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Cancer Research

Platelet PD-L1 reflects collective intratumoral PD-L1 expression and predicts immunotherapy response in non-small cell lung cancer

Hinterleitner, C., Strähle, J., Malenke, E. et al. Nat Commun 12, 7005 (2021). doi.org/10.1038/s41467-021-27303-7

Exosomes produced by melanoma cells significantly influence the biological properties of normal and cancer-associated fibroblasts

Strnadová, K., Pfeiferová, L., Přikryl, P. et al. Histochem Cell Biol 157, 153–172 (2022). doi.org/10.1007/s00418-021-02052-2

Live imaging of neolymphangiogenesis identifies acute antimetastatic roles of dsRNA mimics

Olmeda D, Cerezo-Wallis D, Mucientes C, Calvo TG, Cañón E, Alonso-Curbelo D, Ibarz N, Muñoz J, Rodriguez-Peralto JL, Ortiz-Romero P, Ortega S, Soengas MS. EMBO Mol Med. 2021 Dec 7;13(12):e12924. doi: 10.15252/emmm.202012924. Epub 2021 Nov 11. PMID: 34762341; PMCID: PMC8649872.

MicroRNA-196a promotes renal cancer cell migration and invasion by targeting BRAM1 to regulate SMAD and MAPK signaling pathways

Cui J, Yuan Y, Shanmugam MK, et al. Int J Biol Sci. 2021;17(15):4254-4270. Published 2021 Oct 17. doi:10.7150/ijbs.60805

Inhibition of tumor progression and M2 microglial polarization by extracellular vesicle-mediated microRNA-124 in a 3D microfluidic glioblastoma microenvironment

Hong S, You JY, Paek K, et al. Theranostics. 2021;11(19):9687-9704. Published 2021 Sep 27. doi:10.7150/thno.60851

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Caliva MJ, Yang WS, Young-Robbins S, et al. Sci Rep. 2021;11(1):19830. Published 2021 Oct 6. doi:10.1038/s41598-021-99348-z

Synthetic essentiality between PTEN and core dependency factor PAX7 dictates rhabdomyosarcoma identity

Langdon CG, Gadek KE, Garcia MR, et al. Nat Commun. 2021;12(1):5520. Published 2021 Sep 17. doi:10.1038/s41467-021-25829-4

Upregulation of ECT2 Predicts Adverse Clinical Outcomes and Increases 5-Fluorouracil Resistance in Gastric Cancer Patients

Zhang H, Geng Y, Sun C, Yu J. J Oncol. 2021;2021:2102890. Published 2021 Jul 28. doi:10.1155/2021/2102890

miR-542-3p Contributes to the HK2-Mediated High Glycolytic Phenotype in Human Glioma Cells

Kim J, Park MW, Park YJ, Ahn JW, Sim JM, Kim S, Heo J, Jeong JH, Lee M, Lim J, Moon J-S.; Genes. 2021; 12(5):633. doi.org/10.3390/genes12050633

Epigenomic landscape of human colorectal cancer unveils an aberrant core of pan-cancer enhancers orchestrated by YAP/TAZ

Della Chiara G, Gervasoni F, Fakiola M, et al.; Nat Commun. 2021;12(1):2340. Published 2021 Apr 20. doi:10.1038/s41467-021-22544-y

MAGI1 inhibits the AMOTL2/p38 stress pathway and prevents luminal breast tumorigenesis

Kantar D, Mur EB, Mancini M, Slaninova V, Salah YB, Costa L, Forest E, Lassus P, Géminard C, Boissière-Michot F, Orsetti B, Theillet C, Colinge J, Benistant C, Maraver A, Heron-Milhavet L, Djiane A. Sci Rep. 2021 Mar 11;11(1):5752. doi: 10.1038/s41598-021-85056-1. PMID: 33707576; PMCID: PMC7952706.

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Cesaro E, Pastore A, Polverino A, et al. Research Square; 2021. DOI: 10.21203/rs.3.rs-278700/v1.

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Cancer cells adapt FAM134B-BiP complex mediated ER-phagy to survive hypoxic stress

Sandhya Chipurupalli, Raja Ganesan, Giulia Martini, Luigi Mele, Elango Kannan, Vigneshwaran Namasivayam, Vincenzo Desiderio, Nirmal Robinson
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Senescence Reprogramming by TIMP1 Deficiency Promotes Prostate Cancer Metastasis

Ilaria Guccini, Ajinkya Revandkar, Mariantonietta D'Ambrosio, Manuel Colucci, Emiliano Pasquini, Simone Mosole, Martina Troiani, Daniela Brina, Raheleh Sheibani-Tezerji, Angela Rita Elia, Andrea Rinaldi, Nicolò Pernigoni, Jan Hendrik Rüschoff, Susanne Dettwiler, Angelo M. De Marzo, Emmanuel S. Antonarakis, Costanza Borrelli, Andreas E. Moor, Ramon Garcia-Escudero, Abdullah Alajati, Giuseppe Attanasio, Marco Losa, Holger Moch, Peter Wild, Gerda Egger, Andrea Alimonti,
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MYC as a driver of stochastic chromatin networks: implications for the fitness of cancer cells

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Nucleic Acids Research, Volume 48, Issue 19, 4 November 2020, Pages 10867–10876, doi.org/10.1093/nar/gkaa817
Published: 13 October 2020

BMP6/TAZ-Hippo signaling modulates angiogenesis and endothelial cell response to VEGF

Pulkkinen, H.H., Kiema, M., Lappalainen, J.P. et al. BMP6/TAZ-Hippo signaling modulates angiogenesis and endothelial cell response to VEGF. *Angiogenesis* (2020). Published: October 2020

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Novel renal medullary carcinoma cell lines, UOK353 and UOK360, provide preclinical tools to identify new therapeutic treatments

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Immunology

XIAP restrains TNF-driven intestinal inflammation and dysbiosis by promoting innate immune responses of Paneth and dendritic cells

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Neurobiology

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Farrawell Natalie E., Yerbury Justin J.; Frontiers in Molecular Neuroscience, Vol. 14, 2021; DOI:10.3389/fnmol.2021.771911

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Oxytocin and vasopressin within the ventral and dorsal lateral septum modulate aggression in female rats

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Neural mechanisms of female aggression: Implications on the oxytocin and vasopressin systems

Uni Regensburg, Vinícius Elias de Moura Oliveira, 2020; epub.uni-regensburg.de/43275/1/Thesis_VO_final%20printing%20library.pdf

Microglia orchestrate neuronal activity in brain organoids

Ilkka Fagerlund, Antonios Dougalis, Anastasia Shakirzyanova, Mireia Gómez-Budia, Henna Konttinen, Sohvi Ohtonen, Fazaludeen Feroze, Marja Koskivi, Johanna Kuusisto, Damián Hernández, Alice Pebay, Jari Koistinaho, Sarka Lehtonen, Paula Korhonen, Tarja Malm bioRxiv 2020.12.08.416388; doi: doi.org/10.1101/2020.12.08.416388

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Krefft, Olivia; DOI: doi.org/10.11588/heidok.00029195

Mating-induced central release of oxytocin: Implication for social fear extinction

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Ultrastructural Imaging of Activity-Dependent Synaptic Membrane-Trafficking Events in Cultured Brain Slices

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Divergent FUS phosphorylation in primate and mouse cells following double-strand DNA damage

Michelle A.Johnson, Qiudong Deng, Georgia Taylor, Zachary T. McEachin, Anthony W.S. Chan, Jessica Root, Gary J.Bassell, Thomas Kukar
Science Direct, Published: 2020 by Elsevier Inc.

Neuronal Lhx1 expression is regulated by DNMT1-dependent modulation of histone marks

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Characterization of a cell bridge variant connecting the nodose and superior cervical ganglia in the mouse: Prevalence, anatomical features, and practical implications

Angie L. Bookout, Laurent Gautron; First published: 01 May 2020; doi.org/10.1002/cne.24936
Funding information: National Institute of Diabetes and Digestive and Kidney Diseases, Grant/Award Number: 5 K01 DK116926-02; NIH, Grant/Award Number: 1S10OD021684-01; University of Texas Southwestern Medical Center, Grant/Award Number: Irwin & Irma Grossman Research Fund for Type I Dia

Developmental Biology

Ischemic tolerance and cardiac repair in the spiny mouse (Acomys)

Koopmans, T., van Beijnum, H., Roovers, E.F. et al. npj Regen Med 6, 78 (2021). doi.org/10.1038/s41536-021-00188-2

Degradative tubular lysosomes link pexophagy to starvation and early aging in C. elegans

Dolese DA, Junot MP, Ghosh B, Butsch TJ, Johnson AE, Bohnert KA. [published online ahead of print, 2021 Dec 12]. Autophagy. 2021;1-12. doi:10.1080/15548627.2021.1990647

The Arabidopsis mature endosperm promotes seedling cuticle formation via release of sulfated peptides

Julien De Giorgi, Christelle Fuchs, Mayumi Iwasaki, Woohyun Kim, Urszula Piskurewicz, Kay Gully, Anne Utz-Pugin, Laurent Mène-Saffrané, Patrice Waridel, Christiane Nawrath, Fiamma Paolo Longoni, Satoshi Fujita, Sylvain Loubéry, Luis Lopez-Molina; Developmental Cell,

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Sperm Cyst “Looping”: A Developmental Novelty Enabling Extreme Male Ornament Evolution

Syed ZA, Dallai R, Nasirzadeh N, Brill JA, O’Grady PM, Cong S, Leef EM, Rice S, Asif A, Nguyen S, Hansen MM, Dorus S, Pitnick S. *Cells*. 2021; 10(10):2762. doi.org/10.3390/cells10102762

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Scanning Various Nanomaterials and Variable Camouflages to Evaluate the Biocompatibility in Multi-organs of Embryos

Bin Zheng, Mingming Guo, Meijun Pang, Dong Ming; DOI: 10.21203/rs.3.rs-99384/v1

Ischemic tolerance and cardiac repair in the African spiny mouse

Tim Koopmans, Henriette van Beijnum, Elke F. Roovers, Divyanshu Malhotra, Antonio Tomasso, Jochem Boeter, Danielle Versteeg, Eva van Rooij, Kerstin Bartscherer
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FoxO maintains a genuine muscle stem-cell quiescent state until geriatric age

García-Prat, L., Perdiguero, E., Alonso-Martín, S. et al. *Nat Cell Biol* 22, 1307–1318 (2020). doi.org/10.1038/s41556-020-00593-7

Transgenesis and web resources in quail

Olivier Serralbo, David Salgado, Nadège Véron, Caitlin Cooper, Marie-Julie Dejardin, Timothy Doran, Jérôme Gros, Christophe Marcelle; Copyright: 2020, Serralbo et al.
eLife 2020;9:e56312 doi: 10.7554/eLife.56312

Left-right asymmetric heart jogging increases the robustness of dextral heart looping in zebrafish

Grimes D, Patterson V, Luna-Arvizu G, Schottenfeld-Roames J, Irons Z, et. al.
Developmental Biology, 2019

Two-step mechanism for selective incorporation of lncRNA into a chromatin modifier

Marisa Müller, Tamas Schauer, Silke Krause, Raffaella Villa, Andreas W Thomae, Peter B Becker,

Two-step mechanism for selective incorporation of lncRNA into a chromatin modifier, Nucleic Acids Research, gkaa492

Discrete regulation of β -catenin-mediated transcription governs identity of intestinal epithelial stem cells

Costanza Borrelli, Tomas Valenta, Kristina Handler, Karelia Vélez, Giulia Moro, Atefeh Lafzi, Laura de Vargas Roditi, George Hausmann, Andreas E Moor, Konrad Basler; bioRxiv 2020.05.19.103499; doi: doi.org/10.1101/2020.05.19.103499

A simple, quick, and efficient CRISPR/Cas9 genome editing method for human induced pluripotent stem cells

Geng, B., Choi, K., Wang, S. et al. A simple, quick, and efficient CRISPR/Cas9 genome editing method for human induced pluripotent stem cells. Acta Pharmacol Sin (2020). doi.org/10.1038/s41401-020-0452-0

Placental gene editing via trophectoderm-specific Tat-Cre/loxP recombination

Hatice O. Oztuldey, Rui Fan, Ivan Bedzhov
Development 2020 : dev.190371 doi: 10.1242/dev.190371 Published 15 June 2020, by The Company of Biologists Ltd

Physiology

CXCL1-Triggered PAD4 Cytoplasmic Translocation Enhances Neutrophil Adhesion through Citrullination of PDIA1

Jiro Aoyama, Mizuko Osaka, Michiyo Deushi, Shoichi Hosoya, Akihito Ishigami, Taketoshi Maehara, Masayuki Yoshida; Journal of Atherosclerosis and Thrombosis, 2022, Volume 29, Issue 9, Pages 1307-1318, Released on J-STAGE September 01, 2022, Advance online publication December 08, 2021, Online ISSN 1880-3873, Print ISSN 1340-3478, doi.org/10.5551/jat.63237

ER-misfolded proteins become sequestered with mitochondria and impair mitochondrial function

Cortés Sanchón, A., Santhosh Kumar, H., Mantovani, M. et al. Commun Biol 4, 1350 (2021). doi.org/10.1038/s42003-021-02873-w

The visual opsin and phototransduction pathway genes associated with eye reduction and loss in bat flies (streblidae, nyceteribiidae)

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