

## CURRICULUM VITAE

**NAME:** David Anderson Wink, Jr.  
**DATE AND PLACE OF BIRTH:** September 21, 1958, Buffalo, New York  
**CITIZENSHIP:** United States  
**MARITAL STATUS:** Married  
**PRESENT ADDRESS:** 208 West Irvin  
Hagerstown, MD 21742

## EDUCATION/TRAINING

<i>Institution</i>	<i>Degree</i>	<i>Year</i>	<i>Field</i>
State University of New York College at Oneonta	B.S.	1980	Chemistry
University of California, Santa Barbara	Ph.D.	1985	Inorganic Chemistry
Massachusetts Institute of Technology	Postdoctoral Fellow	1985-9	Bioinorganic Chemistry

## POSITIONS HELD:

1977-1980	Research Assistant, SUNY.Oneonta
1980-1985	Teaching/Research Assistantships, UC Santa Barbara
1983	Research Consultant, Banner Gelatin Corp, Chatsworth, CA
1985	Postdoctoral Researcher (with P. C. Ford), UC Santa Barbara
1985-1989	Postdoctoral Researcher (with W.H. Orme-Johnson), MIT
1989	Scientific Consultant, Program Resources, Inc. Frederick, MD
1989 -1992	Staff Fellow, Chemistry Section, Laboratory of Comparative Carcinogenesis National Cancer Institute, NIH, Frederick, MD
1992-1995	Senior Staff Fellow, Chemistry Section, Laboratory of Comparative Carcinogenesis, National Cancer Institute, NIH, Frederick, MD
1995-1999	Senior Staff Fellow, Radiation Biology Branch, Division of Clinical Sciences, National Cancer Institute, NIH, Bethesda, MD
1999-present	Senior Investigator/Section Chief, Radiation Biology Branch, Division of Clinical Sciences, National Cancer Institute, NIH, Bethesda, MD

## RESEARCH INTERESTS:

Biological Chemistry, **The Chemical Biology** of Oncology, Neurobiology, Cardiology and Immunology, **The Toxicology/Pharmacology** of Reactive Intermediates

## PROFESSIONAL SOCIETIES:

American Chemical Society  
American Association for the Advancement of Science  
Nitric Oxide Society  
Oxygen Society  
Radiation Research Society

## EDITORIAL BOARDS

1996-present	<i>Free Radicals in Biology and Medicine</i>
1996-present	<i>Nitric Oxide Biology and Medicine</i>
1998-2006	<i>Analytical Biochemistry</i>
2007---	<i>Journal of Biological Chemistry</i>
2010 ---	<i>Chemical Research in Toxicology</i>

## HONORS AND OTHER SCIENTIFIC RECOGNITION (Selected):

1982-1983	Graduate Student Fellowship, UC Santa Barbara
1983	Chancellor Patent Funds Award, UC Santa Barbara
1986-1988	National Institutes of Health, National Research Service Award
1997	National Institutes of Health, Loan Repayment Award
1997-98	Division of Clinical Sciences/National Cancer Institute, Intramural Research Award “ <b>Developing NO compounds for Specific Targeting to Cancer cells</b> ”, \$83,000
2002	Guest Editor – Cancer and Nitric Oxide Free Radical in Biology and Medicine
2004- present	Chair and founder; Cancer Redox Biology Faculty
2006	NIH Patent Royalty Fund \$100, 000
2007	Vice-Chair Gordon Research Conference “ Nitric Oxide” (elected 2005)
2008	Fellow, American Association for the Advancement of Science Federal Technology Transfer Award Chair, Gordon Conference, “Nitric Oxide” Federal Technology Transfer Award
2009	Chair, Gordon Conference, “Nitric Oxide” Federal Technology Transfer Award Faculty Member, Faculty of 1000

## PROFESSIONAL SERVICE (selected)

1998	Reviewer –Special Emphasis Panel for Woman’s Reproductive Health Research Career Development Centers, NICHD, NIH
2000	Reviewer (ad hoc) – study section for NIAMS, NIH for R21 High Innovation and Impact for Arthritis, Skin and Muscular Diseases. Reviewer (ad hoc) – general study section for NICHD, NIH. Reviewer – Special Emphasis Panel (K12) RFA Interdisciplinary Research Careers in Woman’s Health

	Reviewer (ad hoc) – Special Emphasis Panel, Radiation Study Section NCI, NIH
2002	Reviewer – Special Emphasis Panel (K12) RFA Interdisciplinary Research Careers in Woman’s Health
2002-present	Review Panel – Center for Cancer Research Promotion
2004	Review Panel- quadrennial review Staff Scientist
2006	Member, NO Society Planning Group International Conference
2006	Member, CCR Strategic Planning Focus Group <i>Understanding the Causes and Mechanisms of Cancer</i>
2007	Ad Hoc reviewer. NIH Synthetic Biological Chemistry-B (SBCB) study section Tenure track search committee Radiation Oncology Branch CCR/NCI/NIH
2008	CICR Program Committee, AACR 2008 Tenure Track committee: Laboratory of Human Carcinogenesis Search Committee for Chief: Laboratory of Chemical Biology
2009	Organizing committee, AACR-ACS Chemistry in Cancer Research special conference ARRA-Special Emphasis panel SBIR “Drug Discovery
2010	Federal technology Award
2011	Organizing committee, AACR-ACS Chemistry in Cancer Research special conference

***Referee for the following journals:***

*American Journal of Physiology, Analytical Biochemistry, Antioxidant and Redox Signaling, Archives of Biochemistry and Biophysics, Biochemical Pharmacology, British Journal of Pharmacology, Biochemistry, BioTechniques, Cancer Research, Cancer Letters, Carcinogenesis, Chemical Research in Toxicology, Free Radicals in Biology and Medicine, Fertility and Sterility, Gastroenterology, Hepatology, Hypertension, International Journal of Chemical Kinetics, International Journal of Radiation Research, Journal of American Chemical Society, Journal of Biological Chemistry, Journal of Cellular Physiology, Journal of Clinical Investigations, Journal of Immunology, Journal of Neuropharmacology, Journal of Pharmaceuticals and Experimental Therapeutics, Journal of Rheumatology, Molecular Cell, Molecular Medicine, Molecular Pharmacology, Nature Medicine, Nature Chemical Biology, Proceedings National Academy of Science, Science*

***Referee for grants for the following institutions:***

National Science Foundation, Department of Energy, Petroleum Research Fund, Veterans Affairs, Wellcome Foundation, Research Corporation (Tucson, AZ), National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institute for Child Health, American Association for the advancement of Science, Woman’s International Science Collaboration Program, NIH/SBIR Drug Discover for ARRA grants.

## Requested Commentary to Press

- 2007 *J. Experimental Medicine* on Carl Nathan's paper in 1989  
*The Scientist* on the role of arginine supplementation  
2004 C&EN HNO unique biology  
1998 National Public radio comments on the Nobel prize in Nitric Oxide  
1997 Documentary for TV show *the Discovery* (Netherlands)

## BIBLIOGRAPHY

**Citations:** 16,060; h index of 68 (as of 8/2012) average citation 53.4

## PUBLICATIONS

1. Ford PC, **Wink DA**, DiBenedetto JA. Mechanistic aspects of the photosubstitution and photoisomerization of  $d^6$  metal complexes. Prog. Inorg. Chem. 30:213-271 (1983).
2. Desrosiers MF, **Wink DA**, Ford PC. Flash photolysis of triruthenium dodecacarbonyl. Evidence for intermediates in the competing fragmentation and ligand substitution photoreactions of  $Ru_3(CO)_{12}$ . Inorg. Chem. 24:1-2 (1985).
3. **Wink DA**, Ford PC. Flash photolysis investigation of  $RhCl(CO)(PPh_3)_2$ : Reaction dynamics of the Wilkinson's catalyst intermediate  $RhCl(PPh_3)_2S$ . J. Am. Chem. Soc. 107:1794-1796 (1985).
4. **Wink DA**, Ford PC. The reaction chemistry of  $MCl(PPh_3)_2$ ,  $M=Rh, Ir$ . ACS Symp. Ser. 307:198-211 (1986).
5. **Wink DA**, Ford PC. Flash photolysis of  $IrCl(CO)(PPh_3)_2$  and  $H_2IrCl(CO)(PPh_3)_2$ . Evidence for photolabilization of a ligand prior to reductive elimination. J. Am. Chem. Soc. 107:5566-5567 (1986).
6. Desrosiers MF, **Wink DA**, Trautman R, Friedman AF, Ford PC. Flash photolysis of triruthenium dodecacarbonyl: Direct observation of fragmentation and substitution intermediates. J. Am. Chem. Soc. 108:1917-1927 (1986).
7. **Wink DA**, Ford PC. A flash photolysis investigation of dihydrogen elimination from phosphine complexes of Ir(II) and Rh(III).  $H_2IrCl(CO)(PPh_3)_2$ ,  $H_2IrCl(PPh_3)_3$ , and  $H_2RhCl(PPh_3)_3$ . J. Am. Chem. Soc. 108:4838-4842 (1986).
8. **Wink DA**, Ford PC. Reaction dynamics of tricoordinate intermediate  $MCl(PPh_3)_2$  ( $M = Rh$  or  $Ir$ ) as probed by flash photolysis of the carbonyl  $MCl(CO)(PPh_3)_2$ . J. Am. Chem. Soc. 109:436-442 (1987).

9. Bastain NR, **Wink DA**, Wackett LP, Livingston DJ, Jordan LM, Fox J, Orme-Johnson WH, Walsh CT. Two hydrogenases from *Methanobacterium thermoautotrophicum*. In: Bioinorganic Chemistry of Nickel (Lancaster JR, Ed.). VCH Publications, New York, pp. 227-248 (1988).
10. McLean PA, **Wink DA**, Chapman SK, Hickman AB, McKillop DM, Orme-Johnson WH. A new method for extraction of iron-molybdenum cofactor (FeMoco) from nitrogenase adsorbed to DEAE-cellulose. 1. Effects of anions, cations, and preextraction treatments. Biochemistry 28:9402-9406 (1989).
11. **Wink DA**, McLean PA, Hickman AB, Orme-Johnson WH. A new method for extraction of iron-molybdenum cofactor (FeMoco) from nitrogenase adsorbed to DEAE-cellulose. 2. Solubilization of FeMoco in a wide range of organic solvents. Biochemistry 28:9407-9412, (1989).
12. **Wink DA**, Nims RW, Desrosiers MF, Ford PC, Keefer LK. A kinetic investigation of intermediates formed during the Fenton reagent mediated degradation of *N*-nitrosodimethylamine: Evidence for an oxidative pathway not involving hydroxyl radical. Chem. Res. Toxicol. 4:510-512 (1991).
13. **Wink DA**, Kasprzak KS, Maragos CM, Elespuru RK, Misra M, Dunams TM, Cebula TA, Koch WH, Andrews AW, Allen JS, Keefer LK. DNA deaminating ability and genotoxicity of nitric oxide and its progenitors. Science 254:1001-1003 (1991).
14. Maragos CM, Morley D, **Wink DA**, Dunams TM, Saavedra JE, Hoffman A, Bove AA, Isaac L, Hrabie JA, Keefer LK. Complexes of  $\bullet\text{NO}$  with nucleophiles as agents for the controlled biological release of nitric oxide: Vasorelaxant effects. J. Med. Chem. 34:3242-3247 (1991).
15. **Wink DA**, Desrosiers MF. Unusual spin-trap chemistry for the reaction of hydroxyl radical with the carcinogen *N*-nitrosodimethylamine. Radiat. Phys. Chem. 38:467-472 (1991).
16. Hanbauer I, **Wink DA**, Osawa Y, Edelman GM, Gally JA. Role of nitric oxide in NMDA-evoked release of [ $^3\text{H}$ ]-dopamine from striatal slices. NeuroReports 3:409-412 (1992).
17. Keefer LK, **Wink DA**, Maragos CM, Morley D, Diodati JG. Complexes of nitric oxide with nucleophiles as agents for the controlled biological release of nitric oxide. In: The Biology of Nitric Oxide. 1. Physiological and Clinical Aspects (Moncada S, Marletta MA, Hibbs JB, Higgs EA, Eds.). Portland Press, London, pp. 153-157 (1992).
18. **Wink DA**, Osawa Y, Darbyshire JF, Jones CR, Eshenaur SC, Nims RW. Inhibition of cytochromes P450 by nitric oxide and a nitric oxide-releasing agent. Arch. Biochem. Biophys. 300:115-123 (1993).
19. **Wink DA**, Darbyshire JF, Nims RW, Saavedra JE, Ford PC. Reactions of the bioregulatory agent nitric oxide in oxygenated aqueous media: Determination of the

- kinetics for oxidation and nitrosation by intermediates generated in the NO/O<sub>2</sub> reaction. Chem. Res. Toxicol. 6:23-27 (1993). (9<sup>th</sup> most cited in 20 years)
20. Morley D, Maragos CM, Zhang XY, Boignon M, **Wink DA**, Keefer LK. Mechanism of vascular relaxation induced by the nitric oxide (NO)/nucleophile complexes, a new class of NO-based vasodilators. J. Cardiovasc. Pharmacol. 21:670-676 (1993).
  21. Hrabie JA, Klose JR, **Wink DA**, Keefer LK. New nitric oxide-releasing zwitterions derived from polyamines. J. Org. Chem. 58:1472-1476 (1993).
  22. Nims RW, Syi JL, **Wink DA**, Nelson VC, Thomas PE, Jones CR, Diwan BA, Keefer LK, Rice JM, Lubet RA. Hepatic cytochrome P450 2B-type induction by ethyl/phenyl-substituted congeners of phenobarbital in the rat. Chem. Res. Toxicol. 6:180-187 (1993).
  23. Christodoulou D, Maragos CM, George C, Morley D, Dunams TM, **Wink DA**, Keefer LK. Mixed-ligand, non-nitrosyl Cu(II) complexes as potential pharmacological agents via NO release. In: Bioinorganic Chemistry of Copper (Karlin KD, Tyekler Z, Eds.). Chapman & Hall, New York, pp. 427-436 (1993).
  24. Routledge MN, **Wink DA**, Keefer LK, Dipple A. Mutations induced by saturated aqueous nitric oxide in the pSP189 supF gene in human Ad293 and *E. coli* MBM7070 cells. Carcinogenesis 14:1251-1254 (1993).
  25. Ford PC, **Wink DA**, Stanbury DM. Autoxidation kinetics of aqueous nitric oxide. FEBS Lett. 326:1-3 (1993).
  26. Mitchell JB, **Wink DA**, DeGraff W, Gamson J, Keefer LK, Krishna MC. Hypoxic mammalian cell radiosensitization by nitric oxide. Cancer Res. 53:5845-5848 (1993).
  27. **Wink DA**, Hanbauer I, Krishna MC, DeGraff W, Gamson J, Mitchell, JB. Nitric oxide protects against cellular damage and cytotoxicity from reactive oxygen species. Proc. Natl. Acad. Sci. USA 90:9813-9817 (1993).
  28. Keefer LK, Christodoulou D, Dunams TM, Hrabie JA, Maragos CM, Saavedra JE, **Wink DA**. Chemistry of the "NONOates", unusual *N*-nitroso compounds formed by reacting nitric oxide with nucleophiles. In: Nitrosamines and Related *N*-Nitroso Compounds; Chemistry and Biochemistry (Loeppky RN, Michejda CJ, Eds.). American Chemical Society (ACS Symp. Ser. 553), Washington, DC, pp. 136-146 (1994).
  29. Christodoulou D, **Wink DA**, George CF, Saavedra JE, Keefer LK. Nitric oxide-nucleophile complexes as ligands: Structural aspects of the coordinated "NONOate" functional group in novel mixed-ligand, non-nitrosyl metal complexes. In: Nitrosamines and Related *N*-Nitroso Compounds; Chemistry and Biochemistry (Loeppky RN, Michejda CJ, Eds.). American Chemical Society (ACS Symp. Ser. 553), Washington, DC, pp. 307-308 (1994).

30. **Wink DA**, Nims RW, Saavedra JE, Desrosiers MF, Ford PC. Oxidation of alkyl nitrosamines via the Fenton reagent. Use of nitrosamines to probe oxidative intermediates in the Fenton reaction. In: Nitrosamines and Related N-Nitroso Compounds; Chemistry and Biochemistry (Loeppky RN, Michejda CJ, Eds.). American Chemical Society (ACS Symp. Ser. 553), Washington, DC, pp. 324-327 (1994).
31. Laval F, **Wink DA**. Inhibition by nitric oxide of the repair protein, O<sup>6</sup>-methyl-guanine-DNA-methyltransferase. Carcinogenesis 15:443-447 (1994).
32. **Wink DA**, Wink CB, Nims RW, Ford PC. Oxidizing intermediates generated in the Fenton reagent: Kinetic arguments against the intermediacy of the hydroxyl radical. Environ. Health Perspect. 102:11-15 Suppl. 3 (1994).
33. Coia GM, White PS, Meyer TJ, **Wink DA**, Keefer LK, Davis WM. Preparation of osmium hydrazido complexes by interception of an Os(IV) imido intermediate. J. Am. Chem. Soc. 116:3649-3650 (1994).
34. **Wink DA**, Hanbauer I, Laval F, Cook JA, Krishna MC, Mitchell JB. Nitric oxide protects against the cytotoxic effects of reactive oxygen species. Ann. NY Acad. Sci. 738:265-278 (1994).
35. **Wink DA**, Nims RW, Saavedra JE, Utermahlen WE, Ford PC. The Fenton oxidation mechanism. Reactivities of biologically relevant substrates with two oxidizing intermediates differ from those predicted for the hydroxyl radical. Proc. Natl. Acad. Sci. USA 91:6604-6608 (1994).
36. **Wink DA**, Nims RW, Darbyshire JF, Christodoulou D, Hanbauer I, Cox GW, Laval F, Laval J, Cook JA, Krishna MC, DeGraff WG, Mitchell JB. Reaction kinetics for nitrosation of cysteine and glutathione in aerobic nitric oxide solutions at neutral pH. Insights into the fate and physiological effects of intermediates generated in the NO/O<sub>2</sub> reaction. Chem. Res. Toxicol. July/Aug:519-25 (1994). (18<sup>th</sup> most cited paper in journal history)
37. Hanbauer I, Cox GW, **Wink DA**. Synaptic and extrasynaptic action of free radicals on cell-to-cell signaling. Ann. NY Acad. Sci. 738:173-180 (1994).
38. Routledge MN, **Wink DA**, Keefer LK, Dipple A. Mutations induced by the nitric oxide generators SPER/NO and DEA/NO in the SUPF assay. Chem. Res. Toxicol. 7:628-632 (1994).
39. Routledge MN, Mirsky FJ, **Wink DA**, Keefer LK, Dipple A. Nitrite-induced mutation in a forward mutation assay: Influence of nitrite concentration and pH. Mutat. Res. 322:341-346 (1994).
40. Liebmann J, DeLuca AM, Coffin D, Keefer LK, Venzon D, **Wink DA**, Mitchell JB. *In vivo* radiation protection by nitric oxide modulation. Cancer Res. 54:3365-3368 (1994).

41. **Wink DA**, Laval J. The Fpg protein, a DNA repair enzyme, is inhibited by the biomediator nitric oxide *in vivo* and *in vitro*. Carcinogenesis 15:443-447 (1994).
42. Farnsworth DW, **Wink DA**, Roscher NM, Michejda CJ, Smith RH. Decomposition of pytidinyltriazenes in aqueous buffer: A kinetic and mechanistic investigation. J. Org. Chem. 59:5942-5950 (1994).
43. Clarkson RB, Norby SW, Boyer S, Vahdi N, Smirnov A, Nims RW, **Wink DA**. Direct observation of the kinetics of accumulation and disappearance of nitric oxide within the Chinese hamster ovary cells using a novel intracellular electron paramagnetic technique. Biochim. Biophys. Acta 1243:496-502 (1994).
44. Nims RW, Darbyshire JF, Saavedra JE, Christodoulou D, Hanbauer I, Cox GW, Grisham MB, Laval J, Cook JA, Krishna MC, **Wink DA**. Colorimetric methods for the determination of nitric oxide concentration in neutral aqueous solutions. Methods (A Companion to Methods Enzymology) 7:48-54 (1995).
45. **Wink DA**, Christodoulou D, Ho M, Krishna MC, Cook JA, Haut H, Randolph JK, Sullivan M, Coia G, Murray R, Meyer T. A discussion of electrochemical techniques for the detection of nitric oxide. Methods (A Companion to Methods Enzymology) 7:71-77 (1995).
46. **Wink DA**, Ford PC. Nitric oxide reactions important to biological systems: a survey of some kinetics investigations. Methods (A Companion to Methods Enzymology) 7:14-20 (1995).
47. Keefer LK, Anderson LM, Diwan BA, Driver CL, Haines DC, Maragos CM, **Wink DA**, Rice JM. Experimental tests of the mutagenicity and carcinogenicity of nitric oxide and its progenitors. Methods (A Companion to Methods Enzymology) 7:121-130 (1995).
48. Cox GW, Sheffler LA, **Wink DA**, Melillo G. Characterization of nitric-oxide-stimulated binding of NAD to various mouse macrophage proteins using the novel nitric oxide-donating diethylamine NONOate and sodium nitroprusside. J. Leukoc. Biol. 57:152-159 (1995).
49. Sheffler LA, **Wink DA**, Mellillo G, Cox GW. Exogenous nitric oxide regulates interferon- $\gamma$  plus lipopolysaccharide-induced nitric oxide synthase in mouse macrophage. J. Immunol. 155:886-894 (1995).
50. **Wink DA**, Cook JA, Krishna MC, Hanbauer I, DeGraff W, Gamson J, Mitchell JB. Nitric oxide protects against alkyl peroxide mediated cytotoxicity. Further Insights into the role nitric oxide plays in oxidative stress. Arch. Biochem. Biophys. 319:402-407 (1995).
51. **Wink DA**. The chemical biology of nitric oxide. In: Toxicology Forum (Hughes DA, Ed.). Cassett Associates, Fairfax, VA, pp. 621-639 (1995).



52. Liebmann J, DeLuca AM, Coffin D, Venzon DJ, **Wink DA**, Mitchell JB. Nitric oxide modulation enhances the *in vivo* protection from lethal irradiation by stem cell factor. Radiat. Oncol. Invest. 2:264-268 (1995).
53. Pacelli R, **Wink DA**, Cook JA, Krishna MC, DeGraff W, Friedman N, Tsokos M, Samuni A, Mitchell JB. Nitric oxide potentiates hydrogen peroxide-induced killing of *Escherichia coli*. J. Exp. Med. 182:1469-1479 (1995).
54. Miles AM, Gibson MF, Pacelli R, Krishna M, Cook JC, **Wink DA**, Grisham, MB. Effects of superoxide on nitric oxide-dependent *N*-nitrosation reactions. Free Radic. Res. 23:379-390 (1995).
55. Misra RR, Hochadel JF, Smith GT, Cook JC, Waalkes MP, **Wink DA**. Evidence that nitric oxide enhances cadmium toxicity by displacing the metal from metallothionein. Chem. Res. Toxicol. 9:326-332 (1995).
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58. Miles AM, Bohle DS, Glassbrenner PA, Hansert B, **Wink DA**, Grisham MB. Modulation of superoxide-dependent oxidation and hydroxylation reactions by nitric oxide. J. Biol. Chem. 271:40-47 (1996).
59. Beckman JS, **Wink DA**, Crow JP. Preparation and Handling of Nitric Oxide. In: Methods in Nitric Oxide Research (Feelisch M, Stamler JS, Eds.). John Wiley & Sons, New York, pp. 61-70 (1996).
60. **Wink DA**, Beckman JS, Ford PC. Kinetics of NO Reaction in Liquid and Gas Phase. In: Methods in Nitric Oxide Research (Feelisch M, Stamler JS, Eds.). John Wiley & Sons, New York, pp. 29-38 (1996).
61. **Wink DA**, Feelisch M. Formation, Chemistry, and Detection of Nitroxyl (NO<sup>-</sup>). In: Methods in Nitric Oxide Research (Feelisch M, Stamler JS, Eds.). John Wiley & Sons, New York, pp. 403-412 (1996).
62. Pacelli R, Taira J, Cook JA, **Wink DA**, Krishna MC. Hydroxyurea reacts with heme-proteins to generate nitric oxide. Lancet 347:900 (1996).

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64. Miles AM, Bohle DS, Glassbrenner PA, Hansert B, **Wink DA**, Grisham MB, Gamson J, Krishna MC, Mitchell JB. Modulation of superoxide dependent oxidation and hydroxylation reactions by nitric oxide. Possible Roles for NO donors in Cancer Treatment. In: The Biology of Nitric Oxide (Stamler J, Gross S, Moncada S, Higgs A, Eds.). Vol. 5. Portland Press, London, pp. 15-16 (1996).
65. Cook JA, Kim SY, Teague D, Krishna MC, Pacelli R, Mitchell JB, Vodovotz Y, Nims RW, Christodoulou D, Miles AM, Grisham MB, **Wink DA**. Convenient colorimetric and fluorometric assays for S-nitrosothiols. Anal. Biochem. 238:150-158 (1996).
66. Cook JA, **Wink DA**, Blount V, Krishna MC, Hanbauer I. Role of antioxidants in the nitric-oxide elicited inhibition of dopamine uptake in cultured mesencephalic neurons. Insights into potential mechanisms of nitric oxide-mediated neurotoxicity. Neurochem. Int. 28:609-617 (1996).
67. Keefer L, **Wink DA**. DNA damage and nitric oxide. In: Biological reactive intermediates V. Basic mechanistic research in toxicology and human assessment (Snyder R, Ed.). Plenum Publishing, New York, pp. 77-185 (1996).
68. **Wink DA**, Grisham M, Mitchell JB, Ford PC. Direct and Indirect Effects of Nitric Oxide. Biologically Relevant Chemical Reactions in Biology of NO. Methods Enzymol. 268:12-31 (1996).
69. Nims RW, Cook JC, Krishna MC, Christodoulou D, Poore CMB, Miles AM, Grisham MB, **Wink DA**. Convenient colorimetric assays for nitric oxide and nitrogen oxide species formed from various NO stock solutions and NO donor compounds. Methods Enzymol. 268:93-105 (1996).
70. **Wink DA**, Grisham MB, Miles AM, Nims RW, Krishna MC, Pacelli R, Teague D, Poore CMB, Cook JC. Methods for the Determination of Selectivity of the Reactive Nitrogen Oxide Species for Various Substrates. Methods Enzymol. 268:120-130 (1996).
71. Miles AM, **Wink DA**, Cook JC, Grisham MB. Determination of nitric oxide using fluorescence spectroscopy. Methods Enzymol. 268:105-120 (1996).
72. Keefer LK, Nims RW, Davies KW, **Wink DA**. NONOates (Diazenolate-2-oxides) as nitric oxide dosage forms. Methods Enzymol. 268:281-294 (1996).
73. Christodoulou D, Kudo S, Cook JC, Krishna MC, Miles A, Grisham MB, Murugesan R, Ford PC, **Wink DA**. Electrochemical Methods for the Detection of Nitric Oxide. Methods Enzymol. 268:69-83 (1996).

74. Mitchell JB, Cook JA, Krishna MC, DeGraff W, Gamson J, Fisher J, Christodoulou D, Wink DA. Radiosensitization by nitric oxide releasing agents. Br. J. Cancer 74:S181-S184 (1996).
75. **Wink DA**, Cook JA, Pacelli R, DeGraff W, Gamson J, Liebmann JE, Krishna MC, Mitchell JB. The effect of various nitric oxide-donor agents on hydrogen peroxide-mediated toxicity. A direct correlation between nitric oxide formation and protection. Arch. Biochem. Biophys. 331:241-248 (1996).
76. Graziewicz M, **Wink DA**, Laval F. Nitric oxide inhibits DNA ligase activity. Potential mechanisms for NO mediated DNA damage. Carcinogenesis 17:2501-2505 (1996).
77. **Wink DA**, Cook JA, Christodoulou D, Krishna MC, Pacelli R, Kim S, DeGraff W, Gamson J, Vodovotz Y, Russo A, Mitchell JB. Nitric Oxide and Some NO Donor Compounds Enhance the Cytotoxicity of Cisplatin. Nitric Oxide 1:3-17 (1997).
78. Cook JA, Krishna MC, Pacelli R, DeGraff W, Liebmann J, Russo A, Mitchell JB, **Wink DA**. Nitric Oxide Enhancement of Melphalan-Induced Cytotoxicity. Br. J. Cancer 76:325-334 (1997).
79. Kelman DJ, Christodoulou D, **Wink DA**, Keefer LK, Srinivasan A, Dipple A. Relative mutagenicities of gaseous N<sub>2</sub>O<sub>3</sub> and NO<sub>2</sub> in the *supF* gene of SP189. Carcinogenesis 18:1045-1048 (1997).
80. Bourassa J, DeGraff W, Kudo S, **Wink DA**, Mitchell JB, Ford PC. The photochemistry of Roussin's red salt, Na<sub>2</sub>[Fe<sub>2</sub>S<sub>2</sub>(NO)<sub>4</sub>] and of Roussin's black salt NH<sub>4</sub>[Fe<sub>4</sub>S<sub>3</sub>(NO)<sub>7</sub>]. *In situ* nitric oxide generation to sensitize  $\gamma$ -radiation induced cell death. J. Am. Chem. Soc. 119:2853-2860 (1997).
81. Laval F, **Wink DA**, Laval J. A discussion of mechanisms of NO genotoxicity. Implication of inhibition of DNA repair proteins. Rev. Physiol. Biochem. Pharmacol. 131:175-191 (1997).
82. Kelm M, Dahmann R, **Wink D**, Feelisch M. A new method for the simultaneous evaluation of rates of NO and O<sub>2</sub><sup>-</sup> formation. Insights into the NO/O<sub>2</sub><sup>-</sup> chemistry. J. Biol. Chem. 272:9922-9932 (1997).
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84. **Wink DA**, Cook JA, Kim S, Vodovotz Y, Pacelli R, Krishna MC, Russo A, Mitchell JB, Jourdeuil D, Miles AM, Grisham MB. Superoxide Modulates the Oxidation and Nitrosation of Thiols by NO-Derived Reactive Intermediates. Chemical Aspects Involved in the Balance Between Oxidative and Nitrosative Stress. J. Biol. Chem. 272:11147-11151 (1997).

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3. MTA- Crada CTG Milan evaluation of novel thiol modified NSAIDs in cancer treatment and prevention. (2005)

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