

## CURRICULUM VITAE – BRADLEY D. SMITH

### Personal Biographical Information

Birth: 1961, Melbourne, Australian Citizen,  
Permanent Resident of USA.  
Spouse: Marie Anne Hendrie (attorney)  
Children: Caitlin 10/8/93 and Julianne 10/1/97  
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### Education

- B. Sc. (First Class Honors) University of Melbourne, Australia – 1983 (D. P. Kelly)
- Ph.D. Pennsylvania State University – 1988 (L. M. Jackman)

### Primary Employment

- Postdoctoral Fellow - Oxford University (J. E. Baldwin) 1989-1990
- Postdoctoral Fellow - Columbia University (K. Nakanishi) 1990-1991
- Assistant Professor - Department of Chemistry and Biochemistry,  
University of Notre Dame 1991-1997
- Associate Professor - Department of Chemistry and Biochemistry,  
University of Notre Dame 1997-2001
- Professor - Department of Chemistry and Biochemistry,  
University of Notre Dame 2001-2008
- Emil T. Hofman Chair, Department of Chemistry and Biochemistry,  
University of Notre Dame 2008-present

### Additional Positions

- Senior Investigator, Walther Cancer Research Center (Notre Dame) 1999-present
- Visiting Professor, Monash University, Australia 2003
- Director, Notre Dame Integrated Imaging Facility 2008-present
- Visiting Professor of Sophia University, Tokyo Japan 2008
- Visiting Fellow, Japan Society for Promotion of Science 2008

### Awards and Honors

- Merck Postdoctoral Fellow (Columbia) 1990
- Research Corporation Cottrell Scholar 1994
- NSF Early Career Development Award 1995
- Kaneb Outstanding Undergraduate Teaching Award 2000

### Professional Activities

- **Editorial Advisory Boards:** *Journal of the American Chemical Society* 2006-2009;  
*Supramolecular Chemistry* 2001-present; *Faculty-of-1000* 2003-2007
- **Science Advisory Council for Research Corporation:** 2007-present. Research Corporation is the oldest private foundation supporting science research in the USA. The main purpose of the science advisory council is to evaluate the peer review and assign the final rankings for

their three major funding programs, Cottrell Scholar Award, Cottrell College Award, and Research Opportunity Award.

- **Grant Reviewer:** Review an average of fifteen major grant proposals per year for major US funding agencies such as the NIH, NSF, PRF and international granting agencies such as NATO, Canadian NSERC, and EU.
- **Peer Reviewer:** Review an average of fifty manuscripts per year for various international chemistry and biochemistry journals (e.g., *Nature*, *Science*, *J. Am. Chem. Soc.*, *Biochemistry*, *Chem. Comm.*, etc).
- **Industrial Consulting:** Retained on an occasional basis by a several small and large companies.

### **Teaching Experience**

- Sophomore-level Organic Chemistry
- Sophomore-level Biological Organic Chemistry
- Graduate-level Physical Organic Chemistry
- Graduate-level Bioorganic Chemistry
- Constructed the internet workbook *Organic Structure Elucidation* at: [www.nd.edu/~smithgrp/structure/workbook.html](http://www.nd.edu/~smithgrp/structure/workbook.html) The site is used regularly by many hundreds of university instructors around the world. Published a Japanese version in 2004.

### **Summary of Research Program**

The general area is bioorganic chemistry but the research is quite multidisciplinary and encompasses topics ranging from fundamental supramolecular chemistry to small animal imaging. A major effort is to develop novel fluorescent imaging probes that can detect tumors, dying tissue, and bacterial infection in living animals. These imaging probes will accelerate the pre-clinical stages of drug discovery and drug development, and also enable new strategies for studying the biology of human disease. Next-generation versions of the probes may eventually be employed in humans for the early detection of cancer and infectious disease.

The Supramolecular Chemistry program designs and evaluates host molecules, transporter molecules, catalysts, and molecular machines. We have recently discovered squaraine-rotaxanes as extremely bright and stable fluorescent Near-IR dyes. A more detailed description of the research program can be found at <http://www.nd.edu/~bsmith3>.

### **Invited Lectures** 125

### **Publications** 154

### **Patents** 3

(7/2008)