

David G. Mummy

CONTACT INFORMATION	714 Hill St. #1 Madison, WI 53705	www.dgmummy.com david@dgmummy.com
RESEARCH INTERESTS	Applications of hyperpolarized gas MRI and CT in obstructive lung diseases, particularly asthma.	
EDUCATION	University of Wisconsin , Madison, WI Ph.D., Biomedical Engineering, <i>Expected</i> : Summer 2018 <ul style="list-style-type: none">• Thesis Topic: <i>Defining Asthma Phenotypes in Asthma Using CT and Hyperpolarized Gas MRI</i>• Advisor: Sean B. Fain, Ph.D M.S., Biomedical Engineering, January 2015 Seattle University , Seattle, WA M.B.A., June 2011 Whitman College , Walla Walla, WA B.A., Mathematics and Physics (Double Major), May 2006	
RESEARCH EXPERIENCE	Research Assistant Department of Medical Physics, University of Wisconsin-Madison Supervisor: Sean B. Fain, Ph.D	September 2013 to present
PUBLICATIONS	<ol style="list-style-type: none">1. Zha, Wei, Stanley J. Kruger, Robert V. Cadman, David G. Mummy, Michael D. Evans, Scott K. Nagle, Loren C. Denlinger, Nizar N. Jarjour, Ronald L. Sorkness, and Sean B. Fain. "Regional Heterogeneity of Lobar Ventilation in Asthma Using Hyperpolarized Helium-3 MRI." <i>Academic radiology</i> 25, no. 2 (2018): 169-178.2. David G. Mummy, Stanley J. Kruger, Wei Zha, Ronald L. Sorkness, Nizar N. Jarjour, Mark L. Scheibler, Loren C. Denlinger, Michael D. Evans, Sean B. Fain. "Ventilation defect percent in helium-3 magnetic resonance imaging as a biomarker of severe outcomes in asthma." <i>Journal of Allergy and Clinical Immunology</i> 141.3 (2018): 1140-1141.3. E. Adamson, K. Ludwig, D. Mummy, S.B. Fain. "Magnetic resonance imaging with hyperpolarized agents: methods and applications". <i>Physics in Medicine and Biology</i> (2017). doi: 10.1088/1361-6560/aa6be8.4. Wei Zha, David J. Niles, Stanley J. Kruger, Bernard J. Dardzinski, Robert V. Cadman, David G. Mummy, Scott K. Nagle, and Sean B. Fain. "Semiautomated Ventilation Defect Quantification in Exercise-induced Bronchoconstriction Using Hyperpolarized Helium-3 Magnetic Resonance Imaging: A Repeatability Study". <i>Academic Radiology</i> (2016).5. V. Shankaran, D. Mummy, L. Koepl, A. Bansal, D. Mirick, E. Yu, R. Morlock, S. Ogale, and S. Ramsey. "Survival and lifetime costs associated with first-line bevacizumab use in older patients with metastatic colorectal cancer". <i>Oncologist</i> 19:892-899, 2014	

6. V. Shankaran, **D. Mummy**, L. Koepl, D. Blough, Y. M. Yim, E. Yu, S. Ramsey. "Adverse events associated with Bevacizumab and chemotherapy in older patients with metastatic colorectal cancer". Clin Colorectal Cancer 2013; 12(3): 204213
7. B. Goulart, C. Reyes, C. Fedorenko, **D. Mummy**, S. Satram-Hoang, L. Koepl, D. Blough, S. Ramsey. "Referral and treatment patterns among patients with stages III and IV non-small cell lung cancer". Journal of Oncology Practice, 9, 42-50. doi:10.1200/JOP.2012.000640
8. B. Goulart, M. Bensink, **D. Mummy**, S. Ramsey. "Lung cancer screening with low-dose computed tomography: costs, national expenditures, and cost-effectiveness". Journal of the National Comprehensive Cancer Network: JNCCN. 01/2012; 10(2): 267-275.

BOOK CHAPTERS 1. "Hyperpolarized Gas MRI of the Lung in Asthma". Sean B. Fain, **David G. Mummy**, Ronald L. Sorkness. Hyperpolarized and Inert Gas MRI: From Technology to Application in Research and Medicine. Academic Press, 2016.

AWARDS Abstract Awards

- Abstract Scholarship, ATS International Conference, San Diego, CA May 2018
- Abstract Scholarship, ATS International Conference, Washington, DC May 2017
- *Summa cum laude* award, ISMRM, Honolulu, HI April 2017
- Student Prize (North America), International Workshop on Pulmonary Functional Imaging, Edinburgh, Scotland Sep 2015
- Abstract Scholarship, ATS International Conference, Denver, CO Oct 2015

Conference Admission/Travel Stipend Awards

- ISMRM, Paris, France June 2018
- ISMRM, Honolulu, HI April 2017
- ISMRM, Toronto, ON May 2015

PRESENTATIONS • ATS International Conference, Washington DC May 2017

- ISMRM International Conference, Honolulu, HI April 2017
- ATS International Conference, San Francisco May 2015
- Radiological Society of North America Annual Meeting Chicago, IL Nov 2015
- International Workshop on Pulmonary Functional Imaging Edinburgh, Scotland Sep 2015