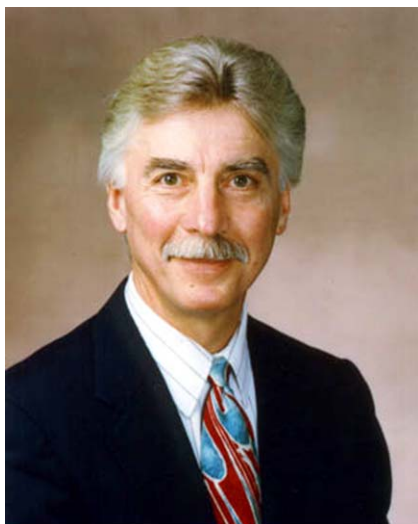


SYNTHESIS



Paul Wender

Dear Reader,

I have known Paul Wender for over 20 years and still am not absolutely sure what to get him for a birthday present! To celebrate Paul's 60th anniversary on this earth, I came up with a couple of ideas. Given Paul's love of Science, and chemistry in particular, one thing that came to mind was an issue of SYNTHESIS dedicated to him on this auspicious occasion. Paul has served as an editor of SYNTHESIS and this venue seemed ideal. Moreover, Paul's interest in producing not only great science but also great scientists suggested that it would be appropriate to have all the contributors to such an issue be former members of the Wender group. This issue is the manifestation of that idea. It is a great pleasure to have been able to serve as a catalyst in this effort.

Over the years, Paul has not only created great chemistry, but has taken a rare interest in helping others to do so as well. He also has placed an extremely high value on independent creativity with respect to his co-workers. What gall! He wants people to think! But he also sees the world as larger than the laboratory and cares for the lives his co-workers lead in a more holistic context. This has resulted in a large number of extremely talented, well-rounded individuals emanating from his group, a legacy at least as important as the science developed in the course of their training.

I have witnessed many occasions during which Paul's genuine enthusiasm for chemistry has been delightfully expressed. One personally memorable occasion occurred when I invited him to be part of a symposium at a Midwest Regional meeting of the American Chemical Society. To an audience of no more than 20, he delivered one of the best lectures I have seen in my life, filled both with new chemistry and utter exuberance for the possibilities it held. It was teaching *par excellence*.

I could say much more, but suffice it to say that Paul has had a very positive influence on my life. And so on behalf of all of the authors, of which I am one, I would like to wish Paul a very happy birthday and continued success and joy in the pursuit of Science.

Michael Harmata
Department of Chemistry
University of Missouri – Columbia

Columbia, July 2007

Curriculum Vitae

PAUL A. WENDER

Bergstrom Professor of Chemistry

Professor of Molecular Pharmacology

Stanford University

Professor Paul Wender (PhD, Yale University, Ziegler; NIH Postdoctoral Fellow, Columbia University, Stork) is currently the Bergstrom Professor of Chemistry at Stanford University, Professor of Molecular Pharmacology (by courtesy, Stanford Medical School), a cofounder of the Quantitative Chemical Biology Program, on the science advisory board of the Stanford Molecular Imaging Program, on the science advisory board of the Stanford Epithelial Biology Program, an associate of the Program for Molecular and Genetic Medicine, and a member of the Cancer Pharmacology Program at Stanford. He is also a cofounder, science advisor, and board member of CellGate, a biotech company pioneering new strategies for drug delivery.

His research involves studies in chemistry, biology, and medicine. His group is interested in the design and mechanism of action of molecules that exhibit unique biological activity and therapeutic potential, and in developing fundamentally new ways of synthesizing such compounds. His co-workers have introduced a number of new reactions and strategies for synthesis, including arene-alkene photocycloadditions and metal-catalyzed [4+4], [4+2], [5+2], [6+2], [2+2+1], [4+2+1], [5+2+1], and [5+1+2+1] cycloadditions. Over 50 total syntheses of a wide range of complex targets have been achieved, including: taxol – a remarkable anti-cancer drug; phorbol – an agent that is central to understanding the molecular basis for tumor promotion and carcinogenesis; resiniferatoxin – a new lead for treating neuropathic pain; and bryostatin analogues – designed agents that have an exceptional range of anti-cancer activities. His laboratory is also interested in understanding biological barriers and in developing new molecular strategies that would enable or enhance the passage of molecules across these barriers. This work has resulted in new strategies for drug delivery, some taken into human trials, and for molecular imaging based on molecular transporters – agents

that can be attached to a poorly or nonpenetrating biologically active molecule to enhance its uptake into cells and tissue. The work of his group is described in over 230 publications.

Professor Wender is a member of the National Academy of Sciences, a Fellow of the American Academy of Arts and Sciences, and a Fellow of the American Association of Arts and Sciences. His work has been recognized by numerous awards. Among these, he is recipient of a Camille and Henry Dreyfus Teacher Scholar Award, an A. P. Sloan Fellowship Award, an Eli Lilly Grantee Award, the Ernest Guenther Award of the American Chemical Society, The Pfizer Research Award for Synthetic Organic Chemistry, the American Chemical Society Award for Creative Work in Synthetic Organic Chemistry, the ICI Pharmaceutical Group's Stuart Award for Excellence in Chemistry, The Arthur C. Cope Scholar Award, the National Science Foundation Award for Special Creativity, National Institutes of Health Merit Awards (1993 and 2006), and the Alexander von Humboldt Stiftung Award, and in 2003 the American Chemical Society Herbert C. Brown Award for Creative Research in Synthetic Methods. He has been recognized for his teaching as well, with the first Associated Stanford Students Union Teaching Award, the Hoagland Prize for Undergraduate Teaching, the Bing Teaching Award, and the Dean's Distinguished Teaching Award from Stanford University. Professor Wender has served as a consultant to various pharmaceutical companies (currently seven) and sits on various editorial advisory boards (including *Journal of the American Chemical Society*, *Journal of Medicinal Chemistry*, *Chemistry & Biology*, *Bioorganic and Medicinal Chemistry Letters*, *Current Drug Discovery Technologies*, *Molecular Pharmaceutics*, and *Accounts of Chemical Research*) and on the science advisory boards of several companies. He is a past editor of SYNTHESIS and has served as a member of the Chemistry Advisory Board to the National Science Foundation, as Chairman of the Medicinal Chemistry Study Section of the National Institutes of Health, and currently serves as Chair of the newly constituted Synthetic and Biological Chemistry study section of the National Institutes of Health.