




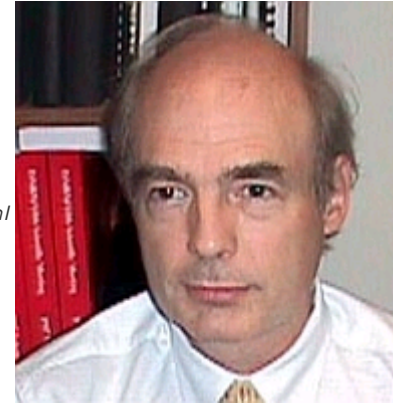
### QUICK LINKS:

- about
- people
- faculty
  - recent publications
  - courses
- staff
- research
- events
- contacts
- news
- bme home
- pratt home
- duke home
- INFORMATION FOR:
- undergrads
- grads
- industry
- employment

## JAMES R MACFALL, ASSOCIATE PROFESSOR OF RADIOLOGY, MEDICAL PHYSICS PROGRAM AND BIOMEDICAL ENGINEERING

### Contact Info:

Office Location: 1812C Hosp North  
 Email: [REDACTED]   
 Address: [REDACTED]  
 Web Page: <http://camrd4.mc.duke.edu/camrdwebpages/jrmhome.html>



### Education:

Ph.D., University of Maryland - College Park, 1976  
 M.S., University of Maryland - College Park, 1971

### Specialties:

Medical Imaging

### Representative Publications (More Publications)

WD Taylor, JR MacFall, JM Provenzale, ME Payne, DR McQuoid, DC Steffens, KR Krishnan, *Serial MR imaging of volumes of hyperintense white matter lesions in elderly patients: correlation with vascular risk factors.*, AJR. American journal of roentgenology, United States, vol. 181 no. 2 (August, 2003), pp. 571-6 [abs].

WD Taylor, JR MacFall, DC Steffens, ME Payne, JM Provenzale, KR Krishnan, *Localization of age-associated white matter hyperintensities in late-life depression.*, Progress in neuro-psychopharmacology & biological psychiatry, England, vol. 27 no. 3 (May, 2003), pp. 539-44 [abs].

MH Hsieh, DR McQuoid, RM Levy, ME Payne, JR MacFall, DC Steffens, *Hippocampal volume and antidepressant response in geriatric depression.*, International journal of geriatric psychiatry, England, vol. 17 no. 6 (June, 2002), pp. 519-25 [abs].

AC Guo, JR MacFall, JM Provenzale, *Multiple sclerosis: diffusion tensor MR imaging for evaluation of normal-appearing white matter.*, Radiology, United States, vol. 222 no. 3 (March, 2002), pp. 729-36 [abs].

DV Lewis, DP Barboriak, JR MacFall, JM Provenzale, TV Mitchell, KE VanLandingham, *Do prolonged febrile seizures produce medial temporal sclerosis? Hypotheses, MRI evidence and unanswered questions.*, Progress in brain research, Netherlands, vol. 135 (2002), pp. 263-78 [abs].

DC Steffens, HB Bosworth, JM Provenzale, JR MacFall, *Subcortical white matter lesions and functional impairment in geriatric depression.*, Depression and anxiety, United States, vol. 15 no. 1 (2002), pp. 23-8 [abs].

JR MacFall, ME Payne, JE Provenzale, KR Krishnan, *Medial orbital frontal lesions in late-onset depression.*, Biological psychiatry, United States, vol. 49 no. 9 (May, 2001), pp. 803-6 [abs].

ST Engelter, JM Provenzale, JR Petrella, DM DeLong, JR MacFall, *The effect of aging on the apparent diffusion coefficient of normal-appearing white matter.*, AJR. American journal of roentgenology, UNITED STATES, vol. 175 no. 2 (August, 2000), pp. 425-30 [abs].

YH Kao, JR MacFall, *Correction of MR kappa-space data corrupted by spike noise.*, IEEE transactions on medical imaging, UNITED STATES, vol. 19 no. 7 (July, 2000), pp. 671-80 [abs].

OI Craciunescu, TV Samulski, JR MacFall, ST Clegg, *Perturbations in hyperthermia temperature distributions associated with counter-current flow: numerical simulations and empirical verification.*, IEEE transactions on bio-medical engineering, UNITED STATES, vol. 47 no. 4 (April, 2000), pp. 435-43 [abs].

Z Vujaskovic, JM Poulson, AA Gaskin, DE Thrall, RL Page, HC Charles, JR MacFall, DM Brizel, RE Meyer, DM Prescott, TV Samulski, MW Dewhirst, *Temperature-dependent changes in physiologic parameters of spontaneous canine soft tissue sarcomas after combined radiotherapy and*

*hyperthermia treatment.*, International journal of radiation oncology, biology, physics, UNITED STATES, vol. 46 no. 1 (January, 2000), pp. 179-85 [abs].

DP Barboriak, JM Provenzale, JR MacFall, *White matter lesion contrast in fast spin-echo fluid-attenuated inversion recovery imaging: effect of varying effective echo time and echo train length.*, AJR. American journal of roentgenology, UNITED STATES, vol. 173 no. 4 (October, 1999), pp. 1091-6 [abs].

LF Donnelly, JR MacFall, HP McAdams, JM Majure, J Smith, DP Frush, P Bogonad, HC Charles, CE Ravin, *Cystic fibrosis: combined hyperpolarized 3He-enhanced and conventional proton MR imaging in the lung--preliminary observations.*, Radiology, UNITED STATES, vol. 212 no. 3 (September, 1999), pp. 885-9 [abs].

EW Hsu, LW Hedlund, JR MacFall, *Functional MRI of the rat somatosensory cortex: effects of hyperventilation.*, Magnetic resonance in medicine : official journal of the Society of Magnetic Resonance in Medicine / Society of Magnetic Resonance in Medicine, UNITED STATES, vol. 40 no. 3 (September, 1998), pp. 421-6 [abs].

EW Hsu, SB Reeder, JR MacFall, *Single-shot, variable flip-angle slice-selective excitation with four gradient-modulated adiabatic half-passage segments.*, Magnetic resonance in medicine : official journal of the Society of Magnetic Resonance in Medicine / Society of Magnetic Resonance in Medicine, UNITED STATES, vol. 40 no. 2 (August, 1998), pp. 334-40 [abs].

*Dewhirst MW, Prosnitz L, Thrall D, Prescott D, Clegg S, Charles C, MacFall J, Rosner G, Samulski T, Gillette E, LaRue S. Hyperthermic treatment of malignant diseases: Current status and a view toward the future. Semin Oncol 24: (6) 616-625 Dec 1997 .*

JP Vallée, HD Sostman, JR MacFall, T Wheeler, LW Hedlund, CE Spritzer, RE Coleman, *MRI quantitative myocardial perfusion with compartmental analysis: a rest and stress study.*, Magnetic resonance in medicine : official journal of the Society of Magnetic Resonance in Medicine / Society of Magnetic Resonance in Medicine, UNITED STATES, vol. 38 no. 6 (December, 1997), pp. 981-9 [abs].

JR MacFall, DM Prescott, HC Charles, TV Samulski, *1H MRI phase thermometry in vivo in canine brain, muscle, and tumor tissue.*, Medical physics, UNITED STATES, vol. 23 no. 10 (October, 1996), pp. 1775-82 [abs].

JR MacFall, HC Charles, RD Black, H Middleton, JC Swartz, B Saam, B Driehuys, C Erickson, W Happer, GD Cates, GA Johnson, CE Ravin, *Human lung air spaces: potential for MR imaging with hyperpolarized He-3.*, Radiology, UNITED STATES, vol. 200 no. 2 (August, 1996), pp. 553-8 [abs].

*MacFall JR, Prescott DM, Fuller E, Samulski TV. Temperature Dependence of Canine Brain Tissue Diffusion Coefficient Measured In Vivo with Magnetic Resonance Echo-Planar Imaging. International Journal of Hyperthermia 1995; 11:73-86 .*

*MacFall JR, Boyko O, Charles HC, Byrum C, Chittilla V, Parashos I, Upchurch L, Krishnan R: Relative Accuracy and Reproducibility of Regional MRI Brain Volume for Point Counting Methods. Psychiatry Research, 1994; 55: 167-177. .*

JR MacFall, HD Sostman, TK Foo, *Thick-section, single breath-hold magnetic resonance pulmonary angiography.*, Investigative radiology, UNITED STATES, vol. 27 no. 4 (April, 1992), pp. 318-22 [abs].

HD Sostman, DT Layish, VF Tapson, CE Spritzer, DM DeLong, P Trotter, JR MacFall, EF Patz, PC Goodman, PK Woodard, TK Foo, JL Farber, *Prospective comparison of helical CT and MR imaging in clinically suspected acute pulmonary embolism.*, Journal of magnetic resonance imaging : JMIR, UNITED STATES, vol. 6 no. 2 , pp. 275-81 [abs].

JP Vallée, HD Sostman, JR MacFall, RE Coleman, *Quantification of myocardial perfusion with MRI and exogenous contrast agents.*, Cardiology, SWITZERLAND, vol. 88 no. 1 , pp. 90-105 [abs].