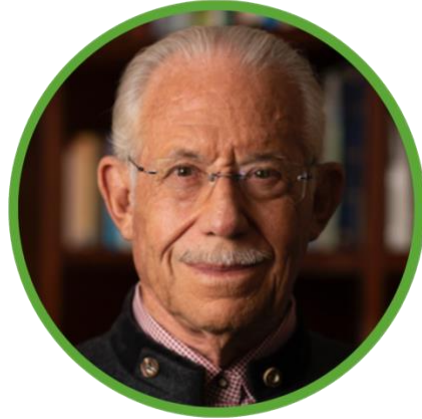


# William Alan Haseltine



<https://www.williamhaseltine.com>

## **EDUCATION:**

1966 B.A.	University of California (Physical Chemistry)
1973 Ph.D.	Harvard University (Biophysics, James D. Watson, Walter Gilbert)
1973-1975	Massachusetts Institute of Technology, Postdoctoral Fellow, Center for Cancer Research, Cambridge, (David Baltimore)

## **EMPLOYMENT:**

2005-present	Chair and President, ACCESS Health International, Inc.
2003-present	Chair, The Haseltine Foundation for Science and the Arts
2005-2010	Chairman, Haseltine Global Health, LLC
1993-2004	Chairman and CEO, Human Genome Sciences, Inc.

## **ACADEMIC AND MAJOR VISITING APPOINTMENTS:**

2008-2012	Member of the Board of Trustees, Institute of Human Virology, University of Maryland
2008-2010	Adjunct Professor, Institute of Chemical Engineering, University of Mumbai, India
2006-2008	Chairman of the Board of Trustees, University of California, Berkley, Center for Synthetic Biology
2004-2010	Adjunct Professor, The Scripps Institute of Medical Research
1989-1995	Professor, Department of Cancer Biology, Harvard School of Public Health
1988-1995	Professor, Division of Human Retrovirology, Dana-Farber Cancer Institute
1988-1995	Professor, Department of Pathology, Harvard Medical School
1988-1994	Harvard AIDS Institute: Steering Committee

1988-1993	Chief, Division of Human Retrovirology, Dana-Farber Cancer Institute
1981-1988	Chief, Laboratory of Biochemical Pharmacology, Dana-Farber Cancer Institute
1979-1988	Associate Professor, Department of Pathology, Harvard Medical School, Dana-Farber Cancer Institute
1979-1988	Associate Professor, Department of Cancer Biology, Harvard School of Public Health
1982	Visiting Professor, University of Kyoto
1980-1981	Chief, Laboratory of Molecular Studies of Cancer Cause and Treatment, Dana-Farber Cancer Institute
1978-1979	Assistant Professor, Department of Cancer Biology, Harvard School of Public Health
1975-1978	Assistant Professor, Department of Pathology, Harvard Medical School, Dana-Farber Cancer Institute
1973	Visiting Professor, University of Copenhagen, Institute of Microbiology

### **TEACHING EXPERIENCE:**

1985-1993	New Pathways Instructor for Harvard Medical School
1992	Virology 202, Molecular Biology of the AIDS Virus, Harvard Medical School and Harvard School of Public Health
1990	AIDS 1990, A Course for Scandinavia AIDS research May 7-9, 1990.
1990	Gene Regulation Conference, Harvard AIDS Institute, November 5-7, Organizer and Chair
1981-1988	Cell Biology 212, Advanced Topics in Cancer Research, Harvard Medical School and Harvard School of Public Health
1975-1981	Biology of Cancer, Harvard College
1977-1980	Biology of Cancer 219, Department of Biophysics, Harvard School of Public Health
1976-1978	Microbiology, Harvard Medical School
1969-1973	Biology and Social Issues, Harvard College

### **BUSINESS and CONSULTING EXPERIENCE:**

2019-present.	Epione Inc.: Founder
2018-present.	Grace Pharmaceuticals Pvt Ltd: Director
2016-present	X-Vax: Founder
2016-present	Demetrix: Chair and Founder
2017-2020	Gemeni Ltd.: Founder
2008-2020	Profectus Biosciences, Inc.: Director
2016-2019	Constructive Biology: Chair, President and Co-Founder
2016-2018	Atentiv: Board Member
2008-2017	Reliance Industries (RIL): Innovation Council (India)
2013- 2014	iCloud Pharmaceuticals: Director
2009-2013	Genformax: Scientific Advisor
2012-2013	Pathogenica: Scientific Advisory Board
2007-2010	The Solena Group Ltd: Director
2005-2010	Indigene Inc.: Director (India, USA)

2005-2009	Codexis Pharmaceuticals: Advisor
2005-2009	CMEA, Inc.: Consultant
2005-2009	The DNA Repair Company, Inc.: Founder, Chairman
2005-2008	Bridge Pharmaceuticals, Inc.: Advisor (China)
2004-2007	Matrix Scientific: Chairman of Advisory Board (India)
1993-2004	Human Genome Sciences, Inc.: Founder, Chairman, CEO.
1987-2001	HealthCare Investment Co: Scientific Advisory Board
1994-2000	Diversa, Inc.: Founder
1992-1998	LeukoSite, Inc.: Founder
1992-1998	ProScript, Inc. (Formerly Myogenics): Founder
1992-1993	Dendreon Corporation, Inc: (Formerly Activated Cell Therapy) Founder
1990-1993	Virus Research Institute, Inc: Founder; Scientific Advisory Board.
1986-1993	Smith Kline Squibb, Consultant. Area: Retrovirus program.
1987-1990	Sandoz, Consultant. Area: Retrovirus Program.
1988-1989	Schering Plough, Consultant. Area: Retrovirus program.
1981-1986	Cambridge BioSciences, Inc: Founder, Scientific Advisory Board.

### **AWARDS and HONORS:**

2013	Distinguished Achievement Award, Lupus Foundation of America
2010	Young Concert Artists Honor
2010	Lotus Club Award of Distinction
2010	AID for AIDS 2010 My Hero Award
2005	S.L.E. Lupus Foundation Gala Scientific Honoree, New York
2005	Genome Valley Excellence Award at BioAsia, India
2004	Honorary Doctorate of Science, University of Maryland
2002	Honorary Doctorate of Science, University of Portsmouth, UK 2003 Washington Business Forward, "The 2002 Forward Forty"
2001	Time Magazine "25 Most Influential Global Business Executives"
2001	Washington Academy of Sciences "Health Sciences Award for Scientific Achievement"
2001	KPMG/Techway Magazine Greater Washington High Tech Award, "Technology Legends Award"
2000	Boston University, F.A. Bourke Distinguished Lecture in Biotechnology 2000 Maryland High-Tech Council "Firm of the Year Award"
1996	KPMG High Tech Entrepreneur of the Year Award, Washington
1996	Ernst & Young Greater Washington Entrepreneur of the Year Award
1995	Burden Center Award for Business Leadership
1996	American Academy of Achievement Golden Plate Award
1994	Washingtonian Magazine, "Washington Business Leader of the Year"
1991-1993	Bristol Myers Squibb Unrestricted Research Award
1987	Leukemia Society of America, Inc. for distinguished service as a member of the National Board of Trustees
1986	Governor's AIDS Recognition Award
1978-1982	American Cancer Society Faculty Research Award
1975-1976	Ruth Estrin Goldberg Memorial Society Award
1973-1975	Helen Hay Whitney Fellow

1964-1966 Regent Fellow, University of California  
1965 Phi Beta Kappa-Junior year exceptional honor

**CURRENT ASSOCIATIONS AND BOARDS:**

2019-present Chumir Foundation for Ethics in Leadership, International Advisory Board  
2019-present Genomes2People Research Program Advisory Board  
2018-present Patron of the Metropolitan Opera  
2014-present Director International China Aging Industry Association  
2014-present Patron Museum of Modern Art  
2014-present Patron Metropolitan Museum  
2014-present Patron of the Whitney Museum  
2013-present Patron of the Guggenheim Museum  
2010-present Lifescience Foundation, Director  
2008-present Board of Directors of Young Concert Artists  
2008-present Board of Directors of the Youth Orchestra of the Americas  
2008-present Honorary Trustee, Brookings Institution  
2007-present Lifetime Member of the Board of Governors, New York Academy of Sciences  
  
2006-present Patron, Asia Society  
2005-present Member of the World Academy of Art and Science  
2004-present Rejuvenation Research, Associate Editor  
2003-present Member, Harold Pratt Associates, Council on Foreign Relations  
2002-present Member, Aspen Institute Italia  
2001-present Cloning & Stem Cells Journal, Member, Editorial Board  
2000-present The Journal of Stem Cell Research, Editor  
2011-2018 Member of the Advisory Council of the Max Institute of Healthcare and Management Indian School of Business  
  
2011-2018 Member of the Advisory Board of The Ragon Institute, Cambridge, Mass  
2010-2018 Advisory Board of the Metropolitan Opera  
2006-2018 Member of the Japan Society  
2009-2017 Member of the Advisory Council of the Koch Institute of Integrative Biology, MIT  
  
1995-2015 Business Executives for National Security

**PROFESSIONAL SOCIETY MEMBERSHIPS:**

American Association for the Advancement of Science (AAAS)  
American Academy of Anti-Aging Medicine  
American Association for Cancer Research (AACR)  
American Society for Biochemistry and Molecular Biology  
New York Academy of Sciences  
Philosophical Society of Washington DC  
The Academy of American Poets  
Society for Tissue Engineering and Regenerative Medicine (Founder)

**PUBLICATIONS:**

Since early 2020, William Haseltine has been published widely as an authority on the Covid-19 pandemic in CNN, Washington Post, Forbes, and Scientific American.

He is a regular contributor to Forbes, with over 300 articles published since 2018, and maintains a bi-monthly column for Inside Precision Medicine.

He has published over 16 Op-Eds for The Hill, over 20 Op-Eds for Project Syndicate, and over 20 articles for Psychology Today.

### ***Recent Notable Books***

Haseltine WA. Affordable Excellence: The Singapore Healthcare Story. Brookings Institution Press, Ridge Books Singapore. 2013.

Widen S, Haseltine WA. Aging with Dignity: Innovation and Challenge in Sweden-The Voice of Care Professionals. Nordic Academic Press. 2017.

Haseltine WA. Every Second Counts: Saving Lives with India's Emergency Response System. Brookings Institution Press, Tethys Press India. 2018.

Haseltine WA. World Class: A Story of Adversity, Transformation, and Success at NYU Langone Health. Fast Company Press. 2019.

Haseltine WA, Galiana J. Aging Well: Solutions to the Most Pressing Global Health Challenges of Aging [hard cover]. Palgrave Macmillan. 2019.

Haseltine WA, Galiana J. Aging Well: Solutions to the Most Pressing Global Health Challenges of Aging [paperback]. Greenleaf Book Group. 2020.

Haseltine WA, Dirksen A. Voices in Dementia Care: Reimagining the Culture of Care. Greenleaf Book Group. 2020

Haseltine WA. Stay Young Navigators: The Pursuit of Active Aging and Seniors Caring for Seniors. ACCESS Health Press. 2020.

Haseltine WA. A Family Guide to Covid: Questions & Answers for Parents, Grandparents, and Children. ACCESS Health Press. 2020

Haseltine WA. A Covid Back To School Guide: Questions & Answers for Parents and Students. ACCESS Health Press. 2020

Haseltine WA. My Lifelong Fight Against Disease: From Polio and AIDS to Covid-19. Mascot Books. 2020

Haseltine WA. Science As A Superpower: My Lifelong Fight Against Disease and the Heroes Who Made It Possible. ACCESS Health Press. 2021

Haseltine WA. Covid Related Post Traumatic Stress Disorder, CV-PTSD: What It Is and What To Do About It. ACCESS Health Press. 2021.

Haseltine WA. Variants! The Shape-shifting Challenge of Covid-19. 4<sup>th</sup> Edition. ACCESS Health Press. 2021.

Haseltine WA. Natural Immunity and Covid-19: What it is and How it Can Save Your Life. ACCESS Health Press. 2022.

Haseltine WA. Omicron: From Pandemic to Endemic: The Future of Covid-19. ACCESS Health Press. 2022.

Haseltine WA. A Family Guide to Long Covid: Questions & Answers. ACCESS Health Press. 2022

Haseltine, W. A. *Monoclonal Antibodies: The Once and Future Cure for Covid-19*. ACCESS Health Press. 2023

### *Original Reports*

1. Shirk J, Haseltine WA, Pimental GC. Sinton Bands Evidence for Deuterated Water on Mars. *Science*. 1965. 147: 48-49

2. Stephanson JC, Haseltine WA, Moore CB. Atmospheric Absorption of CO<sub>2</sub> Laser Radiation. *Applied Physics Letters*. 1967. 11: 164-166.

3. Haseltine WA. In Vitro Transcription of Escherichia coli Ribosomal RNA Genes. *Nature*. 1972. 235: 329-333.

4. Haseltine WA, Block R, Gilbert W, Weber K. MSI and MSII Made on the Ribosome in Idling Step of Protein Synthesis. *Nature*. 1972. 238: 381-384.

5. Haseltine WA, Block R. Synthesis of Guanosine Tetra- and Penta-phosphate Requires the Presence of Codon Specific Uncharged Transfer Ribonucleic Acid in the Acceptor Site of Ribosomes. *Proc. Natl. Acad. Sci*. 1974. 70: 1564-1568.

6. Block R, Haseltine WA. Thermolability of the Stringent Factor in rel Mutants of *Escherichia coli*. *J. Mol. Biol*. 1973. 77: 625-629.

7. Freisen JD, Fiil NP, Parker JM, Haseltine, WA. A New Relaxed Mutant of *Escherichia coli* with an altered 50s Ribosomal Subunit. *Proc. Natl. Acad. Sci*. 1974. 71: 3465-3469.

8. Block R, Haseltine WA. Purification and Properties of Stringent Factor. *J. Biol. Chem.* 1974. 250: 1212-1217.
9. Panet A, Haseltine WA, Baltimore D, Peters G, Harada F, Dahlberg S. Specific Binding of Tryptophan Transfer RNA to Avian Myeloblastosis Virus Reverse Transcriptase. *Proc. Natl. Acad. Sci.* 1975. 72: 2525-2539.
10. Haseltine WA, Baltimore D. Size of Murine RNA Tumor Virus-specific Nuclear RNA Molecules. *J. Virol.* 1976. 19: 331-340.
11. Haseltine WA, Kleid D, Panet A, Rothenberg E, Baltimore D. Ordered Transcription of RNA Tumor Viruses by Reverse Transcriptase In Vitro. *J. Mol. Biol.* 1976. 106: 109-131.
12. Rose J, Haseltine WA, Baltimore D. 5'-Terminus of Moloney Murine Leukemia Virus 35s RNA is m<sup>7</sup>G<sup>5</sup>ppp<sup>5</sup>GmpCp. *J. Virol.* 1976. 20: 324-329.
13. Peters G, Harada F, Dahlberg JE, Haseltine WA, Panet A, Baltimore D. Identification of RNA Primer of DNA Synthesis of Moloney Murine Leukemia Virus. *J. Virol.* 1977 21:103
14. Haseltine WA, Maxam A, Gilbert W. The Rous Sarcoma Virus Genome is Terminally Redundant the 5' Sequence. *Proc. Natl. Acad. Sci.* 1977. 74: 989-993.
15. Coffin J, Haseltine WA. Terminal Redundancy and the Origin of Replication of Rous Sarcoma Virus RNA. *Proc. Natl. Acad. Sci.* 1977. 74: 1908-1912.
16. Haseltine WA, Panet A, Smoler D, Baltimore D, Peters G, Harada F, Dahlberg J. Interaction of AMV Reverse Transcriptase and tRNA<sup>trp</sup>. *Biochem.* 1977. 16: 3625-3632.
17. Coffin J, Haseltine WA. Nucleotide Sequence of Rous Sarcoma Virus RNA at the Initiation Site of DNA Synthesis. *J. Mol. Biol.* 1977. 117: 805-814.
18. Coffin JM, Hageman RC, Maxam AM, Haseltine WA. Structure of the Genome of Moloney Murine Leukemia Virus: A Terminally Redundant Sequence. *Cell.* 1978. 13: 761-773.
19. Haseltine WA, Kleid DG. A Method for Classification of 5' Terminal of Retroviruses. *Nature.* 1978. 273: 358-364.
20. Tronick SA, Cabradilla SA, Aaronson SA, Haseltine WA. 5' Terminal Nucleotide Sequences of Mammalian Type C Helper Viruses are Conserved in the Genomes of Replication-Defective Mammalian Transforming Viruses. *J. Virol.* 1978. 26: 570-576.
21. D'Andrea AD, Haseltine WA. Sequence Cleavage of DNA by the Anti-tumor Antibiotics Neocarzinostatin and Bleomycin. *Proc. Natl. Acad. Sci.* 1978. 75: 3608-3612.

22. D'Andrea AD, Haseltine WA. Modification of DNA by Aflatoxin B<sub>1</sub> Creates Alkali-Labile Lesions in DNA at Positions of Guanine and Adenine. *Proc. Natl. Acad. Sci.* 1978. 75: 4120-4124.
23. Desselberger U, Nakajima K, Alfino P, Pedersen FS, Haseltine WA, Hannoun C, Palaese P. Biochemical Evidence That "New" Influenza Virus Strains in Nature may Arise by Recombination. *Proc. Natl. Acad. Sci.* 1978. 75: 341-3345.
24. Reitz MS Jr, Wong-Staal F, Haseltine WA, Kleid DG, Trainer CD, Gallagher RE, Gallo RC. Gibbon Ape Leukemia Virus Hall's Island: New Strain of Gibbon Ape Leukemia Virus. *J Virol.* 1979. 29: 395-400.
25. Haseltine WA, Coffin JM, Hageman TC. Structure of Product of the Moloney Murine Leukemia Virus Endogenous DNA Polymerase Reaction. *J. Virol.* 1979. 30: 375-383.
26. Sahagan BG, Haseltine WA. Structural Analysis of the Genomes of Woolly Monkey and Gibbon Ape Leukosis Viruses. *J Virol.* 1979. 31: 657-667.
27. Haseltine WA, Lo KM, D'Andrea AD. Preferred Sites of Strand Scission in DNA Modified by anti-Diol Epoxide of Benzo(a)pyrene. *Science.* 1980. 209: 929-931.
28. Haseltine WA, Gordon LK, Lindan CP, Grafstrom RH, Shaper NL, Grossman L. Cleavage of Pyrimidine Dimers in Specific DNA Sequences by a Pyrimidine Dimer DNA-Glycosylase of M.luteus. *Nature.* 1980. 285: 634-641.
29. Rosenberg ZR, Haseltine WA. A Transfection Assay for Transformation by Feline Sarcoma Virus Proviral DNA. *Virology.* 1980. 102: 240-244.
30. Sahagen BG, Haseltine WA. Relationship of Retroviruses Isolated from Leukemia Tissues to the Woolly-Monkey-Gibbon Ape Leukemia Viruses. *J. Virology.* 1980. 34: 390-401.
31. Pedersen FS, Haseltine WA. Analysis of the Genome of an Endogenous, Ecotropic Retrovirus of the AKR Strain of Mice: Micromethod for Detailed Characterization of High-Molecular-Weight RNA. *J. Virol.* 1980. 33: 349-365.
32. Rosenberg ZF, Pedersen FS, Haseltine WA. Comparative Analysis of the Genomes of Feline Leukemia Viruses. *J. Virol.* 1980. 35: 542-546.
33. Clements JE, Pedersen FS, Narayan O, Haseltine WA. Genomic Changes Associated with Antigenic Variation of Visna Virus during Persistent Infection. *Proc. Natl. Acad. Sci.* 1980. 77: 4454-4458.
34. Pedersen FS, Buchhagan DL, Chen CY, Hays EF, Haseltine WA. Characterization of Virus Produced by a Lymphoma Induced by Inoculation of AKR MCF-247 Virus. *J. Virol.* 1980. 35: 211-218.



35. Gordon LK, Haseltine WA. Comparison of the Cleavage of Pyrimidine Dimers by the Bacteriophage T4 and M. luteus UV-Specific Endonucleases. *J. Biol. Chem.* 1980. 255: 12047-12050.
36. Grunberg SM, Haseltine WA. Use of an Indicator Sequence of Human DNA to Study DNA Damage by Methylbis(2-chlorethyl)amine. *Proc. Natl. Acad. Sci.* 1980. 77: 6546-6550.
37. Buchhagan DL, Pedersen FS, Crowther RL, Haseltine WA. Most Sequence Differences Between the Genomes of the AKV Virus and a Leukemogenic Gross A Virus Passaged In Vitro are located Near the 3' Terminus. *Proc. Natl. Acad. Sci.* 1980. 77: 4359-4363.
38. Pedersen FS, Crowther RL, Tenney DY, Reimold AM, Haseltine WA. Novel Leukemogenic Retroviruses Isolated from Cell Line Derived from Spontaneous AKR Tumor. *Nature.* 1981. 292: 167-170.
39. Martin RF, Haseltine WA. Range of Radiochemical Damage to DNA with Decay of Iodine 125. *Science.* 1981. 213: 896-898.
40. Rosenberg ZF, Crowther RL, Essex M, Jarrett O, Haseltine WA. Isolation Via Transfection of Feline Leukemia Viruses from DNA of Naturally Occurring Feline Lymphomas. *Virology.* 1981. 115: 203-210.
41. Rosenberg ZF, Sahagan BG, Snyder HW, Worley MB, Essex M, Haseltine WA. Biochemical Characterization of Cells transformed Via Transfection by Feline Sarcoma Virus Proviral DNA. *J Virol.* 1981. 38: 782-788.
42. Rosenberg ZF, Sahagen BG, Worley MB, Essex M, Haseltine WA. Transformation with Subgenomic Fragments of Feline Sarcoma Virus Proviral DNA. *Virology.* 1981. 112: 496-504.
43. Berlin V, Haseltine WA. Reduction of Adriamycin to a Semiquinone Free Radical by NAHPH Cytochrome P-450 Reductase Produces DNA Cleavage in a Reaction Mediated by Molecular Oxygen. *J. Biol. Chem.* 1981.256: 4747- 4756.
44. Gordon LK, Haseltine WA. Early Steps of Excision Repair of Cyclobutane Pyrimidine Dimers by the Micrococcus Luteus Endonuclease; A Three Step Incision Model. *J. Biol. Chem.* 1981. 256: 6608-6616.
45. Lipke JA, Gordon LK, Brash, DE, Haseltine WA. Distribution of Ultraviolet Light Induced Damage in a Defined Sequence of Human DNA: Detection of Alkaline Sensitive Lesions at Pyrimidine-Nucleoside-Cytidine Sequences. *Proc. Natl. Acad. Sci.* 1981. 78: 3388-3392.
46. Gordon LK, Haseltine WA. Quantitation of Cyclobutane Pyrimidine Dimer Formation in Double and Single Stranded DNA Fragments of Defined Sequences. *Radiation Research.* 1982. 89: 99-112.

47. Royer-Pokora B, Gordon LK, Haseltine WA. Use of ExonucleaseIII to Determine the Site of Stable Lesions in Defined Sequences of DNA; The Cyclobutane Pyrimidine Dimer and cis and trans Dichlorodiammine Platinum II Examples. *Nucleic Acids Research*. 1982. 9: 4595-4609.
48. Pedersen FS, Crowther RL, Hays EF, Nowinski RC, Haseltine WA. Structure of Retroviral RNAs Produced by Cell Lines Derived from Spontaneous Lymphomas of AKR Mice. *J. Virol*. 1982. 41: 18-29.
49. Lenz J, Crowther R, Straceski A, Haseltine WA. Nucleotide Sequences of the Akv env Gene. *J. Virol*. 1982. 42: 519-529.
50. Trus MD, Sodroski JG, Haseltine WA. Isolation and Characterization of a Human Locus Homologous to the Transforming Gene (v-fes) of Feline Sarcoma Virus. *J. Biol. Chem*. 1982. 257: 2730-2733.
51. Kross J, Henner WD, Hecht SM, Haseltine WA. Specificity of Deoxyribonucleic Acid Cleavage by Bleomycin, Phleomycin and Tallysomycin. *Biochem*. 1982. 21: 4310-4318.
52. Kross J, Henner WD, Haseltine WA, Rodriguez L, Levin M, Hecht SM. Structural Basis for the DNA Affinity of Bleomycins. *Biochem*. 1982. 21: 3711-3721.
53. Brash DE, Haseltine WA. Ultraviolet Light Induced Mutation Hotspots Occur at DNA Damage Hotspots. *Nature*. 1982. 298: 189-192.
54. Lenz J, Crowther R, Klimenko S, Haseltine WA. Molecular Cloning of a Highly Leukemogenic, Ecotropic Retrovirus from an AKR Mouse. *J. Virol*. 1982. 43: 943-951.
55. Henner WD, Grunberg SM, Haseltine WA. Sites and Structure of Gamma Radiation Induced DNA Strand Breaks. *J. Biol. Chem*. 1982. 257: 11750-11754.
56. Franklin WA, Lo KM, Haseltine WA. Alkaline Lability of Fluorescent Photoproducts in Ultraviolet Light-irradiated DNA. *J. Biol. Chem*. 1982. 257: 13535-13543.
57. Henner WD, Rodriguez LO, Hecht SM, Haseltine WA. Gamma Ray Induced Deoxyribonucleic Acid Strand Breaks: 3' Glycolate Termini. *J. Biol. Chem*. 1983. 258: 711-713.
58. Romet-Lemone JL, McLane MF, Elfassi E, Haseltine WA, Azocar J, Essex M. Hepatitis B. Virus Infection in a Human Lymphoblastoid Cell Culture. *Science*. 1983. 221: 667-669.
59. Lenz J, Haseltine WA. Localization of the Leukemogenic Determinants of SL3-3, an Ecotropic, XC-Positive, Murine Leukemia Virus of AKR Origin. *J. Virology*. 1983. 47: 317-328.
60. Henner WD, Grunberg SM, Haseltine WA. Enzyme Action at 3' Termini of Ionizing Radiation-induced DNA Strand Breaks. *J. Biol. Chem*. 1983. 258: 15198-15205.

61. Lenz J, Celander D, Crowther RL, Patarca R, Perkins DW, Sheldon A, Haseltine WA. Enhancer Sequences that Determine Leukemogenicity of a Murine Retrovirus. *Nature*. 1984. 308: 467-470.
62. Royer-Pokora B, Pedersen W, Haseltine WA. Biological and Biochemical Characterization of an SV40 Transformed Xeroderma Pigmentosum Cell Line. *Exp. Cell Res.* 1984. 151: 408-420.
63. Frei E, Rosowsky A, Wright JE, Cucchi CA, Lippke JA, Ervin TJ, Jolivet J, Haseltine WA. Development of Methotrexate Resistance in a Human Squamous Cell Carcinoma of the Head and Neck in Culture. *Proc. Natl. Acad. Sci.* 1984. 81: 2873-2877.
64. Elfassi E, Romet-Lemonne JL, Essex M, Frances-McLane M, Haseltine WA. Evidence of Extrachromosomal Forms of Hepatitis B Viral DNA in Bone Marrow Culture Obtained from a Patient Recently Infected with Hepatitis B Virus. *Proc. Natl. Acad. Sci.* 1984. 81: 3526-3528.
65. DeLuca D, Doetsch PW, Haseltine WA. Construction of a Mammalian Expression Vector for the E. coli *uvrA*, *b*, and *C* Genes. *Plasmid*. 1984. 11: 253-259.
66. Sodroski JG, Goh WC, Haseltine WA. Transforming Potential of the Human *c-fps/fes* Locus. *Proc. Natl. Acad. Sci.* 1984. 81: 3039-3043.
67. Sodroski JG, Trus M, Perkins D, Patarca R, Wong-Staal F, Gelman E, Gallo R, Haseltine WA. Repetitive Structure in the Long Terminal Repeat Element of a Type II Human T Cell Leukemia Virus. *Proc. Natl. Acad. Sci.* 1984. 81: 4617-4621.
68. Franklin WA, Haseltine WA. Removal of UV Light-induced Pyrimidine-Pyrimidone (6-4) Products from Escherichia coli DNA Requires the *uvrA*, *uvrB*, and *uvrC* Gene Products. *Proc. Natl. Acad. Sci.* 1984. 81: 3821-3824.
69. Sage E, Haseltine WA. High Ratio of Alkali Sensitive Lesions to Total DNA Modification Induced by Benzo(a)pyrene diol epoxide. *J. Biol. Chem.* 1984. 259: 11098-11102.
70. Sodroski JG, Rosen C, Haseltine WA. Trans-acting Transcriptional Activation of the Long Terminal Repeat of Human T Lymphotropic Viruses in Infected Cells. *Science*. 1984. 225: 381-385.
71. Haseltine WA, Sodroski JG, Patarca R, Briggs D, Perkins D, Wong-Staal F. Structure of the 3' Terminal Region of Type II Human T Lymphotropic Virus: Evidence for a New Coding Region. *Science*. 1984. 225: 419-421.
72. Sodroski JG, Patarca R, Perkins D, Briggs D, Lee TH, Essex M, Coligan J, Wong Staal F, Gallo R, Haseltine WA. The Sequence of the Envelope Glycoprotein Gene of Type II Human T Lymphotropic Virus. *Science*. 1984. 225: 421-424.

73. Royer-Pokora B, Haseltine WA. Isolation of UV Resistant Revertants from a Xeroderma Pigmentosum Complementation Group A Cell Line. *Nature*. 1984. 311: 390-392.
74. Lee TH, Coligan JE, Sodroski JG, Haseltine WA, Salahuddin SZ, Wong-Staal F, Gallo RC, Essex M. Antigens Encoded by the 3'-Terminal Region of Human T-Cell Leukemia Virus: Evidence for a Functional Gene. *Science*. 1984. 226: 57-61.
75. Patarca R, Haseltine WA. Sequence Similarity Among Retroviruses. *Nature*. 1984. 309: 728.
76. Patarca R, Haseltine WA. Similarities Among Retrovirus Proteins. *Nature*. 1984. 312: 496.
77. Celander D, Haseltine WA. Tissue Specific Preference as a Determinant of Cell Tropism and Leukemogenic Potential of Murine Retroviruses. *Nature*. 1984. 312: 159-162.
78. Josephs JF, Wong Staal F, Manzari V, Gallo RC, Sodroski JG, Trus M, Perkins D, Patarca R, Haseltine WA. Long Terminal Repeat Structure of an American Isolate of Human T Cell Leukemia Virus. *J. Virology*. 1984. 139: 340-345.
79. Sodroski JG, Rosen CR, Wong-Staal F, Popovic M, Arya S, Gallo RC, Haseltine WA. Trans-acting Transcriptional Activation of the Long Terminal Repeat of Human T Cell Leukemia Virus Type III (HTLV-III). *Science*. 1985. 227: 171-173.
80. Rosen CA, Sodroski JG, Kettman R, Burny A, Haseltine WA. Trans-activation of the Bovine Leukemia Virus Long Terminal Repeat. *Science*. 1985. 227: 320-322.
81. Goh WC, Sodroski JG, Rosen CR, Essex M, Haseltine WA. Subcellular Localization of the Product of the Long Open Reading Frame of Human T-Cell Leukemia Virus Type I. *Science*. 1985. 227: 1227-1228.
82. Ratner L, Haseltine WA, Patarca R, Livak KJ, Starcich B, Josephs SF, Doran ER, Antoni Rafalski J, Whitehorn EA, Baumeister K, Ivanoff L, Petteway SR, Pearson ML, Lautenberger JA, Papas TS, Ghrayeb J, Chang NT, Gallo RC, Wong-Staal F. Complete Nucleotide Sequence of the AIDS Virus, HTLV-III. *Nature*. 1985. 313: 277-284.
83. Sodroski JG, Rosen CR, Goh WC, Haseltine WA. The Human T-Cell Leukemia Virus x-lor Region Encodes a Transcriptional Activator Protein. *Science*. 1985. 228: 1430-1434.
84. Doetsch PW, Chan GL, Haseltine WA. T4 DNA Polymerase (3'5') Exonuclease, An Enzyme for the Detection and Quantitation of Stable DNA Lesions: The Ultraviolet Light Example. *Nucleic Acids Res*. 1985. 13: 3285-3304.
85. Sodroski JG, Patarca R, Rosen CR, Wong-Staal F, Haseltine WA. Location of the Trans-activating Region on the Genome of Human T-Cell Lymphotropic Virus Type III. *Science*. 1985. 229: 74-77.

86. Chan GL, Doetsch PW, Haseltine WA. Cyclobutane Pyrimidine Dimers (6-4) Photo Product Block Polymerization by DNA Polymerase. *Biochem.* 1985. 24: 5723-5728.
87. Umlas ME, Franklin WA, Chan GL, Haseltine WA. Ultraviolet Light Irradiation of Defined-Sequenced DNA Under Conditions of Chemical Photosensitization. *Photochem Photobi.* 1985. 42: 265-273.
88. Rosen CA, Sodroski JG, Haseltine WA. Location of Cis-Acting Regulatory Sequences in the Human T Cell Leukemia Virus Type I Long Terminal Repeat. *Proc. Natl. Acad. Sci.* 1985. 82: 6502-6506.
89. Brash DE, Haseltine WA. Photoreactivation of E.coli Reverses umuC Induction by Ultraviolet Light. *J Bacteriology.* 1985. 163: 460-463.
90. Brash DE, Franklin WA, Sancar GB, Sancar A, Haseltine WA. E. coli DNA Photolyase Reverses Cyclobutane Pyrimidine Dimers but not Pyrimidine-Pyrimidone (6-4) Photoproducts. *J. Biol. Chem.* 1985. 260: 11438-11441.
91. Goh WC, Sodroski JG, Rosen CR, Haseltine WA. Expression of the x-lor Gene in E.coli. *J. Virology.* 1985. 55: 497-499.
92. Sodroski JG, Goh WC, Rosen CR, Salahuddin SZ, Aldovini A, Franchini G, Wong-Staal F, Gallo RC, Sugamura K, Haseltine WA. Transactivation of the Human T Cell Leukemia Virus Long Terminal Repeat Correlates with Expression of the x-lor Protein. *J. Virology.* 1985. 55: 831-835.
93. Rosen CR, Haseltine WA, Lenz J, Ruprecht R, Cloyd M. Tissue Selectivity of Murine Leukemia Virus (MULV) Infection is Determined by LTR Sequences. *J. Virology.* 1985. 55: 862-866.
94. Allen J, Lee TH, McLane MF, Sodroski J, Haseltine WA, Essex M. Major Glycoprotein Antigens that induce Antibodies in AIDS patients are encoded by HTLV-III. *Science.* 1985. 228: 1091-1094.
95. Rosen CR, Sodroski, JG, Haseltine WA. Location of Cis-Acting Regulatory Sequences in the Human T Cell Lymphotropic Virus Type III (HTLV-III/LAV) Long Terminal Repeat. *Cell.* 1985. 41: 813-823.
96. Franklin W, Doetsch P, Haseltine WA. Structural Determination of the Ultraviolet Light-Induced Thymine-Cytosine Pyrimidine-Pyrimidone (6-4) Photoproduct. *Nucleic Acids Res.* 1985. 13: 5317-5325.
97. Ratner L, Starcich B, Josephs SF, Hahn BH, Reddy EP, Livak KJ, Petteway SR, Pearson ML, Haseltine WA, Arya SK, Wong-Staal F. Polymorphism of the 3' Open Reading Frame of

the Virus Associated with the Acquired Immunodeficiency Syndrome, Human T-Lymphotropic Virus Type III. *Nucleic Acids Res.* 1985. 13: 8219-8229.

98. Frei E, Cucchi C, Bernal S, Rheinwald J, Haseltine WA, Ervin T. Alkylating Agent Resistance: In Vitro Studies with Human Neoplastic Cell Lines. *Proc. Natl. Acad. Sci.* 1985. 82: 2158-2162.

99. Rosen CR, Sodroski JG, Campbell K, Haseltine WA. Construction of Recombinant Retroviruses that Express the Human T Cell Leukemia Virus Type II and Human T Cell Leukemia Virus Type III Transactivator. *J. Virology.* 1986. 57: 379-384.

100. Ruprecht RM, Rossoni LD, Haseltine WA, Broder S. Suppression of Retroviral Propagation and Disease by Suramin in Murine Systems. *Proc. Natl. Acad. Sci.* 1985. 82: 7733-7737.

101. Janicek MF, Haseltine WA, Henner WD. Malondialdehyde Precursors in gamma-irradiated DNA, deoxynucleotides and deoxynucleosides. *Nucleic Acids Research.* 1985. 13: 9011-9029.

102. Patarca R, Haseltine WA. A Major Retroviral Core Protein Related to EPA and TIMP. *Nature.* 1985. 318: 390.

103. Franklin WA, Haseltine WA. The Role of the (6-4) Photoproduct in Ultraviolet Light-Induced Transition Mutations in E.coli. *Mutation Research.* 1986. 165: 1-7.

104. Rosen CA, Sodroski JG, Goh WC, Dayton A, Lippke J, Haseltine WA. Post Transcriptional Regulation Accounts for the trans-activation of the Human T Lymphotropic Viruses Type III (HTLV-III/LAV). *Nature.* 1986. 319: 555-559.

105. Rosen CR, Sodroski JG, Haseltine WA. Activation of Enhancer Sequences in the Type II Human T Cell Leukemia Virus and Bovine Leukemia Virus Long Terminal Repeats by Viral Associated Transacting Regulatory Factors. *J. Virology.* 1986. 57: 738-744.

106. Sodroski JG, Goh WC, Rosen CA, Tartar A, Portetelle D, Burny A, Haseltine WA. Replicative and Cytopathic Potential of Human T Lymphotropic Virus Type III (HTLV-III/LAV) with src Gene Deletion. *Science.* 1986. 231: 1549-1553.

107. Dayton AI, Sodroski JG, Goh WC, Haseltine WA. The Trans-activator Gene of the Human T-Cell Lymphotropic Virus Type III is required for Replication. *Cell.* 1986. 44: 941-947.

108. Doetsch PW, Helland D, Haseltine WA. Mechanism of Action of a Mammalian DNA Repairs Endonuclease. *Biochem.* 1986. 25: 2212-2220.

109. Elfassi E, Haseltine WA, Dienstag JL. Detection of HBV-X Product Using an open Reading Frame Escherichia coli Expression Vector. *Proc. Natl. Acad. Sci.* 1986. 83: 2219-2222.
110. Greene WC, Leonard WJ, Wano J, Svetlik PB, Peffer NJ, Sodroski JG, Rosen CA, Goh WC, Haseltine WA. The Transactivator Gene of Human T Lymphotropic Virus Type II (HTLV-II) Induces Interleukin-2 Receptor and Interleukin-2 Gene Expression. *Science.* 1986. 232: 877-880.
111. Chan GL, Peak MJ, Peak JG, Haseltine, WA. Action Spectrum for the Formation of Endonuclease-sensitive sites and (6-4) Photoproducts Induced in a DNA by Ultraviolet Radiation. *J. Radiation Biol.* 1986. 50: 641-648.
112. Goh WC, Rosen CA, Sodroski JG, Ho DD, Haseltine WA. Identification of a Protein Encoded by the Transactivator Gene, *tat<sub>III</sub>*, of a Human T-Cell Lymphotropic Retrovirus Type III. *J. Virology.* 1986. 59: 181-184.
113. Helland D, Doetsch PW, Haseltine WA. Substrate Specificity of a Mammalian DNA Repair Endonuclease that Recognizes Oxidative Base Damage. *Mol. Cell Biol.* 1986. 6: 1983-1990.
114. Sodroski JG, Goh WC, Rosen CA, Dayton AI, Terwilliger E, Haseltine WA. A Second post-Transcriptional Trans-activator Gene required for HTLV III Replication. *Nature.* 1986. 321: 412-417.
115. Sutherland BM, Feng NI, Oliviera OM, Cairrachi G, Brash DE, Haseltine WA, Lewis RJ, Hanawalt PC. Substrate Range of the 40 000-Dalton DNA- Photoreactivating Enzyme from Escherichia coli. *Biochem.* 1986. 25: 681-687.
116. Sodroski, JG, Goh WC, Rosen CA, Campbell K, Haseltine WA. Role of the HTLV-III/LAV Envelope in Syncytium Formation and Cytopathicity. *Nature.* 1986. 322: 470-474.
117. Tanese N, Sodroski G, Haseltine WA, Goff SP. Expression of Reverse Transcriptase Activity of Human T-Lymphotropic Virus Type III (HTLV-III/LAV) in Escherichia coli. *J. Virology.* 1986. 59: 743-745.
118. Rosen CA, Sodroski JG, Willems L, Kettmann R, Campbell K, Zaya R, Burny A, Haseltine WA. The 3' region of bovine leukemia virus genome encodes a trans-activator protein. *EMBO Journal.* 1986. 10: 2585-2589.
119. Haseltine WA, Patarca R. Presence in the AIDS Virus of Sequences Similar to the Scrapie-Related PrP 27-30 Protein. *Nature.* 1986. 323: 115-116.
120. Elfassi E, Patarca R, Haseltine WA. Similarities among the pre-S Regions of Hepatitis Viruses Analogy with Retroviral Transmembrane Proteins. *J. Theoretical Biology.* 1986. 121: 371

121. Patarca R, Haseltine WA. Variation Among the Human T-Cell Lymphotropic Virus Type III (HTLV-III/LAV) Strains. *Journal of Theoretical Biology*. 1986.
122. Terwilliger E, Sodroski JG, Rosen CA, Haseltine WA. Effects of Mutations Within the 3'-ORF Region of the HTLV-III/LAV on Replication and Cytopathicity. *Journal of Virology*. 1986. 60: 754-760.
123. Goh WC, Sodroski JG, Rosen CA, Haseltine WA. Expression of the art Gene Protein of HTLV-III/LAV in Bacteria. *J. Virology*. 1987. 61: 633-637.
124. Patarca R, Haseltine WA. HIV tat and tar. *AIDS Research and Human Retroviruses*. 1987. 3: 1-2.
125. Patarca R, Heath C, Goldenberg G, Rosen CA, Sodroski JG, Haseltine WA, Hansen U. Transcription Directed by the HIV Long Terminal Repeat In Vitro. *AIDS Research and Human Retroviruses*. 1987. 3: 41-55.
126. Mosca JD, Bednarik DP, Raj NBK, Rosen CA, Sodroski JG, Haseltine WA, Pitha PM. Herpes simplex virus type-1 can reactivate transcription of latent human immunodeficiency virus. *Nature*. 1987. 325: 67-70.
127. Rosen CA, Park R, Sodroski JG, Haseltine WA. Multiple sequence elements are required for regulation of human T-cell leukemia virus gene expression. *Proc. Natl. Acad. Sci*. 1987. 84: 4919-4923.
128. Celander D and Haseltine WA. Glucocorticoid Regulation of Murine Leukemia Virus Transcription Elements Is Specified by Determinants within the Viral Enhancer region. *Journal of Virology*. 1987. 61: 266-275.
129. Walker BD, Kowalski M, Goh WC, Rohrschneider L, Haseltine WA, Sodroski JG. Inhibition of Human Immunodeficiency Virus Syncytium Formation and Replication by Castanospermine. *Proc. Natl. Acad. Sci*. 1987. 84: 8120-8124
130. Kowalski M, Potz J, Basiripour L, Dorfman T, Goh WC, Terwilliger E, Dayton A, Rosen C, Haseltine WA, Sodroski J. Functional Regions of the Human Immunodeficiency Virus Envelope Glycoprotein. *Science*. 1987. 237: 1351.
131. Mosca JD, Bednarik DP, Raj NBK, Rosen CA, Sodroski JG, Haseltine WA, Hayward GS, Pitha PM. Activation of human immunodeficiency virus by herpesvirus infection: Identification of a region within the long terminal repeat that responds to a trans-acting factor encoded by herpes simplex virus 1. *Proc. Natl. Acad. Sci*. 1987. 84: 7408-7412.
132. Terwilliger E, Burghoff R, Sia R, Sodroski JG, Haseltine W, Rosen C. The art Gene Product of the Human Immunodeficiency Virus is Required for Replication. *Journal of Virology*. 1988. 62: 655-658.



133. Rosen CA, Terwilliger E, Sodroski JG, Haseltine WA. Intragenic cis-acting art Responsive Sequences of the Human Immunodeficiency Virus. *Proc. Natl. Acad. Sci.* 1988. 85: 2071-2075.
134. Celander D, Hsu BL, Haseltine WA. Regulatory Elements within the Murine Leukemia Virus Enhancer Regions Mediate Glucocorticoid Responsiveness. *Journal of Virology.* 1988. 62: 1314-1322.
135. Ruben S, Poteat H, Tan Tse-Hau, Kawakami K, Roeder R, Haseltine W, Rosen C. Identification of Cellular Transcription Factors Required For Regulation of Interleukin 2 Receptor Gene Expression By the Human T-Cell Leukemia Virus tat Gene Product. *Science.* 1988. 241: 89-92.
136. Park RE, Haseltine WA, Rosen CA. A Nuclear Factor Mediates Transactivation of HTLV-I Gene Expression. *Oncogene.* 1988. 3: 275-279.
137. Cohen EA, Terwilliger EF, Sodroski JG, Haseltine WA. Identification of a protein encoded by the vpu gene of HIV-1. *Nature.* 1988. 334: 532-534.
138. Terwilliger EF, Godin B, Sodroski JG, Haseltine WA. Construction and Use of a Replication-Competent Human Immunodeficiency Virus (HIV-1) that Expresses the CAT Enzyme Marked Viruses/Replication Studies/Drug Screening. *Proc. Natl. Acad. Sci.* 1989. 86: 3857-3861.
139. Parkin NT, Cohen EA, Darveau A, Rosen CA, Haseltine A, Sonenberg N. Translational Effects of the 5' Non-Coding Region of Human Immunodeficiency Virus Type-1. *Embo Journal.* 1988. 7: 2831-2837.
140. Terwilliger EF, Proulx J, Sodroski JG, Haseltine WA. Cell Lines That Express Stably env Gene Products from Three Strains of HIV-1. *Journal of Acquired Immune Deficiency Syndromes.* 1988. 1: 317-323.
141. Dayton AI, Terwilliger EF, Potz J, Kowalski MM, Sodroski JG, Haseltine WA. Cis-Acting Sequences Responsive to the rev Gene Product of the Human Immunodeficiency Virus. *Journal of Acquired Immune Deficiency Syndromes.* 1988. 1: 441-452.
142. Grassmann R, Dengler C, Muller-Fleckenstein I, Fleckenstein B, McGuire K, Dokhelar M, Sodroski JG, Haseltine WA. Transformation to Continuous Growth of Primary Human Lymphocytes by HTLV-1 X Region Genes Transduced by a Herpesvirus Saimiri Vector. *Proc. Natl. Acad. Sci.* 1989. 86: 3351-3355.
143. Kozarsky K, Penman M, Basiripour L, Haseltine WA, Sodroski JG, Krieger M. Glycosylation and Processing of the Human Immunodeficiency Virus Type 1 Envelope. *Journal of Acquired Immune Deficiency Syndromes.* 1989. 2: 163-169.

144. Poteat H, Kadison P, McGuire K, Park L, Park RE, Sodroski JG, Haseltine WA. The Response of the HTLV-1 LTR to Cyclic AMP. *Journal of Virology*. 1989. 63: 1604-1611.
145. Kowalski MM, Ardman B, Basiripour L, Lu Y, Blohm D, Haseltine WA, Sodroski JG. Antibodies To CD4 in HIV-1-Infected Individuals. *Proc. Natl. Acad. Sci*. 1989. 86: 3346-3350.
146. Dokhelar MC, Pickford H, Sodroski JG, Haseltine WA. HTLV-1 p27<sup>rex</sup> Regulates gag and env Protein Expression. *Journal of Acquired Immune Deficiency Syndromes*. 1989. 2: 431-440.
147. Gottlinger HG, Sodroski JG, Haseltine WA. Role of capsid Precursor Processing Myristylation in HIV-1 Morphogenesis and Infectivity. *Proc. Natl. Acad. Sci*. 1989. 86:5781-5785.
148. Lever A, Gottlinger HG, Haseltine WA, Sodroski JG. Identification of a Sequence Required for Efficient Packaging of HIV-1 RNA into Virions. *Journal of Virology*. 1989. 63: 4085-4087.
149. Terwilliger EF, Cohen EA, Lu Y, Sodroski JG, Haseltine WA. Functional Role of HIV-1 vpu. *Proc. Natl. Acad. Sci*. 1989. 86: 5163-5167.
150. Dokhelar MC, Pickford H, Sodroski JG, Haseltine WA. The Potential for Homeostatic regulation of the X Region Proteins of the Human T Cell Leukemia Virus Type I. *Journal of Acquired Immune Deficiency Syndromes*. 1989. 2: 588-594.
151. Twu JS, Rosen CA, Haseltine WA, Robinson WS. Identification of a Region within the Human Immunodeficiency Virus Type 1 Long Terminal Repeat That Is Essential for Transactivation by the Hepatitis B Virus Gene X. *Journal of Virology*. 1989. 63: 2857-2860.
152. Lu Y, Stenzel M, Sodroski JG, Haseltine WA. Effects of LTR Mutants on HIV-1 Replication. *Journal of Virology*. 1989. 63: 4115-4117.
153. Cohen EA, Terwilliger EF, Jalinoos Y, Proulx J, Sodroski JG, Haseltine WA. Identification of HIV-1 vpr Product Structure and Function. *Journal of Acquired Immune Deficiency Syndromes*. 1990. 3: 11-18.
154. Caputo A, Sodroski JG, Haseltine WA. Constitutive Expression of HIV-1 tat Protein in Human Jurkat T Cells Using a BK Virus Vector. *Journal of Acquired Deficiency Syndromes*. 1990. 3:373-379.
155. Salfeld J, Gottlinger HG, Sia R, Park R, Sodroski JG, Haseltine WA. A Tripartite HIV-1 tat-env-rev Fusion Protein. *EMBO*. 1990. 9:965-970.

156. Poteat H, Chen F, Kadison P, Sodroski J, Haseltine W. Protein Kinase A Dependent Binding of a Nuclear Factor to the 21 Base Pair Repeat of the Human T Cell Leukemia Virus Type 1 Long Terminal Repeat. *Journal of Virology*. 1990. 1264-1270.
157. Rosen C, Campbell K, Godin B, Sodroski J, Haseltine W. Subcellular Localization of Human Immunodeficiency Virus (HIV) Regulatory Proteins, tat and art. *Journal of Virology*. 1988. 62: 2498-2501.
158. Ardman B, Kowalski M, Bristol J, Haseltine W, Sodroski J. Effects on CD4 Binding of Anti-peptide Sera to the Fourth and Fifth Conserved Domains of HIV-1 gp120. *Journal of Acquired Immune Deficiency Syndrome*. 1990. 3:206-214.
159. Helseth E, Kowalski, Gabuzda D, Olshevsky U, Haseltine WA, Sodroski JG. Rapid Complementation Assays measuring replicative potential of HIV-1 envelope glycoprotein mutants. *Journal of Virology*. 1990. 64:2416-2420.
160. Cohen E, Dehni G, Sodroski J, Haseltine W. Human Immunodeficiency Virus vpr Product is a Virion-Associated Regulatory Protein. *Journal of Virology*. 1990. 64: 3097-3099.
161. Cohen E, Lu Y, Gottlinger H, Dehni G, Sodroski J, Haseltine W. The T Open Reading Frame of Human Immunodeficiency Virus Type 1. 1990. *Journal Acquired Immune Deficiency Syndrome*. Vol 3. 6: 601-608.
162. Farnet C, Haseltine WA. Integration of HIV-1 DNA in vitro. 1990. *Proc. Natl. Acad. Sci*. 87: 4164-4168.
163. Zazopoulos E, Sodroski JG, Haseltine WA. p21<sup>rex</sup> protein of HTLV-1. 1990. *Journal of Acquired Immune Deficiency Syndrome*. 3:12 1135-1139.
164. Lu Y, Touzjian N, Stenzel M, Dorfman T, Sodroski J, Haseltine WA. Identification of cis-acting repressive sequences within the Negative Regulatory Element of HIV-1. 1990. *Journal of Virology*. 1990. 64: 5226-5229.
165. Olshevsky U, Helseth E, Furman C, Li J, Haseltine WA, Sodroski JG. Identification of Individual HIV-1 gp120 Amino Acids Important for CD4 Receptor Binding. *Journal of Virology*. 1990. 65: 5701-5707.
166. Gabuzda D, Olshevsky U, Bertani P, Haseltine W, Sodroski J. Identification of Membrane Anchorage Domains of the HIV-1 gp160 Envelope Glycoprotein Precursor. *Journal of Acquired Immune Deficiency Syndrome*. 1991. Volume 4. 1: 34-40.
167. Lu Y, Touzjian N, Dorfman T, Sodroski J, Haseltine W. The NFkB independent cis-acting sequences in HIV-1 LTR responsive to T-cell activation. *Journal of Acquired Immune Deficiency Syndrome*. 1991. Volume 4. 2:173-177.

168. Prasad V, Myrick K, Haseltine W, Goff S. Expression of Enzymatically Active Reverse Transcriptase of Simian Immunodeficiency Virus in Bacteria: Sensitivity to Nucleotide Analogue Inhibitors. 1990. *Journal of Virology*. 179: 896-900.
169. Gottlinger H, Dorfman T, Sodroski J, Haseltine W. Effect of Mutations Affecting the P6 gag Protein on HIV-1 Particle Release. *Proc. Nat'l Acad. Sci.* 1991. 88: 3195-3199.
170. Farnet C, Haseltine W. Determination of viral proteins present in the HIV-preintegration complex. *Journal of Virology*. 1990. 65(4): 1910-1915.
171. Poznansky M, Walker B, Haseltine W, Sodroski J, Langhoff E. A Rapid for Quantitating the Frequency of Peripheral Blood Cells Containing HIV-1 DNA. *Journal of Acquired Immune Deficiency Syndrome*. 1991. 4: 368-373.
172. Letvin NL, Lord CI, King NW, Wyand MS, Myrick KV, Haseltine WA. Infection of Macaque Monkey by SIV Proviral DNA. 1991. *Nature*.
173. Helseth E, Olshevsky U, Gabuzda D, Ardman B, Haseltine WA, Sodroski JG. Changes in the Transmembrane Region of the HIV-1 gp41 Envelope Glycoprotein Affect Membrane Fusion. *Journal of Virology*. 1990. 64: 5764-5772.
174. Poznansky M, Lever A, Bergeron L, Haseltine W, Sodroski J. Gene Transfer into Human Lymphocytes by a Defective Human Immunodeficiency Virus Type 1 Vector. *Journal of Virology*. 1991. 65: 532-536.
175. Kalland K, Langhoff E, Bos H, Gottlinger H, Haseltine W. Rex dependent nucleolar concentration of HTLV-1 env mRNA. *The New Biologist*. 1991. 3:389-397.
176. Amerongen H, Weltzin R, Farnet C, Michetti P, Haseltine W, Neutra M. Transepithelial transport of HIV-1 by intestinal M cells: a mechanism for transmission of AIDS. 1991. *Journal of Acquired Immune Deficiency Syndrome*. 1991. 4:760-765.
177. Kowalski M, Bergeron L, Dorfman T, Haseltine W, Sodroski J. Attenuation of Human Immunodeficiency Virus Type I (HIV-1) Cytopathic Effect by a Mutation Affecting the Transmembrane Envelope Glycoprotein. 1991. *Journal of Virology*. 65: 281-291.
178. Helland DE, Welles JL, Caputo A, Haseltine WA. Transcellular Transactivation by the HIV-1 tat protein. 1991. *Journal of Virology*. 65:4547-4549.
179. Fazely F, Haseltine WA, Rodger RF, and Ruprecht RM. Post-exposure Chemoprophylaxis with AZT or AZT Combined with Interferon-": Failure after inoculating Rhesus Monkeys with a High Dose of SIV. *Journal of Acquired Immune Deficiency Syndrome*. 1991. 4:1093-1097.

180. Langhoff E, Terwilliger E, Bos H, Kalland K, Poznansky M, Sodroski J, Haseltine W. Prolific Replication of HIV-1 in Primary Dendritic Cell Cultures. 1991. Proc. Natl. Acad. Sci. 88:7998-8002.
181. Terwilliger E, Langhoff E, Gabuzda D, Haseltine W. Allelic variation in the effects of nef on HIV-1 replication. Proc. Natl. Acad. Sci. 1991. 88:10971-10975.
182. Farnet C, Haseltine WA. Circularization of human immunodeficiency virus type 1 (HIV-1) DNA in vitro. Journal of Virology. 1991. 65(12):6942-6952.
183. Obaru K, DeClue J and Haseltine WA. An amino terminal amino acid affects the electrophoretic mobility of the HIV-1 nef protein. Journal of Acquired Immune Deficiency Syndromes. 1991. 5:308-312.
184. Caputo and Haseltine. Re-examination of the coding potential of the HTLV-1 pX region. Virology. 1992. Vol. 188, No. 2, pp. 618-627.
185. Merkle R, Helland D, Welles J, Shilatifard A, Haseltine W, Cummings R. GP160 of HIV-1 synthesized by persistently infected molt-3 cells is terminally glycosylated: evidence that cleavage of gp160 occurs subsequent to oligosaccharide processing. Archives of Biochemistry and Biophysics. 1991. Vol. 290, No. 1, pp. 248-257.
186. Gottlinger H, Dorfman T, Cohen E, Haseltine W. The role of the tnv protein and tnv RNA splicing signals in replication of HIV-1 IIIB isolates. Virology 1992. 189:618-628.
187. Zazopoulos, E., Haseltine, W. Mutational analysis of the HIV Eli nef function. Proc. Nat. Acad. Sci. USA. 1992. 88:6634-6638.
188. Li J, Lord CI, Haseltine WA, Letvin NL, Sodroski JG. Infection of Cynomolgus Monkeys with a Chimeric HIV-1/SIV<sub>mac</sub> Virus that Expresses the HIV-1 Envelope Glycoproteins. Journal of Acquired Immune Deficiency Syndromes. 1992. 5:639-646.
189. Marasco WA, Bagley J, Zani C, Posner M, Cavacini L, Haseltine WA, Sodroski JG. Characterization of the cDNA of a Broadly Reactive Neutralizing Human Anti-gp120 Monoclonal Antibody. J. Clinical Investigation. 1992. J. Clinical Investigation. 1992;90:1467-1478.
190. Grassmann R, Berchtold S, Radant I, Alt M, Fleckenstein B, Sodroski JG, Haseltine WA, Ramstedt HU. Role of Human T-Cell Leukemia Virus Type 1 X Region Proteins in Immortalization of Primary Human Lymphocytes in Culture. Journal of Virology. 1992. Vol. 66, No. 7, pp. 4570-4575.
191. Lo KMS, Biasolo MA, Denhi G, Palu G, Haseltine, WA. Inhibition of Replication of HIV-1 by Retroviral Vectors Expressing tat-Antisense and Anti-tat Ribozyme RNA. Virology. 1992. Vol. 190, No. 1, pp. 176-183.

192. Gabuzda DH, Lawrence K, Langhoff E, Terwilliger EF, Dorfman T, Haseltine WA, Sodroski JG. The Role of yif in Replication of HIV-1 in CD4+ T Lymphocytes. *J. Virology*. 1992. 66:6489-6494.
193. Repke H, Gabuzda D, Emmrich F, Palu G, Sodroski J, Haseltine W. Effects of synthetic peptides from CD4 on function of human retroviral envelope glycoprotein. *J. Immunology*. 1992. 149: 1809-1816.
194. Repke H, Barber E, Ulbricht S, Buchner K, Hucho F, Kopp R, Scholz H, Rudd C, Haseltine WA. Ganglioside-induced CD4 Endocytosis Occurs Independent of Serine Phosphorylation and is Accompanied by Dissociation of p56<sup>LCK</sup>. *J. Immunology*. 1992. 149:2585-2591.
195. Yao X-J, Gottlinger H, Haseltine WA and Cohen EA. Envelope Glycoprotein and CD4 Independence of vpu-Facilitated Human Immunodeficiency Virus Type 1 Capsid Export. *J. Virology*. 1992. 66:5119-5126.
196. Zazopoulos, E and Haseltine WA. Disulfide formation of the HIV-1 nef protein. *J. Virology*, 1993. 67:1676-1680.
197. Überla, K, Lu Y, Chung E, and Haseltine WA. Characterization of the NF-kappa B p65 promotor. *J. Acquir. Immun. Def. Synd.* 1993. 6:227-230.
198. Zazopoulos, E and Haseltine WA. Effect of nef alleles on replication of human immunodeficiency virus type 1. *J. Virology*. 1992. 194:20-27
199. Yao X-J, Garzon S, Boisvert F, Haseltine WH, and Cohen E. The effect of vpu on HIV-1 Induced Syncytia Formation. *J. Acquir. Immun. Def. Synd.* 1993. 6:135-141.
200. Shilatifard A, Merkle RK, Helland DE, Welles JL, Haseltine WA and Cummings RD. Complex-type N-Linked Oligosaccharides of gp120 from Human Immunodeficiency Virus Type 1 Contain Sulfated N-Acetylglucosamine. *J. Virology*. 1993. 67:943-952.
201. Langhoff E, Kalland KH, and Haseltine WH. Early molecular replication of human immunodeficiency virus type 1 in cultured blood derived T helper dendritic cells. *J. Clin. Inves.* 1993. 91:2721-2726.
202. Göttlinger, H.G., Dorfman, T., Cohen, E.A., and Haseltine, W.A. Vpu protein of human immunodeficiency virus type 1 enhances the release of capsids produced by *gag* gene constructs of widely divergent retroviruses. *Proc. Natl. Acad. Sci. USA* 1993. 90:7381-7385.
203. McGuire K, Curtiss VS, Larson EL, Haseltine WA. Influence of human T-cell leukemia virus type 1 tax and rex on interleukin-2 gene expression. *J. Virol.* 1993. 67:1590-1599.
204. Marasco WA, Haseltine WA, and Chen SY. Design, Intracellular Expression, and Activity of a Human Anti-HIV-1 gp120 Single Chain Antibody. *Proc. Natl. Acad. Sci. U.S.A.*, 90:7889-7893, 1993.

205. Dorfman, T., Luban, J., Goff, S.P., Haseltine, W.A., and Göttlinger, H.G. Mapping of functionally important residues of a cysteine-histidine box in the human immunodeficiency virus type 1 nucleocapsid protein. *J. Virol.* 1993. 67:6159-6169.
206. N. Papadopoulos, N. C. Nicolaides, Ying-Fei Wei, S. M. Ruben, K. C. Carter, C. A. Rosen, W. A. Haseltine, R. D. Fleischmann, C. M. Fraser, M. D. Adams, J. C. Venter, S. R. Hamilton, G. M. Petersen, P. Watson, H. T. Lynch, P. Peltomaki, Jukka-Pekka Mecklin, A. de la Chapelle, K. W. Kinzler, B. Vogelstein. Mutation of a *mutL* Homolog in Hereditary Colon Cancer. *Science* 1994. Vol. 263; pp 1625-
207. N. Papadopoulos, N. C. Nicolaides, Ying-Fei Wei, S. M. Ruben, K. C. Carter, C. A. Rosen, W. A. Haseltine, R. D. Fleischmann, C. M. Fraser, M. D. Adams, J. C. Venter, S. R. Hamilton, G. M. Petersen, P. Watson, H. T. Lynch, P. Peltomaki, Jukka-Pekka Mecklin, A. de la Chapelle, K. W. Kinzler, B. Vogelstein. Mutations of Two *mutL* Homologs, *hPMS1* and *hPMS2*, in Hereditary Nonpolyposis Colon Cancer
208. Wei, Y.F., Robins, P., Carter, K., Caldecott, K., Pappin, D.J.C., Haseltine, W.A., Lindahl, T. Molecular Cloning and Expression of Human cDNAs Encoding a Novel DNA Ligase IV and DNA Ligase III, an Enzyme Active in DNA Repair and Recombination. *Molecular and Cellular Biology.* June 1995. Vol. 15, No. 6, pp. 3206-3216.
209. Uberla, K., Stahl-Hennig, C., Bottiger, D., Matz-Rensing, K., Kaup, F.J., Li, J., Haseltine, W.A., Fleckenstein, B., Hunsmann, G., Oberg, B., Sodroski J. Animal model for the therapy of acquired immunodeficiency syndrome with reverse transcriptase inhibitors. *Proc. Natl. Acad. Sci. USA.* August 1995. Vol. 92, pp. 8210-8214.
210. Wei, Y.F., Robins, P., Carter, K., Pappin, D.J.C., Wang, R.P., Shell, B.K. Schar, Primo, S., Nash, R., Caldecott, K., Barnes, D.E., Haseltine, W.A., Lindahl, T. Molecular cloning and expression of the human cDNA encoding DNA ligase III, an enzyme active in DNA repair and recombination. *Journal of Biological Chemistry.* November 29, 1996. Vol. 271, No. 48, pp. 30375-30380.
211. Haseltine, W.A. Discovering Genes for New Medicines. *Scientific American.* March 1997. Vol.276, No. 3, pp.92-97.
212. Haseltine, W.A. The Power of Genomics to transform the biotechnology industry. *Nature Biotechnology.* May 1998. Supplement. pp. 25-27.
213. Friberg, J., Ladha, A., Göttlinger, H., Kalland, K., Haseltine, W.A., and Cohen, E.A. Functional analysis of the phosphorylation sites on the human immunodeficiency virus type 1 Vpu protein. *Journal of Acquired Immune Deficiency Syndromes,* January 1, 1995. Vol 8. pp. 10-22
214. Lavallée, C., Yao, X.J., Ladha, A., Göttlinger, H., Haseltine, W.A., and Cohen, E.A. Requirement of Pr55<sup>gag</sup> precursor for the incorporation of the Vpr product into human

immunodeficiency virus type 1 viral particles. *Journal of Virology* March 1994. Vol. 3. pp. 1926-1934.

215. Dorfman, T., Mammano, F., Haseltine, W.A., and Göttinger, H.G. Role of the p17 matrix protein in the virion association of the human immunodeficiency virus type 1 envelope glycoprotein. *Journal of Virology*, March 1994. Vol. 3. pp. 1689-1996.

216. Patarca, Roberto., Haseltine, W.A. Structural flexibility of the SARS-CoV-2 genome relevant to variation, replication, pathogenicity, and immune evasion. *BioRxiv*. December 20, 2021. DOI: <https://doi.org/10.1101/2021.12.20.473542>

217. Patarca, Roberto., Haseltine, W.A. Circularization via complementary sequences in the 5' and 3' termini may facilitate replication of SARS coronaviruses. *Authorea*. January 04, 2022. DOI: [10.22541/au.164132044.46753705/v1](https://doi.org/10.22541/au.164132044.46753705/v1)

218. Patarca, Roberto., Haseltine, W.A. Intragenomic rearrangements of SARS-CoV-2 and other  $\beta$ -coronaviruses. *BioRxiv*. March 3, 2022. DOI: <https://doi.org/10.1101/2022.03.07.483258>

#### *Books and Monographs*

1b. Haseltine WA, IN: Jeffrey Miller. *Experiments in Molecular Genetics*. Cold Spring Harbor, New York: 1972. 326-347.

2b. Haseltine WA, Block R. *In Vitro* Synthesis of ppGpp and pppGpp. In: Tissiers N, Normura, Lengyl P, eds. *Ribosomes*. Cold Spring Harbor Press, New York: 1973. 747-761.

3b. Haseltine WA, Block R, Weber K, Gilbert W. MSI and MSII are Made on the Ribosome in and Idling Step of Protein Synthesis. IN: Zubay G, Marmur J, eds. *Papers in Biochemical Genetics*. New York: Holt, Reinhart, Winston, Inc. 1973. 570.

4b. Besmer P, Smotkin D, Haseltine WA, Baltimore D. Mechanism of Induction of RNA Tumor Viruses by Halogenated Pyrimidines. Cold Spring Harbor Laboratory of Quant. Bio. New York: 1974. 1103-1107.

5b. Haseltine WA, Baltimore D. *In Vitro* Replication of RNA Tumor Virus. IN: Baltimore D, Huang A, Fox CF, eds. *Animal Virology, ICN-UCLA Symposia on Molecular and Cellular Biology*. New York: Academic Press. 1976. IV: 175-213.

6b. Haseltine WA, Kleid D, Pedersen FS. Analysis of RNA Tumor Virus Genomes. IN: Kalter S, Hellman A, Gruber J, eds. *Advances in Comparative Leukemia Research*. North Holland: Biomedical Press. 1977. 437-442.



- 7b. Haseltine WA, Kleid D. A New Look at the Structure of Primate Type c Viral Genomes. IN: Kalter S, Hellman A, Guber J, eds. Primates and Human Cancer. DHEW(NIH). 1977. 185-195.
- 8b. Haseltine WA, Pedersen FS, Sahagan BG, Rosenberg ZF. Comparative Analysis of RNA Tumor Virus Genomes. IN: Neth R, Gallo R, eds. Modern Trends in Human Leukemia III, 1978.
- 9b. Grossman L, Riazuddin S, Haseltine WA, Lindan K. Nucleotide Excision Repair of Damaged DNA. Cold Spring Harbor Laboratory of Quant Biol Symp. 1979. 43: 947-955.
- 10b. Haseltine WA, Coffin JA. In Vitro Studies of the Replication of Moloney Murine Leukemia Virus. Cold Spring Harbor Laboratory of Quant Biol Symp. 1979. 43: 841-849.
- 11b. Pedersen FS, Haseltine WA. A Micromethod for Detailed Characterization of High Molecular Weight RNA. IN: Grossman L, Moldave K, eds. Methods in Enzymology. New York. Academic Press. 1980. 65.
- 12b. Haseltine WA, Lindan CP, D'Andrea AD, Johnsrud L. The use of DNA Fragments of Defined Sequence for the Study of DNA and Repair. IN: Grossman L, Moldave K, eds. Methods in Enzymology. New York. Academic Press, 1980. 65: 235-248.
- 13b. Clements JE, Pedersen FS, Narayan O, Haseltine WA. Mutation as a Mechanism for Escape from Immune Suppression: the Visna Virus Example. IN: Viruses in Naturally Occurring Cancers. New York: Cold Spring Harbor Conferences on Cell Proliferation. 1980. 7: 953-967.
- 14b. Sahagan BG, Rosenberg ZR, Haseltine WA. Restriction Enzyme Analysis of the Feline Sarcoma Virus Provirus in Murine Fibroblasts Transformed by Transfection. IN: Hardy WD Jr, Essex M, McClelland AJ, eds. Feline Leukemia Virus. North Holland. 1980. 345-352.
- 15b. Rosenberg ZF, Pedersen FS, Haseltine WA. Comparative Analysis of the Genomes of Feline Leukemia Viruses. IN: Hardy WD Jr, Essex M, McClelland AJ, eds. Feline Leukemia Virus. North Holland: 1980. 355-359.
- 16b. Clements JE, D Antonia N, Naqrayan O, Pedersen FS, Haseltine WA. Antigenic Variation of Visna Virus. IN: Fields B, Jaenisch R, Fox CT, eds. Animal Virus Genetics, ICN-UCLA Symposia on Molecular and Cellular Biology. New York: Academic Press. 1980. XVIII.
- 17b. Grafstrnom R, Snaper N, Grossman L, Haseltine Wa. Incision of Pyrimidine Dimer Containing DNA by Small Molecular Weight Enzymes. IN: Seeburg E, eds. Chromosome Damage and Repair. Plenum Press. 1980.
- 18b. Grunberger D, Beland FA, Dipple A, Haseltine WA, Poirier MO, Singer B. Quantitation of DNA Damage. J. Supramolecular Structure and Cellular Biochemistry.

- 19b. Haseltine WA, Lippke JA, Gordan LK, Brash DE. Detection of Alkaline Sensitive Lesions Induced by Ultraviolet Light at Pyrimidine-Cytosine Sequences in DNA. IN: Harris C, Cerutti P, eds. Proceedings of the ICN-UCLA Symposia on Mechanisms of Chemical Carcinogenesis. 1982. 2: 363-449.
- 20b. Haseltine WA, Gordon LR, Lindan C, Lippke J, Brash D, Lo RM, Royer-Pokora B. New Approaches to DNA Damage and Repair: The Ultraviolet Light Example. IN: Lemontt JF, Generoso WM, eds. Molecular and Cellular Mechanisms of Mutagenesis. New York: Plenum Press. 1982. 315-332.
- 21b. Lippke J, Haseltine WA. The Human Aliphoid Sequence as an Indicator of DNA Damage in Intact Cells. IN: Hanawalt IPC, Friedberg EC, eds. DNA Repair: A Laboratory Manual of Research Procedures. New York: Marcel Dekker, Inc. 1983. 2: 187-198.
- 22b. Haseltine WA. Ultraviolet Light Repair and Mutagenesis Revisited. Cell. 1983. 33: 13-17.
- 23b. Franklin WA, Haseltine WA. The Use of Post-labeling Methods to Detect and Characterize Infrequent Base Modifications in DNA. IN: Hanawalt PC, Friedberg C, Eds. DNA Repair: A Laboratory Manual of Research Procedures. New York: Marcel Dekker, Inc. 1983. 2: 161-171.
- 24b. Haseltine WA, Brash DE, Lippke JA, Brash DE, Lo KM. New Approaches to DNA Damage and Repair. IN: RT Schimke, ed. Gene Amplification. Cold Spring Harbor. 1982. 263-272.
- 25b. Haseltine WA, Franklin WA, Lippke JA, Brash DE, Lo KM. Possible Biological Significance of a Novel Ultraviolet Light Induced DNA Photoproduct. IN: Perspectives on Genes and the Molecular Biology of Cancer. Texas: Robberson Saunders, ds. Raven Press. 1982. 291-298.
- 26b. Lo KW, Brash DE, Franklin WA, Lippke JA, Haseltine WA. UV Light Induced Sequence Specific DNA Damage and Mutagenesis. IN: Human Carcinogenesis. 1982. 281-299.
- 27b. Lo KW, Brash DE, Franklin WA, Lippke JA, Haseltine WA. Studies of DNA Damage and Mutagenesis by Ultraviolet Light. IN: Genes and Proteins in Oncogenesis. Academic Press, N.Y. 1982. 41-53.
- 28b. Haseltine WA, Lenz J, Crowther R. Determination of Virulence Properties of Leukemia Viruses. IN: Modern Trends in Human Leukemia Virus. 1982. 28: 451-455.
- 29b. Lo KM, Franklin WA, Lippke JA, Henner WD, Haseltine WA. New Methods for the Detection of DNA Damage to Human Cellular DNA by Environmental Carcinogens and Anti-tumor Drugs. IN: Banbury Report 13. Cold Spring Harbor. 1982. 253-263.

- 30b. Haseltine WA, Franklin WA, Lippke JA. New Methods for Detection of Low Levels of DNA Damage in Human Populations. IN: *Env. Health Perspectives*. 1983. 48: 29-41.
- 31b. Sodroski JG, Lenz JR, Haseltine WA. Reflections and Speculations Regarding Mechanisms of Carcinogenesis. *Inserm*. 1983. 117: 189-216.
- 32b. Haseltine WA. Site Specificity of Ultraviolet Light Induced Mutagenesis. IN: *UCLA Symposia on Molecular and Cellular Biology, New Series*. eds. EC Friedberg, BA Bridges Liss, New York. 1983. 11: 2-33.
- 33b. Sodroski JG, Patarca R, Lenz J, Trus M, Crowther R, Perkins D, Gallo R, Wong-Staal F, Josephs S, Gelman E, Haseltine WA. LTR Regions of Murine Leukemia Virus and Human T Cell Leukemia Virus as Potential Leukemogenic and Pathogenic Determinants. IN: *Human T Cell Leukemia/Lymphoma Virus*. eds. RC Gallo, ME Essex, L Gross. Cold Spring Harbor Labs. 1983. 149-155.
- 34b. Haseltine WA, Sodroski JG, Patarca R. Structure and Function of the Genome of HTLV. IN: *Current Topics in Microbiology and Immunology*. ed. PK Vogt. Springer-Verlag, Germany. 1984. 115: 177-209.
- 35b. Bister K, Burny AL, Croce CM, Haseltine WA, Hayman MJ, Hayward WS, Klein G, Moelling K, Neth RD, Pragnell IB, Rowley JD. Genes and Viruses Able to Transform Hematopoietic Cells. IN: *Leukemia*, ed. IL Weissman. Springer-Verlag, Germany. 1983. 275-292.
- 36b. Haseltine WA, Sodroski JG, Rosen CA. Structure and Function of Human Leukemia and AIDS Viruses. IN: *Retroviruses in Human Lymphoma/Leukemia*, ed. M. Miwa. Japan Sci. Soc. Press, Tokyo. 1985. 187-196.
- 37b. Haseltine WA, Sodroski JG, Rosen CA. Control of Gene Expression and the Replication and Pathogenesis of Retroviruses. IN: *Important Advances in Oncology*. J.B. Lippincott, PA. 1986. 159-172.
- 38b. Haseltine WA, Sodroski JG, Rosen CA. Progress and Puzzles: The Molecular Biology of HTLV-III. IN: *AIDS: Modern Concepts and Therapeutic Challenges*. ed. S. Broder. Marcel Dekker, Inc., New York. 1986. 53-62.
- 39b. Haseltine WA, Sodroski JG, Rosen CA, Goh WC, Dayton AI, Celander DW. Transactivator Genes of HTLV-I, II, and III. IN: *Oncogenes and Growth Control*. eds. P. Kahn, T. Graf. 1986, 247-252. Publishers, Springer-Verlag, Heidelberg, FRG.
- 40b. Haseltine WA, Sodroski JG. Cell Membrane Fusion Mediated by the Envelope Glycoproteins as the Primary Effector of AIDS Virus Cytopathicity. IN: *Acquired ImmunoDeficiency Syndrome*. 1986. 47-56. (Proceedings of the II International Conference on AIDS, Paris). Publisher, Elsevier.

- 41b. Haseltine WA. Replication and Pathogenesis of Human Retroviruses. IN: Viral Carcinogenesis Functional Aspects. 1986. 100-112. (Proceedings of the Alfred Benzon Symposium). Publisher, Munksgard, Copenhagen.
- 42b. Sodroski JG, Goh WC, Rosen CA, Terwilliger E, Dayton AI, Campbell K, Haseltine WA. A Functional Analysis of the HTLV-III Envelope: Implications for Pathogenesis, Therapy and Prophylaxis. 1986. (Proceedings of Cold Spring Harbor Meeting, N.Y.).
- 43b. Sodroski JG, Haseltine WA. The AIDS Virus: Puzzles for the Molecular Biologist. IN: AIDS IN OUR LIVES: Personal Social, and Medical Issues (editor, Earl Hanson PPI Publishing, 1989), pp 7-34.
- 44b. Haseltine WA. Molecular Approaches To Preventive and Therapeutic Intervention for AIDS. IN: Retroviruses of Human AIDS and Related Animal Diseases. 1986. 58-60. (Proceedings of Colloque Des Cent Gardes). Publisher, Pasteur Vaccins, France.
- 45b. Sodroski JG, Kowalski MK, Dorfman T, Basiripour L, Rosen CA, Haseltine WA. HIV Envelope - CD4 Interaction Not Inhibited by Synthetic Octapeptides. The Lancet. 1987. 1428-1429.
- 46b. Sodroski JG, Haseltine WA, Rosen CA, Potz J, Basiripour L, Dorfman T, Kowalski M. Structure-Function Analysis of the Human Immunodeficiency Virus Envelope Glycoprotein. 1987. (Proceedings of NIH Workshop on Peptide "T").
- 47b. Haseltine WA, Sodroski JG, Rosen CA. Replication and Pathogenesis of the Human T-Cell Leukemia/Lymphotropic Retrovirus. IN: Modern Trends in Human Leukemia VII. Springer-Verlag, Germany. 1987. 395-403.
- 48b. Haseltine WA. Observations from the Front. IN: SIDA: Epidemies et Societes. 1987. 54-61. Publisher, Fondation Marcel Merieux. (Proceedings of the Fondation Marcel Merieux, Annecy).
- 49b. Haseltine WA, Sodroski J, Terwilliger E. Replication and Pathogenesis of HIV-1 Retrovirus Relevant to Drug Design. IN: Retroviruses and Disease. 1989. 159-181. Publisher, Academic Press. (Proceedings of International Symposium on Medical Virology, Irvine, CA).
- 50b. Haseltine WA, Kowalski M, Sodroski JG. The Structure and Function of the Envelope Glycoprotein of the AIDS Virus. 1988. Publisher, Pasteur Vaccins. (Proceedings of the Cent Gardes Meeting, Paris).
- 51b. Haseltine WA. A Rational Approach To Chemotherapy of AIDS. IN: HIV and Other Highly Pathogenic Viruses. 1988. 25-32.
- 52b. Encyclopedia Americana. AIDS Article. 1988 Edition. Publisher, Grolier Incorporated, Danbury, Connecticut.

- 53b. Sodroski JG, Kowalski MM, Haseltine WA. Structure and Function of the Human Immunodeficiency Virus Envelope: Implications for Vaccine Development. 1988. IN: AIDS Vaccine: Basic Research and Clinical Trials. 1988.
- 54b. Sodroski JG, Haseltine WA. The Molecular Biology of HIV Replication and Pathogenesis. IN: AIDS 1988 (editor, Ruth Kulstad, American Association for the Advancement of Science, 1988) pp. 385-400.
- 55b. Haseltine WA, Wong-Staal F. The Molecular Biology of the Human Immuno Deficiency Virus. Scientific American. 1988. 256: 52-62.
- 56b. Haseltine WA. Replication and Pathogenesis of the AIDS Virus. (Plenary Lecture presented at the IVth International Conference on AIDS, Stockholm, Sweden). Journal of Acquired Immune Deficiency Syndromes. 1988. 1: 217-240.
- 57b. Haseltine WA, Terwilliger EF, Rosen CA, Sodroski JG. Structure and Function of Human Pathogenic Retroviruses. IN: Retrovirus Biology: An Emerging Role in Human Disease. Published by Marcel Dekker, Inc. 1988.
- 58b. Haseltine WA. Current and Future Prospects for Anti-Viral AIDS Drug Development. (Proceedings of the Symposium Biotechnology and the AIDS Challenge in Massachusetts: A Symposium Report). April, 1989. 87-89. Sponsors: Massachusetts Centers for Excellence Corp., Massachusetts Biotechnology Research Institute, University of Massachusetts Medical Center, Massachusetts Biotechnology Council, Massachusetts Department of Public Health.
- 59b. Haseltine, William A. Prospects for Medical Control of the AIDS Epidemic. In: Daedalus: Living with AIDS, Part II. Published by Journal of the American Academy of Arts and Sciences. 1989. 118: 1-21.
- 60b. Haseltine, William A. Molecular Biology of HIV-1. In: AIDS and New Viruses. Published by Academic Press. 1989.
- 61b. Terwilliger EF, Haseltine WA. Regulation of Replication of HIV-1. 1989.
- 62b. Terwilliger EF, Sodroski JG, Haseltine WA. Mechanisms of Infectivity and Replication of HIV-1 and Implications for Therapy. Annals of Emergency Medicine. 1989. 19: 233-241.
- 63b. Haseltine, WA. Development of Antiviral Drugs for the Treatments of AIDS: Strategies & Prospects. Journal of Acquired Deficiency Syndromes. 1989. 2:311.
- 64b. Haseltine WA. The Genetic Code. In: Microverse. Eds.: Preiss B, Alschuler, W. 1990.
- 65b. Haseltine WA, Farnet C, Gottlinger H, Langhoff E, and Terwilliger E. Studies of HIV-1 replication. The role of p6, integration, and growth in peripheral blood dendritic

cells. Retroviruses of Human A.I.D.S. and Related Animal Diseases. Cinquieme Colloque Des Cent Gardes. 1990. 201-212.

66b. Fine HA, Haseltine WA. RNA Tumor Viruses. In: Cancer Medicine Textbook. Eds.: Frei E. 1991. (In Press).

67b. Haseltine WA. AIDS. In: Americana. Ed: Grolier Inc. 1991. (In Press).

68b. Haseltine WA. HIV Research and nef Alleles. Science. 1991.

69b. Haseltine WA. The Molecular Biology of the Human Immunodeficiency Virus Type 1. 1991. FASEB. 2349-2360

70b. Haseltine WA. Human Immunodeficiency Virus (HIV) Gene Expression and Function. In: The Human Retroviruses. Ed: Academic Press. 1991. 69-106.

71b. Haseltine WA. Molecular Biology of the AIDS Virus: Ten Years of Discovery - Hope for the Future. In: Science Challenging AIDS. Ed: Karger. 1992. 71-106

72b. Haseltine WA. Managing the Socio-Economic Implications of Genetic Engineering. In: Leadership and Management in the Information Age. The Emirates Center for Strategic Studies and Research. 2002. 132-160.

#### *Publications Edited*

1d. Haseltine, WA. Regulation of HIV-1 Replication by tat and rev. In: Genetic Structure and Regulation of HIV-1. Eds.: Haseltine WA, Wong-Staal F. Raven Press. 1991. 1-42.

2d. Kalland, KH, Langhoff EL, Bos HJ, Gottlinger H, and Haseltine WA. Retroviral regulatory proteins and the nucleolus. In: Genetic Structure and Regulation of HIV-1. Eds.: Haseltine WA, Wong-Staal F. Raven Press. 1991. 377-390.

3d. Langhoff EL, Terwilliger E, Kalland KH, Poznansky M, Bos HJ, Bacon O, Sodroski J, And Haseltine WA. HIV-1 infection of human dendritic cells. In: Genetic Structure and Regulation of HIV-1. Eds.: Haseltine WA, Wong-Staal F. Raven Press. 1991. 511-525.

4d. Lu Y, Hey A, Touzjian N, Stenzel M, and Haseltine WA. Cellular Transcription Factors which Regulate HIV-1 Replication. In: Genetic Structure and Regulation of HIV-1. Eds.: Haseltine WA, Wong-Staal F. Raven Press. 1991. 415-435

5d. Helland D, Repke H, Caputo A, and Haseltine WA. The Exogenous Transactivation Activity of HIV-1 tat. In: Genetic Structure and Regulation of HIV-1. Eds.: Haseltine WA, Wong-Staal. Raven Press. 1991. 301-310

6d. Terwilliger EF, Langhoff E, and Haseltine WA. The *nef* Gene of HIV-1 A Review of Recent Results. In: Genetic Structure and Regulation of HIV-1. Eds.: Haseltine WA, Wong-Staal F. Raven Press. 1991. 457-471.

7d. Cohen EA, Terwilliger E, and Haseltine WA. The *vpr* Protein of HIV-1 is a Virion-Associated Positive Regulatory Protein. In: Genetic Structure and Regulation of HIV-1. Eds: Haseltine WA, Wong-Staal F. Raven Press. 1991. 451-456

#### *Related Books and Articles*

1e "Rapture: How Biotech Became the New Religion" by Brian Alexander; Basic Books, 2003

2e "The Myth of Heterosexual AIDS: How a Tragedy Has Been Exploited by the Media and Partisan Politics" by Michael Furmento, Basic Books 1990

3e "The Gene Masters: How a new Breed of Scientific Entrepreneurs Raced for the Biggest Prize in Biology, by Ingrid Winkelgren, McMillan 2002

4e Deliberate Destruction of the Environment: What Have we Done to Vietnam?  
Robert C Cooke, William A Haseltine Arthur Galston, New Republic; vol. 162 Issue 2, p18, 1970.

5e Cohen, Jon, "Consulting Biotech's Oracle," *Technology Review* , October 2001, pp. 70–75.

6e Langreth, Robert, "Beyond Talk," *Forbes* , November 24, 2003, pp. 72–75.

7e "He's Brilliant, He's Swaggering—and He May Soon Be Genomics' First Billionaire," by David Stipp *Fortune* , June 25, 2001, pp. 100–106.

8e "The Gene Kings" by John Carey, Business Week May 07, 1995

9e "He's Brilliant, He's Swaggering—and He May Soon Be Genomics' First Billionaire," by David Stipp *Fortune*, pp. 100–106. June 25, 2001,

10e "William Haseltine: The Thought Leader Interview", A Molecular Biologist and Entrepreneur Sees Green as the next wave of the Genomic Revolution", by Ann Graham Strategy Plus Business, Feb 24 2009

11e "Dr. William Haseltine on Regenerative Medicine, Aging and Human Immortality" by Gregory M. Fahey Life Extension Vol. 8, issue 7 p 58 July 2002

12e "I dream of Genome" by Robert Langreth, Forbes May 10 Vol. 7 Issue 8 p10 2004

13e 20 years Ago in Discover: Misunderstanding AIDS, Anne Casselman Discover: April Vol. 26 Issue 4, p13, 2005

14e "Profile: William Haseltine" by Stephan Herrera Nature Biotechnology; August, Vol. 23 Issue 8, p913 2005

15e William A Haseltine by Karen Lowey, Newsweek June 20 Vol. 145 Issue 24/25 p46 2005

16e "Lupus Drug Revives Human genome Science's Prospects" by Matthew Harper Forbes July 20, 2009

17e "Consulting Biotech's Oracle" by Jon Cohen Technolgy Review p 70-75 October 2001

18e "Mining the Genome for Drugs" by Ingrid Winkelgren, Science Vol. 285 #5430 p 998-1001 August 13, 1999

19e "Mr. Green Genes" by Linton Weeks Washington Post Page E01 February 17, 1998

20e "William Haseltine on Human Genome Science's Plan" cover Story Bloomberg Businessweek Online, June 12, 2000