



PUBLICATIONS

DEPARTMENT SIGNALING THROUGH CHROMATIN

> Team ARNOULT / RAY (Genetic, Epigenetic and Therapies of infertility)

SPINK2 deficiency causes infertility by inducing sperm defects in heterozygotes and azoospermia in homozygotes. Kherraf ZE, Christou-Kent M, Karaouzene T, Amiri-Yekta A, Martinez G, Var-gas AS, Lambert E, Borel C, Dorphin B, Aknin-Seifer I, Mitchell MJ, Metzler-Guillemain C, Escoffier J, Nef S, Grepillat M, Thierry-Mieg N, Satre V, Bailly M, Boitrelle F, Pernet-Gallay K, Hennebicq S, Fauré J, Bottari SP, Coutton C, Ray P, Arnoult C. [EMBO Mol Med](#). 2017 Aug;9(8):1132-1149. doi: 10.15252/emmm.201607461.

Spermaurin, an La1-like peptide from the venom of the scorpion *Scorpio maurus palmatus*, improves sperm motility and fertilization in different mammalian species. Martinez G, Hograindleur JP, Voisin S, Abi Nahed R, Abd El Aziz TM, Escoffier J, Bessonnat J, Fovet CM, De Waard M, Hennebicq S, Aucagne V, Ray PF, Schmitt E, Bulet P, Arnoult C. [Mol Hum Reprod](#). 2016 Dec 8. doi: 10.1093/molehr/gaw075.

Whole-exome sequencing of familial cases of multiple morphological abnormalities of the sperm flagella (MMAF) reveals new DNAH1 mutations. Amiri-Yekta A, Coutton C, Kherraf ZE, Karaouzene T, Le Tanno P, Sanati MH, Sabbaghian M, Almadani N, Sadighi Gilani MA, Hosseini SH, Bahrami S, Daneshpour A, Bini M, Arnoult C, Colombo R, Gourabi H, Ray PF. [Hum Reprod](#). 2016 Oct 26.

Single gene defects leading to sperm quantitative anomalies. Mitchell MJ, Metzler-Guillemain C, Toure A, Coutton C, Arnoult C, Ray PF. [Clin Genet](#). 2016 Oct 25. doi: 10.1111/cge.12900.

Genetic abnormalities leading to qualitative defects of sperm morphology or function. Ray PF, Toure A, Metzler-Guillemain, Mitchell MJ, Arnoult C, Coutton C. [Clin Genet](#). 2016 Oct 25. doi: 10.1111/cge.12905.

> Team CALLANAN (Genetics and Epigenetics of lymphoid cancers)

Haploinsufficiency for NR3C1, the gene encoding the glucocorticoid receptor, in blastic plasmacytoid dendritic cell neoplasms. Emadali A, Hoghoughi N, Duley S, Hajmirza A, Verhoeyen E, Cosset FL, Bertrand P, Roumier C, Roggy A, Suchaud-Martin C, Chauvet M, Bertrand S, Hamaidia S, Rousseaux S, Jossierand V, Charles J, Templier I, Maeda T, Bruder-Costa J, Chaperot L, Plumas J, Jacob MC, Bonnefoix T, Park S, Gressin R, Tensen CP, Mecucci C, Macintyre E, Leroux D, Brambilla E, Nguyen-Khac F, Luquet I, Penther D, Bastard C, Jardin F, Lefebvre C, Garnache F, Callanan M. [Blood](#). 2016 Jun 16;127(24):3040-53. doi: 10.1182/blood-2015-09-671040. Epub 2016 Apr 8.

> Team BEDNAR (Chromatin and Epigenetics)

β1 integrin dependent Rac/group I PAK signaling mediates YAP activation of Yes associated protein 1 (YAP1) via NF2/merlin. Sabra H, Brunner M, Mandati V, Wehrle Haller B, Lallemand D, Ribba AS, Chevalier G, Guardiola P, Block MR, Bouvard D. [J Biol Chem](#). 2017 Sep 29. pii: jbc.M117.808063. doi: 10.1074/jbc.M117.808063. [Epub ahead of print]

Structure and Dynamics of a 197 bp Nucleosome in Complex with Linker Histone H1 Jan Bednar, Isabel Garcia-Saez, Ramachandran Boopathi, Amber R. Cutter, Gabor Papai, Anna Reymer, Sajad H. Syed, Imtiaz Nisar Lone, Ognyan Tonchev, Corinne Crucifix, Hervé Menoni, Christophe Papin, Dimitrios A. Skoufias, Hitoshi Kurumizaka, Richard Lavery, Ali Hamiche, Jeffrey J. Hayes, Patrick Schultz, Dimitar Angelov, Carlo Petosa, Stefan Dimitrov. [Molecular Cell](#). Published: May 4, 2017. vol 66. issue.

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> Team KHOCHBIN (Epigenetics and Cell signalling)

Induction of autophagy and autophagy-dependent apoptosis in diffuse large B-cell lymphoma by a new antimalarial artemisinin derivative, SM1044. Cheng C, Wang T, Song Z, Peng L, Gao M, Hermine O, Rousseaux S, Khochbin S, Mi JQ, Wang J. [Cancer Med](#). 2017 Dec 26. doi: 10.1002/cam4.1276. [Epub ahead of print]

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Muscle hypertrophy in hypoxia with inflammation is controlled by bromodomain and extra-terminal domain proteins. Chabert C, Khochbin S, Rousseaux S, Furze R3 Smithers N, Prinjha R, Schlattner U, Pison C, Dubouchaud H. [Sci Rep](#). 2017 Sep 21;7(1):12133. doi: 10.1038/s41598-017-12112-0.

The Role of Bromodomain Testis-Specific Factor, BRDT, in Cancer: A Biomarker and A Possible Therapeutic Target. Bourova-Flin E, Chuffart F, Rousseaux S, Khochbin S. [Cell J](#). 2017 Spring;19(Suppl 1):1-8. doi: 10.22074/cellj.2017.5060. Epub 2017 May 17. PMID: 28580303

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> **Teams KHOCHBIN (Epigenetics and Cell signalling) / LAFANECHERE (Regulation and Pharmacology of the Cytoskeleton)**

The growing landscape of tubulin acetylation: lysine 40 and many more. Sadoul K, Khochbin S. [Biochem J](#). 2016 Jul 1;473(13):1859-68. doi: 10.1042/BCJ20160172.

> **Teams VERDEL (RNA and Epigenetics)**

Bromodomain factors of BET family are new essential actors of pericentric heterochromatin transcriptional activation in response to heat shock. Col E, Hoghoughi N, Dufour S, Penin J, Koskas S, Faure V, Ouzounova M, Hernandez-Vargash H, Reynoird N, Daujat S, Folco E, Vigneron M, Schneider R, Verdel A, Khochbin S, Herceg Z, Caron C, Vourc'h C. [Sci Rep](#). 2017 Jul 14;7(1):5418. doi: 10.1038/s41598-017-05343-8.

Selective termination of lncRNA transcription promotes heterochromatin silencing and cell differentiation. Touat-Todeschini L, Shichino Y, Dangin M, Thierry-Mieg N, Gilquin B, Hiriart E, Sachidanandam R, Lambert E, Brettschneider J, Reuter M, Kadlec J, Pillai R, Yamashita A, Yamamoto M, Verdel A. [EMBO J](#). 2017 Sep 1;36(17):2626-2641. doi: 10.15252/embj.201796571. Epub 2017

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DEPARTMENT MICROENVIRONNEMENT, CELL PLASTICITY AND SIGNALING

> Team ALBIGES-RIZO (Cell adhesion dynamics and Differentiation)

ICAP-1 monoubiquitination coordinates matrix density and rigidity sensing for cell migration through ROCK2- MRCK α balance.

Bouin AP, Kyurmurkov A, Régent-Kloeckner M, Ribba AS, Faurobert E, Fournier HN, Bourrin-Reynard I, Manet-Dupé S, Oddou C, Balland M, Planus E, Albiges-Rizo C. [J Cell Sci](#). 2017 Jan 3. pii: jcs.200139. doi: 10.1242/jcs.200139

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> Team COLL (Cancer targets and Experimental therapeutics)

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J, Chaperot L, Leccia MT, Coll JL, Hurbin A, Hainaut P, Charles J. [Biomed Res Int](#). 2017;2017:5986129. doi: 10.1155/2017/5986129. Epub 2017 Apr 6. Review.

Unsuccessful mitosis in multicellular tumour spheroids. Molla A, Couvet M, Coll JL.

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Karageorgis A, Claron M, Jugé R, Asford C, Thoreau F, Leloup C, Kucharczak J, Plumas J, Henry M, Hurbin A, Verdié P, Martinez J, Subra G, Dumy P, Boturyn D, Aouacheria A, Coll JL [Molecular Therapy](#) (2017)

> Team EYMIN (RNA splicing, Cell signaling and Response to therapies)

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> Team GUILLUY

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> Team LAFANECHERE (Regulation and Pharmacology of the Cytoskeleton)

LIM kinases: cofilin and beyond

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DEPARTMENT PREVENTION & THERAPY OF CHRONIC DISEASES

> Team BOTTE (Apicolipd)

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> Team CHAPEROT (Immunobiology and Immunotherapy in Chronic diseases)

Systemic Delivery of Tumor-Targeted Bax-Derived Membrane-Active Peptides for the Treatment of Melanoma Tumors in a Humanized SCID Mouse Model Karageorgis A, Claron M, Jugé R, Aspod C, Thoreau F, Leloup C, Kucharczak J, Plumas J, Henry M, Hurbin A, Verdié P, Martinez J, Subra G, Dumy P, Boturyn D, Aouacheria A, Coll JL [Molecular Therapy](#) (2017)

> Team HAKIMI (Host-pathogen interactions & Immunity to infections)

Deciphering the Dynamic Interaction Profile of an Intrinsically Disordered Protein by NMR Exchange Spectroscopy Elise Delaforge, Jaka Kragelj, Laura Tengo, Andrés Palencia, Sigrid Milles, Guillaume Bouvignies, Nicola Salvi, Martin Blackledge, and Malene Ringkjøbing Jensen [J Am Chem Soc](#). 2018 Jan 24;140(3):1148-1158. doi: 10.1021/jacs.7b12407. Epub 2018 Jan 11.

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Modifications at K31 on the lateral surface of histone H4 contribute to genome structure and expression in apicomplexan parasites Fabien Sindikubwabo Shuai Ding Tahir Hussain Philippe Ortet Mohamed Barakat Sebastian Baumgarten Dominique Cannella Andrés Palencia Alexandre Bougdour Lucid Belmudes Yohann Couté Isabelle Tardieux Cyrille Y Botté Artur Scherf Mohamed-ali Hakimi [Elife](#). 2017 Nov 4;6. pii: e29391. doi: 10.7554/eLife.29391

Targeting Toxoplasma gondii CPSF3 as a new approach to control toxoplasmosis.

Andrés Palencia, Alexandre Bougdour, Marie-Pierre Brenier-Pinchart, Bastien Touquet, Rose-Laurence Bertini, Cristina Sensi, Gabrielle Gay, Julien Vollaire, Véronique Josserand, Eric Easom, Yvonne R Freund, Hervé Pelloux, Philip J Rosenthal, Stephen Cusack, Mohamed-Ali Hakimi. *EMBO Molecular Medicine* (2017) e201607370 - DOI 10.15252/emmm.201607370

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> Team HAINAUT (Tumor molecular pathology and Biomarkers)

Training the Next Generation of Biobankers: A Two-Year Master's Course in the Management of Biobanks. Gormally E, Hardy I, Caboux E, di Donato JH, Hainaut P, Hofman P. *Biopreserv Biobank*. 2017 Oct;15(5):438-450. doi: 10.1089/bio.2017.0002. Epub 2017 Sep 18. PMID: 28922617

Higher-than-expected population prevalence of potentially pathogenic germline TP53 variants in individuals unselected for cancer history.

de Andrade KC, Mirabello L, Stewart DR, Karlins E, Koster R, Wang M, Gapstur SM, Gaudet MM, Freedman ND, Landi MT, Lemonnier N, Hainaut P, Savage SA, Achatz MI. *Hum Mutat*. 2017 Sep 1. doi: 10.1002/humu.23320. [Epub ahead of print] PMID: 28861920

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Buonaguro FM, Pauza CD, Tornesello ML, Hainaut P, Franco R, Tommasino M. *Biomed Res Int*. 2017;2017:7362721. doi: 10.1155/2017/7362721. Epub 2017 Jun 18. No abstract available. PMID: 28698877

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Plasma Circulating Tumor DNA Levels for the Monitoring of Melanoma Patients: Landscape of Available Technologies and Clinical Applications.

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Pooled Analysis of the Prognostic and Predictive Effects of TP53 Comutation Status Combined With KRAS or EGFR Mutation in Early-Stage Resected Non-Small-Cell Lung Cancer in Four Trials of Adjuvant Chemotherapy.

Shepherd FA, Lacas B, Le Teuff G, Hainaut P, Jänne PA, Pignon JP, Le Chevalier T, Seymour L, Douillard JY, Graziano S, Brambilla E, Pirker R, Filipits M, Kratzke R, Soria JC, Tsao MS; LACE-Bio Collaborative Group. *J Clin Oncol*. 2017 Jun 20;35(18):2018-2027. doi: 10.1200/[JCO](#).2016.71.2893. Epub 2017 Apr 28. PMID: 28453411

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Targeted deep sequencing of plasma circulating cell-free DNA reveals Vimentin and Fibulin 1 as potential epigenetic biomarkers for hepatocellular carcinoma Reetta Holmila, Athena Sklias1 David C. Muller, Davide Degli Esposti, Paule Guilloreau, James Mckay4 Suleeporn Sangrajrang, Petcharin Srivatanakul, Pierre Hainaut, Philippe Merle, Zden-ko Herceg, Andre Nogueira da Costa [PLoS One](#). 2017 Mar 23;12(3):e0174265. doi: 10.1371/journal.pone.0174265. eCollection 2017.

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> **Team MARCHE (Analytic Immunology of Chronic diseases)**

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