Biographical Sketch: David F. Wiemer, F. Wendell Miller Professor of Chemistry

I. Professional Preparation:

NIH Postdoctoral Fellow (Organic Chemistry) Cornell University, Ithaca, NY, 1976–1978
Ph.D. (Organic Chemistry) University of Illinois, Urbana, IL, 1976
B.S. (Chemistry) Marquette University, Milwaukee, WI, 1972

II. Appointments:

2011–present	F. Wendell Miller Professor of Chemistry, University of Iowa
2004–present	Professor, Department of Pharmacology, University of Iowa
2002–2010	Chair, Department of Chemistry, University of Iowa
1989–2010	Professor, Department of Chemistry, University of Iowa
2000–2001	Interim Associate Dean, Graduate College, University of Iowa
1983–1989	Associate Professor, Department of Chemistry, University of Iowa
1986	Visiting Scientist, Scripps Institute, University of California, San Diego
1978–1983	Assistant Professor, Department of Chemistry, University of Iowa

III. Awards (2002-2012):

2011–present	ACS Fellow
2011–present	F. Wendell Miller Professor
2006–present	Fellow, American Association for the Advancement of Science,
2003	Regents Award for Faculty Excellence
2002–2010	Collegiate Fellow, College of Liberal Arts and Sciences

IV. Ten Publications (from a total of ~170 publications and 6 patents):

1. Smits, J. P.; Wiemer, D. F. Synthesis and Reactivity of Alkyl-1,1,1-trisphosphonate Esters. *J. Org. Chem.* **2011**, *76*, 8807–8813.
2. Wiemer, A. J.; Wiemer, D. F.; Hohl, R. J. Geranylgeranyl diphosphate synthase: an emerging therapeutic target. *Nature: Clinical Pharmacology and Therapeutics,* **2011**, *90*, 805–812
3. Barney, R. J.; Richardson, R. M.; Wiemer, D. F. Direct conversion of benzylic and allylic alcohols to phosphonates. *J. Org. Chem.* **2011**, *76*, 2875–2879.
4. A. Topczewski, J. J.; Kodet, J. G.; Wiemer, D. F. Exploration of Cascade Cyclizations Terminated By Tandem Aromatic Substitution: Total Synthesis of (+)-Schweinfurthin. *J. Org. Chem.* **2011**, *76*, 909–919.
5. Ulrich, N. C.; Kuder, C. H.; Hohl, R. J.; Wiemer, D. F. Biologically active biotin derivatives of schweinfurthin F. *Bioorg. Med. Chem. Letters*, **2010**, *20*, 6716–6720.
6. Topczewski, J. J.; Callahan, M. P.; Neighbors, J. D.; Wiemer, D. F. A Tandem Cascade Cyclization-Electrophilic Aromatic Substitution: Application in the Total Synthesis of (+)-Angelichalcone. *J. Am. Chem. Soc.* **2009**, *131*, 14630–14631.
7. Topczewski, J. J.; Neighbors, J. D.; Wiemer, D. F. Total Synthesis of (+)-Schweinfurthins B and E. *J. Org. Chem.* **2009**, *74*, 6965–6972.
8. Wiemer, A. J.; Yu, J. S.; Shull, L. W.; Barney, R. J.; Wasko, B. M.; Lamb, K. M; Hohl, R. J.; Wiemer, D. F. Pivaloyloxymethyl-modified isoprenoid bisphosphonates display enhanced inhibition of cellular geranylgeranylation. *Bioorg. Med. Chem.* **2008**, *16*, 3652–3660.
9. Wiemer, A. J.; Yu, J. S.; Lamb, K. M; Hohl, R. J.; Wiemer, D. F. Mono- and Dialkyl Isoprenoid Bisphosphonates as Geranylgeranyl Diphosphate Synthase Inhibitors. *Bioorg. Med. Chem.* **2008**, *16*, 390–399.
10. Mente, N. R.; Neighbors, J. D.; Wiemer, D. F. $BF_3 \cdot Et_2O$ Mediated Cascade Cyclizations: Synthesis of Schweinfurthins F and G. *J. Org. Chem.* **2008**, *73*, 7963–7970.

V. Synergistic Research and Teaching Activities:

1. Department Chair, Department of Chemistry, University of Iowa, 8/2002–7/2010. Key accomplishments during this time include: made twelve faculty hires; created three new positions for lecturers and hired three people to fill them; created and filled five new staff positions (in IT (2), accounting, chemical stores, and the instructional laboratories); raised and spent approximately $50M on building expansion & renovation; doubled number of undergraduate majors; increased graduate students from 92 to ~140; increased the number of donors to the Department and received several major gifts.
2. Founder, Terpenoid Therapeutics, Incorporated, 2005–present. TTI is a drug discovery and development company focused on anti-cancer therapeutics. It is located in the University of Iowa BioVentures Center, and currently has 9 employees (full or part time). The company has raised ~$3.1M in SBIR, STTR, and private equity funding thus far, and now is raising B-round financing. This company has taken discoveries from basic research in the Wiemer laboratories at the UI and advanced them toward clinical trials. Lead compounds are in hand for two different indications: prostate cancer (and especially bone metastasis), and tumors of the central nervous system (especially glioblastoma multiforme). Pre-clinical development of one lead compound now is underway at the National Cancer Institute–Frederick.
3. Tour Speaker, American Chemical Society, 36 tours completed (~165 local section visits as a representative of the ACS), 1985–present.
4. International Scientific Committee, International Conference on Phosphorus Chemistry (ICPC 17, Xiamen, PRC, 2007; ICPC 18, Wroclaw, Poland, 2010; ICPC 19, Rotterdam, The Netherlands, 2012; and Dublin, Ireland, 2014), 2004–present.
5. Executive Committee, NIH Training Grant in Pharmacological Sciences, University of Iowa 2003–present.

VI. Engagement:

1. Service on NIH study sections
   a. Medicinal Chemistry Study Section, National Institutes of Health, ad hoc member, June, 2009.
   b. Oncology (D) Study Section, National Institutes of Health, ad hoc member, February, 2010.
2. NIH-like study sections:
   a. Review Committee, Clinical and Experimental Therapeutics, US Army Medical Research and Materiel Command, Breast Cancer Research Program, June, 2010
   b. Frasch Grant Review Committee, American Chemical Society, January, 2002; March, 2007 (chair).
3. Editorships
   a. Editorial Board, Mini Reviews in Organic Chemistry. 2010 –
4. Symposium organizer – Organophosphorus Chemistry; 44th Midwest Regional Meeting of the American Chemical Society, Iowa City, Iowa, USA (2009).
5. ACS officer: American Chemical Society, Tour Speaker Service (~35 lecture tours, and ~165 local section visits, thus far, with one tour scheduled for 2012).
6. Meeting organizer: International Scientific Committee, Intl. Conference on Phosphorus Chemistry, 2004 –present (with meetings in Birmingham UK; Xiamin, PRC; Wroclaw, Poland; and Rotterdam, upcoming in Netherlands and Dublin)
7. List of journals and agencies reviewed for: Journal of the American Chemical Society (ACS), Journal of Organic Chemistry (ACS), Organic Letters (ACS), Journal of Natural Products (ACS), Journal of Medicinal Chemistry (ACS), Biochemistry (ACS), Medicinal Chemistry Letters (ACS), Chemical Biology (ACS), Tetrahedron, Tetrahedron Letters, Bioorganic and Medicinal Chemistry, Bioorganic and Medicinal Chemistry Letter, Chemical Communication, European Journal of Organic Chemistry, European Journal of Medicinal Chemistry, Science, Angewandte Chemie, International Edition
8. External reviewer of a Department: External Reviewer, Department of Chemistry, University of Nebraska – Lincoln, April, 2010 (chair of the review committee)
9. Consultant: Procter & Gamble, Cincinnati, OH. 2005 – 2010.