell Reports (2016), 17, 3133–3141. * Co-corresponding-authors

E22-3 de Frutos C. A., Bouvier G., **Arai Y**., Thion M., Lokmane L., Keita M., Garcia-Dominguez M., Charnay P., Hirata T., Riethmacher D., Grove E.A., Tissir F., Casado M., **Pierani A**. and Garel S. Reallocation of olfactory Cajal-Retzius cells shapes neocortex architecture. Neuron (2016), 92, 435-448.

E22-4 **Freret-Hodara B., Cui Y., Griveau A., Vigier L., Arai Y**., Touboul J. and **Pierani A**. Enhanced abventricular proliferation compensates cell death in the embryonic cerebral cortex. Cerebral Cortex (2016) Sept 12; doi: 10.1093/cercor/bhw264.

E22-5 **Karaz S.[#], Courgeon M.[#], Lepetit H.**, Bruno E., Pannone R., Tarallo A., Thouzé F., Kerner P., Vervoort M., **Causeret F.*, Pierani A.*** and **D'Onofrio G.*** Neuronal fate specification by the Dbx1 transcription factor is linked to the evolutionary acquisition of a novel functional domain. Evodevo (2016) Aug 12; doi: 10.1186/s13227-016-0055-5. eCollection 2016. * Co-corresponding-authors

E22-6 Puelles, L., Medina, L., Borello, U., Legaz, I., **Teissier, A**., **Pierani, A.** and Rubenstein, J. L. Radial derivatives of the mouse ventral pallium traced with Dbx1-LacZ reporters. J Chem Neuroanat. (2015), Dec 31. pii: S0891-0618(15)00103-9. doi: 10.1016/j.jchemneu.2015.10.011. [Epub ahead of print]

E22-7 Thelie, A., Desiderio, S., Hanotel, J., Quigley, I., Van Driessche, B., Rodari, A., Borromeo, M., Kricha, S., Lahaye, F., Croce, J., Cerda-Moya, G., Ordono Fernandez, J., Bolle, B., Lewis, K., Sander, M., **Pierani, A.**, Schubert, M., Johnson, J., Kintner, C., Pieler, T., Van Lint, C., Henningfeld, K., Bellefroid, E. and Van Campenhout, C. Prdm12 specifies V1 interneurons through cross-repressive interactions with Dbx1 and Nkx6 genes in Xenopus. Development (2015), 142, 3416-28.

E22-8 **Barber, M., Arai, Y.,** Morishita, Y., **Vigier, L., Causeret, F., Borello, U., Ledonne, F., Coppola, E.**, Contremoulins, V., Pfrieger, F.W., Tissir, F., Govindan, S., Jabaudon, D., Proux-Gillardeaux, V., Galli, T. and **Pierani, A**. Migration speed of Cajal-Retzius cells modulated by vesicular trafficking controls the size

of higher-order cortical areas. Current Biol. (2015), 25, 2466-2478. Epub 2015 Sep 17. Research Highlight in Nature Reviews Neurosci (2015), 16, 644-645

E22-9 **Causeret, F.***, **Sumia, I.** and **Pierani A**.* Kremen1 and Dickkopf1 control cell survival in a Wnt-independent manner. Cell Death and Differentiation (2015), Jul 24. doi: 10.1038/cdd.2015.100. * Co-corresponding-authors

E22-10 Sokolowski K., Esumi, S., Hirata T., Kamal Y., Tran T., Lam A., Zaghlula M., Brighthaupt, S-C., Martinez J., Grimbovski, S., Knoblach, S., **Pierani A**., Jones K., Tamamaki N., Shah N.M. and Corbin J.G. Specification of select hypothalamic circuits and innate behaviors by the embryonic patterning gene, Dbx1. Neuron (2015), 86, 403-416. Epub 2015 Apr 9.

E22-11 Arbeille, E., Reynaud, F., Sanyas, I., Bozon, M., Kindbeiter, K., **Causeret, F.**, **Pierani, A.**, Falk, J., Moret, F. and Castellani, V. Cerebrospinal fluid-derived Semaphorin3B orients neuroepithelial cell divisions in the apicobasal axis. Nature Comms. (2015), 6, 6366.

E22-12 Trousse F., Poluch S., **Pierani A**., **Dutriaux A.**, Bock H.H., Nagasawa T., Verdier J.M. and Rossel M. CXCR7 Receptor Controls the Maintenance of Subpial Positioning of Cajal-Retzius Cells. Cerebral Cortex (2015), 25, 3446-3457. Epub 2014 Aug 1.

E22-13 Di Giovannantonio L.G., Di Salvio M., Omodei D., Prakash N., Wurst W., **Pierani A.**, Acampora D. and Simeone, A. Otx2 cell-autonomously determines dorsal mesencephalon versus cerebellum fate independently of the isthmic organizing activity. Development (2014), 141, 377-388. Epub 2013 Dec 11.

E22-14 Francius C., Harris A., Rucchin V., Hendricks T.J., Stam F.J., **Barber M.**, Kurek D., Grosveld F.G., **Pierani A.**, Goulding M. and Clotman F. Identification of Multiple Subsets of Ventral Interneurons and Differential Distribution along the Rostrocaudal Axis of the Developing Spinal Cord. PLoS One (2013), 8, e70325.

E22-15 Talpalar A.E., Bouvier J., Borgius L., Fortin G., **Pierani A.** and Kiehn O. Dual-mode operation of neuronal networks involved in left-right alternation. Nature (2013), 500, 85-88. Epub 2013 Jun 30.

E22-16 **Borello U.**, Madhavan M., Vilinsky I., Faedo A., **Pierani A.**, Rubenstein J. and Campbell, K. Sp8 and COUP-TF1 Reciprocally Regulate Patterning and Fgf Signaling in Cortical Progenitors. Cerebral Cortex (2014), 24, 1409-1421. Epub 2013 Jan 10.

E22-17 Roy A., Gonzalez-Gomez M., **Pierani A.**, Meyer G. and Tole S. Lhx2 Regulates the Development of the Forebrain Hem System. Cerebral Cortex (2014), 24, 1361-1372 Jan 10. Epub 2013 Jan 10.

E22-18 **Teissier A**., Waclaw R.R.[#], **Griveau A**.[#], Campbell K. and **Pierani A**. Tangentially migrating transient glutamatergic neurons control neurogenesis and maintenance of cerebral cortical progenitor pools. Cerebral Cortex (2012), 22, 403-416. Epub 2011 Jun 10.

Peer reviewed reviews

E22-19 **Barber, M**. and **Pierani, A**. Tangential migration of glutamatergic neurons and cortical patterning during development: lessons from Cajal-Retzius cells. Review. *Developmental Neurobiology* (2015), Nov 18. doi: 10.1002/dneu.22363. [Epub ahead of print]

E22-20 **Arai Y.** and **Pierani A**. Development and evolution of cortical fields. *Neurosci Res.* (2014), 86, 66-76. Epub 2014 Jun 28. Review.

Book Chapter

E22-21 Griveau A., Borello U. and **Pierani A**. Neural migration and brain patterning. In: J.L.R. Rubenstein and P. Rakic Editors: *Comprehensive Developmental Neuroscience*: Cellular Migration and Formation of Neuronal Connections, Amsterdam: Academic Press (2013) pp. 431-456.

Other publications

E22-22 Ohtaka-Maruyama C., Nakajima K., Pierani A., Maeda N. Editorial: Mechanisms of Neuronal Migration during Corticogenesis. Front Neurosci. (2016), 10:172. doi: 10.3389/fnins.2016.00172. eCollection 2016.

E22-23 **Causeret F.*** and **Pierani A.*** Quand la migration de neurones signalisateurs contrôle la régionalisation du cortex cérébral. *Med Sci* (Paris) (2016), 32, 317–319. * Co-corresponding-authors

E23 – Lionel PINTARD

Peer reviewed publications

E23-1 Martino, L., Morchoisne-Bolhy, S., Cheerambathur, D.K., Van Hove, L., Dumont, J., Joly, N., Desai, A., Doye, V. and Pintard, L. Channel Nucleoporins recruit the Polo-like kinase PLK-1 to the Nuclear Pore Complexes in prophase to direct Nuclear Envelope Breakdown. *In revision* for ***Developmental Cell***.

E23-2 Dickinson, DJ., Schwager, F., **Pintard, L**., Gotta, M. and Goldstein B. Single-cell biochemistry reveals a cell cycle-regulated mechanism that couples PAR complex movement to polarizing cortical flows. *In*

Revision for ***Developmental Cell***.

E23-3 Thomas, Y., Cirillo, L., Panbianco, C., Martino, L., Tavernier, N., Schwager, F., Van Hove, L., Joly, N., Santamaria, A., Pintard, L.*, and Gotta, M.* (2016). Cdk1 Phosphorylates SPAT-1/Bora to Promote Plk1 Activation in C. elegans and Human Cells. ***Cell Rep*** *15*, 510-518.

E23-4 Parrilla, A., Cirillo, L., Thomas, Y., Gotta, M.*, Pintard, L.*, and Santamaria, A.* (2016). Mitotic entry: The interplay between Cdk1, Plk1 and Bora. ***Cell Cycle*** *15*, 3177-3182.

E23-5 Joly, N., Martino, L., Gigant, E., Dumont, J., and Pintard, L. (2016). Microtubule-severing activity of the AAA+ ATPase Katanin is essential for female meiotic spindle assembly. ***Development*** *143*, 3604-3614.

E23-6 Ossareh-Nazari, B., Katsiarimpa, A., Merlet, J., and Pintard, L. (2016). RNAi-Based Suppressor Screens Reveal Genetic Interactions Between the CRL2LRR-1 E3-Ligase and the DNA Replication Machinery in Caenorhabditis elegans. ***G3 (Bethesda)*** *6*, 3431-3442.

E23-7 Tavernier, N., Noatynska, A., Panbianco, C., Martino, L., Van Hove, L., Schwager, F., Léger, T., Gotta, M.*, and Pintard, L.* (2015b). Cdk1 phosphorylates SPAT-1/Bora to trigger PLK-1 activation and drive mitotic entry in C. elegans embryos. ***J Cell Biol*** *208*, 661-669.

E23-8 Tavernier, N., Panbianco, C., Gotta, M., and Pintard, L. (2015c). Cdk1 plays matchmaker for the Polo-like kinase and its activator SPAT-1/Bora. ***Cell Cycle*** 1-5.

E23-9 Benkemoun, L., Descoteaux, C., Chartier, N. T., Pintard, L., and Labbe, J. C. (2014). PAR-4/LKB1 regulates DNA replication during asynchronous division of the early C. elegans embryo. ***J Cell Biol*** 205, 447-455.

E23-10 Burger, J., Merlet, J., Tavernier, N., Richaudeau, B., Arnold, A., Ciosk, R., Bowerman, B., and Pintard, L. (2013). CRL2(LRR-1) E3-ligase regulates proliferation and progression through meiosis in the Caenorhabditis elegans germline. ***PLoS Genet*** 9, e1003375.

E23-11 Echalier, A., Pan, Y., Birol, M., Tavernier, N., Pintard, L., Hoh, F., Ebel, C., Galophe, N., Claret, F. X., and Dumas, C. (2013). Insights into the regulation of the human COP9 signalosome catalytic subunit, CSN5/Jab1. ***Proc Natl Acad Sci*** U S A 110, 1273-1278.

E23-12 Gomes, J. E., Tavernier, N., Richaudeau, B., Formstecher, E., Boulin, T., Mains, P. E., Dumont, J., and Pintard, L. (2013). Microtubule severing by the katanin complex is activated by PPFR-1-dependent MEI-1 dephosphorylation. ***J Cell Biol*** 202, 431-439.

Peer reviewed reviews

E23-13 Cirillo, L., Thomas, Y., Pintard, L., and Gotta, M. (2016). BORA-dependent PLK1 regulation: A new weapon for cancer therapy. **Mol Cell Oncol** *3*, e1199265. [Invited Review]

E23-14 Tavernier, N., Labbé, J. C., and Pintard, L. (2015a). Cell cycle timing regulation during asynchronous divisions of the early C. elegans embryo. **Exp Cell Res** *337*, 243-248. [Invited Review]

E23-15 Merlet, J., and Pintard, L. (2013). Role of the CRL2(LRR-1) E3 ubiquitin-ligase in the development of the germline in C. elegans. Worm *2*, e25716. [Invited Review]

E23-16 Noatynska, A., Tavernier, N., Gotta, M., and Pintard, L. (2013). Coordinating cell polarity and cell cycle progression: what can we learn from flies and worms? **Open Biol** *3*, 130083. [Invited Review]

E24 – Anne PLESSIS

Peer reviewed publications

E24 - 1 Sanial M.* , Becam I.*, Hofmann L., Behague J., Arguelles C., Gourhand V., Bruzzone L., Holmgren R. A. and Plessis A.*. Dose dependent transduction of Hedgehog relies on phosphorylation-based feedback between the GPCR Smoothened and the kinase Fused. **Development**, (2017) 144(10):1841-1850.; *: co-first authors

E24 - 2 Brigui A., Hofmann L., Arguelles C., Sanial M., Holmgren R.A. and Plessis A. Control of the dynamics and homeostasis of the Drosophila Hedgehog receptor Patched by two C2-WW-HECT-E3 Ubiquitin ligases. **Open Biol.** (2015): 150112.

E24 - 3 Kim,J., Hsia E. Y. C., Brigui, A., Plessis A., Beachy P. A and Zheng X. The role of ciliary trafficking in Hedgehog receptor signaling. **Sc. Signal.** (2015) Jun 2;8(379):ra55

E24 - 4 Yanai H., Yoshioka Y., Yoshida H., Nakao Y., Plessis A. and Yamaguchi M.. Drosophila myeloid leukemia factor cooperates with DREF to activate the JNK signaling pathway. **Oncogenesis** (2014) 3:e98

E24 - 5 Brunet T., Bouclet A., Ahmadi P., Mitrossilis D., Driquez B., Brunet A-C., Henry L., Serman F., Béalle G., Ménager C., Dumas-Bouchiat F., Givord D., Yanicostas C., Le-Roy D., M. Dempsey N., Plessis A. and Farge E.. Bilateria early mesoderm specification is determined by beta-catenin dependent mechanical induction. **Nature Comm**. (2013) 4:2821. *Commentaries: Nature 504 (2013), "News and views" et http://www.knowtex.com/nav/quand-la-mecanique-controle-nos-genes_41307*

E24 - 6 Bras, S. Martin-Lannerée S., Gobert V., Augé B., Sanial M., Yamaguchi M., Haenli M., Plessis A.* and Waltzer L.* (*co-corresp. authors) MLF controls RUNX transcription factors activity during blood cell development in Drosophila by protecting them from degradation. Proc **Natl Acad Sci U S A.** (2012). 109:4986-91

E24 - 7 Netter S., Marchal C., Vinatier G., Sanial M., Plessis A., Pret A.-M., Théodore L. and Limbourg-Bouchon B.. The HIV-1 Vpu Protein Induces Apoptosis in Drosophila via Activation of JNK Signaling. **PLOS One** (2012) 7: e34310.

E25 - Françoise POIRIER/Mireille VIGUIER

Peer reviewed publications

Advedissian T, Proux-Gillardeaux V, Nkosi R, Mège R-M, Ladoux B, **Poirier F**, **Viguier M*, Deshayes F*** (*senior corresponding authors). Identification of a new modulator of epithelial adherens junctions dynamics : galectin-7. Submitted

Hafsia N, Forien M, Renaudin F, Delacour D, Reboul D, Van Lent P, Cohen-Solal M, Lioté F, **Poirier F**, Ea HK. Galectin-3 deficiency alters chondrocyte primary cilium formation and exacerbates cartilage destruction through mitochondrial apoptosis. Submitted

E25-1 **Magescas J**, Sengmanivong L, Viau A, Mayeux A, **Dang T**, Burtin M, Nilsson UJ, Leffler H, **Poirier F,** Terzi F, **Delacour D**. Spindle pole cohesion requires glycosylation-mediated localization of NuMA. Sci Rep. 2017 May3;7(1):1474.

E25-2 Dion J, **Deshayes F**, Storozhylova N, **Advedissian T**, Lambert A, **Viguier M**, Tellier C, Dussouy C, **Poirier F** and Grandjean C**.** Lactosamine-Based Derivatives as Tools to Delineate the Biological Functions of Galectins: Application to Skin Tissue Repair. Chembiochem. 2017 Apr 18;18(8):782-789.

E25-3 **Advedissian T*, Deshayes F*, Poirier F, Viguier M** and Richarme G. (*co-first authors). The parkinson-associated protein DJ-1/Park7 prevents glycation damage in human in keratinocyte. Biochem Biophys Res Commun. 2016 Apr 22;473(1):87-91.

E25-4 **Gendronneau G, Sanii S, Dang T, Deshayes F, Delacour D, Pichard E, Advedissian T**, Sidhu SS, **Viguier M**, Magnaldo T, **Poirier F**. Overexpression of Galectin-7 in mouse Epidermis Leads to loss of cell junctions ansd defective skin repair. PLoS One. 2015 Mar 5;10(3):e0119031

E25-5 Clare DK, **Magescas J**, Piolot T, Dumoux M, Vesque C, **Pichard E, Dang T, Duvauchelle B, Poirier F, Delacour D**. Basal foot MTOC organizes pillar MTs required for coordination of beating cilia. Nat Commun. 2014 Sep 12;5:4888.

E25-6 **Salomon J**, Goulet O, Canioni D, Brousse N, Lemale J, Tounian P, Coulomb A, Marinier E, Hugot JP, Ruemmele F, Dufier JL, Roche O, Bodemer C, Colomb V, Talbotec C, Lacaille F, Campeotto F, Cerf-Bensussan N, Janecke AR, Mueller T, Koletzko S, Bonnefont JP, Lyonnet S, Munnich A, **Poirier F**, Smahi A. Genetic characterization of congenital tufting enteropathy: epcam associated phenotype and involvement of SPINT2 in the syndromic form. Hum Genet. 2014 Mar;133(3):299-310.

International Collaborations on galectins

E25-7 Grosset AA, **Poirier F**, Gaboury L, St-Pierre Y. Galectin-7 Expression Potentiates HER-2-Positive Phenotype in Breast Cancer. PLoS One. 2016 Nov 30;11(11):e0166731.

E25-8 Martínez-Bosch N, Fernández-Barrena MG, Moreno M, Ortiz-Zapater E, Munné-Collado J, Iglesias M, André S, Gabius HJ, Hwang RF, **Poirier F**, Navas C, Guerra C, Fernández-Zapico ME, Navarro P. Galectin-1 drives pancreatic carcinogenesis through stroma remodeling and Hedgehog signaling activation. Cancer Res. 2014 Jul 1;74(13):3512-24

E25-9 Biron-Pain K, Grosset AA, **Poirier F**, Gaboury L, St-Pierre Y. Expression and functions of galectin-7 in human and murine melanomas. PLoS One. 2013 May 3;8(5):e63307.

E25-10 Potikha T, Stoyanov E, Pappo O, Frolov A, Mizrahi L, Olam D, Shnitzer-Perlman T, Weiss I, Barashi N, Peled A, Sass G, Tiegs G, **Poirier F**, Rabinovich GA, Galun E, Goldenberg D. Interstrain differences in chronic hepatitis and tumor development in a murine model of inflammation-mediated hepatocarcinogenesis. Hepatology. 2013 Jul;58(1):192-204.

E25-11 Benslimane-Ahmim Z, **Poirier F**, Delomenie C, Lokajczyk A, Grelac F, Galy-Fauroux I, Mohamedi A, Fischer AM, Heymann D, Lutomski D, Boisson-Vidal C. Mechanistic study of the proangiogenic effect of osteoprotegerin. Angiogenesis. 2013 Jul;16(3):575-93.

E25-12 Mathieu V, de Lassalle EM, Toelen J, Mohr T, Bellahcène A, Van Goietsenoven G, Verschuere T, Bouzin C, Debyser Z, De Vleeschouwer S, Van Gool S, **Poirier F**, Castronovo V, Kiss R, Feron O. Galectin-1 in melanoma biology and related neo-angiogenesis processes. J Invest Dermatol. 2012 Sep;132(9):2245-54.

E25-13 Romaniuk MA, Croci DO, Lapponi MJ, Tribulatti MV, Negrotto S, **Poirier F**, Campetella O, Rabinovich GA, Schattner. Binding of galectin-1 to αIIbβ3 integrin triggers "outside-in" signals, stimulates platelet activation, and controls primary hemostasis. M. FASEB J. 2012 Jul;26(7):2788-98.

Peer reviewed reviews

E25-14 **Advedissian T, Deshayes F, Poirier F**, Grandjean C, **Viguier M.** Galectins, a class of unconventional lectins. Med Sci (Paris). 2015 May;31(5):499-505.

E25-15 **Viguier M, Advedissian T, Delacour D, Poirier F, Deshayes F**. Galectins in epithelial functions. Tissue Barriers 2014 May 6;2:e29103.

E25-16 Sirko S, Irmler M, Gascón S, Bek S, Schneider S, Dimou L, Obermann J, De Souza Paiva D, **Poirier F**, Beckers J, Hauck SM, Barde YA, Götz M. Astrocyte reactivity after brain injury: The role of galectins 1 and 3. Glia. 2015 Dec;63(12):2340.

Other publications

E25-17. **Deshayes F** and Ghislin S. Chapter 4 "New aspects of the Molecular Biology of melanoma metastasis. ebook : "Melanoma: Molecular Biology, Risk Factors and Treatment Options" Editor : Alexander C. Jones Nova Science Publishers, *Inc.* New York. 2013

E25-18. Kuster, A; Nola, S; Dingli, F; Vacca, B; Gauchy, C; Beaujouan, J; Nunez, M ; Moncion, T; Loew, D; Formstecher, E; Galli, T ; **Proux-Gillardeaux V** The Q-SNARE SNAP-47 regulates trafficking of selected VAMPs, ***Molecular Biology of the Cell***, Dec 2014, **25**: P1996

E25-19. Molino D, Nola S, Lam SM, Verraes A, **Proux-Gillardeaux V**, Boncompain G, Perez F, Wenk M , Shui G, Danglot L and Galli T, Role of tetanus neurotoxin insensitive vesicle-associated membrane protein in membrane microdomains transport and homeostasis, ***Molecular Biology of the Cell***, Dec 2014, **25**: P2006

E25-20. Kuster, A; Nola, S; Dingli, F; Vacca, B; Gauchy, C; Beaujouan, J; Nunez, M ; Loew, D; Formstecher, E; Galli, T ; **Proux-Gillardeaux V** The Q-SNARE SNAP-47 regulates trafficking of selected VAMPs, ***Molecular Biology of the Cell***, 2013, **24**: 480

E25-21. 20- Galli T, Burgo A, **Proux-Gillardeaux V**, Sotirakis E, Bun P, Casano A, Verraes A, Liem RK, Formstecher E, Coppey-Moisan M, A molecular network for the transport of the TI-VAMP/ VAMP7 vesicles from cell center to periphery. ***Molecular Biology of the Cell***, Dec 2012, **23**: 85

E25-22. 21- Galli T and **Proux-Gillardeaux** V §. Internet page and book chapter "VAMP1/2/3/7" for the "**Encyclopedia of Signaling Molecules**", **Second Edition**, § corresponding author, (2017) ISBN: 978-1-4614-6438-9 (Print) 978-1-4614-6438-9 (Online)

E25-23. 22- Galli T and **Proux-Gillardeaux** V §. Internet page (2012) and book chapter (2013) "VAMP1/2/3/7" for the "**Encyclopedia of Signaling Molecules**". 2013, XLVIII, 2030 p. 300 illus., 100 in color in 3 volumes. Editeur Pr. Sangdun Choi and Springer. § corresponding author DOI10.1007/978−1−4419−0461−4_627, Print ISBN978−1−4419−0460−7, Online ISBN978−1−4419−0461−4 pp 1957−1963

E26 - Marie-Noëlle PRIOLEAU

Peer reviewed publications

E26-1 Schiavone D, Guilbaud G, Murat P, Papadopoulou C, Sarkies P, Prioleau MN, Balasubramanian S, Sale JE. Determinants of G quadruplex-induced epigenetic instability in REV1-deficient cells. **EMBO J**. 2014 Nov 3;33(21):2507-20.

E26-2 Picard F, Cadoret JC, Audit B, Arneodo A, Alberti A, Battail C, Duret L, Prioleau MN. The spatiotemporal program of DNA replication is associated with specific combinations of chromatin marks in human cells. **PLoS Genet**. 2014 May 1;10(5):e1004282.

E26-3 Valton AL, Hassan-Zadeh V, Lema I, Boggetto N, Alberti P, Saintomé C, Riou JF, Prioleau MN. G4 motifs affect origin positioning and efficiency in two vertebrate replicators. **EMBO J**. 2014 Apr 1;33(7):732-46.

E26-4 Hassan-Zadeh V, Chilaka S, Cadoret JC, Ma MK, Boggetto N, West AG, Prioleau MN. USF binding sequences from the HS4 insulator element impose early replication timing on a vertebrate replicator. **PLoS Biol**. 2012 Mar;10(3):e1001277.

Peer reviewed reviews

E26-5 G-Quadruplexes in DNA Replication: A Problem or a Necessity? Valton AL, Prioleau MN. **Trends Genet**. 2016 Nov;32(11):697-706.

E26-6 DNA replication origins-where do we begin? Prioleau MN, MacAlpine DM. **Genes Dev**. 2016 Aug 1;30(15):1683-97.

Other publications

E26-7 Book chapter in Chromatin regulation and dynamics, edited by Anita Gondor, Chapter 6, Epigenetic regulation of replication, C. Brossas, A-L. Valton, B. Duriez, M-N. Prioleau. Elsevier.(2016)

E27 – Vanessa RIBES

Peer reviewed publications

E27-1. Gard C., Curto G.G., Frarma Y., Chollet E., Auzié V., Auradé F., Vigier L., Relaix F., Pierani A., Causeret F.# & Ribes V.# 2017. *Pax3-and Pax7-mediated Dbx1 repression orchestrates the patterning of intermediate spinal interneurons.* **Accepted in Dev. Biol.**

Peer reviewed reviews

E27-1. Curto G.G., Gard C. & Ribes V.#. **2015**. Structures and properties of PAX linked regulatory networks architecting and pacing the emergence of neuronal diversity. **Semin Cell Dev Biol.** Aug;44: 75-86.

E28 – Gilbert RICHARME

Peer reviewed publications

E28-1 *Guanine Glycation Repair By Dj-1/Park7 And Its 1 Bacterial Homologs.* G. Richarme, C. Liu, M. Mihoub, J. Abdallah, T. Leger, Nicolas Joly, JC. Liebart, U. V. Jurkunas, M. Nadal, P. Bouloc, J. Dairou, A. Lamouri **Science, 08 jun 2017.**

E28-2 *Parkinsonism-associated protein DJ-1 is a bona fide deglycase*. Richarme G, Dairou J. **Biochem Biophys Res Commun**. 2017 Jan 29;483(1):387-391. DOI: 10.1016/j.bbrc.2016.12.134.

E28-3 *DJ-1 family Maillard deglycases prevent acrylamide formation.* Richarme G, Marguet E, Forterre P, Ishino S, Ishino Y. **Biochem Biophys Res Commun**. 2016 Sep 23;478(3):1111-6. DOI: 10.1016/j.bbrc.2016.08.077. Epub 2016 Aug 13.

E28-4 *The Parkinsonism-associated protein DJ-1/Park7 prevents glycation damage in human keratinocyte.* Advedissian T, Deshayes F, Poirier F, Viguier M, **Richarme G**. **Biochem Biophys Res Commun**. 2016 Apr 22;473(1):87-91. DOI: 10.1016/j.bbrc.2016.03.056. Epub 2016 Mar 16.

E28-5 *The DJ-1 superfamily members YhbO and YajL from Escherichia coli repair proteins from glycation by methylglyoxal and glyoxal.* Abdallah J, Mihoub M, Gautier V, Richarme G. **Biochem Biophys Res Commun**. 2016 Feb 5;470(2):282-6. DOI: 10.1016/j.bbrc.2016.01.068. Epub 2016 Jan 14.

E28-6 *DJ-1 family Maillard deglycases prevent acrylamide formation.* Richarme G, Marguet E, Forterre P, Ishino S, Ishino Y. **Biochem Biophys Res Commun**. 2016 Sep 23;478(3):1111-6. DOI: 10.1016/j.bbrc.2016.08.077. Epub 2016 Aug 13.

E28-7 *Production, secretion and purification of a correctly folded staphylococcal antigen in Lactococcus lactis.* Samazan F, Rokbi B, Seguin D, Telles F, Gautier V, Richarme G, Chevret D, Varela PF, Velours C, Poquet I. **Microb Cell Fact**. 2015 Jul 16;14:104. DOI: 10.1186/s12934-015-0271-z.

E28-8 *The DJ-1 superfamily member Hsp31 repairs proteins from glycation by methylglyoxal and glyoxal.* Mihoub M, Abdallah J, Gontero B, Dairou J, Richarme G. **Biochem Biophys Res Commun**. 2015 Aug 7;463(4):1305-10. DOI: 10.1016/j.bbrc.2015.06.111. Epub 2015 Jun 21.

E28-9 *Parkinsonism-associated protein DJ-1/Park7 is a major protein deglycase that repairs methylglyoxal- and glyoxal-glycated cysteine, arginine and lysine residues*. Richarme G, Mihoub M, Dairou J, Bui LC, Leger T, Lamouri A. **J Biol Chem**. 2015 Jan 16;290(3):1885-97. DOI : 0.1074/jbc.M114.597815. Epub 2014 Nov 21.

E28-10 *Global stress response in prokaryotic model of dj-1 associated parkinsonism.* Messaoudi N, Gautier V, Kthiri F, Lelandais G, Mihoub M, Joseleau-Petit D, Caldas T, Bohn C, Tolosa L, Rao G, Tao K, Landoulsi A, Bouloc P, Richarme G. **J Bacteriol**. 2013 Jan 4. DOI: 10.1128/JB.02202-12

E28-11 *YajL, the Prokaryotic Homolog of the Parkinsonism-Associated Protein DJ-1, Protects Cells against Protein Sulfenylation* Gautier V, Le HT, Malki A, Messaoudi N, Caldas T, Kthiri F, Landoulsi A, Richarme G. **Journal of Molecular Biology** Volume: 421 Issue: 4-5 Special Issue: SI Pages: 662-670 DOI: 10.1016/j.jmb.2012.01.047 Part: Part 2 Published: AUG 24 2012

E28-12 *YajL, the prokaryotic homolog of the Parkinsonism associated protein DJ-1 functions as a covalent chaperone for the thiol proteome.* Le HT, Gautier V, Kthiri F, Malki A, Messaoudi N, Mihoub M, Landoulsi A, An YJ, Cha SS, Richarme G. **J Biol Chem**. 2012 Feb 17;287(8):5861-70. Epub 2011 Dec 7. DOI: 10.1074/jbc.M111.299198

E29 – Guillaume ROMET-LEMONNE/Antoine JEGOU

Peer reviewed publications

E29-1 S. Frémont, H. Hammich, J. Bai, H. Wioland, K. Klinkert, M. Rocancourt, C. Kikuti, D. Stroebel, G. Romet-Lemonne, O. Pylypenko, A. Houdusse and A. Echard, "Oxidation of F-actin controls the terminal steps of cell division", *Nature Communications* 8:14528 (2017).

E29-2 J. Pernier, S. Shekhar, A. Jegou, B. Guichard, MF. Carlier MF, "Profilin Interaction with Actin Filament Barbed End Controls Dynamic Instability, Capping, Branching, and Motility", *Dev Cell.* 36(2):201-14 (2016).

E29-3 S. Shekhar, M. Kerleau, S. Kühn, J. Pernier, G. Romet-Lemonne, A. Jégou, MF. Carlier "Formin and capping protein together embrace the actin filament in a ménage à trois" *Nature Communications* 6: 8730 (2015).

Peer reviewed reviews

E29-4 S. Frémont, G. Romet-Lemonne, A. Houdusse and A. Echard, "Emerging roles of MICAL family proteins – from actin oxidation to membrane trafficking during cytokinesis", *Journal of Cell Science* doi: 10.1242/jcs.202028 (2017). Commentary.

E29-5 A. Jegou, G. Romet-Lemonne "Single filaments to reveal the multiple flavors of actin", *Biophysical Journal* 110, 2138–2146 (2016). Perspective.

E30 – Terence STRICK

Peer reviewed publications

E30 - 1 C. Duboc, J. Fan, E.T. Graves and T.R. Strick. Preparation of DNA substrates and functionalized glass surfaces for correlative nanomanipulation and colocalization (NanoCOSM) of single molecules. *Methods Enzymol*. **582**: 275—296 (2017)

E30 - 2 E. Lerner, S. Chung, B.L. Allen, S. Wang, J. Lee, S.W. Lu, L.W. Grimaud, A. Ingargiola, X. Michalet, Y. Alhadid, S. Borkuhov, T.R. Strick, D.J. Taatjes, and S. Weiss. Backtracked and paused transcription initiation intermediate of Escherichia coli RNA polymerase. Proc. Natl. Acad. Sci. (USA) **113**: E6562—E6571 (2016).

E30 - 3 J. Fan, M. Leroux-Coyau, N.J. Savery and T.R. Strick. Reconstruction of bacterial transcription-coupled repair at single-molecule resolution *Nature* **536**: 234—237 (2016).

E30 - 4 C. Duboc and E.T. Graves and T.R. Strick. Simple calibration of TIR field depth using the supercoiling response of DNA.*Methods* **105**: 56—61 (2016).

E30 - 5 E.T. Graves, C. Duboc, J. Fan, F. Stransky, M. Leroux-Coyau and T.R. Strick. A dynamic DNA-repair complex observed by correlative single-molecule nanomanipulation and fluorescence. *Nature Struct. Mol. Biol*. **22**: 452—457 (2015).

E30 - 6 M.J. Szafran, T. Strick; A. Strzalka, J. Zakrzewska-Czerwinska and D. Jakimowicz. A highly processive topoisomerase I: studies at the single-molecule level. *Nucleic Acids Res*. **42**: 7935—7946 (2014).

E30 - 7 K. Howan, J. Monnet, J. Fan and T.R. Strick. Stopped in its tracks: the RNA polymerase molecular motor as a robust sensor of DNA damage. *DNA Repair (Amsterdam)*, **20**: 49—57 (2014).

E30 - 8 J. Monnet, W. Grange, T.R. Strick and N. Joly. Mfd as a central partner of transcription-coupled repair *Transcription* **4**: 4—6 (2013).

E30 - 9 K. Howan, A. Smith, L. Westblade, N. Joly, W. Grange, S. Zorman, S. Darst, N. Savery and T.R.Strick. Initiation of transcription-coupled repair characterized at single-molecule resolution. *Nature* **490**: 431—434 (2012).

E30 - 10 S. Zorman, H. Seitz, B. Sclavi and T.R. Strick. Topological characterization of the DnaA-oriC complex using single-molecule nanomanipulation. *Nucleic Acids Res*., **40**: 7375—7383 (2012).

E30 - 11 M. Ahmad, Y. Xue, S.K. Lee, J.L. Martindale, W. Shen, W. Li, S. Zou, M. Ciaramella, H. Debat, M. Nadal, F. Leng, H. Zhang, Q. Wang, G. Ee-Lu Siaw, H. Niu, Y. Pommier, M. Gorospe, T.-S. Hsieh, Y. C. Tse-Dinh, D. Xu, and W. Wang, RNA topoisomerase is prevalent in all domains of life and associates with polyribosomes in animals, Nucleic Acids Res. 44 (2016) 6335–6349.

E30 - 12 P. Nguyen Le Minh, M. Nadal, D. Charlier, The trigger enzyme PepA (aminopeptidase A) of Escherichia

coli, a transcriptional repressor that generates positive supercoiling, FEBS Lett. 590 (2016) 1816-1825.
E30 - 13 S. Larmony, F. Garnier, A. Hoste, M. Nadal, A specific proteomic response of Sulfolobus solfataricus P2 to gamma radiations, Biochimie. 118 (2015) 270–277.
E30 - 14 M. Couturier, A.H. Bizard, F. Garnier, M. Nadal, Insight into the cellular involvement of the two reverse gyrases from the hyperthermophilic archaeon Sulfolobus solfataricus, BMC Mol Biol. 15 (2014) 18.
E30 - 15 E. Peeters, L. van Oeffelen, M. Nadal, P. Forterre, D. Charlier, A thermodynamic model of the cooperative interaction between the archaeal transcription factor Ss-LrpB and its tripartite operator DNA, Gene. 524 (2013) 330–340.
E30 - 16 A. Valenti, M. De Felice, G. Perugino, A. Bizard, M. Nadal, M. Rossi, et al., Synergic and Opposing Activities of Thermophilic RecQ-like Helicase and Topoisomerase 3 Proteins in Holliday Junction Processing and Replication Fork Stabilization, J Biol Chem. 287 (2012) 30282–30295.

Other publications

E24 - 28 Flexibility in Transcription Start-Site Selection by RNA Polymerase Involves Transcription-Bubble Expansion ("Scrunching") or Contraction ("Unscrunching") Chinnaraj, Mathivanan; **Strick, Terence R.;** Ebright, Richard H. BIOPHYSICAL JOURNAL Volume: 104 Issue: 2 Supplement: 1 Pages: 585A-586A Published: JAN 29 2013 DOI: 10.1016/j.bpj.2012.11.3255
E24 - 29 Pausing in Escherichia coli Transcription Initiation Lerner, E; Chung, S; Allen, B; Shuang, W; Jookyung, LJ; Shijia, LW; Logan, GW; Ingargiola, A; Alhadid, Y; Borukhov, ; **Strick, T**; Taatjes, DJ; Weiss, S BIOPHYSICAL JOURNAL, Volume: 110, Issue: 3, Pages: 231A-231A, Supplement: 1Meeting Abstract: 1146-Pos Published: FEB 16 2016
E24 - 30 Nicking Single DNA Molecules to Study Initiation of Mismatch Repair. **Monnet, J; Quessada-Vial, A**; Hermans, N; **Graves, E**; Winterwerp, HHK; Friedhoff, P; Sixma, TK; Lebbink, JHG; **Strick, TR.** BIOPHYSICAL JOURNAL Volume: 106 Issue: 2 Supplement: 1 Pages: 692A-692A Published: JAN 28 2014

E31 – Reiner VEITIA

Peer reviewed publications

E31-1 Caburet S, Fruchter RB, Legois B, Fellous M, Shalev S, Veitia RA. A homozygous mutation of *GNRHR* in a familial case diagnosed with polycystic ovary syndrome. ***Eur J Endocrinol.*** 2017 May;176(5):K9-K14.
E31-2 Laissue P, Lakhal B, Vatin M, Batista F, Burgio G, Mercier E, Santos ED, Buffat C, Sierra-Diaz DC, Renault G, Montagutelli X, Salmon J, Monget P, Veitia RA, Méhats C, Fellous M, Gris JC, Cocquet J, Vaiman D. Association of FOXD1 variants with adverse pregnancy outcomes in mice and humans. ***Open Biol.*** 2016 Oct;6(10). pii: 160109.
E31-3 Bouilly J, Beau I, Barraud S, Bernard V, Azibi K, Fagart J, Fèvre A, Todeschini AL, Veitia RA, Beldjord C, Delemer B, Dodé C, Young J, Binart N. Identification of Multiple Gene Mutations Accounts for a new Genetic Architecture of Primary Ovarian Insufficiency. ***J Clin Endocrinol Metab.*** 2016 Dec;101(12):4541-4550.
E31-4 Baetens D, Stoop H, Peelman F, Todeschini AL, Rosseel T, Coppieters F, Veitia RA, Looijenga LH, De Baere E, Cools M. NR5A1 is a novel disease gene for 46,XX testicular and ovotesticular disorders of sex development. ***Genet Med.*** 2016 Aug 4. doi: 10.1038/gim.2016.118.
E31-5 Bottani S, Veitia RA. Hill function-based models of transcriptional switches: impact of specific, nonspecific, functional and nonfunctional binding. ***Biol Rev Camb Philos Soc.*** 2016 Apr 8. doi: 10.1111/brv.12262.
E31-6 Fauchereau F, Shalev S, Chervinsky E, Beck-Fruchter R, Legois B, Fellous M, Caburet S, Veitia RA. A non-sense MCM9 mutation in a familial case of primary ovarian insufficiency. ***Clin Genet.*** 2016 May;89(5):603-7.
E31-7 Auguste A, Bessière L, Todeschini AL, Caburet S, Sarnacki S, Prat J, D'angelo E, De La Grange P, Ariste O, Lemoine F, Legois B, Sultan C, Zider A, Galmiche L, Kalfa N, Veitia RA. Molecular analyses of juvenile granulosa cell tumors bearing AKT1 mutations provide insights into tumor biology and therapeutic leads. ***Hum Mol Genet.*** 2015 Dec 1;24(23):6687-98.
E31-8 Coppieters F, Todeschini AL, Fujimaki T, Baert A, De Bruyne M, Van Cauwenbergh C, Verdin H, Bauwens M, Ongenaert M, Kondo M, Meire F, Murakami A, Veitia RA, Leroy BP, De Baere E. Hidden Genetic Variation in LCA9-Associated Congenital Blindness Explained by 5'UTR Mutations and Copy-Number Variations of NMNAT1. ***Hum Mutat.*** 2015 Dec;36(12):1188-96.

E31-9 Veitia RA, Birchler JA. Models of buffering of dosage imbalances in protein complexes. ***Biol Direct.*** 2015 Aug 15;10:42. doi: 10.1186/s13062-015-0063-8.

E31-10 Bessière L, Todeschini AL, Auguste A, Sarnacki S, Flatters D, Legois B, Sultan C, Kalfa N, Galmiche L, Veitia RA. A Hot-spot of In-frame Duplications Activates the Oncoprotein AKT1 in Juvenile Granulosa Cell Tumors. ***EBioMedicine.*** 2015 Mar 6;2(5):421-31.

E31-11 Petitjean M, Badel A, Veitia RA, Vanet A. Synthetic lethals in HIV: ways to avoid drug resistance : Running title: Preventing HIV resistance. ***Biol Direct.*** 2015 Apr 17;10:17. doi: 10.1186/s13062-015-0044-y.

E31-12 Caburet S, Anttonen M, Todeschini AL, Unkila-Kallio L, Mestivier D, Butzow R, Veitia RA. Combined comparative genomic hybridization and transcriptomic analyses of ovarian granulosa cell tumors point to novel candidate driver genes. ***BMC Cancer.*** 2015 Apr 10;15:251. doi: 10.1186/s12885-015-1283-0.

E31-13 Georges A, L'Hôte D, Todeschini AL, Auguste A, Legois B, Zider A, Veitia RA. The transcription factor FOXL2 mobilizes estrogen signaling to maintain the identity of ovarian granulosa cells. ***Elife***. 2014 Nov 4;3. doi: 10.7554/eLife.04207.

E31-14 Bouilly J, Veitia RA, Binart N. NOBOX is a key FOXL2 partner involved in ovarian folliculogenesis. ***J Mol Cell Biol.*** 2014 Apr;6(2):175-7.

E31-15 Llano E, Gomez-H L, García-Tuñón I, Sánchez-Martín M, Caburet S, Barbero JL, Schimenti JC, Veitia RA, Pendas AM. STAG3 is a strong candidate gene for male infertility. ***Hum Mol Genet.*** 2014 Jul 1;23(13):3421-31.

E31-16 Caburet S, Arboleda VA, Llano E, Overbeek PA, Barbero JL, Oka K, Harrison W, Vaiman D, Ben-Neriah Z, García-Tuñón I, Fellous M, Pendás AM, Veitia RA, Vilain E. Mutant cohesin in premature ovarian failure. ***N Engl J Med.*** 2014 Mar 6;370(10):943-9.

E31-17 Anttonen M, Pihlajoki M, Andersson N, Georges A, L'hôte D, Vattulainen S, Färkkilä A, Unkila-Kallio L, Veitia RA, Heikinheimo M. FOXL2, GATA4, and SMAD3 co-operatively modulate gene expression, cell viability and apoptosis in ovarian granulosa cell tumor cells. ***PLoS One.*** 2014 Jan 9;9(1):e85545.

E31-18 Bost B, Veitia RA. Dominance and interloci interactions in transcriptional activation cascades: models explaining compensatory mutations and inheritance patterns. ***Bioessays***. 2014 Jan;36(1):84-92.

E31-19 Bazin C, Coupaye, R., Middendorp, S. and Vanet, A. 2014. Between compensatory mutations and synthetic lethals: genetic mutations, a new challenge for tomorrow's medicine. ***Science Postprint*** doi: DOI:10.14340/spp.2014.10R0002.

E31-20 Petitjean M, Vanet A. 2014a. VIRAPOPS : A forward simulator dedicated to rapidly evolved viral population. ***Bioinformatics*** 30:578-580.

E31-21 Petitjean M, Vanet A. 2014b. VIRAPOPS2 supports the influenza virus reassortments. ***Source Code for Biology and Medicine*** 9:18.

E31-22 Zhang X, Mozeleski B, Lemoine S, Deriaud E, Lim A, Zhivaki D, Azria E, Le Ray C, Roguet G, Launay O, Vanet A, Leclerc C, Lo-Man R. 2014. CD4 T cells with effector memory phenotype and function develop in the sterile environment of the fetus. ***Sci Transl Med*** 6:238ra272.

E31-23 Chelbi ST, Veitia RA, Vaiman D. Why preeclampsia still exists? ***Med Hypotheses.*** 2013 Aug;81(2):259-63.

E31-24 Benayoun BA, Anttonen M, L'Hôte D, Bailly-Bechet M, Andersson N, Heikinheimo M, Veitia RA. Adult ovarian granulosa cell tumor transcriptomics: prevalence of FOXL2 target genes misregulation gives insights into the pathogenic mechanism of the p.Cys134Trp somatic mutation. ***Oncogene***. 2013 May 30;32(22):2739-46.

E31-25 Grynberg M, Pierre A, Rey R, Leclerc A, Arouche N, Hesters L, Catteau-Jonard S, Frydman R, Picard JY, Fanchin R, Veitia R, di Clemente N, Taieb J. Differential regulation of ovarian anti-müllerian hormone (AMH) by estradiol through α- and β-estrogen receptors. ***J Clin Endocrinol Metab***. 2012 Sep;97(9):E1649-57.

E31-26 L'Hôte D, Georges A, Todeschini AL, Kim JH, Benayoun BA, Bae J, Veitia RA. Discovery of novel protein partners of the transcription factor FOXL2 provides insights into its physiopathological roles. ***Hum Mol Genet.*** 2012 Jul 15;21(14):3264-74.

E31-27 Yusuf D, Butland SL, Swanson MI,…, Benayoun BA, Monteiro LJ, Schwenen HD, Grontved L, Wederell E, Mandrup S, Veitia RA,…, Bradley PH, Wasserman WW. The transcription factor encyclopedia. ***Genome Biol.*** 2012;13(3):R24.

E31-28 Caburet S, Zavadakova P, Ben-Neriah Z, Bouhali K, Dipietromaria A, Charon C, Besse C, Laissue P, Chalifa-Caspi V, Christin-Maitre S, Vaiman D, Levi G, Veitia RA, Fellous M. Genome-wide linkage in a highly consanguineous pedigree reveals two novel loci on chromosome 7 for non-syndromic familial Premature Ovarian Failure. ***PLoS One.*** 2012;7(3):e33412.

E31-29 Fillatre J, Delacour D, Van Hove L, Bagarre T, Houssin N, Soulika M, Veitia RA, Moreau J. Dynamics of the subcellular localization of RalBP1/RLIP through the cell cycle: the role of targeting signals and of protein-protein interactions. ***FASEB J.*** 2012 May;26(5):2164-74.

E31-30 Landin Malt A, Georges A, Silber J, Zider A, Flagiello D. Interaction with the Yes-associated protein (YAP) allows TEAD1 to positively regulate NAIP expression. ***FEBS Lett.*** 2013 Oct 1;587(19):3216-23.
E31-31 Cagliero J, Forget A, Daldello E, Silber J, Zider A. The Hippo kinase promotes Scalloped cytoplasmic localization independently of Warts in a CRM1/Exportin1-dependent manner in Drosophila. ***FASEB J.*** 2013 Apr;27(4):1330-41.
E31-32 Landin Malt A, Cagliero J, Legent K, Silber J, Zider A, Flagiello D. Alteration of TEAD1 expression levels confers apoptotic resistance through the transcriptional up-regulation of Livin. ***PLoS One.*** 2012;7(9):e45498.
E31-33 Servant G, Pinson B, Tchalikian-Cosson A, Coulpier F, Lemoine S, Pennetier C, Bridier-Nahmias A, Todeschini AL, Fayol H, Daignan-Fornier B, Lesage P. "Tye7 regulates yeast Ty1 retrotransposon sense and antisense transcription in response to adenylic nucleotides stress." ***Nucleic Acids Res*** 2012. Jul;40(12):5271-82.
E31-34 Pöyhönen M, de Vanssay A, Delmarre V, Hermant C, Todeschini AL, Teysset L, Ronsseray S. "Homology-dependent silencing by an exogenous sequence in the Drosophila germline." ***G3-Genes Genomes Genetics*** 2012. Mar;2(3):331-8.
E31-35 Basquin D, Spierer A, Begeot F, Koryakov DE, Todeschini AL, Ronsseray S, Vieira C, Spierer P, Delattre M. "The Drosophila Su(var)3-7 gene is required for oogenesis and female fertility, genetically interacts with piwi and aubergine, but impacts only weakly transposon silencing." ***PLoS One*** 2014. May 12;9(5):e96802.
E31-36 Tang Z, Luo OJ, Li X, Zheng M, Zhu JJ, Szalaj P, Trzaskoma P, Magalska A, Wlodarczyk J, Ruszczycki B, Michalski P, Piecuch E, Wang P, Wang D, Tian SZ, Penrad-Mobayed M, Sachs LM, Ruan X, Wei CL, Liu ET, Wilczynski GM, Plewczynski D, Li G, Ruan Y. CTCF-Mediated Human 3D Genome Architecture Reveals Chromatin Topology for Transcription. ***Cell.*** 2015 Dec 17;163(7):1611-27.
E31-37 Penrad-Mobayed M, Perrin C, Lepesant JA. Precocious detection on amphibian oocyte lampbrush chromosomes of subtle changes in the cellular localisation of the Ro52 protein induced by in vitro culture. ***Chromosome Res.*** 2012 Dec;20(8):1033-44.
E31-38 M. Penrad-Mobayed, C. Perrin, D. L'Hôte, V. Contremoulins, B. Boizet-Bonhoure, F. Poulat, X. Baudin, R. A. Veitia. A role for SOX9 in RNA processing: insights from the amphibian oocyte. Under review in ***Scientific Reports***
E31-39 M. Penrad-Mobayed, C. Guillaume, A. Fuger, L.Auvray, O. Faklaris, F. Montel. Nuclear pore complex plasticity during developmental process as revealed by super resolution microscopy. In preparation
E31-40 A.Elewa, C. Talavera-López, H. Wang, … M. Penrad-Mobayed (5/15) and András Simon. The genome of the salamander *Pleurodeles waltl.* Submitted to ***Science***.

Peer reviewed reviews

E31-41 Veitia RA, Govindaraju DR, Bottani S, Birchler JA. Aging: Somatic Mutations, Epigenetic Drift and Gene Dosage Imbalance. ***Trends Cell Biol.*** 2016 Dec 8. pii: S0962-8924(16)30204-5. doi: 10.1016/j.tcb.2016.11.006.
E31-42 Veitia RA. A Fresh Look at 'Aging' Proteins. ***Trends Biochem Sci.*** 2017 Feb;42(2):86-89.
E31-43 Elzaiat M, Todeschini AL, Caburet S, Veitia RA. The genetic make-up of ovarian development and function: the focus on the transcription factor FOXL2. ***Clin Genet.*** 2017 Feb;91(2):173-182.
E31-44 Birchler JA, Johnson AF, Veitia RA. Kinetics genetics: Incorporating the concept of genomic balance into an understanding of quantitative traits. ***Plant Sci.*** 2016 Apr;245:128-34.
E31-45 Veitia RA. Clinical Genetics in the age of Genomics and Genome editing. ***Clin Genet.*** 2016 Jan;89(1):3-4.
E31-46 Landin-Malt A, Benhaddou A, Zider A, Flagiello D. An evolutionary, structural and functional overview of the mammalian TEAD1 and TEAD2 transcription factors. ***Gene.*** 2016 Oct 10;591(1):292-303.
E31-47 Simon E, Faucheux C, Zider A, Thézé N, Thiébaud P. From vestigial to vestigial-like: the Drosophila gene that has taken wing. ***Dev Genes Evol.*** 2016 Jul;226(4):297-315.
E31-48 Veitia RA, Potier MC. Gene dosage imbalances: action, reaction, and models. ***Trends Biochem Sci.*** 2015 Jun;40(6):309-17.
E31-49 Veitia RA, Veyrunes F, Bottani S, Birchler JA. X chromosome inactivation and active X upregulation in therian mammals: facts, questions, and hypotheses. ***J Mol Cell Biol.*** 2015 Feb;7(1):2-11.
E31-50 Caburet S, Vilain E. STAG3 in premature ovarian failure. ***Med Sci (Paris).*** 2015 Feb;31(2):129-31.
E31-51 Todeschini AL, Georges A, Veitia RA. Transcription factors: specific DNA binding and specific gene regulation. ***Trends Genet.*** 2014 Jun;30(6):211-9.
E31-52 Birchler JA, Veitia RA. The Gene Balance Hypothesis: dosage effects in plants. ***Methods Mol Biol.*** 2014;1112:25-32.
E31-53 Veitia RA. Of adrenaline and SRY in males (comment on DOI 10.1002/bies.201100159). ***Bioessays***. 2014 May;36(5):438.

E31-54 Georges A, Auguste A, Bessière L, Vanet A, Todeschini AL, Veitia RA. FOXL2: a central transcription factor of the ovary. ***J Mol Endocrinol.*** 2013 Dec 19;52(1):R17-33.
E31-55 Gibson TJ, Seiler M, Veitia RA. The transience of transient overexpression. ***Nature Methods.*** 2013 Aug;10(8):715-21.
E31-56 Veitia RA, Bottani S, Birchler JA. Gene dosage effects: nonlinearities, genetic interactions, and dosage compensation. ***Trends Genet.*** 2013 Jul;29(7):385-93.
E31-57 Birchler JA, Veitia RA. Gene balance hypothesis: connecting issues of dosage sensitivity across biological disciplines. ***Proc Natl Acad Sci U S A***. 2012 Sep 11;109(37):14746-53.

E32 – Michel VERVOORT

Peer reviewed publications

E32-1 Gazave E., Lemaître Q., and Balavoine G. (2017). The Notch pathway in the annelid *Platynereis*: Insights into chaetogenesis and neurogenesis processes. *Open Biology* **7**: 160242.
E32-2 Fierro-Constain L., Schenkelaars Q., Gazave E., Haguenauer A., Rocher, C., Ereskovsky E., Borchiellini C., and Renard E. (2017). The Conservation of the Germline Multipotency Program, from Sponges to Vertebrates: A Stepping Stone to Understanding the Somatic and Germline Origins". *Genome Biology and Evolution* **9**: 474-488.
E32-3 Fortunato S.A.[#], Vervoort M.[#], Adamski M., and Adamska M. (2016) Conservation and divergence of bHLH genes in the calcisponge *Sycon ciliatum*. *Evodevo* **7**: 23. # = co-first author.
E32-4 Karaz S., Courgeon M., Lepetit H., Bruno E., Pannone R., Tarallo A., Thouzé F., Kerner P., Vervoort M., Causeret F., Pierani A., and D'Onofrio G. (2016). Neuronal fate specification by the Dbx1 transcription factor is linked to the evolutionary acquisition of a novel functional domain. *Evodevo* **7**: 18.
E32-5 Vervoort M., Meulemeester D., Béhague J., and Kerner P. (2016). Evolution of Prdm Genes in Animals: Insights from Comparative Genomics. *Mol. Biol. Evol.* **33**: 679-696.
E32-6 Starunov V.V., Dray N., Belikova E.V., Kerner P., Vervoort M., and Balavoine G. (2015). A metameric origin for the annelid pygidium? *BMC Evol. Biol.* **15**: 25.
E32-7 Ereskovsky A.V., Borisenko I.E., Lapebie P., Gazave E., Tokina D.B., and Borchiellini C. (2015). *Oscarella lobularis* (Homoscleromorpha, Porifera) Regeneration: Epithelial Morphogenesis and Metaplasia. *PLOS One* **10**: e0134566.
E32-8 Lhuillier-Akakpo M., Frapporti A., Denby Wilkes C., Matelot M., Vervoort M., Sperling L., and Duharcourt S. (2014). Local effect of enhancer of zeste-like reveals cooperation of epigenetic and cis-acting determinants for zygotic genome rearrangements. *PLOS Genet.* **10**: e1004665.
E32-9 Gazave E., Guillou A., and Balavoine G. (2014) History of a prolific family: the *Hes/Hey*-related genes of the annelid *Platynereis*. *Evodevo* **5***:* 29
E32-10 Suga H., Chen Z., de Mendoza A., Sebé-Pedrós A., Brown M.W., Kramer E., Carr M., Kerner P., Vervoort M., Sánchez-Pons N., Torruella G., Derelle R., Manning G., Lang B.F., Russ C., Haas B.J., Roger A.J., Nusbaum C., and Ruiz-Trillo I. (2013). The *Capsaspora* genome reveals a complex unicellular prehistory of animals. *Nat Commun.* **4**:2325.
E32-11 Gazave E.[#], Béhague J.[#], Laplane L., Guillou A., Préau L., Demilly A., Balavoine G., and Vervoort M. (2013). Posterior elongation in the annelid *Platynereis dumerilii* involves stem cells molecularly related to primordial germ cells. *Dev. Biol* **382**, 246-267. # = co-first author.
E32-12 Demilly A., Gazave E., Steinmetz P., Marchand L., and Vervoort M. (2013). Involvement of the Wnt/β-catenin pathway in neurectoderm architecture in *Platynereis dumerilii*. *Nat. Commun.* **4**:1915.

Peer reviewed reviews

E32-13 Pradeu T., Laplane L., Prévot K., Hoquet T., Reynaud V., Fusco G., Minelli A., Orgogozo V., and Vervoort M. (2016). Defining "Development". *Curr Top Dev Biol.* **117**: 171-183.
E32-14 Bellefroid E.J., Leclère L., Saulnier A., Keruzore M., Sirakov M., Vervoort M., and De Clercq S. (2013). Expanding roles for the evolutionarily conserved Dmrt sex transcriptional regulators during embryogenesis. *Cell. Mol. Life Sci.* **70**, 3829-3845.

Other publications

E32-15 Franquinet R., Foucrié J. and Vervoort M. (2013). Atlas d'embryologie descriptive (2013). Editions Dunod.
E32-16 Vervoort M. (2014). Comparison of animal and plant development: a right track to establish a theory of development? In Towards a Theory of Development, ed. A. Minelli and T. Pradeu, Oxford University Press.
E32-17 Renard E., Gazave E., Fierro-Constain L., Schenkelaars Q., Ereskovsky A.V., Vacelet J., Borchiellini C. (2013) Porifera (sponges): recent knowledge and new perspectives. Encyclopedia of Life Science.

PF – ImagoSeine

Peer reviewed publications

PTF-1 Walch L, Lakisic G, Leng W, Gautreau A, Contremoulins V, Verbavatz JM#, Jackson CL#.GBF1 interaction with Miro regulates dynein-dependent mitochondrial morphology and positioning within cells, submitted. #co-corresponding authors

PTF-2 Selles J, Penrad-Mobayed M, Guillaume C, Fuger A, Auvray L, Faklaris O#, Montel F #. Nuclear Pore Complex Plasticity induced by Transcription Activity and Oocyte Development Revealed by Super-Resolution Microscopy, submitted. #co-corresponding authors

PTF-3 Uriot K, Blanc O, Auduge N, Faklaris O, Chaverot N, Bloch-Gallego E, Coppey-Moissan M, Girard P. Role of netrin subdomains in supramolecular organization and mobility of its receptor DCC, submitted

PTF-4 Lagache T, Grassart A, Dallongeville S, Faklaris O, Sauvonnet N, Dufour A, Danglot L, Olivo-Marin JC. Mapping molecular assemblies with fluorescence microscopy and object-based spatial statistics. Submitted

PTF-5 Botte A, Franck A, Lainé J, Fontaine G, Corlier F, Albac C, Goh P, Faklaris O, Rebillat A.S, Nizetic D, Potier M.C. Early endosome clustering in Down syndrome revealed by ultrastructural and super-resolution microscopies, submitted

PTF-6 Ribeiro J, Dupaigne P, Duquenne C, Veaute X, Petrillo C, Busso D, Faklaris O, Guerois R, Martini E, Livera G. MEIOB and SPATA22 form a complex that interacts with RPA and regulate meiotic recombination, submitted

PTF-7 Guérin F, Arnaiz O, Boggetto N, Denby Wilkes C, Meyer E, Sperling L, Duharcourt S. Flow cytometry sorting of nuclei enables the first global characterization of Paramecium germline DNA and transposable elements. **BMC Genomics. 2017** 18(1):327. doi: 10.1186/s12864-017-3713-7.

PTF-8 Müller A, Neukam M, Ivanova A, Sönmez A, Münster C, Kretschmar S, Kalaidzidis Y, Kurth T, Verbavatz JM, Solimena M. A Global Approach for Quantitative Super Resolution and Electron Microscopy on Cryo and Epoxy Sections Using Self-labeling Protein Tags. **Sci Rep. 2017** 7(1):23.

PTF-9 Sarangi BR, Gupta M, Doss BL, Tissot N, Lam F, Mège RM, Borghi N, Ladoux B. Coordination between Intra- and Extracellular Forces Regulates Focal Adhesion Dynamics, **Nano Letters 2017** 17 399-406.

PTF-10 Tissot N, Lepesant JA, Bernard F, Legent K, Bosveld F, Martin C, Faklaris O, Bellaïche Y, Coppey M, Guichet A. Distinct molecular cues ensure a robust microtubule-dependent nuclear positioning in the Drosophila oocyte. **Nat Commun. 2017** 8:15168. doi: 10.1038/ncomms15168.

PTF-11 Mazuel F, Espinosa A, Luciani N, Reffay M, Le Borgne R, Motte L, Desboeufs K, Michel A, Pellegrino T, Lalatonne Y, Wilhelm C. Massive Intracellular Biodegradation of Iron Oxide Nanoparticles Evidenced Magnetically at Single-Endosome and Tissue Levels. **ACS Nano. 2016** 10(8):7627-38. doi: 10.1021/acsnano.6b02876.

PTF-12 Zeller P, Méjean A, Biegala I, Contremoulins V, Ploux O. Fluorescence in situ hybridization of Microcystis strains producing microcystin using specific mRNA probes. **Lett Appl Microbiol. 2016** 63(5):376-383. doi: 10.1111/lam.12634.

PTF-13 Barber M, Arai Y, Morishita Y, Vigier L, Causeret F, Borello U, Ledonne F, Coppola E, Contremoulins V, Pfrieger FW, Tissir F, Govindan S, Jabaudon D, Proux-Gillardeaux V, Galli T, Pierani A. Migration Speed of Cajal-Retzius Cells Modulated by Vesicular Trafficking Controls the Size of Higher-Order Cortical Areas. **Curr Biol. 2015** 25(19):2466-78. doi: 10.1016/j.cub.2015.08.028.

PTF-14 Défachelles L, Raich N, Terracol R, Baudin X, Williams B, Goldberg M, Karess RE. RZZ and Mad1 dynamics in Drosophila mitosis. **Chromosome Res. 2015** 23(2):333-42. doi: 10.1007/s10577-015-9472-x.

PTF-15 George I, Naudin G, Boland S, Mornet S, Contremoulins V, Beugnon K, Martinon L, Lambert O, Baeza-Squiban A. Metallic oxide nanoparticle translocation across the human bronchial epithelial barrier. **Nanoscale. 2015** 7(10):4529-44.

PTF-16 Morchoisne-Bolhy S, Geoffroy MC, Bouhlel IB, Alves A, Audugé N, Baudin X, Van Bortle K, Powers MA, Doye V. Intranuclear dynamics of the Nup107-160 complex. **Mol Biol Cell. 2015** 26(12):2343-56. doi: 10.1091/mbc.E15-02-0060.

PTF-17 Mousseau F, Le Borgne R, Seyrek E, Berret JF. Biophysicochemical Interaction of a Clinical Pulmonary Surfactant with Nanoalumina. **Langmuir 2015** 31(26):7346-54. doi: 10.1021/acs.langmuir.5b01639.

PTF-18 Risco-Castillo V, Topçu S, Marinach C, Manzoni G, Bigorgne AE, Briquet S, Baudin X, Lebrun M, Dubremetz JF, Silvie O. Malaria Sporozoites Traverse Host Cells within Transient Vacuoles. **Cell Host Microbe. 2015** 18(5):593-603.

PTF-19 Laouirem S, Le Faouder J, Alexandrov T, Mestivier D, Léger T, Baudin X, Mebarki M, Paradis V, Camadro JM, Bedossa P. Progression from cirrhosis to cancer is associated with early ubiquitin post-translational modifications: identification of new biomarkers of cirrhosis at risk of malignancy. **J Pathol. 2014** 234(4):452-63. doi: 10.1002/path.4398.

PTF-20 Petkovic M, Jemaiel A, Daste A, Specht CG, Izeddin I, Vorkel D, Verbavatz JM, Darzacq X, Triller A, Pfenninger KH, Tareste D, Jackson CL, Galli T.The SNARE Sec22b has a non-fusogenic function in plasma membrane expansion. **Nature Cell Biology 2014** 16:434-44.

PTF-21 Valton AL, Hassan-Zadeh V, Lema I, Boggetto N, Alberti P, Saintomé C, Riou JF, Prioleau MN. G4 motifs affect origin positioning and efficiency in two vertebrate replicators. **EMBO J. 2014** 33(7):732-46. doi: 10.1002/embj.201387506.

PTF-22 Facchinetti P, Dorard E, Contremoulins V, Gaillard MC, Déglon N, Sazdovitch V, Guihenneuc-Jouyaux C, Brouillet E, Duyckaerts C, Allinquant B. SET translocation is associated with increase in caspase cleaved amyloid precursor protein in CA1 of Alzheimer and Down syndrome patients. **Neurobiol Aging. 2014** 35(5):958-68. doi: 10.1016/j.neurobiolaging.2013.08.039.

PTF-23 Sahin U, Ferhi O, Jeanne M, Benhenda S, Berthier C, Jollivet F, Niwa-Kawakita M, Faklaris O, Setterblad N, de Thé H, Lallemand-Breitenbach V. Oxidative stress-induced assembly of PML nuclear bodies controls sumoylation of partner proteins. **J Cell Biol. 2014** 204(6):931-45. doi: 10.1083/jcb.201305148.

PTF-24 Kohiyama M, Contremoulins V, Baudin X. Trashing of single-stranded DNA generated during processing of arrested replication fork in E. coli. **J Mol Biol. 2013** 425(23):4837-44. doi: 10.1016/j.jmb.2013.06.027.

PTF-25 Bouvet S, Golinelli-Cohen MP, Contremoulins V, Jackson CL. Targeting of the Arf-GEF GBF1 to lipid droplets and Golgi membranes. **J Cell Sci. 2013** 126(Pt 20):4794-805. doi: 10.1242/jcs.134254.

PTF-26 Marangon I, Boggetto N, Ménard-Moyon C, Luciani N, Wilhelm C, Bianco A, Gazeau F. Localization and relative quantification of carbon nanotubes in cells with multispectral imaging flow cytometry. **J Vis Exp. 2013** (82):e50566. Doi: 10.3791/50566.

PTF-27 Richard M, Jamet S, Fouquet C, Dubacq C, Boggetto N, Pincet F, Gourier C, Trembleau A. Homotypic and heterotypic adhesion induced by odorant receptors and the β2-adrenergic receptor. **PLoS One. 2013** 8(12):e80100. Doi: 10.1371/journal.pone.0080100.

PTF-28 Silva AK, Kolosnjaj-Tabi J, Bonneau S, Marangon I, Boggetto N, Aubertin K, Clément O, Bureau MF, Luciani N, Gazeau F, Wilhelm C. Magnetic and photoresponsive theranosomes: translating cell-released vesicles into smart nanovectors for cancer therapy. **ACS Nano. 2013** 7(6):4954-66. doi:10.1021/nn400269x.

PTF-29 Vranic S, Boggetto N, Contremoulins V, Mornet S, Reinhardt N, Marano F, Baeza-Squiban A, Boland S. Deciphering the mechanisms of cellular uptake of engineered nanoparticles by accurate evaluation of internalization using imaging flow cytometry. **Part Fibre Toxicol. 2013** 10:2. doi: 10.1186/1743-8977-10-2.

PTF-30 Vranic S, Garcia-Verdugo I, Darnis C, Sallenave JM, Boggetto N, Marano F, Boland S, Baeza-Squiban A. Internalization of SiO_2 nanoparticles by alveolar macrophages and lung epithelial cells and its modulation by the lung surfactant substitute Curosurf. **Environ Sci Pollut Res Int. 2013** 20(5):2761-70. Doi: 10.1007/s11356-012-1436-5.

PTF-31 Danglot L, Freret T, Le Roux N, Narboux Nême N, Burgo A, Hyenne V, Roumier A, Contremoulins V, Dauphin F, Bizot JC, Vodjdani G, Gaspar P, Boulouard M, Poncer JC, Galli T, Simmler MC. Vezatin is essential for dendritic spine morphogenesis and functional synaptic maturation. **J Neurosci. 2012** 32(26):9007-22. doi: 10.1523/JNEUROSCI.3084-11.2012.

PTF-32 Ghislin S, Deshayes F, Middendorp S, Boggetto N, Alcaide-Loridan C. PHF19 and Akt control the switch between proliferative and invasive states in melanoma. **Cell Cycle. 2012** 11(8):1634-45. doi: 10.4161/cc.20095.

PTF-33 Ghislin S, Obino D, Middendorp S, Boggetto N, Alcaide-Loridan C, Deshayes F. LFA-1 and ICAM-1 expression induced during melanoma-endothelial cell co-culture favors the transendothelial migration of melanoma cell lines in vitro. **BMC Cancer. 2012** 12:455.

PTF-34 Hassan-Zadeh V, Chilaka S, Cadoret JC, Ma MK, Boggetto N, West AG, Prioleau MN. USF binding sequences from the HS4 insulator element impose early replication timing on a vertebrate replicator. **PLoS Biol. 2012**10(3):e1001277. doi:10.1371/journal.pbio.1001277.

PTF-35 Lefevre S, Brossas C, Auchère F, Boggetto N, Camadro JM, Santos R. Apn1 AP-endonuclease is essential for the repair of oxidatively damaged DNA bases in yeast frataxin-deficient cells. **Hum Mol Genet. 2012** 21(18):4060-72. doi: 10.1093/hmg/dds230.

PTF-36 Marangon I, Boggetto N, Ménard-Moyon C, Venturelli E, Béoutis ML, Péchoux C, Luciani N, Wilhelm C, Bianco A, Gazeau F. Intercellular carbon nanotube translocation assessed by flow cytometry imaging. **Nano Lett. 2012** 12(9):4830-7. doi: 10.1021/nl302273p.

PTF-37 Monnier V, Iché-Torres M, Rera M, Contremoulins V, Guichard C, Lalevée N, Tricoire H, Perrin L. dJun and Vri/dNFIL3 are major regulators of cardiac aging in Drosophila. **PLoS Genet. 2012** 8(11):e1003081. Doi: 10.1371/journal.pgen.1003081.

PTF-38 Tlili A, Erard M, Faure MC, Baudin X, Piolot T, Dupré-Crochet S, Nüsse O. Stable accumulation of p67phox at the phagosomal membrane and ROS production within the phagosome. **J Leukoc Biol. 2012** 91(1):83-95. doi:10.1189/jlb.1210701.

Peer reviewed reviews

PTF-39 Jackson CL, Walch L, Verbavatz JM. Lipids and Their Trafficking: An Integral Part of Cellular Organization. **Developmental Cell. 2016** 39(2):139-153.

PF – Proteomique

Peer reviewed publications

PTF-40 Richarme G, **Léger T**, Liu C, Mihoub M, Abdallah J, Joly N, Liebart JC, Jurkunas UV, Nadal M, Bouloc P, Dairou J, Lamouri A. Guanine glycation repair by DJ-1/Park7 and its bacterial homologs. Science, 08 jun 2017.

PTF-41 Planchon M, **Léger T**, Spalla O, Huber G, Ferrari R Metabolomic and proteomic investigations of impacts of titanium dioxide nanoparticles on Escherichia coli. PLoS One, 2017, in press Hovsepian J, Defenouillère Q, Albanèse V, Váchová L, **Garcia C**, Palková Z, Léon S. Multilevel regulation of an α-arrestin by glucose depletion controls hexose transporter endocytosis. J Cell Biol. 2017 May 3. pii: jcb.201610094. doi: 10.1083/jcb.201610094. PMID: 28468835.

PTF-42 Gergondey R, **Garcia C**, Marchand CH, Lemaire SD, **Camadro JM**, Auchère F. Modulation of the specific glutathionylation of mitochondrial proteins in the yeast Saccharomyces cerevisiae under basal and stress conditions. Biochem J. 2017 Mar 15;474(7):1175-1193. doi: 10.1042/BCJ20160927. PMID: 28167699.

PTF-43 Boukpessi T, Hoac B, Coyac BR, **Léger T**, **Garcia C**, Wicart P, Whyte MP, Glorieux FH, Linglart A, Chaussain C, McKee MD. Osteopontin and the dento-osseous pathobiology of X-linked hypophosphatemia. Bone. 2017 Feb;95:151-161. doi: 10.1016/j.bone.2016.11.019. PMID: 27884786.

PTF-44 Delaveau T, Davoine D, Jolly A, Vallot A, Rouvière JO, Gerber A, Brochet S, Plessis M, Roquigny R, Merhej J, **Léger T**, **Garcia C**, Lelandais G, Laine E, Palancade B, Devaux F, Garcia M. Tma108, a putative M1 aminopeptidase, is a specific nascent chain-associated protein in Saccharomyces cerevisiae. Nucleic Acids Res. 2016 Oct 14;44(18):8826-8841. PMID: 27580715;

PTF-45 Mathieu C, de la Sierra-Gallay IL, Duval R, Xu X, Cocaign A, **Léger T**, Woffendin G, **Camadro JM**, Etchebest C, Haouz A, Dupret JM, Rodrigues-Lima F. Insights into Brain Glycogen Metabolism: The structure of human brain glycogen phosphorylase. J Biol Chem. 2016 Aug 26;291(35):18072-83. doi: 10.1074/jbc.M116.738898. PMID: 27402852.

PTF-46 Gergondey R, **Garcia C**, Serre V, **Camadro JM**, Auchère F. The adaptive metabolic response involves specific protein glutathionylation during the filamentation process in the pathogen Candida albicans. Biochim Biophys Acta. 2016 Jul;1862(7):1309-23. doi: 10.1016/j.bbadis.2016.04.004. PMID: 27083931.

PTF-47 Lelandais G, Scheiber I, Paz-Yepes J, Lozano JC, Botebol H, Pilátová J, Žárský V, **Léger T**, Blaiseau PL, Bowler C, Bouget FY, **Camadro JM**, Sutak R, Lesuisse E. Ostreococcus tauri is a new model green alga for studying iron metabolism in eukaryotic phytoplankton. BMC Genomics. 2016 May 3;17:319. doi: 10.1186/s12864-016-2666-6. PMID: 27142620

PTF-48 **Léger T**, **Garcia C**, **Camadro JM**. The Metacaspase (Mca1p) Restricts O-glycosylation During Farnesol-induced Apoptosis in Candida albicans. Mol Cell Proteomics. 2016 Jul;15(7):2308-23. doi: 10.1074/mcp.M116.059378. PMID: 27125826

PTF-49 Botebol H, Lesuisse E, Šuták R, Six C, Lozano JC, Schatt P, Vergé V, Kirilovsky A, Morrissey J, **Léger T**, **Camadro JM**, Gueneugues A, Bowler C, Blain S, Bouget FY. Central role for ferritin in the day/night regulation of iron homeostasis in marine phytoplankton. Proc Natl Acad Sci U S A. 2015 Nov 24;112(47):14652-7. doi: 10.1073/pnas.1506074112 PMID: 26553998

PTF-50 **Léger T**, **Garcia C**, **Videlier M**, **Camadro JM**. Label-Free Quantitative Proteomics in Yeast. Methods Mol Biol. 2016;1361:289-307. doi: 10.1007/978-1-4939-3079-1_16. PMID: 26483028.

PTF-51 Clabaut A, Grare C, **Léger T**, Hardouin P, Broux O. Variations of secretome profiles according to conditioned medium preparation: The example of human mesenchymal stem cell-derived adipocytes. Electrophoresis. 2015 Oct;36(20):2587-93. doi: 10.1002/elps.201500086. PMID: 26105977.

PTF-52 Rouillon J, Poupiot J, Zocevic A, Amor F, **Léger T**, **Garcia C**, **Camadro JM**, Wong B, Pinilla R, Cosette J, Coenen-Stass AM, Mcclorey G, Roberts TC, Wood MJ, Servais L, Udd B, Voit T, Richard I, Svinartchouk F. Serum proteomic profiling reveals fragments of MYOM3 as potential biomarkers for monitoring the outcome of therapeutic interventions in muscular dystrophies. Hum Mol Genet. 2015 Sep 1;24(17):4916-32. doi: 10.1093/hmg/ddv214. PMID: 26060189

PTF-53 Tavernier N, Noatynska A, Panbianco C, Martino L, Van Hove L, Schwager F, **Léger T**, Gotta M, Pintard L. Cdk1 phosphorylates SPAT-1/Bora to trigger PLK-1 activation and drive mitotic entry in C. elegans embryos. J Cell Biol. 2015 Mar 16;208(6):661-9. doi: 10.1083/jcb.201408064. PMID: 25753036

PTF-54 Richarme G, Mihoub M, Dairou J, Bui LC, **Léger T**, Lamouri A. Parkinsonism-associated protein DJ-1/Park7 is a major protein deglycase that repairs methylglyoxal- and glyoxal-glycated cysteine, arginine, and lysine residues. J Biol Chem. 2015 Jan 16;290(3):1885-97. doi: 10.1074/jbc.M114.597815. PMID: 25416785

PTF-55 Floch AG, Tareste D, Fuchs PF, Chadrin A, Naciri I, **Léger T**, Schlenstedt G, Palancade B, Doye V. Nuclear pore targeting of the yeast Pom33 nucleoporin depends on karyopherin and lipid binding. J Cell Sci. 2015 Jan 15;128(2):305-16. doi: 10.1242/jcs.158915. PMID: 25413348.

PTF-56 **Léger T**, **Garcia C**, **Ounissi M**, Lelandais G, **Camadro JM**. The metacaspase (Mca1p) has a dual role in farnesol-induced apoptosis in Candida albicans. Mol Cell Proteomics. 2015 Jan;14(1):93-108. doi: 10.1074/mcp.M114.041210. PMID: 25348831

PTF-57 Laouirem S, Le Faouder J, Alexandrov T, Mestivier D, **Léger T**, Baudin X, Mebarki M, Paradis V, **Camadro JM**, Bedossa P. Progression from cirrhosis to cancer is associated with early ubiquitin post-translational modifications: identification of new biomarkers of cirrhosis at risk of malignancy. J Pathol. 2014 Dec;234(4):452-63. doi: 10.1002/path.4398. PMID: 24979321.

PTF-58 Rouillon J, Zocevic A, **Léger T**, **Garcia C**, **Camadro JM**, Udd B, Wong B, Servais L, Voit T, Svinartchouk F. Proteomics profiling of urine reveals specific titin fragments as biomarkers of Duchenne muscular dystrophy. Neuromuscul Disord. 2014 Jul;24(7):563-73. doi: 10.1016/j.nmd.2014.03.012. PMID: 24813925.

PTF-59 Le Faouder J, Laouirem S, Alexandrov T, Ben-Harzallah S, **Léger T**, Albuquerque M, Bedossa P, Paradis V. Tumoral heterogeneity of hepatic cholangiocarcinomas revealed by MALDI imaging mass spectrometry. Proteomics. 2014 Apr;14(7-8):965-72. doi: 10.1002/pmic.201300463. PMID: 24678008.

PTF-60 Rebours V, Le Faouder J, Laouirem S, Mebarki M, Albuquerque M, **Camadro JM**, **Léger T**, Ruszniewski P, Lévy P, Paradis V, Bedossa P, Couvelard A. In situ proteomic analysis by MALDI imaging identifies ubiquitin and thymosin-β4 as markers of malignant intraductal pancreatic mucinous neoplasms. Pancreatology. 2014 Mar-Apr;14(2):117-24. doi: 10.1016/j.pan.2013.12.001. PMID: 24650966.

PTF-61 Bretes H, Rouviere JO, **Léger T**, Oeffinger M, Devaux F, Doye V, Palancade B. Sumoylation of the THO complex regulates the biogenesis of a subset of mRNPs. Nucleic Acids Res. 2014 Apr;42(8):5043-58. doi: 10.1093/nar/gku124. PMID: 24500206

PTF-62 Poté N, Alexandrov T, Le Faouder J, Laouirem S, **Léger T**, Mebarki M, Belghiti J, **Camadro JM**, Bedossa P, Paradis V. Imaging mass spectrometry reveals modified forms of histone H4 as new biomarkers of microvascular invasion in hepatocellular carcinomas. Hepatology. 2013 Sep;58(3):983-94. doi: 10.1002/hep.26433. PMID: 23553687.

PTF-63 Philippe M, **Léger T**, Desvaux R, Walch L. Discs large 1 (Dlg1) scaffolding protein participates with clathrin and adaptator protein complex 1 (AP-1) in forming Weibel-Palade bodies of endothelial cells. J Biol Chem. 2013 May 3;288(18):13046-56. doi: 10.1074/jbc.M112.441261. PMID: 23033141

PTF-64 Sutak R, Botebol H, Blaiseau PL, **Léger T**, Bouget FY, **Camadro JM**, Lesuisse E. A comparative study of iron uptake mechanisms in marine microalgae: iron binding at the cell surface is a critical step. Plant Physiol. 2012 Dec;160(4):2271-84. doi: 10.1104/pp.112.204156. PMID: 23033141

PTF-65 Rangé H, **Léger T**, Huchon C, Ciangura C, Diallo D, Poitou C, Meilhac O, Bouchard P, Chaussain C. Salivary proteome modifications associated with periodontitis in obese patients. J Clin Periodontol. 2012 Sep;39(9):799-806. doi: 10.1111/j.1600-051X.2012.01913.x. PMID: 22780105.

PTF-66 Akchiche N, Bossenmeyer-Pourié C, Kerek R, Martin N, Pourié G, Koziel V, Helle D, Alberto JM, Ortiou S, **Camadro JM**, **Léger T**, Guéant JL, Daval JL. Homocysteinylation of neuronal proteins contributes to folate deficiency-associated alterations of differentiation, vesicular transport, and plasticity in hippocampal neuronal cells. FASEB J. 2012 Oct;26(10):3980-92. doi: 10.1096/fj.12-205757. PMID: 22713523.

PTF-67 Meinzer U, Barreau F, Esmiol-Welterlin S, Jung C, Villard C, **Léger T**, Ben-Mkaddem S, Berrebi D, Dussaillant M, Alnabhani Z, Roy M, Bonacorsi S, Wolf-Watz H, Perroy J, Ollendorff V, Hugot JP. Yersinia pseudotuberculosis effector YopJ subverts the Nod2/RICK/TAK1 pathway and activates caspase-1 to induce intestinal barrier dysfunction. Cell Host Microbe. 2012 Apr 19;11(4):337-51. doi: 10.1016/j.chom.2012.02.009. PMID: 22520462.

Other publications

OTH-1 Massive release of extracellular vesicles from cancer cells after photodynamic treatment or chemotherapy. Aubertin K, Silva AK, Luciani N, Espinosa A, **Djemat A**, Charue D, Gallet F, Blanc-Brude O, Wilhelm C. Sci Rep. 2016 Oct 18;6:35376.DOI: 10.1038/srep35376.

OTH-2 Endophilin-A2 functions in membrane scission in clathrin-independent endocytosis. Renard HF, Simunovic M, Lemière J, Boucrot E, Garcia-Castillo MD, Arumugam S, Chambon V, Lamaze C, Wunder C, Kenworthy AK, **Schmidt AA**, McMahon HT, Sykes C, Bassereau P, Johannes L. Nature. 2015 Jan 22;517(7535):493-6. DOI: 10.1038/nature14064. Epub 2014 Dec 17.

OTH-3 Sensitivity of leukemic T-cell lines to arsenic trioxide cytotoxicity is dependent on the induction of phosphatase B220/CD45R expression at the cell surface. Benbijja M, Mellouk A, **Bobé P**. Mol Cancer. 2014 Nov 19;13:251. DOI: 10.1186/1476-4598-13-251.

OTH-4 Ubiquitylation by the Ltn1 E3 ligase protects 60S ribosomes from starvation-induced selective autophagy. **Ossareh-Nazari** B, **Niño CA**, Bengtson MH, Lee JW, Joazeiro CA, **Dargemont C.** J Cell Biol. 2014 Mar 17;204(6):909-17. DOI 10.1083/jcb.201308139. Epub 2014 Mar 10.

OTH-5 Leukocyte Population Dynamics and Detection of IL-9 as a Major Cytokine at the Mouse Fetal-Maternal Interface. **Habbeddine M**, **Verbeke P**, Karaz S, **Bobé P**, **Kanellopoulos-Langevin C**. PLoS One. 2014 Sep 26;9(9):e107267.DOI: 10.1371/journal.pone.0107267. eCollection 2014.

OTH-6 Adaptor Proteins Intersectin 1 and 2 Bind Similar Proline-Rich Ligands but Are Differentially Recognized by SH2 Domain-Containing Proteins. Novokhatska O, Dergai M, Tsyba L, Skrypkina I, Filonenko V, **Moreau J**, Rynditch A. PLoS One. 2013 Jul 25;8(7):e70546. DOI: 10.1371/journal.pone.0070546. Print 2013.

OTH-7 Deciphering the mechanisms of cellular uptake of engineered nanoparticles by accurate evaluation of internalization using imaging flow cytometry. Vranic S, **Boggetto N**, Contremoulins V, Mornet S, Reinhardt N, Marano F, Baeza-Squiban A, Boland S. Part Fibre Toxicol. 2013 Feb 6;10:2. DOI: 10.1186/1743-8977-10-2.

OTH-8 The Bin/Amphiphysin/Rvs (BAR) domain protein Endophilin B2 interacts with Plectin and controls perinuclear cytoskeletal architecture. **Vannier C**, **Pesty A**, **Jouve San-Roman M**, **Schmidt AA**. J Biol Chem. 2013 Aug 6. DOI 10.1074/jbc.M113.485482

OTH-9 Interaction with the Yes-Associated Protein (YAP) allows TEAD1 to positively regulate NAIP expression. **Malt AL**, Georges A, **Silber J**, **Zider A**, **Flagiello D**. FEBS Lett. 2013 Aug 27. pii: S0014-5793(13)00627-3. DOI : 10.1016/j.febslet.2013.08.013.

OTH-10 The insulin receptor is required for the development of the Drosophila peripheral nervous system. **Dutriaux A**, **Godart A**, **Brachet A**, **Silber J**. PLoS One. 2013 Sep 12;8(9):e71857. DOI: 10.1371/journal.pone.0071857.

OTH-11 Clinical significance of autoantibodies to the pericentromeric heterochromatin protein 1a protein. Coppo P, Henry-Dessailly I, Rochette J, Lok C, **Buendia B**, Lassoued K. Eur J Intern Med. 2013 Dec;24(8):868-71. DOI: 10.1016/j.ejim.2013.06.013. Epub 2013 Oct 31.

OTH-12 mRNA Nuclear Export in Yeast. **Niño CA**, **Hérissant L**, **Babour A**, **Dargemont** C. Chem Rev. 2013 Jun 3. [Epub ahead of print] No abstract available. DOI: 10.1021/cr400002g.

OTH-13 Penicillin Kills Chlamydia following the Fusion of Bacteria with Lysosomes and Prevents Genital Inflammatory Lesions in C. muridarum-Infected Mice. **Dumoux M**, Le Gall SM, **Habbeddine M**, **Delarbre C**, Hayward RD, **Kanellopoulos-Langevin C**, **Verbeke P**. PLoSOne. 2013 Dec 23;8(12):e83511 DOI: 10.1371/journal.pone.0083511.

OTH-14 Alteration of TEAD1 Expression Levels Confers Apoptotic Resistance through the Transcriptional Up-Regulation of Livin**. Landin Malt A**, **Cagliero J, Legent K, Silber J, Zider A, Flagiello D**. PLoS One. 2012;7(9):e45498. DOI: 10.1371/journal.pone.0045498. Epub 2012 Sep 24.

OTH-15 Microalbuminuria is more consistent in the presence of cardiovascular risk factors. van der Tol A, Van Biesen W, De Groote G, **Verbeke P**, Vermeiren F, Eeckhaut K, Vanholder R.J Nephrol. 2012 Aug 3:0. DOI : 10.5301/jn.5000194

OTH-16 A role for protein phosphatase PP1 gamma in SMN complex formation and subnuclear localization to Cajal bodies **Renvoisé B**, **Quérol G**, Verrier ER, Burlet P, **Lefebvre S**. JOURNAL OF CELL SCIENCE Volume: 125 Issue: 12 Pages: 2862-2874 DOI: 10.1242/jcs.096255 Published: JUN 15 2012

OTH-17 Critical role for the kinesin KIF3A in the HIV life cycle in primary human macrophages.Gaudin R, Cunha de Alencar B, **Jouve M**, Bèrre S, Le Bouder E, Schindler M, Varthaman A, Gobert FX, Benaroch P. J Cell Biol. 2012 Oct 29;199(3):467-79. doi: 10.1083/jcb.201201144. Epub 2012 Oct 22. DOI : 10.1083/jcb.201201144

OTH-18 Dynamics of the subcellular localization of RalBP1/RLIP through the cell cycle: the role of targeting signals and of protein-protein interactions. **Fillatre J**, Delacour D, **Van Hove L**, Bagarre T, **Houssin N**, Soulika M, Veitia RA, **Moreau J**. FASEB J. 2012 Feb 8. DOI: 10.1096/fj.11-196451

OTH-19 Identification and Characterization of the RLIP/RALBP1 Interacting Protein Xreps1 in Xenopus laevis Early Development. Boissel L, **Fillatre J, Moreau J**. PLoS One. 2012;7(3):e33193. Epub 2012 Mar 8. DOI: 10.1371/journal.pone.0033193

OTH-20 Absence of Galectin-1 accelerates CD8(+) T cell-mediated graft rejection. Moreau A, Noble A, Ratnasothy K, Chai JG, **Deltour L**, Cuturi MC, Simpson E, Lechler R, Lombardi G. EUROPEAN

JOURNAL OF IMMUNOLOGY Volume: 42 Issue: 11 Pages: 2881-2888 DOI: 10.1002/eji.201142325 Published: NOV 2012

OTH-21 Live-cell imaging reveals multiple interactions between Epstein-Barr Nuclear Antigen 1 (EBNA-1) and cellular chromatin during interphase and mitosis. Jourdan N**, Jobart-Malfait A**, Dos Reis G, Quignon F, **Piolot T**, Klein C, **Tramier M, Coppey M**, Marechal V. J Virol. 2012 Feb 15. DOI: 10.1128/JVI.06303-11

OTH-22 Nanog and Oct4 overexpression increases motility and transmigration of melanoma cells. Borrull A, **Ghislin S**, **Deshayes F, Lauriol J, Alcaide-Loridan C**, **Middendorp S**. JOURNAL OF CANCER RESEARCH AND CLINICAL ONCOLOGY Volume: 138 Issue: 7 Pages: 1145-1154

OTH-23 LFA-1 and ICAM-1 expression induced during melanoma-endothelial cell co-culture favors the transendothelial migration of melanoma cell lines in vitro. **Ghislin S**, Obino D, **Middendorp S**, **Boggetto N**, **Alcaide-Loridan C**, **Deshayes F**. BMC Cancer. 2012 Oct 5;12:455. DOI : 10.1186/1471-2407-12-455

OTH-24 Role of Pleiotropy in the Evolution of a Cryptic Developmental Variation in Caenorhabditis elegans. **Duveau Fabien; Felix Marie-Anne,** PLoS biology Volume: 10 Issue: 1 Pages: e1001230 Published: 2012-Jan (Epub 2012 Jan 03) DOI: 10.1371/journal.pbio.1001230

OTH-25 Population dynamics and habitat sharing of natural populations of Caenorhabditis elegans and C. briggsae. **Felix, Marie-Anne; Duveau, Fabien**. BMC BIOLOGY Volume: 10 Article Number: 59 DOI: 10.1186/1741-7007-10-59 Published: JUN 25 2012

OTH-26 Evolution of Susceptibility to Ingested Double-Stranded RNAs in Caenorhabditis Nematodes. **Nuez I, Félix MA**.PLoS One. 2012;7(1):e29811. Epub 2012 Jan 11.

OTH-27 Regulation of gene expression and the transcription factor cycle hypothesis. **Scherrer K**. Biochimie. 2012 Apr;94(4):1057-68. Epub 2012 Jan 8. DOI: 10.1016/j.biochi.2011.12.010

OTH-28 Ubiquitin and assembly of export competent mRNP. **Babour A, Dargemont C**, Stutz F. Biochim Biophys Acta. 2012 Jan 3. DOI: 10.1016/j.bbagrm.2011.12.006

OTH-29 H2B Ubiquitylation Controls the Formation of Export-Competent mRNP. **Vitaliano-Prunier A, Babour A**, Hérissant L, Apponi L, Margaritis T, Holstege FC, Corbett AH, Gwizdek C, **Dargemont C**. Mol Cell. 2012 Jan 13;45(1):132-9.DOI: 10.1016/j.molcel.2011.12.011

OTH-30 Ubiquitylation of the nuclear pore complex controls nuclear migration during mitosis in S. cerevisiae.Hayakawa A, **Babour A**, Sengmanivong L, **Dargemont C.** J Cell Biol. 2012 Jan 9;196(1):19-27. Epub 2012 Jan 2.DOI: 10.1083/jcb.201108124

OTH-31 Mapping ubiquitin modifications reveals new functions for the yeast nuclear pore complex. **Niño CA**, **Hayakawa A**, **Dargemont C, Babour A**. Cell Logist. 2012 Jan 1;2(1):43-45. DOI : 10.4161/cl.19720

Specific, redundant list of publications signed by authors belonging to different IJM teams

E1, E31 - Fauchereau F, Shalev S, Chervinsky E, Beck-Fruchter R, **Legois B**, Fellous M, **Caburet S**, **Veitia RA**. A non-sense MCM9 mutation in a familial case of primary ovarian insufficiency. Clin Genet. 2016 May;89(5):603-7. doi: 10.1111/cge.12736.

E4, E13, PTF - Complementary molecular cues ensure a robust microtubule-dependent nuclear positioning in the *Drosophila* oocyte", Nat. Comm. In press. **Tissot N., Lepesant J-A., Bernard F., Legent K**., Bosveld F., Martin C., **Orestis F**., Bellaïche Y., **Coppey-Moisan M., Guichet A**.

E4, E17 - Coordination between Intra- and Extracellular Forces Regulates Focal Adhesion Dynamics, Nano Letters 17 (2017)399-406. **Sarangi BR, Gupta M**, Doss BL, **Tissot N**, **Lam F, Mège RM, Borghi N, Ladoux B.**

E4, E8, PTF - Intranuclear dynamics of the Nup107-160 complex." Mol Biol Cell. 2015; 26:2343-56. **Morchoisne-Bolhy S**, **Geoffroy MC**, Bouhlel IB, Alves A, **Audugé N**, **Baudin X**, Van Bortle K, Powers MA, **Doye V.**

E4, E13 - Visualizing Microtubule Networks During Drosophila Oogenesis Using Fixed and Live Imaging. Methods Mol Biol. 2015; 1328:99-112**. Legent K, Tissot N, Guichet A**.

E4, E11, AA - Burgo A., Proux-Gillardeaux, V., Sotirakis, E., Bun, P., Casano,A., Verraes, A., Liem, R., Formstecher, E**., Coppey, M. Galli, T**. (2012). A molecular network for the transport of the TI-VAMP/VAMP7 vesicles from cell center to periphery. ***Developmental Cell*****,** 23:166–180.

E5, PTF - Gergondey R, **Garcia C**, Marchand CH, Lemaire SD, **Camadro JM, Auchère F**. Modulation of the specific glutathionylation of mitochondrial proteins in the yeast Saccharomyces cerevisiae under basal and stress conditions. Biochem J. 2017 Mar 15;474(7):1175-1193. doi: 10.1042/BCJ20160927. PMID: 28167699.

E5, PTF - Lelandais G, Scheiber I, Paz-Yepes J, Lozano JC, Botebol H, Pilátová J, Žárský V, **Léger T**, **Blaiseau PL**, Bowler C, Bouget FY, **Camadro JM**, Sutak R, **Lesuisse E**. Ostreococcus tauri is a new model green alga for studying iron metabolism in eukaryotic phytoplankton. BMC Genomics. 2016 May 3;17:319. doi: 10.1186/s12864-016-2666-6. PMID: 27142620

E5, E8, PTF - Tma108, a putative M1 aminopeptidase, is a specific nascent chain-associated protein in Saccharomyces cerevisiae. Delaveau T, Davoine D, Jolly A, Vallot A, Rouvière JO, Gerber A, Brochet S, Plessis M, Roquigny R, Merhej J, **Leger T, Garcia C**, **Lelandais G**, Laine E, **Palancade B**, Devaux F, Garcia M. Nucleic Acids Res. **2016** Oct 14;44(18):8826-8841. Epub **2016** Aug 31. PMID: 27580715

E5, PTF - Léger T, **Garcia C**, **Camadro JM**. The Metacaspase (Mca1p) Restricts O-glycosylation During Farnesol-induced Apoptosis in Candida albicans. Mol Cell Proteomics. 2016 Jul;15(7):2308-23. doi: 10.1074/mcp.M116.059378. PMID: 27125826.

E5, PTF - Léger T, **Garcia C**, **Videlier M**, **Camadro JM**. Label-Free Quantitative Proteomics in Yeast. Methods Mol Biol. 2016;1361:289-307. doi: 10.1007/978-1-4939-3079-1_16. PMID: 26483028.

E5, E28 - Fermentation and alternative respiration compensate for NADH dehydrogenase deficiency in a prokaryotic model of DJ-1-associated Parkinsonism. **Messaoudi N, Gautier V**, Dairou J, Mihoub M, **Lelandais G**, Bouloc P, Landoulsi A, **Richarme G.** Microbiology. **2015** Nov;161(11):2220-31. doi: 10.1099/mic.0.000181. Epub **2015** Sep 15. PMID: 26377309

E5, PTF - Botebol H, **Lesuisse E**, Šuták R, Six C, Lozano JC, Schatt P, Vergé V, Kirilovsky A, Morrissey J, **Léger T**, **Camadro JM**, Gueneugues A, Bowler C, Blain S, Bouget FY. Central role for ferritin in the day/night regulation of iron homeostasis in marine phytoplankton. Proc Natl Acad Sci U S A. 2015 Nov 24;112(47):14652-7. doi: 10.1073/pnas.1506074112 PMID: 26553998

E5, E8 - Yap7 is a transcriptional repressor of nitric oxide oxidase in yeasts, which arose from neofunctionalization after whole genome duplication. Merhej J, Delaveau T, Guitard J, **Palancade B**, Hennequin C, Garcia M, **Lelandais G**, Devaux F. Mol Microbiol. **2015** Jun;96(5):951-72. doi: 10.1111/mmi.12983. Epub **2015** Mar 28. PMID: 25732006

E5, PTF - Léger T, **Garcia C**, **Ounissi M**, Lelandais G, Camadro JM. The metacaspase (Mca1p) has a dual role in farnesol-induced apoptosis in Candida albicans. Mol Cell Proteomics. 2015 Jan;14(1):93-108. doi: 10.1074/mcp.M114.041210. PMID: 25348831.

E5, E28 - Global stress response in a prokaryotic model of DJ-1-associated Parkinsonism. **Messaoudi N, Gautier V**, Kthiri F, **Lelandais G**, Mihoub M, **Joseleau-Petit D, Caldas T**, Bohn C, Tolosa L, Rao G, Tao K, Landoulsi A, Bouloc P, **Richarme G.** J Bacteriol. **2013** Mar;195(6):1167-78. doi: 10.1128/JB.02202-12. Epub **2013** Jan 4. PMID: 23292772.

E5, PTF - Sutak R, Botebol H, **Blaiseau PL**, **Léger T**, Bouget FY**, Camadro JM, Lesuisse E**. A comparative study of iron uptake mechanisms in marine microalgae: iron binding at the cell surface is a critical step. Plant Physiol. 2012 Dec;160(4):2271-84. doi: 10.1104/pp.112.204156. PMID: 23033141

E5, PTF - Apn1 AP-endonuclease is essential for the repair of oxidatively damaged DNA bases in yeast frataxin-deficient cells. **Lefevre S, Brossas C, Auchère F**, **Boggetto N**, **Camadro JM*, Santos R***. (***** co-senior authors) Hum Mol Genet. **2012** Sep 15;21(18):4060-72. doi: 10.1093/hmg/dds230. Epub **2012** Jun 16. PMID: 22706278

E7, E10 - Rhebergen, T., Flor, **Orgogozo, V.**, **Dumont, J.,** Schilthuizen, M. & **Lang, M**. Drosophila pachea asymmetric lobes are part of a grasping device and stabilize one-sided mating. BMC Evolutionary Biology, 16:176 (2016).

E8, E10, E23 - Martino, L., **Morchoisne-Bolhy, S**., Cheerambathur, D.K., **Van Hove, L., Dumont, J., Joly, N.,** Desai, A., **Doye, V**. and **Pintard, L**. *Channel Nucleoporins recruit the Polo-like kinase PLK-1 to the Nuclear Pore Complexes in prophase to direct Nuclear Envelope Breakdown.* In revision **Dev. Cell.**

E8, E19 - Babour A, Shen Q, Dos-Santos J, Murray S, Gay A, Challal D, Fasken M, **Palancade B**, Corbett A, **Libri D**, Mellor J, Dargemont (2016). C. *The Chromatin Remodeler ISW1 Is a Quality Control Factor that Surveys Nuclear mRNP Biogenesis.* **Cell**. 2016 Nov 17;167(5):1201-1214.e15. doi: 10.1016/j.cell.2016.10.048.

E8, E11, E14, PTF - Floch AG, Tareste D, Fuchs PF, **Chadrin A, Naciri I, Léger T**, Schlenstedt G, **Palancade B, Doye V.** *Nuclear pore targeting of the yeast Pom33 nucleoporin depends on karyopherin and lipid binding.* **J Cell Sci.** 128(2):305-16. doi: 10.1242/jcs.158915.

E 8, PTF - Bretes H, Rouviere JO, **Léger T**, Oeffinger M, Devaux F, **Doye V, Palancade B**. Sumoylation of the THO complex regulates the biogenesis of a subset of mRNPs.Nucleic Acids Res. 2014 Apr;42(8):5043-58. doi: 10.1093/nar/gku124. PMID: 24500206

E9, PTF - Guérin F, Arnaiz O, **Boggetto N**, Denby Wilkes C, Meyer E, Sperling L, **Duharcourt S**. Flow cytometry sorting of nuclei enables the first global characterization of Paramecium germline DNA and transposable elements. BMC **Genomics. 2017** 18(1):327. doi: 10.1186/s12864-017-3713-7.

E9, E32 - Lhuillier-Akakpo M, Frapporti A, Denby Wilkes C**, Matelot M, Vervoort M**, Sperling L, **Duharcourt S**. (2014). Local effect of Enhancer of Zeste-like reveals cooperation of epigenetic and cis-acting determinants for zygotic genome rearrangements. ***PLoS Genetics***. 2014 Sep 25;10(9):e1004665.eCollection 2014 Sep.

E10, E23 - Joly, N., Martino, L., Gigant, E., Dumont, J., & **Pintard, L**. Microtubule-severing activity of AAA-ATPase Katanin is essential for female meiotic spindle assembly Development, 143(19):3604-3614 (2016).

E10, E23 - Gomes, J.E., **Tavernier, N**., Richaudeau, B., Formstecher, E., Boulin, T., Mains, P.E., **Dumont, J**. & **Pintard, L**. Microtubule-severing by the Katanin complex is activated by PPFR-1-dependent MEI-1 dephosphorylation. J Cell Biol 202, 431-439 (2013).

E11, E17, E25 - Advedissian T, Proux-Gillardeaux V, **Nkosi R**, **Mège R-M, Ladoux B, Poirier F, Viguier M***, **Deshayes F*** (*senior corresponding authors). Identification of a new modulator of epithelial adherens junctions dynamics : galectin-7. Submitted.

E11, E22, PTF - Barber M, Arai Y, Morishita Y, **Vigier L**, **Causeret F, Borello U, Ledonne F, Coppola E, Contremoulins V**, Pfrieger FW, Tissir F, Govindan S, Jabaudon D, **Proux-Gillardeaux V, Galli T, Pierani A**. (2015). Migration Speed of Cajal-Retzius Cells Modulated by Vesicular Trafficking Controls the Size of Higher-Order Cortical Areas. ***Curr Biol.*** 25:2466-78. doi: 10.1016/j.cub.2015.08.028.

E11, E14, PTF - Petkovic M, Jemaiel A, **Daste F**, Specht CG, Izeddin I, Vorkel D, **Verbavatz JM,** Darzacq X, Triller A, Pfenninger KH, **Tareste D, Jackson CL, Galli T**. The SNARE Sec22b has a non-fusogenic function in plasma membrane expansion. ***Nat Cell Biol***, 16(5):434-444. doi: 10.1038/ncb2937.

E11 ; PTF - Danglot L, Freret T, Le Roux N, Narboux Nême N, **Burgo A**, Hyenne V, Roumier A, **Contremoulins V,** Dauphin F, Bizot JC, Vodjdani G, Gaspar P, Boulouard M, Poncer JC, **Galli T, Simmler MC**. Vezatin is essential for dendritic spine morphogenesis and functional synaptic maturation. **J Neurosci. 2012** 32(26):9007-22. doi: 10.1523/JNEUROSCI.3084-11.2012.

E14, PTF - Walch L, Lakisic G, Leng W, Gautreau A, **Contremoulins V, Verbavatz JM#, Jackson CL**#. GBF1 interaction with Miro regulates dynein-dependent mitochondrial morphology and positioning within cells, submitted. #co-corresponding authors

E14, PTF - Jackson CL, Walch L, Verbavatz JM. Lipids and Their Trafficking: An Integral Part of Cellular Organization. **Developmental Cell. 2016** 39(2):139-153.

E14, PTF - Bouvet S, **Golinelli-Cohen MP**, **Contremoulins V**, **Jackson CL**. Targeting of the Arf-GEF GBF1 to lipid droplets and Golgi membranes. **J Cell Sci. 2013** 126(Pt 20):4794-805. doi: 10.1242/jcs.134254

E16, PTF - Défachelles L, Raich N, Terracol R, Baudin X, Williams B, Goldberg M, **Karess RE**. RZZ and Mad1 dynamics in Drosophila mitosis. **Chromosome Res. 2015** 23(2):333-42. doi: 10.1007/s10577-015-9472-x.

E17, E25 - Magescas J, Sengmanivong L, Viau A, Mayeux A, Dang T, Burtin M, **Poirier F**, Terzi F, **Delacour D**. Spindle pole cohesion requires glycosylation-mediated stabilization of NuMA. *Sci. Reports*, *in press.*

E17, E25 - Coppin L, Ait-Hayat E, Thuillier C, Frénois F, Lahdaoui F, Stechly L, Renaud F, Barbot B, Crème E, Durand E, Froguel P, van Seuningen I, Leteurtre E, Gradjean C, **Poirier F**, Figeac M, **Delacour D**, Porchet N, Pigny P. Galectin-3 interacts with mature mRNAs involved in epithelial morphogenesis. *Sci. Reports. (2017)* 7:43927.

E17, E20, E25 - Salomon J, Gaston C, Magescas J, Duvauchelle B, Campeotto F, Canioni D, Sengmanivong L, **Mayeux A**, Michaux G, **Poirier F, Minc N,** Schmitz J, Brousse N**, Ladoux B**, Goulet O, **Delacour D** Contractile forces at tricellular contacts modulate epithelial organization and monolayer integrity. *Nat Commun.* (2017), 8:13998.

E17, E20, E21 - Bonazzi D, Haupt A, **Tanimoto H, Delacour D**, **Salort D, Minc N**. Actin-based transport adapts polarity domains size to local cellular curvature. *Current Biology (2015),* 25(20), 2677-2683.

E17, E25 - Clare DK, **Magescas J,** Piolot T, Dumoux M, Vesque C, **Pichard E, Dang T**, Duvauchelle B, **Poirier F, Delacour D**. Basal foot MTOC organizes pillar MTs equired for coordination of beating cilia. *Nat Commun. (2014)* 5:4888.

E18, PTF - Hovsepian J, **Defenouillère Q**, **Albanèse V**, Váchová L, **Garcia C**, Palková Z, **Léon S**. Multilevel regulation of an α-arrestin by glucose depletion controls hexose transporter endocytosis. J Cell Biol. 2017 May 3. pii: jcb.201610094. doi: 10.1083/jcb.201610094. PMID: 28468835.

E21, PFT - Laouirem S, **Le Faouder J**, Alexandrov T, **Mestivier D**, **Léger T**, **Baudin X**, Mebarki M, Paradis V, **Camadro JM**, Bedossa P. Progression from cirrhosis to cancer is associated with early ubiquitin post-translational modifications: identification of new biomarkers of cirrhosis at risk of malignancy. **J Pathol. 2014** 234(4):452-63. doi: 10.1002/path.4398.

E22, E27 - Gard C, **Curto GG**, **Frarma Y, Chollet E**, **Duval N**, **Auzié V**, Auradé F, **Vigier L**, Relaix F, **Pierani A, Causeret F, Ribes V.** (2017) Pax3- and Pax7-mediated Dbx1 regulation orchestrates the patterning of intermediate spinal interneurons. *Dev Biol* (2017) *in press*. * Co-corresponding-authors

E22, E32 - Karaz S., Courgeon M. , Lepetit H., Bruno E., Pannone R., Tarallo A., **Thouzé F., Kerner P., Vervoort M**., **Causeret F.*, Pierani A.** and **D'Onofrio G.** Neuronal fate specification by the Dbx1 transcription factor is linked to the evolutionary acquisition of a novel functional domain. *Evodevo* (2016) Aug 12; doi: 10.1186/s13227-016-0055-5. eCollection 2016. * Co-corresponding-authors.

E23, E28, E30, PTF - Richarme G, **Léger T,** Liu C, **Mihoub M**, **Abdallah J**, **Joly N**, Liebart JC, Jurkunas UV, **Nadal M**, Bouloc P, Dairou J, Lamouri A. Guanine glycation repair by DJ-1/Park7 and its bacterial homologs. Science, 08 jun 2017.

E23, PTF - Tavernier N, Noatynska A, Panbianco C, **Martino L, Van Hove L**, Schwager F, **Léger T**, Gotta M, **Pintard L**. Cdk1 phosphorylates SPAT-1/Bora to trigger PLK-1 activation and drive mitotic entry in C. elegans embryos.J Cell Biol. 2015 Mar 16;208(6):661-9. doi: 10.1083/jcb.201408064. PMID: 25753036.

E25, E28 - Advedissian T, Deshayes F, Poirier F, Viguier M, Richarme G. The Parkinsonism-associated protein DJ-1/Park7 prevents glycation damage in human keratinocyte. Biochem Biophys Res Commun. 2016 Apr 22;473(1):87-91.

E26, PTF - Valton AL, **Hassan-Zadeh V**, **Lema I**, **Boggetto N**, Alberti P, Saintomé C, Riou JF, **Prioleau MN**. G4 motifs affect origin positioning and efficiency in two vertebrate replicators. **EMBO J. 2014** 33(7):732-46. doi: 10.1002/embj.201387506.

E26, PTF - Hassan-Zadeh V, Chilaka S, Cadoret JC, Ma MK, **Boggetto N**, West AG, **Prioleau MN**. USF binding sequences from the HS4 insulator element impose early replication timing on a vertebrate replicator. **PLoS Biol**. 2012 Mar;10(3):e1001277.

E28, PTF - Richarme G, Mihoub M, Dairou J, Bui LC, **Léger T**, Lamouri A. Parkinsonism-associated protein DJ-1/Park7 is a major protein deglycase that repairs methylglyoxal- and glyoxal-glycated cysteine, arginine, and lysine residues. J Biol Chem. 2015 Jan 16;290(3):1885-97. doi: 10.1074/jbc.M114.597815. PMID: 25416785

Other, PTF - LFA-1 and ICAM-1 expression induced during melanoma-endothelial cell co-culture favors the transendothelial migration of melanoma cell lines in vitro. **Ghislin S**, Obino D, **Middendorp S**, **Boggetto N**, **Alcaide-Loridan C**, **Deshayes F**. BMC Cancer. 2012 Oct 5;12:455. DOI : 10.1186/1471-2407-12-455

Other, PTF - LFA-1 and ICAM-1 expression induced during melanoma-endothelial cell co-culture favors the transendothelial migration of melanoma cell lines in vitro. **Ghislin S**, Obino D, **Middendorp S**, **Boggetto N**, **Alcaide-Loridan C**, **Deshayes F**. BMC Cancer. 2012 Oct 5;12:455. DOI : 10.1186/1471-2407-12-455