

## NBCC Publication List

*Separated by year, alphabetical by first author*

### 2020

Bagci, H., N. Sriskandarajah, A. Robert, J. Boulais, I.E. Elkholi, V. Tran, Z.Y. Lin, M.P. Thibault, N. Dube, D. Faubert, D.R. Hipfner, A.C. Gingras, and J.F. Cote, *Mapping the proximity interaction network of the Rho-family GTPases reveals signalling pathways and regulatory mechanisms*. Nat Cell Biol, 2020. **22**(1): p. 120-134.

Bian, Y., R. Zheng, F.P. Bayer, C. Wong, Y.C. Chang, C. Meng, D.P. Zolg, M. Reinecke, J. Zecha, S. Wiechmann, S. Heinzlmeir, J. Scherr, B. Hemmer, M. Baynham, A.C. Gingras, O. Boychenko, and B. Kuster, *Robust, reproducible and quantitative analysis of thousands of proteomes by micro-flow LC-MS/MS*. Nat Commun, 2020. **11**(1): p. 157.

Fritz, J.L., O. Collins, P. Saxena, A. Buensuceso, Y. Ramos Valdes, K.E. Francis, K.R. Brown, B. Larsen, K. Colwill, A.C. Gingras, R. Rottapel, and T.G. Shepherd, *A novel role for NUA1 in promoting ovarian cancer metastasis through regulation of fibronectin production in spheroids*. Cancers (Basel), 2020. **12**(5).

Gonatopoulos-Pournatzis, T., R. Niibori, E.W. Salter, R.J. Weatheritt, B. Tsang, S. Farhangmehr, X. Liang, U. Braunschweig, J. Roth, S. Zhang, T. Henderson, E. Sharma, M. Quesnel-Vallieres, J. Permanyer, S. Maier, J. Georgiou, M. Irimia, N. Sonenberg, J.D. Forman-Kay, A.C. Gingras, G.L. Collingridge, M.A. Woodin, S.P. Cordes, and B.J. Blencowe, *Autism-Misregulated eIF4G Microexons Control Synaptic Translation and Higher Order Cognitive Functions*. Mol Cell, 2020. **77**(6): p. 1176-1192 e16.

Kanwar, N., K. Carmine-Simmen, R. Nair, C. Wang, S. Moghadas-Jafari, H. Blaser, D. Tran-Thanh, D. Wang, P. Wang, J. Wang, A. Pasculescu, A. Datti, T. Mak, J.D. Lewis, and S.J. Done, *Amplification of a calcium channel subunit CACNG4 increases breast cancer metastasis*. EBioMedicine, 2020. **52**: p. 102646.

Liu, Y., J. Kim, R. Philip, V. Sridhar, M. Chandrashekhar, J. Moffat, M. van Breugel, and L. Pelletier, *Direct interaction between CEP85 and STIL mediates PLK4-driven directed cell migration*. J Cell Sci, 2020. **133**(8).

Loganathan, S.K., K. Schleicher, A. Malik, R. Quevedo, E. Langille, K. Teng, R.H. Oh, B. Rathod, R. Tsai, P. Samavarchi-Tehrani, T.J. Pugh, A.C. Gingras, and D. Schramek, *Rare driver mutations in head and neck squamous cell carcinomas converge on NOTCH signaling*. Science, 2020. **367**(6483): p. 1264-1269.

Meant, A., B. Gao, G. Lavoie, S. Nourreddine, F. Jung, L. Aubert, J. Tcherkezian, A.C. Gingras, and P.P. Roux, *Proteomic Analysis Reveals a Role for RSK in p120-catenin Phosphorylation and Melanoma Cell-Cell Adhesion*. Mol Cell Proteomics, 2020. **19**(1): p. 50-64.

Moskal, N., V. Riccio, M. Bashkurov, R. Taddese, A. Datti, P.N. Lewis, and G. Angus McQuibban, *ROCK inhibitors upregulate the neuroprotective Parkin-mediated mitophagy pathway*. Nat Commun, 2020. **11**(1): p. 88.

Muller, P.M., J. Rademacher, R.D. Bagshaw, C. Wortmann, C. Barth, J. van Unen, K.M. Alp, G. Giudice, R.L. Eccles, L.E. Heinrich, P. Pascual-Vargas, M. Sanchez-Castro, L. Brandenburg, G. Mbamalu, M. Tucholska, L. Spatt, M.T. Czajkowski, R.W. Welke, S. Zhang, V. Nguyen, T. Rrustemi, P. Trnka, K. Freitag, B. Larsen, O. Popp, P. Mertins, A.C. Gingras, F.P. Roth, K. Colwill, C. Bakal, O. Pertz, T. Pawson, E. Petsalaki, and O. Rocks, *Systems analysis of RhoGEF and RhoGAP regulatory proteins reveals spatially organized RAC1 signalling from integrin adhesions*. Nat Cell Biol, 2020. **22**(4): p. 498-511.

Nano, N., F. Ugwu, T.V. Seraphim, T. Li, G. Azer, M. Isaac, M. Prakesch, L.R.S. Barbosa, C.H.I. Ramos, A. Datti, and W.A. Houry, *Sorafenib as an Inhibitor of RUVBL2*. Biomolecules, 2020. **10**(4).

Samavarchi-Tehrani, P., R. Samson, and A.C. Gingras, *Proximity Dependent Biotinylation: Key Enzymes and Adaptation to Proteomics Approaches*. Mol Cell Proteomics, 2020. **19**(5): p. 757-773.

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Sivitilli, A.A., J.T. Gosio, B. Ghoshal, A. Evstratova, D. Trcka, P. Ghiasi, J.J. Hernandez, J.M. Beaulieu, J.L. Wrana, and L. Attisano, *Robust production of uniform human cerebral organoids from pluripotent stem cells*. Life Sci Alliance, 2020. **3**(5).

Szewczyk, M.M., Y. Ishikawa, S. Organ, N. Sakai, F. Li, L. Halabelian, S. Ackloo, A.L. Couzens, M. Eram, D. Dilworth, H. Fukushima, R. Harding, C.C. Dela Sena, T. Sugo, K. Hayashi, D. McLeod, C. Zepeda, A. Aman, M. Sanchez-Osuna, E. Bonneil, S. Takagi, R. Al-Awar, M. Tyers, S. Richard, M. Takizawa, A.C. Gingras, C.H. Arrowsmith, M. Vedadi, P.J. Brown, H. Nara, and D. Barsyte-Lovejoy, *Pharmacological inhibition of PRMT7 links arginine monomethylation to the cellular stress response*. Nat Commun, 2020. **11**(1): p. 2396.

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- Ashraf, K., S. Nabeel-Shah, J. Garg, A. Saettone, J. Derynck, A.C. Gingras, J.P. Lambert, R.E. Pearlman, and J. Fillingham, *Proteomic analysis of histones H2A/H2B and variant Hv1 in Tetrahymena thermophila reveals an ancient network of chaperones*. Mol Biol Evol, 2019.
- Ayyaz, A., S. Kumar, B. Sangiorgi, B. Ghoshal, J. Gosio, S. Ouladan, M. Fink, S. Barutcu, D. Trcka, J. Shen, K. Chan, J.L. Wrana, and A. Gregorieff, *Single-cell transcriptomes of the regenerating intestine reveal a revival stem cell*. Nature, 2019. **569**(7754): p. 121-125.
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- Ceccarelli, D.F., S. Ivantsiv, A.A. Mullin, E. Coyaud, N. Manczyk, P. Maisonneuve, I. Kurinov, L. Zhao, C. Go, A.C. Gingras, B. Raught, S. Cordes, and F. Sicheri, *FAM105A/OTULINL Is a Pseudodeubiquitinase of the OTU-Class that Localizes to the ER Membrane*. Structure, 2019. **27**(6): p. 1000-1012 e6.
- Chapman, E.M., B. Lant, Y. Ohashi, B. Yu, M. Schertzberg, C. Go, D. Dogra, J. Koskimaki, R. Girard, Y. Li, A.G. Fraser, I.A. Awad, S. Abdelilah-Seyfried, A.C. Gingras, and W.B. Derry, *A conserved CCM complex promotes apoptosis non-autonomously by regulating zinc homeostasis*. Nat Commun, 2019. **10**(1): p. 1791.
- Gheiratmand, L., E. Coyaud, G.D. Gupta, E.M. Laurent, M. Hasegan, S.L. Prosser, J. Goncalves, B. Raught, and L. Pelletier, *Spatial and proteomic profiling reveals centrosome-independent features of centriolar satellites*. EMBO J, 2019.
- Herbert, K., R. Binet, J.P. Lambert, P. Louphrasitthiphol, H. Kalkavan, L. Sesma-Sanz, C.D. Robles-Espinoza, S. Sarkar, E. Suer, S. Andrews, J. Chauhan, N.D. Roberts, M.R. Middleton, A.C. Gingras, J.Y. Masson, L. Larue, P. Falletta, and C.R. Goding, *BRN2 suppresses apoptosis, reprograms DNA damage repair, and is associated with a high somatic mutation burden in melanoma*. Genes Dev, 2019. **33**(5-6): p. 310-332.
- Hui, K.K., C. Dojo Soeandy, S. Chang, F.S. Vizeacoumar, T. Sun, A. Datti, and J.T. Henderson, *Cell-based high-throughput screen for small molecule inhibitors of Bax translocation*. J Cell Mol Med, 2019. **23**(3): p. 1784-1797.
- Hustedt, N., A. Alvarez-Quilon, A. McEwan, J.Y. Yuan, T. Cho, L. Koob, T. Hart, and D. Durocher, *A consensus set of genetic vulnerabilities to ATR inhibition*. Open Biol, 2019. **9**(9): p. 190156.

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Shakiba, N., A. Fahmy, G. Jayakumaran, S. McGibbon, L. David, D. Trcka, J. Elbaz, M.C. Puri, A. Nagy, D. van der Kooy, S. Goyal, J.L. Wrana, and P.W. Zandstra, *Cell competition during reprogramming gives rise to dominant clones*. Science, 2019. **364**(6438).

Shi, Y., W. Gao, N.K. Lytle, P. Huang, X. Yuan, A.M. Dann, M. Ridinger-Saison, K.E. DelGiorno, C.E. Antal, G. Liang, A.R. Atkins, G. Erikson, H. Sun, J. Meisenhelder, E. Terenziani, G. Woo, L. Fang, T.P. Santisakultarm, U. Manor, R. Xu, C.R. Becerra, E. Borazanci, D.D. Von Hoff, P.M. Grandgenett, M.A. Hollingsworth, M. Leblanc, S.E. Umetsu, E.A. Collisson, M. Scadeng, A.M. Lowy, T.R. Donahue, T. Reya, M. Downes, R.M. Evans, G.M. Wahl, T. Pawson, R. Tian, and T. Hunter, *Targeting LIF-mediated paracrine interaction for pancreatic cancer therapy and monitoring*. Nature, 2019. **569**(7754): p. 131-135.

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Brandmann, T., H. Fakim, Z. Padamsi, J.Y. Youn, A.C. Gingras, M.R. Fabian, and M. Jinek, *Molecular architecture of LSM14 interactions involved in the assembly of mRNA silencing complexes*. EMBO J, 2018. **37**(7).

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