

BIOGRAPHICAL SKETCH

NAME	POSITION TITLE		
Ned A. Porter	Stevenson Professor of Chemistry		
EDUCATION (<i>Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.</i>)			
INSTITUTION AND LOCATION	DEGREE	YEAR CONFERRED	FIELD OF STUDY
Princeton University, Princeton, NJ	B.Sc.	1965	Chemistry and Chemical Engineering
Harvard University, Cambridge, MA	Ph. D.	1969	Organic Chemistry

RESEARCH AND/OR PROFESSIONAL EXPERIENCE: Concluding with present position, list in chronological order previous employment, experience, and honors. Include present membership on any Federal Government public advisory committee. List, in chronological order, the titles, all authors, and complete references to all publications during the past three years and to representative earlier publications pertinent to this application. DO NOT EXCEED TWO PAGES.

Professional Experience:

Chairman, Department of Chemistry, Vanderbilt University	2003–2009
Professor, Department of Biochemistry, Vanderbilt University	2003–present
Associate Director, Vanderbilt Institute of Chemical Biology	2002–present
Stevenson Professor of Chemistry, Vanderbilt University	1998–present
James B. Duke Professor of Chemistry, Duke University	1984–98
Professor, Duke University	1979–84
Associate Professor, Duke University	1973–79
Assistant Professor, Duke University	1969–73

Honors and Awards:

C. K. Ingold Medal, The Royal Society of Chemistry, 2005
 Fellow of the AAAS, 2003
 A. C. Cope Scholar of the American Chemical Society, 2000
 Senior Scientist Humboldt Fellowship, 1988–94, Heinlen Hall Lecturer, The Institute of Photochemical Sciences, Bowling Green University, 1995, The Stanley Cristol Lecture in Physical Organic Chemistry, The University of Colorado, 1995, Merck-Frosst Lecturer, The University of Toronto, 1993, Slayton Evans Distinguished Lecturer, the University of North Carolina, 2007, Distinguished NC Chemist, 1984
 NIH RCDA Awardee, 1977–82

Publications

“Rate Constants for Peroxidation of Polyunsaturated Fatty Acids and Sterols in Solution and in Liposomes.” Xu, Libin; Davis, Todd A.; Porter, Ned A. **2009**, J Am Chem Soc. *131* (36), 13037–13044.

“An azido-biotin reagent for use in the isolation of protein adducts of lipid-derived electrophiles by streptavidin catch and photo-release.” Kim, H.-Y., Tallman, K. A., Liebler, D. C. and Porter, N. A. **2009**, Mol Cell Proteomics *8* (9), 2080–2089.

“Substituent Effects on Regioselectivity in the Autoxidation of Nonconjugated Dienes” Tallman, K. A.; Rector, C. L.; Porter, N. A. J Am Chem Soc. **2009**, *131*, 5635–5641.

“Alkyne-Derivatized Glycerophospholipids and Their Dicobalthexacarbonyl Complexes: A Highly Sensitive Analytical Approach for Determining Cellular Lipid Changes” Milne, S. B.; Tallman, K. A.; Serwa, R. Rouzer, C. A. Armstrong, M. B.; Marnett, L. J.; Lukehart, C. M.; Porter, N. A.; Brown, H. A. **2009**, Nature, Chem Bio, in press.

“Oxysterols from Free Radical Chain Oxidation of 7-Dehydrocholesterol: Product and Mechanistic Studies” Xu, Libin; Korade, Z.; Porter, Ned A. **2009**, J Am Chem Soc. *in press.*

“Identification of Proteins Adducted by Lipid Peroxidation Products in Plasma and Modifications of Apolipoprotein A1 with a Novel Biotinylated Phospholipid Probe” Szapacs ME, Kim H-Y, Porter NA, Liebler DC. J Proteome Res. **2008** Oct;7(10):4237-46.

“Intermolecular Peroxyl Radical Reactions during Autoxidation of Hydroxy and Hydroperoxy Arachidonic Acids Generate a Novel Series of Epoxidized Products” Schneider C, Boeglin WE, Yin H, Porter NA, Brash AR. Chem Res Toxicol. **2008**, *21*, 895-903.

“Routes to 4-hydroxynonenal: Fundamental issues in the mechanisms of lipid peroxidation” Schneider C, Porter NA, Brash AR. J Biol Chem. **2008**, *283*, 15539 –15543.

“Formation of highly reactive cyclopentenone isoprostane compounds (A3/I3-isoprostanes) in vivo from eicosapentaenoic acid” Brooks JD, Milne GL, Yin H, Sanchez SC, Porter NA, Morrow JD J Biol Chem. **2008**, *283*, 12043 – 12055.

“Identification of protein targets of 4-hydroxynonenal using click chemistry for ex vivo biotinylation of azido and alkynyl derivatives” Vila A, Tallman KA, Jacobs AT, Liebler DC, Porter NA, Marnett LJ. Chem Res Toxicol. **2008** *21*, 432-44.

“Enzymatic synthesis of a bicyclobutane fatty acid by a hemoprotein lipoxygenase fusion protein from the cyanobacterium *Anabaena* PCC 7120” Schneider C, Niisuke K; Boeglin WE; Voehler M; Stec DF; Porter NA; Brash AR Proc Natl Acad Sci U S A. **2007**, *104*, 18941-5.

“Identification of intact lipid peroxides by Ag⁺ coordination ion-spray mass spectrometry (CIS-MS)” Yin, H; Porter, N. A. Methods Enzymol. **2007**, *433*, 193-211.

“Tetrahydro-1,8-naphthyridinol Analogues of Tocopherol as Antioxidants in Lipid Membranes and Low-Density Lipoproteins” Nam, T.; Rector, C. L.; Kim, H.; Sonnen, A. F.-P.; Meyer, R.; Nau, W. M.; Atkinson, J.; Rintoul, J.; Pratt, D. A.; Porter, N. A. J. Am. Chem. Soc., **2007**, *129*, 10211-10219.

“Free Radical Induced Site-Specific Cleavage in the Gas Phase: Low-Energy Collision-Induced Dissociation in ESI- and MALDI Mass Spectrometry” Yin, H.; Chacon, A.; Porter, N. A.; Masterson, D. S. JASMS, **2007**, *18*, 807-816.

“Urinary Prostaglandin F_{2α} Is Generated from the Isoprostane Pathway and Not the Cyclooxygenase in Humans” Yin, H.; Gao, L.; Rai, H.H.; Murphey, L. J.; Porter, N. A.; Morrow, J. D.; J Biol. Chem., **2007**, *282*, 329-36.

“Phospholipid-Protein Adducts of Lipid Peroxidation: Synthesis and Study of New Biotinylated Phosphatidylcholines” Tallman, K. A.; Kim, H.-Y.; Ji, J.; Szapacs, M. E.; Yin, H.; McIntosh, T. J.; Liebler, D. C.; Porter, N. A. Chem. Res. Tox., **2007**, *20*, 227-234.

“Free Radical Induced Site-Specific Cleavage in the Gas Phase: Low-Energy Collision-Induced Dissociation in ESI- and MALDI Mass Spectrometry” Yin, H.; Chacon, A.; Porter, N. A.; Masterson, D. S. J. Am. Soc. Mass Spectrom., **2007**, *18*, 807-816.

“Peroxyl Radical Clocks” Roschek, B. Jr.; Tallman, K.A.; Rector, C. L.; Gillmore, J. G.; Pratt, D. A.; Punta C.; Porter, N. A., J. Org. Chem., **2006**, *71*, 3527-3532.

Yin H.; Porter N. A.; Morrow J.D. The origin of prostaglandin F_{2α} in human urine. Clinical Pharmacology & Therapeutics. **2006**, *79*, P38-P38.

“Formation of F-ring Isoprostane-like Compounds (F₃-Isoprostanes) *in Vivo* from Eicosapentaenoic Acid.” Gao, L.; Yin, H.; Milne, G. L.; Porter, N. A.; Morrow, J. D. J. Biol. Chem., **2006**, *281*, 14092-14099.