

**QUICK LINKS:**

- about
- people
- faculty
 - recent publications
 - courses
- staff

- research
- events
- contacts
- news
- bme home
- pratt home
- duke home

INFORMATION FOR:

- undergrads
- grads
- industry
- employment

WARREN S. WARREN, JAMES B. DUKE PROFESSOR OF CHEMISTRY AND RADIOLOGY AND PROFESSOR OF BIOMEDICAL ENGINEERING AND DIRECTOR, CENTER FOR MOLECULAR AND BIOMOLECULAR IMAGING

Contact Info:

Admin: Shari Wynn, (919)681-2691

Office Location: 2217 FFSC

Office Phone: (919) 660-1604

Email Address:  Web Page: <http://www.chem.duke.edu/~wwarren>**Teaching (Spring 2010):**CHEM 32L.001, *MOD APPS CHEM PRINCIPLES* Synopsis
French Sci 2231, WF 08:30 AM-09:45 AM**Education:**

PhD, University of California, Berkeley, 1980

MS, University of California, Berkeley, 1979

A.B. - Chemistry and Physics, summa cum laude, Harvard University, 1977

Specialties:

Medical Imaging

Research Interests:

Our work focuses on the design and application of what might best be called novel pulsed techniques, using controlled radiation fields to alter dynamics. The heart of the work is chemical physics, and most of what we do is ultrafast laser spectroscopy or nuclear magnetic resonance. It generally involves an intimate mixture of theory and experiment: recent publications are roughly an equal mix of pencil- and-paper theory, computer calculations with our workstations, and experiments. Collaborations also play an important role, particularly for medical applications.

Awards, Honors, and Distinctions

Alfred P. Sloan Fellow, 1986-1988

Closs Lectureship, University of Chicago, 1998

Dreyfus Foundation Young Faculty Grant, 1982

Eastern Analytical Symposium NMR Presentation Award, 1996

Fellow, American Physical Society, 1991-1994

McKnight Innovation Award in Neuroscience, 1999

Meloche Lectureship, University of Wisconsin, 2002

Microwave Design Award, Microwave Journal/Minicircuits Corporation, 1985

Nobel Laureate Signature Award, Presented by the American Chemical Society, 1982

Outstanding Academic Book, Choice Magazine (American Library Association), 2000, 1994

Philips Lecturer on Science and Technology, Haverford College, November 1995

Who's Who in the World, since the 18th edition, 2001

Elected Fellow, American Association for the Advancement of Science, 2004

Recent Publications (More Publications)

Louis-S. Bouchard and W.S. Warren, *Multiple-quantum vector field imaging by magnetic resonance*, J. Magn. Reson., vol. 176 (Accepted, 2005), pp. xx (Available online 8/8/2005.) .

Louis-S. Bouchard, Felix W. Wehrli, Chih-Liang Chin and Warren S. Warren, *Structural anisotropy and internal magnetic fields in trabecular bone: Coupling solution and solid dipolar interactions*, J. Magn. Reson., vol. 176 (2005), pp. 27-36 .

A. Miller, M. Fischer and W.S. Warren, *"Simultaneous measurement of two-photon absorption and self-phase modulation by femtosecond pulse shaping"*, Optics Letters (Submitted, 2005) .

Louis-S. Bouchard and W.S. Warren, *"Tensorial character of magnetization diffusion in periodic lattices"*, Phys. Rev. B. (Accepted, 2005) .

N. Lisitza, Yi-Qiao Song and W.S. Warren, *"Exploring permeation in blood by its internal magnetic field"*, Proc. Natl. Acad. Sci. (Submitted, 2005) .

Biomedical Engineering Department
Pratt School of Engineering | Duke University
Room 136 Hudson Hall • Box 90281 • Durham, NC 27708-0281
Phone: (919) 660-5131 • Fax: (919) 684-4488