

## NBCC Publication List

*Separated by year, alphabetical by first author*

### 2024

Aglipay, M., J. C. Kwong, K. Colwill, A. C. Gringas, A. Tuite, M. Mamdani, C. Keown-Stoneman, C. Birken, J. Maguire and T. A. K. Collaboration. *Seroprevalence of SARS-CoV-2 antibodies among children receiving primary care in Toronto, Ontario*. Can J Public Health, 2024. **115**(6): p. 913-923.

Ahmadipour, M., J. C. Prado, B. Hakak-Zargar, M. Q. Mahmood and I. M. Rogers. *Using ex vivo bioengineered lungs to model pathologies and screening therapeutics: A proof-of-concept study*. Biotechnol Bioeng, 2024. **121**(10): p. 3020-3033.

Al Mismar, R., P. Samavarchi-Tehrani, B. Seale, V. Kasmaifar, C. E. Martin and A. C. Gingras. *Extracellular proximal interaction profiling by cell surface-targeted TurboID reveals LDLR as a partner of liganded EGFR*. Sci Signal, 2024. **17**(861): p. eadl6164.

Baghdadi, M. B., R. M. Houtekamer, L. Perrin, A. Rao-Bhatia, M. Whelen, L. Decker, M. Bergert, C. Perez-Gonzalez, R. Bouras, G. Groppler, A. K. H. Loe, A. Afkhami-Poostchi, X. Chen, X. Huang, S. Descroix, J. L. Wrana, A. Diz-Munoz, M. Gloerich, A. Ayyaz, D. Matic Vignjevic and T. H. Kim. *PIEZO-dependent mechanosensing is essential for intestinal stem cell fate decision and maintenance*. Science, 2024. **386**(6725): p. eadj7615.

Barbulescu, P., C. K. Chana, M. K. Wong, I. Ben Makhlof, J. P. Bruce, Y. Feng, A. F. A. Keszei, C. Wong, R. Mohamad-Ramshan, L. C. McGary, M. A. Kashem, D. F. Ceccarelli, S. Orlicky, Y. Fang, H. Kuang, M. Mazhab-Jafari, R. C. Pezo, A. S. Bhagwat, T. J. Pugh, A. C. Gingras, F. Sicheri and A. Martin. *FAM72A degrades UNG2 through the GID/CTLH complex to promote mutagenic repair during antibody maturation*. Nat Commun, 2024. **15**(1): p. 7541.

Best, A. J., U. Braunschweig, M. Wu, S. Farhangmehr, A. Pascalescu, J. J. Lim, L. C. Comsa, M. Jen, J. Wang, A. Datti, J. L. Wrana, S. P. Cordes, R. Al-Awar, H. Han and B. J. Blencowe. *High-throughput sensitive screening of small molecule modulators of microexon alternative splicing using dual Nano and Firefly luciferase reporters*. Nat Commun, 2024. **15**(1): p. 6328.

Bourmoum, M., N. Radulovich, A. Sharma, J. M. Tkach, M. S. Tsao and L. Pelletier. *beta-catenin mediates growth defects induced by centrosome loss in a subset of APC mutant colorectal cancer independently of p53*. PLoS One, 2024. **19**(2): p. e0295030.

Bowdish, D. M. E., V. Chandran, C. A. Hitchon, G. G. Kaplan, J. A. Avina-Zubieta, P. R. Fortin, M. J. Larche, G. Boire, A. C. Gingras, R. M. Dayam, I. Colmegna, L. Lukusa, J. L. F. Lee, D. P. Richards, D. Pereira, T. H. Watts, M. S. Silverberg, C. N. Bernstein, D. Lacaille, J. Benoit, J. Kim,

N. Lalonde, J. Gunderson, H. Allard-Chamard, S. Roux, J. Quan, L. Hracs, E. Turnbull, V. Valerio, S. Bernatsky and S. I. Team. *When Should I Get My Next COVID-19 Vaccine? Data From the Surveillance of Responses to COVID-19 Vaccines in Systemic Immune-Mediated Inflammatory Diseases (SUCCEED) Study*. *J Rheumatol*, 2024. **51**(7): p. 721-727.

Brown, P. E., S. H. Fu, L. Newcombe, X. Tang, N. Nagelkerke, H. C. Birnboim, A. Bansal, K. Colwill, G. Mailhot, M. Delgado-Brand, T. Tursun, F. Qi, A. C. Gingras, A. S. Slutsky, M. D. Pasic, J. Companion, Bogoch, II, E. Morawski, T. Lam, A. Reid, P. Jha and C. S. C. Ab. *Hybrid immunity from severe acute respiratory syndrome coronavirus 2 infection and vaccination in Canadian adults: A cohort study*. *Elife*, 2024. **13**.

Cho, T., L. Hoeg, D. Setiaputra and D. Durocher. *NFATC2IP is a mediator of SUMO-dependent genome integrity*. *Genes Dev*, 2024. **38**(5-6): p. 233-252.

Choi, J. H., J. Luo, G. G. Hesketh, S. Guo, A. Pistofidis, R. J. Ladak, Y. An, P. Naeli, T. Alain, T. M. Schmeing, A. C. Gingras, T. Duchaine, X. Zhang, N. Sonenberg and S. M. Jafarnejad. *Repression of mRNA translation initiation by GIGYF1 via disrupting the eIF3-eIF4G1 interaction*. *Sci Adv*, 2024. **10**(29): p. eadl5638.

Coupland, C. E., R. Karimi, S. A. Bueler, Y. Liang, G. M. Courbon, J. M. Di Trani, C. J. Wong, R. Saghian, J. Y. Youn, L. Y. Wang and J. L. Rubinstein. *High-resolution electron cryomicroscopy of V-ATPase in native synaptic vesicles*. *Science*, 2024. **385**(6705): p. 168-174.

Dhavarasa, P., T. Sack, C. P. Cerrato, A. P. Cheng, Y. Y. Zhang, K. Chen and S. O. Kelley. *Mitochondrial Probe for Glutathione Depletion Reveals NME3 Essentiality for Mitochondrial Redox Response*. *ACS Chem Biol*, 2024. **19**(9): p. 2012-2022.

Enilama, O., K. Yau, L. Er, M. Atiquzzaman, M. J. Oliver, M. G. Romney, J. A. Leis, K. T. Abe, F. Qi, K. Colwill, A. C. Gingras, M. A. Hladunewich and A. Levin. *Humoral Response Following 3 Doses of mRNA COVID-19 Vaccines in Patients With Non-Dialysis-Dependent CKD: An Observational Study*. *Can J Kidney Health Dis*, 2024. **11**: p. 20543581231224127.

Fatehi, A., M. Sadat, M. Fayyad, J. Tang, D. Han, I. M. Rogers and D. Taylor. *Efficient Generation of Pancreatic Progenitor Cells from Induced Pluripotent Stem Cells Derived from a Non-Invasive and Accessible Tissue Source-The Plucked Hair Follicle*. *Cells*, 2024. **13**(12).

Feng, S., K. Liu, J. Shang, L. Hoeg, G. Pastore, W. Yang, S. Roy, G. Sastre-Moreno, J. T. F. Young, W. Wu, D. Xu and D. Durocher. *Profound synthetic lethality between SMARCAL1 and FANCM*. *Mol Cell*, 2024. **84**(23): p. 4522-4537 e4527.

Fink, M., K. Njah, S. J. Patel, D. P. Cook, V. Man, F. Russo, A. Rajan, M. Narimatsu, A. Obersterescu, M. J. Pye, D. Trcka, K. Chan, A. Ayyaz and J. L. Wrana. *Chromatin remodelling in damaged intestinal crypts orchestrates redundant TGFbeta and Hippo signalling to drive regeneration*. *Nat Cell Biol*, 2024. **26**(12): p. 2084-2098.

Habib, R., R. M. Dayam, C. Hitchon, V. Chandran, P. R. Fortin, G. Boire, D. M. E. Bowdish, A. C. Gingras, L. Flamand, M. J. Larche, I. Colmegna, L. Lukusa, J. L. F. Lee, D. Pereira, C. N. Bernstein, N. Lalonde, E. Turnbull, S. Bernatsky and S. i. team. *Duration of Postvaccination*

*Neutralizing Antibodies to SARS-CoV-2 and Medication Effects: Results from the Safety and Immunogenicity of COVID-19 Vaccination in Systemic Immune-Mediated Inflammatory Diseases Cohort Study.* ACR Open Rheumatol, 2024.

Harding, J., K. Vintersten-Nagy, H. Yang, J. K. Tang, M. Shutova, E. D. Jong, J. H. Lee, M. Massumi, T. Oussenko, Z. Izadifar, P. Zhang, I. M. Rogers, M. B. Wheeler, S. J. Lye, H. K. Sung, C. Li, M. Izadifar and A. Nagy. *Immune-privileged tissues formed from immunologically cloaked mouse embryonic stem cells survive long term in allogeneic hosts.* Nat Biomed Eng, 2024. **8**(4): p. 427-442.

Hitchon, C. A., D. M. E. Bowdish, G. Boire, P. R. Fortin, L. Flamand, V. Chandran, R. M. Dayam, A. C. Gingras, C. M. Card, I. Colmegna, M. J. Larche, G. G. Kaplan, L. Lukusa, J. L. F. Lee, S. Bernatsky and T. On Behalf Of The Succeed Investigative. *Methotrexate and Tumor Necrosis Factor Inhibitors Independently Decrease Neutralizing Antibodies after SARS-CoV-2 Vaccination: Updated Results from the SUCCEED Study.* Vaccines (Basel), 2024. **12**(9).

Hurst, J. R., M. Naghibosadat, P. Budowski, J. Liu, P. Samaan, F. Budiman, A. Kurtesi, F. Qi, H. Menon, R. Krishnan, J. Abioye, A. C. Gingras, M. Ostrowski, N. M. Orozco and R. A. Kozak. *Comparison of a SARS-CoV-2 mRNA booster immunization containing additional antigens to a spike-based mRNA vaccine against Omicron BA.5 infection in hACE2 mice.* PLoS One, 2024. **19**(12): p. e0314061.

Janer, A., J. L. Morris, M. Krosl, H. Antonicka, M. J. Aaltonen, Z. Y. Lin, H. Anand, A. C. Gingras, J. Prudent and E. A. Shoubridge. *ESYT1 tethers the ER to mitochondria and is required for mitochondrial lipid and calcium homeostasis.* Life Sci Alliance, 2024. **7**(1).

Kuzmin, E., T. M. Baker, T. Lesluyes, J. Monlong, K. T. Abe, P. P. Coelho, M. Schwartz, J. Del Corpo, D. Zou, G. Morin, A. Pacis, Y. Yang, C. Martinez, J. Barber, H. Kuasne, R. Li, M. Bourgey, A. M. Fortier, P. G. Davison, A. Omeroglu, M. C. Guiot, Q. Morris, C. L. Kleinman, S. Huang, A. C. Gingras, J. Ragoussis, G. Bourque, P. Van Loo and M. Park. *Evolution of chromosome-arm aberrations in breast cancer through genetic network rewiring.* Cell Rep, 2024. **43**(4): p. 113988.

Lacoste, J., M. Haghghi, S. Haider, C. Reno, Z. Y. Lin, D. Segal, W. W. Qian, X. Xiong, T. Teelucksingh, E. Miglietta, H. Shafqat-Abbasi, P. V. Ryder, R. Senft, B. A. Cimini, R. R. Murray, C. Nyirakanani, T. Hao, G. G. McClain, F. P. Roth, M. A. Calderwood, D. E. Hill, M. Vidal, S. S. Yi, N. Sahni, J. Peng, A. C. Gingras, S. Singh, A. E. Carpenter and M. Taipale. *Pervasive mislocalization of pathogenic coding variants underlying human disorders.* Cell, 2024. **187**(23): p. 6725-6741 e6713.

Liu, D., B. K. Dredge, A. G. Bert, K. A. Pillman, J. Toubia, W. Guo, B. J. A. Dyakov, M. M. Migault, V. M. Conn, S. J. Conn, P. A. Gregory, A. C. Gingras, D. Patel, B. Wu and G. J. Goodall. *ESRP1 controls biogenesis and function of a large abundant multiexon circRNA.* Nucleic Acids Res, 2024. **52**(3): p. 1387-1403.

Livingston, J. M., T. T. Lee, T. Enbar, E. Daniele, C. M. Phillips, A. Krassikova, K. W. A. Bang, I. Kortebi, B. W. Donville, O. S. Ibragimov, N. Sachewsky, D. Lozano Casasbuenas, A. Olfat and C. M. Morshead. *Ectopic Expression of Neurod1 Is Sufficient for Functional Recovery following a Sensory-Motor Cortical Stroke.* Biomedicines, 2024. **12**(3).

Lu, Y., T. Cho, S. Mukherjee, C. F. Suarez, N. S. Gonzalez-Foutel, A. Malik, S. Martinez, D. Dervovic, R. H. Oh, E. Langille, K. N. Al-Zahrani, L. Hoeg, Z. Y. Lin, R. Tsai, G. Mbamalu, V. Rotter, P. Ashton-Prolla, J. Moffat, L. B. Chemes, A. C. Gingras, M. Oren, D. Durocher and D. Schramek. *Genome-wide CRISPR screens identify novel regulators of wild-type and mutant p53 stability*. Mol Syst Biol, 2024. **20**(6): p. 719-740.

MacLeod, G., F. Molaei, S. Haider, M. P. Almeida, S. Lin, M. Kushida, H. Sureshkumar, J. K. Bhatti, J. Q. Lu, D. Schramek, P. B. Dirks and S. Angers. *Fitness Screens Map State-Specific Glioblastoma Stem Cell Vulnerabilities*. Cancer Res, 2024. **84**(23): p. 3967-3983.

Madaan, V., A. Kollara, D. Spaner and T. J. Brown. *ISGylation enhances dsRNA-induced interferon response and NFκB signaling in fallopian tube epithelial cells*. J Biol Chem, 2024. **300**(9): p. 107686.

Martinez, S., S. Wu, M. Geuenich, A. Malik, R. Weber, T. Woo, A. Zhang, G. H. Jang, D. Dervovic, K. N. Al-Zahrani, R. Tsai, N. Fodil, P. Gros, S. Gallinger, G. G. Neely, F. Notta, A. Sendoel, K. Campbell, U. Elling and D. Schramek. *In vivo CRISPR screens reveal SCAF1 and USP15 as drivers of pancreatic cancer*. Nat Commun, 2024. **15**(1): p. 5266.

Mokady, D., J. Charish, P. Barretto-Burns, K. N. Grise, B. L. K. Coles, S. Raab, A. Ortin-Martinez, A. Muller, B. Fasching, P. Jain, M. Drukker, D. van der Kooy and M. Steger. *Small-Molecule-Directed Endogenous Regeneration of Visual Function in a Mammalian Retinal Degeneration Model*. Int J Mol Sci, 2024. **25**(3).

Montgomery-Song, A., S. Ashraf, P. Santerre and R. Kandel. *Senescent response in inner annulus fibrosus cells in response to TNFα, H2O2, and TNFα-induced nucleus pulposus senescent secretome*. PLoS One, 2024. **19**(1): p. e0280101.

Morgan, G., C. Y. J. Fung, A. C. Gingras, K. Colwill, L. Briollais, E. Frangione, D. Wolday, F. Qi, A. Pascalescu, M. Delgado-Brand, G. Mailhot, T. Tursun, S. Arnoldo, E. Bearss, A. Binnie, B. Borgundvaag, S. Casalino, S. Chowdhary, M. Dagher, L. Devine, L. T. Elliott, S. M. Friedman, Z. Khan, E. Lapadula, G. MacDonald, T. Mazzulli, S. L. McLeod, C. Mighton, K. Nirmalanathan, D. Richardson, S. Stern, A. Taher, J. Young, J. Lerner-Ellis and J. Taher. *Characterizing the SARS-CoV-2 antibody response and associations with patient factors: Serological profiling of participants enrolled in the GENCOV study*. Clin Biochem, 2024. **135**: p. 110859.

Nantel, S., S. Sheikh-Mohamed, G. Y. C. Chao, A. Kurtesi, Q. Hu, H. Wood, K. Colwill, Z. Li, Y. Liu, L. Seifried, B. Bourdin, A. McGeer, W. R. Hardy, O. L. Rojas, T. A. Al-Aubodah, Z. Liu, M. A. Ostrowski, M. A. Brockman, C. A. Piccirillo, C. Quach, J. M. Rini, A. C. Gingras, H. Decaluwe and J. L. Gommerman. *Comparison of Omicron breakthrough infection versus monovalent SARS-CoV-2 intramuscular booster reveals differences in mucosal and systemic humoral immunity*. Mucosal Immunol, 2024. **17**(2): p. 201-210.

Osman, A., A. Aimone, R. Ansumana, I. Bogoch, H. Gelband, K. Colwill, A. C. Gingras, M. A. Langlois, R. Carshon-Marsh, I. B. Swaray, A. Jambai, M. Vandi, A. Vandi, M. Massaquoi, A. Assalif, H. C. Birnboim, P. E. Brown, N. Nagelkerke and P. Jha. *High SARS-CoV-2 seroincidence but low excess COVID mortality in Sierra Leone in 2020-2022*. PLOS Glob Public Health, 2024. **4**(9): p. e0003411.

Pearson, J. D., K. Huang, L. G. Dela Pena, B. Ducarouge, P. Mehlen and R. Bremner. *Netrin-1 and UNC5B Cooperate with Integrins to Mediate YAP-Driven Cytostasis*. Cancer Res Commun, 2024. **4**(9): p. 2374-2383.

Philip, R., A. Sharma, L. Matellan, A. C. Erpf, W. H. Hsu, J. M. Tkach, H. D. M. Wyatt and L. Pelletier. *qTAG: an adaptable plasmid scaffold for CRISPR-based endogenous tagging*. EMBO J, 2024.

Poirson, J., H. Cho, A. Dhillon, S. Haider, A. Z. Imrit, M. H. Y. Lam, N. Alerasool, J. Lacoste, L. Mizan, C. Wong, A. C. Gingras, D. Schramek and M. Taipale. *Proteome-scale discovery of protein degradation and stabilization effectors*. Nature, 2024. **628**(8009): p. 878-886.

Richard, L., R. Nisenbaum, K. Colwill, S. Mishra, R. M. Dayam, M. Liu, C. Pedersen, A. C. Gingras and S. W. Hwang. *Enhancing detection of SARS-CoV-2 re-infections using longitudinal sero-monitoring: demonstration of a methodology in a cohort of people experiencing homelessness in Toronto, Canada*. BMC Infect Dis, 2024. **24**(1): p. 125.

Scott, E. Y., N. Safarian, D. L. Casasbuenas, M. Dryden, T. Tockovska, S. Ali, J. Peng, E. Daniele, I. Nie Xin Lim, K. W. A. Bang, S. Tripathy, S. A. Yuzwa, A. R. Wheeler and M. Faiz. *Integrating single-cell and spatially resolved transcriptomic strategies to survey the astrocyte response to stroke in male mice*. Nat Commun, 2024. **15**(1): p. 1584.

Sellars, E., M. Savguira, J. Wu, S. Cancelliere, M. Jen, R. Krishnan, A. Hakem, D. Barsyte-Lovejoy, R. Hakem, S. A. Narod, J. Kotsopoulos and L. Salmena. *A high-throughput approach to identify BRCA1-downregulating compounds to enhance PARP inhibitor sensitivity*. iScience, 2024. **27**(7): p. 110180.

Sussman, R. G., J. Mburu, M. Steele, A. Bang, J. Friedman, R. Goldman, M. Kirby, M. L. Rand, V. S. Blanchette, F. G. Pluthero, S. Williams and W. H. A. Kahr. *Constitutive hypercoagulability in pediatric sickle cell disease patients with hemoglobin SS genotype*. Res Pract Thromb Haemost, 2024. **8**(3): p. 102374.

Thivierge, C., M. Bellefeuille, S. S. Diwan, B. J. A. Dyakov, R. Leventis, G. Perron, H. S. Najafabadi, S. P. Gravel, A. C. Gingras and T. F. Duchaine. *Paraspeckle-independent cotranscriptional regulation of nuclear microRNA biogenesis by SFPQ*. Cell Rep, 2024. **43**(9): p. 114695.

Villegas, E., K. Lajkosz, S. Din, C. Kuk, A. Chan, J. C. C. Kwong, C. Vitug, B. Gao, O. Hemminki, D. Kot, J. Misurka, P. Black, M. Jewett, M. S. Soloway, M. Roupret, E. Comperat, J. Sweet, T. Seisen, N. E. Fleshner, J. Wrana, T. H. van der Kwast, G. S. Kulkarni and A. R. Zlotta. *Long-Term Recurrence Risk, Metastatic Potential, and Length of Cystoscopic Surveillance of Low-Grade Non-Muscle-Invasive Bladder Cancer*. J Urol, 2024. p. 101097JU0000000000004305.

Walmsley, S., M. Nabipoor, F. Qi, L. E. Lovblom, R. Ravindran, K. Colwill, R. M. Dayam, T. R. Tursun, A. Silva, A. C. Gingras and S. T. On Behalf Of The. *Declining Levels of Neutralizing Antibodies to SARS-CoV-2 Omicron Variants Are Enhanced by Hybrid Immunity and Original/Omicron Bivalent Vaccination*. Vaccines (Basel), 2024. **12**(6).

Xiao, Y. X., S. Y. Lee, M. Aguilera-Uribe, R. Samson, A. Au, Y. Khanna, Z. Liu, R. Cheng, K. Aulakh, J. Wei, A. G. Farias, T. Reilly, S. Birkadze, A. Habsid, K. R. Brown, K. Chan, P. Mero, J. Q. Huang, M. Billmann, M. Rahman, C. Myers, B. J. Andrews, J. Y. Youn, C. M. Yip, D. Rotin, W. B. Derry, J. D. Forman-Kay, A. M. Moses, I. Pritisanac, A. C. Gingras and J. Moffat. *The TSC22D, WNK, and NRBP gene families exhibit functional buffering and evolved with Metazoa for cell volume regulation*. Cell Rep, 2024. **43**(7): p. 114417.

Xiong, E. H., X. Zhang, H. Yan, H. N. Ward, Z. Y. Lin, C. J. Wong, C. Fu, A. C. Gingras, S. M. Noble, N. Robbins, C. L. Myers and L. E. Cowen. *Functional genomic analysis of genes important for Candida albicans fitness in diverse environmental conditions*. Cell Rep, 2024. **43**(8): p. 114601.

Yang, A., R. Chidiac, E. Russo, H. Steenland, Q. Pauli, R. Bonin, L. L. Blazer, J. J. Adams, S. S. Sidhu, A. Goeva, A. Salahpour and S. Angers. *Exploiting spatiotemporal regulation of FZD5 during neural patterning for efficient ventral midbrain specification*. Development, 2024. **151**(5).

Yau, K., P. Tam, C. T. Chan, Q. Hu, F. Qi, K. T. Abe, A. Kurtesi, Y. Jiang, J. Estrada-Codecido, T. Brown, L. Liu, A. Siwakoti, J. A. Leis, A. Levin, M. J. Oliver, K. Colwill, A. C. Gingras and M. A. Hladunewich. *BNT162b2 versus mRNA-1273 Third Dose COVID-19 Vaccine in Patients with CKD and Maintenance Dialysis Patients*. Clin J Am Soc Nephrol, 2024. **19**(1): p. 85-97.

Zeng, P. Y. F., S. D. Prokopec, S. Y. Lai, N. Pinto, M. A. Chan-Seng-Yue, R. Clifton-Bligh, M. D. Williams, C. J. Howlett, P. Plantinga, M. J. Cecchini, A. K. Lam, I. Siddiqui, J. Wang, R. X. Sun, J. D. Watson, R. Korah, T. Carling, N. Agrawal, N. Cipriani, D. Ball, B. Nelkin, L. M. Rooper, J. A. Bishop, C. Garnis, K. Berean, N. G. Nicolson, P. Weinberger, Y. C. Henderson, C. M. Lalansingh, M. Tian, T. N. Yamaguchi, J. Livingstone, A. Salcedo, K. Patel, F. Vizeacoumar, A. Datti, L. Xi, Y. E. Nikiforov, R. Smallridge, J. A. Copland, L. A. Marlow, M. D. Hyrcza, L. Delbridge, S. Sidhu, M. Sywak, B. Robinson, K. Fung, F. Ghasemi, K. Kwan, S. D. MacNeil, A. Mendez, D. A. Palma, M. I. Khan, M. Shaikh, K. M. Ruicci, B. Wehrli, E. Winquist, J. Yoo, J. S. Myrmryk, J. W. Rocco, D. Wheeler, S. Scherer, T. J. Giordano, J. W. Barrett, W. C. Faquin, A. J. Gill, G. Clayman, P. C. Boutros and A. C. Nichols. *The genomic and evolutionary landscapes of anaplastic thyroid carcinoma*. Cell Rep, 2024. **43**(3): p. 113826.

Zhang, J., L. Ataei, K. Mittal, L. Wu, L. Caldwell, L. Huynh, S. Sarajideen, K. Tse, M. M. Simon, M. A. Mazid, D. P. Cook, D. Trcka, T. Kwan, M. M. Hoffman, J. L. Wrana, M. A. Esteban and M. Ramalho-Santos. *LINE1 and PRC2 control nucleolar organization and repression of the 8C state in human ESCs*. Dev Cell, 2024.

Zhang, S., J. C. Y. Le Blanc, B. Larsen, K. Colwill, L. Burton, M. Guna, A. C. Gingras and S. Tate. *High-resolution quadrupole improves spectral purity and reduces interference from non-target ions in isobaric multiplexed quantitative proteomics*. Anal Chim Acta, 2024. **1325**: p. 343135.

## 2023

Almeida, S. M., S. Ivantsiv, R. Niibori, W. H. Dunham, B. A. Green, L. Zhao, A. C. Gingras and S. P. Cordes. *An interaction between OTULIN and SCRIB uncovers roles for linear ubiquitination in planar cell polarity.* Dis Model Mech, 2023. **16**(8).

Aprosoff, C. M., B. J. A. Dyakov, V. H. W. Cheung, C. J. Wong, M. Palandra, A. C. Gingras and H. D. M. Wyatt *Comprehensive Interactome Mapping of the DNA Repair Scaffold SLX4 Using Proximity Labeling and Affinity Purification.* J Proteome Res, 2023.

Aubry, A., J. D. Pearson, J. Charish, T. Yu, J. M. Sivak, D. P. Xirodimas, H. Avet-Loiseau, J. Corre, P. P. Monnier and R. Bremner. *Deneddylation of ribosomal proteins promotes synergy between MLN4924 and chemotherapy to elicit complete therapeutic responses.* Cell Rep, 2023. **42**(8): p. 112925.

Breznik, J. A., A. Rahim, T. Kajaks, M. Hagerman, L. Bilaver, K. Colwill, R. M. Dayam, A. C. Gingras, C. P. Verschoor, J. E. McElhaney, J. L. Bramson, D. M. E. Bowdish and A. P. Costa *Protection from Omicron Infection in Residents of Nursing and Retirement Homes in Ontario, Canada.* J Am Med Dir Assoc, 2023.

Camirand Lemyre, F., S. H. Honfo, C. Caya, M. P. Cheng, K. Colwill, R. Corsini, A. C. Gingras, A. Jassem, M. Krajden, A. C. Marquez, B. D. Mazer, M. McLennan, C. Renaud, C. P. Yansouni, J. Papenburg and A. Lewin. *Two-phase Bayesian latent class analysis to assess diagnostic test performance in the absence of a gold standard: COVID-19 serological assays as a proof of concept.* Vox Sang, 2023. **118**(12): p. 1069-1077.

Chan, B., M. Glogauer, Y. Wang, J. Wrana, K. Chan, F. Beier, S. Bali, B. Hinz, J. Parreno, S. Ashraf and R. Kandel. *Adseverin, an actin-binding protein, modulates hypertrophic chondrocyte differentiation and osteoarthritis progression.* Sci Adv, 2023. **9**(31): p. eadfl130.

Cheung, M. W., R. M. Dayam, J. R. Shapiro, J. C. Law, G. Y. C. Chao, D. Pereira, R. L. Goetgebuer, D. Croitoru, J. M. Stempak, L. Acheampong, S. Rizwan, J. D. Lee, L. Jacob, D. Ganatra, R. Law, V. E. Rodriguez-Castellanos, M. Kern-Smith, M. Delgado-Brand, G. Mailhot, N. Haroon, R. D. Inman, V. Piguet, V. Chandran, M. S. Silverberg, T. H. Watts and A. C. Gingras. *Third and Fourth Vaccine Doses Broaden and Prolong Immunity to SARS-CoV-2 in Adult Patients with Immune-Mediated Inflammatory Diseases.* J Immunol, 2023. **211**(3): p. 351-364.

Collignon, E., B. Cho, G. Furlan, J. Fothergill-Robinson, S. B. Martin, S. A. McClymont, R. L. Ross, P. A. Limbach and M. Ramalho-Santos. *m(6)A RNA methylation orchestrates transcriptional dormancy during paused pluripotency.* Nat Cell Biol, 2023. **25**(9): p. 1279-1289.

Cormier, K. W., B. Larsen, A. C. Gingras and J. R. Woodgett *Interactomes of Glycogen Synthase Kinase-3 Isoforms.* J Proteome Res, 2023. **22**(3): 977-989.

Dervovic, D., A. A. Malik, E. L. Y. Chen, M. Narimatsu, N. Adler, S. Afifi-Zadeh, D. Krenbek, S. Martinez, R. Tsai, J. Boucher, J. M. Berman, K. Teng, A. Ayyaz, Y. Lu, G. Mbamalu, S. K. Loganathan, J. Lee, L. Zhang, C. Guidos, J. Wrana, A. Valipour, P. P. Roux, J. Reimand, H. W.

Jackson and D. Schramek. *In vivo CRISPR screens reveal Serpinb9 and Adam2 as regulators of immune therapy response in lung cancer*. Nat Commun, 2023. **14**(1): p. 3150.

Di Meo, A., L. Ma, K. Yau, K. T. Abe, K. Colwill, A. C. Gingras, R. Kozak, M. A. Hladunewich and P. M. Yip. *Evaluation of commercial assays for the assessment of SARS-CoV-2 antibody response in hemodialysis patients*. Clin Biochem, 2023. **121-122**: p. 110681.

Dittmann, N. L., P. Torabi, A. E. S. Watson, S. A. Yuzwa and A. Voronova. *Culture Protocol and Transcriptomic Analysis of Murine SVZ NPCs and OPCs*. Stem Cell Rev Rep, 2023. **19**(4): p. 983-1000.

Ferreira, V. H., Q. Hu, A. Kurtesi, J. T. Solera, M. Ierullo, A. C. Gingras, D. Kumar and A. Humar. *Impact of Omicron BA.1 infection on BA.4/5 immunity in transplant recipients*. Am J Transplant, 2023. **23**(2): p. 278-283.

Ferreira, V. H., M. Ierullo, F. Mavandadnejad, A. Kurtesi, Q. Hu, W. R. Hardy, V. G. Hall, N. Pinzon, D. Yotis, A. C. Gingras, S. Belga, S. Shalhoub, M. J. Hebert, A. Humar, D. Kabbani and D. Kumar. *Omicron BA.4/5 Neutralization and T-Cell Responses in Organ Transplant Recipients After Booster Messenger RNA Vaccine: A Multicenter Cohort Study*. Clin Infect Dis, 2023. **77**(2): p. 229-236.

Hall, E. A., D. Kumar, S. L. Prosser, P. L. Yeyati, V. Herranz-Perez, J. M. Garcia-Verdugo, L. Rose, L. McKie, D. O. Dodd, P. A. Tennant, R. Megaw, L. C. Murphy, M. F. Ferreira, G. Grimes, L. Williams, T. Quidwai, L. Pelletier, J. F. Reiter and P. Mill. *Centriolar satellites expedite mother centriole remodeling to promote ciliogenesis*. Elife, 2023. **12**.

Harding, R. J., I. Franzoni, M. K. Mann, M. M. Szewczyk, B. Mirabi, R. Ferreira de Freitas, D. D. G. Owens, S. Ackloo, A. Scheremetjew, K. A. Juarez-Ornelas, R. Sanichar, R. J. Baker, C. Dank, P. J. Brown, D. Barsyte-Lovejoy, V. Santhakumar, M. Schapira, M. Lautens and C. H. Arrowsmith. *Discovery and Characterization of a Chemical Probe Targeting the Zinc-Finger Ubiquitin-Binding Domain of HDAC6*. J Med Chem, 2023. **66**(15): p. 10273-10288.

Iyer, K. R., S. C. Li, N. M. Revie, J. W. Lou, D. Duncan, S. Fallah, H. Sanchez, I. Skulska, M. M. Usaj, H. Safizadeh, B. Larsen, C. Wong, A. Aman, T. Kiyota, M. Yoshimura, H. Kimura, H. Hirano, M. Yoshida, H. Osada, A. C. Gingras, D. R. Andes, R. S. Shapiro, N. Robbins, M. T. Mazhab-Jafari, L. Whitesell, Y. Yashiroda, C. Boone and L. E. Cowen. *Identification of triazenyl indoles as inhibitors of fungal fatty acid biosynthesis with broad-spectrum activity*. Cell Chem Biol, 2023. **30**(7): p. 795-810 e798.

Jong, E. D., S. Hacibekiroglu, L. Guo, E. Sawula, B. Li, C. Li, M. T. Ho, M. S. Shoichet, V. A. Wallace and A. Nagy. *Soluble CX3CL1-expressing retinal pigment epithelium cells protect rod photoreceptors in a mouse model of retinitis pigmentosa*. Stem Cell Res Ther, 2023. **14**(1): p. 212.

Khazaei, S., C. C. L. Chen, A. F. Andrade, N. Kabir, P. Azarafshar, S. M. Morcos, J. A. Franca, M. Lopes, P. J. Lund, G. Danieau, S. Worme, L. Adnani, N. Nzirorera, X. Chen, G. Yogarajah, C. Russo, M. Zeinieh, C. J. Wong, L. Bryant, S. Hebert, B. Tong, T. S. Sihota, D. Faury, E. Puligandla, W. Jawhar, V. Sandy, M. Cowan, E. M. Nakada, L. A. Jerome-Majewska, B. Ellezam, C. C. Gomes, J. Denecke, D. Lessel, M. T. McDonald, C. E. Pizoli, K. Taylor, B. T. Cocanougher,

E. J. Bhoj, A. C. Gingras, B. A. Garcia, C. Lu, E. I. Campos, C. L. Kleinman, L. Garzia and N. Jabado. *Single substitution in H3.3G34 alters DNMT3A recruitment to cause progressive neurodegeneration*. Cell, 2023. **186**(6): p. 1162-1178 e1120.

Kibschull, M., T. T. N. Nguyen, T. Chow, M. Alarab, S. J. Lye, I. Rogers and O. Shynlova. *Differentiation of patient-specific void urine-derived human induced pluripotent stem cells to fibroblasts and skeletal muscle myocytes*. Sci Rep, 2023. **13**(1): p. 4746.

Kim, H., K. Aliar, P. Tharmapalan, C. W. McCloskey, A. Kuttanamkuzhi, B. T. Grunwald, L. Palomero, M. J. Mahendralingam, M. Waas, A. S. Mer, M. J. Elliott, B. Zhang, K. N. Al-Zahrani, E. R. Langille, M. Parsons, S. Narala, S. Hofer, P. D. Waterhouse, R. Hakem, B. Haibe-Kains, T. Kislinger, D. Schramek, D. W. Cescon, M. A. Pujana, H. K. Berman and R. Khokha. *Differential DNA damage repair and PARP inhibitor vulnerability of the mammary epithelial lineages*. Cell Rep, 2023. **42**(10): p. 113256.

Kim, Y. K., B. Cho, D. P. Cook, D. Trcka, J. L. Wrana and M. Ramalho-Santos. *Absolute scaling of single-cell transcriptomes identifies pervasive hypertranscription in adult stem and progenitor cells*. Cell Rep, 2023. **42**(1): 111978.

Kondratyev, M., A. Pesic, T. Ketela, N. Stickle, C. Beswick, Z. Shalev, S. Marastoni, S. Samadian, A. Dvorkin-Gheva, A. Sayad, M. Bashkurov, P. Boasquevisque, A. Datti, T. J. Pugh, C. Virtanen, J. Moffat, R. A. Grenman, M. Koritzinsky and B. G. Wouters. *Identification of acquired Notch3 dependency in metastatic Head and Neck Cancer*. Commun Biol, 2023. **6**(1): p. 538.

Kumar, A., M. Schwab, B. Laborit Labrada, M. A. D. Silveira, M. Goudreault, E. Fournier, K. Bellmann, N. Beauchemin, A. C. Gingras, S. Bilodeau, M. Laplante and A. Marette. *SHP-1 phosphatase acts as a coactivator of PCK1 transcription to control gluconeogenesis*. J Biol Chem, 2023. **299**(9): p. 105164.

Lefebvre, C., S. Pellizzari, V. Bhat, K. Jurcic, D. W. Litchfield and A. L. Allan. *Involvement of the AKT Pathway in Resistance to Erlotinib and Cabozantinib in Triple-Negative Breast Cancer Cell Lines*. Biomedicines, 2023. **11**(9).

Li, W., L. Wen, B. Rathod, A. C. Gingras, K. Ley and H. S. Lee. *Kindlin2 enables EphB/ephrinB bi-directional signaling to support vascular development*. Life Sci Alliance, 2023. **6**(3).

Lin, J. D., P. J. Stogios, K. T. Abe, A. Wang, J. MacPherson, T. Skarina, A. C. Gingras, A. Savchenko and A. W. Ensminger. *Functional diversification despite structural congruence in the HipBST toxin-antitoxin system of Legionella pneumophila*. mBio, 2023. **14**(5): p. e0151023.

Lin, Y. J., D. H. Evans, N. F. Robbins, G. Orjuela, K. T. Abe, B. Rathod, K. Colwill, A. C. Gingras, A. Tuite, Q. L. Yi, S. F. O'Brien and S. J. Drews. *Diminished Neutralization Capacity of SARS-CoV-2 Omicron BA.1 in Donor Plasma Collected from January to March 2021*. Microbiol Spectr, 2023. **11**(4): p. e0525622.

Mabanglo, M. F., K. S. Wong, M. M. Barghash, E. Leung, S. H. W. Chuang, A. Ardalan, E. M. Majaesic, C. J. Wong, S. Zhang, H. Lang, D. S. Karanewsky, A. A. Iwanowicz, L. M. Graves, E. J. Iwanowicz, A. C. Gingras and W. A. Houry. *Potent ClpP agonists with anticancer properties*

*bind with improved structural complementarity and alter the mitochondrial N-terminome.* Structure, 2023. **31**(2): 185-200 e110.

Martin-Orozco, N., N. Vale, A. Mihic, T. Amor, L. Reiter, Y. Arita, R. Samson, Q. Hu, A. C. Gingras, B. T. Sorenson, E. G. Marcusson and P. Patel. *Phase I randomized, observer-blinded, placebo-controlled study of a SARS-CoV-2 mRNA vaccine PTX-COVID19-B.* Sci Rep, 2023. **13**(1): p. 8557.

Matveev, V. A., E. Z. Mihelic, E. Benko, P. Budylowski, S. Grocott, T. Lee, C. S. Korosec, K. Colwill, H. Stephenson, R. Law, L. A. Ward, S. Sheikh-Mohamed, G. Mailhot, M. Delgado-Brand, A. Pasculescu, J. H. Wang, F. Qi, T. Tursun, L. Kardava, S. Chau, P. Samaan, A. Imran, D. C. Copertino, Jr., G. Chao, Y. Choi, R. J. Reinhard, R. Kaul, J. M. Heffernan, R. B. Jones, T. W. Chun, S. Moir, J. Singer, J. Gommerman, A. C. Gingras, C. Kovacs and M. Ostrowski. *Immunogenicity of COVID-19 vaccines and their effect on HIV reservoir in older people with HIV.* iScience, 2023. **26**(10): p. 107915.

McEvoy, C. M., Q. Hu, K. T. Abe, K. Yau, M. J. Oliver, A. Levin, A. C. Gingras, M. A. Hladunewich and D. A. Yuen *Humoral Responses in the Omicron Era Following 3-Dose SARS-CoV-2 Vaccine Series in Kidney Transplant Recipients.* Transplant Direct, 2023. **9**(1): e1401.

Millar, S. R., J. Q. Huang, K. J. Schreiber, Y. C. Tsai, J. Won, J. Zhang, A. M. Moses and J. Y. Youn. *A New Phase of Networking: The Molecular Composition and Regulatory Dynamics of Mammalian Stress Granules.* Chem Rev, 2023. **123**(14): p. 9036-9064.

Murphy, T. J., H. Swail, J. Jain, M. Anderson, P. Awadalla, L. Behl, P. E. Brown, C. L. Charlton, K. Colwill, S. J. Drews, A. C. Gingras, D. Hinshaw, P. Jha, J. N. Kanji, V. A. Kirsh, A. L. S. Lang, M. A. Langlois, S. Lee, A. Lewin, S. F. O'Brien, C. Pambrun, K. Skead, D. A. Stephens, D. R. Stein, G. Tipple, P. G. Van Caeseele, T. G. Evans, O. Oxlade, B. D. Mazer and D. L. Buckeridge. *The evolution of SARS-CoV-2 seroprevalence in Canada: a time-series study, 2020-2023.* CMAJ, 2023. **195**(31): p. E1030-E1037.

Nabeel-Shah, S., J. Garg, K. Ashraf, R. Jeyapala, H. Lee, A. Petrova, J. D. Burns, S. Pu, Z. Zhang, J. F. Greenblatt, R. E. Pearlman, J. P. Lambert and J. Fillingham. *Multilevel interrogation of H3.3 reveals a primordial role in transcription regulation.* Epigenetics Chromatin, 2023. **16**(1): p. 10.

Ngai, J., P. MacMillan, B. R. Kingston, Z. P. Lin, B. Ouyang and W. C. W. Chan. *Delineating the tumour microenvironment response to a lipid nanoparticle formulation.* J Control Release, 2023. **353**: p. 988-1001.

O'Brien, S., T. Ubhi, L. Wolf, K. Gandhi, S. Lin, N. Chaudary, N. C. Dhani, M. Milosevic, G. W. Brown and S. Angers. *FBXW7-loss sensitizes cells to ATR inhibition through induced mitotic catastrophe.* Cancer Res Commun, 2023.

Richard, L., R. Nisenbaum, M. Brown, M. Liu, C. Pedersen, J. I. R. Jenkinson, S. Mishra, S. Baral, K. Colwill, A. C. Gingras, A. McGeer and S. W. Hwang *Incidence of SARS-CoV-2 Infection Among People Experiencing Homelessness in Toronto, Canada.* JAMA Netw Open, 2023. **6**(3): e232774.

Roth, J. F., U. Braunschweig, M. Wu, J. D. Li, Z. Y. Lin, B. Larsen, R. J. Weatheritt, A. C. Gingras and B. J. Blencowe. *Systematic analysis of alternative exon-dependent interactome remodeling reveals multitasking functions of gene regulatory factors*. Mol Cell, 2023. **83**(23): p. 4222-4238 e4210.

Sack, T., P. Dhavarasa, D. Szames, S. O'Brien, S. Angers and S. O. Kelley. *CRISPR Screening in Tandem with Targeted mtDNA Damage Reveals WRNIP1 Essentiality*. ACS Chem Biol, 2023.

Samson, R., F. Zangari and A. C. Gingras. *Studying Cellular Dynamics Using Proximity-Dependent Biotinylation: Somatic Cell Reprogramming*. Methods Mol Biol, 2023. **2718**: p. 23-52.

Sawula, E., S. Miersch, E. D. Jong, C. Li, F. Y. Chou, J. K. Tang, R. Saberianfar, J. Harding, S. S. Sidhu and A. Nagy. *Cell-based passive immunization for protection against SARS-CoV-2 infection*. Stem Cell Res Ther, 2023. **14**(1): p. 318.

Segal, D., S. Maier, G. J. Mastromarco, W. W. Qian, S. Nabeel-Shah, H. Lee, G. Moore, J. Lacoste, B. Larsen, Z. Y. Lin, A. Selvabaskaran, K. Liu, C. Smibert, Z. Zhang, J. Greenblatt, J. Peng, H. O. Lee, A. C. Gingras and M. Taipale. *A central chaperone-like role for 14-3-3 proteins in human cells*. Mol Cell, 2023. **83**(6): 974-993 e915.

Sifri, C., L. Hoeg, D. Durocher and D. Setiaputra. *An AlphaFold2 map of the 53BP1 pathway identifies a direct SHLD3-RIF1 interaction critical for shieldin activity*. EMBO Rep, 2023. **24**(8): p. e56834.

Silveira, K. C., I. C. Fonseca, C. Oborn, P. Wengryn, S. Ghafoor, A. Beke, E. S. Dreseris, C. Wong, A. Iacovone, C. L. Soltys, R. Babul-Hirji, O. Artigalas, A. Antolini-Tavares, A. C. Gingras, E. Campos, D. P. Cavalcanti and P. Kannu. *CYP26B1-related disorder: expanding the ends of the spectrum through clinical and molecular evidence*. Hum Genet, 2023. **142**(11): p. 1571-1586.

Solera, J. T., M. Ierullo, B. G. Arbol, F. Mavandadnejad, A. Kurtesi, F. Qi, Q. Hu, A. C. Gingras, V. H. Ferreira, A. Humar and D. Kumar. *Bivalent COVID-19 mRNA vaccine against omicron subvariants in immunocompromised patients*. Lancet Infect Dis, 2023. **23**(8): p. e266-e267.

Solera, J. T., B. G. Arbol, V. H. Ferreira, A. Kurtesi, Q. Hu, M. Ierullo, A. Valverde-Zuniga, I. Raslan, A. Nasir, C. Grizales, W. R. Hardy, V. Kulasingam, A. C. Gingras, A. Humar and D. Kumar. *Differential serum neutralisation of omicron sublineages in patients receiving prophylaxis with tixagevimab-cilgavimab*. Lancet Infect Dis, 2023. **23**(5): p. 528-530.

Tsekitsidou, E., C. J. Wong, I. Ulengin-Talkish, A. I. M. Barth, T. Stearns, A. C. Gingras, J. T. Wang and M. S. Cyert. *Calcineurin associates with centrosomes and regulates cilia length maintenance*. J Cell Sci, 2023. **136**(8).

Vujovic, A., L. de Rooij, A. K. Chahi, H. T. Chen, B. A. Yee, S. K. Loganathan, L. Liu, D. C. H. Chan, A. Tajik, E. Tsao, S. Moreira, P. Joshi, J. Xu, N. Wong, Z. Balde, S. Jahangiri, S. Zandi, S. Aigner, J. E. Dick, M. D. Minden, D. Schramek, G. W. Yeo and K. J. Hope. *In Vivo Screening Unveils Pervasive RNA-Binding Protein Dependencies in Leukemic Stem Cells and Identifies ELAVL1 as a Therapeutic Target*. Blood Cancer Discov, 2023. **4**(3): 180-207.

Walmsley, S. L., L. Szadkowski, B. Wouters, R. Clarke, K. Colwill, P. Rochon, M. Brudno, R. Ravindran, J. Raboud, A. McGeer, A. Oza, C. Graham, A. Silva, D. Manase, P. Maksymowsky, L. Parente, R. M. Dayam, J. Simpson, A. Pascalescu and A. C. Gingras *COVID-19 vaccine antibody responses in community-dwelling adults to 48 weeks post primary vaccine series*. iScience, 2023. **26**(4): 106506.

Wang, H., S. A. Bueler and J. L. Rubinstein. *Structural basis of V-ATPase V(O) region assembly by Vma12p, 21p, and 22p*. Proc Natl Acad Sci U S A, 2023. **120**(6): p. e2217181120.

Wu, C., J. Lei, F. Meng, X. Wang, C. J. Wong, J. Peng, G. Lin, A. C. Gingras, J. Ma and S. Zhang. *Trace Sample Proteome Quantification by Data-Dependent Acquisition without Dynamic Exclusion*. Anal Chem, 2023. **95**(49): p. 17981-17987.

Yan, Y., M. A. Gauthier, A. Malik, I. Fotiadou, M. Ostrovski, D. Dervovic, L. Ghadban, R. Tsai, G. Gish, S. K. Loganathan and D. Schramek *The NOTCH-RIPK4-IRF6-ELOVL4 Axis Suppresses Squamous Cell Carcinoma*. Cancers (Basel), 2023. **15**(3).

Yau, K., P. Tam, C. T. Chan, Q. Hu, F. Qi, K. T. Abe, A. Kurtesi, Y. Jiang, J. Estrada-Codecido, T. Brown, L. Liu, A. Siwakoti, J. A. Leis, A. Levin, M. J. Oliver, K. Colwill, A. C. Gingras and M. A. Hladunewich. *BNT162b2 versus mRNA-1273 Third Dose COVID-19 Vaccine in Patients with CKD and Maintenance Dialysis Patients*. Clin J Am Soc Nephrol, 2023.

Yau, K., O. Enilama, A. Levin, M. G. Romney, J. Singer, P. Blake, J. Perl, J. A. Leis, R. Kozak, H. Tsui, S. Bolotin, V. Tran, C. T. Chan, P. Tam, M. Dhruve, C. Kandel, J. Estrada-Codecido, T. Brown, A. Siwakoti, K. T. Abe, Q. Hu, K. Colwill, A. C. Gingras, M. J. Oliver and M. A. Hladunewich *Determining the Longitudinal Serologic Response to COVID-19 Vaccination in the Chronic Kidney Disease Population: A Clinical Research Protocol*. Can J Kidney Health Dis, 2023. **10**: 20543581231160511.

Yau, K., A. Kurtesi, F. Qi, M. Delgado-Brand, T. R. Tursun, Q. Hu, M. Dhruve, C. Kandel, O. Enilama, A. Levin, Y. Jiang, W. R. Hardy, D. A. Yuen, J. Perl, C. T. Chan, J. A. Leis, M. J. Oliver, K. Colwill, A. C. Gingras and M. A. Hladunewich. *Omicron variant neutralizing antibodies following BNT162b2 BA.4/5 versus mRNA-1273 BA.1 bivalent vaccination in patients with end-stage kidney disease*. Nat Commun, 2023. **14**(1): p. 6041.

Zhang, C., M. Shafaq-Zadah, J. Pawling, G. G. Hesketh, E. Dransart, K. Pacholczyk, J. Longo, A. C. Gingras, L. Z. Penn, L. Johannes and J. W. Dennis. *SLC3A2 N-glycosylation and Golgi remodeling regulate SLC7A amino acid exchangers and stress mitigation*. J Biol Chem, 2023. **299**(12): p. 105416.

Zhang, J., M. Kanoatov, K. Jarvi, A. Gauthier-Fisher, S. I. Moskovtsev, C. Librach and A. P. Drabovich. *Germ Cell-Specific Proteins AKAP4 and ASPX Facilitate Identification of Rare Spermatozoa in Non-Obstructive Azoospermia*. Mol Cell Proteomics, 2023. **22**(6): p. 100556.

Zhao, Y., D. Tabet, D. Rubio Contreras, L. Lao, A. N. Kousholt, J. Weile, H. Melo, L. Hoeg, S. Feng, A. G. Cote, Z. Y. Lin, D. Setiaputra, J. Jonkers, A. C. Gingras, F. Gomez Herreros, F. P.

Roth and D. Durocher. *Genome-scale mapping of DNA damage suppressors through phenotypic CRISPR-Cas9 screens*. Mol Cell, 2023. **83**(15): p. 2792-2809 e2799.

## 2022

Abe, K. T., B. Rathod, K. Colwill, A. C. Gingras, A. Tuite, N. F. Robbins, G. Orjuela, C. Jenkins, V. Conrod, Q. L. Yi, S. F. O'Brien and S. J. Drews *A Qualitative Comparison of the Abbott SARS-CoV-2 IgG II Quant Assay against Commonly Used Canadian SARS-CoV-2 Enzyme Immunoassays in Blood Donor Retention Specimens, April 2020 to March 2021*. Microbiol Spectr, 2022. **10**(3): e0113422.

Alerasool, N., H. Leng, Z. Y. Lin, A. C. Gingras and M. Taipale *Identification and functional characterization of transcriptional activators in human cells*. Mol Cell, 2022. **82**(3): 677-695 e677.

Baghdadi, M. B., A. Ayyaz, S. Coquenlorge, B. Chu, S. Kumar, C. Streutker, J. L. Wrana and T. H. Kim *Enteric glial cell heterogeneity regulates intestinal stem cell niches*. Cell Stem Cell, 2022. **29**(1): 86-100 e106.

Banerjee, A., J. Lew, A. Kroeker, K. Baid, P. Aftanas, K. Nirmalarajah, F. Maguire, R. Kozak, R. McDonald, A. Lang, V. Gerdts, S. E. Straus, L. Gilbert, A. X. Li, M. Mozafarihashjin, S. Walmsley, A. C. Gingras, J. L. Wrana, T. Mazzulli, K. Colwill, A. J. McGeer, S. Mubareka and D. Falzarano *Immunogenicity of convalescent and vaccinated sera against clinical isolates of ancestral SARS-CoV-2, Beta, Delta, and Omicron variants*. Med (N Y), 2022. **3**(6): 422-432 e423.

Barutcu, A. R., M. Wu, U. Braunschweig, B. J. A. Dyakov, Z. Luo, K. M. Turner, T. Durbic, Z. Y. Lin, R. J. Weatheritt, P. G. Maass, A. C. Gingras and B. J. Blencowe *Systematic mapping of nuclear domain-associated transcripts reveals speckles and lamina as hubs of functionally distinct retained introns*. Mol Cell, 2022. **82**(5): 1035-1052 e1039.

Bongolan, T., J. Whiteley, J. Castillo-Prado, A. Fantin, B. Larsen, C. J. Wong, L. Mazilescu, M. Kawamura, P. Urbanellis, A. Jonebring, E. Salter, G. Collingridge, R. Gladdy, R. Hicks, A. C. Gingras, M. Selzner and I. M. Rogers *Decellularization of porcine kidney with submicellar concentrations of SDS results in the retention of ECM proteins required for the adhesion and maintenance of human adult renal epithelial cells*. Biomater Sci, 2022. **10**(11): 2972-2990.

Brown, P. E., S. H. Fu, A. Bansal, L. Newcombe, K. Colwill, G. Mailhot, M. Delgado-Brand, A. C. Gingras, A. S. Slutsky, M. Pasic, J. Companion, Bogoch, II, E. Morawski, T. Lam, A. Reid, P. Jha, C. S. C. Ab and C. S. I. Ab *Omicron BA.1/1.1 SARS-CoV-2 Infection among Vaccinated Canadian Adults*. N Engl J Med, 2022. **386**(24): 2337-2339.

Chana, C. K., P. Maisonneuve, G. Posternak, N. G. A. Grinberg, J. Poirson, S. M. Ona, D. F. Ceccarelli, P. Mader, D. J. St-Cyr, V. Pau, I. Kurinov, X. Tang, D. Deng, W. Cui, W. Su, L. Kuai, R. Soll, M. Tyers, H. L. Rost, R. A. Batey, M. Taipale, A. C. Gingras and F. Sicheri *Discovery*

*and Structural Characterization of Small Molecule Binders of the Human CTLH E3 Ligase Subunit GID4.* J Med Chem, 2022.

Cholette, F., R. Fabia, A. Harris, H. Ellis, K. Cachero, L. Schroeder, C. Mesa, P. Lacap, C. Arnold, Y. Galipeau, M. A. Langlois, K. Colwill, A. C. Gingras, A. McGeer, E. Giles, J. Day, C. Osiowy, Y. Durocher, C. Hankins, B. Mazer, M. Drebot, J. Kim and C.-I. T. F. w. group *Comparative performance data for multiplex SARS-CoV-2 serological assays from a large panel of dried blood spot specimens.* *Heliyon*, 2022. **8**(9): e10270.

Coelho, P. P., G. G. Hesketh, A. Pedersen, E. Kuzmin, A. N. Fortier, E. S. Bell, C. D. H. Ratcliffe, A. C. Gingras and M. Park *Endosomal LC3C-pathway selectively targets plasma membrane cargo for autophagic degradation.* *Nat Commun*, 2022. **13**(1): 3812.

Colwill, K., Y. Galipeau, M. Stuible, C. Gervais, C. Arnold, B. Rathod, K. T. Abe, J. H. Wang, A. Pasculescu, M. Maltseva, L. Rocheleau, M. Pelchat, M. Fazel-Zarandi, M. Iskilova, M. Barrios-Rodiles, L. Bennett, K. Yau, F. Cholette, C. Mesa, A. X. Li, A. Paterson, M. A. Hladunewich, P. J. Goodwin, J. L. Wrana, S. J. Drews, S. Mubareka, A. J. McGeer, J. Kim, M. A. Langlois, A. C. Gingras and Y. Durocher *A scalable serology solution for profiling humoral immune responses to SARS-CoV-2 infection and vaccination.* *Clin Transl Immunology*, 2022. **11**(3): e1380.

Dayam, R. M., J. C. Law, R. L. Goetgebuer, G. Y. Chao, K. T. Abe, M. Sutton, N. Finkelstein, J. M. Stempak, D. Pereira, D. Croitoru, L. Acheampong, S. Rizwan, K. Rymaszewski, R. Milgrom, D. Ganatra, N. V. Batista, M. Girard, I. Lau, R. Law, M. W. Cheung, B. Rathod, J. Kitaygorodsky, R. Samson, Q. Hu, W. R. Hardy, N. Haroon, R. D. Inman, V. Piguet, V. Chandran, M. S. Silverberg, A. C. Gingras and T. H. Watts *Accelerated waning of immunity to SARS-CoV-2 mRNA vaccines in patients with immune-mediated inflammatory diseases.* *JCI Insight*, 2022. **7**(11).

Drews, S. J., K. T. Abe, Q. Hu, R. Samson, A. C. Gingras, K. Colwill, B. Rathod, J. Wang, M. Fazel-Zarandi, Q. L. Yi, A. Robinson, H. Wood, A. Tuite, D. Fisman, D. H. Evans, Y. J. Lin and S. F. O'Brien *Resistance of SARS-CoV-2 beta and gamma variants to plasma collected from Canadian blood donors during the spring of 2020.* *Transfusion*, 2022. **62**(1): 37-43.

Drews, S. J., Q. Hu, R. Samson, K. T. Abe, B. Rathod, K. Colwill, A. C. Gingras, Q. L. Yi and S. F. O'Brien *SARS-CoV-2 Virus-Like Particle Neutralizing Capacity in Blood Donors Depends on Serological Profile and Donor-Declared SARS-CoV-2 Vaccination History.* *Microbiol Spectr*, 2022. **10**(1): e0226221.

Ebrahim Amini, A., T. Miyata, G. Lei, F. Jin, E. Rubie, C. A. Bradley, J. R. Woodgett, G. L. Collingridge and J. Georgiou. *Specific Role for GSK3alpha in Limiting Long-Term Potentiation in CA1 Pyramidal Neurons of Adult Mouse Hippocampus.* *Front Mol Neurosci*, 2022. **15**: p. 852171.

Elbaz, J., M. C. Puri, M. Faiz, K. W. A. Bang, L. Nguyen, B. Makovoz, M. Gertsenstein, S. M. I. Hussein, P. W. Zandstra, L. Briollais, N. Shakiba and A. Nagy. *Highly efficient reprogrammable mouse lines with integrated reporters to track the route to pluripotency.* *Proc Natl Acad Sci U S A*, 2022. **119**(49): p. e2207824119.

Endo, Y., L. Groom, A. Celik, N. Kraeva, C. S. Lee, S. Y. Jung, L. Gardner, M. A. Shaw, S. L. Hamilton, P. M. Hopkins, R. T. Dirksen, S. Riazi and J. J. Dowling. *Variants in ASPH cause exertional heat illness and are associated with malignant hyperthermia susceptibility*. Nat Commun, 2022. **13**(1): p. 3403.

Ferreira, V. H., J. T. Solera, Q. Hu, V. G. Hall, B. G. Arbol, W. Rod Hardy, R. Samson, T. Marinelli, M. Ierullo, A. K. Virk, A. Kurtesi, F. Mavandadnejad, B. Majchrzak-Kita, V. Kulasingam, A. C. Gingras, D. Kumar and A. Humar. *Homotypic and heterotypic immune responses to Omicron variant in immunocompromised patients in diverse clinical settings*. Nat Commun, 2022. **13**(1): p. 4489.

Gallo, D., J. T. F. Young, J. Fourtounis, G. Martino, A. Alvarez-Quilon, C. Bernier, N. M. Duffy, R. Papp, A. Roulston, R. Stocco, J. Szzychowski, A. Veloso, H. Alam, P. S. Baruah, A. B. Fortin, J. Bowlan, N. Chaudhary, J. Desjardins, E. Dietrich, S. Fournier, C. Fugere-Desjardins, T. Goulet de Rugy, M. E. Leclaire, B. Liu, V. Bhaskaran, Y. Mamane, H. Melo, O. Nicolas, A. Singhania, R. K. Szilard, J. Tkac, S. Y. Yin, S. J. Morris, M. Zinda, C. G. Marshall and D. Durocher *CCNE1 amplification is synthetic lethal with PKMYT1 kinase inhibition*. Nature, 2022. **604**(7907): 749-756.

Goudreault, M., V. Gagne, C. H. Jo, S. Singh, R. C. Killoran, A. C. Gingras and M. J. Smith *Afadin couples RAS GTPases to the polarity rheostat Scribble*. Nat Commun, 2022. **13**(1): 4562.

Han, H., A. J. Best, U. Braunschweig, N. Mikolajewicz, J. D. Li, J. Roth, F. Chowdhury, F. Mantica, S. Nabeel-Shah, G. Parada, K. R. Brown, D. O'Hanlon, J. Wei, Y. Yao, A. A. Zid, L. C. Comsa, M. Jen, J. Wang, A. Datti, T. Gonatopoulos-Pournatzis, R. J. Weatheritt, J. F. Greenblatt, J. L. Wrana, M. Irimia, A. C. Gingras, J. Moffat and B. J. Blencowe *Systematic exploration of dynamic splicing networks reveals conserved multistage regulators of neurogenesis*. Mol Cell, 2022. **82**(16): 2982-2999 e2914.

He, X., M. F. Tolosa, T. Zhang, S. K. Goru, L. Ulloa Severino, P. S. Misra, C. M. McEvoy, L. Caldwell, S. G. Szeto, F. Gao, X. Chen, C. Atin, V. Ki, N. Vukosa, C. Hu, J. Zhang, C. Yip, A. Krizova, J. L. Wrana and D. A. Yuen *Myofibroblast YAP/TAZ activation is a key step in organ fibrogenesis*. JCI Insight, 2022. **7**(4).

Jiang, Z., H. Li, S. A. Schroer, V. Voisin, Y. Ju, M. Pacal, N. Erdmann, W. Shi, P. E. D. Chung, T. Deng, N. J. Chen, G. Ciavarra, A. Datti, T. W. Mak, L. Harrington, F. A. Dick, G. D. Bader, R. Bremner, M. Woo and E. Zackenhaus *Hypophosphorylated pRb knock-in mice exhibit hallmarks of aging and vitamin C-preventable diabetes*. EMBO J, 2022. **41**(4): e106825.

Kumar, D., Q. Hu, R. Samson, V. H. Ferreira, V. G. Hall, M. Ierullo, B. Majchrzak-Kita, W. Hardy, A. C. Gingras and A. Humar. *Neutralization against Omicron variant in transplant recipients after three doses of mRNA vaccine*. Am J Transplant, 2022. **22**(8): p. 2089-2093.

Kumar, D., V. H. Ferreira, V. G. Hall, Q. Hu, R. Samson, T. Ku, M. Ierullo, B. Majchrzak-Kita, G. Tomlinson, A. C. Gingras and A. Humar. *Neutralization of SARS-CoV-2 Variants in Transplant Recipients After Two and Three Doses of mRNA-1273 Vaccine : Secondary Analysis of a Randomized Trial*. Ann Intern Med, 2022. **175**(2): p. 226-233.

Langille, E., K. N. Al-Zahrani, Z. Ma, M. Liang, L. Uuskula-Reimand, R. Espin, K. Teng, A. Malik, H. Bergholtz, S. El Ghamrasni, S. Afiuni-Zadeh, R. Tsai, S. Alvi, A. Elia, Y. Lu, R. H. Oh, K. J. Kozma, D. Trcka, M. Narimatsu, J. C. Liu, T. Nguyen, S. Barutcu, S. K. Loganathan, R. Bremner, G. D. Bader, S. E. Egan, D. W. Cescon, T. Sorlie, J. L. Wrana, H. W. Jackson, M. D. Wilson, A. K. Witkiewicz, E. S. Knudsen, M. A. Pujana, G. M. Wahl and D. Schramek *Loss of epigenetic regulation disrupts lineage integrity, induces aberrant alveogenesis and promotes breast cancer.* Cancer Discov, 2022.

Law, J. C., M. Girard, G. Y. C. Chao, L. A. Ward, B. Isho, B. Rathod, K. Colwill, Z. Li, J. M. Rini, F. Y. Yue, S. Mubareka, A. J. McGeer, M. A. Ostrowski, J. L. Gommerman, A. C. Gingras and T. H. Watts *Persistence of T Cell and Antibody Responses to SARS-CoV-2 Up to 9 Months after Symptom Onset.* J Immunol, 2022. **208**(2): 429-443.

Lequyer, J., R. Philip, A. Sharma, W. H. Hsu and L. Pelletier. *A fast blind zero-shot denoiser.* Nat Mach Intell, 2022. **4**(11): p. 953-963.

Lin, Y. J., D. H. Evans, N. F. Robbins, G. Orjuela, Q. Hu, R. Samson, K. T. Abe, B. Rathod, K. Colwill, A. C. Gingras, A. Tuite, Q. L. Yi, S. F. O'Brien and S. J. Drews *Utilization of the Abbott SARS-CoV-2 IgG II Quant Assay To Identify High-Titer Anti-SARS-CoV-2 Neutralizing Plasma against Wild-Type and Variant SARS-CoV-2 Viruses.* Microbiol Spectr, 2022. e0281122.

Liu, J., P. Budylowski, R. Samson, B. D. Griffin, G. Babuadze, B. Rathod, K. Colwill, J. A. Abioye, J. A. Schwartz, R. Law, L. Yip, S. K. Ahn, S. Chau, M. Naghibosadat, Y. Arita, Q. Hu, F. Y. Yue, A. Banerjee, W. R. Hardy, K. Mossman, S. Mubareka, R. A. Kozak, M. S. Pollanen, N. Martin Orozco, A. C. Gingras, E. G. Marcusson and M. A. Ostrowski. *Preclinical evaluation of a SARS-CoV-2 mRNA vaccine PTX-COVID19-B.* Sci Adv, 2022. **8**(3): p. eabj9815.

Martin, C. E., N. J. Phippen, A. Keyvani Chahi, M. Tilak, S. L. Banerjee, P. Lu, L. A. New, C. R. Williamson, M. J. Platt, J. A. Simpson, M. Krendel, N. Bisson, A. C. Gingras and N. Jones *Complementary Nck1/2 Signaling in Podocytes Controls alpha Actinin-4-Mediated Actin Organization, Adhesion, and Basement Membrane Composition.* J Am Soc Nephrol, 2022. **33**(8): 1546-1567.

Masud, S. N., M. Chandrashekhar, M. Aregger, G. Tan, X. Zhang, P. Mero, D. A. Pirman, O. Zaslaver, G. A. Smolen, Z. Y. Lin, C. J. Wong, C. Boone, A. C. Gingras, J. R. Montenegro-Burke and J. Moffat *Chemical genomics with pyrvinium identifies Clorf115 as a regulator of drug efflux.* Nat Chem Biol, 2022.

Nahle, S., L. Quirion, J. Boulais, H. Bagci, D. Faubert, A. C. Gingras and J. F. Cote *Defining the interactomes of proteins involved in cytoskeletal dynamics using high-throughput proximity-dependent biotinylation in cellulo.* STAR Protoc, 2022. **3**(1): 101075.

O'Brien, S., S. Kelso, Z. Steinhart, S. Orlicky, M. Mis, Y. Kim, S. Lin, F. Sicheri and S. Angers. *SCF(FBXW7) regulates G2-M progression through control of CCNL1 ubiquitination.* EMBO Rep, 2022. **23**(12): p. e55044.

Persaud, R., S. C. Li, J. D. Chao, R. Forestieri, E. Donohue, A. D. Balgi, X. Zheng, J. T. Chao, Y. Yashiroda, M. Yoshimura, C. J. R. Loewen, A. C. Gingras, C. Boone, Y. Av-Gay, M. Roberge and R. J. Andersen *Clionamines stimulate autophagy, inhibit Mycobacterium tuberculosis survival in macrophages, and target Pik1*. *Cell Chem Biol*, 2022. **29**(5): 870-882 e811.

Prosser, S. L., J. Tkach, L. Gheiratmand, J. Kim, B. Raught, C. G. Morrison and L. Pelletier *Aggresome assembly at the centrosome is driven by CP110-CEP97-CEP290 and centriolar satellites*. *Nat Cell Biol*, 2022. **24**(4): 483-496.

Pujadas, G., L. L. Baggio, K. D. Kaur, B. A. McLean, X. Cao and D. J. Drucker. *Genetic disruption of the Gipr in Apoe(-/-) mice promotes atherosclerosis*. *Mol Metab*, 2022. **65**: p. 101586.

Sarikaya, E., N. Sabha, J. Volpatti, E. Pannia, N. Maani, H. D. Gonorazky, A. Celik, Y. Liang, P. Onofre-Oliveira and J. J. Dowling. *Natural history of a mouse model of X-linked myotubular myopathy*. *Dis Model Mech*, 2022. **15**(7).

Sheffield, W. P., V. Bhakta, A. Howell, C. Jenkins, K. Serrano, N. Johnson, Y. J. Lin, K. Colwill, B. Rathod, B. Greenberg, A. C. Gingras, D. H. Evans, E. Flaumenhaft, A. Beckett, S. J. Drews and D. V. Devine *Retention of hemostatic and immunological properties of frozen plasma and COVID-19 convalescent apheresis fresh-frozen plasma produced and freeze-dried in Canada*. *Transfusion*, 2022. **62**(2): 418-428.

Sheikh-Mohamed, S., B. Isho, G. Y. C. Chao, M. Zuo, C. Cohen, Y. Lustig, G. R. Nahass, R. E. Salomon-Shulman, G. Blacker, M. Fazel-Zarandi, B. Rathod, K. Colwill, A. Jamal, Z. Li, K. Q. de Launay, A. Takaoka, J. Garnham-Takaoka, A. Patel, C. Fahim, A. Paterson, A. X. Li, N. Haq, S. Barati, L. Gilbert, K. Green, M. Mozafarihashjin, P. Samaan, P. Budylowski, W. L. Siqueira, S. Mubareka, M. Ostrowski, J. M. Rini, O. L. Rojas, I. L. Weissman, M. C. Tal, A. McGeer, G. Regev-Yochay, S. Straus, A. C. Gingras and J. L. Gommerman *Systemic and mucosal IgA responses are variably induced in response to SARS-CoV-2 mRNA vaccination and are associated with protection against subsequent infection*. *Mucosal Immunol*, 2022. **15**(5): 799-808.

Shin, M., M. Ferguson, R. J. Willms, L. O. Jones, K. Petkau and E. Foley. *Immune regulation of intestinal-stem-cell function in Drosophila*. *Stem Cell Reports*, 2022. **17**(4): p. 741-755.

Sudarshan, D., N. Avvakumov, M. E. Lalonde, N. Alerasool, C. Joly-Beauparlant, K. Jacquet, A. Mameri, J. P. Lambert, J. Rousseau, C. Lachance, E. Paquet, L. Herrmann, S. Thonta Setty, J. Loehr, M. Q. Bernardini, M. Rouzbahman, A. C. Gingras, B. Coulombe, A. Droit, M. Taipale, Y. Doyon and J. Cote *Recurrent chromosomal translocations in sarcomas create a megacomplex that mislocalizes NuA4/TIP60 to Polycomb target loci*. *Genes Dev*, 2022. **36**(11-12): 664-683.

Tan, Y. Z., Y. M. Abbas, J. Z. Wu, D. Wu, K. A. Keon, G. G. Hesketh, S. A. Bueler, A. C. Gingras, C. V. Robinson, S. Grinstein and J. L. Rubinstein *CryoEM of endogenous mammalian V-ATPase interacting with the TLDc protein mEAK-7*. *Life Sci Alliance*, 2022. **5**(11).

Tan, Y. Z., K. A. Keon, R. Abdelaziz, P. Imming, W. Schulze, K. Schumacher and J. L. Rubinstein. *Structure of V-ATPase from citrus fruit*. *Structure*, 2022. **30**(10): p. 1403-1410 e1404.

Tang, X., A. Sharma, M. Pasic, P. Brown, K. Colwill, H. Gelband, H. C. Birnboim, N. Nagelkerke, Bogoch, II, A. Bansal, L. Newcombe, J. Slater, P. S. Rodriguez, G. Huang, S. H. Fu, C. Meh, D. C. Wu, R. Kaul, M. A. Langlois, E. Morawski, A. Hollander, D. Eliopoulos, B. Alois, T. Lam, K. T. Abe, B. Rathod, M. Fazel-Zarandi, J. Wang, M. Iskilova, A. Pasculescu, L. Caldwell, M. Barrios-Rodiles, Z. Mohammed-Ali, N. Vas, D. R. Santhanam, E. R. Cho, K. Qu, S. Jha, V. Jha, W. Suraweera, V. Malhotra, K. Mastali, R. Wen, S. Sinha, A. Reid, A. C. Gingras, P. Chakraborty, A. S. Slutsky, P. Jha and C. S. I. Ab *Assessment of SARS-CoV-2 Seropositivity During the First and Second Viral Waves in 2020 and 2021 Among Canadian Adults*. *JAMA Netw Open*, 2022. **5**(2): e2146798.

Tkach, J. M., R. Philip, A. Sharma, J. Strecker, D. Durocher and L. Pelletier *Global cellular response to chemical perturbation of PLK4 activity and abnormal centrosome number*. *Elife*, 2022. **11**.

Tomaz, L. B., B. A. Liu, M. Meroshini, S. L. M. Ong, E. K. Tan, N. S. Tolwinski, C. S. Williams, A. C. Gingras, M. Leushacke and N. R. Dunn *MCC is a centrosomal protein that relocates to non-centrosomal apical sites during intestinal cell differentiation*. *J Cell Sci*, 2022. **135**(21).

Tsang, D. K. L., R. J. Wang, O. De Sa, A. Ayyaz, E. G. Foerster, G. Bayer, S. Goyal, D. Trcka, B. Ghoshal, J. L. Wrana, S. E. Girardin and D. J. Philpott. *A single cell survey of the microbial impacts on the mouse small intestinal epithelium*. *Gut Microbes*, 2022. **14**(1): p. 2108281.

Tuite, A. R., D. Fisman, K. T. Abe, B. Rathod, A. Pasculescu, K. Colwill, A. C. Gingras, Q. L. Yi, S. F. O'Brien and S. J. Drews *Estimating SARS-CoV-2 Seroprevalence in Canadian Blood Donors, April 2020 to March 2021: Improving Accuracy with Multiple Assays*. *Microbiol Spectr*, 2022. **10**(1): e0256321.

Vasanthakumar, T., K. A. Keon, S. A. Bueler, M. C. Jaskolka and J. L. Rubinstein. *Coordinated conformational changes in the V(1) complex during V-ATPase reversible dissociation*. *Nat Struct Mol Biol*, 2022. **29**(5): p. 430-439.

Vickridge, E., C. C. F. Faraco, P. S. Tehrani, Z. M. Ramdzan, H. Rahimian, L. Leduy, A. C. Gingras and A. Nepveu *The DNA repair function of BCL11A suppresses senescence and promotes continued proliferation of triple-negative breast cancer cells*. *NAR Cancer*, 2022. **4**(4): zcac028.

Volpatti, J. R., M. M. Ghahramani-Seno, M. Mansat, N. Sabha, E. Sarikaya, S. J. Goodman, E. Chater-Diehl, A. Celik, E. Pannia, C. Froment, L. Combes-Soia, N. Maani, K. E. Yuki, G. Chicanne, L. Uuskula-Reimand, S. Monis, S. A. Alvi, C. A. Genetti, B. Payrastre, A. H. Beggs, C. G. Bonnemann, F. Muntoni, M. D. Wilson, R. Weksberg, J. Viaud and J. J. Dowling. *X-linked myotubular myopathy is associated with epigenetic alterations and is ameliorated by HDAC inhibition*. *Acta Neuropathol*, 2022. **144**(3): p. 537-563.

Walmsley, S., R. Ravindran, R. Clarke, B. Wouters, A. Silva, A. C. Gingras and L. Szadkowski. *COVID-19 breakthrough infections in vaccinated participants of the Safety and Efficacy of Preventative COVID Vaccines sub-study*. *J Assoc Med Microbiol Infect Dis Can*, 2022. **7**(4): p. 333-342.

Wu, Q. J., X. Sun, L. Teves, D. Mayor and M. Tymianski. *Mice and Rats Exhibit Striking Inter-species Differences in Gene Response to Acute Stroke*. Cell Mol Neurobiol, 2022. **42**(8): p. 2773-2789.

Yanchus, C., K. L. Drucker, T. M. Kollmeyer, R. Tsai, W. Winick-Ng, M. Liang, A. Malik, J. Pawling, S. B. De Lorenzo, A. Ali, P. A. Decker, M. L. Kosel, A. Panda, K. N. Al-Zahrani, L. Jiang, J. W. L. Browning, C. Lowden, M. Geuenich, J. J. Hernandez, J. T. Gosio, M. Ahmed, S. K. Loganathan, J. Berman, D. Trcka, K. A. Michealraj, J. Fortin, B. Carson, E. W. Hollingsworth, S. Jacinto, P. Mazrooei, L. Zhou, A. Elia, M. Lupien, H. H. He, D. J. Murphy, L. Wang, A. Abyzov, J. W. Dennis, P. G. Maass, K. Campbell, M. D. Wilson, D. H. Lachance, M. Wrensch, J. Wiencke, T. Mak, L. A. Pennacchio, D. E. Dickel, A. Visel, J. Wrana, M. D. Taylor, G. Zadeh, P. Dirks, J. E. Eckel-Passow, L. Attisano, A. Pombo, C. M. Ida, E. Z. Kvon, R. B. Jenkins and D. Schramek. *A noncoding single-nucleotide polymorphism at 8q24 drives IDH1-mutant glioma formation*. Science, 2022. **378**(6615): p. 68-78.

Yau, K., C. T. Chan, K. T. Abe, Y. Jiang, M. Atiquzzaman, S. I. Mullin, E. Shadowitz, L. Liu, E. Kostadinovic, T. Sukovic, A. Gonzalez, M. E. McGrath-Chong, M. J. Oliver, J. Perl, J. A. Leis, S. Bolotin, V. Tran, A. Levin, P. G. Blake, K. Colwill, A. C. Gingras and M. A. Hladunewich. *Differences in mRNA-1273 (Moderna) and BNT162b2 (Pfizer-BioNTech) SARS-CoV-2 vaccine immunogenicity among patients undergoing dialysis*. CMAJ, 2022. **194**(8): E297-E305.

Zhang, S., B. Larsen, K. Colwill, C. J. Wong, J. Y. Youn and A. C. Gingras. *Mapping Protein-Protein Interactions Using Data-Dependent Acquisition without Dynamic Exclusion*. Anal Chem, 2022. **94**(30): 10579-10583.

Zhang, T., X. He, L. Caldwell, S. K. Goru, L. Ulloa Severino, M. F. Tolosa, P. S. Misra, C. M. McEvoy, T. Christova, Y. Liu, C. Atin, J. Zhang, C. Hu, N. Vukosa, X. Chen, A. Krizova, A. Kirpalani, A. Gregorieff, R. Ni, K. Chan, M. K. Gill, L. Attisano, J. L. Wrana and D. A. Yuen. *NUAK1 promotes organ fibrosis via YAP and TGF-beta/SMAD signaling*. Sci Transl Med, 2022. **14**(637): eaaz4028.

## 2021

Adam, S., S. E. Rossi, N. Moatti, M. De Marco Zompit, Y. Xue, T. F. Ng, A. Alvarez-Quilon, J. Desjardins, V. Bhaskaran, G. Martino, D. Setiaputra, S. M. Noordermeer, T. K. Ohsumi, N. Hustedt, R. K. Szilard, N. Chaudhary, M. Munro, A. Veloso, H. Melo, S. Y. Yin, R. Papp, J. T. F. Young, M. Zinda, M. Stucki and D. Durocher. *The CIP2A-TOPBP1 axis safeguards chromosome stability and is a synthetic lethal target for BRCA-mutated cancer*. Nat Cancer, 2021. **2**(12): 1357-1371.

Alqawlaq, S., I. Livne-Bar, D. Williams, J. D'Ercole, S. W. Leung, D. Chan, A. Tuccitto, A. Datti, J. L. Wrana, A. H. Corbett, G. Schmitt-Ulms and J. M. Sivak. *An endogenous PI3K interactome promoting astrocyte-mediated neuroprotection identifies a novel association with RNA-binding protein ZC3H14*. J Biol Chem, 2021. **296**: 100118.

Anderson, N. D., Y. Babichev, F. Fuligni, F. Comitani, M. Layeghifard, R. E. Venier, S. C. Dentro, A. Maheshwari, S. Guram, C. Wunker, J. D. Thompson, K. E. Yuki, H. Hou, M. Zatzman, N. Light, M. Q. Bernardini, J. S. Wunder, I. L. Andrulis, P. Ferguson, A. R. A. Razak, C. J. Swallow, J. J. Dowling, R. S. Al-Awar, R. Marcellus, M. Rouzbahman, M. Gerstung, D. Durocher, L. B. Alexandrov, B. C. Dickson, R. A. Gladdy and A. Shlien. *Lineage-defined leiomyosarcoma subtypes emerge years before diagnosis and determine patient survival*. Nat Commun, 2021. **12**(1): p. 4496.

Aynaud, M. M., J. J. Hernandez, S. Barutcu, U. Braunschweig, K. Chan, J. D. Pearson, D. Trcka, S. L. Prosser, J. Kim, M. Barrios-Rodiles, M. Jen, S. Song, J. Shen, C. Bruce, B. Hazlett, S. Poutanen, L. Attisano, R. Bremner, B. J. Blencowe, T. Mazzulli, H. Han, L. Pelletier and J. L. Wrana *A multiplexed, next generation sequencing platform for high-throughput detection of SARS-CoV-2*. Nat Commun, 2021. **12**(1): 1405.

Bianchi, V. J., M. Parsons, D. Backstein and R. A. Kandel. *Endoglin Level Is Critical for Cartilage Tissue Formation In Vitro by Passaged Human Chondrocytes*. Tissue Eng Part A, 2021. **27**(17-18): p. 1140-1150.

Case, N. T., K. Duah, B. Larsen, C. J. Wong, A. C. Gingras, T. R. O'Meara, N. Robbins, A. O. Veri, L. Whitesell and L. E. Cowen *The macrophage-derived protein PTMA induces filamentation of the human fungal pathogen Candida albicans*. Cell Rep, 2021. **36**(8): 109584.

Chidiac, R., M. Abedin, G. Macleod, A. Yang, P. E. Thibeault, L. L. Blazer, J. J. Adams, L. Zhang, H. Roehrich, H. N. Jo, S. Seshagiri, S. S. Sidhu, H. J. Junge and S. Angers. *A Norrin/Wnt surrogate antibody stimulates endothelial cell barrier function and rescues retinopathy*. EMBO Mol Med, 2021. **13**(7): p. e13977.

Ferguson, M., K. Petkau, M. Shin, A. Galenza, D. Fast and E. Foley. *Differential effects of commensal bacteria on progenitor cell adhesion, division symmetry and tumorigenesis in the Drosophila intestine*. Development, 2021. **148**(5).

Fraser, M., J. Livingstone, J. L. Wrana, A. Finelli, H. H. He, T. van der Kwast, A. R. Zlotta, R. G. Bristow and P. C. Boutros *Somatic driver mutation prevalence in 1844 prostate cancers identifies ZNRF3 loss as a predictor of metastatic relapse*. Nat Commun, 2021. **12**(1): 6248.

Fu, C., X. Zhang, A. O. Veri, K. R. Iyer, E. Lash, A. Xue, H. Yan, N. M. Revie, C. Wong, Z. Y. Lin, E. J. Polvi, S. D. Liston, B. VanderSluis, J. Hou, Y. Yashiroda, A. C. Gingras, C. Boone, T. R. O'Meara, M. J. O'Meara, S. Noble, N. Robbins, C. L. Myers and L. E. Cowen *Leveraging machine learning essentiality predictions and chemogenomic interactions to identify antifungal targets*. Nat Commun, 2021. **12**(1): 6497.

Galenza, A. and E. Foley. *A glucose-supplemented diet enhances gut barrier integrity in Drosophila*. Biol Open, 2021. **10**(3).

Go, C. D., J. D. R. Knight, A. Rajasekharan, B. Rathod, G. G. Hesketh, K. T. Abe, J. Y. Youn, P. Samavarchi-Tehrani, H. Zhang, L. Y. Zhu, E. Popiel, J. P. Lambert, E. Coyaud, S. W. T. Cheung, D. Rajendran, C. J. Wong, H. Antonicka, L. Pelletier, A. F. Palazzo, E. A. Shoubridge, B. Raught

and A. C. Gingras *A proximity-dependent biotinylation map of a human cell*. Nature, 2021. **595**(7865): 120-124.

Grise, K. N., N. X. Bautista, K. Jacques, B. L. K. Coles and D. van der Kooy. *Glucocorticoid agonists enhance retinal stem cell self-renewal and proliferation*. Stem Cell Res Ther, 2021. **12**(1): p. 83.

Hirst, J., G. G. Hesketh, A. C. Gingras and M. S. Robinson *Rag GTPases and phosphatidylinositol 3-phosphate mediate recruitment of the AP-5/SPG11/SPG15 complex*. J Cell Biol, 2021. **220**(2).

Kawashima, A. T., C. Wong, G. Lorden, C. C. King, P. Lara-Gonzalez, A. Desai, A. C. Gingras and A. C. Newton *The PHLPP1 N-Terminal Extension is a Mitotic Cdk1 Substrate and Controls an Interactome Switch*. Mol Cell Biol, 2021.

Kazan, J. M., G. Desrochers, C. E. Martin, H. Jeong, D. Kharitidi, P. M. Apaja, A. Roldan, N. St Denis, A. C. Gingras, G. L. Lukacs and A. Pause *Endofin is required for HD-PTP and ESCRT-0 interdependent endosomal sorting of ubiquitinylated transmembrane cargoes*. iScience, 2021. **24**(11): 103274.

Labibi, B., M. Bashkurov, T. Christova and L. Attisano. *High-content imaging and analysis to quantify the nuclear to cytoplasmic ratio of TGFbeta and hippo effectors in mammalian cells*. STAR Protoc, 2021. **2**(3): p. 100632.

Li, T., E. M. Greenblatt, M. E. Shin, T. J. Brown and C. Chan. *Cargo small non-coding RNAs of extracellular vesicles isolated from uterine fluid associate with endometrial receptivity and implantation success*. Fertil Steril, 2021. **115**(5): p. 1327-1336.

Macrae, T. A. and M. Ramalho-Santos. *The deubiquitinase Usp9x regulates PRC2-mediated chromatin reprogramming during mouse development*. Nat Commun, 2021. **12**(1): p. 1865.

Mayor-Nunez, D., Z. Ji, X. Sun, L. Teves, J. D. Garman and M. Tymianski. *Plasmin-resistant PSD-95 inhibitors resolve effect-modifying drug-drug interactions between alteplase and nerinetide in acute stroke*. Sci Transl Med, 2021. **13**(588).

McLean, B. A., C. K. Wong, K. D. Kaur, R. J. Seeley and D. J. Drucker. *Differential importance of endothelial and hematopoietic cell GLP-1Rs for cardiometabolic versus hepatic actions of semaglutide*. JCI Insight, 2021. **6**(22).

Merritt, N., K. Garcia, D. Rajendran, Z. Y. Lin, X. Zhang, K. A. Mitchell, N. Borcherding, C. Fullenkamp, M. S. Chimenti, A. C. Gingras, K. F. Harvey and M. R. Tanas *TAZ-CAMTA1 and YAP-TFE3 alter the TAZ/YAP transcriptome by recruiting the ATAC histone acetyltransferase complex*. Elife, 2021. **10**.

Nabeel-Shah, S., J. Garg, A. Saettone, K. Ashraf, H. Lee, S. Wahab, N. Ahmed, J. Fine, J. Derynck, S. Pu, M. Ponce, E. Marcon, Z. Zhang, J. F. Greenblatt, R. E. Pearlman, J. P. Lambert and J. Fillingham. *Functional characterization of RebL1 highlights the evolutionary conservation of*

*oncogenic activities of the RBBP4/7 orthologue in Tetrahymena thermophila.* Nucleic Acids Res, 2021. **49**(11): p. 6196-6212.

Nabeel-Shah, S., J. Garg, P. E. Kougnassoukou Tchara, R. E. Pearlman, J. P. Lambert and J. Fillingham. *Functional proteomics protocol for the identification of interaction partners in Tetrahymena thermophila.* STAR Protoc, 2021. **2**(1): p. 100362.

Nadeem, L., R. Balendran, A. Dorogin, S. Mesiano, O. Shynlova and S. J. Lye. *Pro-inflammatory signals induce 20alpha-HSD expression in myometrial cells: A key mechanism for local progesterone withdrawal.* J Cell Mol Med, 2021. **25**(14): p. 6773-6785.

Olivieri, M. and D. Durocher *Genome-scale chemogenomic CRISPR screens in human cells using the TKOv3 library.* STAR Protoc, 2021. **2**(1): 100321.

Park, K., C. Li, S. Tsipopoulou, J. Goncalves, C. Kondratev, L. Pelletier, O. E. Blacque and M. R. Leroux *CDKL kinase regulates the length of the ciliary proximal segment.* Curr Biol, 2021. **31**(11): 2359-2373 e2357.

Pearson, J. D., K. Huang, M. Pacal, S. R. McCurdy, S. Lu, A. Aubry, T. Yu, K. M. Wadosky, L. Zhang, T. Wang, A. Gregorieff, M. Ahmad, H. Dimaras, E. Langille, S. P. C. Cole, P. P. Monnier, B. H. Lok, M. S. Tsao, N. Akeno, D. Schramek, K. A. Wikenheiser-Brokamp, E. S. Knudsen, A. K. Witkiewicz, J. L. Wrana, D. W. Goodrich and R. Bremner *Binary pan-cancer classes with distinct vulnerabilities defined by pro- or anti-cancer YAP/TEAD activity.* Cancer Cell, 2021. **39**(8): 1115-1134 e1112.

Pearson, J. D., D. Trcka, S. Lu, S. J. Hyduk, M. Jen, M. M. Aynaud, J. J. Hernandez, P. Peidis, M. Barrios-Rodiles, K. Chan, J. Woodgett, T. Mazzulli, L. Attisano, L. Pelletier, M. I. Cybulsky, J. L. Wrana and R. Bremner *Comparison of SARS-CoV-2 indirect and direct RT-qPCR detection methods.* Virol J, 2021. **18**(1): 99.

Pearson, J. D. and R. Bremner. *Lentiviral-mediated ectopic expression of YAP and TAZ in YAP(off) cancer cell lines.* STAR Protoc, 2021. **2**(4): p. 100870.

Piette, B. L., N. Alerasool, Z. Y. Lin, J. Lacoste, M. H. Y. Lam, W. W. Qian, S. Tran, B. Larsen, E. Campos, J. Peng, A. C. Gingras and M. Taipale *Comprehensive interactome profiling of the human Hsp70 network highlights functional differentiation of J domains.* Mol Cell, 2021. **81**(12): 2549-2565 e2548.

Rahman, A. N., J. Liu, S. Mujib, S. Kidane, A. Ali, S. Szep, C. Han, P. Bonner, M. Parsons, E. Benko, C. Kovacs, F. Y. Yue and M. Ostrowski. *Elevated glycolysis imparts functional ability to CD8(+) T cells in HIV infection.* Life Sci Alliance, 2021. **4**(11).

Rosenthal, S. M., T. Misra, H. Abdouni, T. C. Branon, A. Y. Ting, I. C. Scott and A. C. Gingras *A Toolbox for Efficient Proximity-Dependent Biotinylation in Zebrafish Embryos.* Mol Cell Proteomics, 2021. **20**: 100128.

Saeed, S., S. F. O'Brien, K. Abe, Q. L. Yi, B. Rathod, J. Wang, M. Fazel-Zarandi, A. Tuite, D. Fisman, H. Wood, K. Colwill, A. C. Gingras and S. J. Drews *Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) seroprevalence: Navigating the absence of a gold standard*. PLoS One, 2021. **16**(9): e0257743.

Scott, W. A., E. Z. Dhanji, B. J. A. Dyakov, E. S. Dreseris, J. S. Asa, L. J. Grange, M. Mirceta, C. E. Pearson, G. S. Stewart, A. C. Gingras and E. I. Campos *ATRX proximal protein associations boast roles beyond histone deposition*. PLoS Genet, 2021. **17**(11): e1009909.

Susky, E. K., S. Hota, I. E. Armstrong, T. Mazzulli, S. Kestenberg, L. K. Casaubon, J. Granton, C. Rebelo, E. Bartels, J. Wrana and A. Vaisman *Hospital outbreak of the severe acute respiratory coronavirus virus 2 (SARS-CoV-2) delta variant in partially and fully vaccinated patients and healthcare workers in Toronto, Canada*. Infect Control Hosp Epidemiol, 2021. 1-4.

Ulengin-Talkish, I., M. A. H. Parson, M. L. Jenkins, J. Roy, A. Z. L. Shih, N. St-Denis, G. Gulyas, T. Balla, A. C. Gingras, P. Varnai, E. Conibear, J. E. Burke and M. S. Cyert *Palmitoylation targets the calcineurin phosphatase to the phosphatidylinositol 4-kinase complex at the plasma membrane*. Nat Commun, 2021. **12**(1): 6064.

Valcourt, E. J., K. Manguiat, A. Robinson, Y. C. Lin, K. T. Abe, S. Mubareka, A. Shigayeva, Z. Zhong, R. C. Girardin, A. DuPuis, A. Payne, K. McDonough, Z. Wang, R. Gasser, A. Laumaea, M. Benlarbi, J. Richard, J. Prevost, S. P. Anand, K. Dimitrova, C. Phillipson, A. McGeer, A. C. Gingras, C. Liang, M. Petric, I. Sekirov, M. Morshed, A. Finzi, M. Drebot and H. Wood. *Evaluating Humoral Immunity against SARS-CoV-2: Validation of a Plaque-Reduction Neutralization Test and a Multilaboratory Comparison of Conventional and Surrogate Neutr*

Yau, K., K. T. Abe, D. Naimark, M. J. Oliver, J. Perl, J. A. Leis, S. Bolotin, V. Tran, S. I. Mullin, E. Shadowitz, A. Gonzalez, T. Sukovic, J. Garnham-Takaoka, K. Q. de Launay, A. Takaoka, S. E. Straus, A. J. McGeer, C. T. Chan, K. Colwill, A. C. Gingras and M. A. Hladunewich *Evaluation of the SARS-CoV-2 Antibody Response to the BNT162b2 Vaccine in Patients Undergoing Hemodialysis*. JAMA Netw Open, 2021. **4**(9): e2123622.

Yusuf, B., I. Mukovozov, S. Patel, Y. W. Huang, G. Y. Liu, E. C. Reddy, M. Skrtic, M. Glogauer and L. A. Robinson. *The neurorepellent, Slit2, prevents macrophage lipid loading by inhibiting CD36-dependent binding and internalization of oxidized low-density lipoprotein*. Sci Rep, 2021. **11**(1): p. 3614.

Zhang, J. and S. J. Lye. *The immune potential of decidua-resident CD16(+)CD56(+) NK cells in human pregnancy*. Hum Immunol, 2021. **82**(5): p. 332-339.

## 2020

Abe, K.T., Z. Li, R. Samson, P. Samavarchi-Tehrani, E.J. Valcourt, H. Wood, P. Budylowski, A.P. Dupuis, 2nd, R.C. Girardin, B. Rathod, J.H. Wang, M. Barrios-Rodiles, K. Colwill, A.J. McGeer, S. Mubareka, J.L. Gommerman, Y. Durocher, M. Ostrowski, K.A. McDonough, M.A. Drebot, S.J.

Drews, J.M. Rini, and A.C. Gingras, *A simple protein-based surrogate neutralization assay for SARS-CoV-2*. JCI Insight, 2020. **5**(19).

Alerasool, N., D. Segal, H. Lee and M. Taipale. *An efficient KRAB domain for CRISPRi applications in human cells*. Nat Methods, 2020. **17**(11): p. 1093-1096.

Alvarez-Quilon, A., J.L. Wojtaszek, M.C. Mathieu, T. Patel, C.D. Appel, N. Hustedt, S.E. Rossi, B.D. Wallace, D. Setiaputra, S. Adam, Y. Ohashi, H. Melo, T. Cho, C. Gervais, I.M. Munoz, E. Grazzini, J.T.F. Young, J. Rouse, M. Zinda, R.S. Williams, and D. Durocher, *Endogenous DNA 3' Blocks Are Vulnerabilities for BRCA1 and BRCA2 Deficiency and Are Reversed by the APE2 Nuclease*. Mol Cell, 2020. **78**(6): p. 1152-1165 e8.

Antonicka, H., Z.Y. Lin, A. Janer, M.J. Aaltonen, W. Weraarpachai, A.C. Gingras, and E.A. Shoubridge, *A High-Density Human Mitochondrial Proximity Interaction Network*. Cell Metab, 2020. **32**(3): p. 479-497 e9.

Aregger, M., K.A. Lawson, M. Billmann, M. Costanzo, A.H.Y. Tong, K. Chan, M. Rahman, K.R. Brown, C. Ross, M. Usaj, L. Nedyalkova, O. Sizova, A. Habsid, J. Pawling, Z.Y. Lin, H. Abdouni, C.J. Wong, A. Weiss, P. Mero, J.W. Dennis, A.C. Gingras, C.L. Myers, B.J. Andrews, C. Boone, and J. Moffat, *Systematic mapping of genetic interactions for de novo fatty acid synthesis identifies C12orf49 as a regulator of lipid metabolism*. Nat Metab, 2020. **2**(6): p. 499-513.

Aubry, A., J. D. Pearson, K. Huang, I. Livne-Bar, M. Ahmad, M. Jagadeesan, V. Khetan, T. Ketela, K. R. Brown, T. Yu, S. Lu, J. L. Wrana, J. Moffat and R. Bremner. *Functional genomics identifies new synergistic therapies for retinoblastoma*. Oncogene, 2020. **39**(31): p. 5338-5357.

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.

Doan, M., J. A. Sebastian, J. C. Caicedo, S. Siegert, A. Roch, T. R. Turner, O. Mykhailova, R. N. Pinto, C. McQuin, A. Goodman, M. J. Parsons, O. Wolkenhauer, H. Hennig, S. Singh, A. Wilson, J. P. Acker, P. Rees, M. C. Kolios and A. E. Carpenter. *Objective assessment of stored blood quality by deep learning*. Proc Natl Acad Sci U S A, 2020. **117**(35): p. 21381-21390.

Fast, D., K. Petkau, M. Ferguson, M. Shin, A. Galenza, B. Kostiuk, S. Pukatzki and E. Foley. *Vibrio cholerae-Symbiont Interactions Inhibit Intestinal Repair in Drosophila*. Cell Rep, 2020. **30**(4): p. 1088-1100 e1085.

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 NUAK1 in*

*promoting ovarian cancer metastasis through regulation of fibronectin production in spheroids.* Cancers (Basel), 2020. **12**(5).

Gilbert, R.E., L. Caldwell, P.S. Misra, K. Chan, K.D. Burns, J.L. Wrana, and D.A. Yuen, *Overexpression of the Severe Acute Respiratory Syndrome Coronavirus-2 Receptor, Angiotensin-Converting Enzyme 2, in Diabetic Kidney Disease: Implications for Kidney Injury in Novel Coronavirus Disease 2019.* Can J Diabetes, 2020.

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.

Goncalves, J., A. Sharma, E. Coyaud, E.M.N. Laurent, B. Raught, and L. Pelletier, *LUZP1 and the tumor suppressor EPLIN modulate actin stability to restrict primary cilia formation.* J Cell Biol, 2020. **219**(7).

Hesketh, G. G., F. Papazotos, J. Pawling, D. Rajendran, J. D. R. Knight, S. Martinez, M. Taipale, D. Schramek, J. W. Dennis and A. C. Gingras. *The GATOR-Rag GTPase pathway inhibits mTORC1 activation by lysosome-derived amino acids.* Science, 2020. **370**(6514): p. 351-356.

Isho, B., K.T. Abe, M. Zuo, A.J. Jamal, B. Rathod, J.H. Wang, Z. Li, G. Chao, O.L. Rojas, Y.M. Bang, A. Pu, N. Christie-Holmes, C. Gervais, D. Ceccarelli, P. Samavarchi-Tehrani, F. Guvenc, P. Budylowski, A. Li, A. Paterson, F.Y. Yue, L.M. Marin, L. Caldwell, J.L. Wrana, K. Colwill, F. Sicheri, S. Mubareka, S.D. Gray-Owen, S.J. Drews, W.L. Siqueira, M. Barrios-Rodiles, M. Ostrowski, J.M. Rini, Y. Durocher, A.J. McGeer, J.L. Gommerman, and A.C. Gingras, *Persistence of serum and saliva antibody responses to SARS-CoV-2 spike antigens in COVID-19 patients.* Sci Immunol, 2020. **5**(52).

Kanwar, N., K. Carmine-Simmen, R. Nair, C. Wang, S. Moghadas-Jafari, H. Blaser, D. Tran-Thanh, D. Wang, P. Wang, J. Wang, A. Pascalescu, 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.

Kazazian, K., Y. Haffani, D. Ng, C. M. M. Lee, W. Johnston, M. Kim, R. Xu, K. Pacholzyk, F. S. Zih, J. Tan, A. Smrke, A. Pollett, H. S. Wu and C. J. Swallow. *FAM46C/TENT5C functions as a tumor suppressor through inhibition of Plk4 activity.* Commun Biol, 2020. **3**(1): p. 448.

Labibi, B., M. Bashkurov, J.L. Wrana, and L. Attisano, *Modeling the Control of TGF-beta/Smad Nuclear Accumulation by the Hippo Pathway Effectors, Taz/Yap.* iScience, 2020. **23**(8): p. 101416.

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.

Maiti, P., H. Antonicka, A.C. Gingras, E.A. Shoubridge, and A. Barrientos, *Human GTPBP5 (MTG2) fuels mitochondrial large subunit maturation by facilitating 16S rRNA methylation*. Nucleic Acids Res, 2020. **48**(14): p. 7924-7943.

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.

Modzelewska, K., L. Brown, J. Culotti and N. Moghal. *Sensory regulated Wnt production from neurons helps make organ development robust to environmental changes in C. elegans*. Development, 2020. **147**(14).

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).

Olivieri, M., T. Cho, A. Alvarez-Quilon, K. Li, M.J. Schellenberg, M. Zimmermann, N. Hustedt, S.E. Rossi, S. Adam, H. Melo, A.M. Heijink, G. Sastre-Moreno, N. Moatti, R.K. Szilard, A. McEwan, A.K. Ling, A. Serrano-Benitez, T. Ubhi, S. Feng, J. Pawling, I. Delgado-Sainz, M.W. Ferguson, J.W. Dennis, G.W. Brown, F. Cortes-Ledesma, R.S. Williams, A. Martin, D. Xu, and D. Durocher, *A Genetic Map of the Response to DNA Damage in Human Cells*. Cell, 2020. **182**(2): p. 481-496 e21.

Pinto, N., S.D. Prokopec, F. Ghasemi, J. Meens, K.M. Ruicci, I.M. Khan, N. Mundi, K. Patel, M.W. Han, J. Yoo, K. Fung, D. MacNeil, J.S. Mymryk, A. Datti, J.W. Barrett, P.C. Boutros, L. Ailles, and A.C. Nichols, *Flavopiridol causes cell cycle inhibition and demonstrates anti-cancer activity in anaplastic thyroid cancer models*. PLoS One, 2020. **15**(9): p. e0239315.

Posternak, G., X. Tang, P. Maisonneuve, T. Jin, H. Lavoie, S. Daou, S. Orlicky, T. Goulet de Rugy, L. Caldwell, K. Chan, A. Aman, M. Prakesch, G. Poda, P. Mader, C. Wong, S. Maier, J.

Kitaygorodsky, B. Larsen, K. Colwill, Z. Yin, D.F. Ceccarelli, R.A. Batey, M. Taipale, I. Kurinov, D. Uehling, J. Wrana, D. Durocher, A.C. Gingras, R. Al-Awar, M. Therrien, and F. Sicheri, *Functional characterization of a PROTAC directed against BRAF mutant V600E*. Nat Chem Biol, 2020.

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.

Saraon, P., J. Snider, Y. Kalaidzidis, L.E. Wybenga-Groot, K. Weiss, A. Rai, N. Radulovich, L. Drecun, N. Vuckovic, A. Vucetic, V. Wong, B. Theriault, N.A. Pham, J.H. Park, A. Datti, J. Wang, S. Pathmanathan, F. Aboualizadeh, A. Lyakisheva, Z. Yao, Y. Wang, B. Joseph, A. Aman, M.F. Moran, M. Prakesch, G. Poda, R. Marcellus, D. Uehling, M. Samarzija, M. Jakopovic, M.S. Tsao, F.A. Shepherd, A. Sacher, N. Leighl, A. Akhmanova, R. Al-Awar, M. Zerial, and I. Stagljar, *A drug discovery platform to identify compounds that inhibit EGFR triple mutants*. Nat Chem Biol, 2020. **16**(5): p. 577-586.

Sebastian, J. A., M. C. Kolios and J. P. Acker. *Emerging use of machine learning and advanced technologies to assess red cell quality*. Transfus Apher Sci, 2020. **59**(6): p. 103020.

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).

St-Germain, J.R., P. Samavarchi Tehrani, C. Wong, B. Larsen, A.C. Gingras, and B. Raught, *Variability in Streptavidin-Sepharose Matrix Quality Can Significantly Affect Proximity-Dependent Biotinylation (BioID) Data*. J Proteome Res, 2020. **19**(8): p. 3554-3561.

Szewczyk, M. M., Y. Ishikawa, S. Organ, N. Sakai, F. Li, L. Halabelian, S. Ackloo, A. L. Couzens, M. Eram, D. Dilworth, H. Fukushi, 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.

Tao, H., J. P. Lambert, T. M. Yung, M. Zhu, N. A. Hahn, D. Li, K. Lau, K. Sturgeon, V. Puvindran, X. Zhang, W. Gong, X. X. Chen, G. Anderson, D. J. Garry, R. M. Henkelman, Y. Sun, A. Julianella, Y. Kawakami, A. C. Gingras, C. C. Hui and S. Hopyan *IRX3/5 regulate mitotic chromatid segregation and limb bud shape*. Development, 2020. **147**(19).

Tsatskis, Y., R. Rosenfeld, J.D. Pearson, C. Boswell, Y. Qu, K. Kim, L. Fabian, A. Mohammad, X. Wang, M.I. Robson, K. Krchma, J. Wu, J. Goncalves, D. Hodzic, S. Wu, D. Potter, L. Pelletier, W.H. Dunham, A.C. Gingras, Y. Sun, J. Meng, D. Godt, T. Schedl, B. Ciruna, K. Choi, J.R.B. Perry, R. Bremner, E.C. Schirmer, J.A. Brill, A. Jurisicova, and H. McNeill, *The NEMP family supports metazoan fertility and nuclear envelope stiffness*. Sci Adv, 2020. **6**(35): p. eabb4591.

Wigington, C.P., J. Roy, N.P. Damle, V.K. Yadav, C. Blikstad, E. Resch, C.J. Wong, D.R. Mackay, J.T. Wang, I. Krystkowiak, D.A. Bradburn, E. Tsekitsidou, S.H. Hong, M.A. Kaderali, S.L. Xu, T. Stearns, A.C. Gingras, K.S. Ullman, Y. Ivarsson, N.E. Davey, and M.S. Cyert, *Systematic Discovery of Short Linear Motifs Decodes Calcineurin Phosphatase Signaling*. Mol Cell, 2020. **79**(2): p. 342-358 e12.

## 2019

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.

Black, M., F. Ghasemi, R.X. Sun, W. Stecho, A. Datti, J. Meens, N. Pinto, K.M. Ruicci, M.I. Khan, M.W. Han, M. Shaikh, J. Yoo, K. Fung, D. MacNeil, D.A. Palma, E. Winquist, C.J. Howlett, J.S. Mymryk, L. Ailles, P.C. Boutros, J.W. Barrett, and A.C. Nichols, *Spleen tyrosine kinase expression is correlated with human papillomavirus in head and neck cancer*. Oral Oncol, 2019. **101**: p. 104529.

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.

Dunk, C., M. Kwan, A. Hazan, S. Walker, J. K. Wright, L. K. Harris, R. L. Jones, S. Keating, J. C. P. Kingdom, W. Whittle, C. Maxwell and S. J. Lye. *Failure of Decidualization and Maternal Immune Tolerance Underlies Uterovascular Resistance in Intra Uterine Growth Restriction*. Front Endocrinol (Lausanne), 2019. **10**: p. 160.

Garg, J., A. Saettone, S. Nabeel-Shah, M. Cadorin, M. Ponce, S. Marquez, S. Pu, J. Greenblatt, J. P. Lambert, R. E. Pearlman and J. Fillingham. *The Med31 Conserved Component of the Divergent Mediator Complex in Tetrahymena thermophila Participates in Developmental Regulation*. Curr Biol, 2019. **29**(14): p. 2371-2379 e2376.

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.

Hustedt, N., Y. Saito, M. Zimmermann, A. Alvarez-Quilon, D. Setiaputra, S. Adam, A. McEwan, J.Y. Yuan, M. Olivieri, Y. Zhao, M.T. Kanemaki, A. Jurisicova, and D. Durocher, *Control of homologous recombination by the HROB-MCM8-MCM9 pathway*. Genes Dev, 2019.

Knight, J.D.R., P. Samavarchi-Tehrani, M. Tyers, and A.C. Gingras, *Gene Information eXtension (GIX): effortless retrieval of gene product information on any website*. Nat Methods, 2019. **16**(8): p. 665-666.

Lambert, J.P., S. Picaud, T. Fujisawa, H. Hou, P. Savitsky, L. Uuskula-Reimand, G.D. Gupta, H. Abdouni, Z.Y. Lin, M. Tucholska, J.D.R. Knight, B. Gonzalez-Badillo, N. St-Denis, J.A. Newman, M. Stucki, L. Pelletier, N. Bandeira, M.D. Wilson, P. Filippakopoulos, and A.C. Gingras, *Interactome Rewiring Following Pharmacological Targeting of BET Bromodomains*. Mol Cell, 2019. **73**(3): p. 621-638 e17.

Luo, Y., M. Barrios-Rodiles, G.D. Gupta, Y.Y. Zhang, A.A. Ogunjimi, M. Bashkurov, J.M. Tkach, A.Q. Underhill, L. Zhang, M. Bourmoum, J.L. Wrana, and L. Pelletier, *Atypical function of a centrosomal module in WNT signalling drives contextual cancer cell motility*. Nat Commun, 2019. **10**(1): p. 2356.

MacLeod, G., D.A. Bozek, N. Rajakulendran, V. Monteiro, M. Ahmadi, Z. Steinhart, M.M. Kushida, H. Yu, F.J. Coutinho, F.M.G. Cavalli, I. Restall, X. Hao, T. Hart, H.A. Luchman, S. Weiss, P.B. Dirks, and S. Angers, *Genome-Wide CRISPR-Cas9 Screens Expose Genetic Vulnerabilities and Mechanisms of Temozolomide Sensitivity in Glioblastoma Stem Cells*. Cell Rep, 2019. **27**(3): p. 971-986 e9.

Moutaoufik, M. T., R. Malty, S. Amin, Q. Zhang, S. Phanse, A. Gagarinova, M. Zilocchi, L. Hoell, Z. Minic, M. Gagarinova, H. Aoki, J. Stockwell, M. Jessulat, F. Goebels, K. Broderick, N. E. Scott, J. Vlasblom, G. Musso, B. Prasad, E. Lamantea, B. Garavaglia, A. Rajput, K. Murayama, Y. Nouri, K., T. Azad, E. Lightbody, P. Khanal, C. J. Nicol and X. Yang. *A genome-wide screen using a NanoLuc LATS luminescent biosensor identifies ALK as a novel regulator of the Hippo pathway in tumorigenesis and immune evasion*. FASEB J, 2019. **33**(11): p. 12487-12499.

Nouri, K., T. Azad, E. Lightbody, P. Khanal, C. J. Nicol and X. Yang. *A kinome-wide screen using a NanoLuc LATS luminescent biosensor identifies ALK as a novel regulator of the Hippo pathway in tumorigenesis and immune evasion*. FASEB J, 2019. **33**(11): p. 12487-12499.

O'Meara, T.R., M.J. O'Meara, E.J. Polvi, M.R. Pourhaghghi, S.D. Liston, Z.Y. Lin, A.O. Veri, A. Emili, A.C. Gingras, and L.E. Cowen, *Global proteomic analyses define an environmentally contingent Hsp90 interactome and reveal chaperone-dependent regulation of stress granule proteins and the R2TP complex in a fungal pathogen*. PLoS Biol, 2019. **17**(7): p. e3000358.

Pinto, R. N., E. Hysi, K. Bagga, J. A. Sebastian, A. Douplik, J. P. Acker and M. C. Kolios. *Feasibility of photoacoustic imaging for the non-invasive quality management of stored blood bags*. Vox Sang, 2019. **114**(7): p. 701-710.

Pinto, R. N., J. A. Sebastian, M. J. Parsons, T. C. Chang, T. R. Turner, J. P. Acker and M. C. Kolios. *Label-Free Analysis of Red Blood Cell Storage Lesions Using Imaging Flow Cytometry*. Cytometry A, 2019. **95**(9): p. 976-984.

Polvi, E.J., A.O. Veri, Z. Liu, S. Hossain, S. Hyde, S.H. Kim, F. Tebbji, A. Sellam, R.T. Todd, J.L. Xie, Z.Y. Lin, C.J. Wong, R.S. Shapiro, M. Whiteway, N. Robbins, A.C. Gingras, A. Selmecki, and L.E. Cowen, *Functional divergence of a global regulatory complex governing fungal filamentation*. PLoS Genet, 2019. **15**(1): p. e1007901.

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.

Torres-Mendez, A., S. Bonnal, Y. Marquez, J. Roth, M. Iglesias, J. Permanyer, I. Almudi, D. O'Hanlon, T. Guitart, M. Soller, A.C. Gingras, F. Gebauer, F. Rentzsch, B.J. Blencowe, J. Valcarcel, and M. Irimia, *A novel protein domain in an ancestral splicing factor drove the evolution of neural microexons*. Nat Ecol Evol, 2019. **3**(4): p. 691-701.

Yeung, T., O. Fung, M. Bashkurov, A. Khandani, O. Subedar, A. Wudwud, P. Shaw, B. Clarke, J. Bartlett, R. Rottapel, and A. Kapus, *Avoidance of apoptotic death via a hyperploid salvage survival pathway after platinum treatment in high grade serous carcinoma cell line models*. Oncotarget, 2019. **10**(62): p. 6691-6712.

Zhang, J., C. E. Dunk, O. Shynlova, I. Caniggia and S. J. Lye. *TGF $\beta$ 1 suppresses the activation of distinct dNK subpopulations in preeclampsia*. EBioMedicine, 2019. **39**: p. 531-539.

## 2018

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).

Canning, P., K. Park, J. Goncalves, C. Li, C.J. Howard, T.D. Sharpe, L.J. Holt, L. Pelletier, A.N. Bullock, and M.R. Leroux, *CDKL Family Kinases Have Evolved Distinct Structural Features and Ciliary Function*. Cell Rep, 2018. **22**(4): p. 885-894.

Canny, M.D., N. Moatti, L.C.K. Wan, A. Fradet-Turcotte, D. Krasner, P.A. Mateos-Gomez, M. Zimmermann, A. Orthwein, Y.C. Juang, W. Zhang, S.M. Noordermeer, E. Seclen, M.D. Wilson, A. Vorobyov, M. Munro, A. Ernst, T.F. Ng, T. Cho, P.M. Cannon, S.S. Sidhu, F. Sicheri, and D. Durocher, *Inhibition of 53BP1 favors homology-dependent DNA repair and increases CRISPR-Cas9 genome-editing efficiency*. Nat Biotechnol, 2018. **36**(1): p. 95-102.

Coyaud, E., C. Ranadheera, D. Cheng, J. Goncalves, B.J.A. Dyakov, E.M.N. Laurent, J. St-Germain, L. Pelletier, A.C. Gingras, J.H. Brumell, P.K. Kim, D. Safronetz, and B. Raught, *Global Interactomics Uncovers Extensive Organellar Targeting by Zika Virus*. Mol Cell Proteomics, 2018. **17**(11): p. 2242-2255.

Emmer, B.T., G.G. Hesketh, E. Kotnik, V.T. Tang, P.J. Lascuna, J. Xiang, A.C. Gingras, X.W. Chen, and D. Ginsburg, *The cargo receptor SURF4 promotes the efficient cellular secretion of PCSK9*. Elife, 2018. **7**.

Farine, T., M. Parsons, S. Lye and O. Shynlova. *Isolation of Primary Human Decidual Cells from the Fetal Membranes of Term Placentae*. J Vis Exp, 2018.(134).

Garzia, L., N. Kijima, A. S. Morrissy, P. De Antonellis, A. Guerreiro-Stucklin, B. L. Holgado, X. Wu, X. Wang, M. Parsons, K. Zayne, A. Manno, C. Kuzan-Fischer, C. Nor, L. K. Donovan, J. Liu, L. Qin, A. Garancher, K. W. Liu, S. Mansouri, B. Luu, Y. Y. Thompson, V. Ramaswamy, J. Peacock, H. Farooq, P. Skowron, D. J. H. Shih, A. Li, S. Ensan, C. S. Robbins, M. Cybulsky, S. Mitra, Y. Ma, R. Moore, A. Mungall, Y. J. Cho, W. A. Weiss, J. A. Chan, C. E. Hawkins, M. Massimino, N. Jabado, M. Zapotocky, D. Sumerauer, E. Bouffet, P. Dirks, U. Tabori, P. H. B. Sorensen, P. K. Brastianos, K. Aldape, S. J. M. Jones, M. A. Marra, J. R. Woodgett, R. J. Wechsler-Reya, D. W. Fults and M. D. Taylor. *A Hematogenous Route for Medulloblastoma Leptomeningeal Metastases*. Cell, 2018. **172**(5): p. 1050-1062 e1014.

Ghasemi, F., M. Black, R.X. Sun, F. Vizeacoumar, N. Pinto, K.M. Ruicci, J. Yoo, K. Fung, D. MacNeil, D.A. Palma, E. Winquist, J.S. Mymryk, L.A. Ailles, A. Datti, J.W. Barrett, P.C. Boutros, and A.C. Nichols, *High-throughput testing in head and neck squamous cell carcinoma identifies agents with preferential activity in human papillomavirus-positive or negative cell lines*. Oncotarget, 2018. **9**(40): p. 26064-26071.

Gill, M.K., T. Christova, Y.Y. Zhang, A. Gregorieff, L. Zhang, M. Narimatsu, S. Song, S. Xiong, A.L. Couzens, J. Tong, J.R. Krieger, M.F. Moran, A.R. Zlotta, T.H. van der Kwast, A.C. Gingras, F. Sicheri, J.L. Wrana, and L. Attisano, *A feed forward loop enforces YAP/TAZ signaling during tumorigenesis*. Nat Commun, 2018. **9**(1): p. 3510.

Gingras, A.C., K.T. Abe, and B. Raught, *Getting to know the neighborhood: using proximity-dependent biotinylation to characterize protein complexes and map organelles*. Curr Opin Chem Biol, 2018. **48**: p. 44-54.

Gonatopoulos-Pournatzis, T., M. Wu, U. Braunschweig, J. Roth, H. Han, A.J. Best, B. Raj, M. Aregger, D. O'Hanlon, J.D. Ellis, J.A. Calarco, J. Moffat, A.C. Gingras, and B.J. Blencowe, *Genome-wide CRISPR-Cas9 Interrogation of Splicing Networks Reveals a Mechanism for Recognition of Autism-Misregulated Neuronal Microexons*. Mol Cell, 2018. **72**(3): p. 510-524 e12.

Hunter, M.R., G.G. Hesketh, T.H. Benedyk, A.C. Gingras, and S.C. Graham, *Proteomic and Biochemical Comparison of the Cellular Interaction Partners of Human VPS33A and VPS33B*. J Mol Biol, 2018. **430**(14): p. 2153-2163.

Jurak, E., H. Suzuki, G. van Erven, J. A. Gandier, P. Wong, K. Chan, C. Y. Ho, Y. Gong, E. Tillier, M. N. Rosso, M. A. Kabel, S. Miyauchi and E. R. Master, *Dynamics of the Phanerochaete carnosa transcriptome during growth on aspen and spruce*. BMC Genomics, 2018. **19**(1): p. 815.

Khan, M., J.Y. Youn, A.C. Gingras, R. Subramaniam, and D. Desveaux, *In planta proximity dependent biotin identification (BioID)*. Sci Rep, 2018. **8**(1): p. 9212.

Khoriaty, R., G.G. Hesketh, A. Bernard, A.C. Weyand, D. Mellacheruvu, G. Zhu, M.J. Hoenerhoff, B. McGee, L. Everett, E.J. Adams, B. Zhang, T.L. Saunders, A.I. Nesvizhskii, D.J. Klionsky, J.A. Shavit, A.C. Gingras, and D. Ginsburg, *Functions of the COPII gene paralogs SEC23A and SEC23B are interchangeable in vivo*. Proc Natl Acad Sci U S A, 2018. **115**(33): p. E7748-E7757.

Knight, J.F., V.Y.C. Sung, E. Kuzmin, A.L. Couzens, D.A. de Verteuil, C.D.H. Ratcliffe, P.P. Coelho, R.M. Johnson, P. Samavarchi-Tehrani, T. Gruosso, H.W. Smith, W. Lee, S.M. Saleh, D. Zuo, H. Zhao, M.C. Guiot, R.R. Davis, J.P. Gregg, C. Moraes, A.C. Gingras, and M. Park, *KIBRA (WWC1) Is a Metastasis Suppressor Gene Affected by Chromosome 5q Loss in Triple-Negative Breast Cancer*. Cell Rep, 2018. **22**(12): p. 3191-3205.

Liang, Q., C. Monetti, M. V. Shutova, E. J. Neely, S. Hacibekiroglu, H. Yang, C. Kim, P. Zhang, C. Li, K. Nagy, M. Mileikovsky, I. Gyongy, H. K. Sung and A. Nagy, *Linking a cell-division gene and a suicide gene to define and improve cell therapy safety*. Nature, 2018. **563**(7733): p. 701-704.

Liu, J.C., L. Granieri, M. Shrestha, D.Y. Wang, I. Vorobieva, E.A. Rubie, R. Jones, Y. Ju, G. Pellecchia, Z. Jiang, C.A. Palmerini, Y. Ben-David, S.E. Egan, J.R. Woodgett, G.D. Bader, A. Datti, and E. Zackenhaus, *Identification of CDC25 as a Common Therapeutic Target for Triple-Negative Breast Cancer*. Cell Rep, 2018. **23**(1): p. 112-126.

Liu, Y., G.D. Gupta, D.D. Barnabas, F.G. Agircan, S. Mehmood, D. Wu, E. Coyaud, C.M. Johnson, S.H. McLaughlin, A. Andreeva, S.M.V. Freund, C.V. Robinson, S.W.T. Cheung, B. Raught, L. Pelletier, and M. van Breugel, *Direct binding of CEP85 to STIL ensures robust PLK4 activation and efficient centriole assembly*. Nat Commun, 2018. **9**(1): p. 1731.

Nadeem, L., T. Farine, A. Dorogin, E. Matysiak-Zablocki, O. Shynlova and S. Lye. *Differential expression of myometrial AP-1 proteins during gestation and labour*. J Cell Mol Med, 2018. **22**(1): p. 452-471.

Nishimura, T., H. Fakim, T. Brandmann, J.Y. Youn, A.C. Gingras, M. Jinek, and M.R. Fabian, *Human MARF1 is an endoribonuclease that interacts with the DCP1:2 decapping complex and degrades target mRNAs*. Nucleic Acids Res, 2018.

Noordermeer, S.M., S. Adam, D. Setiaputra, M. Barazas, S.J. Pettitt, A.K. Ling, M. Olivieri, A. Alvarez-Quilon, N. Moatti, M. Zimmermann, S. Annunziato, D.B. Krastev, F. Song, I. Brandsma, J. Frankum, R. Brough, A. Sherker, S. Landry, R.K. Szilard, M.M. Munro, A. McEwan, T. Goulet de Rugy, Z.Y. Lin, T. Hart, J. Moffat, A.C. Gingras, A. Martin, H. van Attikum, J. Jonkers, C.J. Lord, S. Rottenberg, and D. Durocher, *The shieldin complex mediates 53BP1-dependent DNA repair*. Nature, 2018. **560**(7716): p. 117-121.

Pinto, N., S.D. Prokopec, F. Vizeacoumar, K. Searle, M. Lowerison, K.M. Ruicci, J. Yoo, K. Fung, D. MacNeil, J.C. Lacefield, H.S. Leong, J.S. Mymryk, J.W. Barrett, A. Datti, P.C. Boutros, and A.C. Nichols, *Lestaurtinib is a potent inhibitor of anaplastic thyroid cancer cell line models*. PLoS One, 2018. **13**(11): p. e0207152.

Reddy, E. C., H. Wang, K. W. A. Bang, M. A. Packham and M. L. Rand. *Young steady-state rabbit platelets do not have an enhanced capacity to expose procoagulant phosphatidylserine*. Platelets, 2018. **29**(1): p. 27-33.

Saettone, A., J. Garg, J.P. Lambert, S. Nabeel-Shah, M. Ponce, A. Burtch, C. Thuppu Mudalige, A.C. Gingras, R.E. Pearlman, and J. Fillingham, *The bromodomain-containing protein Ibd1 links multiple chromatin-related protein complexes to highly expressed genes in Tetrahymena thermophila*. Epigenetics Chromatin, 2018. **11**(1): p. 10.

Samavarchi-Tehrani, P., H. Abdouni, R. Samson, and A.C. Gingras, *A Versatile Lentiviral Delivery Toolkit for Proximity-dependent Biotinylation in Diverse Cell Types*. Mol Cell Proteomics, 2018. **17**(11): p. 2256-2269.

Xiong, S., K. Lorenzen, A.L. Couzens, C.M. Templeton, D. Rajendran, D.Y.L. Mao, Y.C. Juang, D. Chiovitti, I. Kurinov, S. Guettler, A.C. Gingras, and F. Sicheri, *Structural Basis for Auto-Inhibition of the NDR1 Kinase Domain by an Atypically Long Activation Segment*. Structure, 2018. **26**(8): p. 1101-1115 e6.

Youn, J.Y., W.H. Dunham, S.J. Hong, J.D.R. Knight, M. Bashkurov, G.I. Chen, H. Bagci, B. Rathod, G. MacLeod, S.W.M. Eng, S. Angers, Q. Morris, M. Fabian, J.F. Cote, and A.C. Gingras, *High-Density Proximity Mapping Reveals the Subcellular Organization of mRNA-Associated Granules and Bodies*. Mol Cell, 2018. **69**(3): p. 517-532 e11.

Zhang, J., A. Bang and S. J. Lye. *Analysis of SIP Receptor Expression by Uterine Immune Cells Using Standardized Multi-parametric Flow Cytometry*. Methods Mol Biol, 2018. **1697**: p. 83-97.

Zimmermann, M., O. Murina, M.A.M. Reijns, A. Agathanggelou, R. Challis, Z. Tarnauskaite, M. Muir, A. Fluteau, M. Aregger, A. McEwan, W. Yuan, M. Clarke, M.B. Lambros, S. Panesha, P. Moss, M. Chandrashekhar, S. Angers, J. Moffat, V.G. Brunton, T. Hart, J. de Bono, T. Stankovic, A.P. Jackson, and D. Durocher, *CRISPR screens identify genomic ribonucleotides as a source of PARP-trapping lesions*. Nature, 2018. **559**(7713): p. 285-289.

## 2017

Antonicka, H., K. Choquet, Z.Y. Lin, A.C. Gingras, C.L. Kleinman, and E.A. Shoubridge, *A pseudouridine synthase module is essential for mitochondrial protein synthesis and cell viability*. EMBO Rep, 2017. **18**(1): p. 28-38.

Barrios-Rodiles, M., J.D. Ellis, B.J. Blencowe, and J.L. Wrana, *LUMIER: A Discovery Tool for Mammalian Protein Interaction Networks*. Methods Mol Biol, 2017. **1550**: p. 137-148.

Batenburg, N.L., J.R. Walker, S.M. Noordermeer, N. Moatti, D. Durocher, and X.D. Zhu, *ATM and CDK2 control chromatin remodeler CSB to inhibit RIF1 in DSB repair pathway choice*. Nat Commun, 2017. **8**(1): p. 1921.

Chapat, C., S.M. Jafarnejad, E. Matta-Camacho, G.G. Hesketh, I.A. Gelbart, J. Attig, C.G. Gkogkas, T. Alain, N. Stern-Ginossar, M.R. Fabian, A.C. Gingras, T.F. Duchaine, and N. Sonenberg, *Cap-binding protein 4EHP effects translation silencing by microRNAs*. Proc Natl Acad Sci U S A, 2017. **114**(21): p. 5425-5430.

Collins, B.C., C.L. Hunter, Y. Liu, B. Schilling, G. Rosenberger, S.L. Bader, D.W. Chan, B.W. Gibson, A.C. Gingras, J.M. Held, M. Hirayama-Kurogi, G. Hou, C. Krisp, B. Larsen, L. Lin, S. Liu, M.P. Molloy, R.L. Moritz, S. Ohtsuki, R. Schlapbach, N. Selevsek, S.N. Thomas, S.C. Tzeng, H. Zhang, and R. Aebersold, *Multi-laboratory assessment of reproducibility, qualitative and quantitative performance of SWATH-mass spectrometry*. Nat Commun, 2017. **8**(1): p. 291.

Couzens, A.L., S. Xiong, J.D. Knight, D.Y. Mao, S. Guettler, S. Picaud, I. Kurinov, P. Filippakopoulos, F. Sicheri, and A.C. Gingras, *MOBI mediated phospho-recognition in the core mammalian Hippo pathway*. Mol Cell Proteomics, 2017.

Ghasemi, F., M. Black, F. Vizeacoumar, N. Pinto, K.M. Ruicci, C.C. Son Huu Le, M.R. Lowerison, H.S. Leong, J. Yoo, K. Fung, D. MacNeil, D.A. Palma, E. Winquist, J.S. Mymryk, P.C. Boutros, A. Datti, J.W. Barrett, and A.C. Nichols, *Repurposing Abendazole: new potential as a chemotherapeutic agent with preferential activity against HPV-negative head and neck squamous cell cancer*. Oncotarget, 2017.

Gu, B., J.P. Lambert, K. Cockburn, A.C. Gingras, and J. Rossant, *AIRE is a critical spindle-associated protein in embryonic stem cells*. Elife, 2017. **6**.

Gueroussov, S., R.J. Weatheritt, D. O'Hanlon, Z.Y. Lin, A. Narula, A.C. Gingras, and B.J. Blencowe, *Regulatory Expansion in Mammals of Multivalent hnRNP Assemblies that Globally Control Alternative Splicing*. Cell, 2017. **170**(2): p. 324-339 e23.

Han, H., U. Braunschweig, T. Gonatopoulos-Pournatzis, R.J. Weatheritt, C.L. Hirsch, K.C. Ha, E. Radovani, S. Nabeel-Shah, T. Sterne-Weiler, J. Wang, D. O'Hanlon, Q. Pan, D. Ray, H. Zheng, F. Vizeacoumar, A. Datti, L. Magomedova, C.L. Cummins, T.R. Hughes, J.F. Greenblatt, J.L. Wrana, J. Moffat, and B.J. Blencowe, *Multilayered Control of Alternative Splicing Regulatory Networks by Transcription Factors*. Mol Cell, 2017. **65**(3): p. 539-553 e7.

Hesketh, G.G., J.Y. Youn, P. Samavarchi-Tehrani, B. Raught, and A.C. Gingras, *Parallel Exploration of Interaction Space by BioID and Affinity Purification Coupled to Mass Spectrometry*. Methods Mol Biol, 2017. **1550**: p. 115-136.

Johnston, W.L., A. Krizus, A.K. Ramani, W. Dunham, J.Y. Youn, A.G. Fraser, A.C. Gingras, and J.W. Dennis, *C. elegans SUP-46, an HNRNPM family RNA-binding protein that prevents paternally-mediated epigenetic sterility*. BMC Biol, 2017. **15**(1): p. 61.

Knight, J.D.R., H. Choi, G.D. Gupta, L. Pelletier, B. Raught, A.I. Nesvizhskii, and A.C. Gingras, *ProHits-viz: a suite of web tools for visualizing interaction proteomics data*. Nat Methods, 2017. **14**(7): p. 645-646.

Mahadevan, V., C.S. Khademullah, Z. Dargaei, J. Chevrier, P. Uvarov, J. Kwan, R.D. Bagshaw, T. Pawson, A. Emili, Y. De Koninck, V. Anggono, M. Airaksinen, and M.A. Woodin, *Native KCC2 interactome reveals PACSIN1 as a critical regulator of synaptic inhibition*. Elife, 2017. **6**.

Mojarad, B.A., G.D. Gupta, M. Hasegan, O. Goudiam, R. Basto, A.C. Gingras, and L. Pelletier, *CEP19 cooperates with FOP and CEP350 to drive early steps in the ciliogenesis programme*. Open Biol, 2017. **7**(6).

Mulvihill, E. E., E. M. Varin, B. Gladanac, J. E. Campbell, J. R. Ussher, L. L. Baggio, B. Yusta, J. Ayala, M. A. Burmeister, D. Matthews, K. W. A. Bang, J. E. Ayala and D. J. Drucker, *Cellular Sites and Mechanisms Linking Reduction of Dipeptidyl Peptidase-4 Activity to Control of Incretin Hormone Action and Glucose Homeostasis*. Cell Metab, 2017. **25**(1): p. 152-165.

Nadeem, L., O. Shynlova, S. Mesiano and S. Lye, *Progesterone Via its Type-A Receptor Promotes Myometrial Gap Junction Coupling*. Sci Rep, 2017. **7**(1): p. 13357.

Schraeder, C.U., L. Lee, M. Rey, V. Sarpe, P. Man, S. Sharma, V. Zabrouskov, B. Larsen, and D.C. Schriemer, *Neprosin, a selective prolyl endoprotease for bottom-up proteomics and histone mapping*. Mol Cell Proteomics, 2017.

Smith, M.J., E. Ottoni, N. Ishiyama, M. Goudreault, A. Haman, C. Meyer, M. Tucholska, G. Gasmi-Seabrook, S. Menezes, R.C. Laister, M.D. Minden, R. Marschalek, A.C. Gingras, T.

Hoang, and M. Ikura, *Evolution of AF6-RAS association and its implications in mixed-lineage leukemia*. Nat Commun, 2017. **8**(1): p. 1099.

Tran, C. W., S. D. Saibil, T. Le Bihan, S. R. Hamilton, K. S. Lang, H. You, A. E. Lin, K. M. Garza, A. R. Elford, K. Tai, M. E. Parsons, K. Wigmore, M. G. Vainberg, J. M. Penninger, J. R. Woodgett, T. W. Mak and P. S. Ohashi. *Glycogen Synthase Kinase-3 Modulates Cbl-b and Constrains T Cell Activation*. J Immunol, 2017. **199**(12): p. 4056-4065.

Tsai, A.Y., K. Chan, C.Y. Ho, T. Canam, R. Capron, E.R. Master, and K. Brautigam, *Transgenic expression of fungal accessory hemicellulases in Arabidopsis thaliana triggers transcriptional patterns related to biotic stress and defense response*. PLoS One, 2017. **12**(3): p. e0173094.

Uhrig, R.G., A.M. Labandera, L.Y. Tang, N.A. Sieben, M. Goudreault, E. Yeung, A.C. Gingras, M.A. Samuel, and G.B. Moorhead, *Activation of Mitochondrial Protein Phosphatase SLP2 by MIA40 Regulates Seed Germination*. Plant Physiol, 2017. **173**(2): p. 956-969.

Veyhl, J., R. J. Dunn, W. L. Johnston, A. Bennett, L. W. Zhang, J. W. Dennis, H. Schachter and J. G. Culotti. *The directed migration of gonadal distal tip cells in Caenorhabditis elegans requires NGAT-1, a ss1,4-N-acetylgalactosaminyltransferase enzyme*. PLoS One, 2017. **12**(8): p. e0183049.

Xie, J.L., I. Bohovych, E.O.Y. Wong, J.P. Lambert, A.C. Gingras, O. Khalimonchuk, L.E. Cowen, and M.D. Leach, *Ydj1 governs fungal morphogenesis and stress response, and facilitates mitochondrial protein import via Mas1 and Mas2*. Microb Cell, 2017. **4**(10): p. 342-361.

Xiong, S., A.L. Couzens, M.J. Kean, D.Y. Mao, S. Guettler, I. Kurinov, A.C. Gingras, and F. Sicheri, *Regulation of protein interactions by MOB1 phosphorylation*. Mol Cell Proteomics, 2017.

Zhang, J., C. E. Dunk, M. Kwan, R. L. Jones, L. K. Harris, S. Keating and S. J. Lye. *Human dNK cell function is differentially regulated by extrinsic cellular engagement and intrinsic activating receptors in first and second trimester pregnancy*. Cell Mol Immunol, 2017. **14**(2): p. 203-213.

Zhang, J., O. Shynlova, S. Sabra, A. Bang, L. Briollais and S. J. Lye. *Immunophenotyping and activation status of maternal peripheral blood leukocytes during pregnancy and labour, both term and preterm*. Cell Mol Med, 2017. **21**(10): p. 2386-2402.

## 2016

Babichev, Y., L. Kabaroff, A. Datti, D. Uehling, M. Isaac, R. Al-Awar, M. Prakesch, R.X. Sun, P.C. Boutros, R. Venier, B.C. Dickson, and R.A. Gladdy, *PI3K/AKT/mTOR inhibition in combination with doxorubicin is an effective therapy for leiomyosarcoma*. J Transl Med, 2016. **14**(1): p. 67.

Billon, P., J. Li, J.P. Lambert, Y. Chen, V. Tremblay, J.S. Brunzelle, A.C. Gingras, A. Verreault, T. Sugiyama, J.F. Couture, and J. Cote, *Acetylation of PCNA Sliding Surface by Eco1 Promotes Genome Stability through Homologous Recombination*. Mol Cell, 2016.

Campbell, C.I., P. Samavarchi-Tehrani, M. Barrios-Rodiles, A. Datti, A.C. Gingras, and J.L. Wrana, *The RNF146 and tankyrase pathway maintains the junctional Crumbs complex through regulation of angiomotin*. J Cell Sci, 2016. **129**(18): p. 3396-411.

Campbell, J.E., J.R. Ussher, E.E. Mulvihill, J. Kolic, L.L. Baggio, X. Cao, Y. Liu, B.J. Lamont, T. Morii, C.J. Streutker, N. Tamarina, L.H. Philipson, J.L. Wrana, P.E. MacDonald, and D.J. Drucker, *TCF1 links GIPR signaling to the control of beta cell function and survival*. Nat Med, 2016. **22**(1): p. 84-90.

Costanzo, M., B. VanderSluis, E.N. Koch, A. Baryshnikova, C. Pons, G. Tan, W. Wang, M. Usaj, J. Hanchard, S.D. Lee, V. Pelechano, E.B. Styles, M. Billmann, J. van Leeuwen, N. van Dyk, Z.Y. Lin, E. Kuzmin, J. Nelson, J.S. Piotrowski, T. Sri Kumar, S. Bahr, Y. Chen, R. Deshpande, C.F. Kurat, S.C. Li, Z. Li, M.M. Usaj, H. Okada, N. Pascoe, B.J. San Luis, S. Sharifpoor, E. Shuteriqi, S.W. Simpkins, J. Snider, H.G. Suresh, Y. Tan, H. Zhu, N. Malod-Dognin, V. Janjic, N. Przulj, O.G. Troyanskaya, I. Stagljar, T. Xia, Y. Ohya, A.C. Gingras, B. Raught, M. Boutros, L.M. Steinmetz, C.L. Moore, A.P. Rosebrock, A.A. Caudy, C.L. Myers, B. Andrews, and C. Boone, *A global genetic interaction network maps a wiring diagram of cellular function*. Science, 2016. **353**(6306).

de Kreuk, B.J., A.R. Gingras, J.D. Knight, J.J. Liu, A.C. Gingras, and M.H. Ginsberg, *Heart of glass anchors Rasip1 at endothelial cell-cell junctions to support vascular integrity*. Elife, 2016. **5**.

Feng, Y., A. Vlassis, C. Roques, M.E. Lalonde, C. Gonzalez-Aguilera, J.P. Lambert, S.B. Lee, X. Zhao, C. Alabert, J.V. Johansen, E. Paquet, X.J. Yang, A.C. Gingras, J. Cote, and A. Groth, *BRPF3-HBO1 regulates replication origin activation and histone H3K14 acetylation*. EMBO J, 2016. **35**(2): p. 176-92.

Goulet de Rugy, T., M. Bashkurov, A. Datti, R. Betous, L. Guitton-Sert, C. Cazaux, D. Durocher, and J.S. Hoffmann, *Excess Poltheta functions in response to replicative stress in homologous recombination-proficient cancer cells*. Biol Open, 2016.

Jacquet, K., A. Fradet-Turcotte, N. Avvakumov, J.P. Lambert, C. Roques, R.K. Pandita, E. Paquet, P. Herst, A.C. Gingras, T.K. Pandita, G. Legube, Y. Doyon, D. Durocher, and J. Cote, *The TIP60 Complex Regulates Bivalent Chromatin Recognition by 53BP1 through Direct H4K20me Binding and H2AK15 Acetylation*. Mol Cell, 2016. **62**(3): p. 409-21.

Janer, A., J. Prudent, V. Paupe, S. Fahiminiya, J. Majewski, N. Sgarioto, C. Des Rosiers, A. Forest, Z.Y. Lin, A.C. Gingras, G. Mitchell, H.M. McBride, and E.A. Shoubridge, *SLC25A46 is required for mitochondrial lipid homeostasis and cristae maintenance and is responsible for Leigh syndrome*. EMBO Mol Med, 2016.

Jin, J., R. Tian, A. Pascalescu, A.Y. Dai, K. Williton, L. Taylor, M.M. Savitski, M. Bantscheff, J.R. Woodgett, T. Pawson, and K. Colwill, *Mutational Analysis of Glycogen Synthase Kinase 3beta Protein Kinase Together with Kinome-Wide Binding and Stability Studies Suggests Context-Dependent Recognition of Kinases by the Chaperone Heat Shock Protein 90*. Mol Cell Biol, 2016. **36**(6): p. 1007-18.

Jones, R.A., T.J. Robinson, J.C. Liu, M. Shrestha, V. Voisin, Y. Ju, P.E. Chung, G. Pellecchia, V.L. Fell, S. Bae, L. Muthuswamy, A. Datti, S.E. Egan, Z. Jiang, G. Leone, G.D. Bader, A. Schimmer, and E. Zackenhaus, *RB1 deficiency in triple-negative breast cancer induces mitochondrial protein translation*. J Clin Invest, 2016.

Kazazian, K., C.D. Go, H. Wu, O. Brashavitskaya, R.S. Xu, J.W. Dennis, A.C. Gingras, and C. Swallow, *Plk4 promotes cancer invasion and metastasis through Arp2/3 complex regulation of the actin cytoskeleton*. Cancer Res, 2016.

Liu, G., J.D. Knight, J.P. Zhang, C.C. Tsou, J. Wang, J.P. Lambert, B. Larsen, M. Tyers, B. Raught, N. Bandeira, A.I. Nesvizhskii, H. Choi, and A.C. Gingras, *Data Independent Acquisition analysis in ProHits 4.0*. J Proteomics, 2016.

Lun, X., J.C. Wells, N. Grinshtein, J.C. King, X. Hao, N.H. Dang, X. Wang, A. Aman, D. Uehling, A. Datti, J.L. Wrana, J.C. Easaw, A. Luchman, S. Weiss, J.G. Cairncross, D.R. Kaplan, S.M. Robbins, and D.L. Senger, *Disulfiram when combined with copper enhances the therapeutic effects of temozolomide for the treatment of Glioblastoma*. Clin Cancer Res, 2016.

Mohammad, D.K., B.F. Nore, M.O. Gustafsson, A.J. Mohamed, and C.I. Smith, *Protein kinase B (AKT) regulates SYK activity and shuttling through 14-3-3 and importin 7*. Int J Biochem Cell Biol, 2016. **78**: p. 63-74.

Mulvihill, E. E., E. M. Varin, J. R. Ussher, J. E. Campbell, K. W. Bang, T. Abdullah, L. L. Baggio and D. J. Drucker. *Inhibition of Dipeptidyl Peptidase-4 Impairs Ventricular Function and Promotes Cardiac Fibrosis in High Fat-Fed Diabetic Mice*. Diabetes, 2016. **65**(3): p. 742-754.

Nadeem, L., O. Shynlova, E. Matysiak-Zablocki, S. Mesiano, X. Dong and S. Lye. *Molecular evidence of functional progesterone withdrawal in human myometrium*. Nat Commun, 2016. **7**: p. 11565.

Naska, S., S.A. Yuzwa, A.P. Johnston, S. Paul, K.M. Smith, M. Paris, M.V. Sefton, A. Datti, F.D. Miller, and D.R. Kaplan, *Identification of Drugs that Regulate Dermal Stem Cells and Enhance Skin Repair*. Stem Cell Reports, 2016. **6**(1): p. 74-84.

Picaud, S., K. Leonards, J.P. Lambert, O. Dovey, C. Wells, O. Fedorov, O. Monteiro, T. Fujisawa, C.Y. Wang, H. Lingard, C. Tallant, N. Nikbin, L. Guetzoyan, R. Ingham, S.V. Ley, P. Brennan, S. Muller, A. Samsonova, A.C. Gingras, J. Schwaller, G. Vassiliou, S. Knapp, and P. Filippakopoulos, *Promiscuous targeting of bromodomains by bromosporine identifies BET proteins as master regulators of primary transcription response in leukemia*. Sci Adv, 2016. **2**(10): p. e1600760.

Pupavac, M., D. Watkins, F. Petrella, S. Fahiminiya, A. Janer, W. Cheung, A.C. Gingras, T. Pastinen, J. Muenzer, J. Majewski, E.A. Shoubridge, and D.S. Rosenblatt, *Inborn Error of Cobalamin Metabolism Associated with the Intracellular Accumulation of Transcobalamin-Bound Cobalamin and Mutations in ZNF143, Which Codes for a Transcriptional Activator*. *Hum Mutat*, 2016.

Reginensi, A., L. Enderle, A. Gregorieff, R.L. Johnson, J.L. Wrana, and H. McNeill, *A critical role for NF2 and the Hippo pathway in branching morphogenesis*. *Nat Commun*, 2016. **7**: p. 12309.

Rotin, L.E., N. MacLean, A. Aman, M. Gronda, F.H. Lin, R. Hurren, X. Wang, J.L. Wrana, A. Datti, R. Al-Awar, M.D. Minden, and A.D. Schimmer, *Erlotinib synergizes with the poly(ADP-ribose) glycohydrolase inhibitor ethacridine in acute myeloid leukemia cells*. *Haematologica*, 2016.

Savitsky, P., T. Krojer, T. Fujisawa, J.P. Lambert, S. Picaud, C.Y. Wang, E.K. Shanle, K. Krajewski, H. Friedrichsen, A. Kanapin, C. Goding, M. Schapira, A. Samsonova, B.D. Strahl, A.C. Gingras, and P. Filippakopoulos, *Multivalent Histone and DNA Engagement by a PHD/BRD/PWWP Triple Reader Cassette Recruits ZMYND8 to K14ac-Rich Chromatin*. *Cell Rep*, 2016. **17**(10): p. 2724-2737.

Shekhar-Guturja, T., G.M. Gunaherath, E.M. Wijeratne, J.P. Lambert, A.F. Averette, S.C. Lee, T. Kim, Y.S. Bahn, F. Tripodi, R. Ammar, K. Dohl, K. Niewola-Staszkowska, L. Schmitt, R.J. Loewith, F.P. Roth, D. Sanglard, D. Andes, C. Nislow, P. Coccetti, A.C. Gingras, J. Heitman, A.A. Gunatilaka, and L.E. Cowen, *Dual action antifungal small molecule modulates multidrug efflux and TOR signaling*. *Nat Chem Biol*, 2016. **12**(10): p. 867-75.

St-Denis, N., G.D. Gupta, Z.Y. Lin, B. Gonzalez-Badillo, A.O. Veri, J.D. Knight, D. Rajendran, A.L. Couzens, K.W. Currie, J.M. Tkach, S.W. Cheung, L. Pelletier, and A.C. Gingras, *Phenotypic and Interaction Profiling of the Human Phosphatases Identifies Diverse Mitotic Regulators*. *Cell Rep*, 2016. **17**(9): p. 2488-2501.

Strecker, J., G.D. Gupta, W. Zhang, M. Bashkurov, M.C. Landry, L. Pelletier, and D. Durocher, *DNA damage signalling targets the kinetochore to promote chromatin mobility*. *Nat Cell Biol*, 2016. **18**(3): p. 281-90.

Teo, G., H. Koh, D. Fermin, J.P. Lambert, J.D. Knight, A.C. Gingras, and H. Choi, *SAINTq: scoring protein-protein interactions in affinity purification - mass spectrometry experiments with fragment or peptide intensity data*. *Proteomics*, 2016.

Tkac, J., G. Xu, H. Adhikary, J.T. Young, D. Gallo, C. Escribano-Diaz, J. Krietsch, A. Orthwein, M. Munro, W. Sol, A. Al-Hakim, Z.Y. Lin, J. Jonkers, P. Borst, G.W. Brown, A.C. Gingras, S. Rottenberg, J.Y. Masson, and D. Durocher, *HELB Is a Feedback Inhibitor of DNA End Resection*. *Mol Cell*, 2016.

Uuskula-Reimand, L., H. Hou, P. Samavarchi-Tehrani, M.V. Rudan, M. Liang, A. Medina-Rivera, H. Mohammed, D. Schmidt, P. Schwalie, E.J. Young, J. Reimand, S. Hadjur, A.C. Gingras, and M.D. Wilson, *Topoisomerase II beta interacts with cohesin and CTCF at topological domain borders*. Genome Biol, 2016. **17**(1): p. 182.

Wan, L.C., P. Maisonneuve, R.K. Szilard, J.P. Lambert, T.F. Ng, N. Manczyk, H. Huang, R. Laister, A.A. Caudy, A.C. Gingras, D. Durocher, and F. Sicheri, *Proteomic analysis of the human KEOPS complex identifies C14ORF142 as a core subunit homologous to yeast Gon7*. Nucleic Acids Res, 2016.

Wang, S., J.C. Liu, D. Kim, A. Datti, and E. Zackenhaus, *Targeted Pten deletion plus p53-R270H mutation in mouse mammary epithelium induces aggressive claudin-low and basal-like breast cancer*. Breast Cancer Res, 2016. **18**(1): p. 9.

Zhang, L., V. Luga, S.K. Armitage, M. Musiol, A. Won, C.M. Yip, S.V. Plotnikov, and J.L. Wrana, *A lateral signalling pathway coordinates shape volatility during cell migration*. Nat Commun, 2016. **7**: p. 11714.

Zhang, L., Z. Yang, L. Granieri, A. Pasquescu, A. Datti, S.L. Asa, Z. Xu, and S. Ezzat, *High-throughput drug library screening identifies colchicine as a thyroid cancer inhibitor*. Oncotarget, 2016.

## 2015

Abou El Hassan, M., K. Huang, M. B. Eswara, M. Zhao, L. Song, T. Yu, Y. Liu, J. C. Liu, S. McCurdy, A. Ma, J. Wither, J. Jin, E. Zackenhaus, J. L. Wrana and R. Bremner, *Cancer Cells Hijack PRC2 to Modify Multiple Cytokine Pathways*. PLoS One, 2015. **10**(6): p. e0126466.

Abraham, S., M. Scaria, R.D. Bagshaw, K. McMahon, G. Grant, T. Harvey, M. Yeo, F.O. Esteves, H.H. Thygesen, P.F. Jones, V. Speirs, A.M. Hanby, P.J. Selby, M. Lorger, T.N. Dear, T. Pawson, C.J. Marshall, and G. Mavria, *A Rac/Cdc42 exchange factor complex promotes formation of lateral filopodia and blood vessel lumen morphogenesis*. Nat Commun, 2015. **6**: p. 7286.

Antonczak, A.K., L.I. Mullee, Y. Wang, D. Comartin, T. Inoue, L. Pelletier, and C.G. Morrison, *Opposing effects of pericentrin and microcephalin on the pericentriolar material regulate CHK1 activation in the DNA damage response*. Oncogene, 2015.

Bernard, D., M. Gebbia, S. Prabha, M. Gronda, N. MacLean, X. Wang, R. Hurren, M.A. Sukhai, E.E. Cho, M.F. Manolson, A. Datti, J. Wrana, M.D. Minden, R. Al-Awar, A. Aman, C. Nislow, G. Giaever, and A.D. Schimmer, *Select microtubule inhibitors increase lysosome acidity and promote lysosomal disruption in acute myeloid leukemia (AML) cells*. Apoptosis, 2015. **20**(7): p. 948-59.

Coyaud, E., M. Mis, E.M. Laurent, W.H. Dunham, A.L. Couzens, M. Robitaille, A.C. Gingras, S. Angers, and B. Raught, *BioID-based Identification of Skp Cullin F-box (SCF)beta-TrCP1/2 E3 Ligase Substrates*. Mol Cell Proteomics, 2015. **14**(7): p. 1781-95.

Faiz, M., N. Sachewsky, S. Gascon, K. W. Bang, C. M. Morshead and A. Nagy. *Adult Neural Stem Cells from the Subventricular Zone Give Rise to Reactive Astrocytes in the Cortex after Stroke*. Cell Stem Cell, 2015. **17**(5): p. 624-634.

Giampietro, C., A. Disanza, L. Bravi, M. Barrios-Rodiles, M. Corada, E. Frittoli, C. Savorani, M.G. Lampugnani, B. Boggetti, C. Niessen, J.L. Wrana, G. Scita, and E. Dejana, *The actin-binding protein EPS8 binds VE-cadherin and modulates YAP localization and signaling*. J Cell Biol, 2015. **211**(6): p. 1177-92.

Gregorieff, A., Y. Liu, M.R. Inanlou, Y. Khomchuk, and J.L. Wrana, *Yap-dependent reprogramming of Lgr5(+) stem cells drives intestinal regeneration and cancer*. Nature, 2015. **526**(7575): p. 715-8.

Gupta, G.D., E. Coyaud, J. Goncalves, B.A. Mojarrad, Y. Liu, Q. Wu, L. Gheiratmand, D. Comartin, J.M. Tkach, S.W. Cheung, M. Bashkurov, M. Hasegan, J.D. Knight, Z.Y. Lin, M. Schueler, F. Hildebrandt, J. Moffat, A.C. Gingras, B. Raught, and L. Pelletier, *A Dynamic Protein Interaction Landscape of the Human Centrosome-Cilium Interface*. Cell, 2015. **163**(6): p. 1484-99.

Heng, Y.J., L. Taylor, B.G. Larsen, H.N. Chua, S.M. Pung, M.W. Lee, M. Tucholska, S. Tate, P. Kupchak, C.E. Pennell, T. Pawson, and S.J. Lye, *Albumin Decrease Is Associated with Spontaneous Preterm Delivery within 48 h in Women with Threatened Preterm Labor*. J Proteome Res, 2015. **14**(1): p. 457-66.

Hirsch, C.L., Z. Coban Akdemir, L. Wang, G. Jayakumaran, D. Trcka, A. Weiss, J.J. Hernandez, Q. Pan, H. Han, X. Xu, Z. Xia, A.P. Salinger, M. Wilson, F. Vizeacoumar, A. Datti, W. Li, A.J. Cooney, M.C. Barton, B.J. Blencowe, J.L. Wrana, and S.Y. Dent, *Myc and SAGA rewire an alternative splicing network during early somatic cell reprogramming*. Genes Dev, 2015. **29**(8): p. 803-16.

Knight, J.D., G. Liu, J.P. Zhang, A. Pascalescu, H. Choi, and A.C. Gingras, *A web-tool for visualizing quantitative protein-protein interaction data*. Proteomics, 2015. **15**(8): p. 1432-6.

Koehler, J.A., L.L. Baggio, X. Cao, T. Abdulla, J.E. Campbell, T. Secher, J. Jelsing, B. Larsen, and D.J. Drucker, *Glucagon-like Peptide-1 receptor agonists increase pancreatic mass by induction of protein synthesis*. Diabetes, 2015. **64**(3): p. 1046-56.

Lambert, J.P., M. Tucholska, C. Go, J.D. Knight, and A.C. Gingras, *Proximity biotinylation and affinity purification are complementary approaches for the interactome mapping of chromatin-associated protein complexes*. J Proteomics, 2015. **118**: p. 81-94.

Lant, B., B. Yu, M. Goudreault, D. Holmyard, J.D. Knight, P. Xu, L. Zhao, K. Chin, E. Wallace, M. Zhen, A.C. Gingras, and W.B. Derry, *CCM-3/STRIPAK promotes seamless tube extension through endocytic recycling*. Nat Commun, 2015. **6**: p. 6449.

Lee, E.A., L. Angka, S.G. Rota, T. Hanlon, A. Mitchell, R. Hurren, X.M. Wang, M. Gronda, E. Boyaci, B. Bojko, M. Minden, S. Sriskanthadevan, A. Datti, J.L. Wrana, A. Edginton, J. Pawliszyn, J.W. Joseph, J. Quadrilatero, A.D. Schimmer, and P.A. Spagnuolo, *Targeting Mitochondria with Avocatin B Induces Selective Leukemia Cell Death*. Cancer Res, 2015. **75**(12): p. 2478-88.

Levy-Strumpf, N., M. Krizus, H. Zheng, L. Brown and J. G. Culotti. *The Wnt Frizzled Receptor MOM-5 Regulates the UNC-5 Netrin Receptor through Small GTPase-Dependent Signaling to Determine the Polarity of Migrating Cells*. PLoS Genet, 2015. **11**(8): p. e1005446.

Marcon, E., H. Jain, A. Bhattacharya, H. Guo, S. Phanse, S. Pu, G. Byram, B.C. Collins, E. Dowdell, M. Fenner, X. Guo, A. Hutchinson, J.J. Kennedy, B. Krastins, B. Larsen, Z.Y. Lin, M.F. Lopez, P. Loppnau, S. Miersch, T. Nguyen, J.B. Olsen, M. Paduch, M. Ravichandran, A. Seitova, G. Vadali, M.S. Vogelsang, J.R. Whiteaker, G. Zhong, N. Zhong, L. Zhao, R. Aebersold, C.H. Arrowsmith, A. Emili, L. Frappier, A.C. Gingras, M. Gstaiger, A.G. Paulovich, S. Koide, A.A. Kossiakoff, S.S. Sidhu, S.J. Wodak, S. Graslund, J.F. Greenblatt, and A.M. Edwards, *Assessment of a method to characterize antibody selectivity and specificity for use in immunoprecipitation*. Nat Methods, 2015. **12**(8): p. 725-31.

Mui, M.Z., Y. Zhou, P. Blanchette, N. Chughtai, J.F. Knight, T. Gruosso, A.I. Papadakis, S. Huang, M. Park, A.C. Gingras, and P.E. Branton, *The Human Adenovirus Type 5 E4orf4 Protein Targets Two Phosphatase Regulators of the Hippo Signaling Pathway*. J Virol, 2015. **89**(17): p. 8855-70.

Nie, J., C. Xu, J. Jin, J.A. Aka, W. Tempel, V. Nguyen, L. You, R. Weist, J. Min, T. Pawson, and X.J. Yang, *Ankyrin Repeats of ANKRA2 Recognize a PxLPxL Motif on the 3M Syndrome Protein CCDC8*. Structure, 2015.

Nishimura, T., Z. Padamsi, H. Fakim, S. Milette, W.H. Dunham, A.C. Gingras, and M.R. Fabian, *The eIF4E-Binding Protein 4E-T Is a Component of the mRNA Decay Machinery that Bridges the 5' and 3' Termini of Target mRNAs*. Cell Rep, 2015. **11**(9): p. 1425-36.

Orthwein, A., S.M. Noordermeer, M.D. Wilson, S. Landry, R.I. Enchev, A. Sherker, M. Munro, J. Pinder, J. Salsman, G. Dellaire, B. Xia, M. Peter, and D. Durocher, *A mechanism for the suppression of homologous recombination in G1 cells*. Nature, 2015. **528**(7582): p. 422-6.

Prosser, S.L., N.K. Sahota, L. Pelletier, C.G. Morrison, and A.M. Fry, *Nek5 promotes centrosome integrity in interphase and loss of centrosome cohesion in mitosis*. J Cell Biol, 2015. **209**(3): p. 339-48.

Rosario, C.O., K. Kazazian, F.S. Zih, O. Brashavitskaya, Y. Haffani, R.S. Xu, A. George, J.W. Dennis, and C.J. Swallow, *A novel role for Plk4 in regulating cell spreading and motility*. Oncogene, 2015. **34**(26): p. 3441-51.

Rotin, L.E., M. Gronda, N. MacLean, R. Hurren, X. Wang, F.H. Lin, J. Wrana, A. Datti, D.L. Barber, M.D. Minden, M. Slassi, and A.D. Schimmer, *Ibrutinib synergizes with poly(ADP-ribose) glycohydrolase inhibitors to induce cell death in AML cells via a BTK-independent mechanism*. Oncotarget, 2015.

Scifo, E., A. Szwajda, R. Soliymani, F. Pezzini, M. Bianchi, A. Dapkunas, J. Debski, K. Uusi-Rauva, M. Dadlez, A.C. Gingras, J. Tyynela, A. Simonati, A. Jalanko, M.H. Baumann, and M. Lalowski, *Proteomic analysis of the palmitoyl protein thioesterase 1 interactome in SH-SY5Y human neuroblastoma cells*. J Proteomics, 2015. **123**: p. 42-53.

Scifo, E., A. Szwajda, R. Soliymani, F. Pezzini, M. Bianchi, A. Dapkunas, J. Debski, K. Uusi-Rauva, M. Dadlez, A.C. Gingras, J. Tyynela, A. Simonati, A. Jalanko, M.H. Baumann, and M. Lalowski, *Quantitative analysis of PPT1 interactome in human neuroblastoma cells*. Data Brief, 2015. **4**: p. 207-16.

Shnitsar, I., M. Bashkurov, G.R. Masson, A.A. Ogunjimi, S. Mosessian, E.A. Cabeza, C.L. Hirsch, D. Trcka, G. Gish, J. Jiao, H. Wu, R. Winklbauer, R.L. Williams, L. Pelletier, J.L. Wrana, and M. Barrios-Rodiles, *PTEN regulates cilia through Dishevelled*. Nat Commun, 2015. **6**: p. 8388.

So, J., A. Pascalescu, A.Y. Dai, K. Williton, A. James, V. Nguyen, P. Creixell, E.M. Schoof, J. Sinclair, M. Barrios-Rodiles, J. Gu, A. Krizus, R. Williams, M. Olhovsky, J.W. Dennis, J.L. Wrana, R. Linding, C. Jorgensen, T. Pawson, and K. Colwill, *Integrative analysis of kinase networks in TRAIL-induced apoptosis provides a source of potential targets for combination therapy*. Sci Signal, 2015. **8**(371): p. rs3.

Srivastava, G., A. Matta, G. Fu, R.T. Somasundaram, A. Datti, P.G. Walfish, and R. Ralhan, *Anticancer activity of pyrithione zinc in oral cancer cells identified in small molecule screens and xenograft model: Implications for oral cancer therapy*. Mol Oncol, 2015. **9**(8): p. 1720-35.

St-Denis, N., G.D. Gupta, Z.Y. Lin, B. Gonzalez-Badillo, L. Pelletier, and A.C. Gingras, *Myotubularin-related Proteins 3 and 4 Interact with Polo-like Kinase 1 and Centrosomal Protein of 55 kDa to Ensure Proper Abscission*. Mol Cell Proteomics, 2015. **14**(4): p. 946-60.

Teo, G., S. Kim, C.C. Tsou, B. Collins, A.C. Gingras, A.I. Nesvizhskii, and H. Choi, *mapDIA: Preprocessing and statistical analysis of quantitative proteomics data from data independent acquisition mass spectrometry*. J Proteomics, 2015. **129**: p. 108-20.

Tian, R., H. Wang, G.D. Gish, E. Petsalaki, A. Pascalescu, Y. Shi, M. Mollenauer, R.D. Bagshaw, N. Yosef, T. Hunter, A.C. Gingras, A. Weiss, and T. Pawson, *Combinatorial proteomic analysis of intercellular signaling applied to the CD28 T-cell costimulatory receptor*. Proc Natl Acad Sci U S A, 2015. **112**(13): p. E1594-603.

Tsou, C.C., D. Avtonomov, B. Larsen, M. Tucholska, H. Choi, A.C. Gingras, and A.I. Nesvizhskii, *DIA-Umpire: comprehensive computational framework for data-independent acquisition proteomics*. Nat Methods, 2015. **12**(3): p. 258-264.

Wang, J., M. Tucholska, J.D. Knight, J.P. Lambert, S. Tate, B. Larsen, A.C. Gingras, and N. Bandeira, *MSPLIT-DIA: sensitive peptide identification for data-independent acquisition*. Nat Methods, 2015. **12**(12): p. 1106-8.

Yeh, C., E. Coyaud, M. Bashkurov, P. van der Lelij, S.W. Cheung, J.M. Peters, B. Raught, and L. Pelletier, *The Deubiquitinase USP37 Regulates Chromosome Cohesion and Mitotic Progression*. Curr Biol, 2015. **25**(17): p. 2290-9.

Yusta, B., L. L. Baggio, J. Koehler, D. Holland, X. Cao, L. J. Pinnell, K. C. Johnson-Henry, W. Yeung, M. G. Surette, K. W. Bang, P. M. Sherman and D. J. Drucker. *GLP-1R Agonists Modulate Enteric Immune Responses Through the Intestinal Intraepithelial Lymphocyte GLP-1R*. Diabetes, 2015. **64**(7): p. 2537-2549.

Zeqiraj, E., L. Tian, C.A. Piggott, M.C. Pillon, N.M. Duffy, D.F. Ceccarelli, A.F. Keszei, K. Lorenzen, I. Kurinov, S. Orlicky, G.D. Gish, A.J. Heck, A. Guarne, R.A. Greenberg, and F. Sicheri, *Higher-Order Assembly of BRCC36-KIAA0157 Is Required for DUB Activity and Biological Function*. Mol Cell, 2015. **59**(6): p. 970-83.

## 2014

Barsyte-Lovejoy, D., F. Li, M.J. Oudhoff, J.H. Tatlock, A. Dong, H. Zeng, H. Wu, S.A. Freeman, M. Schapira, G.A. Senisterra, E. Kuznetsova, R. Marcellus, A. Allali-Hassani, S. Kennedy, J.P. Lambert, A.L. Couzens, A. Aman, A.C. Gingras, R. Al-Awar, P.V. Fish, B.S. Gerstenberger, L. Roberts, C.L. Benn, R.L. Grimley, M.J. Braam, F.M. Rossi, M. Sudol, P.J. Brown, M.E. Bunnage, D.R. Owen, C. Zaph, M. Vedadi, and C.H. Arrowsmith, *(R)-PFI-2 is a potent and selective inhibitor of SETD7 methyltransferase activity in cells*. Proc Natl Acad Sci U S A, 2014. **111**(35): p. 12853-8.

Gray, E.J., E. Petsalaki, D.A. James, R.D. Bagshaw, M.M. Stacey, O. Rocks, A.C. Gingras, and T. Pawson, *Src homology 2 domain containing protein 5 (SH2D5) binds the breakpoint cluster region protein, BCR, and regulates levels of Rac1-GTP*. J Biol Chem, 2014. **289**(51): p. 35397-408.

Jeon, J., S. Nim, J. Teyra, A. Datti, J.L. Wrana, S.S. Sidhu, J. Moffat, and P.M. Kim, *A systematic approach to identify novel cancer drug targets using machine learning, inhibitor design and high-throughput screening*. Genome Med, 2014. **6**(7): p. 57.

Jovic, M., M.J. Kean, A. Dubankova, E. Boura, A.C. Gingras, J.A. Brill, and T. Balla, *Endosomal sorting of VAMP3 is regulated by PI4K2A*. J Cell Sci, 2014. **127**(Pt 17): p. 3745-56.

Kittanakom, S., M. Barrios-Rodiles, J. Petschnigg, A. Arnoldo, V. Wong, M. Kotlyar, L.E. Heisler, I. Jurisica, J.L. Wrana, C. Nislow, and I. Stagljar, *CHIP-MYTH: a novel interactive proteomics method for the assessment of agonist-dependent interactions of the human beta(2)-adrenergic receptor*. Biochem Biophys Res Commun, 2014. **445**(4): p. 746-56.

Kurat, C.F., J.P. Lambert, J. Petschnigg, H. Friesen, T. Pawson, A. Rosebrock, A.C. Gingras, J. Fillingham, and B. Andrews, *Cell cycle-regulated oscillator coordinates core histone gene transcription through histone acetylation*. Proc Natl Acad Sci U S A, 2014. **111**(39): p. 14124-9.

Kwan, M., A. Hazan, J. Zhang, R. L. Jones, L. K. Harris, W. Whittle, S. Keating, C. E. Dunk and S. J. Lye. *Dynamic changes in maternal decidua leukocyte populations from first to second trimester gestation*. Placenta, 2014. **35**(12): p. 1027-1034.

Lambert, J.P., M. Tucholska, T. Pawson, and A.C. Gingras, *Incorporating DNA shearing in standard affinity purification allows simultaneous identification of both soluble and chromatin-bound interaction partners*. J Proteomics, 2014. **100**: p. 55-9.

Levy-Strumpf, N. and J. G. Culotti. *Netrins and Wnts function redundantly to regulate antero-posterior and dorso-ventral guidance in C. elegans*. PLoS Genet, 2014. **10**(6): p. e1004381.

Liu, J.C., V. Voisin, S. Wang, D.Y. Wang, R.A. Jones, A. Datti, D. Uehling, R. Al-awar, S.E. Egan, G.D. Bader, M. Tsao, T.W. Mak, and E. Zackenhaus, *Combined deletion of Pten and p53 in mammary epithelium accelerates triple-negative breast cancer with dependency on eEF2K*. EMBO Mol Med, 2014. **6**(12): p. 1542-60.

Liu, Y., A.P. Noon, E. Aguiar Cabeza, J. Shen, C. Kuk, C. Ilczynski, R. Ni, B. Sukhu, K. Chan, N.L. Barbosa-Moraes, T. Hermanns, B.J. Blencowe, A. Azad, T.H. van der Kwast, J.W. Catto, A.R. Zlotta, and J.L. Wrana, *Next-generation RNA Sequencing of Archival Formalin-fixed Paraffin-embedded Urothelial Bladder Cancer*. Eur Urol, 2014.

Liu, Y.C., A.L. Couzens, A.R. Deshwar, B.M.-C. LD, X. Zhang, V. Puviindran, I.C. Scott, A.C. Gingras, C.C. Hui, and S. Angers, *The PPFIA1-PP2A protein complex promotes trafficking of Kif7 to the ciliary tip and Hedgehog signaling*. Sci Signal, 2014. **7**(355): p. ra117.

Meiri, D., C.B. Marshall, D. Mokady, J. LaRose, M. Mullin, A.C. Gingras, M. Ikura, and R. Rottapel, *Mechanistic insight into GPCR-mediated activation of the microtubule-associated RhoA exchange factor GEF-H1*. Nat Commun, 2014. **5**: p. 4857.

O'Neill, D.J., S.C. Williamson, D. Alkharaif, I.C. Monteiro, M. Goudreault, L. Gaughan, C.N. Robson, A.C. Gingras, and O. Binda, *SETD6 controls the expression of estrogen-responsive genes and proliferation of breast carcinoma cells*. Epigenetics, 2014. **9**(7): p. 942-50.

Orthwein, A., A. Fradet-Turcotte, S.M. Noordermeer, M.D. Canny, C.M. Brun, J. Strecker, C. Escribano-Diaz, and D. Durocher, *Mitosis inhibits DNA double-strand break repair to guard against telomere fusions*. Science, 2014. **344**(6180): p. 189-93.

Pasculescu, A., E.M. Schoof, P. Creixell, Y. Zheng, M. Olhovsky, R. Tian, J. So, R.D. Vanderlaan, T. Pawson, R. Linding, and K. Colwill, *CoreFlow: A computational platform for integration, analysis and modeling of complex biological data*. Journal of proteomics, 2014. **100**: p. 167-73.

Raj, B., M. Irimia, U. Braunschweig, T. Sterne-Weiler, D. O'Hanlon, Z.Y. Lin, G.I. Chen, L.E. Easton, J. Ule, A.C. Gingras, E. Eyras, and B.J. Blencowe, *A global regulatory mechanism for activating an exon network required for neurogenesis*. Mol Cell, 2014. **56**(1): p. 90-103.

Sakamaki, J., A. Fu, C. Reeks, S. Baird, C. Depatie, M. Al Azzabi, N. Bardeesy, A.C. Gingras, S.P. Yee, and R.A. Scretton, *Role of the SIK2-p35-PJA2 complex in pancreatic beta-cell functional compensation*. Nat Cell Biol, 2014. **16**(3): p. 234-44.

Soliman, M.A., A.M. Abdel Rahman, D.W. Lamming, K. Birsoy, J. Pawling, M.E. Frigolet, H. Lu, I.G. Fantus, A. Pasculescu, Y. Zheng, D.M. Sabatini, J.W. Dennis, and T. Pawson, *The adaptor protein p66Shc inhibits mTOR-dependent anabolic metabolism*. Sci Signal, 2014. **7**(313): p. ra17.

Suzuki, H., T.V. Vuong, Y. Gong, K. Chan, C.Y. Ho, E.R. Master, and A. Kondo, *Sequence diversity and gene expression analyses of expansin-related proteins in the white-rot basidiomycete, Phanerochaete carnosa*. Fungal Genet Biol, 2014. **72**: p. 115-123.

Taipale, M., G. Tucker, J. Peng, I. Krykbaeva, Z.Y. Lin, B. Larsen, H. Choi, B. Berger, A.C. Gingras, and S. Lindquist, *A quantitative chaperone interaction network reveals the architecture of cellular protein homeostasis pathways*. Cell, 2014. **158**(2): p. 434-48.

Teo, G., G. Liu, J. Zhang, A.I. Nesvizhskii, A.C. Gingras, and H. Choi, *SAINTexpress: improvements and additional features in Significance Analysis of INTERactome software*. J Proteomics, 2014. **100**: p. 37-43.

Xu, G., M. Barrios-Rodiles, M. Jerkic, A.L. Turinsky, R. Nadon, S. Vera, D. Voulgaraki, J.L. Wrana, M. Toporsian, and M. Letarte, *Novel protein interactions with endoglin and activin receptor-like kinase 1: potential role in vascular networks*. Mol Cell Proteomics, 2014. **13**(2): p. 489-502.

Yasui, N., G.M. Findlay, G.D. Gish, M.S. Hsiung, J. Huang, M. Tucholska, L. Taylor, L. Smith, W.C. Boldridge, A. Koide, T. Pawson, and S. Koide, *Directed network wiring identifies a key protein interaction in embryonic stem cell differentiation*. Mol Cell, 2014. **54**(6): p. 1034-41.

## 2013

Beyer, T.A., A. Weiss, Y. Khomchuk, K. Huang, A.A. Ogunjimi, X. Varelas, and J.L. Wrana, *Switch enhancers interpret TGF-beta and Hippo signaling to control cell fate in human embryonic stem cells*. Cell Rep, 2013. **5**(6): p. 1611-24.

Chow, T., J. Whiteley, M. Li and I. M. Rogers. *The transfer of host MHC class I protein protects donor cells from NK cell and macrophage-mediated rejection during hematopoietic stem cell transplantation and engraftment in mice*. Stem Cells, 2013. **31**(10): p. 2242-2252.

Comartin, D., G.D. Gupta, E. Fussner, E. Coyaud, M. Hasegan, M. Archinti, S.W. Cheung, D. Pinchev, S. Lawo, B. Raught, D.P. Bazett-Jones, J. Luders, and L. Pelletier, *CEP120 and SPICE1 cooperate with CPAP in centriole elongation*. Curr Biol, 2013. **23**(14): p. 1360-6.

Couzens, A.L., J.D. Knight, M.J. Kean, G. Teo, A. Weiss, W.H. Dunham, Z.Y. Lin, R.D. Bagshaw, F. Sicheri, T. Pawson, J.L. Wrana, H. Choi, and A.C. Gingras, *Protein interaction network of the mammalian Hippo pathway reveals mechanisms of kinase-phosphatase interactions*. Sci Signal, 2013. **6**(302): p. rs15.

Crasto, G.J., N. Kartner, Y. Yao, K. Li, L. Bullock, A. Datti, and M.F. Manolson, *Luteolin inhibition of V-ATPase a3-d2 interaction decreases osteoclast resorptive activity*. J Cell Biochem, 2013. **114**(4): p. 929-41.

Ernst, A., G. Avvakumov, J. Tong, Y. Fan, Y. Zhao, P. Alberts, A. Persaud, J.R. Walker, A.M. Neculai, D. Neculai, A. Vorobiov, P. Garg, L. Beatty, P.K. Chan, Y.C. Juang, M.C. Landry, C. Yeh, E. Zeqiraj, K. Karamboulas, A. Allali-Hassani, M. Vedadi, M. Tyers, J. Moffat, F. Sicheri, L. Pelletier, D. Durocher, B. Raught, D. Rotin, J. Yang, M.F. Moran, S. Dhe-Paganon, and S.S. Sidhu, *A strategy for modulation of enzymes in the ubiquitin system*. Science, 2013. **339**(6119): p. 590-5.

Escribano-Diaz, C., A. Orthwein, A. Fradet-Turcotte, M. Xing, J.T. Young, J. Tkac, M.A. Cook, A.P. Rosebrock, M. Munro, M.D. Canny, D. Xu, and D. Durocher, *A cell cycle-dependent regulatory circuit composed of 53BP1-RIF1 and BRCA1-CtIP controls DNA repair pathway choice*. Mol Cell, 2013. **49**(5): p. 872-83.

Fermin, D., S.J. Walmsley, A.C. Gingras, H. Choi, and A.I. Nesvizhskii, *LuciPHOr: algorithm for phosphorylation site localization with false localization rate estimation using modified target-decoy approach*. Mol Cell Proteomics, 2013. **12**(11): p. 3409-19.

Findlay, G.M., M.J. Smith, F. Lanner, M.S. Hsiung, G.D. Gish, E. Petsalaki, K. Cockburn, T. Kaneko, H. Huang, R.D. Bagshaw, T. Ketela, M. Tucholska, L. Taylor, D.D. Bowtell, J. Moffat, M. Ikura, S.S. Li, S.S. Sidhu, J. Rossant, and T. Pawson, *Interaction domains of Sos1/Grb2 are finely tuned for cooperative control of embryonic stem cell fate*. Cell, 2013. **152**(5): p. 1008-20.

Garg, J., J.P. Lambert, A. Karsou, S. Marquez, S. Nabeel-Shah, V. Bertucci, D.V. Retnasothie, E. Radovani, T. Pawson, A.C. Gingras, R.E. Pearlman, and J.S. Fillingham, *Conserved Asfl-importin beta physical interaction in growth and sexual development in the ciliate Tetrahymena thermophila*. J Proteomics, 2013. **94**: p. 311-26.

Goswami, R.S., E.G. Atenafu, Y. Xuan, L. Waldron, P.P. Reis, T. Sun, A. Datti, W. Xu, J. Kuruvilla, D.J. Good, R. Lai, A.J. Church, W.S. Lam, T. Baetz, D.P. Lebrun, L.H. Sehn, P. Farinha, I. Jurisica, D.J. Bailey, R.D. Gascoyne, M. Crump, and S. Kamel-Reid, *MicroRNA signature obtained from the comparison of aggressive with indolent non-Hodgkin lymphomas: potential prognostic value in mantle-cell lymphoma*. J Clin Oncol, 2013. **31**(23): p. 2903-11.

Han, H., M. Irimia, P.J. Ross, H.K. Sung, B. Alipanahi, L. David, A. Golipour, M. Gabut, I.P. Michael, E.N. Nachman, E. Wang, D. Trcka, T. Thompson, D. O'Hanlon, V. Slobodeniu, N.L. Barbosa-Morais, C.B. Burge, J. Moffat, B.J. Frey, A. Nagy, J. Ellis, J.L. Wrana, and B.J.

Blencowe, *MBNL proteins repress ES-cell-specific alternative splicing and reprogramming*. Nature, 2013. **498**(7453): p. 241-5.

Izraileit, J., H.K. Berman, A. Datti, J.L. Wrana, and M. Reedijk, *High throughput kinase inhibitor screens reveal TRB3 and MAPK-ERK/TGF $\beta$  pathways as fundamental Notch regulators in breast cancer*. Proc Natl Acad Sci U S A, 2013. **110**(5): p. 1714-9.

Lambert, J.P., G. Ivosev, A.L. Couzens, B. Larsen, M. Taipale, Z.Y. Lin, Q. Zhong, S. Lindquist, M. Vidal, R. Aebersold, T. Pawson, R. Bonner, S. Tate, and A.C. Gingras, *Mapping differential interactomes by affinity purification coupled with data-independent mass spectrometry acquisition*. Nat Methods, 2013. **10**(12): p. 1239-45.

Ling, L. S., D. Voskas and J. R. Woodgett. *Activation of PDK-1 maintains mouse embryonic stem cell self-renewal in a PKB-dependent manner*. Oncogene, 2013. **32**(47): p. 5397-5408.

Louria-Hayon, I., C. Frelin, J. Ruston, G. Gish, J. Jin, M.M. Kofler, J.P. Lambert, H.A. Adissu, M. Milyavsky, R. Herrington, M.D. Minden, J.E. Dick, A.C. Gingras, N.N. Iscove, and T. Pawson, *Lnk adaptor suppresses radiation resistance and radiation-induced B-cell malignancies by inhibiting IL-11 signaling*. Proc Natl Acad Sci U S A, 2013. **110**(51): p. 20599-604.

Mellacheruvu, D., Z. Wright, A.L. Couzens, J.P. Lambert, N.A. St-Denis, T. Li, Y.V. Miteva, S. Hauri, M.E. Sardiu, T.Y. Low, V.A. Halim, R.D. Bagshaw, N.C. Hubner, A. Al-Hakim, A. Bouchard, D. Faubert, D. Fermin, W.H. Dunham, M. Goudreault, Z.Y. Lin, B.G. Badillo, T. Pawson, D. Durocher, B. Coulombe, R. Aebersold, G. Superti-Furga, J. Colinge, A.J. Heck, H. Choi, M. Gstaiger, S. Mohammed, I.M. Cristea, K.L. Bennett, M.P. Washburn, B. Raught, R.M. Ewing, A.C. Gingras, and A.I. Nesvizhskii, *The CRAPome: a contaminant repository for affinity purification-mass spectrometry data*. Nat Methods, 2013. **10**(8): p. 730-6.

Oudhoff, M.J., S.A. Freeman, A.L. Couzens, F. Antignano, E. Kuznetsova, P.H. Min, J.P. Northrop, B. Lehnertz, D. Barsyte-Lovejoy, M. Vedadi, C.H. Arrowsmith, H. Nishina, M.R. Gold, F.M. Rossi, A.C. Gingras, and C. Zaph, *Control of the hippo pathway by Set7-dependent methylation of Yap*. Dev Cell, 2013. **26**(2): p. 188-94.

Rivkin, E., S.M. Almeida, D.F. Ceccarelli, Y.C. Juang, T.A. MacLean, T. Srikumar, H. Huang, W.H. Dunham, R. Fukumura, G. Xie, Y. Gondo, B. Raught, A.C. Gingras, F. Sicheri, and S.P. Cordes, *The linear ubiquitin-specific deubiquitinase gumby regulates angiogenesis*. Nature, 2013. **498**(7454): p. 318-24.

Robbins, C. S., I. Hilgendorf, G. F. Weber, I. Theurl, Y. Iwamoto, J. L. Figueiredo, R. Gorbatov, G. K. Sukhova, L. M. Gerhardt, D. Smyth, C. C. Zavitz, E. A. Shikatani, M. Parsons, N. van Rooijen, H. Y. Lin, M. Husain, P. Libby, M. Nahrendorf, R. Weissleder and F. K. Swirski. *Local proliferation dominates lesional macrophage accumulation in atherosclerosis*. Nat Med, 2013. **19**(9): p. 1166-1172.

Robinson, T.J., J.C. Liu, F. Vizeacoumar, T. Sun, N. Maclean, S.E. Egan, A.D. Schimmer, A. Datti, and E. Zackenhaus, *RB1 status in triple negative breast cancer cells dictates response to radiation treatment and selective therapeutic drugs*. PLoS One, 2013. **8**(11): p. e78641.

Robinson, T.J., M. Pai, J.C. Liu, F. Vizeacoumar, T. Sun, S.E. Egan, A. Datti, J. Huang, and E. Zacksenhaus, *High-throughput screen identifies disulfiram as a potential therapeutic for triple-negative breast cancer cells: interaction with IQ motif-containing factors*. Cell Cycle, 2013. **12**(18): p. 3013-24.

Spagnuolo, P.A., R. Hurren, M. Gronda, N. MacLean, A. Datti, A. Basheer, F.H. Lin, X. Wang, J. Wrana, and A.D. Schimmer, *Inhibition of intracellular dipeptidyl peptidases 8 and 9 enhances parthenolide's anti-leukemic activity*. Leukemia, 2013. **27**(6): p. 1236-44.

Sukhai, M.A., S. Prabha, R. Hurren, A.C. Rutledge, A.Y. Lee, S. Sriskanthadevan, H. Sun, X. Wang, M. Skrtic, A. Seneviratne, M. Cusimano, B. Jhas, M. Gronda, N. MacLean, E.E. Cho, P.A. Spagnuolo, S. Sharmin, M. Gebbia, M. Urbanus, K. Eppert, D. Dissanayake, A. Jonet, A. Dassonville-Klimpt, X. Li, A. Datti, P.S. Ohashi, J. Wrana, I. Rogers, P. Sonnet, W.Y. Ellis, S.J. Corey, C. Eaves, M.D. Minden, J.C. Wang, J.E. Dick, C. Nislow, G. Giaever, and A.D. Schimmer, *Lysosomal disruption preferentially targets acute myeloid leukemia cells and progenitors*. J Clin Invest, 2013. **123**(1): p. 315-28.

Tian, R., J. Jin, L. Taylor, B. Larsen, S.E. Quaggin, and T. Pawson, *Rapid and sensitive MRM-based mass spectrometry approach for systematically exploring ganglioside-protein interactions*. Proteomics, 2013. **13**(8): p. 1334-8.

Vizeacoumar, F.J., R. Arnold, F.S. Vizeacoumar, M. Chandrashekhar, A. Buzina, J.T. Young, J.H. Kwan, A. Sayad, P. Mero, S. Lawo, H. Tanaka, K.R. Brown, A. Baryshnikova, A.B. Mak, Y. Fedynshyn, Y. Wang, G.C. Brito, D. Kasimer, T. Makhnevych, T. Ketela, A. Datti, M. Babu, A. Emili, L. Pelletier, J. Wrana, Z. Wainberg, P.M. Kim, R. Rottapel, C.A. O'Brien, B. Andrews, C. Boone, and J. Moffat, *A negative genetic interaction map in isogenic cancer cell lines reveals cancer cell vulnerabilities*. Mol Syst Biol, 2013. **9**: p. 696.

Zhang, J., C. E. Dunk and S. J. Lye. *Sphingosine signalling regulates decidual NK cell angiogenic phenotype and trophoblast migration*. Hum Reprod, 2013. **28**(11): p. 3026-3037.

Zheng, Y., C. Zhang, D.R. Croucher, M.A. Soliman, N. St-Denis, A. Pascalescu, L. Taylor, S.A. Tate, W.R. Hardy, K. Colwill, A.Y. Dai, R. Bagshaw, J.W. Dennis, A.C. Gingras, R.J. Daly, and T. Pawson, *Temporal regulation of EGF signalling networks by the scaffold protein Shc1*. Nature, 2013. **499**(7457): p. 166-71.

## 2012

Al-Hakim, A.K., M. Bashkurov, A.C. Gingras, D. Durocher, and L. Pelletier, *Interaction proteomics identify NEURL4 and the HECT E3 ligase HERC2 as novel modulators of centrosome architecture*. Mol Cell Proteomics, 2012. **11**(6): p. M111 014233.

Belozerov, V.E., Z.Y. Lin, A.C. Gingras, J.C. McDermott, and K.W. Michael Siu, *High-resolution protein interaction map of the Drosophila melanogaster p38 mitogen-activated protein kinases reveals limited functional redundancy*. Mol Cell Biol, 2012. **32**(18): p. 3695-706.

Canton, D.A., C.D. Keene, K. Swinney, L.K. Langeberg, V. Nguyen, L. Pelletier, T. Pawson, L. Wordeman, N. Stella, and J.D. Scott, *Gravin is a transitory effector of polo-like kinase 1 during cell division*. Mol Cell, 2012. **48**(4): p. 547-59.

Choi, H., G. Liu, D. Mellacheruvu, M. Tyers, A.C. Gingras, and A.I. Nesvizhskii, *Analyzing protein-protein interactions from affinity purification-mass spectrometry data with SAINT*. Curr Protoc Bioinformatics, 2012. Chapter 8: p. Unit8 15.

Costa, B., M.J. Kean, V. Ast, J.D. Knight, A. Mett, Z. Levy, D.F. Ceccarelli, B.G. Badillo, R. Eils, R. Konig, A.C. Gingras, and M. Fainzilber, *STK25 protein mediates TrkA and CCM2 protein-dependent death in pediatric tumor cells of neural origin*. J Biol Chem, 2012. **287**(35): p. 29285-9.

Dalpe, G., H. Zheng, L. Brown and J. Culotti. *Semaphorin-1 and netrin signal in parallel and permissively to position the male ray 1 sensillum in Caenorhabditis elegans*. Genetics, 2012. **192**(3): p. 959-971.

Ellis, J.D., M. Barrios-Rodiles, R. Colak, M. Irimia, T. Kim, J.A. Calarco, X. Wang, Q. Pan, D. O'Hanlon, P.M. Kim, J.L. Wrana, and B.J. Blencowe, *Tissue-specific alternative splicing remodels protein-protein interaction networks*. Mol Cell, 2012. **46**(6): p. 884-92.

Filippakopoulos, P., S. Picaud, M. Mangos, T. Keates, J.P. Lambert, D. Barsyte-Lovejoy, I. Felletar, R. Volkmer, S. Muller, T. Pawson, A.C. Gingras, C.H. Arrowsmith, and S. Knapp, *Histone recognition and large-scale structural analysis of the human bromodomain family*. Cell, 2012. **149**(1): p. 214-31.

Golipour, A., L. David, Y. Liu, G. Jayakumaran, C.L. Hirsch, D. Trcka, and J.L. Wrana, *A late transition in somatic cell reprogramming requires regulators distinct from the pluripotency network*. Cell Stem Cell, 2012. **11**(6): p. 769-82.

Gomez-Ferreria, M.A., M. Bashkurov, A.O. Helbig, B. Larsen, T. Pawson, A.C. Gingras, and L. Pelletier, *Novel NEDD1 phosphorylation sites regulate gamma-tubulin binding and mitotic spindle assembly*. J Cell Sci, 2012. **125**(Pt 16): p. 3745-51.

Gomez-Ferreria, M.A., M. Bashkurov, M. Mullin, A.C. Gingras, and L. Pelletier, *CEP192 interacts physically and functionally with the K63-deubiquitinase CYLD to promote mitotic spindle assembly*. Cell Cycle, 2012. **11**(19): p. 3555-8.

Gustafsson, M.O., A. Hussain, D.K. Mohammad, A.J. Mohamed, V. Nguyen, P. Metalnikov, K. Colwill, T. Pawson, C.I. Smith, and B.F. Nore, *Regulation of nucleocytoplasmic shuttling of Bruton's tyrosine kinase (Btk) through a novel SH3-dependent interaction with ankyrin repeat domain 54 (ANKRD54)*. Mol Cell Biol, 2012. **32**(13): p. 2440-53.

Ikegami, R., K. Simokat, H. Zheng, L. Brown, G. Garriga, J. Hardin and J. Culotti. *Semaphorin and Eph receptor signaling guide a series of cell movements for ventral enclosure in C. elegans*. Curr Biol, 2012. **22**(1): p. 1-11.

Jin, J., K. Sison, C. Li, R. Tian, M. Wnuk, H.-K. Sung, M. Jeansson, C. Zhang, M. Tucholska, N. Jones, D. Kerjaschki, M. Shibuya, I.G. Fantus, A. Nagy, H.-P. Gerber, N. Ferrara, T. Pawson, and S.E. Quaggin, *Soluble FLT1 Binds Lipid Microdomains in Podocytes to Control Cell Morphology and Glomerular Barrier Function*. Cell 2012. **151**(2): p. 384-399.

Jin, K., J. Li, F.S. Vizeacoumar, Z. Li, R. Min, L. Zamparo, F.J. Vizeacoumar, A. Datti, B. Andrews, C. Boone, and Z. Zhang, *PhenoM: a database of morphological phenotypes caused by mutation of essential genes in Saccharomyces cerevisiae*. Nucleic Acids Res, 2012. **40**(Database issue): p. D687-94.

Jovic, M., M.J. Kean, Z. Szentpetery, G. Polevoy, A.C. Gingras, J.A. Brill, and T. Balla, *Two phosphatidylinositol 4-kinases control lysosomal delivery of the Gaucher disease enzyme, beta-glucocerebrosidase*. Mol Biol Cell, 2012. **23**(8): p. 1533-45.

Knight, J.D., R. Tian, R.E. Lee, F. Wang, A. Beauvais, H. Zou, L.A. Megeney, A.C. Gingras, T. Pawson, D. Figeys, and R. Kothary, *A novel whole-cell lysate kinase assay identifies substrates of the p38 MAPK in differentiating myoblasts*. Skelet Muscle, 2012. **2**: p. 5.

Lawo, S., M. Hasegan, G.D. Gupta, and L. Pelletier, *Subdiffraction imaging of centrosomes reveals higher-order organizational features of pericentriolar material*. Nat Cell Biol, 2012. **14**(11): p. 1148-58.

Li, Y.J., X. Zhao, L.M. Vecchiarelli-Federico, Y. Li, A. Datti, Y. Cheng, and Y. Ben-David, *Drug-mediated inhibition of Fli-1 for the treatment of leukemia*. Blood Cancer J, 2012. **2**(1): p. e54.

Liu, G., J. Zhang, H. Choi, J.P. Lambert, T. Sri Kumar, B. Larsen, A.I. Nesvizhskii, B. Raught, M. Tyers, and A.C. Gingras, *Using ProHits to store, annotate, and analyze affinity purification-mass spectrometry (AP-MS) data*. Curr Protoc Bioinformatics, 2012. **Chapter 8**: p. Unit8 16.

Luga, V., L. Zhang, A.M. Viloria-Petit, A.A. Ogunjimi, M.R. Inanlou, E. Chiu, M. Buchanan, A.N. Hosein, M. Basik, and J.L. Wrana, *Exosomes mediate stromal mobilization of autocrine Wnt-PCP signaling in breast cancer cell migration*. Cell, 2012. **151**(7): p. 1542-56.

Marcotte, R., K.R. Brown, F. Suarez, A. Sayad, K. Karamboulas, P.M. Krzyzanowski, F. Sircoulomb, M. Medrano, Y. Fedyshyn, J.L.Y. Koh, D. van Dyk, B. Fedyshyn, M. Luhova, G.C. Brito, F.J. Vizeacoumar, F.S. Vizeacoumar, A. Datti, D. Kasimer, A. Buzina, P. Mero, C. Misquitta, J. Normand, M. Haider, T. Ketela, J.L. Wrana, R. Rottapel, B.G. Neel, and J. Moffat, *Essential gene profiles in breast, pancreatic, and ovarian cancer cells*. Cancer Discovery, 2012. **2**: p. 172-89.

McDermott, S.P., K. Eppert, F. Notta, M. Isaac, A. Datti, R. Al-Awar, J. Wrana, M.D. Minden, and J.E. Dick, *A small molecule screening strategy with validation on human leukemia stem cells uncovers the therapeutic efficacy of kinetin riboside*. Blood, 2012. **119**(5): p. 1200-7.

Morita, M., L.W. Ler, M.R. Fabian, N. Siddiqui, M. Mullin, V.C. Henderson, T. Alain, B.D. Fonseca, G. Karashchuk, C.F. Bennett, T. Kabuta, S. Higashi, O. Larsson, I. Topisirovic, R.J. Smith, A.C. Gingras, and N. Sonenberg, *A novel 4EHP-GIGYF2 translational repressor complex is essential for mammalian development*. Mol Cell Biol, 2012. **32**(17): p. 3585-93.

Ryan, O., R.S. Shapiro, C.F. Kurat, D. Mayhew, A. Baryshnikova, B. Chin, Z.Y. Lin, M.J. Cox, F. Vizeacoumar, D. Cheung, S. Bahr, K. Tsui, F. Tebbji, A. Sellam, F. Istel, T. Schwarzmuller, T.B. Reynolds, K. Kuchler, D.K. Gifford, M. Whiteway, G. Giaever, C. Nislow, M. Costanzo, A.C. Gingras, R.D. Mitra, B. Andrews, G.R. Fink, L.E. Cowen, and C. Boone, *Global gene deletion analysis exploring yeast filamentous growth*. Science, 2012. **337**(6100): p. 1353-6.

van Zuylen, W.J., P. Doyon, J.F. Clement, K.A. Khan, L.M. D'Ambrosio, F. Do, M. St-Amant-Verret, T. Wissanji, G. Emery, A.C. Gingras, S. Meloche, and M.J. Servant, *Proteomic profiling of the TRAF3 interactome network reveals a new role for the ER-to-Golgi transport compartments in innate immunity*. PLoS Pathog, 2012. **8**(7): p. e1002747.

## 2011

Bisson, N., D.A. James, G. Ivosev, S.A. Tate, R. Bonner, L. Taylor, and T. Pawson, *Selected reaction monitoring mass spectrometry reveals the dynamics of signaling through the GRB2 adaptor*. Nat Biotechnol, 2011. **29**(7): p. 653-8.

Ceccarelli, D.F., R.C. Laister, V.K. Mulligan, M.J. Kean, M. Goudreault, I.C. Scott, W.B. Derry, A. Chakrabarty, A.C. Gingras, and F. Sicheri, *CCM3/PDCD10 heterodimerizes with germinal center kinase III (GCKIII) proteins using a mechanism analogous to CCM3 homodimerization*. J Biol Chem, 2011. **286**(28): p. 25056-64.

Choi, H., B. Larsen, Z.Y. Lin, A. Breitkreutz, D. Mellacheruvu, D. Fermin, Z.S. Qin, M. Tyers, A.C. Gingras, and A.I. Nesvizhskii, *SAINT: probabilistic scoring of affinity purification-mass spectrometry data*. Nat Methods, 2011. **8**(1): p. 70-3.

Dunham, W.H., B. Larsen, S. Tate, B.G. Badillo, M. Goudreault, Y. Tehami, T. Kislinger, and A.C. Gingras, *A cost-benefit analysis of multidimensional fractionation of affinity purification-mass spectrometry samples*. Proteomics, 2011. **11**(13): p. 2603-12.

Dyson, M.R., Y. Zheng, C. Zhang, K. Colwill, K. Pershad, B.K. Kay, T. Pawson, and J. McCafferty, *Mapping protein interactions by combining antibody affinity maturation and mass spectrometry*. Analytical biochemistry, 2011. **417**(1): p. 25-35.

Eberhard, Y., M. Gronda, R. Hurren, A. Datti, N. MacLean, T. Ketela, J. Moffat, J.L. Wrana, and A.D. Schimmer, *Inhibition of SREBP1 sensitizes cells to death ligands*. Oncotarget, 2011. **2**(3): p. 186-96.

Grinshtein, N., A. Datti, M. Fujitani, D. Uehling, M. Prakesch, M. Isaac, M.S. Irwin, J.L. Wrana, R. Al-Awar, and D.R. Kaplan, *Small molecule kinase inhibitor screen identifies polo-like kinase 1 as a target for neuroblastoma tumor-initiating cells*. Cancer Res, 2011. **71**(4): p. 1385-95.

Guettler, S., J. LaRose, E. Petsalaki, G. Gish, A. Scotter, T. Pawson, R. Rottapel, and F. Sicheri, *Structural basis and sequence rules for substrate recognition by Tankyrase explain the basis for cherubism disease*. Cell, 2011. **147**(6): p. 1340-54.

Ito, E., S. Yue, E.H. Moriyama, A.B. Hui, I. Kim, W. Shi, N.M. Alajez, N. Bhogal, G. Li, A. Datti, A.D. Schimmer, B.C. Wilson, P.P. Liu, D. Durocher, B.G. Neel, B. O'Sullivan, B. Cummings, R. Bristow, J. Wrana, and F.F. Liu, *Uroporphyrinogen decarboxylase is a radiosensitizing target for head and neck cancer*. Sci Transl Med, 2011. **3**(67): p. 67ra7.

Kaniuk, N.A., V. Canadien, R.D. Bagshaw, M. Bakowski, V. Braun, M. Landekic, S. Mitra, J. Huang, W.D. Heo, T. Meyer, L. Pelletier, H. Andrews-Polymeris, M. McClelland, T. Pawson, S. Grinstein, and J.H. Brumell, *Salmonella exploits Arl8B-directed kinesin activity to promote endosome tubulation and cell-to-cell transfer*. Cell Microbiol, 2011. **13**(11): p. 1812-23.

Kean, M.J., D.F. Ceccarelli, M. Goudreault, M. Sanches, S. Tate, B. Larsen, L.C. Gibson, W.B. Derry, I.C. Scott, L. Pelletier, G.S. Baillie, F. Sicheri, and A.C. Gingras, *Structure-Function Analysis of Core STRIPAK Proteins: A SIGNALING COMPLEX IMPLICATED IN GOLGI POLARIZATION*. J Biol Chem, 2011. **286**(28): p. 25065-75.

Leung, E., A. Datti, M. Cossette, J. Goodreid, S.E. McCaw, M. Mah, A. Nakhamchik, K. Ogata, M. El Bakkouri, Y.Q. Cheng, S.J. Wodak, B.T. Eger, E.F. Pai, J. Liu, S. Gray-Owen, R.A. Batey, and W.A. Houry, *Activators of cylindrical proteases as antimicrobials: identification and development of small molecule activators of ClpP protease*. Chem Biol, 2011. **18**(9): p. 1167-78.

Li, Z., F.J. Vizeacoumar, S. Bahr, J. Li, J. Warringer, F.S. Vizeacoumar, R. Min, B. Vandersluis, J. Bellay, M. Devit, J.A. Fleming, A. Stephens, J. Haase, Z.Y. Lin, A. Baryshnikova, H. Lu, Z. Yan, K. Jin, S. Barker, A. Datti, G. Giaever, C. Nislow, C. Bulawa, C.L. Myers, M. Costanzo, A.C. Gingras, Z. Zhang, A. Blomberg, K. Bloom, B. Andrews, and C. Boone, *Systematic exploration of essential yeast gene function with temperature-sensitive mutants*. Nat Biotechnol, 2011. **29**(4): p. 361-7.

Olhovsky, M., K. Williton, A.Y. Dai, A. Pascalescu, J.P. Lee, M. Goudreault, C.D. Wells, J.G. Park, A.C. Gingras, R. Linding, T. Pawson, and K. Colwill, *OpenFreezer: a reagent information management software system*. Nat Methods, 2011. **8**(8): p. 612-3.

Page, B.D., S. Fletcher, P. Yue, Z. Li, X. Zhang, S. Sharmin, A. Datti, J.L. Wrana, S. Trudel, A.D. Schimmer, J. Turkson, and P.T. Gunning, *Identification of a non-phosphorylated, cell permeable, small molecule ligand for the Stat3 SH2 domain*. Bioorg Med Chem Lett, 2011. **21**(18): p. 5605-9.

Prassas, I., G.S. Karagiannis, I. Batruch, A. Dimitromanolakis, A. Datti, and E.P. Diamandis, *Digitoxin-induced cytotoxicity in cancer cells is mediated through distinct kinase and interferon signaling networks*. Mol Cancer Ther, 2011. **10**(11): p. 2083-93.

Skarra, D.V., M. Goudreault, H. Choi, M. Mullin, A.I. Nesvizhskii, A.C. Gingras, and R.E. Honkanen, *Label-free quantitative proteomics and SAINt analysis enable interactome mapping for the human Ser/Thr protein phosphatase 5*. Proteomics, 2011. **11**(8): p. 1508-16.

Skrtic, M., S. Sriskanthadevan, B. Jhas, M. Gebbia, X. Wang, Z. Wang, R. Hurren, Y. Jitkova, M. Gronda, N. Maclean, C.K. Lai, Y. Eberhard, J. Bartoszko, P. Spagnuolo, A.C. Rutledge, A. Datti, T. Ketela, J. Moffat, B.H. Robinson, J.H. Cameron, J. Wrana, C.J. Eaves, M.D. Minden, J.C. Wang, J.E. Dick, K. Humphries, C. Nislow, G. Giaever, and A.D. Schimmer, *Inhibition of mitochondrial translation as a therapeutic strategy for human acute myeloid leukemia*. Cancer Cell, 2011. **20**(5): p. 674-88.

Song, S., T. Christova, S. Perusini, S. Alizadeh, R.Y. Bao, B.W. Miller, R. Hurren, Y. Jitkova, M. Gronda, M. Isaac, B. Joseph, R. Subramaniam, A. Aman, A. Chau, D.E. Hogge, S.J. Weir, J. Kasper, A.D. Schimmer, R. Al-awar, J.L. Wrana, and L. Attisano, *Wnt inhibitor screen reveals iron dependence of beta-catenin signaling in cancers*. Cancer Res, 2011. **71**(24): p. 7628-39.

Templeton, G.W., M. Nimick, N. Morrice, D. Campbell, M. Goudreault, A.C. Gingras, A. Takemiya, K. Shimazaki, and G.B. Moorhead, *Identification and characterization of AtI-2, an Arabidopsis homologue of an ancient protein phosphatase 1 (PP1) regulatory subunit*. Biochem J, 2011. **435**(1): p. 73-83.