

CURRICULUM VITAE

Samuel H. Wilson

Place of Birth: U.S.A.

Married - 2 children (grown)

Education:

1961	A.B. (Chemistry)	University of Denver
1968	M.D.	Harvard University
1968	Postdoctoral Fellowship	Dartmouth Medical School
1970	Postdoctoral Fellowship	NIH

Professional Employment:

2007 - Present	Acting Director, National Institute of Environmental Health Sciences (NIEHS), NIH, & National Toxicology Program
1996 - Present	Chief, DNA Repair and Nucleic Acid Enzymology Section, Laboratory of Structural Biology, NIEHS, NIH
1996 - 2007	Deputy Director, NIEHS, NIH, & National Toxicology Program
1991 - 1996	Founding Director, Sealy Center for Molecular Science, The University of Texas Medical Branch (UTMB) and Director, Centennial Center for Environmental Toxicology, UTMB
1986 - 1992	Chief, Nucleic Acid Enzymology Section, Laboratory of Biochemistry, National Cancer Institute (NCI), NIH
1970 - 1992	Research Scientist, Laboratory of Biochemistry, NCI, NIH
1968 - 1992	US Public Health Service Commissioned Corps, Retired (January 1992) Medical Director (06)
1968 - 1970	Postdoctoral Fellow (Research Associate) Laboratory of Biochemical Genetics (Advisor - Marshall Nirenberg), National Heart Institute, NIH
1967 - 1968	Postdoctoral Fellow, Department of Biochemistry (Advisor- Mahlon Hoagland), Dartmouth Medical School
1964 - 1966	Student Research Associate, Department of Bacteriology and Immunology (Advisor - Mahlon Hoagland), Harvard Medical School
1961 - 1962	Graduate Fellow, Department of Chemistry (Advisors - J.J. Schmidt - Colerus and J.A. Krimmel), Denver Research Institute, Univ. of Denver

Awards & Lectures: (since 2000)

2008	Robert S. Harris Lecturer, Massachusetts Institute of Technology
2008	Abelson Lecturer, Washington State University
2008	Keynote Speaker, MD Anderson Cancer Center, DNA Repair Symposium
2007	Keynote Speaker, North Carolina Regional Conference on Genome Stability
2005	NIH Merit Award (Strategic Planning)
2005	NIH Merit Award (Gulf Coast Hurricane Response)
2005	Plenary Lecturer, 9 th International Conference on Environmental Mutagens
2005	Keynote Speaker, Genetic Toxicology Gordon Research Conference
2004	NIH Merit Award (Leadership as Deputy Director, NIEHS)
2003	NIEHS "Scientist of the Year 2003" and Science Day Speaker
2003	Keynote Speaker, EU-US Conf. on DNA Damage Induced Stress Responses

2003 Keynote Speaker, Toxicogenomics Gordon Research Conference
 2003 Keynote Speaker, The American Chemistry Council Long-Range Research Initiative (ACC-LRI) First Annual Science Meeting
 2002 Keynote Speaker, Mutagenesis Gordon Research Conference
 2002 21st William B. Kinter Lecturer, Mount Desert Island Biol. Lab. Symposium
 2002 NIH Director's Award (Toxicogenomics)
 2002 Keynote Speaker, New York Medical College, Annual Research Forum
 2001 NIH Merit Award (Toxicogenomics)
 2001 Keynote Speaker, Mouse Genomics Consortium Workshop
 2001 Keynote Speaker, 11th Annual Howard Hughes Medical Institute Environmental Conference
 2001 Keynote Speaker, Genetic Toxicology Gordon Research Conference
 2001 Keynote Speaker, 3rd Annual Midwest DNA Repair Symposium
 2000 Keynote Speaker, Toxicology Gordon Research Conference
 2000 NIH Director's Award, Advanced Research Cooperation in Environmental Health (ARCH) Program

Graduate Student Advisor/Thesis Research Supervisor:

Degree in 1978 W. Zellmer, Dept. of Zoology, Auburn University
 Degree in 1978 E.W. Bohn, Dept. of Chemistry, American University
 Degree in 1985 J. Swack, Dept. of Biochemistry, George Washington University
 Degree in 1997 T. Molina, Dept. of Human Biological Chemistry and Genetics, UTMB
 Degree in 2007 N. Palma, Dept. of Cellular Biology, University of Seville, Spain

Member Ph.D. Thesis Defense or Advisory Committee:

2002, T. Fisher, Dept. of Microbiology and Immunology, Albert Einstein College of Medicine;
 2001, L. Chen, Dept. of Molecular Medicine, Institute of Biotechnology, University of Texas Health Science Center (San Antonio); 2000, B.-Q. Li, Dept. of Biochemistry and Molecular Biology, University of Miami; 1997, A.G. McNees, Dept. of Human Biological Chemistry and Genetics (HBC&G), UTMB; 1997, X.-Q. Zhou, Department of Cellular and Structural Biology, University of Texas Health Science Center (San Antonio); 1996, Q. Xie, Dept. of HBC&G, UTMB; 1996, B. Ponnaiya, Dept. of HBC&G, UTMB; 1996, T.K. Varma, Dept. of HBC&G, UTMB; 1995, S. F. Anderson, Dept. of Molecular Biophysics and Biochemistry, Yale University; 1995, N. Deane, Dept. of Microbiology, UTMB; 1992, R. Anderson, Dept. of Biochemistry, Baylor College of Medicine; 1991, M. Delahunty, Dept. of Chemistry, Univ. of Maryland Baltimore County; 1987, H. Al-Khatib, Dept. of Biochemistry, Georgetown University; 1986, B. Merrill, Dept. of Molecular Biophysics and Biochemistry, Yale University; 1985, A. Lambrianidou, Dept. of Biochemistry, Georgetown University; 1984, W. Albert, Institute of Biochemistry, University of Wurzburg; 1980, M. Vinocour, Dept. of Biochemistry, University of Arizona.

Postdoctoral Fellows and Research Associates:

2007-present, M. Heacock; 2005-present, A Masaoka; 2003-present, Y. Liu; 2003-present, K. Asagoshi; 2002-2006, E. Braithwaite; 2005, E. Speina; 2002-2003, C. Cistulli; 1998-2003, M. Ghosh; 1993-2002, R. Sobol; 1992-1999, 2001-2002, D. Srivastava; 1997-2001, B. Vande Berg; 1999-2000, D. Kolpachtchikov; 1999-2000, G. Belova; 1997-2000, A. Robertson; 1998-1999, J.

Krahn; 1992-1999, X.-P. Yang; 1994-1996, J. Chyan; 1992-1996, R. Singhal; 1991-1996, F. He; 1991-1996, K.-H. Chen; 1991-1996, S. Narayan; 1990-1995, M. Jaju; 1991-1994, R. Prasad; 1992-1993, R. Kim; 1991-1993, H. Idriss; 1991-1993, R. Goel; 1990-1992, W. Beard; 1989-1991, J. Casas-Finet; 1989-1991, S.-J. Kim; 1989-1991, A. Kumar; 1989-1991, E. Englander; 1987-1991, J. Abbotts; 1986-1991, S. Widen; 1988-1990, C. Majumdar; 1987-1990, P. Kedar; 1985-1987, P. Kumar; 1984-1987, D. Sen Gupta; 1984-1987, F. Cobiانchi; 1982-1984, A. Hazra; 1981-1984, E. Karawya; 1980-1984, P. Becerra; 1979-1984, S. Detera; 1979-1984, K. Tanabe; 1980-1983, S. Planck; 1977-1980, Y.-C. Chen; 1978-1979, T. Marshall; 1975-1976, M. Sivarajan; 1972-1975, A. Matsukage.

Sabbatical/Senior Laboratory Associates:

2006-present, M. Carrozza; 2002-present, V. Poltoratsky; 2001-present, V. Batra; 1999-present, P. Kedar; 1997-present, J. Horton; 1994-present, R. Prasad; 1992-present, W. Beard; 2006-2007, Z. Zhang; 1994-1995, 1999-2000, 2001-2002, O. Lavrik; 1995-1996, and 2002, P. Strauss; 2000-2002, S.-J. Kim; 2001, H. Idriss; 1999, 2000, S. DeLauder; 1997, A. Slesarev; 1990, F. Cobiانchi; 1985, K. Tanabe; 1984-1990, B.Z. Zmudzka.; 1984 and 1988, A. Matsukage.

National Peer-Review Activities: (excluding journal reviews, since 2000)

2008 - 2011 Editorial Board, *Nucleic Acids Research*
 2006 - present Editorial Board, *Mechanisms of Ageing and Development*
 2003 - 2008 Associate Editor, *DNA Repair*
 2001 - 2003 Editorial Board, *DNA Repair*
 1999 - 2006 Editorial Board, *Annual Review of Medicine*
 1997 - 2008 Editorial Board, *Environmental Health Perspectives*
 1996 - 2002 Editorial Board, *The Journal of Biological Chemistry*

National Committees and Other Activities Outside NIH: (since 2000)

2007 - 2008 Co-Chair, 3rd Biannual US-EU/EU-US DNA Repair Meeting
 2007 Organizing Committee NAS/IOM The Institute of Medicine's Roundtable on Environmental Health Sciences, Research, and Medicine (EHSRT) Workshop, Environmental Health, Energy, and Transportation, Washington, DC
 2007 Vice-Chair, Genetic Toxicology Gordon Research Conference, Oxford, UK
 2007 Co-Chair, 3rd Biannual Japan-US/US-Japan DNA Repair Meeting
 2005 Co-Chair, 2nd Biannual EU-US DNA Repair Meeting, Erice, Sicily
 2004 - present Member, Scientific Advisory Board, Flight Attendant Medical Research Institute (FAMRI) Center, Weizmann Institute of Science, Rehovot, Israel
 2004 Co-Chair, 2nd Biannual Japan-US/US-Japan DNA Repair Meeting, Honolulu, HI
 2003 - 2009 Vice-Chair and Chair, respectively, Genetic Toxicology Gordon Research Conference, Oxford, UK
 2003 - 2007 Director (2003), Scientific Advisory Board (2004-2007), Radiation Effects Research Foundation (Cooperative Japan-United States Research Organization), Hiroshima, Japan
 2003 - 2005 Program Committee, 9th International Conference on Environmental Mutagens, San Francisco, CA
 2003 Co-Chair, Biannual US-EU/EU-US DNA Repair Meeting, Leesburg, VA

- 2003 Annual Meeting EMS, Miami, FL, May 2003, Symposium Co-Chair
- 2002 Scientific Advisory Board – Program on Structural and Cell Biology of DNA Repair, Lawrence Berkeley National Laboratory, Berkeley, CA
- 2002 Scientific Advisory Committee (*ad hoc*), CIIT, RTP, NC
- 2002 Co-Chair, Marshall Nirenberg Symposium, Natcher Center, NIH, Bethesda, MD
- 2002 Co-Chair, 1st Biannual Japan-US/US-Japan DNA Repair Meeting, Sendai, Japan
- 2000 - 2001 Member, American Society for Biochemistry and Molecular Biology (ASBMB) Council
- 1997 - 2001 Vice-Chair and Chair, respectively, Mammalian DNA Repair Gordon Research Conference
- 1997 - 2000 Co-Organizer and Co-Chair, Base Excision Repair 2000 Workshop, Galveston, TX
- 1994 - 2000 Scientific Advisory Panel - The Flinn Foundation, Phoenix, AZ

Invited Laboratory Research Presentations (since 2000):

- 3rd Biannual US-EU DNA Repair Meeting, Galveston, TX, November 2008
- Targeting DNA Replication in Cancer Cells Meeting, Bethesda, MD, September 2008
- Gordon Research Conference, Oxford, UK, July 2008
- 2nd International Genome Dynamics in Neuroscience Conference, Pacific Grove, CA, June 2008
- Washington State University, Pullman, WA, April 2008
- R.D. Wells Symposium, Houston, TX, April 2008
- NIH Videoconference on the History of DNA Repair, Transforming Technologies Along the Way: A Story About Pol β and BER, Research Triangle Park, NC, June 2007
- Gordon Research Conference, Oxford, UK, August 2007
- 3rd Japan-US DNA Repair Meeting, Sendai, Japan, May 2007
- Rutgers University, Piscataway, NJ, March 2007
- Gordon Research Conference, Ventura, CA, February 2007
- Conference on Xeroderma Pigmentosum and Other Diseases of Human Premature Aging and DNA Repair: Molecules to Patients, National Conferences Center, Landsdowne, VA, September 2006
- XIII International Congress of the Free Radical Society International Meeting, Davos, Switzerland, August 2006
- Erling Seeberg Symposium on DNA Repair, Bodø and Henningsvær, Lofoten, Norway, May 2006
- American Society Biochemistry and Molecular Biology Annual Meeting, San Francisco, CA, April 2006
- Mayo Clinic, Rochester, MN, February 2006
- 2nd Biannual EU-US DNA Repair Meeting, Erice, Sicily, November 2005
- NIEHS Center for Rodent Genetics Conference, Research Triangle Park, NC, October 2005
- Ohio State University, Columbus, OH, October 2005
- Gordon Research Conference, Newport, RI, June 2005
- FAMRI Symposium, Weizmann Institute, Rehovot, Israel, March 2005
- Keystone Symposium, Taos, NM, March 2005

American Society of Microbiology Conference on DNA Repair and Mutagenesis, Bermuda,
November 2004
Dale W. Mosbaugh Symposium on Genetic Toxicology and DNA Repair, Corvallis, OR,
October 2004
American Chemical Society National Meeting, Philadelphia, PA, August 2004
Forbeck Forum, Hilton Head Island, SC, November 2003
Sixth Annual Jack B. Little Symposium, Boston, MA, October 2003
1st Biannual US-EU DNA Repair Meeting, Leesburg, VA, October 2003
Gordon Research Conference, Oxford, UK, August 2003
Cincinnati Comparative Mouse Genomics Centers (CMGCC) Symposium, Boston, MA, June
2003
Gordon Research Conference, Newport, RI, June 2003
University of Nebraska, Omaha, NE, May 2003
Gordon Research Conference, Ventura, CA, January 2003
55th Annual Symposium on Fundamental Cancer Research, M.D. Anderson Cancer Center,
Houston, TX, October 2002
University of California, San Diego, CA, October 2002
32nd Annual Meeting of European Environmental Mutagen Society, Warsaw, Poland, September
2002
University of Pittsburgh, Pittsburgh, PA, May 2002
American Chemical Society 223rd National Meeting, Orlando, FL, April 2002
SUNY-Stony Brook, Long Island, NY, April 2002
Gordon Research Conference, Ventura, CA, March 2002
Albert Einstein College of Medicine, New York, NY, February 2002
University of Southern California, Los Angeles, CA, November 2001
University of North Carolina, Chapel Hill, NC, September 2001
University of Rochester, Rochester, NY, April 2001
University of North Carolina, Chapel Hill, NC, March 2001
Gordon Research Conference, Ventura, CA, January 2001
Intramural AIDS Targeted Antiviral Program (IATAP) Symposium, NIH, Bethesda, MD,
October 2000
Gordon Research Conference, Oxford, UK, August 2000
65th Cold Spring Harbor Symposium on Quantitative Biology, Cold Spring Harbor, NY, June
2000
Curriculum in Toxicology, University of North Carolina Graduate Program, Chapel Hill, NC,
March, 2000
BER Workshop 2000, Galveston, TX, March, 2000
Gordon Research Conference, Ventura, CA, March 2000
AACR Special Conference on DNA Repair, San Diego, CA, January 2000

Books: Editor or Co-Editor (Reference Volumes):

The Eukaryotic Nucleus: Molecular Biochemistry and Macromolecular Assemblies, Vol. 1-2.
Strauss, P.R., Wilson, S.H. (eds.), The Telford Press/CRC Press, 1990.
Cancer Biology and Biosynthesis. Wilson, S.H. (ed.), CRC Press, 1991.
Base Excision Repair, Progress in Nucleic Acids Research and Molecular Biology. Mitra, S.,
McCullough, A., Lloyd, R.S., and Wilson, S.H. (eds.), Academic Press, 2001.

Biomarkers of Environmentally Associated Disease: Technologies, Concepts, and Perspectives.
Wilson, S.H., and Suk, W. (eds.), CRC Press, 2002.

Patent:

Wilson, S.H. and Kronick, M.N. “An assay technique for reactions that produce radioactive gases.”

Reports and Special Articles:

1. **Schmidt-Collerus, J.J.**, Krimmel, J.A., Smith, C.D., and Wilson, S.H. Polymerization by the Diels-Alder reaction. University of Denver Research Institute Project Report to Olin-Matheson Corp. for period 1959-1962.
2. **Gray, D.N.**, Bonamo, F., Knight, R., Wilson, S.H., and Schmidt-Collerus, J.J. Synthesis and characterization of ultraviolet radiation absorbers. Progress Reports No. 1-4, 1961-1962 Wright-Patterson Air Development Center, U.S. Air Force 33616-8251. TASK No. 73120.
3. **Wilson, S.H.** Stability of rat liver messenger RNA: Long and short half-life cytoplasmic messenger RNA molecules indicate mechanisms for controlling differential stability. Honors Thesis, Harvard Medical School, Harvard University, February 1, 1968.
4. **Friedberg, E.C.**, Hanaoka, F., Tanaka, K., Wilson, S.H., and Yasui, A. Meeting Report: Report on the first US-Japan Repair Meeting, Sendai, Japan, October 27-31, 2002. **DNA Repair (Amst.)** 2:639-652, 2003.
5. **Bohr, V.A.**, Souza-Pinto, N., and Wilson, S.H. First US-EU DNA Repair Meeting: Endogenous Stress, National Conference Center, VA, USA, 14-18 October 2003. **DNA Repair (Amst.)**, 3:543-559, 2004.
6. **Friedberg, E.C.**, Hanaoka, F., Tanaka, K., Yasui, A., and Wilson, S.H. Meeting Report: The 2nd US-Japan DNA Repair Meeting, Honolulu, Hawaii, June 4-8, 2004, **DNA Repair (Amst.)**, 3:1661-1674, 2004.
7. **Wilson, S.H.** Book review: DNA damage recognition. **DNA Repair (Amst.)**, 6:396, 2007.

Invited Research Articles and Reviews:

1. **Hoagland, M.B.**, Wilson, S.H., and Quincey, R.V. Some light upon the "Membrane RNA" problem. IN: San Pietro, A., Lamborg, M.R., and Kenney, F.T. (eds.), **Regulatory Mechanisms for Protein Synthesis in Mammalian Cells; third Kettering Symposium**. Academic Press, 1968, pp. 179-181.
2. **Wilson, S.H.**, Kuff, E.L., Bohn, E.W., Lueders, K.K., and Matsukage, A. DNA polymerase in association with intracisternal A-type particles. IN: Wells, R.D. and Inman, R.B. (eds.), **DNA Synthesis In Vitro**. University Park Press, 1973, pp. 361-367.
3. **Schrier, B.K.**, Wilson, S.H., and Nirenberg, M. Cultured cell systems and methods for neurobiology. IN: Fleischer, S. and Packer, L. (eds.), **Methods in Enzymology, Biomembranes: Part B**. Academic Press, 1974, Vol. 32, pp. 765-788.
4. **Schrier, B.K.** and Wilson, S.H. On the measurement of tritium in DNA and its applications to the assay of DNA polymerase activity. IN: Prescott, D.M. (ed.), **Methods in Cell Biology**. Academic Press, 1976, Vol. 13, pp. 105-120.
5. **Cobianchi, F.** and Wilson, S.H. Enzymatic techniques: Enzymes for modifying and labeling DNA and RNA. IN: Berger, S.L. and Kimmel, A.R. (eds.), **Methods in Enzymology, Guide to Molecular Cloning Techniques**. Academic Press, Inc., 1987, Vol. 152, pp. 94-110.
6. **Wilson, S.H.**, Cobianchi, F., and Guy, H.R. cDNA cloning and structure-function relationships of a mammalian helix destabilizing protein: hnRNP particle core protein A1. IN: Thompson, E.B. and Papaconstantinou, J. (eds.), **DNA: Protein Interactions and Gene Regulation**. University of Texas Press, 1987, pp. 129-146.
7. **Wilson, S.H.**, Abbotts, J., and Widen, S. Progress toward molecular biology of DNA polymerase β . **Biochim. Biophys. Acta.**, 949:149-157, 1988.

8. **Abbotts, J.**, SenGupta, D.M., Zmudzka, B.Z., Widen, S.G., and Wilson, S.H. Human DNA polymerase beta: Expression *E. coli* and characterization of the recombinant enzyme. **IN:** Moses, R.E. and Summers, W.C. (eds.), **DNA Replication and Mutagenesis**. American Society of Microbiology Press, 1988, pp. 55-67.
9. **Wilson, S.H.** Gene regulation and structure-function studies of mammalian DNA polymerase β . **IN:** Strauss, P.R. and Wilson, S.H. (eds.), **The Eukaryotic Nucleus: Molecular Biochemistry and Macromolecular Assemblies**. The Telford Press, CRC Press, 1990, Vol. I, pp. 199-234.
10. **Wilson, S.H.** hnRNP protein A1 and insight on the mechanism of nucleic acid binding. **IN:** Wilson, S.H. (ed.), **Cancer Biology and Biosynthesis**. CRC Press, 1990, pp. 55-89.
11. **Abbotts, J.**, and Wilson, S.H. Mechanistic Analysis of HIV-1 Reverse Transcriptase. **IN:** Kumar, A. (ed.), **Advances in Molecular Biology and Targeted Treatment of AIDS**. Plenum Press, 1991, pp. 1-19.
12. **Wilson, S.H.** and Abbotts, J. tRNA in the molecular biology of retroviruses. **IN:** Hatfield, D.L., Lee, B.J., and Pirtle, R.M. (eds.), **Transfer RNA in Protein Synthesis**. CRC Press, 1992, pp. 1-21.
13. **Englander, E.W.** and Wilson, S.H. Regulation of transcription from the mammalian DNA polymerase β promoter by oncogene proteins. **IN:** Spandidos, D. (ed.), **Current Perspectives on Molecular and Cellular Oncology**. JAI Press LTD., 1992, Vol I, part A, pp. 111-129.
14. **Wilson, S.H.**, Singhal, R.K., and Kumar, A. Structural and functional studies of mammalian DNA polymerase β . **IN:** Bohr, W.A., Wassermann, K., Kraemer, K.H. (eds.), **Alfred Benzon Symposium 35: DNA Repair Mechanisms**. 1992, pp. 343-360.
15. **Prasad, R.**, Casas-Finet, J.R., Karpel, R.L., and Wilson, S.H. Characterization of a 32-residue peptide from rat DNA polymerase β with single-stranded DNA-binding affinity. **IN:** Crabb J.W. (ed.), **Techniques in Protein Chemistry V**. Academic Press, 1994, pp. 359-369.
16. **Beard, W.A.** and Wilson, S.H. Site-directed mutagenesis of HIV reverse transcriptase to probe enzyme processivity and drug binding. **IN:** Erickson, J. and Abdel-Meguid, S. (eds.), **Protein Engineering, Current Opinion in Biotechnology**. Current Biology Ltd Press, 1994, Vol. 5, pp. 414-421.
17. **Beard, W.A.** and Wilson, S.H. Reverse transcriptase. **IN:** Karn, J. (ed.), **HIV: A Practical Approach, Volume 2: Biochemistry, Molecular Biology, Drug Discovery**. Oxford University Press, 1995, pp. 15-36.
18. **Beard, W.A.** and Wilson, S.H. Purification and domain-mapping of mammalian DNA polymerase β . **IN:** Campbell, J.L. (ed.), **Methods in Enzymology, DNA Replication**. Academic Press, 1995, Vol. 262, pp. 98-107.
19. **Kunkel, T.A.** and Wilson, S.H. Push and pull of base flipping. **Nature**, 384:25-26, 1996
20. **Mullen, G.P.** and Wilson, S.H. Repair activity in DNA polymerases: A structurally conserved helix-hairpin-helix motif in base excision repair enzymes and in DNA polymerase β . **IN:** Hickson, I.D. (ed), **Base Excision Repair of DNA Damage**. Landes Bioscience, 1997, pp. 121-135.
21. **Wilson, S.H.**, Singhal, R.K., and Zmudzka, B.Z. Studies of DNA polymerases in replication-based repeat expansion. **IN:** Warren, S.T., and Wells, R.D. (eds.), **Genetic Instabilities and Hereditary Neurological Diseases**. Academic Press, 1998, pp. 693-698.
22. **Kunkel, T.A.** and Wilson, S.H. DNA polymerases on the move. **Nat. Struct. Biol.**, 5:95-99, 1998.

23. **Beard, W.A.** and Wilson, S.H. Structural insights into DNA polymerase β fidelity: Hold tight if you want it right. **Chem. Biol.**, 5:R7-R13, 1998.
24. **Wilson, S.H.** and Singhal, R.K. Mammalian DNA repair and the cellular polymerases. IN: Hoekstra, M.F., and Nickoloff, J.A. (eds.), **DNA Damage and Repair, Vol 2.: DNA Repair in Higher Eukaryotes**. Humana Press, 1998, pp. 161-180.
25. **Wilson, S.H.** Mammalian base excision repair and DNA polymerase β . **Mutat. Res. – DNA Repair**, 407:203-215, 1998.
26. **Robertson, A.** and Wilson, S.H. Complementary DNA. IN: Creighton, T.E. (ed.), **Encyclopedia of Molecular Biology**. John Wiley & Sons, 1999, Vol. 1, pp. 532-540.
27. **Wilson, S.H.** and Kunkel, T.A. Passing the Baton in Base Excision Repair. **Nat. Struct. Biol.**, 7:176-178, 2000.
28. **Beard, W.A.** and Wilson, S.H. Structural design of a eukaryotic DNA repair polymerase: DNA polymerase β . **Mutat. Res. – DNA Repair (special issue, Structure of DNA Repair Enzymes)**, 460:231-244, 2000.
29. **Wilson, S.H.**, Sobol, R.W., Beard, W.A., Horton, J.K., Prasad, R., and Vande Berg, B.J. DNA polymerase- β and mammalian base excision repair. IN: **Cold Spring Harbor Symposia on Quantitative Biology**, Cold Spring Harbor Laboratory Press, 2000, Vol. 65, pp. 143-155.
30. **Sobol, R.W.** and Wilson, S.H. Mammalian DNA β -polymerase in base excision repair of alkylation damage. IN: Moldave, K., Mitra, S., McCullough, A., Lloyd, R.S., and Wilson, S.H. (eds.), **Progress in Nucleic Acids Research and Molecular Biology: Base Excision Repair**. Academic Press, 2001, Vol. 68, pp. 57-74.
31. **Beard, W.** and Wilson, S.H. DNA lesion bypass polymerases open up. **Structure (Camb.)**, 9:759-764, 2001.
32. **Beard, W.A.** and Wilson, S.H. DNA polymerases lose their grip. **Nat. Struct. Biol.**, 8:915-917, 2001.
33. **Sander, M.** and Wilson SH. Base Excision Repair, AP Endonucleases and DNA Glycosylases, version 1.0. IN: **Encyclopedia of Life Sciences**. Nature Publishing Group, London, 2002.
34. **Idriss, H.T.**, Al-Assar, O., and Wilson, S.H. Molecules in Focus: DNA polymerase β . **Int. J. Biochem. Cell Biol.**, 34:321-324, 2002.
35. **Beard, W.A.** and Wilson, S.H. DNA Polymerase β , eukaryotic. IN: Lennarz, W.J. and Lane, M.D. (eds.), **Encyclopedia of Biological Chemistry**, Elsevier Academic Press, 2004, pp. 708-712.
36. **Beard, W.A.** and Wilson, S.H. *Syn*-full behavior by T7 DNA polymerase. **Structure (Camb.)**, 13:1580-1582, 2005.
37. **Beard, W.A.** and Wilson, S.H. Structure and mechanism of DNA polymerase β . **Chemical Reviews**, “DNA Damage and Repair,” 106:361-382, 2006.
38. **Liu, Y.**, Prasad, R., and Wilson, S.H. DNA repair models for understanding triplet repeat instability. IN: Wells, R.D. and Ashizawa, T. (eds.), **Genetic Instabilities and Neurological Diseases**, Elsevier-Academic Press, 2006, pp. 667-678.
39. **Beard, W.A.**, Prasad, R., and Wilson, S.H. Activities and mechanism of pol β . IN: Campbell, J.L. and Modrich, P. (eds.), **Methods in Enzymology, DNA Repair, Part A**. Academic Press, 2006, Vol. 408, pp. 91-107.
40. **Horton, J.K.** and Wilson, S.H. Hypersensitivity phenotypes associated with genetic and synthetic inhibitor-induced base excision repair deficiency. **DNA Repair (Amst.)**, 6:530-543, 2007.

Bibliography (Peer-reviewed research articles):

1. **Wilson, S.H.** and Hoagland, M.B. Studies on the physiology of rat liver polyribosomes: Quantitation and intracellular distribution of ribosomes. **Proc. Natl. Acad. Sci. USA**, 54:600-607, 1965.
2. **Wilson, S.H.** and Hoagland, M.B. Physiology of rat-liver polysomes: The stability of messenger ribonucleic acid and ribosomes. **Biochem. J.**, 103:556-566, 1967.
3. **Wilson, S.H.**, Hill, H.Z., and Hoagland, M.B. Physiology of rat-liver polysomes: Protein synthesis by stable polysomes. **Biochem. J.**, 103:567-572, 1967.
4. **Wilson, S.H.** and Quincey, R.V. Quantitative determination of low molecular weight ribonucleic acids in rat liver microsomes. **J. Biol. Chem.**, 244:1092-1096, 1969.
5. **Quincey, R.V.** and Wilson, S.H. The utilization of genes for ribosomal RNA, 5S RNA, and transfer RNA in liver cells of adult rats. **Proc. Natl. Acad. Sci. USA**, 64:981-988, 1969.
6. **Blume, A.**, Gilbert, F., Wilson, S.H., Farber, J., Rosenberg, R., and Nirenberg, M. Regulation of acetylcholinesterase in neuroblastoma cells. **Proc. Natl. Acad. Sci. USA**, 67:786-792, 1970.
7. **Wilson, S.H.** and Kronick, M.N. A new assay technique for reactions that produce radioactive gases. **Anal. Biochem.**, 43:460-467, 1971.
8. **Wilson, S.H.**, Schrier, B.K., Farber, J.L., Thompson, E.J., Rosenberg, R.N., Blume, A.J., and Nirenberg, M.W. Markers for gene expression in cultured cells from the nervous system. **J. Biol. Chem.**, 247:3159-3169, 1972.
9. **Hill, H.Z.**, Wilson S.H., and Hoagland, M.B. Patterns of albumin and general protein synthesis in rat liver as revealed by gel electrophoresis. **Biochim. Biophys. Acta.**, 269:477-484, 1972.
10. **Wilson, S.H.** and Kuff, E.L. A novel DNA polymerase activity found in association with intracisternal A-type particles. **Proc. Natl. Acad. Sci. USA**, 69:1531-1536, 1972.
11. **Miller, J.V., Jr.**, Thompson, E.B., Kuff, E.L., and Wilson, S.H. Polydeoxythymidylate inhibition of rabbit reticulocyte RNA dependent protein synthesis in a Krebs II ascites cell system. **Biochem. Biophys. Res. Commun.**, 48:1280-1286, 1972.
12. **Wilson, S.H.**, Kuff, E.L., Bohn, E.W., and Lueders, K.K. Studies on DNA synthesis in murine myeloma: II. Activation of latent RNA-dependent DNA polymerase activity in membrane fractions. **Biochem. Biophys. Res. Commun.**, 49:1093-1099, 1972.
13. **Stromberg, K.**, Gantt, R., and Wilson, S.H. Structural studies on avian myeloblastosis virus: Conditions for isolation and biochemical characteristics of the core component. **Biochim. Biophys. Acta.**, 304:1-11, 1973.
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