

BIOGRAPHICAL SKETCH

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GoodnigJ

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NAME		POSITION TITLE		
Gold, Garry E.		Assistant Professor		
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	
Stanford University, Stanford CA	B.S.	1986	Electrical Engr.	
Stanford University, Stanford CA	M.S.	1988	Electrical Engr.	
Stanford University, Stanford CA	M.D.	1992	Medicine	

A. Positions and Honors.

1988-1989 Research Assistant, Department of Electrical Engineering, Stanford University.
 1988-1999 Research Assistant, Department of Radiology, Stanford University Medical School.
 1990-1991 Research Assistant, Department of Computer Science, Stanford University.
 1991-1992 Research Assistant, Department of Radiology, Stanford University Medical School.
 1992-1993 Resident, Department of Internal Medicine, Kaiser Medical Center, Santa Clara.
 1994-1998 Resident, Department of Radiology, Stanford University Medical Center.
 1995-1997 Research Fellow, Department of Radiology, Stanford University.
 1998-1999 Osteoradiology Fellow and Clinical Faculty, Department of Radiology, UCSD.
 1999- Assistant Professor, Department of Radiology, Stanford University.

Honors

1986 Tau Beta Pi Engineering Honor Society
 1988 Hewlett Packard Award for Outstanding Engineering Design Project
 1991 Stanford Medical Scholars Research Grant
 1992 Stanford Medical School Dean's Award for Research
 1993 Kaiser Residency Program Research Award
 1994 NIH Research Festival Resident's Award
 1995 ISMRM Young Investigator Moore Award Winner
 1996 RSNA Roentgen Resident/Fellow Research Award
 RSNA Certificate of Merit (co--author)
 1997 ISMRM Young Investigator Moore Award Winner (co--author)
 ARRS President's Award in Radiology
 1999 VA VISN 21 Young Investigator Award
 2000 SCBT/MR Cum Laude Award
 Medical Device Challenge Invention Challenge Winner
 2001 SCBT/MR Lauterbur Award (Best MRI Paper)
 2002 SCBT/MR Lauterbur Award (Best MRI Paper)
 ARRS President's Award in Radiology (Senior Author)
 2003 SCBT/MR Lauterbur Award (Best MRI Paper)
 2004 ARRS President's Award (Senior Author)
 2004 SCBT/MR Cum Laude Award

Societies

ISMRM , RSNA, ARRS, SCMR, ARRS, ISS

B. Selected Publications

1. **G. Gold**, J. Pauly, G. Glover, J. Moretto, A. Macovski, and R. Herfkens, Characterization of Atherosclerosis with a 1.5 T Imaging System. *J. Mag. Res. Im*, **3**, 399 (1993).
2. **G. Gold**, J. Pauly, A. Macovski, and R. Herfkens, MR Spectroscopic Imaging of Collagen: Tendons and Knee Menisci. *Magn. Reson. Med*, **34**, 647 (1995).
3. J. Brittain, E. Olcott, A. Szuba, **G. Gold**, G. Wright, P. Irarrazabal, and D. Nishimura, Three-Dimensional Flow-Independent Peripheral Angiography, *Magn. Res. Med.*, **38**, 343, (1997).
4. **G. Gold**, D. Thedens, J. Pauly, K. Fechner, G. Bergman, C. Beaulieu, and A. Macovski, MR Imaging of Articular Cartilage of the Knee: New Methods Using Ultra-Short TE's, *AJR*, **170**, 1223, (1998).
5. **G. Gold**, G. Bergman, J. Pauly, P. Lang, K. Butts, C. Beaulieu, B. Hargreaves, L. Frank, R. Boutin, A. Macovski, and D. Resnick, MR Imaging of Knee Cartilage Repair, *Topics in MRI*, **9**, 377, (1998).
6. H. Nielsen, **G. Gold**, E. Olcott, J. Pauly, and D. Nishimura, Ultra-Short Echo-Time 2-D Time-of-Flight MR Angiography Using a Half-Pulse Excitation, *Magn. Reson. Med.*, **41**, 591, (1999).
7. G. Luk Pat, **G. Gold**, E. Olcott, B. Hu, and D. Nishimura, High-Resolution Three-Dimensional In Vivo Imaging of Atherosclerotic Plaque, *Magn. Reson. Med.*, **42**, 762, (1999).
8. B. Hargreaves, **G. Gold**, P. Lang, S. Conolly, J. Pauly, G. Bergman, J. Vandevenne, and D. Nishimura, MR Imaging of Articular Cartilage Using Driven Equilibrium, *Magn. Reson. Med.*, **42**, 695, (1999).
9. D. Hodge, C. Beaulieu, G. Thabit, **G. Gold**, A.G. Bergman, K. Butts, M. Dillingham, and R. Herfkens. Dynamic MR imaging and stress testing in glenohumeral instability: comparison with normal shoulders and clinical/surgical findings, *J Magn Reson Imaging*. 2001 May; **13**(5):748-56.
10. **G. Gold**, J. Pauly, A. Leung, W. Block, C. Meyer, R. Sze, A. Macovski, P. Stark. Short Echo Time MR Spectroscopic Imaging of the Lung Parenchyma. *JMRI* 15:674-682, 2002.
11. D. Asakawa, S. Blemker, **G. Gold**, S. Delp. In Vivo Motion of the Rectus Femoris Muscle after Tendon Transfer Surgery. *J Biomech* 35:1029-1037, 2002.
12. S. Vasawala, J. Pauly, D. Nishimura, **G. Gold**. MR Imaging of Knee Cartilage with FEMR. *Skeletal Radiol*. 2002; 31(10): 574-80.
13. S. Reeder, N. Pelc, M. Alley, **G. Gold**. Rapid Imaging of Articular Cartilage with Steady-State Free Precession and Multi-Point Dixon Fat-Water Separation. *Am J Roentgenol*. 2003; 180:357-362.
14. B. Hargreaves, **G. Gold**, C. Beaulieu, S. Vasawala, D. Nishimura, J. Pauly. Comparison of new sequences for high-resolution cartilage imaging. *Magn Res Med* 49(4):700-709, April 2003.
15. **G. Gold**, T. McCauley, M. Gray, D. Disler. What's new in cartilage? *Radiographics* 2003; 23:1227-42.
16. D. Asakawa, K. Nayak, S. Blemker, S. Delp, J. Pauly, D. Nishimura, **G. Gold**. Real-time imaging of skeletal muscle velocity. *J Magn Reson Imaging*. 2003 Dec;18(6):734-9.
17. K. Miller, B. Hargreaves, **G. Gold**, J. Pauly. Steady-state diffusion-weighted imaging of in vivo knee cartilage. *Magn Reson* 2004 Feb;51(2):394-8.
18. N. Bangerter, B. Hargreaves, S. Vasawala, J. Pauly, **G. Gold**, D. Nishimura. Analysis of Multiple Acquisition SSFP. *Magn Reson Med*, 2004 May;51(5):1038-47.
19. **G. Gold**, E. Han, J. Stanisby, G. Wright, J. Brittain, C. Beaulieu. Musculoskeletal MR Imaging at 3.0 Tesla: Relaxation Times and Image Contrast. *Am J Roentgenol*, 2004 Aug;183:343-351.
20. **G. Gold**, T. Besier, C. Draper, D. Asakawa, S. Delp, G. Beaupre. Weight-bearing MRI of Patellofemoral Cartilage Contact Area. *J Magn Res Im* 2004 :526-530.
21. T. Besier, C. Draper, **G. Gold**, G. Beaupre, S. Delp. Patellofemoral Joint Contact Area Increases with Knee Flexion and Weight-Bearing. Accepted by *J Orthopedic Research*, 2004.

C. Research Support

PI: Garry E. Gold, M.D. Dates: 9/20/03 – 10/1/08
NIH 1R01EB002524

Title: Rapid MRI for Evaluation of Osteoarthritis
Goals: Improving MRI imaging of morphology and physiology of osteoarthritis
Role: Principal investigator, lead project

PI: Garry E. Gold, M.D. Dates: 1/1/03 – 12/31/05
Stanford Bio-X IIP Program

Title: Modeling Muscles in Contact
Goals: Improving musculoskeletal models of muscle using image data
Role: Principal investigator, lead project

PI: Garry E. Gold, M.D. Dates: 7/15/04 – 4/30/09
NIH 1R01-04677401

Title: Biomechanical Modeling of Tendon Transfer in Tetraplegia
Goals: Longitudinal study of osteoarthritis
Role: Principal investigator on imaging sub-contract. Overall project P.I. is Wendy Murray, Ph.D.

PI: Garry E. Gold, M.D. Dates: 9/30/01 – 6/30/08
NIH 5U01-AG019069-04

Title: Multi-Center Osteoarthritis Study
Goals: Longitudinal study of osteoarthritis
Role: Principal investigator on safety sub-contract. Overall project P.I. is Michael Nevitt, Ph.D.

PI: Charles Steele, Ph.D. Dates: 7/1/04-6/30/07
NIH 1R01-DC005960-01A2

Title: Human middle ear imaging, physiology, and biomechanics
Goals: Model middle ear function.
Role: Co-investigator, imaging the temporal bone with CT and MRI

PI: Thomas Andriacchi, Ph.D. Dates: 3/16/04-12/31/08
NIH 1R01-AR049792-01

Title: Cartilage Morphology Relative to In-Vivo Knee Function
Goals: Cartilage biomechanics in the knee related to gait
Role: Co-investigator, imaging cartilage at high resolution with MRI

PI: Albert Macovski, Ph.D. Dates: 9/30/02 – 8/31/05
National Institutes of Health 1R33 CA95882

Title: A Low-Cost High Quality Pre-polarized MRI Head Scanner.
Goals: Design considerations and initial clinical testing of the PMRI system.
Role: Co-investigator, provide clinical feedback on new kind of MRI system

PI: Albert Macovski, Ph.D. Dates: 9/1/01 – 8/31/05
National Institutes of Health 1R01CA92409

Title: Development of a Pre-polarized MRI Extremity Scanner.
Goals: Design considerations and initial clinical testing of the PMRI system.
Role: Co-investigator, clinical testing of new kind of MRI system

Principal Investigator/Program Director (Last, first, middle): Gold, Garry E.

PI: Michael Ward Dates: 12/1/01-11/30/06

National Institutes of Health

Title: Genetic determinants of ankylosing spondylitis severity

Goals: Find genetic determinants of AS severity

Role: Co-investigator, grade AS severity radiographically

PI: Gary Beaupre, Ph.D. Dates: 10/1/02-9/30/05

VA Merit Review A00-2048RA

Title: Patellofemoral Joint Biomechanics and Rehabilitation

Goals: Non-invasive imaging of cartilage strain with MRI

Role: Co-investigator, MRI sequence design and testing

PI:Carolynn Patten, Ph.D. Dates: 1/1/03-12/31/05

VA Merit Review

Title: Therapeutic Effects on Neuromuscular Function in Post-stroke Hemiplegia

Goals: Non-invasive imaging of muscle function with MRI

Role: Co-investigator, MRI sequence design and testing

PI: Nicholas Giori, M.D., Ph.D. Dates: 5/1/03-4/30/06

Whitaker Foundation

Title: Dynamic Cartilage Stain with MRI

Goals: Cartilage biomechanics under dynamic load

Role: Co-investigator, MRI sequence design and testing

Pending Support

PI: Sandip Biswal, M.D. Dates: 10/1/04-9/30/05

Roche Biomedical

Title: Imaging of a Rat Model of Rheumatoid Arthritis at High Field

Goals: Early detection of RA using a 4.7T MRI system

Role: Co-principal investigator, imaging protocols

Completed Support

PI: Garry Gold, M.D. Dates: 10/1/00-2/1/03

VA Rehabilitation R&D Service

Title: Improved MR Imaging of Articular Cartilage

Goals: Improve clinical imaging of cartilage using MRI

Role: Principal investigator

PI: Garry E. Gold, M.D. Dates: 12/1/00 – 6/1/04

Whitaker Foundation 176W017

Title: Intra-articular Coils for Musculoskeletal MRI

Goals: Improving MRI imaging of cartilage and joints with new coil designs

Role: Principal investigator, lead project

PI: Albert Macovski, Ph.D. Dates: 9/1/99 – 8/31/04

National Institutes of Health R01 AR46904

Title: Development of Improved MRI Techniques for Cartilage Injury and Repair.

Goals: Design, implementation, and clinical testing of new cartilage imaging methods.

Role: Co-investigator, clinical input and sequence design