

DITL Member Publications

2021

[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

[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*. 2021 Jul 13:S2451-9456(21)00306-8. doi: 10.1016/j.chembiol.2021.06.007. Online ahead of print. PMID: 34265272

[Engineered RebH halogenase variants demonstrating a specificity switch from tryptophan towards novel indole compounds.](#)

Sana B, Ho T, Kannan S, Ke D, Li E, Seayad J, Verma C, Duong H, **Ghadessy F**. *Chembiochem*. 2021 Jul 8. doi: 10.1002/cbic.202100210. Online ahead of print. PMID: 34240527

[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

[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

[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 Jun 1:S2451-9456(21)00254-3. doi: 10.1016/j.chembiol.2021.05.009. Online ahead of print. PMID: 34111400

[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

PREPRINT: [BK polyomavirus \(BKPyV\) is a risk factor for bladder cancer through induction of APOBEC3-mediated genomic damage.](#)

Baker SC, Mason AS, Slip RG, Skinner KT, Macdonald A, Masood O, Harris RS, Fenton TR, **Periyasamy M**, Ali S, Southgate J. bioRxiv. Posted May 17, 2021. doi: <https://doi.org/10.1101/2021.05.13.443803>

[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

[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

PREPRINT: [Engineering Disulphide-Free Autonomous Antibody VH Domains to modulate intracellular pathways](#)

Frosi Y, **Jiang S**, **Ramlan SR**, Hew KH, Engman AH, Pillai A, Cheng YX, Cornvik T, Nordlund P, Goh M, Lama D, Verma CS, Thean DT, **Lane DP**, Asial I, **Brown C**. Research Square, Posted 16 Mar 2021. DOI: 10.21203/rs.3.rs-244469/v1 PPR: PPR298547

[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

[Zinc Finger Protein SALL4 Functions through an AT-Rich Motif to Regulate Gene Expression.](#)

Kong NR, Bassal MA, Tan HK, Kurland JV, **Yong KJ**, Young JJ, Yang Y, Li F, Lee JD, Liu Y, Wu CS, Stein A, Luo HR, Silberstein LE, Bulyk ML, Tenen DG, Chai L. Cell Rep. 2021 Jan 5;34(1):108574. doi: 10.1016/j.celrep.2020.108574. PMID: 33406418

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

[Directed co-evolution of interacting protein-peptide pairs by compartmentalized two-hybrid replication \(C2HR\).](#)

Siau JW, Nonis S, **Chee S**, **Koh LQ**, Ferrer FJ, **Brown CJ**, **Ghadessy FJ**. *Nucleic Acids Res.* 2020 Dec 16;48(22):e128. doi: 10.1093/nar/gkaa933. PMID: 33104786

PREPRINT: [VGLL1-directed TEAD activation drives endocrine therapy resistance in estrogen receptor positive breast cancer.](#)

Gemma C, Singh AK, Belfiore A, Lai CF, **Periyasamy M**, Abuelmaaty S, Davies CM, Wang X, Simmons GM, Nguyen VTM, Magnani L, Rakha E, Martin LA, Coombes RC, Pruneri G, Buluwela L, Ali S. *bioRxiv*. Posted November 29, 2020. doi: <https://doi.org/10.1101/2020.11.29.402842>.

[Discovery of Nucleic Acid Binding Molecules from Combinatorial Biohybrid Nucleobase Peptide Libraries.](#)

Pomplun S, **Gates ZP**, Zhang G, Quartararo AJ, Pentelute BL. *J Am Chem Soc.* 2020 Nov 18;142(46):19642-19651. doi: 10.1021/jacs.0c08964. Epub 2020 Nov 9. PMID: 33166454

[Flow-based SPSS for protein synthesis: A perspective](#)

Gates ZP, Hartrampf N. 06 Oct 2020, *Pept Sci.* 112(6):e24198. doi.org/10.1002/pep2.24198

[The Novel Anti-cMet Antibody seeMet 12 Potentiates Sorafenib Therapy and Radiotherapy in a Colorectal Cancer Model.](#)

Spiegelberg D, Mortensen ACL, Palupi KD, Micke P, Wong J, Vojtesek B, **Lane DP**, Nestor M. *Front Oncol.* 2020 Sep 11;10:1717. doi: 10.3389/fonc.2020.01717. eCollection 2020. PMID: 33014851

[A kinase-independent function for AURORA-A in replisome assembly during DNA replication initiation.](#)

Guarino Almeida E, Renaudin X, **Venkitaraman AR**. *Nucleic Acids Res.* 2020 Aug 20;48(14):7844-7855. doi: 10.1093/nar/gkaa570. PMID: 32652013

[A Patient-Derived Cell Atlas Informs Precision Targeting of Glioblastoma.](#)

Johansson P, Krona C, Kundu S, Doroszko M, Baskaran S, Schmidt L, Vinel C, Almstedt E, Elgendy R, Elfineh L, Gallant C, Lundsten S, Ferrer Gago FJ, Hakkarainen A, Sipilä P, Häggblad M, Martens U, Lundgren B, Frigault MM, **Lane DP**, Swartling FJ, Uhrbom L, Nestor M, Marino S, Nelander S. *Cell Rep.* 2020 Jul 14;32(2):107897. doi: 10.1016/j.celrep.2020.107897. PMID: 32668248

[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, Kvaratsberg H, Brinkmalm G, Hithersay R, Startin C, Hamburg S, Phillips M, Pervushin K, Turmaine M, Wallon D, Rovelet-Lecrux A, Soinen 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.* 2020 Jul 10:10.1038/s41380-020-0806-5. doi: 10.1038/s41380-020-0806-5. Online ahead of print. PMID: 32647257

[High intracellular stability of the spidroin N-terminal domain in spite of abundant amyloidogenic segments revealed by in-cell hydrogen/deuterium exchange mass spectrometry.](#)

Kaldmäe M, Leppert A, Chen G, Sarr M, Sahin C, Nordling K, Kronqvist N, Gonzalvo-Ulla M, Fritz N, Abelein A, Laín S, Biverstål H, Jörnvall H, **Lane DP**, Rising A, Johansson J, Landreh M. *FEBS J.* 2020 Jul;287(13):2823-2833. doi: 10.1111/febs.15169. Epub 2019 Dec 20. PMID: 31815338

[Ultra-large chemical libraries for the discovery of high-affinity peptide binders.](#)

Quartararo AJ, **Gates ZP**, Somsen BA, Hartrampf N, Ye X, Shimada A, Kajihara Y, Ottmann C, Pentelute BL. Nat Commun. 2020 Jun 23;11(1):3183. doi: 10.1038/s41467-020-16920-3. PMID: 32576815

[Macrocyclization of an all-d linear \$\alpha\$ -helical peptide imparts cellular permeability.](#)

Kannan S, Aronica PGA, Ng S, Gek Lian DT, **Frosi Y**, **Chee S**, **Shimin J**, Yuen TY, Sadruddin A, Kaan HYK, Chandramohan A, Wong JH, Tan YS, Chang ZW, Ferrer-Gago FJ, Arumugam P, Han Y, Chen S, Rénia L, **Brown CJ**, Johannes CW, Henry B, **Lane DP**, Sawyer TK, Verma CS, Partridge AW. Chem Sci. 2020 May 11;11(21):5577-5591. doi: 10.1039/c9sc06383h. eCollection 2020 Jun 7. PMID: 32874502

[Synthesis of proteins by automated flow chemistry.](#)

Hartrampf N, Saebi A, Poskus M, **Gates ZP**, Callahan AJ, Cowfer AE, Hanna S, Antilla S, Schissel CK, Quartararo AJ, Ye X, Mijalis AJ, Simon MD, Loas A, Liu S, Jessen C, Nielsen TE, Pentelute BL. Science. 2020 May 29;368(6494):980-987. doi: 10.1126/science.abb2491. PMID: 32467387

[Combining native and 'omics' mass spectrometry to identify endogenous ligands bound to membrane proteins.](#)

Gault J, Liko I, Landreh M, Shutin D, Bolla JR, Jefferies D, Agasid M, Yen HY, Ladds MJGW, **Lane DP**, Khalid S, Mullen C, Remes PM, Huguet R, McAlister G, Goodwin M, Viner R, Syka JEP, Robinson CV. Nat Methods. 2020 May;17(5):505-508. doi: 10.1038/s41592-020-0821-0. Epub 2020 May 4. PMID: 32371966

[Endonuclease FEN1 Coregulates ER \$\alpha\$ Activity and Provides a Novel Drug Interface in Tamoxifen-Resistant Breast Cancer.](#)

Flach KD, **Periyasamy M**, Jadhav A, Dorjsuren D, Siefert JC, Hickey TE, Opdam M, Patel H, Canisius S, Wilson DM 3rd, Donaldson Collier M, Prekovic S, Nieuwland M, Kluin RJC, Zakharov AV, Wesseling J, Wessels LFA, Linn SC, Tilley WD, Simeonov A, Ali S, Zwart W. Cancer Res. 2020 May 15;80(10):1914-1926. doi: 10.1158/0008-5472.CAN-19-2207. Epub 2020 Mar 19. PMID: 32193286

[Monitoring eIF4F Assembly by Measuring eIF4E-eIF4G Interaction in Live Cells.](#)

Frosi Y, **Ramlan SR**, **Brown CJ**. J Vis Exp. 2020 May 1;(159). doi: 10.3791/60850. PMID: 32421011

[De-risking Drug Discovery of Intracellular Targeting Peptides: Screening Strategies to Eliminate False-Positive Hits.](#)

Ng S, Juang YC, Chandramohan A, Kaan HYK, Sadruddin A, Yuen TY, Ferrer-Gago FJ, Lee XC, Liew X, Johannes CW, **Brown CJ**, Kannan S, Aronica PG, Berglund NA, Verma CS, Liu L, Stoeck A, Sawyer TK, Partridge AW, **Lane DP**. ACS Med Chem Lett. 2020 May 1;11(10):1993-2001. doi: 10.1021/acsmchemlett.0c00022. eCollection 2020 Oct 8. PMID: 33062184

[Targeting codon 158 p53-mutant cancers via the induction of p53 acetylation.](#)

Kong LR, Ong RW, Tan TZ, Mohamed Salleh NAB, Thangavelu M, Chan JV, Koh LYJ, Periyasamy G, Lau JA, Le TBU, Wang L, Lee M, Kannan S, Verma CS, Lim CM, Chng WJ, **Lane DP**, **Venkitaraman A**, Hung HT, Cheok CF, Goh BC. Nat Commun. 2020 Apr 29;11(1):2086. doi: 10.1038/s41467-020-15608-y. PMID: 32350249

[Combined proinflammatory cytokine and cognate activation of invariant natural killer T cells enhances anti-DNA antibody responses.](#)

Sedimbi SK, Hägglöf T, Garimella MG, Wang S, Duhlin A, Coelho A, Ingelshed K, Mondoc E, Malin SG, Holmdahl R, **Lane DP**, Leadbetter EA, Karlsson MCI. Proc Natl Acad Sci U S A. 2020 Apr 21;117(16):9054-9063. doi: 10.1073/pnas.1920463117. Epub 2020 Apr 15. PMID: 32295878

[Tumor-Targeted Delivery of the p53-Activating Peptide VIP116 with PEG-Stabilized Lipodisks.](#)

Lundsten S, Hernández VA, Gedda L, Sarén T, **Brown CJ**, **Lane DP**, Edwards K, Nestor M. Nanomaterials (Basel). 2020 Apr 19;10(4):783. doi: 10.3390/nano10040783. PMID: 32325827

[Enhancing the therapeutic effects of in vitro targeted radionuclide therapy of 3D multicellular tumor spheroids using the novel stapled MDM2/X-p53 antagonist PM2.](#)

Mortensen ACL, Morin E, **Brown CJ**, **Lane DP**, Nestor M. EJNMMI Res. 2020 Apr 16;10(1):38. doi: 10.1186/s13550-020-0613-7. PMID: 32300907

[A novel JAK2 R564* variant in a patient with thrombocytosis.](#)

Villanueva A, Poon KS, Gallardo CA, Chai CN, Chiu L, Yan B, Ding CSL, **Yong KJ**, Zhou J, Lee J, Tan K, Ong KH. Int J Lab Hematol. 2020 Apr;42(2):e38-e41. doi: 10.1111/ijlh.13090. Epub 2019 Aug 23. PMID: 31441587

[bioPROTACs as versatile modulators of intracellular therapeutic targets including proliferating cell nuclear antigen \(PCNA\).](#)

Lim S, Khoo R, Peh KM, Teo J, Chang SC, Ng S, Beilhardt GL, Melnyk RA, Johannes CW, **Brown CJ**, **Lane DP**, Henry B, Partridge AW. Proc Natl Acad Sci U S A. 2020 Mar 17;117(11):5791-5800. doi: 10.1073/pnas.1920251117. Epub 2020 Mar 2. PMID: 32123106

[A Mass-Spectrometry-Based Approach to Distinguish Annular and Specific Lipid Binding to Membrane Proteins.](#)

Bolla JR, Corey RA, Sahin C, Gault J, Hummer A, Hopper JTS, **Lane DP**, Drew D, Allison TM, Stansfeld PJ, Robinson CV, Landreh M. Angew Chem Int Ed Engl. 2020 Feb 24;59(9):3523-3528. doi: 10.1002/anie.201914411. Epub 2020 Jan 29. PMID: 31886601

[Pulsatile MAPK Signaling Modulates p53 Activity to Control Cell Fate Decisions at the G2 Checkpoint for DNA Damage.](#)

De S, Campbell C, **Venkitaraman AR**, Esposito A. Cell Rep. 2020 Feb 18;30(7):2083-2093.e5. doi: 10.1016/j.celrep.2020.01.074. PMID: 32075732

PREPRINT: [Both DNA binding domains of p53 are required for its ultra-rapid recruitment to sites of UV damage.](#) Wang YH, **Ho T**, Hariharan A, Goh HC, Sheetz MP, **Lane, D**. bioRxiv. Posted February 10, 2020. doi: 10.1101/2020.02.09.938993

[Synthesis of Chiral Alkenyl Cyclopropane Amino Acids for Incorporation into Stapled Peptides.](#)

Yuen TY, **Brown CJ**, Tan YS, Johannes CW. J Org Chem. 2020 Feb 7;85(3):1556-1566. doi: 10.1021/acs.joc.9b02659. Epub 2019 Dec 26. PMID: 31825612

[Functionalized Resins for the Synthesis of Peptide Alcohols.](#)

Ferrer-Gago FJ, **Koh LQ**, **Lane DP**. Chemistry. 2020 Jan 7;26(2):379-383. doi: 10.1002/chem.201903965. Epub 2019 Nov 19. PMID: 31609031

[ZNF281 is recruited on DNA breaks to facilitate DNA repair by non-homologous end joining.](#)

Nicolai S, Mahen R, Raschellà G, Marini A, Pieraccioli M, Malewicz M, **Venkitaraman AR**, Melino G. Oncogene. 2020 Jan;39(4):754-766. doi: 10.1038/s41388-019-1028-7. Epub 2019 Sep 30. PMID: 31570788

[The quantification of antibody elements and receptors subunit expression using qPCR: The design of VH, VL, CH, CL, FcR subunits primers for a more holistic view of the immune system.](#)

Ling WL, Ng YL, Wipat A, **Lane DP**, Gan SK. J Immunol Methods. 2020 Jan;476:112683. doi: 10.1016/j.jim.2019.112683. Epub 2019 Nov 1. PMID: 31682797

[Development of a Novel Cell-Permeable Protein-Protein Interaction Inhibitor for the Polo-box Domain of Polo-like Kinase 1.](#)

Huggins DJ, Hardwick BS, Sharma P, Emery A, Laraia L, Zhang F, Narvaez AJ, Roberts-Thomson M, Crooks AT, Boyle RG, Boyce R, Walker DW, Mateu N, McKenzie GJ, Spring DR, **Venkitaraman AR**. ACS Omega. 2019 Dec 24;5(1):822-831. doi: 10.1021/acsomega.9b03626. eCollection 2020 Jan 14. PMID: 31956833

2019

[How the Other Half Lives: What p53 Does When It Is Not Being a Transcription Factor.](#)

Ho T, Tan BX, **Lane D**. Int J Mol Sci. 2019 Dec 18;21(1):13. doi: 10.3390/ijms21010013. PMID: 31861395

[New High-Throughput Screening Identifies Compounds That Reduce Viability Specifically in Liver Cancer Cells That Express High Levels of SALL4 by Inhibiting Oxidative Phosphorylation.](#)

Tan JL, Li F, Yeo JZ, **Yong KJ**, Bassal MA, Ng GH, Lee MY, Leong CY, Tan HK, Wu CS, Liu BH, Chan TH, Tan ZH, Chan YS, Wang S, Lim ZH, Toh TB, Hooi L, Low KN, Ma S, Kong NR, Stein AJ, Wu Y, Thangavelu MT, Suzuki A, Periyasamy G, Asara JM, Dan YY, Bonney GK, Chow EK, Lu GD, Ng HH, Kanagasundaram Y, Ng SB, Tam WL, Tenen DG, Chai L. Gastroenterology. 2019 Dec;157(6):1615-1629.e17. doi: 10.1053/j.gastro.2019.08.022. Epub 2019 Aug 22. PMID: 31446059

[Rigorous Computational and Experimental Investigations on MDM2/MDMX-Targeted Linear and Macrocylic Peptides.](#)

Diller DJ, Swanson J, Bayden AS, **Brown CJ**, Thean D, **Lane DP**, Partridge AW, Sawyer TK, Audie J. Molecules. 2019 Dec 14;24(24):4586. doi: 10.3390/molecules24244586. PMID: 31847417

[Transmembrane signaling on a protocell: Creation of receptor-enzyme chimeras for immunodetection of specific antibodies and antigens.](#)

Su J, Kitaguchi T, Ohmuro-Matsuyama Y, Seah T, **Ghadessy FJ**, Hoon S, Ueda H. Sci Rep. 2019 Dec 3;9(1):18189. doi: 10.1038/s41598-019-54539-7. PMID: 31796769

[Simultaneous measurement of p53:Mdm2 and p53:Mdm4 protein-protein interactions in whole cells using fluorescence labelled foci.](#)

Frosi Y, Inoue K, **Ramlan SR**, **Lane DP**, Watanabe T, **Brown CJ**. Sci Rep. 2019 Nov 29;9(1):17933. doi: 10.1038/s41598-019-54123-z. PMID: 31784573

[The Dual Interactions of p53 with MDM2 and p300: Implications for the Design of MDM2 Inhibitors.](#)

Kannan S, Partridge AW, **Lane DP**, Verma CS. Int J Mol Sci. 2019 Nov 28;20(23):5996. doi: 10.3390/ijms20235996. PMID: 31795143

[Intratour heterogeneity of p53 expression; causes and consequences.](#)

Xue Y, San Luis B, Lane DP. J Pathol. 2019 Nov;249(3):274-285. doi: 10.1002/path.5328. Epub 2019 Aug 27. PMID: 31322742

[Therapeutic anti-cancer activity of antibodies targeting sulfhydryl bond constrained epitopes on unglycosylated RON receptor tyrosine kinase.](#)

Koh XY, Koh XH, Hwang LA, Ferrer FJ, **Rahmat SAB,** Lama D, **Lane DP.** Oncogene. 2019 Nov;38(48):7342-7356. doi: 10.1038/s41388-019-0946-8. Epub 2019 Aug 15. PMID: 31417186

[A cryptic hydrophobic pocket in the polo-box domain of the polo-like kinase PLK1 regulates substrate recognition and mitotic chromosome segregation.](#)

Sharma P, Mahen R, Rossmann M, Stokes JE, Hardwick B, Huggins DJ, Emery A, Kunciw DL, Hyvönen M, Spring DR, McKenzie GJ, **Venkitaraman AR.** Sci Rep. 2019 Nov 4;9(1):15930. doi: 10.1038/s41598-019-50702-2. PMID: 31685831

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