

Recent Publications

The NAE Pathway: Autobahn to the Nucleus for Cell Surface Receptors.

Shah P, Chaumet A, Royle SJ, Bard FA.

Cells. 2019 Aug 16;8(8). pii: E915. doi: 10.3390/cells8080915. Review.

The GalNAc-T Activation (GALA) Pathway: Drivers and markers.

Chia J, Tay F, Bard F.

PLoS One. 2019 Mar 19;14(3):e0214118. doi: 10.1371/journal.pone.0214118. eCollection 2019.

Combining laser capture microdissection and proteomics reveals an active translation machinery controlling invadosome formation.

Ezzoukhy Z, Henriet E, Cordelières FP, Dupuy JW, Maître M, Gay N, Di-Tommaso S, Mercier L, Goetz JG, Peter M, Bard F, Moreau V, Raymond AA, Saltel F.

Nat Commun. 2018 May 23;9(1):2031. doi: 10.1038/s41467-018-04461-9.

Quiescin sulfhydryl oxidase 1 (QSOX1) glycosite mutation perturbs secretion but not Golgi localization.

Horowitz B, Javitt G, Ilani T, Gat Y, Morgenstern D, Bard FA, Fass D.

Glycobiology. 2018 Aug 1;28(8):580-591. doi: 10.1093/glycob/cwy044.

Functional genomics identifies specific vulnerabilities in PTEN-deficient breast cancer.

Tang YC, Ho SC, Tan E, Ng AWT, McPherson JR, Goh GYL, Teh BT, Bard F, Rozen SG.

Breast Cancer Res. 2018 Mar 22;20(1):22. doi: 10.1186/s13058-018-0949-3.

HoxC5 and miR-615-3p target newly evolved genomic regions to repress hTERT and inhibit tumorigenesis.

Yan T, Ooi WF, Qamra A, Cheung A, Ma D, Sundaram GM, Xu C, Xing M, Poon L, Wang J, Loh YP, Ho JHJ, Ng JJQ, Ramlee MK, Aswad L, Rozen SG, Ghosh S, Bard FA, Sampath P, Tergaonkar V, Davies JOJ, Hughes JR, Goh E, Bi X, Fullwood MJ, Tan P, Li S.

Nat Commun. 2018 Jan 8;9(1):100. doi: 10.1038/s41467-017-02601-1.

Organelle Specific O-Glycosylation Drives MMP14 Activation, Tumor Growth, and Metastasis.

Nguyen AT, Chia J, Ros M, Hui KM, Saltel F, Bard F.

Cancer Cell. 2017 Nov 13;32(5):639-653.e6. doi: 10.1016/j.ccell.2017.10.001.

Digging deep into Golgi phenotypic diversity with unsupervised machine learning.

Hussain S, Le Guezennec X, Yi W, Dong H, Chia J, Yiping K, Khoon LK, Bard F.

Mol Biol Cell. 2017 Dec 1;28(25):3686-3698. doi: 10.1091/mbc.E17-06-0379. Epub 2017 Oct 11.

Comment on "The GalNAc-T Activation Pathway (GALA) is not a general mechanism for regulating mucin-type O-glycosylation".

Bard F, Chia J.

PLoS One. 2017 Jul 18;12(7):e0180005. doi: 10.1371/journal.pone.0180005. eCollection 2017. No abstract available.

VAMP3/Syb and YKT6 are required for the fusion of constitutive secretory carriers with the plasma membrane.

Gordon DE, Chia J, Jayawardena K, Antrobus R, Bard F, Peden AA.

PLoS Genet. 2017 Apr 12;13(4):e1006698. doi: 10.1371/journal.pgen.1006698. eCollection 2017 Apr.

Pushing the boundaries of high content imaging.

Wright GD, Ward AM, Bard F, Calvert ME.

Cytometry A. 2017 Feb;91(2):113-114. doi: 10.1002/cyto.a.23063. No abstract available.

Human genome-wide RNAi screen reveals host factors required for enterovirus 71 replication.

Wu KX, Phuektes P, Kumar P, Goh GY, Moreau D, Chow VT, Bard F, Chu JJ.

Nat Commun. 2016 Oct 17;7:13150. doi: 10.1038/ncomms13150.

New developments and novel applications in high throughput and high content imaging. Calvert ME, Ward AM, Wright GD, Bard F.

Cytometry A. 2016 Aug;89(8):705-7. doi: 10.1002/cyto.a.22921. No abstract available.

RNAi Reveals Phase-Specific Global Regulators of Human Somatic Cell

Reprogramming. Toh CX, Chan JW, Chong ZS, Wang HF, Guo HC, Satapathy S, Ma D, Goh GY, Khattar E, Yang L, Tergaonkar V, Chang YT, Collins JJ, Daley GQ, Wee KB, Farran CA, Li H, Lim YP, Bard FA, Loh YH.

Cell Rep. 2016 Jun 21;15(12):2597-607. doi: 10.1016/j.celrep.2016.05.049. Epub 2016 Jun 9.

Sar1, a Novel Regulator of ER-Mitochondrial Contact Sites.

Ackema KB, Prescianotto-Baschong C, Hench J, Wang SC, Chia ZH, Mergentaler H, Bard F, Frank S, Spang A.

PLoS One. 2016 Apr 21;11(4):e0154280. doi: 10.1371/journal.pone.0154280. eCollection 2016.

Short O-GalNAc glycans: regulation and role in tumor development and clinical perspectives. Chia J, Goh G, Bard F.

Biochim Biophys Acta. 2016 Aug;1860(8):1623-39. doi: 10.1016/j.bbagen.2016.03.008. Epub 2016 Mar 8. Review.

Cracking the Glycome Encoder: Signaling, Trafficking, and Glycosylation.

Bard F, Chia J.

Trends Cell Biol. 2016 May;26(5):379-388. doi: 10.1016/j.tcb.2015.12.004. Epub 2016 Jan 29. Review.

The Ubiquitin Ligase CBLC Maintains the Network Organization of the Golgi Apparatus.

Lee WY, Goh G, Chia J, Boey A, Gunko NV, Bard F.

PLoS One. 2015 Sep 22;10(9):e0138789. doi: 10.1371/journal.pone.0138789. eCollection 2015.

Systematic identification of factors for provirus silencing in embryonic stem cells.

Yang BX, El Farran CA, Guo HC, Yu T, Fang HT, Wang HF, Schlesinger S, Seah YF, Goh GY, Neo SP, Li Y, Lorincz MC, Tergaonkar V, Lim TM, Chen L, Gunaratne J, Collins JJ, Goff SP, Daley GQ, Li H, Bard FA, Loh YH.

Cell. 2015 Sep 24;163(1):230-45. doi: 10.1016/j.cell.2015.08.037. Epub 2015 Sep 10.

Nuclear envelope-associated endosomes deliver surface proteins to the nucleus.
Chaumet A, Wright GD, Seet SH, Tham KM, Gounko NV, Bard F.
Nat Commun. 2015 Sep 10;6:8218. doi: 10.1038/ncomms9218.

Genome-Wide Screen Reveals Valosin-Containing Protein Requirement for Coronavirus Exit from Endosomes.
Wong HH, Kumar P, Tay FP, Moreau D, Liu DX, Bard F.
J Virol. 2015 Nov;89(21):11116-28. doi: 10.1128/JVI.01360-15. Epub 2015 Aug 26.

Deterministic Restriction on Pluripotent State Dissolution by Cell-Cycle Pathways.
Gonzales KA, Liang H, Lim YS, Chan YS, Yeo JC, Tan CP, Gao B, Le B, Tan ZY, Low KY, Liou YC, Bard F, Ng HH.
Cell. 2015 Jul 30;162(3):564-79. doi: 10.1016/j.cell.2015.07.001.

RNAi screens for genes involved in Golgi glycosylation.
Goh GY, Bard FA.
Methods Mol Biol. 2015;1270:411-26. doi: 10.1007/978-1-4939-2309-0_28.

The small GTPase Arf1 modulates mitochondrial morphology and function.
Ackema KB, Hench J, Böckler S, Wang SC, Sauder U, Mergentaler H, Westermann B, Bard F, Frank S, Spang A.
EMBO J. 2014 Nov 18;33(22):2659-75. doi: 10.15252/embj.201489039. Epub 2014 Sep 4.

WLS retrograde transport to the endoplasmic reticulum during Wnt secretion.
Yu J, Chia J, Canning CA, Jones CM, Bard FA, Virshup DM.
Dev Cell. 2014 May 12;29(3):277-91. doi: 10.1016/j.devcel.2014.03.016. Epub 2014 Apr 24.

ERK8 is a negative regulator of O-GalNAc glycosylation and cell migration.
Chia J, Tham KM, Gill DJ, Bard-Chapeau EA, Bard FA.
Elife. 2014 Mar 11;3:e01828. doi: 10.7554/eLife.01828.

Addicted to secrete - novel concepts and targets in cancer therapy.
Dejeans N, Manié S, Hetz C, Bard F, Hupp T, Agostinis P, Samali A, Chevet E.
Trends Mol Med. 2014 May;20(5):242-50. doi: 10.1016/j.molmed.2013.12.003. Epub 2014 Jan 20.

Transposon mutagenesis identifies genes driving hepatocellular carcinoma in a chronic hepatitis B mouse model.
Bard-Chapeau EA, Nguyen AT, Rust AG, Sayadi A, Lee P, Chua BQ, New LS, de Jong J, Ward JM, Chin CK, Chew V, Toh HC, Abastado JP, Benoukraf T, Soong R, Bard FA, Dupuy AJ, Johnson RL, Radda GK, Chan EC, Wessels LF, Adams DJ, Jenkins NA, Copeland NG.
Nat Genet. 2014 Jan;46(1):24-32. doi: 10.1038/ng.2847. Epub 2013 Dec 8.

ScreenSifter: analysis and visualization of RNAi screening data.
Kumar P, Goh G, Wongphayak S, Moreau D, Bard F.
BMC Bioinformatics. 2013 Oct 3;14:290. doi: 10.1186/1471-2105-14-290.

Initiation of GalNAc-type O-glycosylation in the endoplasmic reticulum promotes cancer cell invasiveness.
Gill DJ, Tham KM, Chia J, Wang SC, Steentoft C, Clausen H, Bard-Chapeau EA, Bard FA.
Proc Natl Acad Sci U S A. 2013 Aug 20;110(34):E3152-61. doi: 10.1073/pnas.1305269110. Epub 2013 Aug 2.

EV11 oncoprotein interacts with a large and complex network of proteins and integrates signals through protein phosphorylation.

Bard-Chapeau EA, Gunaratne J, Kumar P, Chua BQ, Muller J, Bard FA, Blackstock W, Copeland NG, Jenkins NA.

Proc Natl Acad Sci U S A. 2013 Jul 30;110(31):E2885-94. doi: 10.1073/pnas.1309310110. Epub 2013 Jul 15.

TRPM5-mediated calcium uptake regulates mucin secretion from human colon goblet cells. Mitrovic S, Nogueira C, Cantero-Recasens G, Kiefer K, Fernández-Fernández JM, Popoff JF, Casano L, Bard FA, Gomez R, Valverde MA, Malhotra V.

Elife. 2013 May 28;2:e00658. doi: 10.7554/eLife.00658.

RNAi screening reveals a large signaling network controlling the Golgi apparatus in human cells.

Chia J, Goh G, Racine V, Ng S, Kumar P, Bard F.

Mol Syst Biol. 2012;8:629. doi: 10.1038/msb.2012.59.

Zip14 expression induced by lipopolysaccharides in macrophages attenuates inflammatory response.

Sayadi A, Nguyen AT, Bard FA, Bard-Chapeau EA.

Inflamm Res. 2013 Feb;62(2):133-43. doi: 10.1007/s00011-012-0559-y. Epub 2012 Oct 2.

[Looking for an antidote against A/B toxins].

Moreau D, Bard F.

Med Sci (Paris). 2012 Jan;28(1):28-31. doi: 10.1051/medsci/2012281010. Epub 2012 Jan 27. French. No abstract available.

Genome-wide RNAi screens identify genes required for Ricin and PE intoxications.

Moreau D, Kumar P, Wang SC, Chaumet A, Chew SY, Chevalley H, Bard F.

Dev Cell. 2011 Aug 16;21(2):231-44. doi: 10.1016/j.devcel.2011.06.014. Epub 2011 Jul 21.

Exploratory analysis of cell-based screening data for phenotype identification in drug-siRNA study.

Tjhi WC, Lee KK, Hung T, Tsang IW, Ong YS, Bard F, Racine V.

Int J Comput Biol Drug Des. 2011;4(2):194-215. doi: 10.1504/IJCBDD.2011.041011. Epub 2011 Jun 28.

Location, location, location: new insights into O-GalNAc protein glycosylation.

Gill DJ, Clausen H, Bard F.

Trends Cell Biol. 2011 Mar;21(3):149-58. doi: 10.1016/j.tcb.2010.11.004. Epub 2010 Dec 8. Review.

A genome-wide RNAi screen reveals determinants of human embryonic stem cell identity.

Chia NY, Chan YS, Feng B, Lu X, Orlov YL, Moreau D, Kumar P, Yang L, Jiang J, Lau MS, Huss M, Soh BS, Kraus P, Li P, Lufkin T, Lim B, Clarke ND, Bard F, Ng HH.

Nature. 2010 Nov 11;468(7321):316-20. doi: 10.1038/nature09531. Epub 2010 Oct 17.

Regulation of O-glycosylation through Golgi-to-ER relocation of initiation enzymes.

Gill DJ, Chia J, Senewiratne J, Bard F.

J Cell Biol. 2010 May 31;189(5):843-58. doi: 10.1083/jcb.201003055. Epub 2010 May 24.

The formation of TGN-to-plasma-membrane transport carriers.

Bard F, Malhotra V.
Annu Rev Cell Dev Biol. 2006;22:439-55. Review.

Functional genomics reveals genes involved in protein secretion and Golgi organization.
Bard F, Casano L, Mallabiabarrena A, Wallace E, Saito K, Kitayama H, Guizzunti G, Hu Y, Wendler F, Dasgupta R, Perrimon N, Malhotra V.
Nature. 2006 Feb 2;439(7076):604-7.

Apatite-mediated actin dynamics in resorbing osteoclasts.
Saltel F, Destaing O, Bard F, Eichert D, Jurdic P.
Mol Biol Cell. 2004 Dec;15(12):5231-41. Epub 2004 Sep 15.

Protein kinase D regulates basolateral membrane protein exit from trans-Golgi network.
Yeaman C, Ayala MI, Wright JR, Bard F, Bossard C, Ang A, Maeda Y, Seufferlein T, Mellman I, Nelson WJ, Malhotra V.
Nat Cell Biol. 2004 Feb;6(2):106-12. Epub 2004 Jan 25.

Src regulates Golgi structure and KDEL receptor-dependent retrograde transport to the endoplasmic reticulum.
Bard F, Mazelin L, Péchoux-Longin C, Malhotra V, Jurdic P.
J Biol Chem. 2003 Nov 21;278(47):46601-6. Epub 2003 Sep 15.

Podosomes display actin turnover and dynamic self-organization in osteoclasts expressing actin-green fluorescent protein.
Destaing O, Saltel F, Géminard JC, Jurdic P, Bard F.
Mol Biol Cell. 2003 Feb;14(2):407-16.

Molecular complexes that contain both c-Cbl and c-Src associate with Golgi membranes.
Bard F, Patel U, Levy JB, Jurdic P, Horne WC, Baron R.
Eur J Cell Biol. 2002 Jan;81(1):26-35. Erratum in: *Eur J Cell Biol* 2002 Mar;81(3):174.

RR Bard F, Malhotra V

Transit from the Trans-Golgi Network to the plasma membrane.
Annu Rev Cell Dev Biol. 2006;22:439-55.

Bard F, Casano L, Mallabiabarrena A, Wallace E, Saito K, Kitayama H, Guizzinti G, Hu Y, DasGupta R, Perrimon N, Malhotra V. Functional genomics reveals new genes involved in protein secretion and Golgi organization.
Nature. 2006 Feb 2;439(7076):604-7

Yeaman C, Ayala MI, Wright JR, Bard F, Bossard C, Ang A, Maeda Y, Seufferlein T, Mellman I, Nelson WJ, Malhotra V.
Protein kinase D regulates basolateral membrane protein exit from trans-Golgi network.
Nat Cell Biol. 2004 Feb;6(2):106-12.

Saltel F, Destaing O, Bard F, Eichert D, Jurdic P.
Apatite-mediated actin dynamics in resorbing osteoclasts.
Mol Biol Cell. 2004 15, 5231-41.

Bard F, Mazelin L, Pechoux-Longin C, Malhotra V, Jurdic P.

Src regulates Golgi structure and KDEL receptor-dependent retrograde transport to the endoplasmic reticulum.

J Biol Chem. 2003 Nov 21;278(47):46601-6.

Destaing O, Saltel F, Geminard JC, Jurdic P, Bard F. Podosomes display actin turnover and dynamic self-organization in osteoclasts expressing actin-green fluorescent protein.

Mol Biol Cell. 2003 Feb;14(2):407-16.