

CURRICULUM VITAE

Samuel H. Wilson

Place of Birth: USA

Married - 2 children

Education:

1961	B.A.	University of Denver
1968	M.D.	Harvard University

Professional Employment:

1996 - Present	Head, DNA Repair and Nucleic Acid Enzymology Group, Laboratory of Structural Biology, NIEHS, NIH (now Genome Integrity and Structural Biology Laboratory)
2007 - 2009	Director (acting), National Institute of Environmental Health Sciences (NIEHS), NIH, & the National Toxicology Program (NTP), DHHS
1996 - 2007	Deputy Director, NIEHS, NIH, & the NTP, DHHS
1991 - 1996	Founding Director, Sealy Center for Molecular Science, University of Texas-Med. Br.
1986 - 1992	Chief, Nucleic Acid Enzymology Section, Laboratory of Biochemistry, National Cancer Institute (NCI), NIH
1970 - 1992	Principal Investigator, Laboratory of Biochemistry, NCI, NIH
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, Harvard University
1961 - 1962	Graduate Fellow, Department of Chemistry (Advisors – Joseph J. Schmidt-Collerus and John A. Krimmel), Denver Research Institute, University of Denver

Awards & Honorary Lectures (selected since 2008):

2019	Keynote Speaker, Smerdon-Reeves Symposium, Washington State University
2018	Keynote Speaker, Van Houten Symposium, Duke University
2017	Keynote Speaker, 48 th Annual Meeting of the EMGS, Raleigh, NC
2016	NIEHS-NIH, Champion of Environmental Health Research Award
2016	Keynote Lecturer, 18 th Midwest DNA Repair Meeting, Columbus, OH
2015	Honorary Lecturer, Genome Stability Symposium, University of Pittsburgh
2015	NIH Director's Award (Ruth L. Kirschstein Award)
2014	NIEHS-NIH, Division of Intramural Research, Mentor of the Year Award
2014	SER-CAT Outstanding Science Award and Lecture
2013	Keynote Speaker, 38 th FEBS Congress Symposium, St. Petersburg, Russia
2013	Joseph Coleman Memorial Lecture, Yale University
2012	19 th Granville H. Sewell Lecture, Columbia University
2011	Keynote Lecture, Gordon Research Conference in Genetic Toxicology, Barga, Italy
2010	Honorary Lecturer, 2010 Fukuoka Dental College Symposium, Fukuoka, Japan
2010	EMS Award and Lecture, Environmental Mutagen Society Annual Meeting, Ft. Worth
2010	Keynote Speaker, 2010 Intl. Conf. on Biomed. & Environ. Sci. and Technology, Beijing
2009	Nakamura Memorial Lectureship, 40th Princess Takamatsu Symposium, Tokyo
2009	Plenary Lecture, 10th Intl. Conf. on Environmental Mutagens, Italy
2009	Elected Fellow of the AAAS
2008	Robert S. Harris Lecture, Massachusetts Institute of Technology, Cambridge, MA
2008	Abelson Lecture, Washington State University, Pullman, WA

Postdoctoral Fellows and Research Associates:

2019-present, T. Igawa; 2018-present, C. Nadalutti; 2015-present, Y. Rodriguez; 2014-present, J. Jansen; 2015-2018, M. Howard; 2013-2018, M. Caglayan; 2013-2015 N. Dyrkheeva; 2010-2015, B. Freudenthal; 2010-2015, N. Gassman; 2011-2013, A. Sassa; 2009-2012, N. Cavanaugh; 2007-2012, M. Heacock; 2005-2012, A. Masaoka; 2003-2010, Y. Liu; 2003-2010, 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; 1989-1992, 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 or Senior Laboratory Associates:

2001-present, V. Batra; 1996-present, J. Horton; 1991-present, R. Prasad; 1991-present, W. Beard; 2016-2018, Da-Peng Dai; 1999-2012, P. Kedar; 2006-2010, M. Carrozza; 2002-2009, V. Poltoratsky; 2006-2007, Z. Zhang; 1994-1995, 1999-2000, and 2001-2002, O. Lavrik; 1995-1996, 2002, and 2017, P. Strauss; 2000-2002, S.-J. Kim; 2001, H. Idriss; 1999, and 2000, S. DeLauder; 1997, A. Slesarev; 1990, F. Cobiانchi; 1985, K. Tanabe; 1984-1990, B.Z. Zmudzka.; 1984 and 1988, A. Matsukage.

Senior and Junior Associates in Administration:

2001-2002, M. Yudell (graduate student); 2000-2001, C. Miller (sabbatical); 1997, G. LeMasters (sabbatical).

Graduate Student Thesis Research Advisor:

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

Editorships: (selected since 1997)

2011 - present	Editor-in-Chief, <i>DNA Repair</i>
2008 - 2014	Editorial Board, <i>Nucleic Acids Research</i>
2006 - 2010	Editorial Board, <i>Mechanisms of Ageing and Development</i>
2000 - 2011	Associate Editor, <i>DNA Repair</i>
1999 - 2006	Editorial Board, <i>Annual Review of Medicine</i>
1992 - 1997	Editorial Board, <i>Journal of Biological Chemistry</i>

National/International Committees and Other Activities Outside NIH: (selected since 2001)

2020	Sci Adv, Israel Science Foundation (ISF)
2019	Sci Adv, DNA Repair and Genome Integrity Program, Brandeis-Tufts Univ
2015	Session Chair and Speaker, Intl Congress of Radiation Research, Kyoto, Japan
2014 - present	Sci Adv Bd, Biomolecular Science Institute, Florida International Univ
2014	Co-Chair, 5 th Japan-US/US-Japan DNA Repair Meeting, Naruto, Japan
2013 - present	Sci Adv Bd, Cntr for Environmental Health Sciences, MIT
2011 - 2014	EU Scientific Adv Bd
2011 - 2015	Norwegian Research Council Adv Bd
2010 - 2013	Sci Adv Comm, Burroughs Wellcome Fund Training Prog, Univ of Texas Health Sci Cntr
2010 - 2013	Adv Bd, The Netherlands Toxicogenomics Center, Leiden & Amsterdam
2010 - 2012	Co-Chair, 4 th Japan-US/US-Japan DNA Repair Meeting, Leesburg, VA
2010	Sci Adv Bd, Program at Stony Brook Univ.
2007- 2009	Vice-Chair and Chair, Genetic Toxicology Gordon Research Conf, New London, NH
2009	Co-Chair, 3 rd US-EU/EU-US DNA Repair Meeting, Galveston
2008 - 2007	Co-Chair, 3 rd Japan-US/US-Japan DNA Repair Meeting, Sendai
2005	Co-Chair, 2 nd EU-US DNA Repair Meeting, Erice, Sicily
2004 - 2009	Sci Adv Bd, FAMRI Cntr, Weizmann Institute of Science, Rehovot
2004	Co-Chair, 2 nd Japan-US/US-Japan DNA Repair Meeting, Honolulu
2003 - 2009	Program Committees, Intl Conferences on Environmental Mutagens
2003	Co-Chair, US-EU/EU-US DNA Repair Meeting, Leesburg, VA
2003	Co-Organizer, Symposium on Gene-Environment Interaction, NIH, Bethesda

2002 Co-Chair and Co-Organizer, Marshall Nirenberg Symposium NIH, Bethesda
 2002 Co-Chair, 1st Japan-US/US-Japan DNA Repair Meeting, Sendai
 2000 - 2001 Council Member, American Society for Biochemistry and Molecular Biology
 1998 - 2009 Founding Member, NAS/IOM Roundtable on Environmental Health Sci, Washington, DC
 1997 - 2001 Vice-Chair and Chair, Mammalian DNA Repair Gordon Research Conf, Ventura, CA

Invited Laboratory Research Presentations: (selected since 2010)

Gordon Research Conf., Ventura, CA, February, 2019; Brandeis & Tufts Universities, Program in DNA Repair & Genome Integrity, Boston, January, 2019; Friedrich Miescher Institute, Basel, Switzerland, October, 2018; Bennett Van Houten Symposium, Durham, NC, October, 2018; 5th Intl. Meeting on DNA Polymerases, Leiden, The Netherlands, September, 2018; Susan Wallace Symposium, Burlington, VT, June, 2018; University of Kansas Medical Center, February, 2018
 6th EU-US DNA Repair Meeting, Udine, Italy, September, 2017; Sankar Mitra Symposium, Houston, July, 2017
 6th US-Japan DNA Repair Meeting, Berkeley, CA, May, 2017; Philip Hanawalt Symposium, Asilomar, CA, May, 2017
 Gordon Research Conf., Ventura, CA, February, 2017; 4th Intl. Meeting on DNA Polymerases, Biarritz, France, October, 2016
 Eurotox 2016 Congress Symposium, Seville, Spain, September, 2016; Josef Jiricny Symposium, Zurich, July, 2016
 Gordon Research Conf., Girona, Spain, June, 2016; DNA Repair Symposium, Egmond, The Netherlands, April, 2016
 Gordon Research Conf., Ventura, CA, March, 2016; Univ. of Maryland Baltimore County, February, 2016
 Wayne State Univ., September, 2015; Smerdon-Reeves Symposium, Pullman, WA, May, 2015
 Gordon Research Conf., Ventura, CA, February, 2015; Hans Krokan Symposium, Trondheim, Norway, February, 2015
 Tulane Univ. Cancer Center, December, 2014; Univ. of North Carolina-Charlotte, November, 2014
 5th US-EU DNA Repair Meeting Santa Fe, NM, November, 2014; 15th IUBMB 24th FAOBMB-TSBMB Conference, Taipei, October, 2014; 5th US-Japan DNA Repair Meeting, Naruto, Japan, October, 2014
 MD Anderson Cancer Center, September, 2014; ACS Annual Meeting, San Francisco, August, 2014
 ASBMB Annual Meeting, San Diego, April, 2014; SER-CAT Meeting, Rockville, MD, April, 2014
 Gordon Research Conf., Ventura, CA, February, 2014; EMGS Annual Meeting, Monterey, CA, September, 2013
 DNA Replication, Repair and Recombination Meeting, Telluride, CO, June, 2013; Univ. of California-Davis, April, 2013
 Univ. of North Carolina-Chapel Hill, March, 2013; Gordon Research Conf, Ventura, CA, February, 2013
 Cantoblanco Workshop, Madrid, Spain, June, 2012; 3rd Erling Seeberg Symposium, Trondheim, Norway, June, 2012
 4th US-Japan DNA Repair Meeting, Leesburg, VA, April, 2012; Society of Toxicology Annual Meeting, San Francisco, March, 2012; Gordon Research Conference, Ventura, CA, March, 2012; Florida Intl Univ., Miami, February, 2012
 Genetic Mechanisms of Aging and Genome Maintenance Meeting, Alyeska, AK, July 2011; 4th US-EU DNA Repair Meeting, Oslo, Norway, May, 2011; Gordon Research Conf., Ventura, CA, February, 2011; Intl. Workshop on BER, Brain Function and Aging, Hyderabad, India, January, 2011; Japanese National Institute for Health, Tokyo, Japan, December, 2010
 Japanese Molecular Biology Society, Kobe, Japan, December, 2010; Workshop on DNA Repair, Northern Virginia, September, 2010; Gordon Research Conf., Ventura, CA, March, 2010

Books: Editor or Co-Editor (Review/Reference Volumes):04

Publications: 405

1. Janoshazi, A.K., Horton, J.K., Zhao, M.-L., Scappini, E.L., Tucker, C.J., and Wilson, S.H. Shining light on the response to repair intermediates in DNA of living cells. *DNA Repair* 85:2020 Jan;85:102749. doi: 10.1016/j.dnarep.2020.102749. Epub Nov 12.
2. Quiñones, J.L., Thapar, U., Wilson, S.H., Ramsden, D.A., Demple, B. Oxidative DNA-protein crosslinks formed in mammalian cells by abasic site lyases involved in DNA Repair. *DNA Repair* 2020 87:102773. doi: 10.1016/j.dnarep.2020.102773. Epub Jan 9.
3. Jiang, Z., Lai, Y., Beaver, J., Tsegay, P., Zhao, M.-L., Horton, J.K., Zamora, M., Rein, H., Miralles, F., Shaver, M., Hutcheson, J., Agoulnik, I., Wilson, S.H., and Liu, Y. Oxidative DNA damage modulates DNA methylation pattern in human breast cancer 1 (BRCA1) gene via the crosstalk between DNA polymerase β and a de novo DNA methyltransferase. *Cells* 9: E225. doi: 10.3390/cells9010225, 2020
4. Jamsen, J.A., Sassa, A., Shock, D.D., Beard, W.A., and Wilson, S.H. Structural basis for proficient oxidized deoxyucleotide Insertion by double strand break repair polymerase μ revealed by time-lapse crystallography. *Nature Communications* (in press; reformatting underway)
5. Nadalutti, C.A., Stefanick, D.F., Zhao, M.-L., Horton, J.K., Prasad, R., Brooks, A.M., Griffith J.D., and Wilson S.H. Mitochondrial dysfunction and DNA damage accompany enhanced levels of formaldehyde in cultured primary human fibroblasts. *Scientific Reports* 10:5575, 2020