

## 4. Fluorescence Applications

Alonso C, Musat N, Adam B, Kuypers M, Amann R

**HISH-SIMS analysis of bacterial uptake of algal-derived carbon in the Río de la Plata estuary**  
Syst Appl Microbiol. 2012 Sep 28. pii: S0723-2020(12)00109-9. doi: 10.1016/j.syapm.2012.08.004.  
<http://www.sciencedirect.com/science/article/pii/S0723202012001099>

André EM, Daviaud N, Sindji L, Cayon J, Perrot R, Montero-Menei CN:

**A novel ex vivo Huntington's disease model for studying GABAergic neurons and cell grafts by laser microdissection**

PLoS One. 2018 Mar 5;13(3):e0193409. doi: 10.1371/journal.pone.0193409. eCollection 2018.  
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0193409>

Bandyopadhyay U, Cotney J, Nagy M, Oh S, Leng J, Mahajan M, Mane S, Fenton WA, Noonan JP, Horwich AL:

**RNA-Seq Profiling of Spinal Cord Motor Neurons from a Presymptomatic SOD1 ALS Mouse**

PLoS ONE 8(1): e53575. doi:10.1371/journal.pone.0053575  
<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0053575>

Bender A, Desplats P, Spencer B, Rockenstein E, Adame A, Elstner M, Laub C, Mueller S, Koob AO, Mante M, Pham E, Klopstock T, Masliah E:

**TOM40 mediates mitochondrial dysfunction induced by  $\alpha$ -synuclein accumulation in Parkinson's disease**

PLoS One. 2013 Apr 23;8(4):e62277.  
<http://dx.plos.org/10.1371/journal.pone.0062277>

Bergsbaken T1, Bevan MJ2, Fink PJ:

**Local Inflammatory Cues Regulate Differentiation and Persistence of CD8+ Tissue-Resident Memory T Cells**

Cell Rep. 2017 Apr 4;19(1):114-124. doi: 10.1016/j.celrep.2017.03.031.  
[https://linkinghub.elsevier.com/retrieve/pii/S2211-1247\(17\)30363-7](https://linkinghub.elsevier.com/retrieve/pii/S2211-1247(17)30363-7)

Blackmore MG, Wang Z, Lerch JK, Motti D, Zhang YP, Shields CB, Lee JK, Goldberg JL, Lemmon VP, Bixby JL:

**Kruppel-like Factor 7 engineered for transcriptional activation promotes axon regeneration in the adult corticospinal tract**

Proc Natl Acad Sci U S A. 2012 Apr 23. [Epub ahead of print]  
<http://www.pnas.org/cgi/pmidlookup?view=long&pmid=22529377>

Bondoc A, Golbar HM, Pervin M, Katou-Ichikawa C, Tanaka M, Izawa T, Kuwamura M, Yamate J:

**Participation of Tumor-Associated Myeloid Cells in Progression of Amelanotic Melanoma (RMM Tumor Line) in F344 Rats, with Particular Reference to MHC Class II- and CD163-Expressing Cells**

Cancer Microenviron. 2017 Jun 16. doi: 10.1007/s12307-017-0193-x.  
<https://dx.doi.org/10.1007/s12307-017-0193-x>

Brilli E, Reitano E, Conti L, Conforti P, Gulino R, Consalez GG, Cesana E, Smith A, Rossi F, Cattaneo E:

**Neural stem cells engrafted in the adult brain fuse with endogenous neurons**

Stem Cells Dev. 2013 Feb 15;22(4):538-47. doi: 10.1089/scd.2012.0530.  
<http://dx.doi.org/10.1089/scd.2012.0530>

Burbach, G.J., Dehn, D., Del Turco, D., Staufenbiel, M., and Deller, T.:

**Laser microdissection reveals regional and cellular differences in GFAP mRNA upregulation following brain injury, axonal denervation, and amyloid plaque deposition**

Glia 48(1): 76-84 (2004)

<http://onlinelibrary.wiley.com/doi/10.1002/glia.20057/full>

Burbach, G.J., Dehn, D., Nagel, B., Del Turco, D., and Deller, T.:

**Laser microdissection of immunolabeled astrocytes allows quantification of astrocytic gene expression**

J Neurosci Methods 138(1-2): 141-148 (2004)

<http://dx.doi.org/10.1016/j.jneumeth.2004.03.022>

Cao J, Ni J, Ma W, Shiu V, Milla LA, Park S, Spletter ML, Tang S, Zhang J, Wei X, Kim SK, Scott MP:  
**Insight into Insulin Secretion from Transcriptome and Genetic Analysis of Insulin-Producing Cells of Drosophila**

Genetics. 2014 Feb 20.

<http://www.genetics.org/content/early/2014/02/18/genetics.113.160663.full.pdf+html>

Carrillo MAL:

**Endothelial Cell Heterogeneity: A Correlation With The Von Willebrand Factor Expression In Distinct Organs**

Thesis, 2017

[https://era.library.ualberta.ca/files/cbn9996983/LorenzanaCarrillo\\_Maria\\_A\\_201612\\_MSc.pdf](https://era.library.ualberta.ca/files/cbn9996983/LorenzanaCarrillo_Maria_A_201612_MSc.pdf)

Castelli MP, Spiga S, Perra A, Madeddu C, Mulas G, Ennas MG, Gessa GL:

**$\alpha$ 2A adrenergic receptors highly expressed in mesoprefrontal dopamine neurons**

Neuroscience. 2016 Jun 27. pii: S0306-4522(16)30276-7. doi: 10.1016/j.neuroscience.2016.06.037.

[http://linkinghub.elsevier.com/retrieve/pii/S0306-4522\(16\)30276-7](http://linkinghub.elsevier.com/retrieve/pii/S0306-4522(16)30276-7)

Chatzi C, Zhang G, Hendricks W, Chen Y, Schnell E, Goodman RH, Westbrook GL:

**Exercise-induced enhancement of synaptic function triggered by the inverse BAR protein, Mtss1L**

bioRxiv, Feb. 9, 2019, <http://dx.doi.org/10.1101/545582>doi:

<https://www.biorxiv.org/content/biorxiv/early/2019/02/09/545582.full.pdf>

Chen QL, Chen YJ, Zhou SS, Yip KM, Xu J, Chen HB, Zhao ZZ:

**Laser microdissection hyphenated with high performance gel permeation chromatography-charged aerosol detector and ultra performance liquid chromatography-triple quadrupole mass spectrometry for histochemical analysis of polysaccharides in herbal medicine: Ginseng, a case study**

Int J Biol Macromol. 2017 Aug 31. pii: S0141-8130(17)32336-X. doi: 10.1016/j.ijbiomac.2017.08.162.

[https://linkinghub.elsevier.com/retrieve/pii/S0141-8130\(17\)32336-X](https://linkinghub.elsevier.com/retrieve/pii/S0141-8130(17)32336-X)

Chen L, Zhou T, Wu N, O'Brien A, Venter J, Ceci L, Kyritsi K, Onori P, Gaudio E, Sybenga A, Xie L, Wu C, Fabris L, Invernizzi P, Zawieja D, Liangpunsakul S, Meng F, Francis H, Glaser S :

**Pinealectomy or light exposure exacerbates biliary damage and liver fibrosis in cholestatic rats through decreased melatonin synthesis**

Biochimica et Biophysica Acta (BBA) - Molecular Basis of Disease, 16 Mar 2019,

<https://doi.org/10.1016/j.bbadis.2019.03.002>

<https://www.sciencedirect.com/science/article/abs/pii/S0925443919300766#!>

Chen Y, Xu L, Zhao Y, Zhao Z, Chen H, Yi T, Qin M, Liang Z:

**Tissue-specific metabolite profiling and quantitative analysis of ginsenosides in Panax quinquefolium using laser microdissection and liquid chromatography–quadrupole/time of flight-mass spectrometry**

Chem Cent J. 2015; 9: 66. 2015 Dec 9. doi: 10.1186/s13065-015-0141-0

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4673779/>

Dasari S, Theis JD, Vrana JA, Zenka RM, Zimmermann MT, Kocher JP, Highsmith Jr WE, Kurtin PJ, Dogan A:

**Clinical proteome informatics workbench detects pathogenic mutations in hereditary amyloidoses**

J Proteome Res. 2014 Mar 20.

<http://dx.doi.org/10.1021/pr4011475>

Di Niro R, Snir O, Kaukinen K, Yaari G, Lundin KE, Gupta NT, Kleinstein SH, Cols M, Cerutti A, Mäki M, Shlomchik MJ, Sollid LM:

**Responsive population dynamics and wide seeding into the duodenal lamina propria of transglutaminase-2-specific plasma cells in celiac disease**

Mucosal Immunol. 2015 Jul 8. doi: 10.1038/mi.2015.57.

<http://www.nature.com/mi/journal/vaop/ncurrent/pdf/mi201557a.pdf>

Drummond E, Nayak S, Faustin A, Pires G, Hickman RA, Askenazi M, Cohen M, Haldiman T, Kim C, Han X, Shao Y, Safar JG, Ueberheide B, Wisniewski T:

**Proteomic differences in amyloid plaques in rapidly progressive and sporadic Alzheimer's disease**

Acta Neuropathol. 2017 Mar 4. doi: 10.1007/s00401-017-1691-0.

<https://dx.doi.org/10.1007/s00401-017-1691-0>

Fink KL, López-Giráldez F, Kim IJ, Strittmatter SM, Cafferty WB :

**Identification of Intrinsic Axon Growth Modulators for Intact CNS Neurons after Injury**

Cell Rep. 2017 Mar 14;18(11):2687-2701. doi: 10.1016/j.celrep.2017.02.058.

[https://linkinghub.elsevier.com/retrieve/pii/S2211-1247\(17\)30256-5](https://linkinghub.elsevier.com/retrieve/pii/S2211-1247(17)30256-5)

Fu Z, Löfqvist CA, Liegl R, Wang Z, Sun Y, Gong Y, Liu CH, Meng SS, Burnim SB, Arellano I, Chouinard MT, Duran R, Poblete A, Cho SS, Akula JD, Kinter M, Ley D, Pupp IH, Talukdar S, Hellström A, Smith LE:

**Photoreceptor glucose metabolism determines normal retinal vascular growth**

EMBO Mol Med. 2017 Nov 27. pii: e201707966. doi: 10.15252/emmm.201707966.

<http://embomolmed.embopress.org/cgi/pmidlookup?view=long&pmid=29180355>

García-Berrocoso T, Giralt D, Llombart V, Bustamante A, Penalba A, Flores A, Ribó M, Molina CA, Rosell A, Montaner J:

**Chemokines after human ischemic stroke: from neurovascular unit to blood using protein arrays**

Translational Proteomics, 2014 12 Mar, <http://dx.doi.org/10.1016/j.trprot.2014.03.001>

<http://www.sciencedirect.com/science/article/pii/S2212963414000035>

García-Berrocoso T, Llombart V, Colàs-Campàs L, Hainard A, Licker V, Penalba A, Ramiro L, Simats A, Bustamante A, Martínez-Saez E, Canals F, Sanchez JC, Montaner J:

**Single Cell Immuno-laser Microdissection Coupled to Label-free Proteomics to Reveal the Proteotypes of Human Brain Cells After Ischemia**

Mol Cell Proteomics. 2017 Nov 13. pii: mcp.RA117.000419. doi: 10.1074/mcp.RA117.000419.

<http://www.mcponline.org/cgi/pmidlookup?view=long&pmid=29133510>

Gwee SSL, Radford RAW, Chow S, Syal MD, Morsch M, Formella I, Lee A, Don EK, Badrock AP, Cole NJ, West AK, Cheung SNS, Chung RS:

**Aurora kinase B regulates axonal outgrowth and regeneration in the spinal motor neurons of developing zebrafish**

Cell Mol Life Sci. 2018 Feb 21. doi: 10.1007/s00018-018-2780-5.

<https://link.springer.com/article/10.1007/s00018-018-2780-5>

Handschick K, Beuerlein K, Jurida L, Bartkuhn M, Müller H, Soelch J, Weber A, Dittrich-Breiholz O, Schneider H, Scharfe M, Jarek M, Stellzig J, Schmitz ML, Kracht M:

**Cyclin-Dependent Kinase 6 Is a Chromatin-Bound Cofactor for NF- $\kappa$ B-Dependent Gene Expression**

Mol Cell. 2013 Dec 31. pii: S1097-2765(13)00870-8. doi: 10.1016/j.molcel.2013.12.002.

<https://www.cell.com/molecular-cell/abstract/S1097-2765%2813%2900870-8>

Hoffmann H:

**Identifying Regulators of Tumor Vascular Morphology**

Thesis, 2016

[https://opus.bibliothek.uni-wuerzburg.de/opus4-wuerzburg/frontdoor/deliver/index/docId/14234/file/Hoffmann\\_Helene\\_Morphology.pdf](https://opus.bibliothek.uni-wuerzburg.de/opus4-wuerzburg/frontdoor/deliver/index/docId/14234/file/Hoffmann_Helene_Morphology.pdf)

Hou S, Zhao L, Shen Q, Yu J, Ng C, Kong X, Wu D, Song M, Shi X, Xu X, OuYang WH, He R, Zhao XZ, Lee T, Brunicardi FC, Garcia MA, Ribas A, Lo RS, Tseng HR:

**Polymer nanofiber-embedded microchips for detection, isolation, and molecular analysis of single circulating melanoma cells**

Angew Chem Int Ed Engl. 2013 Mar 18;52(12):3379-83. doi: 10.1002/anie.201208452. Epub 2013 Feb 21.

<http://dx.doi.org/10.1002/anie.201208452>

Huang J, Liu Y, Oltean A, Beebe DC:

**Bmp4 from the optic vesicle specifies murine retina formation**

Dev Biol. 2015 Mar 16. pii: S0012-1606(15)00114-1. doi: 10.1016/j.ydbio.2015.03.006.

[http://linkinghub.elsevier.com/retrieve/pii/S0012-1606\(15\)00114-1](http://linkinghub.elsevier.com/retrieve/pii/S0012-1606(15)00114-1)

Hurley JH, Kunkler PE, Zhang L, Knopp KL, Oxford GS:

**Role of Intraganglionic Transmission in the Trigeminovascular Pathway**

Mol Pain. 2019 Feb 20:1744806919836570. doi: 10.1177/1744806919836570.

[http://journals.sagepub.com/doi/full/10.1177/1744806919836570?url\\_ver=Z39.88-2003&rfr\\_id=ori:rid:crossref.org&rfr\\_dat=cr\\_pub%3dpubmed](http://journals.sagepub.com/doi/full/10.1177/1744806919836570?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%3dpubmed)

Jaiswal YS, Liang Z, Guo P, Ho HM, Chen HB, Zhao Z:

**Tissue-specific Metabolite Profiling of Cyperus rotundus L. Rhizomes and (+)-Nootkatone Quantitation by Using Laser Micro Dissection, UHPLC-QTOF MS and GC-MS Techniques**

J Agric Food Chem. 2014 Jun 17.

<http://pubs.acs.org/doi/abs/10.1021/jf502494z?journalCode=jafcau>

Jaiswal Y, Liang Z, Ho A, Chen H, Williams L, Zhao Z:

**Tissue based metabolite profiling and qualitative comparison of two species of Achyranthes roots by use of UHPLC-QTOF MS and laser micro dissection**

Journal of Pharmaceutical Analysis, 16 June 2017

<http://www.sciencedirect.com/science/article/pii/S2095177917300709>

Jaiswal Y, Liang Z, Ho A, Chen H, Zhao Z:

**A Comparative Tissue-specific Metabolite Analysis and Determination of Protodioscin Content in Asparagus Species used in Traditional Chinese Medicine and Ayurveda by use of Laser Microdissection, UHPLC-QTOF/MS and LC-MS/MS**

Phytochem Anal. 2014 Apr 16. doi: 10.1002/pca.2522.

<http://dx.doi.org/10.1002/pca.2522>

Jensen E:

**Laser-Capture Microdissection**

The Anatomical Record (Anat. Rec.), 2013, 1932-8494, 10.1002/ar.22791

<http://dx.doi.org/10.1002/ar.22791>

Kadkhodaei B, Alvarsson A, Schintu N, Ramsköld D, Volakakis N, Joodmardi E, Yoshitake T, Kehr J, Decressac M, Björklund A, Sandberg R, Svenningsson P, Perlmann T :

**Transcription factor Nurr1 maintains fiber integrity and nuclear-encoded mitochondrial gene expression in dopamine neurons**

Proc Natl Acad Sci U S A. 2013 Jan 22.

<http://www.pnas.org/cgi/pmidlookup?view=long&pmid=23341612>

Kassis H, Shehadah A, Li C, Zhang Y, Cui Y, Roberts C, Sadry N, Liu X, Chopp M, Zhang ZG :  
**Class IIa histone deacetylases affect neuronal remodeling and functional outcome after stroke**  
Neurochem Int. 2016 Apr 18. pii: S0197-0186(16)30056-0. doi: 10.1016/j.neuint.2016.04.006.  
[http://linkinghub.elsevier.com/retrieve/pii/S0197-0186\(16\)30056-0](http://linkinghub.elsevier.com/retrieve/pii/S0197-0186(16)30056-0)

Khodosevich, K., Inta, D., Seeburg, P.H., and Monyer, H.:  
**Gene expression analysis of in vivo fluorescent cells**  
PLoS ONE 2(11): e1151 (2007)  
<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0001151>

Khodosevich K, Alfonso J, Monyer H:  
**Dynamic changes in the transcriptional profile of subventricular zone-derived postnatally born neuroblasts**  
Mech Dev. 2012 Dec 4. pii: S0925-4773(12)00114-1. doi: 10.1016/j.mod.2012.11.003.  
<http://www.sciencedirect.com/science/article/pii/S0925477312001141>

Kley RA, Maerkens A, Leber Y, Theiss V, Schreiner A, van der Ven PF, Uszkoreit J, Stephan C, Eulitz S, Euler N, Kirschner J, Mueller K, Meyer HE, Tegenthoff M, Fuerst DO, Vorgerd M, Mueller T, Marcus K:  
**A combined laser microdissection and mass spectrometry approach reveals new disease relevant proteins accumulating in aggregates of filaminopathy patients**  
Mol Cell Proteomics. 2012 Oct 31.  
<http://www.mcponline.org/content/early/2012/10/31/mcp.M112.023176.abstract>

Körber C, Dondzillo A, Eisenhardt G, Herrmannsdörfer F, Wafzig O, Kuner T:  
**Gene expression profile during functional maturation of a central mammalian synapse**  
Eur J Neurosci. 2014 Jul 3. doi: 10.1111/ejn.12661.  
<http://dx.doi.org/10.1111/ejn.12661>

Kosloski LM, Kosmacek EA, Olson KE, Mosley RL, and Gendelman HE:  
**GM-CSF induces neuroprotective and anti-inflammatory responses in 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine intoxicated mice**  
Journal of Neuroimmunology, 29 Oct 2013, ISSN 0165-5728  
<http://dx.doi.org/10.1016/j.jneuroim.2013.10.009>

Krabbe S, Duda J, Schiemann J, Poetschke C, Schneider G, Kandel ER, Liss B, Roeper J, Simpson EH:  
**Increased dopamine D2 receptor activity in the striatum alters the firing pattern of dopamine neurons in the ventral tegmental area**  
Proc Natl Acad Sci U S A. 2015 Feb 9. pii: 201500450.  
<http://www.pnas.org/cgi/pmidlookup?view=long&pmid=25675529>

Kruse LC, Walter NA, Buck KJ:  
**Mpdz Expression In The Caudolateral Substantia Nigra Pars Reticulata Is Crucially Involved In Alcohol Withdrawal**  
Genes Brain Behav. 2014 Aug 11. doi: 10.1111/gbb.12171.  
<http://dx.doi.org/10.1111/gbb.12171>

Lammel, S., Hetzel, A., Hackel, O., Jones, I., Liss, B., and Roeper, J.:  
**Unique properties of mesoprefrontal neurons within a dual mesocorticolimbic dopamine system**  
Neuron 57(5): 760-773 (2008)  
<http://www.cell.com/neuron/retrieve/pii/S0896627308001074>

Li Y, Guo X, Xue Q, Zhu M, Gao L, and Wang Y:  
**Single Cell Gene Profiling Revealed Heterogeneity of Paracrine Effects of Bone Marrow Cells in Mouse Infarcted Hearts**  
PLoS ONE 8(7): e68270. doi:10.1371/journal.pone.0068270

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0068270>

Liang L, Xu J, Liang ZT, Dong XP, Chen HB, Zhao ZZ:

**Tissue-Specific Analysis of Secondary Metabolites Creates a Reliable Morphological Criterion for Quality Grading of Polygoni Multiflori Radix**

Molecules. 2018 May 8;23(5). pii: E1115. doi: 10.3390/molecules23051115.

<https://europepmc.org/abstract/med/29738485>

Liang Z, Sham T, Yang G, Yi L, Chen H, Zhao Z:

**Profiling of secondary metabolites in tissues from Rheum palmatum L. using laser microdissection and liquid chromatography mass spectrometry**

Anal Bioanal Chem. 2013 May;405(12):4199-212. doi: 10.1007/s00216-013-6819-z.

<http://dx.doi.org/10.1007/s00216-013-6819-z>

Liddel SA, Temple S, Møllgård K, Gehwolf R, Wagner A, Bauer H, Bauer HC, Phoenix TN, Dziegielewska KM, Saunders NR:

**Molecular Characterisation of Transport Mechanisms at the Developing Mouse Blood-CSF Interface: A Transcriptome Approach**

PLoS One. 2012;7(3):e33554. Epub 2012 Mar 21.

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0033554>

Lynch L, Gamblin A, Vintiner S, Simons JL:

**STR profiling of epithelial cells identified by X/Y-FISH labelling and laser microdissection using standard and elevated PCR conditions**

Forensic Sci Int Genet. 2014 Oct 25;16C:1-7. doi: 10.1016/j.fsigen.2014.10.017.

[http://linkinghub.elsevier.com/retrieve/pii/S1872-4973\(14\)00233-6](http://linkinghub.elsevier.com/retrieve/pii/S1872-4973(14)00233-6)

MacFarlane EG, Parker SJ, Shin JY, Ziegler SG, Creamer TJ, Bagirzadeh R, Bedja D, Chen Y, Calderon JF, Weissler K, Frischmeyer-Guerrero PA, Lindsay ME, Habashi JP, Dietz HC

**Lineage-specific events underlie aortic root aneurysm pathogenesis in Loays-Dietz syndrome**

J Clin Invest. 2019 Feb 1;129(2):659-675. doi: 10.1172/JCI123547. Epub 2019 Jan 7.

<https://doi.org/10.1172/JCI123547>

Maerkens A, Olivé M, Schreiner A, Feldkirchner S, Schessl J, Uszkoreit J, Barkovits K, Güttsches AK, Theis V, Eisenacher M, Tegenthoff M, Goldfarb LG, Schröder R, Schoser B, van der Ven PF, Fürst DO, Vorgerd M, Marcus K, Kley RA:

**New insights into the protein aggregation pathology in myotilinopathy by combined proteomic and immunolocalization analyses**

Acta Neuropathol Commun. 2016 Feb 3;4(1):8. doi: 10.1186/s40478-016-0280-0.

<http://actaneurocomms.biomedcentral.com/articles/10.1186/s40478-016-0280-0>

Mayer C, Jaglin XH, Cobbs LV, Bandler RC, Streicher C, Cepko CL, Hippenmeyer S, Fishell G:

**Clonally Related Forebrain Interneurons Disperse Broadly across Both Functional Areas and Structural Boundaries**

Neuron. 2015 Sep 2;87(5):989-98. doi: 10.1016/j.neuron.2015.07.011.

[http://linkinghub.elsevier.com/retrieve/pii/S0896-6273\(15\)00633-9](http://linkinghub.elsevier.com/retrieve/pii/S0896-6273(15)00633-9)

McDaniel K, Huang L, Sato K, Wu N, Annable T, Zhou T, Ramos-Lorenzo S, Wan Y, Huang Q, Francis H, Glaser S, Tsukamoto H, Alpini G, Meng F:

**The let-7/lin28 axis regulates activation of hepatic stellate cells in alcoholic liver injury**

J Biol Chem. 2017 May 23. pii: jbc.M116.773291. doi: 10.1074/jbc.M116.773291.

<http://www.jbc.org/content/early/2017/05/23/jbc.M116.773291.short>

Micanovic R, Khan S, El-Achkar TM:



**Immunofluorescence laser micro-dissection of specific nephron segments in the mouse kidney allows targeted downstream proteomic analysis**

Physiol Rep. 2015 Feb 12;3(2). pii: e12306. doi: 10.14814/phy2.12306.

<http://physreports.physiology.org/cgi/pmidlookup?view=long&pmid=25677553>

Mishra PK, Teale JM:

**Transcriptome analysis of the ependymal barrier during murine neurocysticercosis**

J Neuroinflammation. 2012 Jun 25;9(1):141

<http://www.jneuroinflammation.com/content/9/1/141/abstract>

Nagai-Okatani C, Nagai M, Sato T, Kuno A:

**An Improved Method for Cell Type-Selective Glycomic Analysis of Tissue Sections Assisted by Fluorescence Laser Microdissection**

Int J Mol Sci. 2019 Feb 6;20(3). pii: E700. doi: 10.3390/ijms20030700.

<http://www.mdpi.com/resolver?pii=ijms20030700>

Nakashima Y, Egami Y, Kimura M, Wakimoto T, Abe I:

**Metagenomic Analysis of the Sponge Discodermia Reveals the Production of the Cyanobacterial Natural Product Kasumigamide by 'Entotheonella'**

PLoS One. 2016 Oct 12;11(10):e0164468. doi: 10.1371/journal.pone.0164468. eCollection 2016.

<http://dx.plos.org/10.1371/journal.pone.0164468>

Öhlund M, Franzen P, Andersson G, Holst BS, Lau J:

**Laser Microdissection of Pancreatic Islets Allows for Quantitative Real-Time PCR Detection of Islet-Specific Gene Expression in Healthy and Diabetic Cats**

Journal of Gastroenterology, Pancreatology & Liver Disorders

[http://www.researchgate.net/publication/270816898\\_Laser\\_Microdissection\\_of\\_Pancreatic\\_Islets\\_Allows\\_for\\_Quantitative\\_Real-Time\\_PCR\\_Detection\\_of\\_Islet-Specific\\_Gene\\_Expression\\_in\\_Healthy\\_and\\_Diabetic\\_Cats\\_Amyloid](http://www.researchgate.net/publication/270816898_Laser_Microdissection_of_Pancreatic_Islets_Allows_for_Quantitative_Real-Time_PCR_Detection_of_Islet-Specific_Gene_Expression_in_Healthy_and_Diabetic_Cats_Amyloid)

Pereira M, Birtele M, Shrigley S, Benitez JA, Hedlund E, Parmar M, Ottosson DR:

**Direct Reprogramming of Resident NG2 Glia into Neurons with Properties of Fast-Spiking Parvalbumin-Containing Interneurons**

Stem Cell Reports. 2017 Aug 22. pii: S2213-6711(17)30333-8. doi: 10.1016/j.stemcr.2017.07.023.

<http://www.sciencedirect.com/science/article/pii/S2213671117303338>

Ping YS, Shun Chang XL, Goh SK, Choong Syn CK:

**Optimization of Spermatozoa Detection using Immunofluorescent Staining and Laser Micro-Dissection**

Forensic Science International, 13 Jul 2015

<http://www.fsijournal.org/article/S0379-0738%2815%2900278-9/abstract>

Poppe M, Wittig S, Jurida L, Bartkuhn M, Wilhelm J, Müller H, Beuerlein K, Karl N, Bhuju S, Ziebuhr J, Schmitz ML, Kracht M:

**The NF- $\kappa$ B-dependent and -independent transcriptome and chromatin landscapes of human coronavirus 229E-infected cells**

PLoS Pathog. 2017 Mar 29;13(3):e1006286. doi: 10.1371/journal.ppat.1006286.

<http://journals.plos.org/plospathogens/article?id=10.1371/journal.ppat.1006286>

Raasch J, Zeller N, van Loo G, Merkler D, Mildner A, Erny D, Knobloch KP, Bethea JR, Waisman A, Knust M, Del Turco D, Deller T, Blank T, Priller J, Brück W, Pasparakis M, Prinz M:

**I $\kappa$ B kinase 2 determines oligodendrocyte loss by non-cell-autonomous activation of NF- $\kappa$ B in the central nervous system**

Brain 134(Pt 4): 1184-98 (Epub 2011)

<http://brain.oxfordjournals.org/content/134/4/1184.long>

Root DH, Mejias-Aponte CA, Qi J, Morales M:

**Role of glutamatergic projections from ventral tegmental area to lateral habenula in aversive conditioning**

J Neurosci. 2014 Oct 15;34(42):13906-10. doi: 10.1523/JNEUROSCI.2029-14.2014.

<http://www.jneurosci.org/cgi/pmidlookup?view=long&pmid=25319687>

Rydén M, Uzunel M, Hård JL, Borgström E, Mold JE, Arner E, Mejhert N, Andersson DP, Widlund Y, Hassan M, Jones CV, Spalding KL, Svahn BM, Ahmadian A, Frisén J, Bernard S, Mattsson J, Arner P:  
**Transplanted Bone Marrow-Derived Cells Contribute to Human Adipogenesis**

Cell Metab. 2015 Jul 14. pii: S1550-4131(15)00278-8. doi: 10.1016/j.cmet.2015.06.011.

[http://linkinghub.elsevier.com/retrieve/pii/S1550-4131\(15\)00278-8](http://linkinghub.elsevier.com/retrieve/pii/S1550-4131(15)00278-8)

Schnorbusch K, Lembrechts R, Pintelon I, Timmermans JP, Brouns I, Adriaensen D:

**GABAergic signaling in the pulmonary neuroepithelial body microenvironment: functional imaging in GAD67-GFP mice**

Histochem Cell Biol. 2013 Apr 9.

<http://dx.doi.org/10.1007/s00418-013-1093-x>

Sethi S, Vrana JA, Theis JD, Leung N, Sethi A, Nasr SH, Fervenza FC, Cornell LD, Fidler ME, Dogan A:  
**Laser microdissection and mass spectrometry-based proteomics aids the diagnosis and typing of renal amyloidosis**

Kidney Int. 2012 Apr 11. doi: 10.1038/ki.2012.108.

<http://dx.doi.org/10.1038/ki.2012.108>

Shimizu N, Wada N, Shimizu T, Suzuki T, Takaoka EI, Kanai AJ, de Groat WC, Hirayama A, Hashimoto M, Uemura H, Yoshimura N :

**Effects of nerve growth factor neutralization on TRP channel expression in laser-captured bladder afferent neurons in mice with spinal cord injury**

Neurosci Lett. 2018 Jun 27. pii: S0304-3940(18)30452-X. doi: 10.1016/j.neulet.2018.06.049.

[https://linkinghub.elsevier.com/retrieve/pii/S0304-3940\(18\)30452-X](https://linkinghub.elsevier.com/retrieve/pii/S0304-3940(18)30452-X)

Spagnuolo V, Figlioli F, De Nicola F, Capozzi F, Giordano S:

**Tracking the route of phenanthrene uptake in mosses: An experimental trial**

Sci Total Environ. 2016 Sep 29. pii: S0048-9697(16)32104-0. doi: 10.1016/j.scitotenv.2016.09.174.

<http://www.sciencedirect.com/science/article/pii/S0048969716321040>

Suárez-Calvet X, Gallardo E, Nogales-Gadea G, Querol L, Navas M, Diaz-Manera J, Rojas-Garcia R, Illa I:

**Altered RIG-I/DDX58-mediated innate immunity in dermatomyositis**

J Pathol. 2014 Mar 6. doi: 10.1002/path.4346.

<http://onlinelibrary.wiley.com/doi/10.1002/path.4346/abstract>

Sundaresan S, Meininger CA, Kang AJ, Photenhauer AL, Hayes MM, Sahoo

N, Grembecka J, Cierpicki T, Ding L, Giordano TJ, Else T, Madrigal DJ, Low MJ, Campbell F, Baker A-M, Xu H, Wright NA, Merchant JL:

**Gastrin Induces Nuclear Export and Proteasome Degradation of Menin in Enteric Glial Cells**

Gastroenterology (2017), doi: 10.1053/j.gastro.2017.08.038.

[https://linkinghub.elsevier.com/retrieve/pii/S0016-5085\(17\)36071-7](https://linkinghub.elsevier.com/retrieve/pii/S0016-5085(17)36071-7)

Swieck K, Conta-Steencken A, Middleton FA, Siebert JR, Osterhout DJ, Stelzner DJ:

**Effect of lesion proximity on the regenerative response of long descending propriospinal neurons after spinal transection injury**

BMC Neurosci. 2019 Mar 18;20(1):10. doi: 10.1186/s12868-019-0491-y.

<https://bmcneurosci.biomedcentral.com/articles/10.1186/s12868-019-0491-y>



Tachikawa M, Sumiyoshiya Y, Saigusa D, Sasaki K, Watanabe M, Uchida Y, Terasaki T :  
**Liver zonation index of drug transporter and metabolizing enzyme protein expressions in mouse liver acinus**

Drug Metab Dispos. 2018 Mar 5. pii: dmd.117.079244. doi: 10.1124/dmd.117.079244.  
<http://dmd.aspetjournals.org/content/dmd/early/2018/03/05/dmd.117.079244.full.pdf?with-ds=yes>

Takahashi N, Hirata Y, Aihara K, Mas P:

**A Hierarchical Multi-oscillator Network Orchestrates the Arabidopsis Circadian System**

Cell. 2015 Sep 24;163(1):148-59. doi: 10.1016/j.cell.2015.08.062.  
[http://linkinghub.elsevier.com/retrieve/pii/S0092-8674\(15\)01114-9](http://linkinghub.elsevier.com/retrieve/pii/S0092-8674(15)01114-9)

Valleix S, Verona G, Jourde-Chiche N, Nédelec B, Mangione PP, Bridoux F, Mangé A, Dogan A, Goujon JM, Lhomme M, Dauteuille C, Chabert M, Porcari R, Waudby CA, Relini A, Talmud PJ, Kovrov O, Olivecrona G, Stoppini M, Christodoulou J, Hawkins PN, Grateau G, Delpech M, Kontush A, Gillmore JD, Kalopissis AD, Bellotti V:

**D25V apolipoprotein C-III variant causes dominant hereditary systemic amyloidosis and confers cardiovascular protective lipoprotein profile**

Nat Commun. 2016 Jan 21;7:10353. doi: 10.1038/ncomms10353.  
<http://dx.doi.org/10.1038/ncomms10353>

Verckist L, Lembrechts R, Thys S, Pintelon I, Timmermans JP, Brouns I, Adriaensen D:

**Selective gene expression analysis of the neuroepithelial body microenvironment in postnatal lungs with special interest for potential stem cell characteristics**

Respir Res. 2017 May 8;18(1):87. doi: 10.1186/s12931-017-0571-4.  
<https://respiratory-research.biomedcentral.com/articles/10.1186/s12931-017-0571-4>

Wei Y, Gong J, Thimmulappa RK, Kosmider B, Biswal S, Duh EJ:

**Nrf2 acts cell-autonomously in endothelium to regulate tip cell formation and vascular branching**

Proc Natl Acad Sci U S A. 2013 Oct 8;110(41):E3910-E3918.

<http://www.pnas.org/cgi/pmidlookup?view=long&pmid=24062466>

Wei Y, Gong J, Xu Z, Thimmulappa RK, Mitchell KL, Welsbie DS, Biswal S, Duh EJ:

**Nrf2 in ischemic neurons promotes retinal vascular regeneration through regulation of semaphorin 6A**

Proc Natl Acad Sci U S A. 2015 Nov 30. pii: 201512683.  
<http://www.pnas.org/cgi/pmidlookup?view=long&pmid=26621751>

Welsh IC, Thomsen M, Gludish DW, Alfonso-Parra C, Bai Y, Martin JF, Kurpios NA:

**Integration of Left-Right Pitx2 Transcription and Wnt Signaling Drives Asymmetric Gut Morphogenesis via Daam2**

Dev Cell. 2013 Sep 30;26(6):629-44. doi: 10.1016/j.devcel.2013.07.019.  
[http://linkinghub.elsevier.com/retrieve/pii/S1534-5807\(13\)00449-8](http://linkinghub.elsevier.com/retrieve/pii/S1534-5807(13)00449-8)

Winter L, Wittig I, Peeva V, Eggers B, Heidler J, Chevessier F, Kley RA, Barkovits K, Strecker V, Berwanger C, Herrmann H, Marcus K, Kornblum C, Kunz WS, Schröder R, Clemen CS:

**Mutant desmin substantially perturbs mitochondrial morphology, function and maintenance in skeletal muscle tissue**

Acta Neuropathol. 2016 Jul 8.  
<http://dx.doi.org/10.1007/s00401-016-1592-7>

Xie W, Zhang H, Zeng J, Chen H, Zhao Z, Liang Z:

**Tissues-based chemical profiling and semi-quantitative analysis of bioactive components in the root of Salvia miltiorrhiza Bunge by using laser microdissection system combined with UPLC-q-TOF-MS**

Chem Cent J. 2016 Jul 13;10:42. doi: 10.1186/s13065-016-0187-7. eCollection 2016.

<http://www.journal.chemistrycentral.com/content/10//42>

Xiong H, Zhou Y, Zhou Q, He D, Deng X, Sun Q, Zhang J:

**Nanocapsule assemblies as effective enzyme delivery systems against hyperuricemia**

Nanomedicine. 2016 Mar 21. pii: S1549-9634(16)30001-6. doi: 10.1016/j.nano.2016.02.010.

[http://linkinghub.elsevier.com/retrieve/pii/S1549-9634\(16\)30001-6](http://linkinghub.elsevier.com/retrieve/pii/S1549-9634(16)30001-6)

Yi L, Liang ZT, Peng Y, Yao X, Chen HB, Zhao ZZ:

**Tissue-specific metabolite profiling of alkaloids in *Sinomenii* Caulis using laser microdissection and liquid chromatography-quadrupole/time of flight-mass spectrometry**

J Chromatogr A. 2012 May 24. [Epub ahead of print]

<http://www.sciencedirect.com/science/article/pii/S002196731200787X>

Yokota K, Kobayakawa K, Kubota K, Miyawaki A, Okano H, Ohkawa Y, Iwamoto Y, Okada S:

**Engrafted Neural Stem/Progenitor Cells Promote Functional Recovery through Synapse Reorganization with Spared Host Neurons after Spinal Cord Injury**

Stem Cell Reports. 2015 Jul 14. pii: S2213-6711(15)00185-X. doi: 10.1016/j.stemcr.2015.06.004.

[http://linkinghub.elsevier.com/retrieve/pii/S2213-6711\(15\)00185-X](http://linkinghub.elsevier.com/retrieve/pii/S2213-6711(15)00185-X)

Yoshioka W, Endo N, Kurashige A, Haijima A, Endo T, Shibata T, Nishiyama R, Kakeyama M, Tohyama C:

**Fluorescence laser microdissection reveals a distinct pattern of gene activation in the mouse hippocampal region**

Sci Rep. 2012;2:783. doi: 10.1038/srep00783.

<http://www.ncbi.nlm.nih.gov/pmc/articles/pmid/23136640/>

Zhao J, Li x, Luo Q, Chen L, Chai L, Huang Y, and Fang L:

**Screening of surface markers on rat intestinal mucosa microfold cells by using laser capture microdissection combined with protein chip technology**

Int J Clin Exp Med 2014;7(4):932-939; www.ijcem.com, /ISSN:1940-5901/IJCEM1401061

<http://www.ijcem.com/files/ijcem1401061.pdf>

Zhu Y, Piehowski PD, Zhao R, Chen J, Shen Y, Moore RJ, Shukla AK, Petyuk VA, Campbell-Thompson M, Mathews CE, Smith RD, Qian WJ, Kelly RT

**Nanodroplet processing platform for deep and quantitative proteome profiling of 10-100 mammalian cells**

Nat Commun. 2018 Feb 28;9(1):882. doi: 10.1038/s41467-018-03367-w.

<https://www.nature.com/articles/s41467-018-03367-w.pdf>