
BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Theodore P. Trouard		POSITION TITLE Associate Professor of Biomedical Engineering and Radiology	
eRA COMMONS USER NAME TROUARD			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
California Polytechnic University, San Luis Obispo, CA	B.S.	1981-1985	Physics
University of Virginia, Charlottesville, VA	Ph.D.	1986-1991	Biophysics
University of Umeå, Umeå, Sweden		1992-1993	Postdoc
University of Arizona, Tucson, AZ		1994-1995	Postdoc

A. Positions and Honors

Positions and Employment

6/84-9/85 Research Assistant, Central Research Department, Varian Associates, Palo Alto, CA.
9/85-12/87 Research Assistant, Department of Chemistry, University of Virginia, Charlottesville, VA.
1/88-12/91 Research Assistant, Department of Chemistry, University of Arizona, Tucson, AZ.
1/92-12/93 Postdoctoral Research Fellow, Department of Physical Chemistry, University of Umeå, Sweden.
1/94-5/95 Postdoctoral Research Associate, Department of Radiology, University of Arizona, Tucson, AZ.
6/95-8/00 Research Assistant Professor, Department of Radiology, University of Arizona, Tucson, AZ.
9/00-present Assistant Professor, Department of Radiology, University of Arizona, Tucson, AZ.
9/00-present Assistant Professor, Biomedical Engineering Program, University of Arizona, Tucson, AZ.
9/05-present Associate Professor, Department of Radiology, University of Arizona, Tucson, AZ.
9/05-present Associate Professor, Biomedical Engineering Program, University of Arizona, Tucson, AZ.

Professional Affiliations

1993-present International Society for Magnetic Resonance in Medicine

Honors and Awards

1986 Deans scholarship, University of Virginia
1995-1996 Flinn Post-doctoral Scientist, University of Arizona

B. Peer-reviewed publications (selected, 1997 – present).

1. **Trouard TP**, Altbach MI, Hunter GC, Eskelson CD, and Gmitro AF (1997), MRI and NMR Spectroscopy of the Lipids of Atherosclerotic Plaque in Rabbits and Humans, *Magn. Reson. Med.* **38**, 19-26.
2. Warunee S, Benedicto A, O'Brien D, **Trouard TP**, Oradd G, Persson S, and Lindblom G (1998), Stabilization of a bicontinuous cubic phase from polymerizable monoacylglycerol and diacylglycerol. *Langmuir* **14**, 1921-1926.
3. Nevzorov A, **Trouard TP**, and Brown MF (1998), Lipid Bilayer Dynamics from simultaneous analysis of orientation and frequency dependence of deuterium spin lattice and quadrupolar order relaxation. *Phys. Rev. E.* **58**, 2259-2281.
4. Unger EC, Shen D-K, Wu G, Stuart L, Matsunaga TO, and **Trouard TP** (1999), Gadolinium-containing copolymeric chelates – a new potential MR contrast agent. *MAGMA*, **8**, 154-162.
5. **Trouard TP**, Nevzorov A, Alam TM, Job C, Zajicek J, and Brown MF (1999), Influence of cholesterol on dynamics of dimyristoylphosphatidylcholine bilayers as studied by deuterium NMR relaxation, *J. Chem. Phys.* **110**, 221-238.

6. **Trouard TP**, Theilmann RJ, Altbach MI, and Gmitro AF (1999), High resolution diffusion imaging with DIFRAD-FSE (DIFfusion-weighted Radial Acquisition of Data with fast Spin-Echo), *Magn. Reson. Med.* **42**, 11-18.
7. Brennick MJ, **Trouard TP**, Gmitro AF and Fregosi RF (2001), MRI study of pharyngeal airway changes during stimulation of the hypoglossal nerve branches in rats. *J. Appl. Phys.* **90**:1373-1384.
8. Ryan L, Nadel L, Keil K, Putnam K, Schnyer D, **Trouard T**, and Moscovitch M. (2001), The hippocampal complex and retrieval of recent and very remote autobiographical memories: Evidence from functional magnetic resonance imaging in neurologically intact people, *Hippocampus* **11**, 707-714.
9. McCabe K, Houser D, Ryan L, Smith V, and **Trouard T** (2001), A Functional Imaging Study of "Theory of Mind" in Two-Person Reciprocal Exchange, *PNAS* **98**:11832.
10. Altbach MI, **Trouard TP**, Van de Walle R, Barrett HH, and Gmitro AF (2001), Chemical shift imaging utilizing the positional shifts along the readout gradient direction. *IEEE Trans. Med. Imaging* **20**:1156-1166.
11. Altbach MI, Outwater EK, **Trouard TP**, Krupinski EA, Theilmann RJ, Stopeck AT, Kono M, and Gmitro AF (2002), A T2-weighted radial MRI method for imaging the abdomen. *JMRI* **16**:179-189.
12. Schnyer DM, Ryan L, **Trouard TP**, and Forster K (2002), Masked word repetition results in increased fMRI signal: a framework for understanding signal changes in priming. *Neuroreport* **13**:281-284.
13. Fridriksson J, Holland AL, Coull BM, Plante E, Trouard TP, and Beeson P (2002), Aphasia severity: Association with cerebral perfusion and diffusion. *Aphasiology* **16**:859-871.
14. Jennings D, Hatton BN, Guo J, Galons JP, **Trouard TP**, Raghunand N, Marshall J, and Gillies RJ (2002), Early response of prostate carcinoma xenografts to docetaxel chemotherapy monitored with diffusion MRI. *Neoplasia* **4**:255-262.
15. Mahendra N. Plante E. Magloire J. Milman L. **Trouard TP** (2003) fMRI variability and the localization of languages in the bilingual brain. *Neuroreport*. **14**:1225-8
16. De Weerd P, Reinke K, Ryan L, Mclsaac L, Perschler P, Schnyer D, **Trouard T**, & Gmitro A, (2003), Cortical mechanisms for acquisition and performance of bimanual motor sequences. *Neuroimage*, **19**:1404-1416.
17. Beeson PM., Rapcsak SZ, Plante E, Chargualaf J, Chung A, Johnson SC and **Trouard TP** (2003). The neural substrates of writing: A functional magnetic resonance imaging study. *Aphasiology*, **17**:647-665.
18. Gou J, **Trouard TP**, Galons JP, Erikson R and Gillies RJ (2003) Magnetization Transfer Contrast Image in Niemann Pick Type C mouse liver, *JMRI* **18**:321-327.
19. Theilmann RJ, Gmitro AF, Altbach MI, and **Trouard TP** (2004) View Ordering Techniques in Radial Fast Spin-Echo Imaging, *MRM* **51**:768-774.
20. Bascuñan E, Erickson R, Howison C, Hunter R, Heidenreich R, Hicks C, **Trouard TP** and Gillies RJ (2004) Tamoxifen and vitamin E treatments delay symptoms in the mouse model of Niemann-Pick C, *Journal of Applied Genetics*, **45**:461-467.
21. Theilmann RJ, Borders R, **Trouard TP**, Xia Gm Outwater E Ranger-Moore J, Gillies RJ and Stopeck A (2004) Changes in water mobility measured by diffusion MRI predict response of metastatic breast cancer to chemotherapy, *Neoplasia* **6**:831-837.
22. Sarlls J, Gmitro AF, Altbach MI, and **Trouard TP** (2005) Isotropic Diffusion Weighting in Radial Fast Spin Echo (Radial-FSE) MRI. *Magnetic Resonance in Medicine*, **53**:1347-1354.
23. Gmitro AF, Kono M, Theilmann RJ, Altbach MI and **Trouard TP** (2005) Radial GRASE: Implementation and Applications, *Magnetic Resonance in Medicine*, **53**:1363-1371.
24. Galons J-P, Lopez-Pedrafitas S, Divijak JL, Corum C, Gillies RJ, **Trouard TP**. (2005) Uncovering of Intracellular Water in Cultured Cells. *Magnetic Resonance in Medicine*, **54**:79-86.
25. Altbach MI, Bilgin A, Li Z, Clarkson EW, **Trouard TP**, and Gmitro AF (2005) Processing of radial fast spin-echo data for obtaining T2 estimates from a single k-space data set. *Magnetic Resonance in Medicine*, **54**:549-559.
26. Ahmad I, Lope-Piedrafitas S, Bi X, Hicks C, Yao Y, Yu C, Chaitkin E, Howison CM, Weberg L, **Trouard TP** and Erickson RP (2005) Allopregnanolone Treatment, Both As a Single Injection or Repetitively, Delays Demyelination and Enhances Survival of Niemann-Pick C Mice, *Journal of Neuroscience Research*, **82**:811-821.
27. **Trouard TP**, Heidenreich R, Seeger J and Erickson RP (2005) Diffusion Tensor Imaging (DTI) in Niemann-Pick Type C Disease, *Pediatric Neurology* **5**:325-330.
28. Raghunand N, Jagadish B, **Trouard TP**, Galons JP, Gillies RJ and Mash EA (2006) Redox-Sensitive Contrast Agents for MRI Based on Reversible Binding of Thiols to Serum Albumin, *Mag. Resonance in Medicine*, in press