

## Professor Sir David Lane

FRS, FRSE, FRCPath., FRCS (Edinburgh), FmedSci., FUCL

### CURRICULUM VITAE

Professor Sir David Lane is the Director of the Cancer Research UK Transformation Research Group at the University of Dundee, where he leads research teams studying Human Tumour suppressor gene function. He is also Chief Scientist of Agency for Science, Technology and Research (A\*STAR).

Sir David completed undergraduate and postgraduate degrees at University College London where he studied auto-immunity under the supervision of Avrion Mitchison. He carried out Post Doctoral Research first at the Imperial Cancer Research Fund in London with Lionel Crawford and then at the Cold Spring Harbor Labs in New York with Jo Sambrook. On returning to the UK, Sir David set up his own laboratory with CRC funding at Imperial College, London, then moving to the ICRF laboratories at Clare Hall before moving in 1990 to Dundee to help establish the CRC laboratories there.

Sir David has published more than 350 research articles that have been cited over 39,000 times and is internationally recognised for his original discovery of the p53 protein SV40 T antigen complex and for his many subsequent contributions to the p53 field. The p53 gene is the most frequently altered gene in human cancer with more than half of all cancers having mutant p53. He is co-author with Ed Harlow of the most successful practical guide to the use of immunochemical methods. The "Antibodies" manual has sold over 40,000 copies.

Sir David is a member of EMBO, and a Fellow of the Royal Society, the UK's premier Academy. He is also a Fellow of the Royal Society of Edinburgh, the Royal College of Pathologists, the Royal College of Surgeons (Edinburgh) and a founder member of the Academy of Medical Science. He has won many international prizes for his work including the Joseph Steiner Prize, the Mayenberg Prize, the Yvette Mayent Prize and the Paul Ehrlich Prize. He has been awarded honorary degrees from the Universities of Toulouse, Birmingham, Aberdeen, Stirling, Abertay and Nottingham. He has also been recognized for his business acumen with the award of Emerging Entrepreneur of the year. He has played an active part in UK science, sitting at various times on the Scientific Committee of the CRC, the Cell Board of the MRC and briefly on the council of the ICRF. Sir David founded the Dundee based Biotechnology company, Cyclacel Ltd. and was the Chief Scientific Officer from 1996 - 2004. From 2004 - 2007, he was the Executive Director of the Institute of Molecular & Cell Biology (IMCB) in Singapore. He is dedicated to the successful translation of research for patient benefit and participated in the early discussions around the scientific benefits of the merger of ICRF and CRC.

Sir David is well known for his speaking to non-specialist groups and for his clarifying reviews, of which his commentary "p53, guardian of the genome" published in Nature, is a key example.

David Lane was knighted for his contribution to cancer research in the New Year honours list in January 2000.

### Key Publications

1. Lane, D.P. and Crawford, L.V. (1979) SV40 T antigen is bound to a host protein in V40 transformed cells. *Nature* 278, 261-263.
2. Yewdell, J.W., Gannon, J.V. and Lane, D.P. (1986) Monoclonal antibody analysis of p53 expression in normal and transformed cells. *J.Virol.* 59. 444-452.
3. Iggo, R. Gatter K.G. Bartek, J., Lane, D. and Harris, A.L. (1990) Increased expression of mutant forms of the p53 oncogene in primary lung cancer. *Lancet* 335, 675-679.
4. Bartek, J. Bartkova, J. Vojtesek, B. Staskova, Z. Lukas, J. Rejthar, A. Kovarik, J. Midgley, C.A. Gannon, J.V. and Lane, D.P. (1991) Aberrant expression of the p53 oncoprotein is a common feature of a wide spectrum of human malignancies. *Oncogene* 6, 1699-1703.
5. Lane, D.P. (1992) Cancer - p53, Guardian of the Genome. *Nature*, 358, 15-16.
6. Hupp, T.R., Meek, D.W., Midgley, C.A. and Lane, D.P. (1992) Regulation of the DNA binding function of p53. *Cell* 71, 875-886.
7. Lu, X. and Lane, D.P. (1993) Differential induction of transcriptionally active p53 following UV or ionizing radiation: defects in chromosome instability syndromes? *Cell* 75, 765-778.
8. Hall, P.A., McKee, P.H., Menage, H du P., Dover, R. and Lane, D.P. (1993) High levels of p53 protein in UV irradiated normal human skin. *Oncogene* 8, 203-207.
9. Bottger, A., Bottger, V., Sparks, A., Liu, W.L., Howard, S. and Lane, D.P. (1997) Design of a synthetic Mdm2-binding mini protein that activates the p53 response in vivo. *Curr Biol.* 7, 860-869.
10. Hupp, T.R., Sparks, A. and Lane, D.P. (1995) Small peptides activate the latent sequence specific DNA binding function of p53 *Cell* 83 237-245      83 237-245
11. Xirodimas, D.P., Saville, M.K., Bourdon, J.C., Hay, R.T. and Lane, D.P. (2004) Mdm2-mediated NEDD8 conjugation of p53 inhibits its transcriptional activity. *Cell.* 9, 83-97.

12. Bourdon, J.C., Fernandes, K., Murray-Zmijewski, F., Liu, G., Diot, A., Xirodimas, D.P., Saville, M.K. and Lane, D.P. (2005) p53 isoforms can regulate p53 transcriptional activity. *Genes Dev.* 19(18), 2122-37.
13. Chen, J., Ruan, H., Ng, S.M., Gao, C., Soo, H.M., Wu, W., Zhang, Z., Wen, Z., Lane, D.P. and Peng, J. (2005) Loss of function of *def* selectively up-regulates *Delta113p53* expression to arrest expansion growth of digestive organs in zebrafish. *Genes Dev.* 19, 2900-11.
14. Kontopidis, G., Wu, S.Y., Zheleva, D.I., Taylor, P., McInnes, C., Lane, D.P., Fischer, P.M. and Walkinshaw, M.D. (2005) From the Cover: Structural and biochemical studies of human proliferating cell nuclear antigen complexes provide a rationale for cyclin association and inhibitor design. *Proc Natl Acad Sci U S A.* Feb 8;102(6):1871-6. Epub 2005 Jan 28
15. Stevenson, L.F., Sparks, A., Allende-Vega, N., Xirodimas, D.P., Lane, D.P. and Saville, M.K. (2007) The deubiquitinating enzyme USP2a regulates the p53 pathway by targeting Mdm2. *EMBO J.* 26, 976-86.
16. Cheok, C.F., Dey, A. and Lane, D.P. (2007) Cyclin-dependent kinase inhibitors sensitize tumor cells to nutlin-induced apoptosis: a potent drug combination. *Mol Cancer Res.* 5, 1133-45.
17. Dey, A., Wong, E.T., Cheok, C.F., Tergaonkar, V. and Lane, D.P. (2008) R-Roscovitine simultaneously targets both the p53 and NF-kappaB pathways and causes potentiation of apoptosis: implications in cancer therapy. *Cell Death Differ.* 15, 263-73.
18. Lee, K.C., Goh, W.L., Xu, M., Kua, N., Lunny, D., Wong, J.S., Coomber, D., Vojtesek, B., Lane, E.B. and Lane, D.P. (2008) Detection of the p53 response in zebrafish embryos using new monoclonal antibodies. *Oncogene.* Jan 24;27 (5) 629-40
19. Lain, S., Hollick, J.J., Campbell, J., Staples, O.D., Higgins, M., Aoubala, M., McCarthy, A., Appleyard, V., Murray, K.E., Baker, L., Thompson, A., Mathers, J., Holland, S.J., Stark, M.J.R., Pass, G., Woods, J., Lane, D.P. and Westwood, N.J. (2008) Discovery, in vivo activity and mechanism of action of a small-molecule p53 activator. *Cancer Cell* 13, 454-63.
20. Chen, J., Ng, S.M., Chang, C., Zhang, Z., Bourdon, J.C., Lane, D.P. and Peng, J. (2009) p53 isoform *delta113p53* is a p53 target gene that antagonizes p53 apoptotic activity via BclxL activation in zebrafish. *Genes Dev.* 23, 278-90.
21. Brown, C.J., Verma, C.S., Walkinshaw, M.D. and Lane, D.P. (2009) Crystallization of eIF4E complexed with eIF4GI peptide and glycerol reveals distinct structural differences around the cap-binding site. *Cell Cycle.* 8, 1905-1911.
22. Brown, C.J., Dastidar, S.G., See, H.Y., Coomber, D.W., Ortiz-Lombardía, M., Verma, C. and Lane, D.P. (2009) Rational Design and Biophysical Characterization of Thioredoxin-Based Aptamers: Insights into Peptide Grafting. *J Mol Biol.* 395(4):871-83.
23. Wan, K.F., Wang, S., Brown, C.J., Yu, V.C., Entzeroth, M., Lane, D.P. and Lee, M.A. (2009) Differential scanning fluorimetry as secondary screening platform for small molecule inhibitors of Bcl-XL. *Cell Cycle.* 8(23):3943-52.
24. Lane, D.P., Cheok, C.F., Brown, C., Madhumalar, A., Ghadessy, F.J. and Verma, C. (2010) Mdm2 and p53 are highly conserved from placozoans to man. *Cell Cycle.* 9(3):540-547.
25. Cheok, C.F., Kua, N., Kaldis, P. and Lane, D.P. (2010) Combination of nutlin-3 and VX-680 selectively targets p53 mutant cells with reversible effects on cells expressing wild-type p53. *Cell Death Differ.* 17(9):1486-500.
26. See, H.Y. and Lane, D.P. A novel unstructured scaffold based on 4EBP1 enables the functional display of a wide range of bioactive peptides. *J Mol Biol.* 2010 Dec 17;404(5):819-31.
27. Dastidar, S.G., Raghunathan, D., Nicholson, J., Hupp, T.R., Lane, D.P. and Verma, C.S. (2011) Chemical states of the N-terminal "lid" of MDM2 regulate p53 binding: simulations reveal complexities of modulation. *Cell Cycle.* 2011 Jan 1;10(1):82-9.
28. Lane, D.P., Madhumalar, A., Lee, A.P., Tay, B.H., Verma, C., Brenner, S. and Venkatesh B. (2011) Conservation of all three p53 family members and Mdm2 and Mdm4 in the cartilaginous fish. *Cell Cycle.* 2011 Dec 15; 10(24) 4272-9.
29. Goh, A.M., Lim, C.Y., Chiam, P.C., Li, L., Mann, M.B., Mann, K.M., Menendez, S. and Lane, D.P. (2012) Using targeted transgenic reporter mice to study promoter-specific p53 transcriptional activity. *Proc Natl Acad Sci U S A.* 2012 Jan 31;109(5):1685-90.
30. Muller, P.A., Trinidad, A.G., Timpson, P., Morton, J.P., Zanivan, S., van den Berghe, P.V., Nixon, C., Karim, S.A., Caswell, P.T., Noll, J.E., Coffill, C.R., Lane, D.P., Sansom, O.J., Neilsen, P.M., Norman, J.C., Vousden, K.H. (2012) Mutant p53 enhances MET trafficking and signalling to drive cell scattering and invasion. *Oncogene.* 2012 May 14. [Epub ahead of print]
31. Coffill, C.R., Muller, P.A., Oh, H.K., Neo, S.P., Hogue, K.A., Cheok, C.F., Vousden, K.H., Lane, D.P., Blackstock, W.P., Gunaratne, J. (2012) Mutant p53 interactome identifies nardilylin as a p53R273H-specific binding partner that promotes invasion. *EMBO Rep.* 2012 Jun 1. [Epub ahead of print]
32. Guo L, Liew HP, Camus S, Goh AM, Chee LL, Lunny DP, Lane EB, Lane DP. (2012) Ionising radiation induces a dramatic persistence of p53 protein accumulation and DNA damage signaling in mutant p53 zebrafish. *Oncogene.* 2012 Oct 15.
33. Tao, T., Shi, H., Guan, Y., Huang, D., Chen, Y., Lane, D.P., Chen, J., Peng, J. (2013) *Def* defines a conserved nucleolar pathway that leads p53 to proteasome-independent degradation. *Cell Res.* 2013 Jan 29.
34. Wong, J.S., Warbrick, E., Vojtesek, B., Hill, J., Lane, D.P. (2013) Anti-c-Met antibodies recognising a temperature sensitive epitope, inhibit cell growth. *Oncotarget.* 2013 Jul;4(7):1019-36.
35. Mondal, A.M., Horikawa, I., Pine, S.R., Fujita, K., Morgan, K.M., Vera, E., Mazur, S.J., Appella, E., Vojtesek, B., Blasco, M.A., Lane, D.P., Harris, C.C. (2013) p53 isoforms regulate aging- and tumor-associated replicative senescence in T lymphocytes. *J Clin Invest.* 2013 Dec 2;123(12):5247-57.

#### Full CV

**Full name** David Philip Lane

**Education**

- 1963-1970 John Fisher School, Purley, Surrey  
1970-1973 BSc in Microbiology (upper second class honours).  
University College London, London WC1E 6BT  
1973-1976 PhD in Immunology (Faculty of Medicine)  
Department of Zoology & Comparative Anatomy, University College London.  
Thesis Title: "F: A Liver Specific Antigen".  
Supervisor: Prof. N. A. Mitchison, F.R.S.

**Positions Held**

- 1976-1977 Postdoctoral Research Fellow in the laboratory of Dr. L.V. Crawford, Imperial Cancer Research Fund, Lincoln's Inn Fields, London WC2A 3PX  
1977-1981 Lecturer  
Department of Zoology, Imperial College of Science & Technology, London SW7 2AZ  
1978-1980 *Leave of Absence*  
Robertson Research Fellow/Cancer Research Institute Fellow, Cold Spring Harbor Laboratories, New York 11724, U.S.A.  
1981-1985 Lecturer  
Department of Biochemistry  
Imperial College of Science & Technology  
1985-1988 Senior Staff Scientist  
Imperial Cancer Research Fund  
Head, Molecular Immunochemistry Laboratory I.C.R.F. Clare Hall Laboratories, South Mimms, Hertfordshire EN6 3LD  
1988-1990 Principal Scientist, I.C.R.F.  
Continued at Clare Hall Laboratories  
1990-present Personal Chair in Molecular Oncology, University of Dundee  
Director of the Cancer Research UK Cell Transformation Research Group, The Cancer Research UK Laboratories at Dundee.  
1990-1998 Department of Biochemistry, Medical Sciences Institute, University of Dundee, Dundee DD1 4HN.  
1998-present Department of Surgery and Molecular Oncology, Ninewells Hospital and Medical School, University of Dundee, Dundee DD1 9SY  
2004-2007 Executive Director of the IMCB in Singapore on a three year leave of absence from Dundee  
2007-2008 Chief Executive Officer, Experimental Therapeutics Centre, Singapore  
2008-2009 Chairman of Singapore's Biomedical Research Council  
2007-2011 Chief Scientist, Cancer Research UK  
2009 - Chief Scientist, A\*STAR, Singapore  
2012 - Chairman, Chugai Pharmabody Research Pte Ltd, Singapore

**Teaching****Experience**

- 1977-1985 Taught and convened an advanced third year course on molecular and cellular immunology. The course was taken by biochemists, microbiologists, zoologists and botanists. It consisted of some 25 lectures plus practicals and tutorials. In addition numerous individual lectures were given on first and second year courses.  
1991-2004 Teaching final year module in molecular oncology. Additional lectures on immunology and cancer to third year biochemistry students and to medical students.

**PhD Students**

1. Dr Viesturs Simanis
2. Dr Ximena Montano
3. Dr Sara Mole
4. Dr Richard Greaves
5. Dr Richard Iggo
6. Dr Naushin Waseem
7. Dr Julian Gannon

8. Dr Karola Lindner
9. Dr Tonya Bliss
10. Dr Dion Daniels
11. Dr Jochen Renzing
12. Dr Silke Hansen
13. Dr Charles Stephen
14. Dr Dimitris Xirodimas
15. Dr Heidi Mattock
16. Dr Wei-Li Liu
17. Dr Suzanne Camus
18. Dr Sergio Menendez
19. Dr Rachel Berkson
20. Dr Fiona Murray-Zmijewski
21. Dr Maged Nashed
22. Dr Oliver Staples
23. Dr Hai Yun See
24. Dr Julin Wong Shuxian
25. Dr Walter Goh Leng Peng
26. Dr Joy Chua Shijia
27. Dr Tan Ban Xiong
28. Dr Eng Huiyan

### ***Other Appointments***

#### *Current*

1. Professor and Head of Molecular Oncology Dundee University
2. Adjunct Professor, Department of Medicine, National University of Singapore

#### *Previously*

1. CRC Scientific Committee
2. ICRF Council
3. MRC Cell and Molecular Medicines Board
4. Chairman of NTRAC
5. Member of the SEB of CRUK
6. Chairman of the Translational Research Committee CRUK
7. Chairman of the Cancer Research Portfolio Steering Group of the Chief Scientist Office Scottish Executive
8. Founder CSO and Executive Director Cyclacel Ltd
9. Chairman of the SAB IMP Vienna
10. Co-Opted member, A\*STAR EXCO 2005/2006
11. Director, Exploit Technologies Pte Ltd, Singapore
12. Committee Member of the selection committee, NUS Centennial Professorship Committee
13. Working Committee, Biomedical Translational and Clinical Research (BM-TCR), Singapore
14. Scientific Advisory Board, Bio\*One Capital Pte Ltd, Singapore
15. Chairman, Users Committee Phase 2, Vivarium, Biological Resource Centre, Singapore
16. Member, The Steering Committee - Molecular Database Program, Bioinformatic Institute, Singapore
17. Member, The Steering Committee - Chemoinformatics Program, Bioinformatic Institute, Singapore
18. Member, Singapore Stem Cell Consortium Executive Committee (SSCC EXCO), Singapore
19. Board of Director, CombinatoRx (Singapore) Pte Ltd, Singapore
20. Co-Chairman, A\*STAR Computational Resource Centre (A\*CRC) User Committee, Singapore
21. Chairman, Biological Resource Centre Executive Committee (BRC EXCO), Singapore
22. Committee Member, Grand Challenge Steering Committee, Singapore
23. Executive Deputy Chairman, Biomedical Sciences & Technology Group, Biomedical Research Council, Singapore
24. Chairman, Scientific Advisory Board, Attogenix Biosystems, Singapore
25. Chief Executive Officer, Experimental Therapeutics Centre, Singapore
26. Chairman of the BMRC Singapore
27. Chief Scientist, Cancer Research UK

### ***Elected Fellowships***

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|------|---|
| 1990 | Member of European Molecular Biology Organisation   |
| 1992 | Fellow Royal Society of Edinburgh                   |
| 1996 | Fellow of the Royal Society                         |
| 1996 | Fellow of the Royal College of Pathologists         |
| 1998 | Fellow of the Academy of Medical Sciences           |
| 2000 | Fellow of the Royal College of Surgeons (Edinburgh) |
| 2001 | Fellow of University College London                 |

### *Prizes and Awards*

1990	Gibb Fellow of the Cancer Research Campaign
1993	Charles Rodolphe Brupbacher Foundation, Switzerland
1993-1998	Howard Hughes International Scholar Award
1993	Joseph Steiner Prize, Switzerland
1994	Medal of the Swedish Society of Oncology
1995	Yvette Mayent Prize, France
1995	Black Prize, Thomas Jefferson University, USA
1995	Meyenburg Prize, Germany
1996	Silvanus Thompson Medal
1996	Henry Dryerre Prize Lecture
1998	Paul Ehrlich Prize, Germany
1998	Tom Connors Prize Lecturer
1998	Bruce-Preller Prize
1999	Hon. Doctor of Science, University of Abertay
2000	Hon. Doctor of Science, University of Stirling
2000	Knighthood
2002	Hon. Doctor of Science, University of Aberdeen
2002	Hon. Doctor of Science, University of Birmingham
2003	Medal of the Society of Chemical Industry
2004	Anthony Dipple Carcinogenesis Award
2004	Buchanan Medal of the Royal Society
2004	Biochemical Society Medal
2005	Int. Agency for Res. on Cancer (IARC) Medal, Lyon
2005	Sergio Lombroso Award in Cancer Research, Weizmann Institute of Science, Israel
2006	Inserm Award, France (Prize to Foreign Scientist)
2006	Hon. Doctor of Science, University of Nottingham
2007	Gregor Mendel Memorial Medal, Czech Republic
2007	AICR (Association for International Cancer Research) Colin Thomson Memorial Medal Lecture, Beatson Institute for Cancer Research, Glasgow
2007	David Hungerford Lecture Medal, Bangalore
2007	Doctor Honoris Causa, University Paul Sabatier, Toulouse
2008	Royal Medal, Royal Society of Edinburgh
2009	Datta Medal, Federation of European Biochemical Societies
2010	Hon. Doctor of Science, University of Liverpool
2011	Extraordinary Professor to the TEFAF Oncology Chair
2011	Doctor of Laws honoris causa, University of Dundee
2012	CRUK Lifetime Achievement Award, Cancer Research UK

### *Principal Current Grants Held in the last 3 years*

#### *Grants from Cancer Research UK*

1. Gibb Fellowship Award
2. Programme Grant (BSC)
3. Studentship - PhD (TCDB)

#### *Grants from other organizations*

1. Breast Cancer Campaign
2. Research grant from the French Embassy at London
3. Institut National de la Sante Et de la Recherche Medicale (Inserm, France)
4. Tenovus PhD studentship
5. Ligue contre le Cancer (France) PhD studentship
6. French Embassy PhD studentship
7. Tenovus Small Project Grant
8. Scottish Universities Life Sciences Alliance (SULSA) PhD Project grant
9. Scottish Enterprise Commercialisation Award

### ***Complete List of Publication***

1. Silver, D.M. & Lane, D.P. (1975) Dominant nonresponsiveness in the induction of autoimmunity to liver specific F antigen. *J. Exp. Med.* 142, 1455-1461.
2. Lane, D.P. and Silver, D.M. (1976) Isolation of murine liver-specific alloantigen, F antigen and examination of its immunogenic properties by radioimmunoassay. *Eur. J. Immunol.* 6, 480-485.
3. Silver, D.M. and Lane, D.P. (1977) Identification of the gene locus controlling dominant non-responsiveness to F. antigen. *Immunogenetics* 4, 295-299.
4. Lane, D.P. and Silver, D.M. (1977) Inhibition of lymphocyte proliferation by murine liver-specific F antigen. *Transplantation Proceedings IX*, 1063-1065.
5. Crawford, L.V. and Lane, D.P. (1977) An immune complex assay for SV40 T antigen. *Biochem. Biophys. Res. Comm.* 74, 323-329.
6. Lane, D.P. and Robbins, A.K. (1978) An immunochemical investigation of SV40 T antigens. *Virology* 87, 182-193.
7. Silver, D.M. and Lane, D.P. (1979) A hierarchy of responsiveness and the production of nonprecipitating antibodies to F antigen. *Immunogenetics* 8, 65-70.
8. \* Lane, D.P. and Crawford, L.V. (1979) SV40 T antigen is bound to a host protein in V40 transformed cells. *Nature* 278, 261-263.
9. Tjian, R., Robbins, A. and Lane, D.P. (1979) Antibody inhibition of SV40 T antigen ATPase. *ICN-UCLA Winter Symp. Eucaryotic. Gene Regulation* 18, 637-642.
10. Crawford, L.V., Pim, D.C. and Lane, D.P. (1980) An immunochemical investigation of SV40 T antigens. 2. Quantitation of antigens and antibody activities. *Virology* 100, 314-325.
11. Lane, D.P. and Crawford, L.V. (1980) The complex between Simian virus 40 T antigen and a specific host protein. *Proc. Royal Soc. B.* 210, 451-463.
12. Crawford, L.V., Lane, D.P., Denhardt, D.T., Harlow, E.E., Nicklin, P.M., Osborn, K. and Pim, D.C. (1980) Characterisation of the complex between SV40 large T antigen and the 53K host protein in transformed mouse cells. *Cold Spring Harbor Symposium Quantitative Biology* 44, 179-187.
13. Hanahan, D., Lane, D.P. Lipsich, L., Wigler, M. and Bothan, M. (1980) Characterisation of an SV40-plasmid recombinant and its movement into and out of the genome of a murine cell. *Cell* 21, 127-139.
14. Lane, D.P. and Hoeffler, W.K. (1980) SV40 large T shares an antigenic determinant with a cellular protein of molecular weight 68,000. *Nature* 288, 167-170.
15. Silver, D.M. and Lane, D.P. (1981) Polygenic control of the immune response to F antigen. *Immunogenetics* 12, 237-251.
16. Topp, W.C., Lane, D.P. and Pollack, R. (1980) Transformation by SV40 and polyoma virus. In 'DNA Tumour Viruses'. Ed. J. Tooze, Cold Spring Harbor, pp. 205-296.
17. Lane, D.P. and Lane, E.B. (1981) A rapid antibody assay system for screening hybridoma cultures. *J. Immunological Methods.* 47, 303-307.
18. Clark, R., Lane, D. and Tjian, R. (1981) Use of monoclonal antibodies as probes of Simian virus 40 T antigen ATPase activity. *J. Biol. Chem.* 256, 11854-11858.
19. McCormick, F., Lane, D.P. and Dilworth, D.M. (1982) Immunological cross- reactions between large T antigens of SV40 and polyoma virus. *Virology* 116, 383-387.
20. Crawford, L.V., Leppard, K., Lane, D.P. and Harlow, E. (1982) Cellular proteins reactive with monoclonal antibodies directed against SV40 T antigen. *J. Virology* 42, 612-620.
21. Lane, D.P. and Koprowski, H. (1982) Molecular recognition and the future of monoclonal antibodies. *Nature* 296, 200-202.
22. Lane, D.P., Gannon, J. and Winchester, G. (1982) The complex between p53 and SV40 T-antigen. In 'Advances in Viral Oncology' vol.2, Ed. G. Klein, Raven Press, p.23-29.
23. Lane, D.P. and Harlow, E.E. (1982) Two viral transforming proteins bind the same host protein. *Nature* 298, 511.
24. Rigby, P.W.J. and Lane, D.P. (1983) The structure and function of the Simian virus 40 large T antigen. In 'Advances in Viral Oncology, vol.3 Ed. G. Klein, Raven Press, p.31-57.
25. Crawford, L., Leppard, K., Lane, D.P. and Harlow, E. (1983) Cross reactions between cellular proteins and SV40 T antigen. In 'Tumour Viruses and Differentiation', p.421-425. Alan Liss Inc., New York.
26. Jones, C.A., Lane, D.P. and Hughes, J. (1983) Monoclonal antibodies to leucine enkephalin. *Biochem. Biophys. Res. Comm.* 113, 757-764.
27. Lane, D.P. and Gannon, J. (1983) Cellular proteins involved in SV40 transformation. *Cell Biology Int. Report* 7, 513-514.
28. Thomas, R., Kaplan, L., Reich, N., Lane, D.P. and Levine, A.J. (1983) Characterisation of human p53 antigens employing primate specific monoclonal antibodies. *Virology* 131, 502-517.
29. Montano, X. and Lane, D.P. (1984) A monoclonal antibody to SV40 small t. *J. Virology* 51, 760-767.
30. Gorman, C., Lane, D.P. and Rigby, P.W.J. (1984) High efficiency gene transfer into Mammalian Cells. *Phil. Trans. R. Soc. Lond. B.* 307, 343-346.
31. Lane, D.P. (1984) Cell immortalization and transformation by the p53 gene. *Nature* 312, 596-597.
32. Rigby, P.W.J., Brickell, P.M., Latchman, D.S., Murphy, D., Scott, M.R.D., Westphal, K.-H., Simanis, V., Lane, D.P. and Willison, K. (1984) Onco-Fetal Genes and The Major Histocompatibility Complex. In 'Cancer Cells 1, The Transformed Phenotype', Levine et al., Eds. (Cold Spring Harbor Laboratory, New York) pp. 97-104.
33. Simanis, V. and Lane, D.P. (1985) An immunoaffinity purification procedure for SV40 large T antigen. *Virology* 144, 88-100.
34. Lane D.P., Simanis, V., Bartsch, R., Yewdell, J., Gannon, J. and Mole S. (1985) Cellular targets for SV40 large T-antigen. *Proc. R. Soc. Lond. B.* 226, 25-42.

35. Mole, S.E. and Lane, D.P. (1985) Use of Simian virus 40 large T-B-galactosidase fusion proteins in an immunochemical analysis of Simian virus 40 large T antigen. *J. Virology* 54, 703-710.
36. Gorman, C., Rigby, P. and Lane, D.P. (1985) Control of viral expression in undifferentiated teratocarcinoma cells. In *Current Communications in Molecular Biology; Eukaryotic Transcription; The Role of cis- and trans-acting Elements in Initiation*. Gluzman, Ed. Cold Spring Harbor Laboratory, New York, p.53-58.
37. Gorman, C.M., Rigby, P.W.J. and Lane, D.P. (1985) Negative regulation of viral enhancers in undifferentiated embryonic stem cells. *Cell* 42, 519-526.
38. Gorman, C.M., Lane, D.P., Watson, C.J. and Rigby, P.W.J. (1986) Regulation of gene expression in murine teratocarcinoma cells. *Cold Spring Harbor Symp. Quant. Biol.* 50, 701-706.
39. Lane, D.P., Gannon, J., Brennan, S.P.J. and Mole, S.E. (1986) Investigating the specificity of monoclonal antibodies to protein antigens using b-galactosidase fusion proteins. From Investigation and exploitation of antibody combining sites. Eds: E. Reid, G. Cook and D.J. Morre, Plenum Publicity Corporation.
40. \* Yewdell, J.W., Gannon, J.V. and Lane, D.P. (1986) Monoclonal antibody analysis of p53 expression in normal and transformed cells. *J. Virology* 59, 444-452.
41. Lane, D.P. and Gannon, J. (1986) Monoclonal antibody analysis of the SV40 large T-p53 complex. In 'Cancer Cells' 4, 387-393. (Cold Spring Harbor Publications, New York).
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\* Listed under Key Publications