

FACULTY PUBLICATIONS

2019

BEAUCHEMIN, N.

Jeyakumar T, Fodil N, Van Der Kraak L, Meunier C, Cayrol R, McGregor K, Langlais D, Greenwood CMT, Beauchemin N, Gros P. Inactivation of Interferon Regulatory Factor 1 Causes Susceptibility to Colitis Associated Colorectal Cancer. *Sci Rep.* 2019 Dec 11;9(1):18897. doi: 10.1038/s41598-019-55378-2. PubMed PMID: 31827213.

Jeyakumar T, Beauchemin N, Gros P. Impact of the Microbiome on the Human Genome. *Trends Parasitol.* 2019 Oct;35(10):802-1. doi: 10.1016/j.pt.2019.07.015. Epub 2019 Aug 23. Review. PubMed PMID: 31451407.

BERGHUIS, A.M.

Rivera B, Nadaf J, Fahiminiya S, Apellaniz M, Saskin A, Chong AS, Sharma S, Wagener R, Revil T, Condello V, Harra Z, Hamel N, Sabbaghian N, Muchantef K, Thomas C, de Kock L, HébertBlouin MN, Bassenden AV, Rabenstein H, Mete O, Paschke R, Pusztaszeri MP, Paulus

Department of Biochemistry 2019

Sustai

Department of Biochemistry 2019

transcription factor Creb3l2. *Nat Commun.* 2019 Sep 3;10(1):3960. doi: 10.1038/s41467-019-11894-3. PubMed PMID: 31481663; PubMed Central PMCID: PMC6722061.

Mayran A, Sochodolsky K, Khetchoumian K, Harris J, Gauthier Y, Bemmo A, Balsalobre A, Drouin J. Pioneer and nonpioneer factor cooperation drives lineage specific chromatin opening. *Nat Commun.* 2019 Aug 23;10(1):3807. doi: 10.1038/s41467-019-11791-9. PubMed PMID: 31444346; PubMed Central PMCID: PMC6707328.

Desanlis I, Kherdjemil Y, Mayran A, Bouklouch Y, Gentile C, Sheth R, Zeller R, Drouin J, Kmita M, HOX13-dependent chromatin accessibility modulates the target repertoires of the HOX factors, *BioRxiv* (2019) doi.org/10.1101/789875

DUCHAINE , T.F.

Donayo AO, Johnson RM, Tseng HW, Izreig S, Garipey A, Mayya VK, Wu E, Alam R, Lussier C, Jones RG, Duchaine TF. Oncogenic Biogenesis of miR-17-92 Reveals Hierarchy and Competition among Polycistronic MicroRNAs. *Mol Cell.* 2019 Jul 25;75(2):356.e10. doi: 10.1016/j.molcel.2019.05.033. Epub 2019 Jun 26. PubMed PMID: 31253575.

Tran AT, Chapman EM, Flamand MN, Yu B, Krempel SJ, Duchaine TF, ~~EMG~~Derry WB. MiR-35 buffers apoptosis thresholds in the *C. elegans* germline by antagonizing both MAPK and core apoptosis pathways. *Cell Death Differ.* 2019 Dec;26(12):2657-2667. doi: 10.1038/s41418-019-0325-6. Epub 2019 Apr 5. PubMed PMID: 30952991.

Mayya VK, Duchaine TF. Ciphers and Executioners: How Untranslated Regions Determine the Fate of Messenger RNAs. *Front Genet.* 2019 Jan 24;10:6. doi: 10.3389/fgene.2019.00006. eCollection 2019. Review. PubMed PMID: 30740123; PubMed Central PMCID: PMC6357968.

FABIAN, M.R.

Fakim H, Fabian MR. Communication Is Key: 3' Interactions that Regulate mRNA Translation and Turnover. *Adv Exp Med Biol.* 2019;1203:1494. doi: 10.1007/978-0-30-314347_6. PubMed PMID: 31811634.

Fabian MR. Of seeds and supplements: structural insights into extended microRNA target pairing. *EMBO J.* 2019 Jul 1;38(13):e102477. doi: 10.15252/embj.2019102477. Epub 2019 Jun 18. PubMed PMID: 31268603; PubMed Central PMCID: PMC6600611.

Apellaniz-Ruiz M, Segni M, Kettwig M, Glüer S, Pelletier D, Nguyen VH, Wagener R, López C, Muchantef K, Bouron-Dal Soglio D, Sabbaghian N, Wu MK, Zannella S, Fabian MR, Siebert R, Menke J, Priest JR, Foulkes WD. Mesenchymal Hamartoma of the Liver and DICER1 Syndrome. *N Engl J Med.* 2019 May 9;380(19):1838-1842. doi: 10.1056/NEJMoa1812169. PubMed PMID: 31067372.

Choquet K, Forget D, Meloche E, Dicaire MJ, Bernard G, Vanderver A, Schiffmann R, Fabian MR, Teichmann M, Coulombe B, Brais B, Kleinman CL. Leukodystrophy-associated POLR3A mutations downregulate the RNA polymerase III transcript and important regulatory RNA

Department of Biochemistry 2019

BC200. J Biol Chem. 2019 May 3;294(18):7445-9. doi: 10.1074/jbc.RA118.006271. Epub 2019 Mar 21. PubMed PMID: 30898877; PubMed Central PMCID: PMC6509492.

Duchaine TF, Fabian MR. Mechanistic Insights into MicroRNA-Mediated Gene Silencing. Cold Spring Harb Perspect Biol. 2019 Mar 1;11(3). pii: a032771. doi: 10.1101/cshperspect.a032771. Review. PubMed PMID: 29959194.

Rivera, B., Nadaf, J., Fahiminiya, S., Apellaniz, M., Saskin, A., Chong, A.S., Sharma, S., Wagener, R., Revil, T., Condello, V., Harra, Z., Hamel, N., Sabbaghian, N., Muchantef, K., Thomas, C., de Kock, L., Hébert-Duval, M.N., Bassenden, A.V., Rabenstein, H., Mete, O., Paschke, R., Pusztaszeri, M.P., Paulus, W., Berghuis, A., Ragoussis, Nikiforov, Y.E., Siebert, R., Albrecht, S., Turcotte, R., Hasselblatt, M., Fabian, M.R. & Foulkes, W.D. (2019) DGCR8 microprocessor defect characterizes familial multinodular goiter with schwannomatosis. J. Clin. Invest. Epub ahead of print. PMID: 31805011; DOI: 10.1172/JCI130206

GALLOUZI, I.E.

Janice Sánchez B, Tremblay AK, Ledoux C, Gaudet JP, Hall DT, Kovacs E, Ma JF, Mubaid S, Hallauer PL, Phillips BL, Vest KE, Corbett AH, Kontoyiannis DL, Hussain SNA, Hastings KEM, Di Marco S, Gallouzi IE. Depletion of HuR in murine skeletal muscle enhances exercise endurance and prevents cancer-induced muscle atrophy. Nat Commun. 2019 Sep 13;10(1):4171. doi: 10.1038/s41467-019-12186-6. PubMed PMID: 31519904; PubMed Central PMCID: PMC6744452.

Mubaid S, Ma JF, Omer A, Ashour K, Lian XJ, Sanchez BJ, Robinson S, Cammas A, Dormoy-Raclet V, Di Marco S, Chittur SV, Tenenbaum SA, Gallouzi IE. HuR counteracts STAT3 to promote STAT3 translation during inflammation-induced muscle wasting. Proc Natl Acad Sci U S A. 2019 Aug 27;116(35):17261-7270. doi: 10.1073/pnas.1905172116. Epub 2019 Aug 12. PubMed PMID: 31405989; PubMed Central PMCID: PMC6717253.

Sadek J, Omer A, Hall D, Ashour K, Gallouzi IE. Alternative polyadenylation and the stress response. Wiley Interdiscip Rev RNA. 2019 Sep;10(5):e1540. doi: 10.1002/wrna.1540. Epub 2019 May 2. Review. PubMed PMID: 31050180.

Al Khatib HA, Al Thani AA, Gallouzi I, Yassie HM. Epidemiological and genetic characterization of pH1N1 and H3N2 influenza viruses circulated in MENA region during 2009-2017. BMC Infect Dis. 2019 Apr 11;19(1):314. doi: 10.1186/s12879-019-3930-6. PubMed PMID: 30971204; PubMed Central PMCID: PMC6458790.

GEHRING, K.

Yuan T, Yang M, Gehring K, Sampson NS. Mycobacterium tuberculosis Exploits a Heterohexameric Enoyl-CoA Hydratase Retroaldolase Complex for Cholesterol Catabolism. J Biol Chem. 2019 Jun 14;294(24):9100-9110. doi: 10.1074/jbc.M119.009003. Epub 2019 May 15. PubMed PMID: 31050180.

Department of Biochemistry 2019

Yang M, Chen YS, Ichikawa M, Calle Garcia D, Basu K, Fakhri R, Bui KH, Gehring K. Cryo electron microscopy structures of ArnA, a key enzyme for polymyxin resistance, revealed unexpected oligomerizations and domains

Department of Biochemistry 2019

Susceptibility to Colitis-Associated Colorectal Cancer. *Sci Rep.* 2019 Dec 11;9(1):18897. doi: 10.1038/s41598-019-55378-2. PubMed PMID: 31827213.

Kennedy JM, Georges A, Bassenden AV, Vidal SM, Berghuis AM, Taniuchi I, Majewski J, Lathrop M, Behr MA, Langlais D, Gros P. ZBTB7B (ThPOK) IS REQUIRED FOR PATHOGENESIS OF CEREBRAL MALARIA AND PROTECTION AGAINST PULMONARY TUBERCULOSIS. *Infect Immun.* 2019 Dec 2. pii: IAI.0084519. doi: 10.1128/IAI.0084519. [Epub ahead of print] PubMed PMID: 31792077.

Amato KR, Jeyakumar T, Poinar H, Gros P. Shifting Climates, Foods, and Diseases: The Human Microbiome through Evolution. *Bioessays.* 2019 Oct;41(10):e1900034. doi: 10.1002/bies.201900034. Epub 2019 Sep 16. Review. PubMed PMID: 31524305.

Jeyakumar T, Beauchemin N, Gros P. Impact of the Microbiome on the Human Genome. *Trends Parasitol.* 2019 Oct;35(10):802-1. doi: 10.1016/j.pt.2019.07.015. Epub 2019 Aug 23. Review. PubMed PMID: 31451407.

Teyra J, Singer AU, Schmitges FW, Jaynes P, Kit Leng Lui S, Polyak MJ, Fodil N, Krieger JR, Tong J, Schwerdtfeger C, Brasher BB, Ceccarelli DFJ, Moffat J, Sicheri F, Wu F, Gros P, Eichhorn PJA, Lenter M, Boehmelt G, Sidhu SS. Structural and Functional Characterization of Ubiquitin Variant Inhibitors of USP15. *Structure.* 2019 Apr 2;27(4):606-e5. doi: 10.1016/j.str.2019.01.002. Epub 2019 Jan 31. PubMed PMID: 30713027.

GUARNÉ, A.

Reimer JM, Eivaskhani M, Harb I, Guarné A, Weigt M, Schmeing TM. Structures of a dimodular nonribosomal peptide synthetase reveal conformational flexibility. *Science.* 2019 N01

Department of Biochemistry 2019

LUKACS, G.L.

Veit G, Da Fonte DF, Avramescu RG, Premchandrar A, Bagdany M, Xu H, Bensinger D, Stubba D, Schmidt B, Matouk E, Lukacs GL. Mutationspecific dual potentiators maximize rescue of CFTR gating mutants. *J Cyst Fibros*. 2019 Oct 30. pii: S1569-1993(19)30924-5. doi: 10.1016/j.jcf.2019.10.011. [Epub ahead of print] PubMed PMID: 31678009.

Ng CA, Perry MD, Liang W, Smith NJ,

Department of Biochemistry 2019

McCAFFREY, L

Department of Biochemistry 2019

Department of Biochemistry 2019

Bareche Y, Buisseret L, Gruosso T, Girard E, Venet D, Dupont F, Desmedt C, Larsimont D, Park M, Rothé F, Stagg J, Sotiriou C. Unraveling triple-negative breast cancer tumor microenvironment heterogeneity: towards an optimized treatment approach. *J Natl Cancer Inst.* 2019 Oct 29. pii: djz208. doi: 10.1093/jnci/djz208. [Epub ahead of print] PubMed PMID: 31665482.

Dankner, M., Senecal, J., Neubarth, N. S., Bernis, Park, M., Issa-Chergui, B., Asselah, J., Siegel, P. M., & Bouganim, N. (2019). A survey of health care professionals and oncology patients at the McGill University Health Centre reveals enthusiasm for establishing a postmortem rapid tissue donation program. *Curr Oncol*, 26(4), e5570. doi: 10.3747/co.26.4771

Hirukawa A, Singh S, Wang J, Rennhack JP, Swiatnicki M, Sanguineto V, Zuo D, Daldoul K, Lavoie C, Park M, Andrechek ER, Westbrook TF, Harris LN, Varadan V, Smith HW, Muller WJ. Reduction of Global H3K27me(3) Enhances HER2/ErbB2 Targeted Therapy. *Cell Rep.* 2019 Oct 8;29(2):2457.e8. doi: 10.1016/j.celrep.2019.08.105. PubMed PMID: 31597089.

Zaoui K, Rajadurai CV, Duhamel S, Park M. Arf6 regulates RhoB subcellular localization to control cancer cell invasion. *J Cell Biol.* 2019 Nov 4;218(11):3826. doi: 10.1083/jcb.201806111. Epub 2019 Oct 7. PubMed PMID: 31591185; PubMed Central PMCID: PMC6829653.

Kong T, Xue Y, Cencic R, Zhu X, Monast A, Fu Z, Pilon V, Sangwan V, Guiot MC, Foulkes WD, Porco JA Jr, Park M, Pelletier J, Huang S. eIF4A Inhibitors Suppress Cell Feedback Response and Acquired Resistance to CDK4/6 Inhibition in Cancer. *Mol Cancer Ther.* 2019 Nov;18(11):2158-2170. doi: 10.1158/1535-7163.MCT-19-0162. Epub 2019 Aug 8. PubMed PMID: 31395685.

Smith HW, Hirukawa A, Sanguineto V, Zuo D, Daldoul K, Lavoie C, Park M, Andrechek ER, Westbrook TF, Harris LN, Varadan V, Muller WJ, Hirukawa A, Sanguineto V, Zuo D, Daldoul K, Lavoie C, Park M, Andrechek ER, Westbrook TF, Harris LN, Varadan V, Smith HW, Muller WJ. Reduction of Global H3K27me(3) Enhances HER2/ErbB2 Targeted Therapy. *Cell Rep.* 2019 Oct 8;29(2):2457.e8. doi: 10.1016/j.celrep.2019.08.105. PubMed PMID: 31597089.

Department of Biochemistry 2019

Kazan JM, Lukacs GL, Apaja PM, Pause A. Single Cell Fluorescence Ratio Image Analysis for Studying ESCRT Function in Receptor Trafficking. *Methods Mol Biol.* 2019;1998:93-103. doi: 10.1007/978-1-4939-9492-2_7. PubMed PMID: 31250296.

El-Houjeiri L, Possik E, Vijayaraghavan T, Paquette M, Martina JA, Kazan JM, Ma EH, Jones R, Blanchette P, Puertollano R, Pause A. The Transcription Factors TFEB and TFE3 Link the FLCN-AMPK Signaling Axis to Innate Immune Response and Pathogenesis. *Cell Rep.* 2019 Mar 26;26(13):3613-3628.e6. doi: 10.1016/j.celrep.2019.02.102. PubMed PMID: 30917316.

Desrochers G, Kazan JM, Pause A. Structure and functions of His domain protein tyrosine phosphatase in receptor trafficking and cancer (1). *Cell Biochem Cell Biol.* 2019 Feb;97(1):68-78. doi: 10.1139/bcb-2017-0322. Epub 2018 Jun 7. Review. PubMed PMID: 29879361.

PELLETIER, J.

Shen L, Pelletier J. Selective targeting of the DEAD RNA helicase eukaryotic initiation factor (eIF) 4A by natural products. *Nat Prod Rep.* 2019 Nov 29. doi: 10.1039/c9np00052f. [Epub ahead of print] PubMed PMID: 31782447.

Department of Biochemistry 2019

Department of Biochemistry 2019

Department of Biochemistry 2019

Boillard, M. H.A. Bos, G. Chicanne, A. Chuansumrit, E. M. Conway, N. Curry, D. Cutler, E. Danese, S. F. De Meyer, J. M. Del Rio, J. Despotovic, J. Di Paola, J. Eikelboom, J. Emsley, K. Eto, K. Fijnvandraat, R. Flaumenhaft, M. Flick, T. A. Fuchs, K. Gomez, S. Goto, R. Hamilton, I. S. Hitchcock, C. N. Jenne, J. M. Johnsen, L. A. Ju, G. Le Gal, M. Levade, B. Lip, J. Luyendyk, C. Maas, M. Magnusson, P. Mangin, A. Mast, Di . *Cell*. 2019 Jun 13;177(6):1297-1312. doi: 10.1016/j.cell.2019.05.012. Epub 2019 Jun 13. PubMed PMID: 31111111.

Choi D, Spinelli C, Montermini L, Rak J. Oncogenic Regulation of Extracellular Vesicle Proteome and Heterogeneity. *Proteomics*. 2019 Jan 21;19(1):1800169. doi: 10.1002/pmic.201800169. Epub 2019 Jan 4. Review. PubMed PMID: 30561828.

Feulner L, Najafabadi HS, Tanguay S, Rak J, Riazalhosseini Y. Altered variations in gene expression patterns of renal cell carcinoma. *Urol Oncol*. 2019 Feb;17(2):175. doi: 10.1016/j.urolonc.2018.11.006. Epub 2018 Nov 23. PubMed PMID: 30478010.

RICHARD, S.

Qiao X, Kim DI, Jun H, Ma Y, Knights AJ, Park MJ, Zhu K, Lipinski JH, Liao J, Li Y, Richard S, Weinman SA, Wu J. Protein Arginine Methyltransferase 1 *C1W H U D F W V : L W K 3 * &* Modulates Thermogenic Fat Activation. *Endocrinology*. 2019 Dec 1;160(12):2773-2783. doi: 10.1210/en.2019-0504. PubMed PMID: 31555811; PubMed Central PMCID: PMC6853686.

Wong TL, Ng KY, Tan KV, Chan LH, Zhou L, Che N, Hoo RL, Lee TK, Richard S, Lo CM, Man K, Khong PL, Ma S. CRAF methylation by PRMT6 regulates aerobic glycolysis driven hepatocarcinogenesis via ERK-dependent PKM2 nuclear relocalization and activation. *Hepatology*. 2019 Aug 30. doi: 10.1002/hep.30923. [Epub ahead of print] PubMed PMID: 31469916.

Guccione E, Richard S. The regulation, functions and clinical relevance of arginine methylation. *Nat Rev Mol Cell Biol*. 2019 Oct;20(10):645-657. doi: 10.1038/s41580-019-0155-x. Epub 2019 Jul 26. Review. Erratum in: *Nat Rev Mol Cell Biol*. 2019 Sep;20(9):567. PubMed PMID: 31350521.

Srouf N, Mersaoui SY, Richard S. TAP Dance: Targeting PRMT1 and PRMT5 Family Members to Push Cancer Cells Over the Edge. *Cancer Cell*. 2019 Jul 8;36(1):1-8. doi: 10.1016/j.ccell.2019.06.004. PubMed PMID: 31287990.

Mersaoui SY, Yu Z, Coulombe Y, Karam M, Busatto FF, Masson JY, Richard S. Arginine methylation of the DDX5 helicase RGG/RG motif by PRMT5 regulates resolution of RNA:DNA hybrids. *EMBO J*. 2019 Aug 1;38(15):e100986. doi: 10.15252/embj.2018100986. Epub 2019 Jun 21. PubMed PMID: 31267554; PubMed Central PMCID: PMC6669924.

Department of Biochemistry 2019

Litzler LC, Zahn A, Meli AP, Hébert S, Patenaude AM, Methot SP, Sprumont A, Bois T, Kitamura D, Costantino S, King IL, Kleinman CL, Richard S, Di Noia JM. PRMT5 is essential for B cell development and germinal center dynamics. Nat Commun. 2019 Jan 3;10(1):22. doi: Bprentd 236M356 (at2 d 0 32 (i s) 2 3 7 R) c (

Department of Biochemistry 2019

SALAVATI, R.

Nikpour N,

Department of Biochemistry 2019

Department of Biochemistry 2019

DL. Dipeptidase1 Is an Adhesion Receptor for Neutrophil Recruitment in Lungs and Liver. Cell. 2019 Aug 22;178(5):1205-1221.e17. doi: 10.1016/j.cell.2019.07.017. PubMed PMID: 31442408.

Hsu BE, Tabariès S, Johnson RM, Andrzejewski S, Senecahudé C, Annis MG, Ma EH, Völs S, Ramsay L, Froment R, Monast A, Watson IR, Granot Z, Jones RC, Siegel PM. Immature Low Density Neutrophils Exhibit Metabolic Flexibility that Facilitates Breast Cancer Liver Metastasis. Cell Rep. 2019 Jun 25;27(12):3902-3915.e6. doi: 10.1016/j.celrep.2019.05.091. PubMed PMID: 31242422.

Yoshie H, Koushki N, Molter C, Siegel PM, Krishnan R, Ehrlicher AJ. High Throughput Traction Force Microscopy Using PDMS Reveals Dependent Effects of Transforming Growth Factor- β on Cell-Mediated Transition. J Vis Exp. 2019 Jun 1;(148). doi: 10.3791/59364. PubMed PMID: 31205302.

Dankner M, Ouellet V, Communal L, Schmitt E, Perkins D, Annis MG, Barrès V, Caron G, Mes Masson AM, Saad F, Siegel PM; Canadian Prostate Cancer Biomarker Network. CCN3/Nephroblastoma Overexpressed Is a Functional Mediator of Prostate Cancer Bone Metastasis That Is Associated with Poor Patient Prognosis. Am J Pathol. 2019 Jul;189(7):1451-1461. doi: 10.1016/j.ajpath.2019.04.006. Epub 2019 Jun 12. PubMed PMID: 31202437.

Maric G, Annis MG, MacDonald PA, Russo C, Perkins D, Siwak DR, Mills GB, Siegel PM. GPNMB augments Wnt mediated breast tumor initiation and growth by activating β -catenin activity. Oncogene. 2019 Jun;38(26):5294-5307. doi: 10.1038/s41388-019-0793-7. Epub 2019 Mar 26. PubMed PMID: 30914799.

Tabariès S, McNulty A, Ouellet V, Annis MG, Dessureault M, Vinette M, Hachem Ybatetac73(-)-4.7 (Yba)3

Department of Biochemistry 2019

Müller D, Shin S, Goulet de Rugy T, Saima R, Baer R, Strehaiano M, Masvieira L, Guillermet-Guibert J, Jean C, Tsukumo Y, Sonenberg N, Marion F, Guilbaud N, Hoffmann JS, Larsson O, Bousquet C, Pyronnet S, Martineau Y. eIF4A inhibition circumvents uncontrolled DNA replication mediated by 4BP1 loss in pancreatic cancer. *JCI Insight*. 2019 Nov 1;4(21). pii: 121951. doi: 10.1172/jci.insight.121951. PubMed PMID: 31672935.

Areal CC, Cao R, Sonenberg N, Mongrain V. Wakefulness/sleep architecture and

Department of Biochemistry 2019

10.1016/j.ajhg.2019.06.011. Epub 2019 Jul 11. PubMed PMID: 31303264; PubMed Central PMCID: PMC6731352.

THOMAS, D.Y.

Sato Y, Thomas DY, Hanrahan JW. The anion transporter SLC26A9 localizes to tight junctions and is degraded by the proteasome when expressed with F508delCFTR. *J Biol Chem*. 2019 Nov 29;294(48):18269-18284. doi: 10.1074/jbc.RA119.010192. Epub 2019 Oct 23. PubMed PMID: 31645438; PubMed Central PMCID: PMC6885613.

Maurel M, Obacz J, Avril T, Ding YP, Papadodima O, Treton X, Daniel F, Pilalis E, Hörberg J, Hou W, Beauchamp MC, Tournebise J, Cazals-Hatem D, Sommerova L, Samali A, Tavernier J, Hrstka R, Dupont A, Fessart D, Delorme F, Fernandez-Zapico ME, Jansen G, Eriksson LA, Thomas DY, Jerome-Majewska L, Hupp T, Chatziioannou A, Chevet E, Ogden E. Control of anterior GRADIENT 2 (AGR2) dimerization links endoplasmic reticulum proteostasis to inflammation. *EMBO Mol Med*. 2019 Jun;11(6). pii: e10120. doi: 10.15252/emmm.201810120. PubMed PMID: 31040128; PubMed Central PMCID: PMC6554669.

Hanrahan JW, Sato Y, Carlile GW, Jansen G, Young JC, Thomas DY. Cystic Fibrosis: Proteostatic correctors of CFTR trafficking and alternative proteic targets. *Expert Opin Ther Targets*. 2019 Aug;23(8):717-724. doi: 10.1080/14728222.2019.1628948. Epub 2019 Jun 9. PubMed PMID: 31169041.

Brahimi F, Galan A, Barcelona PF, De Jay N, Dejgaard K, Young JC, Kleiman C, Thomas DY, Saragovi HU. (2019) Alternative conformations of the TrkC receptor ectodomain result from splicing of the intracellular domain, and are activated by isolectin B4. *Mol Cell*. 2019 Sep 19;75(4):1000-1011. doi: 10.1016/j.molcel.2019.08.011. Epub 2019 Sep 19. PubMed PMID: 31511111; PubMed Central PMCID: PMC6731352.

TOPISIROVIC, I.

Hipolito VEB, Diaz JA, Tandok V, Oertlin C, Ristau J, Chauhan N, Saric M, McLaughlan S, Larsson O, Topisirovic I, Botelho RJ. Enhanced translation expands the endosome size and promotes antigen presentation during phagocyte activation. *PLoS Biol*. 2019 Dec 4;17(12):e3000535. doi: 10.1371/journal.pbio.3000535. eCollection 2019 Dec. PubMed PMID: 31711111; PubMed Central PMCID: PMC6731352.

Department of Biochemistry 2019

Lorent J, Kusnadi EP, van Hoef V, Rebello RJ, Leibovitch M, Ristau J, Chen S, Lawrence MG, Szkop KJ, Samreen B, Balanathan P, Rapino F, Close P, Bukczynska P, Scharmann K, Takizawa I, Risbridger GP, Selth LA, Leidel SA, Lin Q, Topisirovic I, Larsson O, Furic L. Translational RII VHWLQJ DV D PRGH dependent regulation of cell fission. *EMBO J*. 2019 Dec 2;38(23):e101323. doi: 10.15252/emj.2018101323. Epub 2019 Sep 26. PubMed PMID: 31556460.

Papadopoli D, Boulay K, Kazak L, Pollak M, Mallette Fopisirovic I, Hulea L. mTOR as a central regulator of lifespan and aging. *F1000Res*. 2019 Jul 2;8. pii: F1000 Faculty Rev doi: 10.12688/f1000research.17196.1. eCollection 2019. Review. PubMed PMID: 31316753; PubMed Central PMCID: PMC6611156.

Smith HW, Hirukawa A, SanguinGendreau V, Nandi I, Dufour CR, Zuo D, Tandoc K, Leibovitch M, Singh S, Rennhack JP, Swiatnicki M, Lavoie C, Papavasiliou V, Temps C, Carragher NO, Unciti

Department of Biochemistry 2019

Huey ED, Sorbi S, Nacmias B, Laforce R Jr, Tremblay ML, Vandenberghe R, Damme PV, Rogalski EJ, Weintraub S, Gerhard A, Onyike CU, Ducharme S, Papageorgiou SG, Lyn AS,

Department of Biochemistry 2019

StrayPedersen A, Tarpinian JM, Klee EW, Sapp JC, Zyskind J, Holla ØL, Bedoukian E, Filippini F, Guimier A, Picard A, Busk ØL, Punetha J, Pfundt L, Nordstrand A, Nordgren A, Kalb F, Desai M, Ebanks AH, Jhangiani SN, Dewan T, Coban Akdemir ZH, Telegrafi A, Zackai EH, Begtrup A, Song X, Toutain A, Wentzensen IM, Odent S, Bonneau D, Latypova X, Deb W; CAUSES Study, Redon S, Bilan F, Legendre M, Troyer C, Whitlock K, Caluseriu O, Murphree MI, Pichurin PN, Agre K, Gavrilova R, Rinne T, Park M, Shain C, Heinzen EL, Xiao R, Amiel J, Lyonnet S, Isidor B, Biesecker LG, Lowenstein D, Posey JE, Deneff P, Pichon AS; Deciphering Developmental Disorders study, Férec C, Yang XJ, Rosenfeld JA, Gilbert F, Dussardier B, Audebert Bellanger S, Redon R, Stessman HAF, Nellaker C, Yang Y, Lupski JR, Goldstein DB, Eichler EE, Bolduc F, Bézieau S, Küry S, Campeau PM. Missense Variants in the Histone Acetyltransferase Complex Component Gene TRRAP Cause Autism and Syndromic Intellectual Disability. *Am J Hum Genet.* 2019 Mar 7;104(3):541. doi: 10.1016/j.ajhg.2019.01.010. Epub 2019 Feb 28. PubMed PMID: 30827496; PubMed Central PMCID: PMC6407527.

YOUNG, J.C.

Kim Chiaw P, Hantouché, Wong MJH, Matthes E, Robert R, Hanrahan JW, Shrier A, Young JC. Hsp70 and DNAJA2 limit CFTR levels through degradation. *PLoS One.* 2019 Aug 13;14(8):e0220984. doi: 10.1371/journal.pone.0220984. eCollection 2019. PubMed PMID: 31408507; PubMed Central PMCID: PMC6692068.

Hanrahan JW, Sato Y, Carlile GW, Jansen G, Young JC, Thomas DY. Cystic Fibrosis: Proteostatic correctors of CFTR trafficking and alternative therapeutic targets. *Expert Opin Ther Targets.* 2019 Aug;23(8):717-724. doi: 10.1080/14728222.2019.1628948. Epub 2019 Jun 9. PubMed PMID: 31169041.

Kampinga HH, Andreasson C, Barducci A, Cheetham ME, Cyr D, Emanuelsson C, Genevax P, Gestwicki JE, Goloubinoff P, Huerfano Cepas J, Kirstein J, Liberek K, Mayer MP, Nagata K, Nillegoda NB, Pulido P, Ramos, De Los Rios P, Rospert S, Rosenzweig R, Sahi C, Taipale M, Tomiczek B, Ushioda R, Young JC, Zimmermann R, Zylicz A, Zylicz M, Craig EA, Marszalek J. Function, evolution, and structure of -ddomain proteins. *Cell Stress Chaperones.* 2019 Jan;24(1):715. doi: 10.1007/s12192-018-0948-4. Epub 2018 Nov 26. PubMed PMID: 30478692; PubMed Central PMCID: PMC6363617.