

DITL Member Publications

2023

[Domain-specific p53 mutants activate EGFR by distinct mechanisms exposing tissue-independent therapeutic vulnerabilities.](#)

Ho TLF, Lee MY, Goh HC, Ng GYN, Lee JJH, Kannan S, Lim YT, Zhao T, Lim EKH, Phua CZJ, Lee YF, Lim RYX, Ng PJH, Yuan J, Chan DKH, Lieske B, Chong CS, Lee KC, Lum J, Cheong WK, Yeoh KG, Tan KK, Sobota RM, Verma CS, **Lane DP**, Tam WL, **Venkitaraman AR**. Nat Commun. 2023 Mar 28;14(1):1726. doi: 10.1038/s41467-023-37223-3. PMID: 36977662

[MDM2 inhibitors, nutlin-3a and navtemadelin, retain efficacy in human and mouse cancer cells cultured in hypoxia.](#)

Jerma Clavero A, Boqvist PL, Ingelshed K, Bosdotter C, Sedimbi S, Jiang L, Wermeling F, Vojtesek B, **Lane DP**, Kannan P. Sci Rep. 2023 Mar 20;13(1):4583. doi: 10.1038/s41598-023-31484-0. PMID: 36941277

PREPRINT: [Ketogenic diet promotes tumor ferroptosis but induces relative corticosterone deficiency that accelerates cachexia.](#)

Ferrer M, Mourikis N, Davidson EE, Kleeman SO, Zaccaria M, Habel J, Rubino R, Flint TR, Connell CM, Lukey M, White EP, Coll AP, **Venkitaraman AR**, Janowitz T. bioRxiv. 2023 Feb 18:2023.02.17.528937. doi: 10.1101/2023.02.17.528937. Preprint. PMID: 36824830

[Visualizing intracellular target antigens in live cells.](#)

Ueda H, Dai Y, **Ghadessy F**. Trends Cell Biol. 2023 Apr;33(4):277-279. doi: 10.1016/j.tcb.2023.01.004. Epub 2023 Feb 7. PMID: 36759281

[Covalent Rescue of Mutant p53.](#)

Lane DP, Verma CS. Cancer Discov. 2023 Jan 9;13(1):14-16. doi: 10.1158/2159-8290.CD-22-1212. PMID: 36620883

[A "grappling hook" interaction connects self-assembly and chaperone activity of Nucleophosmin 1.](#)

Saluri M, Leppert A, Gese GV, Sahin C, Lama D, Kaldmäe M, Chen G, Elofsson A, Allison TM, Arsenian-Henriksson M, Johansson J, **Lane DP**, Hällberg BM, Landreh M. PNAS Nexus. 2023 Jan 6;2(2):pgac303. doi: 10.1093/pnasnexus/pgac303. eCollection 2023 Feb. PMID: 36743470

2022

[Conformation specific antagonistic high affinity antibodies to the RON receptor kinase for imaging and therapy.](#)

Yu Koh X, Koh XH, Spiegelberg D, Jha P, Nestor M, Hwang LA, Tan BX, **Lane DP**. Sci Rep. 2022 Dec 29;12(1):22564. doi: 10.1038/s41598-022-26404-7. PMID: 36581692

[Halogenation of Peptides and Proteins Using Engineered Tryptophan Halogenase Enzymes.](#)

Sana B, **Ke D**, Li EHY, Ho T, Seayad J, Duong HA, **Ghadessy FJ**. *Biomolecules*. 2022 Dec 8;12(12):1841. doi: 10.3390/biom12121841. PMID: 36551269

[Indole and azaindole halogenation catalyzed by the RebH enzyme variant 3-LSR utilizing co-purified *E. coli* reductase.](#)

Li EHY, Sana B, Ho T, **Ke D**, **Ghadessy FJ**, Duong HA, Seayad J. *Front Bioeng Biotechnol*. 2022 Dec 1;10:1032707. doi: 10.3389/fbioe.2022.1032707. eCollection 2022. PMID: 36588932

[Ras-mutant cancers are sensitive to small molecule inhibition of V-type ATPases in mice.](#)

Tolani B, Celli A, Yao Y, **Tan YZ**, Fetter R, Liem CR, de Smith AJ, Vasanthakumar T, Bisignano P, Cotton AD, Seiple IB, Rubinstein JL, Jost M, Weissman JS. *Nat Biotechnol*. 2022 Dec;40(12):1834-1844. doi: 10.1038/s41587-022-01386-z. Epub 2022 Jul 25. PMID: 35879364

[Binary combinatorial scanning reveals potent poly-alanine-substituted inhibitors of protein-protein interactions.](#)

Ye X, Lee YC, **Gates ZP**, Ling Y, Mortensen JC, Yang FS, Lin YS, Pentelute BL. *Commun Chem*. 2022 Oct 14;5(1):128. doi: 10.1038/s42004-022-00737-w. PMID: 36697672

[Structure of V-ATPase from citrus fruit.](#)

Tan YZ, Keon KA, Abdelaziz R, Imming P, Schulze W, Schumacher K, Rubinstein JL. *Structure*. 2022 Oct 6;30(10):1403-1410.e4. doi: 10.1016/j.str.2022.07.006. Epub 2022 Aug 29. PMID: 36041457

[Structure and Function of Mycobacterial Arabinofuranosyltransferases.](#)

Tan YZ, Mancia F. *Subcell Biochem*. 2022;99:379-391. doi: 10.1007/978-3-031-00793-4_12. PMID: 36151383

[A fragment-based approach leading to the discovery of inhibitors of CK2 \$\alpha\$ with a novel mechanism of action.](#)

Brear P, De Fusco C, Atkinson EL, Iegre J, Francis-Newton NJ, **Venkitaraman AR**, Hyvönen M, Spring DR. *RSC Med Chem*. 2022 Sep 16;13(11):1420-1426. doi: 10.1039/d2md00161f. eCollection 2022 Nov 16. PMID: 36426237

[The MDM2 Inhibitor Navtemadlin Arrests Mouse Melanoma Growth *In Vivo* and Potentiates Radiotherapy.](#)

Ingelshed K, Spiegelberg D, Kannan P, Pávénus L, Hacheney J, Jiang L, Eisinger S, Lianoudaki D, Lama D, Castillo F, Bosdotter C, Kretschmar WW, Al-Radi O, Fritz N, Villablanca EJ, Karlsson MCI, Wermeling F, Nestor M, **Lane DP**, Sedimbi SK. *Cancer Res Commun*. 2022 Sep 28;2(9):1075-1088. doi: 10.1158/2767-9764.CRC-22-0053. eCollection 2022 Sep. PMID: 36922937

PREPRINT: [Stitched peptides as potential cell permeable inhibitors of oncogenic DAXX protein.](#)

Jelinska C, Kannan S, **Frosi Y**, **Ramlan SR**, Winnerdy F, Lakshminarayanan R, **Brown CJ**, Phan AT, Rhodes D, Verma C. *bioRxiv*, Sept 2022.

[Engineering an autonomous VH domain to modulate intracellular pathways and to interrogate the eIF4F complex.](#)

Frosi Y, Lin YC, Shimin J, **Ramlan SR**, Hew K, Engman AH, Pillai A, Yeung K, Cheng YX, Cornvik T, Nordlund P, Goh M, Lama D, **Gates ZP**, Verma CS, Thean D, **Lane DP**, Asial I, **Brown CJ**. Nat Commun. 2022 Aug 18;13(1):4854. doi: 10.1038/s41467-022-32463-1. PMID: 35982046

[Intra Q-body: an antibody-based fluorogenic probe for intracellular proteins that allows live cell imaging and sorting.](#)

Dai Y, Sato Y, Zhu B, Kitaguchi T, Kimura H, **Ghadessy FJ**, Ueda H. Chem Sci. 2022 Aug 1;13(33):9739-9748. doi: 10.1039/d2sc02355e. eCollection 2022 Aug 24. PMID: 36091915

[Development of a novel peptide aptamer that interacts with the eIF4E capped-mRNA binding site using peptide epitope linker evolution \(PELE\).](#)

Frosi Y, Ng S, Lin YC, Jiang S, **Ramlan SR**, Lama D, Verma CS, Asial I, **Brown CJ**. RSC Chem Biol. 2022 May 19;3(7):916-930. doi: 10.1039/d2cb00099g. eCollection 2022 Jul 6. PMID: 35866173

[CryoEM of endogenous mammalian V-ATPase interacting with the TLDc protein mEAK-7.](#)

Tan YZ, Abbas YM, Wu JZ, Wu D, Keon KA, Hesketh GG, Bueler SA, Gingras AC, Robinson CV, Grinstein S, Rubinstein JL. Life Sci Alliance. 2022 Jul 6;5(11):e202201527. doi: 10.26508/lsa.202201527. Print 2022 Nov. PMID: 35794005

[Better, Faster, Cheaper: Recent Advances in Cryo-Electron Microscopy.](#)

Chua EYD, Mendez JH, Rapp M, Ilca SL, **Tan YZ**, Maruthi K, Kuang H, Zimanyi CM, Cheng A, Eng ET, Noble AJ, Potter CS, Carragher B. Annu Rev Biochem. 2022 Jun 21;91:1-32. doi: 10.1146/annurev-biochem-032620-110705. Epub 2022 Mar 23. PMID: 35320683

[A "spindle and thread" mechanism unblocks p53 translation by modulating N-terminal disorder.](#)

Kaldmäe M, Vosselman T, Zhong X, Lama D, Chen G, Saluri M, Kronqvist N, **Siau JW**, Ng AS, **Ghadessy FJ**, Sabatier P, Vojtesek B, Sarr M, Sahin C, Österlund N, Ilag LL, Väänänen VA, Sedimbi S, Arsenian-Henriksson M, Zubarev RA, Nilsson L, Koeck PJB, Rising A, Abelein A, Fritz N, Johansson J, **Lane DP**, Landreh M. Structure. 2022 May 5;30(5):733-742.e7. doi: 10.1016/j.str.2022.02.013. Epub 2022 Mar 14. PMID: 35290795

[An Automated Quantification Tool for Angiogenic Sprouting From Endothelial Spheroids.](#)

Kannan P, Schain M, **Lane DP**. Front Pharmacol. 2022 Apr 27;13:883083. doi: 10.3389/fphar.2022.883083. eCollection 2022. PMID: 35571133

[CETSA interaction proteomics define specific RNA-modification pathways as key components of fluorouracil-based cancer drug cytotoxicity.](#)

Liang YY, Bacanu S, Sreekumar L, Ramos AD, Dai L, Michaelis M, Cinatl J, Seki T, Cao Y, **Coffill CR**, **Lane DP**, Prabhu N, Nordlund P. Cell Chem Biol. 2022 Apr 21;29(4):572-585.e8. doi: 10.1016/j.chembiol.2021.06.007. Epub 2021 Jul 16. PMID: 34265272

[Induction of APOBEC3-mediated genomic damage in urothelium implicates BK polyomavirus \(BKPyV\) as a hit-and-run driver for bladder cancer.](#)

Baker SC, Mason AS, Slip RG, Skinner KT, Macdonald A, Masood O, Harris RS, Fenton TR, **Periyasamy M**, Ali S, Southgate J. Oncogene. 2022 Apr;41(15):2139-2151. doi: 10.1038/s41388-022-02235-8. Epub 2022 Feb 22. PMID: 35194151

[Rapid recruitment of p53 to DNA damage sites directs DNA repair choice and integrity.](#)

Wang YH, **Ho TLF**, Hariharan A, Goh HC, Wong YL, Verkaik NS, Lee MY, Tam WL, van Gent DC, **Venkitaraman AR**, Sheetz MP, **Lane DP**. Proc Natl Acad Sci U S A. 2022 Mar 8;119(10):e2113233119. doi: 10.1073/pnas.2113233119. Epub 2022 Mar 2. PMID: 35235448

[Early Neutrophilia Marked by Aerobic Glycolysis Sustains Host Metabolism and Delays Cancer Cachexia.](#)

Petruzzelli M, Ferrer M, Schuijs MJ, Kleeman SO, Mourikis N, Hall Z, Perera D, Raghunathan S, Vacca M, Gaude E, Lukey MJ, Jodrell DI, Frezza C, Wagner EF, **Venkitaraman AR**, Halim TYF, Janowitz T. Cancers (Basel). 2022 Feb 15;14(4):963. doi: 10.3390/cancers14040963. PMID: 35205709

[Molecular descriptors suggest stapling as a strategy for optimizing membrane permeability of cyclic peptides.](#)

Li J, Kannan S, Aronica P, **Brown CJ**, Partridge AW, Verma CS. J Chem Phys. 2022 Feb 14;156(6):065101. doi: 10.1063/5.0078025. PMID: 35168356

[Affinity Selection from Synthetic Peptide Libraries Enabled by De Novo MS/MS Sequencing](#)

Koh LQ, Lim YW, **Gates ZP**. 2022. Int J Pept Res Ther 28 (2), 1-14. doi: 10.1007/s10989-022-10370-9

[Phase-separating peptides for direct cytosolic delivery and redox-activated release of macromolecular therapeutics.](#)

Sun Y, **Lau SY**, Lim ZW, Chang SC, **Ghadessy F**, Partridge A, Miserez A. Nat Chem. 2022 Feb 3. doi: 10.1038/s41557-021-00854-4. Online ahead of print. PMID: 35115657

[CRISPR/Cas9-Induced DNA Damage Enriches for Mutations in a p53-Linked Interactome: Implications for CRISPR-Based Therapies.](#)

Jiang L, Ingelshed K, Shen Y, Boddul SV, Iyer VS, Kasza Z, Sedimbi S, **Lane DP**, Wermeling F. Cancer Res. 2022 Jan 1;82(1):36-45. doi: 10.1158/0008-5472.CAN-21-1692. Epub 2021 Nov 18. PMID: 34750099

2021

[Symmetric activation and modulation of the human calcium-sensing receptor.](#)

Park J, Zuo H, Frangaj A, Fu Z, Yen LY, Zhang Z, Mosyak L, Slavkovich VN, Liu J, Ray KM, Cao B, Vallese F, Geng Y, Chen S, Grassucci R, Dandey VP, **Tan YZ**, Eng E, Lee Y, Kloss B, Liu Z, Hendrickson WA, Potter CS, Carragher B, Graziano J, Conigrave AD, Frank J, Clarke OB, Fan QR. Proc Natl Acad Sci U S A. 2021 Dec 21;118(51):e2115849118. doi: 10.1073/pnas.2115849118. PMID: 34916296

PREPRINT: [Accelerated biological aging in people with Down syndrome with full and segmental trisomy 21 begins in childhood as revealed by immunoglobulin G glycosylation.](#)

Cindric A, Vuckovic F, **Koschut D**, Borelli V, Juric J, Pucic-Bakovic M, Slana A, Deris H, Frkatović A, Murray A, Alic I, Groet J, O'Brien N, Petrovic D, Hamburg S, Startin C, Hithersay R, D'Souza H, LonDownS Consortium, Spector T, Mitrecic D, Kero M, Odak L, Barisic I, Thomas M, Strydom A, Rebillat AS, Franceschi C, Lauc G, Kristic J, Nizetic D. Research Square, Posted 15 Dec 2021. DOI: 10.21203/rs.3.rs-1128079/v1

[Constitutive activation of WASp in X-linked neutropenia renders neutrophils hyperactive.](#)

Keszei M, Record J, Kritikou JS, Wurzer H, Geyer C, Thiemann M, Drescher P, Brauner H, Köcher L, James J, He M, Baptista MA, Dahlberg CI, Biswas A, Lain S, **Lane DP**, Song W, Pütsep K, Vandenberghe P, Snapper SB, Westerberg LS. *J Clin Invest*. 2021 Dec 1;131(23):e156513. doi: 10.1172/JCI156513. PMID: 34850746

[Discovery of cell active macrocyclic peptides with on-target inhibition of KRAS signaling.](#)

Lim S, Boyer N, Boo N, Huang C, Venkatachalam G, Angela Juang YC, Garrigou M, Kaan HYK, Duggal R, Peh KM, Sadruddin A, Gopal P, Yuen TY, Ng S, Kannan S, **Brown CJ**, Verma CS, Orth P, Peier A, Ge L, Yu X, Bhatt B, Chen F, Wang E, Li NJ, Gonzales RJ, Stoeck A, Henry B, Sawyer TK, **Lane DP**, Johannes CW, Biswas K, Partridge AW. *Chem Sci*. 2021 Nov 25;12(48):15975-15987. doi: 10.1039/d1sc05187c. eCollection 2021 Dec 15. PMID: 35024121

[Target identification for small-molecule discovery in the FOXO3a tumor-suppressor pathway using a biodiverse peptide library.](#)

Emery A, Hardwick BS, Crooks AT, Milech N, Watt PM, Mithra C, Kumar V, Giridharan S, Sadasivam G, Mathivanan S, Sudhakar S, Bairy S, Bharatham K, Hurakadli MA, Prasad TK, Kamariah N, Muellner M, Coelho M, Torrance CJ, McKenzie GJ, **Venkitaraman AR**. *Cell Chem Biol*. 2021 Nov 18;28(11):1602-1615.e9. doi: 10.1016/j.chembiol.2021.05.009. Epub 2021 Jun 9. PMID: 34111400

[p53-Mediated Radiosensitization of ¹⁷⁷Lu-DOTATATE in Neuroblastoma Tumor Spheroids.](#)

Lundsten S, Berglund H, Jha P, Krona C, Hariri M, Nelander S, **Lane DP**, Nestor M. *Biomolecules*. 2021 Nov 15;11(11):1695. doi: 10.3390/biom11111695. PMID: 34827693

[CD36 and LC3B initiated autophagy in B cells regulates the humoral immune response.](#)

He C, Wang S, Zhou C, He M, Wang J, Ladds M, Lianoudaki D, Sedimbi SK, **Lane DP**, Westerberg LS, Li S, Karlsson MCI. *Autophagy*. 2021 Nov;17(11):3577-3591. doi: 10.1080/15548627.2021.1885183. Epub 2021 Feb 16. PMID: 33535890

[Patient-specific Alzheimer-like pathology in trisomy 21 cerebral organoids reveals BACE2 as a gene dose-sensitive AD suppressor in human brain.](#)

Alić I, Goh PA, Murray A, Portelius E, Gkanatsiou E, Gough G, Mok KY, **Koschut D**, Brunmeir R, Yeap YJ, O'Brien NL, Groet J, Shao X, Havlicek S, Dunn NR, Kvartsberg H, Brinkmalm G, Hithersay R, Startin C, Hamburg S, Phillips M, Pervushin K, Turmaine M, Wallon D, Rovelet-Lecrux A, Soininen H, Volpi E, Martin JE, Foo JN, Becker DL, Rostagno A, Ghiso J, Krsnik Ž, Šimić G, Kostović I, Mitrečić D; LonDownS Consortium; Francis PT, Blennow K, Strydom A, Hardy J, Zetterberg H, Nižetić D. *Mol Psychiatry*. 2021 Oct;26(10):5766-5788. doi: 10.1038/s41380-020-0806-5. Epub 2020 Jul 10. PMID: 32647257

[A general approach to protein folding using thermostable exoshells.](#)

Sadeghi S, Deshpande S, Vallerinteavide Mavelli G, Aksoyoglu A, Bafna J, Winterhalter M, Kini RM, **Lane DP**, Drum CL. *Nat Commun*. 2021 Sep 29;12(1):5720. doi: 10.1038/s41467-021-25996-4. PMID: 34588451

[Engineered RebH Halogenase Variants Demonstrating a Specificity Switch from Tryptophan towards Novel Indole Compounds.](#)

Sana B, Ho T, Kannan S, **Ke D**, Li EHY, Seayad J, Verma CS, Duong HA, **Ghadessy FJ**. *Chembiochem*. 2021 Sep 14;22(18):2791-2798. doi: 10.1002/cbic.202100210. Epub 2021 Jul 29. PMID: 34240527

[Monoclonal Antibodies against Specific p53 Hotspot Mutants as Potential Tools for Precision Medicine.](#)

Hwang LA, Phang BH, Liew OW, Iqbal J, Koh XH, Koh XY, Othman R, Xue Y, Richards AM, **Lane DP**, Sabapathy K. *Cell Rep.* 2021 Aug 10;36(6):109498. doi: 10.1016/j.celrep.2021.109498. PMID: 34380044

[BRCA2 deficiency reveals that oxidative stress impairs RNaseH1 function to cripple mitochondrial DNA maintenance.](#)

Renaudin X, Lee M, Shehata M, Surmann EM, **Venkitaraman AR**. *Cell Rep.* 2021 Aug 3;36(5):109478. doi: 10.1016/j.celrep.2021.109478. PMID: 34348152

[Can Glycosylation Mask the Detection of MHC Expressing p53 Peptides by T Cell Receptors?](#)

Nguyen TB, **Lane DP**, Verma CS. *Biomolecules.* 2021 Jul 19;11(7):1056. doi: 10.3390/biom11071056. PMID: 34356680

[FUT6 deficiency compromises basophil function by selectively abrogating their sialyl-Lewis x expression.](#)

Puan KJ, **San Luis B**, Yusof N, Kumar D, Andiappan AK, Lee W, Cajic S, Vuckovic D, Chan JD, Döllner T, Hou HW, Jiang Y, Tian C, the 23andMe Research Team, Rapp E, Poidinger M, Wang DY, Soranzo N, Lee B, Röttschke O. *Commun Biol.* 4, 832 (2021). <https://doi.org/10.1038/s42003-021-02295-8>. PMID: 34215830

[Multivalency transforms SARS-CoV-2 antibodies into ultrapotent neutralizers.](#)

Rujas E, Kucharska I, **Tan YZ**, Benlekbir S, Cui H, Zhao T, Wasney GA, Budyłowski P, Guvenc F, Newton JC, Sicard T, Semesi A, Muthuraman K, Nouanesengsy A, Aschner CB, Prieto K, Bueler SA, Youssef S, Liao-Chan S, Glanville J, Christie-Holmes N, Mubareka S, Gray-Owen SD, Rubinstein JL, Treanor B, Julien JP. *Nat Commun.* 2021 Jun 16;12(1):3661. doi: 10.1038/s41467-021-23825-2. PMID: 34135340

[Cancer Cells Shuttle Extracellular Vesicles Containing Oncogenic Mutant p53 Proteins to the Tumor Microenvironment.](#)

Bhatta B, Luz I, Krueger C, Teo FX, **Lane DP**, Sabapathy K, Cooks T. *Cancers (Basel).* 2021 Jun 15;13(12):2985. doi: 10.3390/cancers13122985. PMID: 34203762

[Cancer-causing BRCA2 missense mutations disrupt an intracellular protein assembly mechanism to disable genome maintenance.](#)

Lee M, Shorthouse D, Mahen R, Hall BA, **Venkitaraman AR**. *Nucleic Acids Res.* 2021 Jun 4;49(10):5588-5604. doi: 10.1093/nar/gkab308. PMID: 33978741

[A small-molecule inhibitor of the BRCA2-RAD51 interaction modulates RAD51 assembly and potentiates DNA damage-induced cell death.](#)

Scott DE, Francis-Newton NJ, Marsh ME, Coyne AG, Fischer G, Moschetti T, Bayly AR, Sharpe TD, Haas KT, Barber L, Valenzano CR, Srinivasan R, Huggins DJ, Lee M, Emery A, Hardwick B, Ehebauer M, Dagostin C, Esposito A, Pellegrini L, Perrior T, McKenzie G, Blundell TL, Hyvönen M, Skidmore J, **Venkitaraman AR**, Abell C. *Cell Chem Biol.* 2021 Jun 17;28(6):835-847.e5. doi: 10.1016/j.chembiol.2021.02.006. Epub 2021 Mar 3. PMID: 33662256

[Functional display of bioactive peptides on the vGFP scaffold.](#)

Chee SMQ, Wongsantichon J, **Yi LS**, Sana B, **Frosi Y**, Robinson RC, **Ghadessy FJ**. *Sci Rep*. 2021 May 12;11(1):10127. doi: 10.1038/s41598-021-89421-y. PMID: 33980885

[Liposome Click Membrane Permeability Assay for Identifying Permeable Peptides.](#)

Desai TJ, Habulihaz B, Cannon JR, Chandramohan A, Kaan HYK, Sadruddin A, Yuen TY, Johannes C, Thean D, **Brown CJ**, **Lane DP**, Partridge AW, Evers R, Sawyer TK, Hochman J. *Pharm Res*. 2021 May;38(5):843-850. doi: 10.1007/s11095-021-03005-z. Epub 2021 Mar 15. PMID: 33723794

[Correction to: Liposome Click Membrane Permeability Assay for Identifying Permeable Peptides.](#)

Desai TJ, Habulihaz B, Cannon JR, Chandramohan A, Kaan HYK, Sadruddin A, Yuen TY, Johannes C, Thean D, **Brown CJ**, **Lane DP**, Partridge AW, Evers R, Sawyer TK, Hochman J. *Pharm Res*. 2021 Apr;38(4):735-736. doi: 10.1007/s11095-021-03033-9. PMID: 33821425

[Tissues and Tumor Microenvironment \(TME\) in 3D: Models to Shed Light on Immunosuppression in Cancer.](#)

Ho T, Msallam R. *Cells*. 2021 Apr 7;10(4):831. doi: 10.3390/cells10040831. PMID: 33917037

[High Throughput Expression Screening of Arabinofuranosyltransferases from Mycobacteria.](#)

Rodrigues, J., Almeida, V.T., Rosário, A.L., **Tan, Y.Z.**, Kloss, B., Mancia, F. and Archer, M., 2021. *Processes*, 9(4), p.629.

[Constitutive activation of WASp leads to abnormal cytotoxic cells with increased granzyme B and degranulation response to target cells.](#)

Kritikou JS, Oliveira MM, Record J, Saeed MB, Nigam SM, He M, Keszei M, Wagner AK, Brauner H, Sendel A, Sedimbi SK, Rentouli S, **Lane DP**, Snapper SB, Kärre K, Vandenberghe P, Orange JS, Westerberg LS. *JCI Insight*. 2021 Mar 22;6(6):e140273. doi: 10.1172/jci.insight.140273. PMID: 33621210

[CD36 and LC3B initiated autophagy in B cells regulates the humoral immune response.](#)

He C, Wang S, Zhou C, He M, Wang J, Ladds M, Lianoudaki D, Sedimbi SK, **Lane DP**, Westerberg LS, Li S, Karlsson MCI. *Autophagy*. 2021 Feb 16:1-15. doi: 10.1080/15548627.2021.1885183. Online ahead of print. PMID: 33535890

[Identification of pathways modulating vemurafenib resistance in melanoma cells via a genome-wide CRISPR/Cas9 screen.](#)

Goh CJH, Wong JH, El Farran C, Tan BX, **Coffill CR**, Loh YH, **Lane D**, Arumugam P. *G3 (Bethesda)*. 2021 Feb 9;11(2):jkaa069. doi: 10.1093/g3journal/jkaa069. PMID: 33604667

[NanoClick: A High Throughput, Target-Agnostic Peptide Cell Permeability Assay.](#)

Peier A, Ge L, Boyer N, Frost J, Duggal R, Biswas K, Edmondson S, Hermes JD, Yan L, Zimprich C, Sadruddin A, Kristal Kaan HY, Chandramohan A, **Brown CJ**, Thean D, Lee XE, Yuen TY, Ferrer-Gago FJ, Johannes CW, **Lane DP**, Sherborne B, Corona C, Robers MB, Sawyer TK, Partridge AW. *ACS Chem Biol*. 2021 Feb 19;16(2):293-309. doi: 10.1021/acscchembio.0c00804. Epub 2021 Feb 4. PMID: 33539064

[Induction of APOBEC3B expression by chemotherapy drugs is mediated by DNA-PK-directed activation of NF-κB.](#)

Periyasamy M, Singh AK, Gemma C, Farzan R, Allsopp RC, Shaw JA, Charmsaz S, Young LS, Cunnea P, Coombes RC, Gyórfy B, Buluwela L, Ali S. *Oncogene*. 2021 Feb;40(6):1077-1090. doi: 10.1038/s41388-020-01583-7. Epub 2020 Dec 15. PMID: 33323971

[Conformational ordering of intrinsically disordered peptides for targeting translation initiation.](#)

Brown CJ, Verma CS, **Lane DP**, Lama D. *Biochim Biophys Acta Gen Subj*. 2021 Jan;1865(1):129775. doi: 10.1016/j.bbagen.2020.129775. Epub 2020 Oct 27. PMID: 33122085

[RAS-protein activation but not mutation status is an outcome predictor and unifying therapeutic target for high-risk acute lymphoblastic leukemia.](#)

Koschut D, Ray D, Li Z, Giarin E, Groet J, Alić I, Kham SK, Chng WJ, Ariffin H, Weinstock DM, Yeoh AE, Basso G, Nižetić D. *Oncogene*. 2021 Jan;40(4):746-762. doi: 10.1038/s41388-020-01567-7. Epub 2020 Nov 27. PMID: 33247204

2020

[Exploitation of dihydroorotate dehydrogenase \(DHODH\) and p53 activation as therapeutic targets: A case study in polypharmacology.](#)

Ladds MJGW, Popova G, Pastor-Fernández A, Kannan S, van Leeuwen IMM, Håkansson M, Walse B, Tholander F, Bhatia R, Verma CS, **Lane DP**, Laín S. *J Biol Chem*. 2020 Dec 25;295(52):17935-17949. doi: 10.1074/jbc.RA119.012056. Epub 2020 Sep 8. PMID: 32900849

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