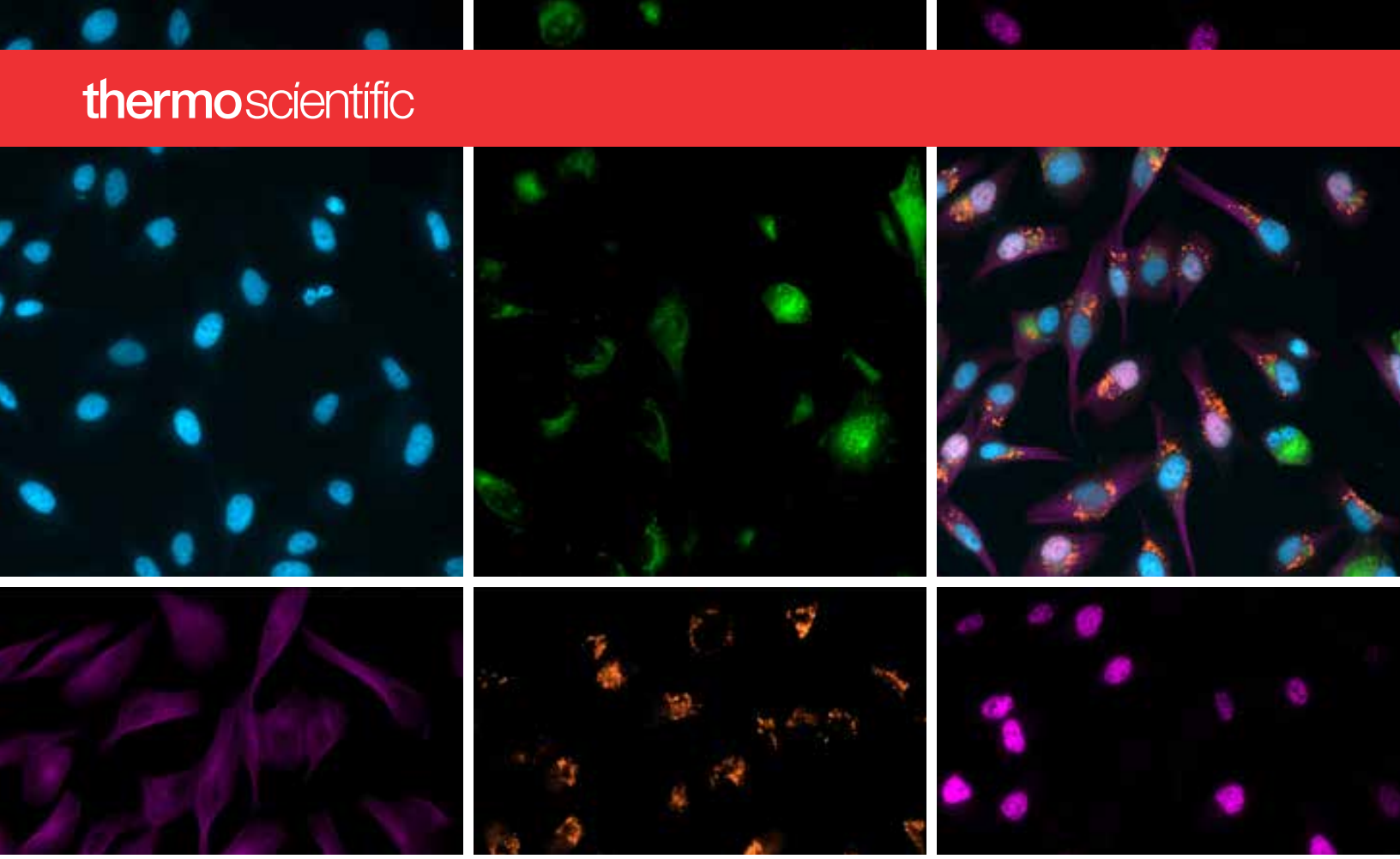
thermo scientific



High-content screening

Recent publications

June 2016

ThermoFisher SCIENTIFIC

What is high-content screening?

High-content screening (HCS) or high-content analysis (HCA) describes a set of analytical methods using automated microscopy, multiparameter image processing, and visualization tools to extract quantitative data from cell populations. HCS typically employs fluorescence imaging of samples in a high-throughput format and reports quantitatively on parameters such as spatial distribution of targets, and individual cell and organelle morphology. Most importantly, HCS is able to correlate measurements back to individual cells.

Since the introduction of Thermo Scientific™ ArrayScan™ High Content Analysis (HCA) Readers in 1999, over 1,000 peer-reviewed cellomics publications attest to a legacy of innovation in HCA that continues today. More peer-reviewed publications reference Thermo Scientific™ high-content screening instruments than any other high-content platform.

This list includes peer-reviwed publications from 2014 to June 2016 that reference the Thermo Scientific™ CellInsight™ or ArrayScan high-content platforms. Use it to find examples and applications that will validate your strategy and inform the next steps in your research.

For more information on high-content products, including instruments, reagents, and applications, go to **thermofisher.com/hcs**

Publications 2016
(year-to-date, alphabetical by first author)

Ahn SO et al. (2016) Stronger uricosuric effects of the novel selective URAT1 inhibitor UR-1102 lowered plasma urate in tufted capuchin monkeys to a greater extent than benzbromaron. *J Pharmacol Exp Ther* 357:157–166.

Baker P et al. (2016) Exopolysaccharide biosynthetic glycoside hydrolases can be utilized to disrupt and prevent *Pseudomonas aeruginosa* biofilms. *Sci Adv* 2:e1501632.

Belzile J-P et al. (2016) Trehalose, an mTOR-independent inducer of autophagy, inhibits human cytomegalovirus infection in multiple cell types. *J Virol* 90:1259–1277.

Bengtsson E et al. (2016) The leucine-rich repeat protein PRELP binds fibroblast cell-surface proteoglycans and enhances focal adhesion formation. *Biochem J* 473:1153–1164.

Bruinsma W et al. (2016) Tousled-like kinase 2 regulates recovery from a DNA damage-induced G2 arrest. *EMBO Rep* 17:659–670.

Fujisawa T et al. (2016) The ASK1-specific inhibitors K811 and K812 prolong survival in a mouse model of amyotrophic lateral sclerosis. *Hum Mol Genet* 25:245–253.

Gengenbacher M et al. (2016) Deletion of nuoG from the vaccine candidate mycobacterium bovis BCG ΔureC::hly improves protection against tuberculosis. *MBio* 7:e00679–e00716.

Hoelting L et al. (2016) Stem cell-derived immature human dorsal root ganglia neurons to identify peripheral neurotoxicants. *Stem Cells Trans Med* 5:476–487.

Hopcroft PJ and Fisher DI (2016) Development of a medium-throughput targeted LCMS assay to detect endogenous cellular levels of malonyl-CoA to screen fatty acid synthase inhibitors. *J Biomol Screen* 21:111–116.

Kong SL et al. (2016) Cellular reprogramming by the conjoint action of ERα, FOXA1, and GATA3 to a ligand-inducible growth state. *Mol Syst Biol* 7:526.

Li J et al. Downregulation of SMC1A inhibits growth and increases apoptosis and chemosensitivity of colorectal cancer cells. *J Intl Med Res* 44:67–74.

Mahara S et al. (2016) HIFI-α activation underlies a functional switch in the paradoxical role of Ezh2/PRC2 in breast cancer. *Proc Natl Acad Sci* 113:E3735–E3744.

Martinez E et al. (2016) *Coxiella burnetii* effector CvpB modulates phosphoinositide metabolism for optimal vacuole development. *Proc Natl Acad Sci* 113:E3260–E3269.

Matsa E et al. (2016) Human induced pluripotent stem cells as a platform for personalized and precision cardiovascular medicine. *Physiol Rev* 96:1093–1126.

Pattabhi S et al. (2016) Targeting innate immunity for antiviral therapy through small molecule agonists of the RLR pathway. *J Virol* 90:2372–2387.

Sun J et al. (2016) Comprehensive RNAi-based screening of human and mouse TLR pathways identifies species-specific preferences in signaling protein use. *Sci Signal* 9:ra3.

Sun L et al. (2016) NHERF1 regulates actin cytoskeleton organization through modulation of α-actinin-4 stability. *FASEB J* 30:578–589.

Ulferts R et al. (2016) Screening of a library of FDA-approved drugs identifies several enterovirus replication inhibitors that target viral protein 2C. *Antimicrob Agents Chemother* 60:2627–2638.

Westwell-Roper C et al. (2016) Differential activation of innate immune pathways by distinct islet amyloid polypeptide (IAPP) aggregates. *J Biol Chem* 291:8908–8917.

Young HE et al. (2016) Discovery of the elusive UDP-diacylglucosamine hydrolase in the lipid A biosynthetic pathway in *Chlamydia trachomatis*. *MBio* 7:e00090–e00116.

Zhang Y et al. (2016) Transient gene and microRNA expression profile changes of confluent human fibroblast cells in spaceflight. *FASEB J* 30:2211–2224.

Publications 2015
(alphabetical by first author)

Amazit L et al. (2015) Finerenone impedes aldosterone-dependent nuclear import of the mineralocorticoid receptor and prevents genomic recruitment of steroid receptor coactivator-1. *J Biol Chem* 290:21876–21889.

Bachour-El Azzi P et al. (2015) Comparative localization and functional activity of the main hepatobiliary transporters in HepaRG cells and primary human hepatocytes. *Toxicol Sci* 145:157–168.

Bailey ML et al. (2015) Dependence of human colorectal cells lacking the FBW7 tumor suppressor on the spindle assembly checkpoint. *Genetics* 201:885–895.

Barber JA et al. (2015) Quantification of drug-induced inhibition of canalicular cholyl-L-lysyl-fluorescein excretion from hepatocytes by high content cell imaging. *Toxicol Sci* 148:48–59.

Callihan P et al. (2015) Convergent regulation of neuronal differentiation and Erk and Akt Kinases in human neural progenitor cells by lysophosphatidic acid, sphingosine 1-phosphate, and LIF: specific roles for the LPA1 receptor. *ASN Neuro* 6:pii:1759091414558416.

Callis R. et al. (2015) A screening assay cascade to identify and characterize novel selective estrogen receptor downregulators (SERDs). *J Biomol Screen* 20:748–759.

Cassar PA et al. (2015) Integrative genomics positions MKRN1 as a novel ribonucleoprotein within the embryonic stem cell gene regulatory network. *EMBO Rep* 16:1334–1357.

Chatterjee SS et al. (2015) Inhibition of β-catenin–TCF1 interaction delays differentiation of mouse embryonic stem cells. *J Cell Biol* 211:39–51.

Chen Y et al. (2015) PHD3 stabilizes the tight junction protein occludin and protects intestinal epithelial barrier function. *J Biol Chem* 290:20580–20589.

Chetty S et al. (2015) A Src inhibitor regulates the cell cycle of human pluripotent stem cells and improves directed differentiation. *J Cell Biol* 210:1257–1268.

Cho SW et al. (2015) CXCL16 signaling mediated macrophage effects on tumor invasion of papillary thyroid carcinoma. *Endocr Relat Cancer* 23:113–124.

Chou Y-C et al. (2015) Pharmacological induction of human fetal globin gene in hydroxyurea-resistant primary adult erythroid cells. *Mol Cell Biol* 35:2541–2553.

Ciferri C et al. (2015) Structural and biochemical studies of HCMV gH/gL/gO and pentamer reveal mutually exclusive cell entry complexes. *Proc Natl Acad Sci* 112:1767–1772.

Dai FF et al. (2015) A novel GLP1 receptor interacting protein ATP6ap2 regulates insulin secretion in pancreatic beta cells. *J Biol Chem* 290:25045–25061.

Deglincerti A et al. (2015) Coco is a dual activity modulator of TGFβ signaling. *Development* 142:2678–2685.

Dhindsa RS et al. (2015) Epileptic encephalopathy-causing mutations in DNM1 impair synaptic vesicle endocytosis. *Neurol Genet* 1:e4.

Dopie J et al. (2015) Genome-wide RNAi screen for nuclear actin reveals a network of cofilin regulators. *J Cell Sci* 128:2388–2400.

Franco MC et al. (2015) Nitration of Hsp90 on Tyrosine 33 regulates mitochondrial metabolism. *J Biol Chem* 290:19055–19066.

Geschwindner S et al. (2015) Characterisation of *de novo* mutations in the C-terminal domain of proprotein convertase subtilisin/kexin type 9. *Protein Eng Des Sel* 28:117–125.

Hancox U et al. (2015) Inhibition of PI3Kβ signaling with AZD8186 inhibits growth of PTEN-deficient breast and prostate tumors alone and in combination with docetaxel. *Mol Cancer Ther* 14:48–58.

Hanniford D et al. (2015) Identification of metastasis-suppressive microRNAs in primary melanoma. *J Natl Cancer Inst* 107:pii:dju494.

Her Z et al. (2015) Loss of TLR3 aggravates CHIKV replication and pathology due to an altered virus-specific neutralizing antibody response. *EMBO Mol Med* 7:24–41.

Hirst J et al. (2015) Contributions of epsinR and gadkin to clathrin-mediated intracellular trafficking. *Mol Biol Cell* 26:3085–3103.

Hirst J et al. (2015) Loss of AP-5 results in accumulation of aberrant endolysosomes: defining a new type of lysosomal storage disease. *Hum Mol Genet* 24:4984–4996.

Hopkins TA et al. (2015) Mechanistic dissection of PARP1 trapping and the impact on *in vivo* tolerability and eficacy of PARP inhibitors. *Mol Cancer Res* 13:1465–1477.

Kawano S et al. (2015) A cell-based screening for TAZ activators identifies ethacridine, a widely used antiseptic and abortifacient, as a compound that promotes dephosphorylation of TAZ and inhibits adipogenesis in C3H10T1/2 cells. *J Biochem* 158:413–423.

Kumar SK et al. (2015) Naturally produced opsonizing antibodies restrict the survival of *Mycobacterium tuberculosis* in human macrophages by augmenting phagosome maturation. *Open Bio* 5:150171.

Lin F et al. (2015) XIAP and cIAP1 amplifications induce Beclin 1-dependent autophagy through NFκB activation. *Hum Mol Genet* 24:2899–2913.

Liu Y et al. (2015) Characterization of zinc influx transporters (ZIPs) in pancreatic β cells: roles in regulating cytosolic zinc homeostasis and insulin secretion. *J Biol Chem* 290:18757–18769.

Liu Z et al. (2015) A novel antibody engineering strategy for making monovalent bispecific heterodimeric IgG antibodies by electrostatic steering mechanism. *J Biol Chem* 290:7535–7562.

Mahajan S et al. (2015) VX-509 (decernotinib) is a potent and selective janus kinase 3 inhibitor that attenuates inflammation in animal models of autoimmune disease. *J Pharmacol Exp Ther* 353:405–414.

Nakayama M et al. (2015) Attenuation of the phosphatidylinositol 3-kinase/Akt signaling pathway by porphyromonas gingivalis gingipains RgpA, RgpB, and Kgp. *J Biol Chem* 290:5190–5202.

Neves-Carvalho A et al. (2015) Dominant negative effect of polyglutamine expansion perturbs normal function of ataxin-3 in neuronal cells. *Hum Mol Genet* 24:100–117.

Pastori C et al. (2015) The bromodomain protein BRD4 controls HOTAIR, a long noncoding RNA essential for glioblastoma proliferation. *Proc Natl Acad Sci* 112:8326–8331.

Pedraza CE et al. (2015) Induction of oligodendrocyte differentiation and *in vitro* myelination by inhibition of rho-associated kinase. *ASN Neuro* 6:pii:1759091414538134.

Peppard JV et al. (2015) High-content phenotypic screening and triaging strategy to identify small molecules driving oligodendrocyte progenitor cell differentiation. *J Biomol Screen* 20:382–390.

Poussin C et al. (2015) Systems biology reveals cigarette smoke-induced concentration-dependent direct and indirect mechanisms that promote monocyte–endothelial cell adhesion. *Toxicol Sci* 147:370–385.

Rameseder J et al. (2015) A multivariate computational method to analyze high-content rnai screening data. *J Biomol Screen* 20:985–997.

Rashid M et al. (2015) Identification and optimization of combinatorial glucose metabolism inhibitors in hepatocellular carcinomas. *J Lab Autom* 20:423–437.

Reed DM et al. (2015) An autologous endothelial cell:peripheral blood mononuclear cell assay that detects cytokine storm responses to biologics. *FASEB J* 29:2595–2602.

Sadaie M et al. (2015) Cell-based screen for altered nuclear phenotypes reveals senescence progression in polyploid cells after Aurora kinase B inhibition. *Mol Biol Cell* 26:2971–2985.

Schira J et al. (2015) Characterization of regenerative phenotype of unrestricted somatic stem cells (USSC) from human umbilical cord blood (hUCB) by functional secretome analysis. *Mol Cell Proteomics* 14:2630–2643.

Sekimoto T et al. (2015) Both high-fidelity replicative and low-fidelity Y-family polymerases are involved in DNA rereplication. *Mol Cell Biol* 35:699–715.

Senkowski W et al. (2015) Three-dimensional cell culture-based screening identifies the anthelmintic drug nitazoxanide as a candidate for treatment of colorectal cancer. *Mol Cancer Ther* 14:1504–1516.

Sharanek A et al. (2015) Cellular accumulation and toxic effects of bile acids in cyclosporine A-treated HepaRG hepatocytes. *Toxicol Sci* 147:573–587.

Silva-Miranda M et al. (2015) High-content screening technology combined with a human granuloma model as a new approach to evaluate the activities of drugs against *Mycobacterium tuberculosis*. *Antimicrob Agents Chemother* 59:693–697.

Smith JG et al. (2015) Dental pulp cell behavior in biomimetic environments. *J Dent Res* 94:1552–1559.

Stroedicke M et al. (2015) Systematic interaction network filtering identifies *CRMP1* as a novel suppressor of huntingtin misfolding and neurotoxicity. *Genome Res* 25:701–713.

Stylianou M et al. (2015) Novel high-throughput screening method for identification of fungal dimorphism blockers. *J Biomol Screen* 20:285–291.

Suzuki T et al. (2015) Mitochonic acid 5 binds mitochondria and ameliorates renal tubular and cardiac myocyte damage. *J Am Soc Nephrol* 27:1925–1932.

Talbert D et al. (2015) A multi-parameter *in vitro* screen in human stem cell-derived cardiomyocytes identifies ponatinib-induced structural and functional cardiac toxicity. *Toxicol Sci* 143:147–155.

Teo T-H et al. (2015) Caribbean and La Réunion chikungunya virus isolates differ in their capacity to induce proinflammatory Th1 and NK cell responses and acute joint pathology. *J Virol* 89:7955–7969.

Trzcińska-Daneluti AM et al. (2015) RNA interference screen to identify kinases that suppress rescue of ΔF508-CFTR. *Mol Cell Proteomics* 14:1569–1583.

Vellinga TT et al. (2015) SIRT1/PGC1α-dependent increase in oxidative phosphorylation supports chemotherapy resistance of colon cancer. *Clin Cancer Res* 21:2870–2879.

Wang W et al. (2015) Novel scaffolds of cell-active histone demethylase inhibitors identified from high-throughput screening. *J Biomol Screen* 20:821–827.

Watanabe T et al. (2015) Apoptosis signal-regulating kinase 1 (ASK1)-p38 pathway-dependent cytoplasmic translocation of the orphan nuclear receptor NR4A2 is required for oxidative stress-induced necrosis. *J Biol Chem* 290:10791–10803.

Wiemhoefer A et al. (2015) Tripeptidyl peptidase II mediates levels of nuclear phosphorylated ERK1 and ERK2. *Mol Cell Proteomics* 14:2177–2193.

Xia H-G et al. (2015) Degradation of HK2 by chaperone-mediated autophagy promotes metabolic catastrophe and cell death. *J Cell Biol* 210:705–716.

Xiao J et al. (2015) FBXL20-mediated Vps34 ubiquitination as a p53 controlled checkpoint in regulating autophagy and receptor degradation. *Genes Dev* 29:184–196.

Xie J et al. (2015) Zinc inhibits hedgehog autoprocessing: linking zinc deficiency with hedgehog activation. *J Biol Chem* 290:11591–11600.

Ye S et al. (2015) Inhibition of reactive oxygen species production ameliorates inflammation induced by influenza A viruses via upregulation of SOCS1 and SOCS3. *J Virol* 89:2672–2683.

Yoshida M et al. (2015) Rectifier of aberrant mRNA splicing recovers tRNA modification in familial dysautonomia. *Proc Natl Acad Sci* 112:2764–2769.

Zhang B et al. (2015) Human umbilical cord mesenchymal stem cell exosomes enhance angiogenesis through the Wnt4/β-catenin pathway. *Stem Cells Trans Med* 4:513–522.

Publications 2014
(alphabetical by first author)

Altman M et al. (2014) Silencing of regulator of G-protein signaling 10 (RGS10) increases phosphorylation of eukaryotic initiation factor 4E binding protein (4E-BP1), and enhances growth and survival signaling pathways in ovarian cancer. *FASEB J* 28:843.11.

Ando M et al. (2014) Usefulness of monitoring γ-H2AX and cell cycle arrest in HepG2 cells for estimating genotoxicity using a high-content analysis system. *J Biomol Screen* 19:1246–1254.

Bachour-El Azzi P et al. (2014) Impact of inflammation on chlorpromazine-induced cytotoxicity and cholestatic features in HepaRG cells. *Drug Metab Dispos* 42:1556–1566.

Bailey ML et al. (2014) Glioblastoma cells containing mutations in the cohesin component STAG2 are sensitive to PARP inhibition. *Mol Cancer Ther* 13:724–732.

Bailey TA et al. (2014) A kinase inhibitor screen reveals protein kinase C-dependent endocytic recycling of ErbB2 in breast cancer cells. *J Biol Chem* 289:30443–30458.

Bard J et al. (2014) A novel microscopy-based high-throughput screening method to identify proteins that regulate global histone modification levels. *J Biomol Screen* 19:191–204.

Beidler CB et al. (2014) Generation and activity of a humanized monoclonal antibody that selectively neutralizes the epidermal growth factor receptor ligands transforming growth factor-α and epiregulin. *J Pharmacol Exp Ther* 349:330–343.

Blondel S et al. (2014) Induced pluripotent stem cells reveal functional differences between drugs currently investigated in patients with hutchinson-gilford progeria syndrome. *Stem Cells Transl Med* 3:510–519.

Cannet A et al. (2014) Identification of a mitotic Rac-GEF, Trio, that counteracts MgcRacGAP function during cytokinesis. *Mol Biol Cell* 25:4063–4071.

Cappella P and Gasparri F (2014) Highly multiplexed phenotypic imaging for cell proliferation studies. *J Biomol Screen* 19:145–157.

Clewell RA et al. (2014) Profiling dose-dependent activation of p53-mediated signaling pathways by chemicals with distinct mechanisms of DNA damage. *Toxicol Sci* 142:56–73.

Cole SD et al. (2014) High content analysis of an *in vitro* model for metabolic toxicity: results with the model toxicants 4-aminophenol and cyclophosphamide. *J Biomol Screen* 19:1402–1408.

Dean RA et al. (2014) Identification of a putative Tdp1 inhibitor (CD00509) by *in vitro* and cell-based assays. *J Biomol Screen* 19:1372–1382.

Dhingra R et al. (2014) Bnip3 mediates doxorubicin-induced cardiac myocyte necrosis and mortality through changes in mitochondrial signaling. *Proc Natl Acad Sci* 1:E5537–E5544.

Falkenberg KJ et al. (2014) A high-throughput, multiplex cell death assay using an RNAi screening approach. *Cold Spring Harb Protoc* 2014:663–676.

Feng Y et al. (2014) Platelets direct monocyte differentiation into epithelioid-like multinucleated giant foam cells with suppressive capacity upon mycobacterial stimulation. *J Infect Dis* 210:1700–1710.

Freeman CL et al. (2014) RME-8 coordinates the activity of the WASH complex with the function of the retromer SNX dimer to control endosomal tubulation. *J Cell Sci* 127:2053–2070.

Gama V et al. (2014) The E3 ligase PARC mediates the degradation of cytosolic cytochrome c to promote survival in neurons and cancer cells. *Sci Signal* 7:ra67.

Ha KD et al. (2014) High-content analysis of antibody phage-display library selection outputs identifies tumor selective macropinocytosis-dependent rapidly internalizing antibodies. *Mol Cell Proteomics* 13:3320–3331.

Hamabe A et al. (2014) Role of pyruvate kinase M2 in transcriptional regulation leading to epithelial–mesenchymal transition. *Proc Natl Acad Sci* 111:15526–5531.

Isensee J et al. (2014) Pain modulators regulate the dynamics of PKA-RII phosphorylation in subgroups of sensory neurons. *J Cell Sci* 127:216–229.

Ito K et al. (2014) Gene targeting study reveals unexpected expression of brain-expressed X-linked 2 in endocrine and tissue stem/progenitor cells in mice. *J Biol Chem* 289:29892–29911.

Kaehler C et al. (2014) 5-Fluorouracil affects assembly of stress granules based on RNA incorporation. *Nucleic Acids Res* 42:6436–6447.

Kameoka S et al. (2014) A high-throughput screen for teratogens using human pluripotent stem cells. *Toxicol Sci* 137:76–90.

Khetani SR et al. (2014) Microengineered liver tissues for drug testing. *J Lab Autom* 20:216–250.

Khoh-Reiter S et al. (2014) Contribution of membrane trafficking perturbation to retinal toxicity. *Toxicol Sci* 145:383–395.

Long OS et al. (2014) A *C. elegans* model of human α1-antitrypsin deficiency links components of the RNAi pathway to misfolded protein turnover. *Hum Mol Genet* 23:5109–5122.

Marwaha S et al. (2014) N-acylated derivatives of sulfamethoxazole and sulfafurazole inhibit intracellular growth of *Chlamydia trachomatis*. *Antimicrob Agents Chemother* 58:2968–2971.

McCoy MK et al. (2014) Hexokinase activity is required for recruitment of parkin to depolarized mitochondria. *Hum Mol Genet* 23:145–156.

Minettia GC et al. (2014) Gαi2 signaling is required for skeletal muscle growth, regeneration, and satellite cell proliferation and differentiation. *Mol Cell Biol* 34:619–630.

Mitchell T et al. (2014) Pharmacologic profile of the adnectin BMS-962476, a small protein biologic alternative to pcsk9 antibodies for low-density lipoprotein lowering. *J Pharmacol Exp Ther* 350:412–424.

Norton M et al. (2014) ROMO1 is an essential redox-dependent regulator of mitochondrial dynamics. *Sci Signal* 7:ra10.

O'Reilly LP et al. (2014) A genome-wide RNAi screen identifies potential drug targets in a *C. elegans* model of α1-antitrypsin deficiency. *Hum Mol Genet* 23:5123–5132.

Patel DA et al. (2014) High-throughput screening normalized to biological response: application to antiviral drug discovery. *J Biomol Screen* 19:119–130.

Poe JA et al. (2014) Development and validation of a high-content bimolecular fluorescence complementation assay for small-molecule inhibitors of HIV-1 Nef dimerization. *J Biomol Screen* 19:556–565.

Shaltiel IA et al. (2014) Distinct phosphatases antagonize the p53 response in different phases of the cell cycle. *Proc Natl Acad Sci* 111:7313–7318.

Sharanek A et al. (2014) Different dose-dependent mechanisms are involved in early cyclosporine A-induced cholestatic effects in HepaRG cells. *Toxicol Sci.* 141:244-253.

Stewart CR et al. (2014) Promotion of hendra virus replication by microRNA 146a. *J Virol* 87:3782–3791.

Sun R et al. (2014) Zidovudine induces downregulation of mitochondrial deoxynucleoside kinases: implications for mitochondrial toxicity of antiviral nucleoside analogs. *Antimicrob Agents Chemother* 58:6758–6766.

Sundaramoorthy S et al. (2014) Functional genomics identifies a requirement of pre-mRNA splicing factors for sister chromatid cohesion. *EMBO J* 33:2623–2642.

Tomaru Y et al. (2014) A transient disruption of fibroblastic transcriptional regulatory network facilitates trans-differentiation. *Nucleic Acids Res* 42:8905–8913.

Trumpi K et al. (2014) Abstract 5388: High throughput toxicity assay for three-dimensional cell cultures. *Cancer Res 74:5388.*

van Berge L et al. (2014) Leukoencephalopathy with brainstem and spinal cord involvement and lactate elevation: clinical and genetic characterization and target for therapy. *Brain* 137:1019–1029.

van Pel DM et al. (2014) *Saccharomyces cerevisiae* genetics predicts candidate therapeutic genetic interactions at the mammalian replication fork. *G3 (Bethesda).* 3:273–282.

Wickramasinghe VO et al. (2014) Selective nuclear export of specific classes of mRNA from mammalian nuclei is promoted by GANP. *Nucleic Acids Res* 42:5059–5071.

Zhang M. et al. (2014) Phenotypic screens targeting neurodegenerative diseases. *J Biomol Screen* 19:1–16.

Zhang M et al. (2014) Progesterone receptor membrane component 1 is a functional part of the glucagon-like peptide-1 (GLP-1) receptor complex in pancreatic β cells. *Mol Cell Proteomics* 13:3049–3062.

Zhou L et al. (2014) Development of functionally selective, small molecule agonists at kappa opioid receptors. *J Biol Chem* 288:36703–36716.

Find out more at **thermofisher.com/hcs**

ThermoFisher SCIENTIFIC