	Program **Poster Sessions**		
	Thursday, October 2		
9:30-10:30am	Poster Session 1: Functional heterogeneity of the lung		
	1) Pulmonary Kinematics From Novel Point-Set Registration of Hyperpolarized Helium-3 Tagged Magnetic Resonance Image	Nicholas J. Tustison	University of Pennsylvania, Pennsylvania, USA
	2) Quantitative measurement of lung density using MRI	R.J. Theilmann, T.J. Arai1, A. Samiee, D.J. Dubowitz2, S.R. Hopkins, R.B. Buxton, and G.K. Prisk	University of California, San Diego, La Jolla,CA, USA
	3) Phenotyping emphysema by distribution analysis between rind and core region of the lung in COPD patients	Michael Owsijewitsch, Julia Ley-Zaporozhan, Jan-Martin Kuhnigk, Claus Peter Heussel, Sebastian Ley, Hans-Ulrich Kauczor	German Cancer Research Center Heidelberg, Germany
	4) Dynamic 3D imaging of ventilation dynamics using multi-echo projection acquisition with iterative constrained reconstruction	James Holmes, RL O'Halloran, ET Peterson, CJ Francios, EK Brodsky, JE Kuhlman, WW Busse, SB Fain	University of Wisconsin-Madison, WI, USA
	5) Regional quantitative analysis of volumetric paired thin section multi detector computed tomography scans and comparision with pulmonary function tests in patients with severe emphysema	Aleksandar Grgic1, Heinrike Wilkens, Jan-Martin Kuhnigk, Arno Buecker, Gerhard W.Sybrecht, Reinhard Kubale	Saarland University Medical Center, Homburg/Saar, Germany
	6) Regional Heterogeneity of	Eun Jin Chae, Joon Beom Seo, Jae-Woo	Asan Medical Center, Seoul, Korea

	Smoking-related Emphysema Assessed on CT in an Independent Determinant of Pulmonary Function	Song, Namkug Kim, Bum Woo Park, Young Kyung Lee, Yeon-Mok Oh, Sang Do Lee	
	7) Emphysema Quantification on serial low-dose CT scans in current and former smokers	Heidi Roberts, Alexander McGregor, Zhi Dong, Andre Pereira, Igor Sitartchouk, Ravi Menezes, Claus-Peter Heussel, Oliver Weinheimer, Hans-Ulrich Kauczor	University Health Network, Toronto, ON, Canada Thoraxklinik am Universitätsklinikum Heidelberg, Germany Joh. Gutenberg University Mainz, Germany Universitätsklinikum Heidelberg, Germany
	8) Comparison of Regional Pulmonary Perfusion Measurments with Dynamic axial MDCT and Fluorescent Microspheres	SK Alford, MK Fuld, WJE Lamm, HT Robertson, JH Song, GE Christensen, EA Hoffman	University of Iowa, Iowa City, IA, USA
9:30-10:30am	Poster Session 2 Image processing		
	9) Robust segmentation of airway trees at volumetric CT with adaptive thresholding based on local dilatation/connected component analysis and leakage control: Comparison with a conventional region growing method	Namkug Kim, Joon Beom Seo, Bumwoo Park, Jeongjin Lee (Corresponding author: Joon Beom Seo)	Univ. of Ulsan College of Medicine, Asan Medical Center, Seoul, Korea
	10) New algorithm to quantify emphysematous lesions using chest CT	Yasutaka Nakano, Shinsuke Saita, Mitsuru Kubo, Yoshiki Kawata, Noboru Niki, Hironobu Ohmatsu, Keigo Tominaga, Kenji Eguchi, Noriyuki	Dept. of Respiratory Medicine, Shiga University of Medical Science, Institute of Technology and Science, The University of Tokushima,

		Moriyama	National Cancer Center Hospital East, Tochigi Public Health Service Association, Faculty of Medicine, Teikyo University, Research Center for Cancer Prevention and Screening, National Cancer Center, Japan
	11) Surface based lung motion tracking, modelling and quantification	Cristian Lorenz, Tobias Klinder, Thomas Blaffert	Philips Research Europe - Hamburg
	12) A Novel method for separating arteries and veins in pulmonary CT images	Punam Kumar Saha, Milan Sonka, Zhiyun Gao, Eric Hoffman	University of Iowa, Iowa City, IA, USA
	13) Registration accuracy in Respiratory-gated pulmonary CT images of Supine Sheep: Static Breath-hold Imaging versus Restrospectively Reconstructed Dynamic image Acquistion	Kai Ding, Kunlin Cao, Matthew L. Moehlmann, Gary E. Christensen, Eric A. Hoffman, Joseph M. Reinhardt	University of Iowa, Iowa City, IA, USA
	14) Improved association graph matching of intra-patient airway trees for longitudinal lung analysis	Shalmali V.Bodas, Joseph M.Reinhardt.	University of Iowa, Iowa City, IA, USA
	15) Quantitative Assessment of Lung Ventilation and Perfusion: Integration with PASS 9.0	Junfeng Guo, Matthew K Fuld, Sara K Alford, Joseph M. Reinhardt, Eric A Hoffman,	University of Iowa, Iowa City, IA,USA
	16) A Phantom for Standardized Assessment of Quantitative Lung MDCT	K Gunderson; J Sieren; O I Saba; M Hudson; E J Van Beek, MD, PhD; E A Hoffman, PhD	University of Iowa, Iowa City, IA, USA
3:00-4:00pm	Poster Session 3		

	Image guided diagnosis and intervention		
	17) An efficient automatic classifier for differentiation of diffuse infiltrative diseases on whole lung HRCT (high resolution CT) using a level-set based diseased lung segmentation, non-linear binning strategy, cascading SVM (support vector machine) classifi	Namkug Kim, Joon Beom Seo, Sang Ok Park, Youngjoo Lee, Jeongjin Lee (Corresponding author: Joon Beom Seo)	Univ. of Ulsan College of Medicine, Asan Medical Center, Seoul, Korea
	18) A computer aided differential diagnosis between UIP and NSIP using automated assessment of the extent and distribution of Regional Disease Patterns at HRCT; Comparison with the radiologists' decision	Namkug Kim, Joon Beom Seo, Eunsol Lee(silvergorem@naver.com), Sang Ok Park, Youngjoo Lee, Jeongjin Lee (Corresponding author: Joon Beom Seo)	Univ. of Ulsan College of Medicine, Asan Medical Center, Seoul, Korea
	19) Prevalence of excessive tracheal collapsibility in moderate to severe COPD: manual and automated evaluation of cine-CT	Michael Owsijewitsch, Amit Mehndiratta, Julia Ley-Zaporozhan, Dirk Simon, Ralf Eberhardt, Sebastian Ley, Hans-Ulrich Kauczor	German Cancer Research Center Heidelberg, Germany
	20) Hyperpolarized 3He Magnetic Resonance Imaging: Tools for Assessing Differences in Static Ventilation Images	Lindsay Mathew, Andrew Wheatley, Miranda Kirby, Aaron Fenster, David G. McCormack and Grace Parraga	Robarts Research Institute, London Canada The University of Western Ontario, and [4]Lawson Health Research Institute, London, Canada
3:00-4:00pm	Poster Session 4 CFD, Modeling, and Atlas		

	21) Assessment of Functional Ventilation Heterogeneity and Airway Structure in Lung Tumor Patients	Yanping Sun, Aaron Alle, David Sugarbaker, Mitchell Albert	Brigham and Women's Hospital & Harvard Medical School, Boston, MA, USA
	22) Lungsim - A tool to explore lung geometry and function	Uday Kiran Thummalapalli and Andres Kriete	School of Biomedical Engineering, Drexel University, Philadelphia, PA, USA
	23) Particle deposition analysis using computational fluid dynamics (CFD) in a realistic respiratory model of a Sprague-Dawley rat	Jan De Backer, Wim Vos, Patricia Burnell, Catherine Gorlé, Wilfried De Backer	University Hospital Antwerp Antwerp, Belgium University of Antwerp Antwerp, Belgium GlaxoSmithKline Ware, UK University of Antwerp Antwerp, Belgium
	24) Ventilation hetereogeneity as a function of airways resistance and tissue compliance	J.H.Mitchell, M.H. Tawhai, E.A. Hoffman	University of Auckland, Auckland,New Zealand University of Iowa, Iowa City, IA, USA
	25) Computations of transport and mixing honeycomb-like models of the human acinus - a multistage approach	H Kumar, CL Lin, MH Tawhai and EA Hoffman	University of Iowa, Iowa City, Iowa, USA & University of Auckland, Auckland, New Zealand
	26) Quantitative Assessment of Air Trapping by Using Automatic Registration and Subtraction of Inspiration/Expiration CT Scans: Studies on Healthy Individuals and Asthmatics	Eun Jin Chae, Joon Beom Seo, Jeongjin Lee, Kamkug Kim, San So Lee, Tae-Bum Kim	Asan Medical Center, Seoul, Korea
	27) Variabilities of subject specific human inspiratory flow simulation	Jiwoong Choi, Ching-Long Lin, Merryn H. Tawhai, Eric A. Hoffman	University of Iowa, Iowa City, IA, USA

	28) Surface Smoothing of Respiratory Airways using Moving Least Squares	Youbing Yin, Ching-Long Ling, and Eric A. Hoffman	University of Iowa, Iowa City, IA, USA
	29) 3D Numerical Simulation of Respiratory Flow and Fluid-Structure Interaction in a CT-Based Human Lung Airway Bifurcation	Guohua Xia, Merryn H. Tawhai, Eric A. Hoffman, and Ching-Long Lin	University of Iowa, Iowa City, IA, USA University of Auckland, Auckland, New Zealand

	Friday, October 3		
9:30-10:30am	Poster Session 5 Molecular Imaging		
	30) 3D spatially resolved q-space imaging with radial acquisition and constrained reconstruction	Rafael L O'Halloran, James H Holmes, Andrew Alexander, Sean B Fain	University of Wisconsin – Madison, WI, USA
	31) Advances in spin-exchange optical pumping of hyperpolarized 3HE	F. W. Hersman, J. Distelbrink, J. Ketel, S. Ketel, E. Kotkowski, I. C. Ruset, D. W. Watt	University of New Hampshire, Durham, NH USA Xemed LLC, Durham, NH 03824 USA
	32) Advances in spin-exchange optical pumping of hyperpolarized 129 XE	F. W. Hersman, J. Distelbrink, J. Ketel, S. Ketel, I. C. Ruset, D. W. Watt	University of New Hampshire, Durham, NH, USA Xemed LLC, Durham, NH, USA
	33) Progress towards FDA regulatory approval of hyperpolarized 129XE as an MRI contrast agent	F. W. Hersman, S. Patz, H. Hatabu, J. Butler, G. Topulos, M.I. Hrovat, I.C. Ruset, I. Muradian, S. Ketel	University of New Hampshire, Durham, NH USA Xemed LLC, Durham, NH USA Brigham and Women's Hospital, Boston MA ,USA Harvard School of Public Health, Boston MA, USA Mirtech Inc, Brockton MA, USA
	34) Xenon Ventilation CT Using a Dual-Energy Technique of a Dual-Source CT: Intial Experience	Eun Jin Chae, Joon Beom Seo, Hyun Woo Goo, Namkug Kim, Koun-Sik Song, Sang Do Lee, Soo-Song Hong, Krauss Bernhard	Asan Medical Center, Seoul, Korea
	35) Mapping and Quantifying Hyperpolarized 3HE Magnetic Resonance Imaging Ventilation Gradients in COPD	Andrew Wheatley Andrea Evans David G. McCormack Grace Parraga	Robarts Research Institute, London Canada, The University of Western Ontario, London Canada

	36) Quantitative Assessment of oblique pulmonary fissure completeness	Sudharshan Bommu, Soumik Ukil, Joseph M. Reinhardt	University of Iowa, Iowa City, IA, USA
	37) Xenon Ventilation CT Using Dual-source and Dual-energy Technique in Children with Bronchiolitis Obliterans: Initial Experience.	Hyun Woo Goo, Dong Hyun Yang, Soo-Jong Hong, Jinho Yu, Byoung-Ju Kim, Joon Beom Seo, Eun Jin Chae, Namkug Kim, Krauss Bernhard	University of Ulsan College of Medicine, Asan Medical Center, Seoul, Korea Siemens Medical Solutions Forchheim, Germany
	38) Transitioning from the laboratory to the clinic: Adapting the Xe-CT method for human scanning.	M.K. Fuld, BS, B.A. Simon, MD, PhD, E.J. van Beek, MD, PhD, M. Hudson, RTR, J. Sieren,RTR1 and E.A. Hoffman, PhD1.	University of Iowa, Iowa City, IA, USA Johns Hopkins University, Baltimore, MD, USA
9:30-10:30am	Poster Session 6 Animal Models		
	39) Non-Destructive Morphometric Assessment of the Whole Mouse Lung via Hi-Res microCT Images	Vasilescu D, Chon D, Goldberger I, Chang H, Fong T, Kundsen L, Heverhagen J, Meyer-zu-Bexten E, Ochs M, and Weibel E, Hoffman E	University of Iowa, Iowa City, IA, USA Philipps University Marburg, University of Applied Science Giessen, University of Bern, Xradia Inc
3:00-4:00pm	Poster Session 7 Lung oxygen and vascular tone		
	40) Oxygen partial pressure mapping with radial acquisition and constrained reconstruction	Rafael L O'Halloran, James H Holmes, Sean B Fain	University of Wisconsin – Madison, WI, USA
	41) Comparison of Functional Imaging	M.K. Fuld, BS, S.K. Alford, MS,	University of Iowa, Iowa City, IA,

	Techniques: Xenon CT & Microspheres	W.JE. Lamm, MA, H.T. Robertson, MD, J.H. Song, MS, G.E. Christensen, PhD and E.A. Hoffman, PhD.	USA
	42) Evaluation of regional hypoxic pulmonary vasoconstriction by electrical impedance tomography	G. Elke, S. Pulletz, F. Reifferscheid, D. Schädler, G. Zick, J. Scholz, N. Weiler, I. Frerichs	University Medical Center Schleswig-Holstein, Campus Kiel, Kiel, Germany
	43) Regional oxygen uptake in the lung assessed by electrical impedance tomography	G. Elke, S. Pulletz, D. Schädler, F. Reifferscheid, G. Zick, J. Scholz, I. Frerichs, N. Weiler	University Medical Center Schleswig-Holstein, Campus Kiel, Kiel, Germany
3:00-4:00pm	Poster Session 8 Optical Imaging. Cancer assessment and image acquisition		
	44) Linking Airway Closure with Regional Ventilation Defects using Hyperpolarized 3HE MRI	Yanping Sun, Yang-Sheng Tzeng, Michael H. Cho, Elliot Israel, Kenneth R. Lutchen, Mitchell Albert	Brigham and Women's Hospital & Harvard Medical School, Boston, MA, USA Boston University, Boston, MA,USA University of Massachusetts Medical School, Worchester, MA, USA
	45) Optimization of apparent diffusion coefficient measurements for detection of emphyseme using hyperpolarized noble gas magnetic resonance imaging	X.Xu, J. Parra-Robles and G.E. Santyr	Robarts Research Institute, London, Ontario, Canada, University of Western Ontario, London, Ontario, Canada , University of Sheffield, Sheffield, England University of Western Ontario, London, Ontario, Canada
	46) Contour Enhancement of alveoli by diffuse illumination of alveolar microscopic videos	Schwenninger D., Moeller K., Schneider M., Guttmann J.	University of Freiburg, Germany
	47) Longitudinal Assessment of Lung	Eman Namati, Jacqueline Thiesse,	University of Iowa, Iowa City, IA

	Cancer in Mice	Jessica de Ryk, Andrew Stessman, and Geoffrey McLennan	USA