

REFERENCES

- Adams, J.M. and Cory, S. (1998):* The Bcl-2 protein family's arbiters of cell survival. *Science*, 281 : 1322 – 1326.
- Ahern, W.; Bird, T. and Court, S.D.M. (1970):* Pathologic changes in virus infections of the lower respiratory tract in children. *J. Clin. Pathol.*, 23 : 7-18.
- Akerlind, B. and Norby, E. (1986):* Occurrence of respiratory syncytial virus subtypes A and B strains in Sweden. *J. Med. Virol.*, 19 : 241 – 247.
- Allport, T.D.E.G.; Davies, W.C. and Sharland, M. (1997):* Ribavirin and bronchiolitis : variation in use in the UK. *Arch. Dis. Child.*, 76 : L 385 – L 387.
- Alwan, W.H.; Record, F.M. and Openshaw, P.J. (1992):* CD4+ T cells clear virus but augment disease in mice infected with respiratory syncytial virus. Comparison with the effects of CD8+ T cells. *Clin. Exp. Immunol.*, 88 : 527 – 536.
- Ambrosini, G.; Adida, C.; Sirugo, G. and Altieri, D.C. (1998):* Induction of apoptosis and inhibition of cell proliferation by survivin gene targeting. *J. Biol. Chem.*, 273 : 11177 – 11182.
- Anas, N.; Boettlich, C.; Hall C.B. and Brooks, J.G. (1982):* The association of apnea and respiratory syncytial virus infection in infants. *J. Pediatr.*, 101 : 65 – 68.
- Anderson, L.J. (1988):* Paramyxoviridae : respiratory syncytial virus. In : laboratory diagnosis of infectious disease principles and practice. Vol. II, Viral, Rickettsial and chlamydial diseases Iennette. H.E.; Halonen, P. and Murphy, A.F. (eds). Springer. Verlag New York, chap : 28, 540 - 562.

- Anderson, L.J. and Heilman, C.A. (1995):** Protective and disease – enhancing immune responses to respiratory syncytial virus. *J. Infect. Dis.* 171 : 1-7.
- Anderson, L.J.; Hierholzer, J. C.; Tsou, C.; Hendry, R.M.; Fernie, B.F.; Stone, Y. and McIntosh, K. (1985):** Antigenic characterization of respiratory syncytial virus strains with monoclonal antibodies. *J. Infect. Dis.*, 151 : 625 – 633.
- Anderson, L.J.; Tsou, C. and Potter, C. (1994):** Cytokine response to respiratory syncytial virus stimulation of human PBMC. *J. Infect. Dis.*, 174 : 1201 – 1208.
- Andrew, G.R.; Catherine, Booth and Christopher, S.P. (2001):** What is apoptosis and why is it important, *B.M.J.*, 322 (23) : 1536 – 1538.
- Arscott, P.I. and Baker, J.R. Jr. (1998):** Apoptosis and thyroiditis, *Clin. Immunol. Immunopathol.*, 87 : 207 – 217.
- Arstila, P.P. and Halonen, E.P. (1988):** Direct antigen detection. In : laboratory diagnosis of infectious diseases. Principles and practice. Vol. II, Viral, Rickettsial and Chlamydial disease Lennette, H.E., Halonen, P. and Murphy, A.F. (eds) : Springer Verlag New York, Chap., 4, 60 - 65.
- Bachem, M.B.; Riess, U.; Melchior, R. et al. (1989):** Transforming growth factors (TGF alpha and TGF beta) stimulate chondroitin sulfate and hyaluronate synthesis in cultured rat liver fat storing cells. *FEBS lett*, 257 : 134 – 137.
- Bachi, T. and Howe, C. (1973):** Morphogenesis and ultrastructure of respiratory syncytial virus. *J. Virol.*, 12 : 1173 – 1180.

- Bangham, C.R.M.; Openshaw, P.J.M.; Ball, L.A.; King, A.M.Q.; Wertz, G.W. and Askonas, B.A. (1986):** Human and murine cytotoxic T cells specific to respiratory syncytial virus recognize the viral nucleoprotein (N), but not the major glycoprotein (G), expressed by vaccinia virus recombinants. *J. Immunol.*, 137 : 3973 – 3977.
- Banngarten, A. (1980):** Viral immunodiagnosis. *Yale, J. Biol. Med.*, 53 : 71-75.
- Barinaga, M. (1998):** Death by dozens of cuts. *Science*, 280, 32 – 34.
- Bazzoni, F. and Beutler, B. (1996):** The tumor necrosis factor ligand and receptor families. *Semin. Med. Beth. Hosp.* 334 : 1717 – 1725.
- Becker, S. and Soukup, J.M. (1999):** Airway epithelial cell-induced activation of monocytes and eosinophils in respiratory syncytial virus infection. *Immunobiology*, 201 (1) : 88 – 106.
- Beem, M.; Egerer, R. and Anderson, J. (1964) :** Respiratory syncytial virus neutralizing antibodies in persons residing in Chicago, Illinois. *Pediatrics*, 34 : 761 – 770.
- Berman, S.; Duenas, A.; Bedoya, A.; Constain, V.; Leon, S.; Borrero, I. And Murphy, J. (1983):** Acute lower respiratory tract illnesses in Cali, Colombia : a two – year ambulatory study. *Pediatrics*, 71 : 210 – 218.
- Berthiaume, L.; Joncas, J. and Pavilanis, V. (1974):** Comparative structure. Morphogenesis and biological characteristics of the respiratory syncytial (RS) virus and the pneumonia virus of mice (PVM). *Arch. Ges. Virusforsch*, 5 : 39 – 51.
- Bienenstock, J. (1976):** Local mucosal immunity in the lung. In : “Lung cells in disease”. Bouhuys A (ed). Elsevir, North Holl and Biomedical Press, 197 – 208.

- Bissell, D.M.; Friedman, S.L.; Maher, J.J. et al. (1990):** Connective tissue biology and hepatic fibrosis : Report of a conference. *Hepatology*, 11 : 488 – 498.
- Blanco-Quiros, A.; Gozalez, H.; Arranz, E. and Lapena, S. (1999):** Decreased IL-12 levels in umbilical cord blood in children who developed acute bronchiolitis. *Pediatr. Pulmonol.*, 28 (3): 175 – 180.
- Boesen-de Cock, J.G.; Teppet, A.D. and de Vries, F. (1999):** Common regulation of apoptosis signaling induced by CD95 and the DNA-damaging stimuli etoposide and gamma-radiation downstream from caspase-8 activation. *J. Biol. Chem.*, 274 : 14255 – 14261.
- Bortner, C.D. and Cidlowski, J.A. (1996):** Absence of volume regulatory mechanisms contributes to the rapid activation of apoptosis in thymocytes. *Am. J. Physiol.*, 271 : C950 –C961.
- Bossy-Wetzel, E.; Newmeyer, D.D. and Green, D.R. (1998):** Mitochondrial cytochrome C release in apoptosis occurs upstream of DEVD-specific caspase activation and independently of mitochondrial transmembrane depolarization, *Embo, J.* 17 : 37 – 49.
- Bright, H.; Turnbull, T. and Toms, G.L. (1995):** Comparison of the T helper cell response induced by respiratory syncytial virus (RSV) and its fusion protein in BALB/C mice. *Vaccine*, 13 : 915 – 922.
- Bromberg, K.; Daidone, B.; Clarke, L. and Sierra, F. (1984):** Comparison of immediate and delayed inoculation of Hep-2 cells for isolation of respiratory syncytial virus. *J. Clin. Microbiol.*, 20 : 123 – 124.

- Bromberg, K.; Tannis, G. and Diadone, B. (1991):** Early use of indirect immunofluorescence for the detection of respiratory syncytial virus in HEP-2 cell culture. *Am. J. Clin. Pathol.*, 96 : 127 – 9.
- Brooks, G. F.; Butel, J. and Morse, S.A. (1998):** Paramyxoviruses & Rubella virus In : Jawetz, Melnick, E. Adelberg's, *Medical Microbiology*, Twenty – first edition. Appleton & Lange Press., 507 – 527.
- Bukreyev, A.; Whitehead, S.S.; Murphy, B.R. and Collins, P.L. (1997):** Recombinant respiratory syncytial virus from which the entire SH gene has been deleted grows efficiently in cell culture and exhibits site – specific attenuation in the respiratory tract of the mouse. *J. Virol.*, 71 : 8973 – 8982.
- Campbell, M.J. and Machin, D. (1993):** Medical statistics. A common sense approach. 2nd Ed. John Wiley & Sons. New- York, Chichester, Brishane, Toronto & Singapore.
- Caroline, Bress Hall, M.D.; Arthur, E.; Lopleman, M.D.; Gordon, R.; Douglas, Jr. M.D. (1979):** Neonatal respiratory syncytial virus infection. *N. Engl. J. Med.*, 300 : 393 – 396.
- Cash, P.; Pringle, C.R. and Preston, C.M. (1979):** The polypeptides of human respiratory syncytial virus : Products of cell – free protein synthesis and post – translational modifications. *Virology*, 92 : 375 – 384.
- Castedo, M.; Hirsch, T.; Susin, S.A. (1996):** Sequential acquisition of mitochondrial and plasma membrane alterations during early lymphocyte apoptosis. *J. Immunol.*, 157 : 512 - 521.
- Caul, E.O.; Waller, D.K.; Clarke, S.K.R. and Corner, B.D. (1976):** A comparison of influenza and respiratory syncytial virus infections among infants admitted to hospital with acute respiratory infections. *Am. J. Hyg.*, 77 : 383 – 392.

- Chanock, R. M. and Finberg, L. (1957):** Recovery from infants with respiratory illness of a virus related to chimpanzee coryza agent (CCA). II. Epidemiologic aspects of infection in infants and young children. *Am. J. Hyg.* 66 : 291 – 300.
- Chanock, R.M.; Kapikian, A.Z.; Mills, J.; Kim, H.W. and Parrot, R.H. (1970):** Influence of immunologic factors in respiratory syncytial virus disease. *Arch. Envirom. Health*, 21 : 341-345.
- Chanock, R.M. and Murphy, B.R. (1991):** Past efforts to develop safe and effective RSV vaccine. In : *Animal Models of Respiratory syncytial virus Infections*. Meignier B., Murphy B., OgrapD (eds). Merieux, France : Merieux, Foundation publications, 35 – 42.
- Chanock, R. M; Roizman, B. and Myers, R. (1957):** Recovery from infants with respiratory illness of a virus related to chimpanzee coryza agent (CCA). Isolation, properties and characterization, *Am. J. Hyg.*, 66 : 281 – 290.
- Chao, D.T. and Korsmeyer, S.J. (1998):** BCL-2 family : regulators of cell death. *Annu. Rev. Immunol.* 16 : 395 – 419.
- Charriaut-Mariangue, C. and Ben-Ari, Y. (1995):** A cautionary note on the use of the TUNEL stain to determine apoptosis. *Neuroreport*, 7 : 61 – 64.
- Chaudhary, D.; O'Rourke, K.; Chinnalyan, A.M.; Dixit, V.M. (1998):** The death inhibitory molecules CED-9 and CED-4L use a common mechanism to inhibit the CED-3 death protease. *J. Biol. Chem.*, 273 : 17708 – 17712.
- Cherrie, A.H.; Anderson, K. and Wertz, G.W. (1992):** Human cytotoxic T-cells stimulated by antigen on dendritic cells recognize the N, SH, F, M, 22K, and 1b proteins of respiratory syncytial virus. *J. Virol.* 66 : 2102 – 2110.

- Chiba, Y.; Higashidato, Y. and Suga, K. (1989):** Development of cell-mediated cytotoxic immunity to respiratory syncytial virus in human infants following naturally acquired infection. *J. Med. Virol.*, 28 : 133 – 139.
- Coates, H.V.; Alling, D.W. and Chanock, R.M. (1966):** An antigenic analysis of respiratory syncytial virus isolates by a plaque reduction neutralization tests. *Am. J. Epidemiol.* 83 : 299 – 313.
- Cohen, J.J. and Duke, R.C. (1984):** Glucocorticoid activation of calcium – dependent endonuclease in thymocyte nuclei leads to cell death. *J. Immunol.*, 132 : 38 – 42.
- Collins, P.L. (1995):** Potential roles of apoptosis in viral pathogenesis. *Am. Jour Resp. Crit. Care Med.*, 152, S 20 – S 24.
- Collins, P.L.; Dickens, L.E.; Buckler-White, A.; Olmsted, R.A.; Spriggs, M.K.; Camargo, E. and Coelingh, K.V.W. (1986):** Nucleotide sequences for the gene junctions of human respiratory syncytial virus reveal distinctive features of intergenic structure and gene order. *Proc. Natl. Acad. Sci. USA* 83: 4594 – 4598.
- Collins, P.L.; Hill, M.G.; Cristina, J. and Grosfeld, H. (1996):** Transcription elongation factor of respiratory syncytial virus, a nonsegmented negative – strand RNA virus. *Proc. Natl. Acad. Sci. USA*, 93 : 81-85.
- Collins, P.L.; Hill, M.G. and Johnson, P.R. (1990 a):** The two open reading frames of the 22K mRNA of human respiratory syncytial virus : sequene comparisons of antigenic subgroups A and B and expression in vitro. *J. Gen. Virol.*, 71 : 3015-3020.
- Collins, P.L.; Huang, Y.T. and Wertz, G.W. (1984):** Identification of a tenth mRNA of respiratory syncytial virus and assignment of polypeptides to the 10 viral genes. *J. Virol.* 49 : 572 – 578.

- Collins, P.L.; Olmsted, R.A. and Johnson, P.R. (1990 b):** The small hydrophobic protein of human respiratory syncytial virus: comparison between antigenic subgroups A and B. *J. Gen. Virol.*, 71 : 1571 – 1576.
- Collins, P.L.; Olmsted, R.A.; Spriggs, H.K.; Folsom, P.R. and Buckler –White, A.J. (1987):** Gene overlap and site specific attenuation of transcription of the viral polymerase L. gene of human respiratory syncytial virus. *Proc. Natl. Acad. Sci. USA*, 84 : 5134 – 5138.
- Collins, P.L.; Whitehead, S. S.; Bukreyev, A.; Fearn, R.; Teng, M.N.; Juhasz, K.; Chanock, R.M. and Murphy, B.R. (1999):** Rational design of live – attenuated recombinant vaccine virus for human respiratory syncytial virus by reverse genetics. *Adv. Virus Res.*, 54 : 423 – 451.
- Connors, M.; Giese, N.A. and Kulkarni, A.B. (1994):** Enhanced pulmonary histopathology induced by respiratory syncytial virus (RSV) challenge of formalin-inactivated RSV-immunized BALB/C mice is abrogated by depletion of interleukin-4 (IL-4) and IL-10. *J. Virol.*, 68 : 5321 – 5325.
- Corvaisier, C.; Guillemin, G.; Bourgeois, C.; Bour, J.B.; Kohli, E. and Pothier, P. (1993):** Identification of T-cell epitopes adjacent to neutralizing antigenic domains on the fusion protein of respiratory syncytial Virus. *J. inst. Pasteur*, 144 : 141 – 150.
- Cory, S.; Strasser, A.; Jacks, T. et al. (1994):** Enhanced cell survival and tumorigenesis. *Cold Spring Harb. Symp. Quant. Biol.* 59 : 365 – 375.
- Czaja, M.J.; Weiner, F.R.; Takahashi, S. et al. (1989):** Gamma-interferon treatment inhibits collagen deposition in murine schistosomiasis. *Hepatology*, 10 : 795 – 800.

- D'Amico, A.V. and McKenna, W.G. (1994):** Apoptosis and a re-investigation of the biologic basis for cancer therapy. *Radiotherapy & Oncology*, 33 (1) : 3-10.
- Daniel, W.W. (1987):** Biostatistics, A poundation for analysis in the health sciences. 4th Ed. John. Wiley & Sons. New – York, Chichester; Brisbane; Toronto & Singapore.
- Darzynkiewicz, Z.; Bruno, S. and Del Bino, G. (1992):** Features of apoptotic cells measured by flow cytometry. *Cytometry*, 13 : 795 – 808.
- Debra, A. T. and Robert, C.W. (1995):** Respiratory syncytial virus In. Lennette PHD Diagnostic procedure for viral, Rickettsial and Chlamydial infection. Edwin H. lenneett, David A. lennette and Evelwanat (eds). American Public Health Association 7th edition. Prepared under auspices of the committee on laboratory standard and practice of American Public Health Associated., 539 – 552.
- Desagher, S.; Osen-Sand, A.; Nichols, A. (1999):** Bid-induced conformational change of bax is responsible for mitochondrial cytochrome C release during apoptosis. *J. Cell. Biol.*, 144 : 891 – 901.
- Deveraux, Q.I.; Takahashi, R.; Salvesen, G.S.; Reed, J.C. (1997):** x-linked IAP is a direct inhibitor of cell-death proteases. *Nature*, 388 : 300 – 304.
- Dickens, L.E.; Callens, P.L. and Werly (1990):** Transcriptional mapping of human respiratory syncytial virus. *J. Virol.*, 52 : 364 – 369.
- Doane, F.W.; Anderson, N.; Zbitnew, A. and Rhodes, A.J. (1969):** Application of electron microscopy to the diagnosis of virus infections. *Can. Med. Assoc. J.* 100 : 1043 – 1049.
- Dodge, R.; Martinez, F.D.; Cline, M.G.; lebowitz, m.D. and Burrows, B. (1996):** Early childhood respiratory symptoms and the

- subsequent diagnosis of asthma. *J. Allergy, Clin. Immunol.*, 98 : 48 - 52.
- Domachowske, J.B.; Bonville, C.A. and Rosenberg, H.F. (2001):* Gene expression in epithelial cells in response to pneumovirus *Respir. Res.*, 2 (4) : 225 – 233.
- Domachowske, J.B. and Rosenberg, H.F. (1999):* Respiratory syncytial virus infection : immune response, immunopathogenesis and treatment. *Clin. Microbiol. Rev.* 12 (2) : 298 – 309.
- Domurat, F.; Roberts, N.J.J.R.; Walsh, E.E. and Dagan, R. (1985):* Respiratory virus infection of human mononuclear leukocytes in vitro and in vivo. *J. Infect. Dis.*, 152 : 895 – 902.
- Dong, Z.; Saikumar, P.; Weinberg, J.M. and Venkatachalam, M.A. (1997):* Internucleosomal DNA cleavage triggered by plasma membrane damage during necrotic cell death. Involvement of serine but not cysteine proteases. *Am. J. pathol.*, 151 : 1205 – 1213.
- Duke, R.C. (1991):* Apoptosis in cell – mediated immunity. In : *Apoptosis : the molecular basis of cell death.* Tomei L.D. and Cope F.O. (eds). Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y., 209 – 226.
- Duke, R.C. and Cohen, J.J. (1986):* IL-2 addition : withdrawal of growth factor activates a suicide program in dependent T cells. *Lymphokine Res.*, 5 : 289 – 299.
- Edward, E. W.; Kenneth, M. M.; Christeine, E. L. and Caroline B. H. (1997):* Severity of respiratory syncytial virus infection is related to virus strain. *J. infect. Dis.*, 175 : 814 – 820.
- Eilers, M.; Schirm, S. and Bishop, J.M. (1991):* The Myc prot activates transcription of the alpha – prothymosin gene. *BMJ*, 10 : 133 – 141.

- Ellis, H.M. and Horvitz, H.R. (1986):** Genetic control of programmed cell death in the nematode *C. elegans*. *Cell.*, 44 : 817 – 829.
- Erdem, S.; Mendell, J.R. and Sahenk, Z. (1998):** Fate of Schwann cells in CMT1A and HNPP : evidence for apoptosis. *J. neuropathol. Exp. Neurol.*, 57 : 635 – 642.
- Eskes, R.; Antonsson, B. and Osen - Sand A. (1998):** Bax – induced cytochrome C release from mitochondria is independent of the permeability transition pore but highly dependent on Mg^{2+} ions *J. Cell. Biol.*, 143 : 217 – 224.
- Evan, G.I. and Littlewood, T.D. (1993):** The role of C-Myc in cell growth. *Current Opin. Gen. Dev.*, 3 : 44 – 49.
- Evan, G.I.; Wyllie, A.H. and Gilbert, C.S. (1992):** Induction of apoptosis in fibroblasts by c-myc protein. *Cell.*, 69 : 119 – 128.
- Evans, J.; Cane, P.A., and Pringle, C.R. (1994):** Analysis of the functions of the unique NS1 (1C) and NS2 (1 B) promotorprosmial proteins of respiratory virus. Oral presentation, programme 127th Meeting of the Society for General Microbiology, 33 - 34.
- Falsey, A.R. and Walsh, E.E. (1996):** Safety and immunogenicity of a respiratory syncytial virus subunit vaccine (PFP-2) in ambulatory adults over age 60. *Vaccine*, 14 : 1214-1218.
- Fan, J.; Henrickson, K.J. and Savatski, L.L. (1998):** Rapid simultaneous diagnosis of infections with respiratory syncytial virus A and B, influenza viruses A and B and human parainfluenza virus types 1,2 and 3 by multiplex quantitative reverse transcription – polymerase chain reaction – enzyme hybridization assay (Hexaplex). *Clin. Infect. Dis.* 26 : 1397 – 402.
- Fearns, R.; Peebles, M.E. and Collins, P.L. (1997):** Increased expression of the N protein of respiratory syncytial virus stimulates minigenome replication but does not alter the balance between the synthesis of mRNA and antigenome. *Virology* 236 : 188-201.

- Fenner, F. (1976):** The classification and nomenclature of viruses. Summary of the results of the International Committee on Taxonomy of viruses in Madrid, Sept., 1975, *Virology*, 71:371-374.
- Ferlini, C.; De Angelis, C.; Biselli, R. (1999):** Sequence of metabolic changes during X-ray-induced apoptosis, *Exp. Cell Res.* 247 : 160 – 167.
- Fernands-Alnemri, T.; Armstrong, R.C.; Krebs, J. (1996):** In vitro activation of CPP32 and Mch3 by Mch4, a novel human apoptotic cysteine protease containing two FADD-like domains. *Proc. Natl. Acad. Sci. USA*, 93 : 7464 –7469.
- Fernie, B.F. and Gerin J.L. (1982):** Immunochemical identification of viral and nonviral proteins of the respiratory syncytial virus virion. *Infect. Immun.*, 37 : 243 – 249.
- Ferris, J.A.J.; Aheme, W.A. and Lock, W.S. (1973):** Sudden and unexpected deaths in infants : histology and virology. *B.M.J.*, 2, 439 – 442.
- Fine, A.; Anderson, N.L.; Rothstein, T.L.; Williams, M.C. and Bochuico, B.R. (1997):** Fas expression in pulmonary alveolar type II cells. *Am. J. Physiol. (Lung cell. Mol. Physiol.)* 17, L64 –L 71.
- Fishaut, M.; Murphy, D.; McIntosh, K. and Ogra, P.L. (1981):** Broncho-mammary axis in the immune response to RSV. *J. Pediatr.*, 99 (2) : 186 – 191.
- Fishaut, M.; Tubergen, D. and McIntosh, K. (1980):** Cellular response to respiratory viruses with particular reference to children with disorders of cell – mediated immunity. *J. Pediatr.*, 96:179 – 186.

- Flanders, R.T.; Lindsay, P.D.; Chairez, R.; Brawner, T.A.; Kumar, M.L.; Swenson, P.D. and Bromberg, K. (1986):** Evaluation of clinical specimens for the presence of respiratory syncytial virus antigens using an enzyme immunoassay. *J. Med. Virol.*, 19 : 1-9.
- Follett, E.A.C.; Pringle, C.R. and Pennington, T.H. (1975):** Virus development in enucleate cells : echovirus, poliovirus, pseudorabies virus, reovirus, respiratory syncytial virus and semliki forest virus. *J. Gen. Virol.* 26 : 183 – 196.
- Fort, J.; Oberti, F.; Pilette, C. (1998):** Antifibrotic and hemodynamic effects of the early and chronic administration of octreotide in two models of liver fibrosis in rats. *Hepatology*, 28 : 1525 – 1531.
- Frank, A.L.; Taber, L.H.; Wells, C.R.; Wells, J.M.; Glezen, W.P. and Paredes, A. (1981):** Patterns of shedding of myxoviruses and paramyxoviruses in children, *J. Infect. Dis.*, 144 : 433 – 441.
- Freke, A.; Stott, E.J.; Roome, A.P.C.H. and Caul, E.O. (1986):** The detection of respiratory syncytial virus in nasopharyngeal aspirates : assessment, formulation, and evaluation of monoclonal antibodies as a diagnostic reagent. *J. Med. Virol.* 18 : 181 – 191.
- Friedman, S.L.; Roll, F.J. (1987):** Isolation and culture of hepatic lipocytes, Kupffer cells, and sinusoidal endothelial cells by density gradient centrifugation with Stractan. *Anal Biochem.*, 161 : 207 – 218.
- Garcia, J.; Garcia-Barreno, B.; Vivo, A. and Melero, J.A. (1992):** Cytoplasmic inclusions of respiratory syncytial virus – infected cells that coexpress the nucleoprotein, the phosphoprotein and the 22K protein. *Virology*, 195 : 243 – 247.

- Gardner, P.S.; Grandien, M. and McQuillin, J. (1978):** Comparison of immunofluorescence and immunoperoxidase methods for viral diagnosis. WHO Collaborative Study – Beul : WHO, 56 : 105 – 110.
- Gardner, P.S. and McQuillin, J. (1980):** Rapid virus diagnosis: application of immunofluorescence 2nd ed., Butter Worth, Boston, 110 – 123.
- Gardner, P.S.; McQuillin, J. and Court, S.D.M. (1970):** Speculation on pathogenesis in death from respiratory syncytial virus infection. B.M.J., 1 : 327 – 330.
- Garofalo, R.; Kimpen, J.L.; Welliver, R. C. and Ogra, P.L. (1992):** Eosinophil degranulation in the respiratory tract during naturally acquired respiratory syncytial virus infection. J. Pediatr., 120: 28 – 32.
- Gillies, M. (1999):** Apoptosis, Radiosensitivity and the cell cycle. Oncolink, 6 : 22 – 27.
- Gimenez, H.B.; Hardman, N.; Keir, H.M. and Cash, P. (1986):** Antigenic variation between human respiratory syncytial virus isolates. J. Gen. Virol., 67 : 863 – 870.
- Glezen, W.P. and Denny, F.W. (1973):** Epidemiology of acute lower respiratory disease in children. N, Engl. J. Med., 288 : 498 – 505.
- Glezen, W.P.; Taber, L.H.; Frank, A.I. and Kasel, J.A. (1986):** Risk of primary infection and re-infection with respiratory syncytial virus. Am. J. Dis. Child., 140 : 543.
- Gollapudi, L. and Oblinger, M.M. (1999):** Stable transfection of PC12 cells with estrogen receptor (Eralpha) : protective effects of estrogen on cell survival after serum deprivation. J. Neurosci. Res., 56 : 99 – 108.

- Graham, B.S.; Bunton, L.A.; Wright, P.F. and Karzon, D.T. (1991):** Role of T-lymphocyte subsets in the pathogenesis of primaryss infection and rechallenge with respiratory syncytial virus in mice. *J. Clin. Invest.*, 88 : 1026 – 1033.
- Graig, B. T. (1999):** Apoptosis. In : *Fundamental Immunology* Edited by William E. paul 4th ed. Lippincott – Raven, chap., 23, 813 – 829.
- Green, D. R. and Kroemer, G. (1998):** The central executioners of apoptosis : caspases or mitochondria ? *Trends Cell. Biology*, 8 : 267 – 271.
- Green, D.R. and Reed, J.C. (1998):** Mitochondria and apoptosis. *Science*, 281: 1309 – 1312.
- Green, G.M. and Jakab, G.J. (1977):** Defense mechanisms of the respiratory membrane. *Am. Rev. Resp. Dis.*, 115 : 479 – 514.
- Gronroos, J.A.; Vikma, L.; Salimivalli, A. et al. (1986):** Co-existing viral (respiratory syncytial) and bacterial (pneumococcus) otitis media in children. *Acta Otolaryngeal*, 65 : 505 – 517.
- Groothuis, J.R.; King, S.J.; Hogerman, D.A.; Paradiso, P.R. and Simoes, E.A. (1998):** Safety and immunogenecity of a purified F protein respiratory syncytial virus (PEP-2) Vaccine in seropositive children with bronchopulmonary dysplasia. *J. Infect. Dis.*, 177 (2) : 467 – 469.
- Groothuis, J.R.; Simons, E.A. and Levin, M.J. (1993):** Prophylactic administration of respiratory syncytial virus immunoglobulin to high-risk infants and young children. *N. Engl. J. Med.*, 329 : 1524 – 1530.

- Gross, A.; Yin, X.M.; Wang, K. et al. (1999):** Caspase elevated BID targets mitochondria and is required for cytochrome C release while BCL-XL prevents this release but not tumor necrosis factor-R1/Fa death. *J. Biol. Chem.*, 274 : 1156 – 1163.
- Grove, J.E. Jr.; Murphy, B.R.; Chanack, R.M.; Williamson, R.A.; Barbas, C.F. Iii and Burton, D.R. (1994):** Recombinant human respiratory syncytial virus monoclonal antibody Fab is effective therapeutically when introduced directly into Lungs of R.S.V. infected mice *proc. Natl. Acad. Sci. USA*; 91 : 1386 – 1390.
- Hadziyannis, E.; Sholtis, W.; Schindler, S. and YenLiepberman, B. (1999):** Comparison of VIDAS with direct immunofluorescence for the detection of respiratory syncytial virus in clinical specimens. *J. Clin. Virol.*, 14 (2) : 133 – 136.
- Hakem, R.; Hakem, A.; Duncan, G.s. et al. (1998):** Differential requirement for caspase 9 in apoptotic pathways in vivo. *Cell*, 94 : 339 – 352.
- Hall, C.B. (1983):** The nosocomial spread of respiratory syncytial virus infections. *Annual Review of Medicine*, 34 : 311 – 319.
- Hall, C.B. (1997):** Respiratory syncytial virus. In : *Textbook of pediatric infectious diseases*. 4th ed. Feigin RD, Cherry, JD, (eds) Philadelphia. : WB Saunders; 2084 – 2111.
- Hall, C. B. (1999):** The RSV-Asthma Link : The Emerging Story. *J. Pediatr.*, 135 (2) : 1 –10.
- Hall, C.B. (2000):** Respiratory syncytial virus. In *principles and Practice of Clinical Virology*, Zuckerman, A.J., Banatvala, J.E. and Pattison, Jr (eds), 4th ed ; 293 – 306.
- Hall, C.B. (2001):** Respiratory syncytial virus and parainfluenza virus. *N. Engl. J. Med.*, 344 (25) : 1917 – 1927.

- Hall, C.B. and Douglas, R.G. (1975 a):* A clinically useful method for the isolation of RSV. *J. Infect. Dis.*, 131 (1) : 1 – 5.
- Hall, C.B. and Douglas, R.G. (1981):* Mode of transmission of respiratory syncytial virus, *J. pediatr.*, 99 : 100 – 103.
- Hall, C.B.; Douglas, R.G. and Geiman, J.M. (1975):* Quantitative shedding patterns of respiratory syncytial virus infectons. *N. Engl. J. med.*, 293 : 1343 – 1346.
- Hall, C.B.; Douglas, R.G. and Geiman, J.M. (1975 b):* Nosocomial RSV infections. *N. Engl. J. Med.*, 293 (26) : 1343 – 1346.
- Hall, C.B.; Douglas, R.G. and Geiman, J.M. (1976):* Respiratory syncytial virus infections in infants. Quantitatrian and duration of shedding. *J. pediatr.* 89 : 11-15.
- Hall, C.B.; Hallow, O.F. and Speers, D.M. (1977):* Patterns of hypoxemia in infants with RSV bronchiolitis and pneumonia. *Pediatr. Res.*, 11 : 572 - 577.
- Hall, C.B.; McBride, J.T.; Gala, C.L.; Hildreth, S.W. and Schnabel, K.C. (1985):* Ribavirin treatment of respiratory syncytial viral infection in infants with underlying cardiopulmonary disease. *JAMA*; 254 : 3047 – 3051.
- Hall, C.B.; Walsh, E.E. and Hruska, J.F. (1983):* Ribavirin treatment of experimental RSV infection. *JAMA*, 249 (19) : 2666 – 2670.
- Hall, C.B.; Walsh, E.E.; Schnabel, K.C. et al. (1990):* Occurance of groups A and B respiratory syncytial virus over 15 years associated epidemiologic and clinical characteristics in hospitalized and ambulatory children. *J. Infect. Dis.*, 162 : 1283 – 1290.

- Hambling, M.H. (1964):** Survival of the respiratory syncytial virus during storage under various conditions. *Br. J. Exp. Pathol.*, 435 : 647 – 655.
- Hamilton, A. and Piccart, M. (2000):** The contribution of molecular markers to the prediction of response in the treatment of breast cancer : a review of the literature on HER-2, p53 and BCL-2. *Ann Oncol.*, 11 : 647-663.
- Hannon, G.J. and Beach, D. (1994):** p15 (INK4B) is a potential effector of TGF-beta induced cell cycle arrest. *Nature*, 37 : 257 – 261.
- Harrington, E.A.; Bennett, M.R.; Franidi, A. and Evar, I. (1994):** C-Myc-induced apoptosis in fibroblasts is inhibited by specific cytokines. *Embo, J.*, 13 : 3286 – 3295.
- Harrison, A.M.; Bonville, C.A.; Rosenberg, H.F. and Domachowske, J.B. (1999):** Respiratory syncytial virus – induced chemokine expression in the lower airways : eosinophil recruitment and degranulation. *Am. Jour. Resp. Crit. Car. Med.*, 159 (6) : 1918 – 1924.
- Hasegawa, J.; Kamada, IS.; Kamiike, W.; Simizu, S.; Imazu, T.; Matsuda, H. and Tsujimoto, Y. (1996):** Involvement of CPP32/Yama (-like) proteases in Fas-mediated apoptosis. *Cancer Res.*, 56 : 1713 – 1718.
- Hasui, M.; Matsuda, M.; Okutani, K. and Shigeta, S. (1995):** In vitro activities of sulfated polysaccharides from a marine microalga (*Cochlodinium polykrikoides*) against human immunodeficiency virus and other enveloped viruses. *Int. J. Biol. Macromol.*, 17 : 293 – 297.
- Heminway, B.R.; Yang, Y.; Tanala, Y. (1993):** Role of the human respiratory syncytial virus small hydrophobic protein in membrane fusion. *Abstarcts of the IV International Congress of virology*, 167 : 17 – 22.

- Heminway, B.R.; Yu, Y.; Tanaka, Y.; Perrine, K.G.; Gustafson, E.; Bernstetin, J.M. and Galinski, M.S. (1994):** Analysis of respiratory syncytial virus F, G, and SH proteins in cell fusion. *Virology*, 200 : 801 – 805.
- Hemming, V.G.; Prince, G.A.; Groothuis, J.R. and Siber, G.R. (1995):** Hyperimmune globulins in prevention and treatment of respiratory syncytial virus infections. *Clin. Microbiol. Rev.*, 8 : 22 – 33.
- Hendrickse, M.T; Rigney, E.; Giaffer, M.M. (1999):** Low-dose methotrexate is ineffective in primary biliary cirrhosis : long – term results of a placebo-controlled trial (see comments). *Gastroenterology*, 117 : 400 – 407.
- Hendry, R.M and McIntosh, K. (1982):** Enzyme-linked immunosorbent assay for detection of respiratory syncytial virus infection : development and description. *J.Clin. Microbiol.*, 16 : 324 – 328.
- Hetherington, S.V.; Watson, A.S.; Scroggs, R.A. and Portner, A. (1994):** Human parainfluenza virus type 1 evolution combines cocirculation of strains and development of geographical, restricted lineages. *J. Infect. Dis.*, 169 : 248 – 252.
- Holberg, G.J.; Wright, A.L.; Martinez, F.D.; Ray, C.G.; Taussing, L.M. and Lebcowitz, M.D. (1991):** Risk factors for respiratory syncytial virus associated lower respiratory illness in the first year of life. *Am. J. Epidemiol*, 133 : 1135 – 1151.
- Holmgren, L.; O'Reilly, M.S.; Folkman, J. (1995):** Dormancy of micrometastases : balanced proliferation and apoptosis in the presence of angiogenesis suppression. *Nat. Med.*, 1 : 149 – 153.

- Holmgren, L.; O'Reilly, M.S.; Folkman, J. (1995):** Dormancy of micrometastases : balanced proliferation and apoptosis in the presence of angiogenesis suppression. *Nat. Med.*, 1 : 149 – 153.
- Horikami, S.M.; Curran, J.; Kolarofsky, D. and Moyer, S.A. (1992):** Complexes of sendavirus NPP and PL proteins are required for defective interfering particle genome replication in vitro. *J. Virol*, 66 : 4901 –4908.
- Hornsleth, A.; Grauballe, P. Chr., Friis, B.; Genner, J. and Pederson, I.R. (1981a):** Detection of RSV in nasopharyngeal secretions by inhibition of ELISA. *J. Clin. Microbiol.*, 14 : 510 – 515.
- Hornsleth, A.; Grauballe, C.P.; Genner, J. and Pedersen, R.J. (1981 b):** Production of antiserum to respiratory syncytial virus polypptides : application in enzyme linked immunosorbent assay. *J. Clin. Microbiol.*, 14 : 501 –508.
- Hornsleth, A.; Friis, B.; Grauballe, P.C. and Krasilnikof, P.A. (1984):** Detection by ELISA of IgA and IgM antibodies in secretion and IgM antibodies in serum in primary lower respiratory syncytial virus infection. *J. Med. Virol.*, 13 : 149 – 161.
- Hornsleth, A.; Klug, B.; Nir, M.; Johansen, J.; Hansen, K.S.; Christensen, L.S. and Larsen, L.B. (1998):** Severity of the respiratory syncytial virus disease related to type and genotype of virus and to cytokine values in nasopharyngeal secretions. *Pediatr. J. Infect. Dis.*, 17 (12) : 1114 – 1121.
- Howie, S.E.M.; harrison, D.J. and Wyllie, A.H. (1994):** Lymphocyte apoptosis. Mechanisms and implications in disease. *Immunology, Review*, 142 : 141 – 156.
- Hsu, H.; Huang, J.; Shu, H.B. (1996):** TNF-dependent recruitment of the protein kinase RIP to the TNF receptor-1 signaling complex. *Immunity*, 4 : 387 – 396.

- Huang, Y.T.; Collins, P.L. and Wertz, G.W. (1985):** Characteriation of the ten proteins of human respiratory syncytial virus : identification of a fourth envelope – associated protein. *Virus Res.*, 2 : 157 – 173.
- Huey-Pin, T.; Pin-Hwa, K.; Ching-Chuan, L. and Jen-Ren, W. (2001):** Respiratory viral infections among pediatric in patients and outpatients in Taiwan from 1997 to 1999. *J. Clin. Microbiol.*, 39 (1) : 111 – 118.
- Ikeda, S.; Neyts, J.; Verma, S.; Wickramasinghe, A.; Mohan, P. and DeClercq, E. (1994):** In vitro and in vivo inhibition of ortho- and paramyxovirus infections by a new class of sulfonic acid polymers interacting with virus – cell binding and/or fusion. *Antimicrob. Agents. Chemother.*, 38 : 256 – 259.
- Itoh, M.; Hotta, H. and Homma, M. (1998):** Increased induction of apoptosis by a Sendai virus mutant is associated with attenuation of mouse pathogenicity. *J. Virol.*, 72 : 2927 – 2934.
- Itoh, N.; Tsujimoto, Y.; and Nagata, S. (1993):** Effect of Bcl-2 on Fas antigen mediated cell death. *J. Immunol.*, 151 : 621 – 627.
- Jellinger, K.A. and Bancher, C. (1993):** Neuropathology of Alzheimer's disease : a critical update. *J. Neural. Transm.* 54 (suppl):77– 95.
- Jenkinson, E.T.; Kingston, R.; Smith, C.A.; Williams, G.T. and Own, J.J. (1989):** Antigen induced apoptosis in developing T cell : a mechanism for negative selection of the T-cell receptor repertoire. *Eur. J. Immunol.*, 19 : 2175 – 2177.
- Johanna, S. and Jonas, B. (2001):** How apoptosis is regulated, and what goes wrong in cancer. *BMJ*, 322 (23) : 1538 – 1539 .
- John, C. (1999):** Apoptosis : Mechanisms of Life and death in the immune system. *J. Allergy, Clin. Immunol.* 103 (4) : 548 – 554.

- John, J.L.; Cherian, T.; Steinholl, M.G.; Simoes, E.A.F and John, M. (1991):** Etiology of acute respiratory infection in children in tropical southern India. *Rev. Infect. Dis*, 1 (supl. (6) : S 463 – 369).
- Johnson, P.R.; Olmsted, R.A.; Prince, G.A. (1987):** Antigenic relatedness between glycoproteins of human respiratory syncytial virus subgroups A and B : evaluation of the contributions of F and G glycoproteins to immunity. *J. Virol.*, 61 : 3163 - 3166.
- Johnson, R.A.; Prince, G.A.; Suffin, S.C. et al. (1982):** Respiratory syncytial virus infection in cyclophosphamide – treated cotton rats. *Infect Immun.*, 37 : 369 – 373.
- Johnson, T.R.; Johnson, J.E.; Roberts, S.R.; Wertz, G.W.; Parker, R.A. and Graham, B.S. (1998):** Priming with secreted glycoprotein G of respiratory syncytial virus (RSV) augments IL-5 production and tissue eosinophilia after RSV challenge. *J. Virol.*, 72 (4) : 2871 – 2880.
- Jordan, W.S. Jr. (1962):** Growth characteristics of respiratory syncytial virus. *J. Immunol.*, 88 : 581 – 590.
- Joseph, B. D.; Cynthia, A.; Bonville, Anthony J. Morteilliti and Carol, B. Colella (2001):** Respiratory syncytial virus infection induces expression of the Anti-Apoptosis Gene IEX-IL in human Respiratory epithelial cells. *J. Infect. Dis.*, 181 : 824 – 830.
- Joseph, B.D. and Helene, F.R. (1999):** Respiratory syncytial virus infection : immune response, immunopathogenesis and treatment. *Clin. Microbiol. Rev.* 12 (2) : 298 – 309.
- Kalams, S.A. and Walker, B.D. (1998):** The critical need for CD4 help in maintaining effective cytotoxic T lymphocyte responses. *J. Exp. Med.*, 188 : 2199 – 2204.

- Karron, R.A.; Wright, P.F.; Crowe, J.E.; Clements-Mann, M.S. Jr.; Thompson, J.; Makhene, M.; Casey, R. and Murphy, B.R. (1997):** Evaluation of two live, cold passaged, temperature – sensitive respiratory syncytial virus (RSV) vaccines in chimpanzees, and in human adults, infants and children. *J. Infect. Dis.*, 176 : 1428 – 1436.
- Kattan, M.; Keens, T.G.; LaPierre, J.C. (1977):** Pulmonary function abnormalities in symptom –free children after bronchiolitis. *Pediatrics*, 59 : 683 – 688.
- Kaul, T.N.; Welliver, R.C.; Wong, D.T.; Udawadia, R.A.; Riddlesberger, K. and Orga, P.L. (1981):** Secretory antibody response to respiratory syncytial virus infection. *Am. J. Dis. Child.*, 135 : 1013 – 1016.
- Kawamura (1977):** In *Fluorescent Antibody Techniques and their applications*, 2nd. Ed. University of Tokyo Press.
- Kehry, M.R. (1996):** CD40 – mediated signaling in B cells balancing cell survival growth and death. *J. Immunol.*, 156 : 2345 – 2348.
- Kerr, J.P.; Wyllie, A.H. and Currie, A.R. (1972):** Apoptosis : a basic biological phenomenon with wide – ranging implications in tissue kinetics. *Br. J. Cancer*, 26 : 239 – 257.
- Kim, H.W.; Canchola, J.G.; Brandt, C.D., et al. (1969):** Respiratory syncytial virus disease in infants despite prior administration of antigenic inactivated vaccine. *Am. J. Epidemiol.*, 89 : 422 – 434.
- Kisch, A.L.; Johnson, K.M. and Chanock, R.M. (1962):** Immunofluorescence with respiratory syncytial virus. *Virology*, 16 : 177 – 189.

- Krilov, L.R.; Hendry, R.M.; Godfrey, E. and McIntosh, K. (1987):** Respiratory virus infection of peripheral blood monocytes: correlation with aging of cells and interferon production in Vitro. *J. Gen. Virol.*, 68 : 1749 – 1753.
- Krilov, L.R.; Mandel, F.S. and Barone, S.R. (1997):** Follow-up of children with respiratory syncytial virus bronchiolitis in 1986 and 1987 : Potential effect of ribavirin on long term pulmonary function. *Pediatr. J. Infect. Dis.*, 16 : 273 – 276.
- Krivitskaia, V.Z. and Aleksandrova, M.A. (1998):** Anti-RS viral IgE in respiratory syncytial viral infection in adult patients with a complicated course of bronchitis. *Zh. Microbiol. Epidemiol. Immunobiol.*, (4) : 56 – 61.
- Kuids, K.; Hsydar, T.F. and Kuan, C.Y. (1998):** Reduced apoptosis and cytochrome C– mediated caspase activation in mice lacking caspase g. *cell* 94 : 325 – 337.
- Kuids, K.; Zheng, T.S. and Na, S. (1996):** Decreased apoptosis in the brain and premature lethality in CPP32 deficient mice. *Nature*. 384 : 368 – 372.
- Kulkarni, A.B.; Connors, M.; Firestone, C.Y.; Morse, H.C. and Murphy, B.R. (1993):** The cytolytic activity of pulmonary CD8+ lymphocytes, induced by infection with a vaccinia virus recombinant expressing the M2 protein of human respiratory syncytial virus (RSV) correlates with resistance to RSV infection in mice. *J. Virol.*, 67 : 1044 – 1049.
- Kumar, M.; Behera, A.K.; Matsuse, H.; Lockey, R.F. and Mohapatra, S.S. (1999):** Intranasal INF-gamma gene transfer protects BALB/C mice against respiratory syncytial virus infection. *Vaccine*, 18 (5) : 558 – 567.
- Kuo, T.H.; Kim, H.R.; Zhu, L. et al. (1998):** Modulation of endoplasmic reticulum calcium pump by Bcl-2. *Oncogene*, 17 : 1903 – 1910.

- Lambert, D.M.; Barney, S.; Lambert, A.L.; Guthrie, K.; Medinas, R.; Bucy, T.; Erickson, J.; Merutka, G. and Petteway, S.R. (1996):** Peptides from conserved regions of paramyxovirus fusion (F) proteins are potent inhibitors of viral fusion. *Proc. Natl. Acad. Sci. USA.*, 93 : 2186 – 2191.
- Lambert, D.M. and Pons, M.W. (1983):** Respiratory syncytial virus glycoproteins. *Virology*, 130 : 204 – 214.
- Landry, M.L. and Ferguson, D. (2000) :** SimulFluor respiratory screen for rapid detection of multiple respiratory viruses in clinical specimens by immunofluorescence staining. *J. Clin. Microbiol.*, 378 (2) : 708- 711.
- Lauer, B.A.; Master, H.A.; Wren, C.G. and Levin, M.J. (1985):** Rapid detection of respiratory syncytial virus in nasopharyngeal secretions by enzyme- linked immunosorbent assay. *J. Clin. Microbiol.*, 22 : 782 – 785.
- Lavia, W.V.; Grant, S.W.; Stutman and Marks, M.I. (1993):** Clinical profile of pediatric patients hospitalized with respiratory syncytial virus infection. *Clin. Pediatr. (Phila)*, 32 (8) : 450 – 4.
- Lehmkuhl, H. D.; Smith, M.H. and Cutlip, R.C. (1980):** Morphogenesis and structure of carpine respiratory syncytial virus. *Arch. Virol.*, 65 : 269 – 276.
- Lennett, E.H. and Schmidt, N.J. (1979):** General principles underlying lab. Diagnosis of viral and rickettsial infection. In : *Diagnostic procedures for viral, rickettsial & chlamydial infections* 5th ed. American Public Health Association, 1-177.
- Leonard, R.; Kirlov, Thomas, W.; McCloskey, S.; Hella, Harkness, Lucy Pontrelli and Savita Pahwa (2000):** Alteration in Apoptosis of Cord and Adult peripheral blood Mononuclear cells Induced by In vitro infection with respiratory syncytial virus. *J. Infect. Dis.*, 181 : 349 – 53.

- Magnusson, C. and Vaux, D.L. (1999):** Signalling by CD95 and TNF receptors not only life and death. *Immunol. Cell. Biol.*, 77:41–46.
- Maitreyi, R.S.; Boor, S.; Kabra, S.K.; Gosb, M.; Seth, P.; Dar, L. and Prasad, A.K. (2000).** Rapid detection of respiratory viruses by centrifugation enhanced cultures from children with acute lower respiratory tract infections. *J. Clin. Virol.*, 16 : 41 – 47.
- Marquez, A. and Hsuing, G.D. (1967):** Influence of glutamine on multiplication and cytopathic effect of respiratory syncytial virus, *Proc. Soc. Exp. Biol. Med.*, 124 : 95 – 99.
- Matsuyama, M.; Wiadrowski, M.N. and Metcalf, D. (1966):** Autoradiographic analysis of lymphopoiesis and lymphocyte migration in mice bearing multiple thymus grafts. *J. Exp. Med.*, 123 : 559 – 576.
- McFadden, G. (1998):** Even viruses can learn to cope with stress. *Science*, 279 : 40 –41.
- McIntosh, K.; Masters, H.B.; Orr, I.; Chao, K. and Barkin, R.M. (1978):** The immunologic response to infection with respiratory syncytial virus in infants. *J. Infect. Dis.*, 138 : 24 – 32.
- McIntosh, K.; McQuillin, J. and Gardner, P.S. (1979):** Cell free and cell-bound antibody in nasal secretions from infants with respiratory syncytial virus infection. *Infect. Immun.*, 23 : 276–281.
- McIntosh, K.; Hendry, R.M.; Fahnestock, M.L. and Pierik, L.T. (1982):** Enzyme – linked immunosorbent assay for detection of respiratory syncytial virus infection : application of clinical samples. *J. Clin. Microbiol.*, 16 : 329 – 333.

- Meegan, J.M.; Evans, B. and Horstmann, D.M. (1982):** Comparison of the later agglutination test with the haemagglutination inhibition test, enzyme linked immunosorbant assay and neutralization test for detection of antibodies to rubella virus. *J. Clin. Microbiol.*, 16 : 644-651.
- Meert, K.L.; Sarnaik, A.P.; Gelmini, M.J. and Lieh-Lai, M.W. (1994):** Aerosolized ribavirin in mechanically ventilated children with respiratory syncytial virus lower respiratory tract disease : a prospective, double blind, randomized trial. *Crit. Care Med.*, 22 : 566 – 572.
- Memon, S.A.; Moreno, M.B.; Petrak, D. and Zacharchuk, C.M. (1995):** Bcl-2 blocks glucocorticoid-but not Fas- or activation- induced apoptosis in a T cell hybridoma. *J. Immunol.*, 155 : 4644 – 4652.
- Michael, P. and Christiaan, L. (1999):** Mitochondrial control of apoptosis in aging and exercise. *Ger. Card.*, 1-22.
- Minnich, L.L. and Ray, C.G. (1982):** Comparison of direct and indirect immunofluorescence staining of clinical specimens for detection of respiratory syncytial virus antigen. *J. Clin. Microbiol.*, 15 : 969 – 970.
- Miyajima, A.; Ito, Y. and Kinoshita, T. (1999):** Cytokine signaling for proliferation, survival and death in hematopoietic cells. *J. Int. Hematol.*, 69 : 137- 146.
- Miyashita, T. and Reed, J.C. (1995):** Tumor suppressor P53 is a direct transcriptional activator of the human bax gene, *Cell*, 80 : 293 – 299.
- Moler, F.W.; Khan, A.S.; Meliones, J.N.; Custer, J.R.; Palmisan, O.J. and Shope, T.C. (1992):** Respiratory syncytial virus morbidity and mortality estimates in congenital heart disease patients a recent experience. *Crit. Care Med.*, 26 : 1406 – 1413.

- Monica, C. (1984):** Medical laboratory manual for tropical countries volume II: Microbiol. Great Britain University Press, Cambridge : 436 - 437.
- Monica, C. (1993):** Laboratory diagnosis of viral infections. In : Medical laboratory Manual for Tropical Countries. Vol. II, Microbiol. Great Britain University Press, Cambridge : 341 – 343.
- Morales, F.; Calder, M.A.; Inglis, J.M.; Murdoch, P.S. and Williamson, J. (1983):** A study of respiratory infections in the elderly to assess the role of respiratory syncytial virus. J. Infect. Dis., 7 : 236 – 247.
- Morgenbesser, S.D.; Williams, B.O.; Jacks, T. and Depinho, R.A. (1994):** p53 dependent apoptosis produced by rb deficiency in the developing Mouse lens. Nature, 371 : 372.
- Morris, J.A.; Blount, R.E. and Savage, R.E. (1956):** Recovery of cytopathogenic agent from chimpanzees with coryza. Proc. Soc. Exp. Biol. Med., 92 : 544 – 549.
- Muelenaar, P.M.; Henderson, F.W.; Heming, V.G. et al. (1991):** Group specific serum antibody responses in children with primary and recurrent respiratory syncytial virus infections. J. Infect. Dis., 164 : 15 – 21.
- Mymryk, J.S.; Shire, K. and Bayley, S.T. (1994):** Induction of Apoptosis by Adenovirus Type 5 E1A in Rat Cells Require a Proliferation Block. Oncogene, 9: 1187 – 1193.
- Nagata, S. (1997):** Apoptosis by death factor. Cell 88 : 355 – 365.
- Nagata, S. (1998):** Human autoimmune lymphoproliferative syndrome, a defect in the apoptosis – inducing fas receptor : a lesson from the mouse model. J. Hum. Genet. 43 : 2 – 8.

- Nakano, H.; Kurihara, K.; Okamoto, M. et al. (1997):** Heat- induced apoptosis and p53 in cultured mammalian cells. *Int. J. Radiat. Biol.*, 71 : 519 – 529.
- Nandaplan, N.; Taylor, C.; Scott, R. and Toms, G.L. (1987):** Mammary immunity in mothers of infants with respiratory syncytial virus infection. *J. Med. Virol.*, 30-40.
- Naot, Y. and Remington, J. S. (1980):** An enzyme – linked immunosorbent assay for detection of IgM antibodies to *Toxoplasma gondii*. Use for diagnosis of acute acquired toxoplasmosis. *J. Infect. Dis.*, 142 : 757 – 766.
- Norimura, T.; Nomoto, S.; Katsuki, M.; Gondo, Y. and Kondo, S. (1996):** P53-dependent apoptosis suppresses radiation – induced teratogenesis. *Nat. Med.*, 2 : 577 – 580.
- Norrby, E.; Marusyk, H. and Orvell, C. (1970):** Ultrastructural studies of the multiplication of RS (respiratory syncytial) virus. *Acta Pathol. Microbiol. Scand [B]*, 78 : 268 - 270.
- O'Brien, V. (1998):** Viruses and apoptosis. *J. Gen. Virol*, 79 : 1833 – 1845.
- O'Connell, J.; Bennett, M.W.; O'Sullivan, G.C.; Collins, J.K.; Shanahan, F. (1999):** Fas counter – attack- the best form of tumor defense ? *Nat. Med.*, 5 : 267-268.
- O'donnell, D.R.; Milligan, L. and Stark, M. (1999):** Induction of CD95 (Fas) and Apoptosis in Respiratory Epithelial cell cultures following respiratory syncytial virus infection. *Virology*, 257 : 198 – 207.
- Oberhammer, F.; Wilson, J.W. and Dive, C. (1993):** Apoptotic death in epithelial cell : cleavage of DNA to 300 and/or 50 kb fragments prior to or in the absence of internucleosomal fragmentation. *Embo., J.* 12 : 3679 – 3684.

- Offit, P.A.; Cunningham, S.L. and Dudzik, K.I. (1991):** memory and distribution of virus – specific cytotoxic T lymphocytes (CTLs) and CTL precursors after rotavirus infection. *J. Virol.*, 65 : 1318 – 1324.
- Ogra, P.L. (1980):** Ontogeny of the local immune response. *Pediatrics*, 64 : 765-769.
- Ogra, P.L.; Ogra, S.S. and Coppola, P.R. (1975):** Secretory component and sudden infant –death syndrome. *Lancet.*, 2 : 387 – 390.
- Ogra, P.L. and Welliver, R.C. (1981):** The RSV, a review : *Compr. Ther.*, 7 (6) : 34 – 40.
- Olmsted, R.A. and Collins, P.L. (1989):** The 1A protein of respiratory syncytial virus is an integral membrane protein present as multiple, structurally distinct species. *J. Virol.*, 63 : 2019 – 2029.
- Oltvai, Z.; Milliman, C.L. and Korsmeyer, S.J. (1993):** Bcl-2 heterodimerizes in vivo with a conserved homology, Bax, that accelerates programmed cell death. *Cell*, 74 : 609 – 619.
- Oren, M. (1992):** The Involvement of oncogenes and tumor suppressor genes in the control of apoptosis. *Cancer and Metastasis Reviews*, 11 : 141 – 148.
- Otter, I.; Conus, S.; Ravn, U. et al. (1998):** The binding properties and biological activities of Bcl-2 and Bax in cells exposed to apoptotic stimuli. *J. Biol. Chem.* 273 : 6110 – 6120.
- Pan, H.C. and Griep, A.E. (1994):** Altered cell cycle regulation in the lens of HPV-16 E6 or E7 transgenic mice – implication for tumor – suppressor gene function in development. *Gene and development*, 8 : 1285 – 1299.

- Pans, M.W.; Lambert, A.L.; Lambert, M.D. and Rackovansky, M. (1983):** Improvement of respiratory syncytial virus replication in actively growing Hep2 cells. *J. Viral. Meth.*, 7 : 217 – 221.
- Panuska, J.R.; Hertz, M.I.; Taraf, H.; Villani, A. and Cirino, N.M. (1992):** Respiratory syncytial virus infection of alveolar macrophages in adult transplant patients. *Am. Rev. Respir. Dis.*, 145 : 934 – 939.
- Patston, P.A.; Gettins, P.; Beechem, J. and Schapira, M. (1991):** mechanism of serp. Action : evidence that C1 inhibitor functions as a suicids substrate. *Biochemistry*, 30 : 8876 – 8882.
- Peret, T.C.; Hall, C.B.; Schnabel, K.C.; Golub, J.A. and Anderson, L.J. (1998):** Circulation patterns of genetically distinct group A and B strains of human respiratory syncytial virus in a community. *J. Gen. Virol.*, 79 (9) : 2221 – 2229.
- Peter, L.C.; Kenneth, M. and Robert, M.C. (1996):** Respiratory syncytial virus. In : fields. *Virology*, 3rd ed., chap, 44 : 1313 – 1351.
- Pohl, C.; Green, M. and Wald, E.R. (1992) :** Respiratory syncytial virus infections in pediatric liver transplant recipients. *J. Infec. Dis.*, 92 (165) : 166 – 169.
- Potten, C.S. (1996):** What is an apoptotic index measuring? A commentary. *Br. J. Cancer*, 74 : 1743 – 1748.
- Potten, C.S. and Booth, C. (1997):** The role of radiation – induced and spontaneous apoptosis in the homeostasis of the gastrointestinal epithelium : a brief review. *Comp. Biochem. Physiol. B. biochem. Mol. Biol.*, 118 : 4763-4768.
- Prince, G.A.; Hemming, V.G.; Horswood, R.L. and Chanock, R.M. (1985):** Immunoprophylaxis and immunotherapy of respiratory syncytial virus infection in the cotton rat. *Virus Res.*, 3 : 93 – 206.

- Pringle, C.R. (1991):** The order Mononegavirales. Arch. Virol., 117 : 137 – 140.
- Pringle, C.R. and Health, R.B. (1990):** Paramyxoviridae. In : Topley and Wilson's principles of Bacteriology, Virology and immunology. Edited by Edward Arnold, 8th (ed) Butler & Tanner, Frome and London, Vol. 4, 274 – 289.
- Raza, M.W.; Essery, S.; Weir, D.M.; Ogilvie, M.M.; Elton, R.A. and Blackwell, C.C. (1999):** Infection with respiratory syncytial virus and water – soluble components of cigarette smoke alter production of tumor necrosis factor alpha and nitric oxide by human blood monocytes. FEMS, Immunol. Med. Microbiol., 24 (4) : 387 – 394.
- Reed, J.C. (1998):** Bcl-2 family proteins, Oncogene, 17 : 3225 – 3236.
- Ren, Y.; Silverstein, R.I.; Allen, J. and Savill, J. (1980):** CD36 gene transfer confers capacity for phagocytosis of cells undergoing apoptosis. J. Ex. Med., 181 : 1857 – 1862.
- Renehan, A.G.; Painter, J.E.; Atkin, W.S.; Potten, C.S.; Shalet, S.M.; O'Dwyer, S.T. (2001):** High-risk colorectal adenomas and serum insulin – like growth factors. Br. J. Surg., 88 : 107 – 13.
- Richman, A.V.; Pedreira, F.A. and Tauraso, N.M. (1971):** Attempts to demonstrate haemagglutination and haemadsorption by respiratory syncytial virus. Appl. Microbiol., 21 : 1099 – 1100.
- Richman, D.D.; Cleveland, H.P.; Redfield, C.D; Oxman, N.M. and Wahl, M.G. (1984):** Rapid viral diagnosis, J. Infec. Dis., 149 : 298 – 302.
- Ricki, M.B. (1995):** The dance of cell death. The scientist, 9 (3) : 1- 6.
- Rooney, J.C. and Williams, H.E. (1971):** The relationship between proved viral bronchiolitis and subsequent wheezing J. Pediatr. 79 : 744 - 747.

- Rothe, M.; Pan, M.G.; Henzel, W.J.; Ayres, T.M. and Goeddel, D.V. (1995):** The TNFR2 TRAF signaling complex contains two novel proteins related to baculoviral inhibitor of apoptosis proteins. *Cell*, 83 : 1243 – 1252.
- Routledge, E.G.; Willcocks, M.M.; Morgan, L.; Samson, A.C.R.; Scott, R. and Toms, G.L. (1987):** Expression of the respiratory syncytial virus 22K protein on the surface of infected HeLa cells. *J. Gen. Virol.*, 68 : 1217 – 1222.
- Ruoslahti, E. and Reed, J.C. (1994):** Anchorage dependence, integrins and apoptosis. *Cell*, 77 : 477 – 478.
- Ruuskanen (1995):** Respiratory syncytial virus is it preventable. *J. Hosp. Infect. Funesp*, 30 : 494 – 497.
- Saikumar, P.; Dong, Z.; Mikhailov, V.; Denton, M.; Weinberg, J. and Venkatachalam, M. (1999):** Apoptosis: Definition, Mechanisms and Relevance to Disease *Am.J. Med.*, 107 : 489– 506.
- Saikumar, P.; Dong, Z.; Patel, Y. et al. (1998):** Role of hypoxia – induced Bax translocation and cytochrome C release in reoxygenation injury. *Oncogene*, 17 : 3401 – 3415.
- Saikumar, P.; Dong, Z.; Weinberg, J.M. and Venkatachalam, M.A. (1998):** Mechanisms of cell death in hypoxia / reoxygenation Injury. *Oncogene*, 17 : 3341 – 3349.
- Sakurai, H.; Williamson, R.A.; Growe, J.E.; Beler, J.A.; Bastidas, R.B.; Chanock, R.M. and Burton, D.R. (1999):** Human antibody response to mature and immature forms of viral envelope in RSV infection : significant for subunit vaccines : *J. Virol.*, 73 (4) : 2956 – 2962.
- Sambrook, J.; Fritsh, E.F. and Manniatis eds (1989):** Molecular cloning : A laboratory manual. Cold, Spring Harbor, N.Y. Cold Spring Laboratory, 1025 – 1031.

- Savill, J.S.; Fadok, V.; Henson, P. and Haslett, C. (1993):* Phagocyte recognition of cells undergoing apoptosis. *Immunol. Today*, 14 : 131-136.
- Savill, J.S.; Wyllie, A.H. and Henson, J.E. (1989):* Phagocytosis of aged neutrophils by macrophages is mediated by a novel charge – sensitive recognition mechanism in inflammation. *J. Clin. Invest.*, 84 : 1518 – 1527.
- Schreiber, M.; Sedger, L. and McFadden, G. (1997):* Distinct domains of M-T2, the myxoma virus tumor necrosis factor (TNF) receptor homolog, mediate extracellular TNF binding and intracellular apoptosis inhibition. *J. Virol.* 71 : 2171 – 2181.
- Schwartz, L.M. and Osborne, B.A. (1993):* Programmed cell death – apoptosis and killer genes. *Immunol. Today*, 14 (12) : 582 – 589.
- Schwarze, J.; Makela, M.; Cieslewicz, G.; Dakhama, A.; Lahn, M. Ikemura, T.; Joetham, A. and Gelfand, E.W. (1999):* Transfer of the enhancing effect of respiratory syncytial virus infection on subsequent allergic airway sensitization by T lymphocytes. *J. Immunol.*, 163 (10) : 5729 – 5734.
- Sheeran, P.; Jafri, H.; Carubelli, C.; Saavedra, J.; Johnson, c.; Krisher, K.; Sanchez, P.J. and Ramilo, O. (1999):* Elevated cytokine concentrations in the nasopharyngeal and tracheal secretions of children with respiratory syncytial virus disease. *J. Pediatr. Infect. Dis.*, 18 (2) : 115 – 122.
- Shen, Y. and Shenk, T.E. (1995):* Viruses and apoptosis. *Curr. Opin. Genet. Dev.*, 5 : 105 – 111.
- Sheridan, J.P.; Marsters, S.A.; Pitti, R.M.; Gurney, A.; Skubatch, M. and Baldwin, D. (1997):* Control of TRAIL – induced apoptosis by a family of signaling and decoy receptors. *Science*, 277 : 818 – 821.

- Smith, M.C.; Greytz, C. and Huang, Y.T. (1991):** Detection of respiratory syncytial virus in nasopharyngeal secretions by shell viral technique. *J. Clin. Microbiol.*, 29 : 463 – 465.
- Spector, M.S.; Desnoyers, S.; Hoepfner, D.J. and Hengartner, M.O. (1997):** Interaction between the *C. elegans* cell – death regulators CED-9 and CED-4. *Nature*, 385 : 653 – 656.
- Srikiatkachorn, A. and Bracial, (1997):** Virus specific CD8+ T lymphocytes down regulate T helper cell type 2 cytokine secretion and pulmonary eosinophilia during experimental murine respiratory syncytial virus infection. *J. Exp. Med.*, 186 : 421 – 432.
- Stec, D.S.; Hill, M.G. and Collins, P.L. (1991):** Sequence analysis of the polymerase L gene of human respiratory syncytial virus and predicted phylogeny of nonsegmented negative-strand viruses. *Virology*, 183 : 273 – 287.
- Stout, C.; Murphy, M.D.; Lawrence, S. and Fulian, S. (1989):** Evaluation of a monoclonal antibody pool for rapid diagnosis of respiratory viral infections. *J. Clin. Microbiol.*, 27, 448 – 452.
- Strasser, A.; Harris, A.W.; Huang, D.C. et al. (1995):** Bcl-2 and Fas/APO-1 regulate distinct pathway to lymphocyte apoptosis. *Embo. J.*, 14 : 6136- 6147.
- Stratling, W.H. and Klingholz, R. (1981):** Supranucleosomal structure of chromatin : Diagnosis by calcium/ magnesium endonuclease proceeds via a discrete size class of particles with elevated stability. *Biochemistry*, 20 : 1386 – 1392.
- Sullender, W.M.; Mufson, M.A.; Anderson, L.J. and Wertz, G.W. (1991):** Genetic diversity of the attachment protein of subgroup B respiratory syncytial virus. *J. Virol.*, 65 : 5425 – 5434.

- Sulston, J.E. and Horvitz, H.R. (1977):** Post-embryonic cell lineages of the nematode, *Caenorhabditis elegans*. *Developmental Biology*, 56 : 110 – 156.
- Susin, S.A.; Lorenzo, H.K.; Zamzami, N.; Marzo, I.; Brenner, C.; Larochette, N.; Prevost, M.C.; Alzari, P.M. and Kroemer, G. (1999):** Mitochondrial release of caspase-2 and -9 during the apoptotic process. *J. Exp. Med.*, 189 : 381- 394.
- Susin, S.A.; Zamzami, N. and Kroemer, G. (1998):** Mitochondria as regulators of apoptosis : doubt no more. *Biochim Biophys. Acta.*, 1366 : 151 – 165.
- Svenson, L. and Bonsdroff, H.C. (1986):** Solid phase immune electron microscopy (PIEM) by use of protein A and its application for characterization of selected adenovirus serotypes. *J. Med. Virol.*, 10 : 243 – 53.
- Takeuchi, R.; Tsutsumi, H.; Osaki, M.; Haseyama, K.; Mizue, N. and Chiba, S. (1998):** Respiratory syncytial virus infection of human alveolar epithelial cells enhances interferon regulatory factor 1 and interleukin-1 β -converting enzyme gene expression but does not cause apoptosis. *J. Virol.*, 72 : 4498 – 502.
- Tamura, T.; Ueda, S.; Yoshida, M.; Matsuzaki, M.; Mohri, H. and Okubo, T. (1996):** Interferon- γ Induces ICE gene expression and enhances cellular susceptibility to apoptosis in the U937 leukemia cell line. *Biochem. Biophys. Res. Commun.*, 229 : 21– 26.
- Taylor, C.E.; Craft, A.W. and Kernahan, J. (1990):** Local antibody production and respiratory syncytial virus infection in children with leukemia. *J. Med. Virol.*, 30 : 277 – 281.
- Telford, W.G.; King, L.E. and Fraker, P.J. (1991):** Evaluation of glucocorticoid-induced DNA fragmentation in mouse thymocytes by flow cytometry. *Cell. Prolif.*, 24 : 447 – 459.

- Tewari, M.; Quan, L.T.; O'Rourke, K.; Desnoyers, S.; Zeng, Z.; Beidler, D.R.; Poirier, G.G.; Salvesen, G.S. and Dixit, V.M. (1995):* Yama/CPP32, a mammalian homolog of CED-3, is a CrmA-inhibitable protease that cleaves the death substrate poly(ADP-ribose) polymerase. *Cell*, 81 : 801 – 809.
- Thomas, K.W.; Hunninghak, G.W. and Alert, M.E. (2002):* Respiratory syncytial virus inhibits apoptosis. *J. Biol. Chem.*, 277 (1) : 492 – 501.
- Thomas, L.H.; Friedland, J.S.; Sharland, M. and Becker (1998):* Respiratory syncytial virus – induced RANTES production from human bronchial epithelial cells is dependent on nuclear factor – κ B nuclear binding and is inhibited by Adenovirus – mediated expression of inhibitor of κ B α . *J. of Immunol.*, 161 : 1007 – 1016.
- Thomas, L.H.; Stott, E.J.; Collins, A.P. and Jebbett, J. (1984):* Experimental pneumonia in gnotobiotic calves produced by respiratory syncytial virus. *Br. J. Exp. Pathol.* 65 : 19 – 28.
- Thome, M.; Schneider, P.; Hofmann, K. (1997):* Viral FLICE-inhibitory proteins (FLIPs) prevent apoptosis induced by death receptors. *Nature*, 386 : 517 – 21.
- Thornberry, N.A. and Lazebnik, Y. (1998):* Caspase enemies within. *Science*, 281 : 1312 – 1316.
- Thornberry, N.A.; Rano, T.A.; Peterson, E.P. (1997):* A combinatorial approach defines specificities of members of the caspase family and granzyme B. Functional relationships established for key mediators of apoptosis. *J. Biol. Chem.*, 272 : 17907 – 17911.
- Tolosa, E.; King, L.B. and Ashwell, J.D. (1998):* Thymocyte glucocorticoid resistance alters positive selection and inhibits autoimmunity and lymphoproliferative disease in MRL-1pr/1pr mice. *Immunity*, 8 : 67 – 76.

- Toms, G.L. (1995):** Respiratory syncytial virus – how soon will we have a vaccine? Archives of Disease In Childhood, 72 : 1-3.
- Torrence, P.F.; Xiao, W.; Li, G.; Cramer, H.; Player, M.R. and Silverman, R.H. (1997):** Recruiting the 2-5A system for antisense therapeutics. Antisense Nucleic Acid Drug Dev., 7 : 203 – 206.
- Treuhaf, M.W.; Soukup, J.M. and Sullivan, B.J. (1985):** Practical recommendations for the detection of pediatric respiratory syncytial virus infections. J. Clin. Microbiol, 22 : 270 – 273.
- Trepanier, P.; Payment, P. and Trudel, M. (1980):** A simple and rapid microassay for the titration of human respiratory syncytial virus. J. Virol. Meth, 1: 343 – 347.
- Tripp, R.A.; Moore, D.; Winter, J. and Anderson, L.J. (2000):** Respiratory syncytial virus infection G and/or SH protein expression contribute to substance P, which mediates inflammation and enhanced pulmonary disease in BALB/V mice. J. Virol., 74 (4) : 1614 – 1622.
- Tristram, D.A.; Welliver, R.C.; Hogerman, D.A.; Hildreth, S.W. and Paradiso, P. (1994):** Second –year surveillance of recipients of a respiratory syncytial virus (RSV) F protein subunit vaccine, PFP-1: evaluation of antibody persistence and possible disease enhancement. Vaccine, 12 : 551 – 556.
- Tristram, D.A.; Welliver, R.C.; Hicks, Jr., W.L.; and hard, R. (1997):** Ciliated human respiratory epithelium : a new model for respiratory syncytial virus (RSV) infection. Pediatr. Res., 41 : 131 A-135A.
- Tsokos, G.C. and Liossis, S.N. (1999):** Immune cell signaling defects in lupus : activation, anergy and death. Immunol. Today, 20 : 119 – 124.

- Tushar, P. (2000):** Apoptosis in hepatic pathophysiology. Clinics in liver disease 4 (2) : 295 – 315.
- Tyeryar, F.J. (1983):** Report of a workshop on respiratory syncytial virus and parainfluenza viruses. J. Infect. Dis., 148 : 588 – 598.
- Vainionpaa, R.; Meurman, O. and Sarkkinen, H. (1985):** Antibody response to respiratory syncytial virus structural proteins in children with acute respiratory syncytial virus infection. J. Virol., 53 : 976 – 979.
- Valdivia, A.; Gonzalez, G.; Chacon, D.; Savon, C.; Otero, A.; Valdes, O.; Cancio, R.; Oropesa, S.; Melero, J.A.; Garcia – Barreno, B. and Goyenechea, A. (1999):** Antigenic and genetic characterization of twenty – six strains of human respiratory syncytial virus (subgroup A) isolated during three consecutive outbreaks in Havana city, Cuba. Mem – Inst- Oswaldo – Cruz, 94 (4) : 469 – 475.
- Van Dyke, R.B. (1986):** Detection of respiratory syncytial virus (RSV) in clinical samples by nucleic acid hybridization. Program and abstracts of the Twenty – sixth interscience Conference on Antimicrobial Agents and Chemotherapy, 83 - 87.
- Vaux, D.L. (1997):** CED-4-the third horseman of apoptosis. Cell, 90 : 389 – 390.
- Vaux, D.L.; Cory, S. and Adams, J.M. (1988):** Bcl-2 gene promotes haemopoietic cell survival and cooperates with c-myc to immortalize pre-B cells. Nature, 335 : 440 – 442.
- Vaux, D.L. and Strasser, A. (1996):** The molecular biology of apoptosis, Proc. Natl. Acad. Sci. USA, 93 : 2239 – 2244.
- Verheij, M.; Van Blitterwijk, W.J. and Bartelink, H. (1998):** Radiation – induced apoptosis – the ceramide – SAPK signaling pathway and clinical aspects. Acta. Oncol, 37 : 575 – 581.

- Wallace-Brodeur, R.R. and Lowe, S.W. (1999):** Clinical implications of p53 mutations. *Cell. Molec. Life, Science*, 55 : 64 – 75.
- Wallach, D.; Boldin, M.; Goncharov, T. et al. (1996):** Exploring cell death mechanisms by analyzing signaling cascades of the TNF/NGF receptor family, *Behring Inst. Mitt*, 97 : 144 – 155.
- Walsh, E.E. and Falsey, A.R. (1999):** A simple and reproducible method for collecting nasal secretions in frail elderly adults, for measurement of virus – specific IgA. *J. Infect. Dis.*, 179 (5) : 1268 – 1273.
- Walsh, E.E. and Hruska, J. (1983):** Monoclonal antibodies to respiratory syncytial virus proteins : identification of the fusion protein. *J. Virol.*, 47 : 171 – 177.
- Wang, J.H.; Redmond, H.P.; Wu, Q.D; Bouchier-Hayes, D. (1998):** Nitric oxide mediates hepatocyte injury. *Am. J. Physiol.*, 275 : G 1117 –G1126.
- Wang, S.Z.; Smith, P.K.; Lovejoy, M.; Bowden, J.J.; Alpers, J.H. and Forsyth, K.D. (1998):** The apoptosis of neutrophils is accelerated in respiratory syncytial virus (RSV) induced bronchiolitis. *Clin. Exp. Immunol.*, 114 (1) : 49 – 54.
- Wang, S. Z and Forsyth, K.D. (2000):** The interaction of neutrophils with respiratory epithelium in viral infection. *Respirology*, 5 (1) : 1 – 10.
- Waris, M.; Neurman, O.; Mufson, M.A.; ruuskanen, O. and Halonen, P. (1992):** Shedding of infectious virus and virus antigen during acute infection with respiratory syncytial virus. *J. Med. Virol*; 138 : 111-116.
- Waris, M.; Ziegler, T.; Kivivirata, P. and Ruuskanen, O. (1990):** Rapid detection of respiratory syncytial virus and influenza A virus in cell culture by immunoperoxidase staining with monoclonal antibodies. *J. Clin. Microbiol.*, 28, 159 – 162.

- Waters, J.S.; Webb, A.; Cunningham, D.; Clarke, P.A.; Raynaud, F.; Di Stefano, F. et al. (2000):** Phase I clinical and pharmacokinetic study of Bcl-2 antisense oligonucleotide therapy in patients with non-Hodgkin's lymphoma. *J. clin. Oncol.*, 18 : 1812-1823.
- Wathen, M.W.; Aeed, P.A. and Elhammer, A.P. (1991):** Characterization of oligosaccharide structures on a chimeric respiratory syncytial virus protein expressed in insect cell line Sf9. *Biochemistry*, 30 : 2863 – 2868.
- Weber, M.W.; Milligan, P.; Hilton, S.; Lahai, G.; Whittle, H.; Mulholland, E.K. and Greenwood, B.M. (1999):** Risk factors for severe respiratory syncytial virus infection leading to hospital admission in children in the western region of the Gambia. *Int. J. Epidemiol.*, 28 (1) : 157 – 162.
- Weber, M. W.; Muholland, F.K.; Greenwood, B.M. (1998):** Respiratory syncytial virus interaction in tropical and developing countries *Trop. Med. Int. Health*, 3 : 268 – 280.
- Weif, M.; Raff, M.C. and Braga, V.M. (1999):** Caspase activation in the terminal differentiation of human epidermal keratinocytes. *Curr. Biol.*, 9 : 361 – 364.
- Weiss, R.A. (1993):** How does HIV cause AIDS *Science*, 260 : 1273-1279.
- Welliver, R.C.; Kaul, T.N. and Ogra, P. L. (1980):** The appearance of cell-bound IgE in respiratory-tract epithelium after respiratory syncytial virus infection. *N. Engl. J. Med.* 303 : 1198 – 1202.
- Welliver, R.C.; Kaut, T.N.; Sun, M. and Ogra, P.L. (1984):** Defective regulation of immune responses in respiratory syncytial virus infection. *J. Immunol.*, 133 : 1925 – 1930.
- Welliver, R.C.; Sun, M.; Rinaldo, D. and Ogra, P.L. (1985):** Respiratory syncytial virus – specific IgE responses following infection : evidence for a predominantly mucosal response. *Pediatr. Res.*, 19 : 420 – 424.

- Welliver, R.C.; Wong, D.T.; Sun, M.; Middleton, Jr. E.; Vaughan, R.S. and Ogra, P.L. (1981):** The development of respiratory syncytial virus – specific IgE and the release of histamine in nasopharyngeal secretions after infection. *N. Engl. J. Med.*, 305 : 841 – 846.
- Wertz, G.W.; Stott, E.J.; Young, K.K.Y.; Anderson, K. and Ball, L.A. (1987):** Expression of the fusion protein of human respiratory syncytial virus from recombinant vaccinia virus vectors and protection of vaccinated mice. *J. Virol.*, 61 : 293 – 301.
- White, E. (1993):** Regulation of apoptosis by the transforming GE of the DNA tumor virus adenovirus. *P.S.E.B.M.*, 204 : 230.
- White, E. (1994):** P53, guardian of rb. *Nature*, 371 : 21 –22.
- Williams, M.S. and Henkart, P.A. (1994):** Apoptotic cell death induced by intracellular proteolysis. *J. Immunol.*, 153 : 4247 – 4255.
- Willis, H.M. and Horvitz, H.R. (1986):** Genetic control of programmed cell death in the nematode *C. elegans*. *Cell*, 44 : 817 – 829.
- Woo, M.; Hakem, R.; Soengas, M.S. et al. (1998):** Essential contribution of caspase 3/CPP32 to apoptosis and its associated nuclear changes. *Genes Dev.*, 12 : 806 – 819.
- Wyllie, A.H. (1980):** Glucocorticoid –induced thymocyte apoptosis is associated with endogenous endonuclease activation. *Nature*, 284 : 555 – 556.
- Wyllie, A.H. (1997):** Apoptosis : an overview. *Br. Med. Bull.*, 53 : 451 – 465.
- Wyllie, A.H.; Bellamy, C.O.; Bubb, V.J.; Clarke, A.R.; Corbet, S.; Curtis, L. (1999):** Apoptosis and carcinogenesis. *Br. J. Cancer*, 80 (suppl 1) : 34 – 37.

- Wyllie, A.H.; Kerr, J.F.R. and Currie, A.R. (1980):** Cell death the significance of apoptosis. *Int. Rev. Cytol.*, 68 : 251 – 306.
- Yamada, T. and Ohyama, H. (1988):** Radiation – Induced Interphase death of rat thymocytes is internally programmed (Apoptosis). *Int. J. Radiat. Biol.*, 53 : 65 – 75.
- Yang, J.; Liu, X.; Bhalla, K. (1997):** Prevention of apoptosis by Bcl-2 : release of cytochrome C from mitochondria blocked. *Science*, 275 : 1129 – 1132.
- Yang, X.; Chang, H.Y. and Baltimore, D. (1998):** Essential role of CED-4 oligomerization in CED-3 activation and apoptosis. *Science*, 281 : 1355 – 1357.
- Yeh, W.C.; Pompe, J.L.; McCurrach, M.B. (1998):** FADD essential for embryo development and signaling from some, but not all, inducers of apoptosis, *Science*, 279 : 1954 – 1953.
- Yuan, J. (1996):** Evolutionary conservation of a genetic pathway of programmed cell death. *J. Cell. Biochem.*, 60 : 4 – 11.
- Zambon, M. (1999):** Active and passive immunization against respiratory syncytial virus. *Rev. Med. Virol.*, 9 (4) : 227 – 236.
- Zhong, L.T.; Sarafian, T. and Kane, D.J. (1993):** Bcl-2 inhibits death of central neural cells induced by multiple agents. *Proc. Natol. Acad. Sci. USA*, 90 : 4533 – 4537.