Apr, 2018

Grace Hyun J. Kim

CURRICULUM VITAE

PERSONAL HISTORY:

924 Westwood Blvd., Ste 650
Los Angeles, California 90024
(310) 481-7594 (office)
(310) 794-8657 (fax)

EDUCATION:

B.S.	Ewha Woman's University, Seoul, Korea, 1997 Mathematics
Internship	CHUNG-ANG UNIVERSITY Women's Junior School, Seoul. Korea, 1996 Math intern teacher for 8th grade
Credential	Teaching credential for middle and high schools, South Korea, 1997
Internship	GARTNER-GROUP Inc, Seoul, Korea, 1997 Marketing department
M.S.	California Polytechnic University, Pomona, CA, 2000 Applied Mathematics
M.S.	University of California, Los Angeles, CA, 2001 Biostatistics
Ph.D.	University of California, Los Angeles, CA, 2007 Title of Dissertation**: "**Classification in CT image data" Biostatistics, (Advisor: Gang Li)
Postdoctoral	University of California, Los Angeles, CA, 2009 Radiological Science, (Advisor: Jonathan G. Goldin)

ACADEMIC APPOINTMENTS:

2016 – Present	Associate Professor in Residence, Department of Radiological Science & Biostatistics, University of California, Los Angeles, CA
2013 – 2016	Assistant Professor in Residence, Department of Radiological Science, University of California, Los Angeles, CA
2013 – 2016	Assistant Professor in Residence, Department of Biostatistics, University of California, Los Angeles, CA
2011 –2013	Adjunct Assistant Professor, Department of Biostatistics, University of California, Los Angeles, CA
2009 – 2013	Adjunct Assistant Professor, Department of Radiological Science, University of California, Los Angeles, CA

PROFESSIONAL EXPERIENCE:

2015 – Present	Statistician, Connective Tissue Disease-Interstitial Lung Disease, Department of Rheumatology, University of California, Los Angeles, CA

2014 – Present Co-director of Computer Vision and Imaging Biomarkers (CVIB), and Director of Biostatistics Core in CVIB, Department of Radiological Science, University of California, Los Angeles, CA

2011 – Present Biostatistician, Department of Biostatistics, University of California, Los Angeles, CA

2011 – Present Member, Jonsson Comprehensive Cancer Center, University of California, Los Angeles, CA

2009 – 2014 Biostatistician, Department of Radiological Science, University of California, Los Angeles, CA

2007 – 2009 Post-Doctoral Employee, Department of Radiological Science, University of California, Los Angeles, CA

2001 – 2007 Graduate Student Researcher, Department of Radiological Science, University of California, Los Angeles

1999 – 2000 Instructor, Department of Mathematics, California State Polytechnic University, Pomona

1997 – 1998 Tutor, Learning Resource Center, California State Polytechnic University, Pomona

1997 – 1997 Researcher, Department of Computer Information System, California State Polytechnic University, Pomona

1995 – 1996 Director, Photo Department, AD Power United College Club, Seoul, Korea

PROFESSIONAL ACTIVITIES:

UNIVERSITY COMMITTEE SERVICE

Co-Chair of UCLA Computer Vision in Medicine Workshop, Theme of Lung CT Image Analysis, Feb/22/2008

Co-Chair of UCLA Computer Vision in Medicine Workshop, Theme of Computer-Aided Lung Cancer Screening, Feb/21/2014

Committee Member of UCLA Medical IRB 2 (oncology and hematology research) committee March 2014 - present

Member, Johnson Comprehensive Cancer Center 2008- present

Member, Connective Tissue Disease-Interstitial Lung Disease, Department of Rheumatology, David Geffen School of Medicine 2015- present

Scientific Mentor, CTSI Grant Writing Studio, 2018 - present

SCIENTIFIC SOCIETY MEMBERSHIP

American Statistical Association (ASA); 2004-present

Society of Thoracic Radiology (STR): 2012-present

Korean-American Scientists and Engineers Association (KSEA); 2013-present

American Society of Clinical Oncology (ASCO); 2013-2014

ACTIVITIES in SCIENTIFIC SOCIEITIES

Committee member of QIBA CT Modality comprised of members from the Volumetric CT and COPD Technical Committees, RSNA since 2008-current

Organizer of topic contributed session #184, Development and Validation of Biomarker, Sponsored by Western North American Region (WNAR). Joint Statistical Meeting (JSM) sponsored by ASA, Aug/4/2008, Denver, CO.

Organizer of topic contributed session #459, Characteristics of Biomarker in the Clinical Development and Adoption, Sponsored by Biometrics Section, Joint Statistical Meeting (JSM) sponsored by ASA, Aug/5/2009, Washington, DC

Committee member of reviewing abstract for Quantitative Computer Tomography (QCT) session in Society of Thoracic Radiology (STR) June, 2012

Chair of topic contributed session #208951, *Patient Report Outcome and Biomarkers in Asthma*, Sponsored by Biometrics Section, Joint Statistical Meeting (JSM) sponsored by ASA, Aug/5/2013, Quebec, Canada

Scientific Committee member of the 2013 World Congress Thoracic Imaging sponsored by STR

RSNA-QIBA/FNIH FDG-PET Imaging Biomarker Qualification Committee members and advisors 2011-2012

Chair of Round Table Lunch Meeting, *Our Roles in Evaluating Biomarker in Clinical Trials*, Sponsored by FDA/DIA Statistical Forum, Apr/8/2014, Washington, DC

Chair of Math-Statistics Technology session 6, Bio-math and statistics, Sponsored by UKC and KSEA, Aug/9/2014, San Francisco, CA

Statistical Partnerships among Academe, Industry, and Government (SPAIG) member, sponsored by ASA, Oct/2014- present

Co-symposium Chair of Math-Statistics Technology symposium, Sponsored by UKC and KSEA, Aug/2015, Atlanta, GA

Chair of Math-Statistics Technology session 6, Bio-math and statistics, Sponsored by UKC and KSEA, Aug 2016, Dallas, TX

Co- symposium Chair of Math-Statistics Technology symposium, Sponsored by UKC and KSEA, Aug/2017, Washington, DC

Organizer of Korean-American Women in Science and Engineering of 9th & 10th West Coast Annual Conference by KSEA, May/16/2015 & Jan/16/2016, Pasadena, CA

Council Member of scholarship, KSEA August/2/2015- 2018

Chair of contributed session #700, Topics in Clinical Trial 3, Sponsored by Biopharmaceutical Section, Joint Statistical Meeting (JSM) sponsored by ASA, Aug/13/2015, Seattle, WA

Panel discussion member, Profile Guidance, QIBA Annual meeting Apr/13/2016

Chair of Round Table Lunch Meeting, ***TL32****: Oncology: Imaging Endpoints in Clinical Trials*, Sponsored by ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop, Sep/29/2016, Washington, DC

Member of the study team, Subpopulations and intermediate outcome measures in COPD study

Member of the Committee, Conference on Statistical Practice (CSP) sponsored by ASA, March/1/2016 –Feb/28/2020

OTHER RESEARCH-RELATED ACTIVITIES

Investigator of Reference Image Database to Evaluate Response (RIDER) 2009-2010

Investigator of Quantitative Imaging Biomarker (QIBA) initiated by RSNA: working on study design and statistical analyses plan in the experiment of 1A, 1B and 1C. 2009-current

Organizer of visit of Dr. Sue Jane Wang, associate director, Adaptive Design and Pharmacogenomics, from Office of Biostatistics, Office of Translational Sciences, CDER, FDA, two sessions of a) Adaptive versus Non-adaptive Biomarker Enrichment in Pharmacogenomics Trials and b) Biomarker Development and Its Qualification, joint sponsored by Department of Biostatistics, School of Public Health, and Department of Radiological Science, David Geffen School of Medicine at UCLA, May/12-13/2010, Los Angeles, CA

UCLA/AUPO Introduction to Clinical Research course, Sep/20/2014- Sep/22/2013, a discussion leader as role of biostatistician in helping clinical study design in the topic of appropriate/inappropriate control groups with Dr. Thomas Leitman and Dr. Steven Piantadosi.

NIH SREA MEDI Study Section Review June 2016, Reviewed 10 grants (Agenda Sequence Number 306352)

DoD Ad-hoc Section Review December 2016

NIH SREA BMIT-A Study Section Review June 2017, Reviewed 4 grants (Mail Reviewer)

EDITORIAL ACTIVITEIS

Reviewer of *International Journal Artificial Intelligence in Medicine (2009-2010)*

Reviewer of *Journal of Biopharmaceutical Statistics* (2009-2010)

Reviewer of *European Radiology (2012- current)*

Reviewer of *Medical Physics (2013- current)*

Reviewer of *Medical Engineering and Physics (2013- current)*

Reviewer of *Statistical Methods Medical Research (2014- current)*

Reviewer of *IEEE Transactions on Medical Imaging (2016- current)*

Reviewer of *PLOS ONE (2016- current)*

SUPERVISED STUDENTS:

Teaching Experience:

Instructor and co-*course originator (BIOSTAT 245)*, "Advanced Seminar: Biostatistics". Winter 2012, 2013, Winter 2014, Fall 2014, Winter 2015, Winter 2016. Together with one of faculty from Biostatistics department, organized and put together a seminar-oriented course for PhD Biostatistics students which covered an advanced understanding and the role that various areas of biostatics including applied genetic/imaging areas.

Lecturer (BIOSTAT 403A), "*Computer Management of Health Data*", part of lecture series in large health data management, design, and application of statistics software SAS, Fall 2011. Teaching basic data management related to a clinical protocol and sorting, merging, and query of data quality check using statistical software.

Instructor (*BIOSTAT 596), "Directed Individual Study or Research"*, guided students for their master thesis, Fall 2012, Winter 2013, Spring 2013. Teaching a study design and unbalanced data analysis and writing manuscripts.

Instructor (*BIOSTAT 597), "Preparation for Master's Comprehensive or Doctoral Qualifying Examinations"*, Fall 2012. Supervising students for their master examination, Fall 2012. Providing the guidance and supervising in running the real research data with statistical software.

Instructor (*BIOSTAT 400), "Field Studies in Biostatistics"*, supervising students for their field work in imaging analysis for health promotion, Fall 2014. Providing the opportunity of experience in a research lab: collection, analysis of image data, and statistical analysis of the outcome from imaging data

Instructor (*PBMED 217), "Statistics and Data Analysis in Biomedical Physics"*. Fall 2015, 2016, and 2017. Lecture for two hours; a laboratory for one hour. Introduction to computer-based statistical concepts, data analysis, and experimental design within biomedical physics research. Standard statistical packages and various statistical computing algorithms on relevant data sets within radiological sciences.

Instructor (*BIOENGR M228), "Medical Decision Making"*. Winter 2016, 2017 and 2018. Lecture for four hours; Overview of issues related to medical decision making. Introduction to concept of evidence-based medicine and decision processes related to process of care and outcomes. Basic probability and statistics to understand research results and evaluations, and algorithmic methods for decision-making processes (Bayes theorem, decision trees). Study design, hypothesis testing, and estimation. Focus on technical advances in medical decision support systems and expert systems, with review of classic and current research. Introduction to common statistical and decision-making software packages to familiarize students with current tools.

Guest Lecturer (*BIOENGR M224B), "Advances in Imaging Informatics"*. Spring 2016. Lecture for two hours;
Teach statistical design based on the hypotheses and validation of the imaging outcomes, which are under-development.

Guest Lecturer (*BIOMATH 285), "High Throughput Data Analysis"*. Spring 2017 and 2018. Lecture for 1.5 hours;
Teach Statistical methods in imaging- measurand, biomarkers, and radiomics.

CT Physics Teaching, "Statistical Design and Concept", Aug 2017. Lecture for 3 hours; teach Statistical methods in diagnostic testing and concept for 1st year radiology residents.

Co mentoring with Ben Ellingson BioMed High School Student Program, November 8, 2016 – February 28, 2017

Ph.D. Committee Member:
I have four PhD students from Biostatistics and Physics Biology & Medicine (Biomedical Physics):

1) Maryam Khatonabadi, Ph.D. (2013; UCLA Biomedical Physics). I supervised her modeling the effective CT dose between vendors and demographic information

2) Daniel Chong (Ph.D. Candidate May 2012 – 2016; UCLA Biomedical Physics). Research is a continuation of my patent. He works on interstitial disease classification modeling with updated features and robust experiments from Biomedical Physics at UCLA.

3) Eran Barnoy, M.S. (Biostatistics Sep 2010 – June 2012). Started his study as PhD candidate in the Biostatistics Department, but he left to Israel for his personal reasons. Eran has continuously worked on heterogeneous index in lungs of asthma patients. This work is soon to be submitted to Statistical journal. He was supported by the grant from QIBA (NHLBI- PB-EB-2010-159-JKS, HHSN268201000050C, RECOVERY – QIBA). He is currently a PhD student in the department of Electronic Engineering and a recipient of the most prestigious award, President's Scholarship at Bar Ilan University in Israel. I wrote the letter of support for him.

4) Sheng Wu (Ph.D. Candidate; Biostatistics Sep 2013 – Nov 2014). Working on imaging utilization in geriatric population. He was supported by ACR Neiman Institute Awards Grant

5) Yu Shi (Ph.D. Candidate; Biostatistics Sep 2015 – present) Working on IPF prediction using HRCT imaging funded by R21HL123477-01A1

6) John Hoffman (Ph.D. Candidate; Physics Biology & Medicine Mar 2016 – Mar 2018)

Other Mentees/Students Supervised

1) Jonhyoon (Jewels) Lee: Master's student in the Department of Statistics at UCLA (Sep 2011- Jun 2013). I advised her dissertation and she received CAS scholarship (Fall 2012). She presented the poster of 'Unbalanced Data Classification Using Support Vector Machines with Active Learning on Scleroderma Lung Disease Patterns' at WNAR 2013.

2) David Huang: Master's student in the Department of Biostatistics at UCLA (2011-2013). I advised his programing and his career plan. We compared the EM algorithms from three different statistical software (SAS, Stata, and R), which we found robust ways of converging to quantitative values within 0.01 tolerance level. Currently he works at Gilead biotech Company.

3) Roger Won Shih: Master's student in the Department of Biostatistics at UCLA (June 2014- Sep 2014). I mentored him for his Field Studies (Biostat 400), which is part of his required courses. He had worked on the classification of idiopathic pulmonary fibrosis as part of eligibility of clinical trials.

COMMUNITY SERVICE:

Mexico mission trip sponsored by United Methodist church, Pomona, CA (July 1999)

Teaching SAT math section, Los Angeles CA (July-August 2001, July-August 2005)

Feeding homeless people in Los Angeles downtown CA (Dec 2006)

Taking care of toddlers during Sunday service, Los Angeles CA (Jan 2007- Jul 2008)

Career day talk to the 1st, 2nd, 3rd grade students, a role of scientist/biostatistician at the department of radiology with emphasis on no smoking and no drug, organized at Balboa Magnet Elementary school, Northridge CA (Nov 2009, June 2010, Nov 2010)

Assisting carpool lane for students' drop off and pick up at Balboa Magnet Elementary school, Northridge CA (May 2010, May 2012, Mar 2012, Sep 2013)

Serving lunch for students and staff at Granada Baptist Elementary school once in a month, Granada Hill CA (Sep 2011-Jan 2012)

Assisting the dress rehearsal for the Sound of Music musical, Metropolitan Educational Theatre Network, Northridge CA (Aug 2012)

Caring and Serving lunch for high school students and staff at Light of Love Mission Church, Pasadena CA (Oct 2012 – Nov 2014)

Teaching the 2nd grade elementary students for Approved Workman Are Not Ashamed (AWANA) program on every Friday evening at Light of Love Mission Church, Pasadena CA (Sep 2012 – June 2015)

Organizer and grader of National Mathematics, Science Competition and High School Physics Contest by KSEA, April/18/2015, Claremont, CA

Making a database and Grading the mathematic exam, KSEA National Math and Science Competition, April/11/2015, Claremont, CA

Presentation of Introducing "The role of Biostatistician", KSEA Major Fair for Junior and High school students, October/10/2015, Claremont, CA

Proctoring, Grading the mathematic exam and awards female students from KWiSE, KSEA National Math and Science Competition Claremont College, April/9/2016, Claremont, CA

Panel Discussant in Medical/Public Health, 2nd Career Workshop from Global Leaders Association led by students, May/11/2016, UCLA, Los Angeles, CA

Panel Discussant "The role of Biostatistician in academics and industry, and future outlook of your field", KSEA Major Fair for Junior and High school students, Sep/30/2017, Van Nuys, CA

Teaching, Career pathway to biomedical scientists, KSEA- Southern California Chapter Spring Career & Mentoring Workshop, March/24/2018, House of Writers, Los Angeles, CA

Presenting, 'Touch questions to ask: STEM or not STEM, and when do we make decisions?'. KSEA- Southern California, National Math Science Engineering, April/7/2018, Harvey Mudd College, Claremont, CA

HONORS AND SPECIAL AWARDS:

CHUNG-ANG UNIVERSITY WOMEN'S School Board Community Scholarship (1992)

Cameron Bogue Statistician Memorial Scholarship, Cal Poly, Pomona (1998)

The Korean American Construction Company (1999)

Co-author: Cum Laude Poster, European Congress of Radiology (ECR), (2005)

American Association for Cancer Research (AACR), Scholar-in-Training Travel Award (2008)

Co-author: Honorable Mention, SPIE Medical Imaging meeting (2012)

Young Investigator Award, 3rd World Congress of Thoracic Imaging (WCTI) (2013)

Certificate of Merit, Best Scientific Exhibition Award, 3rd WCTI (2013)

Certificate of Appreciation, CHUNG-ANG UNIVERSITY College of Medicine (2015)

One of the best posters in Health Science, UCLA Research Conference on Aging (2015)

RESEARCH GRANTS AND FELLOWSHIPS RECEIVED:

NIH/ Non-profit Organization:

Name: N01-HR96143-01
Project PI: Roth, M.
INV: 49% Effort beginning 7/1/01 thru 12/31/04, 09/29/99 – 12/31/04 NHLBI
Total Direct Project: $541,141
Role: Graduate student Researcher (GSR)
Purpose: *Clinical Centers for Feasibility Studies on Retinoid Treatment in Emphysema (FORTE)*
This project involves the use of imaging and other studies to evaluate the disease progression of emphysema in the lungs and its response using Retinoid treatments. The goal of the Radiology Core will be to coordinate imaging, data collection and quantitative image analysis of CT scans for patients who are being studied to evaluate disease progression of emphysema in the lungs and its response using Retinoid treatments.

Name: 019152-001
Project PI: Connett, J.
INV: 25% effort Graduate Student Researcher GSR
Duration: 05/01/05 – 04/30/08
Total Direct: $55,575
Role: GSR
Purpose: Statistical support in University of Minnesota / NIH Prime FORTE (Feasibility Studies on Retinoid Treatment in Emphysema) Radiology Core

Name: UC Sales and Service Account
Project PI: Goldin
Thoracic Research Group "Computer Aided Image Analysis"
INV: Effective 10/1/07 100% effort
Duration: 07/01/04 – 06/30/2009
Role: GSR / Post-doctoral scholar as a biostatistician and scientist
Total Direct project: $937,766 direct cost received to date
Purpose: to develop, evaluate and validate new computer vision techniques

Name: Itl06-10158
Project PI: Brown
"Computer –Aided Image Analysis for Treatment Targeting in Emphysema"
INV: 2.4 calendar months
Duration: 02/01/07 – 01/31/10
Role: Post-doctoral scholar/Assistant Professor/ Biostatistician/Scientist
Total Direct Project: $512,902 all years
Purpose: to develop new computer vision techniques for automatic segmentation of the lungs into airways and lobes in CT images. These techniques will overcome limitations of existing systems and be reliable even for abnormal (diseased) patients, making it feasible to perform structural and functional analysis of the lung lobes and airways in emphysema patients on a routine clinical basis.

Specific Aim: Project will bring innovation to lung healthcare by using computer image analysis and decision support to optimize the treatment of emphysema.

Name: NIH CA 016042
Project PI: Gasson
INV: 10% Effort beginning 12/1/2008
Total Direct Project: UCLA JCCC CC SG Fund
Role: Assistant Professor /Biostatistician/Scientist
Purpose: to collaborate in developing cancer imaging biomarker.

Name: Brain Tumor Funders Collaboration 20092623
Project PI: Pope
INV: 5% Effort beginning 1/1/2010
Total Direct Project: UCLA Radiology Fund
Role: Assistant Professor /Biostatistician/Scientist
Purpose: to collaborate in developing a combining Genomics with physiologic imaging biomarkers to predict and follow treatment response in glioma cancer imaging biomarker.

Name: Organ Dose/Radiobiology Project
Project PI: Mike McNitt-Gray
INV: 10% Dec 30, 2010 to Dec 29, 2014
Total Direct Project: UCLA Radiology Fund. As part of Siemens Master Research Agreement with UCLA Department of Radiology
Role: Assistant Professor /Biostatistician
Purpose: Collaborating as Statistician in development of methods to more accurately assess radiation dose to sensitive organs and methods to reduce that dose and investigations into biological dosimetry using in vivo and ex vivo assays.

Name: NHLBI-PB-EB-2010-159-JKS, HHSN268201000050C, RECOVERY - QIBA
Project PI: Sullivan
INV: 10% Effort beginning 4/1/2011- 03/31/2012
Total Direct Project: UCLA Radiology Fund
Role: Assistant Professor /Biostatistician
Purpose: to collaborate in statistical design and analysis in estimating variance of multi-scanner s in QIBA "Inter-scanner/inter-clinic comparison of reader nodule sizing in CT imaging of a phantom" in 1C experiment.

Name: NHLBI- PB-EB-2010-159-JKS, HHSN268201000050C, RECOVERY – QIBA
Project PI: Sullivan
INV: 10% Effort beginning 4/1/2011- 03/31/2012
Total Direct Project: UCLA Radiology Fund
Role: Assistant Professor /Biostatistician
Purpose (called 1B project): to collaborate in statistical design and analysis in estimating variance of multi-scanner s in QIBA Inter- /inter-comparison of reader nodule sizing in CT imaging of MSK coffee break in 1B experiment.

Name: NHLBI- PB-EB-2010-159-JKS, HHSN268201000050C, RECOVERY - QIBA
Project PI: Sullivan
Award number: HHSN2682010 50C (15.a)
INV: 10% Effort beginning 8/1/2011- 07/31/2012
Total Direct Project: UCLA Radiology Fund
Role: Assistant Professor /Biostatistician
Purpose (called 1B extension project): to collaborate in statistical design and analysis in estimating variance of multi-scanner s in QIBA Inter- /inter-comparison of reader nodule sizing in CT imaging of MSK coffee break in 1B experiment.

Name: NHLBI- PB-EB-2010-159-JKS, HHSN268201000050C, RECOVERY - QIBA
Project PI: Sullivan
Award number: HHSN268201000050C (16.a)
INV: 10% Effort beginning 8/1/2011- 07/31/2012
Total Direct Project: UCLA Radiology Fund

Role: Assistant Professor /Biostatistician
Purpose: QIBA (called 3A project): A Statistical Analysis and Setting Re-Usable Infrastructure in Statistical code for Large-Scale Algorithm

LAM Foundation Pilot Project Award
Lo (PI)
INV: 01/01/12-12/31/13
Role: Assistant Professor /Biostatistician/Scientist
Purpose: To develop a radiological imaging feature predictive and to characterize the patients' image data with refining and validating qualitative and quantitative features of lung
Role: Investigator

ACR Neiman Institute Awards Grant
Project PI: Hsu (PI)
INV: 40% GSR Support, 09/01/13-08/31/14
Role: Assistant Professor /Biostatistician/Scientist
Purpose: Geriatric Imaging Utilization: to quantitatively characterize the role and value of imaging in the care of an elderly outpatient population

R21
Project PI: Ellingson (PI)
INV: 5% Effort 09/01/12-08/31/14
Role: Assistant Professor /Biostatistician/Scientist
Purpose: Cell invasion, motility, and proliferation level estimate maps in gliomas, Predictive Biomarker for GBM using Apparent Diffusion Coefficient fMRI images

U01CA181156; McNitt-Gray (contact PI)
INV: 12% Effort 05/01/14-04/30/17
Role: Co-PI
Purpose: Quantitative CT Imaging for Response Assessment When Using Dose Reduction Methods
The goal of this project is to investigate the effects of radiation dose reduction techniques used in CT imaging on quantitative measures used in response assessment of patients in clinical trials.

UCLA CTSI Seed Grant; Hoffman (PI)
INV: Effort 08/01/14-02/29/16
Role: Assistant Professor /Biostatistician
A prospective, double blind, randomized, placebo controlled study to compare the effectiveness of intravenous acetaminophen and intravenous ibuprofen in reducing the use of opiates and anti-emetics to control post procedural pain and nausea in uterine fibroid embolization procedures.
Role: Biostatistician/Assistant Professor

Endocare Inc. 20142494 ; Lee & Abtin (PIs)
INV: 1.2% Effort 12/3/13-12/31/14
Role: Assistant Professor /Biostatistician
UCLA Cryoablation Study: This is pre-clinical study to assess utility of soft cream in procedure of cryoablation.

RSG-15-003-01-CCE: Ellingson
INV: 4.2% Effort 07/01/15 thru 06/30/19
Role: Co-Investigator
Purpose: ph-Weighted Molecular MRI in Brain Tumors

1R01 HL127153 NIH-NHLBI: Hu (PI)
INV: 5% Effort 7/7/15-7/6/2020
Role: Co-Investigator
Purpose: *A new paradigm of cardiovascular MRI for pediatric congenital heart disease.* This project aims to develop advanced 4D cardiovascular MRI and flow imaging techniques for imaging children with congenital heart disease.

1R01 R01HL131975-01NIH-NHLBI: Ennis (PI)
INV: 5% Effort 7/7/15-7/6/2020
Role: Co-Investigator
Purpose: *Validating Cardiac MRI Biomarkers and Genotype-Phenotype Correlation for DMD.* This project aims to develop and validate cardiac MRI Biomarkers and associated with Genotype for boys with Duchenne Muscular Dystrophy.

R21HL123477-01A1 NIH-NHLBI: Kim (PI)
INV: 13.5% Effort 8/15/15-7/31/2017
Role: PI
Purpose: Prediction of IPF Progression Using HRCT Imaging Patterns
The goal of this project is that quantitative imaging phenotypes determined either from single time points or from texture transitions occurring short-interval sequential time points, used alone or in multivariate model can predict disease progression in advance of standard clinical indicator of deterioration.

Society of Abdominal Radiology: Young (PI)
Role: Co-investigator
Purpose: Identifying Multiphasic MDCT Biomarkers to Predict the Expression of Carbonic Anhydrase-IX, Hypoxia-Inducible Factor 1α, and PTEN, Important Prognostic Molecular Targets in Clear Cell Renal Cell Carcinoma

4500002285 BOSTON UNIVERSITY:Aberle (PI) 9/23/2016 - 8/31/2021
(Sub grant) Molecular and Imaging Biomarkers for Early Lung Cancer Detection in the Setting of Indeterminate Pulmonary Nodule
The goal of this project is develop and evaluate the molecular and imaging biomarkers for early lung cancer detection in the setting of indeterminate pulmonary nodule.
Role: Investigator

Industry Sponsorship:

G-45335 GENENTECH, INC.: Kim (PI)
INV: 10% Effort 7/1/16-06/30/2018
Role: PI
Purpose: Prediction of Idiopathic Pulmonary Fibrosis Using Imaging Pattern in Elderly Population
The goal of this project is that quantitative imaging phenotypes determined either from single time points or from texture transitions occurring short-interval sequential time points, used alone or in multivariate model can predict disease progression in the elderly population and understand the differences in advance of standard clinical indicator of deterioration.

PATENTS

1. Transitional Changes in Quantitative Interstitial Lung Disease [Provisional Patent: UC-2013-078-1-LA will be expired on Nov 8, 2013. Currently filed for full patent of Patent Cooperation Treaty to protecting the patent abroad: Application Number PCT/US2013/069501].This computer aided diagnosis, QLF score is continuously used in two NIH clinical studies (ClinicalTrials.gov identifier: NCT00883129, 'Comparison of Therapeutic Regimens for Scleroderma Interstitial Lung Disease (The Scleroderma Lung Study II) (SLSII)'; ClinicalTrials.gov identifier: NCT00114530, 'Scleroderma: Cyclophosphamide or Transplantation (SCOT)'); This QLF score (so called computer-assisted scores of percent of area of lung parenchymal fibrosis) has been used as a *secondary or exploratory outcome* in five industry clinical studies in phase 2 (ClinicalTrials.gov identifier: NCT01766817, NCT00764309, NCT01262001, NCT01890265, NCT01872689, NCT0264848, NCT02453256). Phase 3b trials (NCT01979952) is also included, which was terminated early (1. Sample size adjusted from 275 to 113; 2.planning to change 12 month duration, but changed to 6 month changes in Feb/4/2015; and terminated at the sample size of 113)

Raghu G, Scholand MB, de Andrade J, Lancaster L, Mageto Y, Goldin J, Brown KK, Flaherty KR, Wencel M, Wanger J, Neff T, Valone F, Stauffer J, Porter S. FG-3019 anti-connective tissue growth factor monoclonal antibody: results of an open-label clinical trial in idiopathic pulmonary fibrosis Eur Respir J. 2016;47(5):1481-91

2. Apparatus and Method for Generating a Probability Mao of a Biopsy Site [Provisional Patent: UC-2017-103-2-LA; U.S. Provisional Application Serial No. 62/567,290, filed on October 3, 2017].

LECTURES AND PRESENTATIONS:

1. "Prediction of IPF within 1-2 years with the Early Changes in Quantitative Imaging Patterns Using High Resolution Computed Tomography", International Conference on Biomarker Research in Clinical Medicine. Paris France, Feb 21, 2018.
2. "Application of Denoise on Medical CT images toward Classification in the Patterns of Lung Disease", Ulsan National Institute Science and Technology (UNIST), Ulsan South Korea, Brain Korea 21 plus Seminar, Dec 6, 2017.
3. "The Role of Metrology in Quantitative Imaging", Educational Course presentation (RC825A), Chicago IL, RSNA 2017, Dec 1, 2017.
4. "Computer Assisted Diagnostic of Interstitial Lung Disease", Invited speaker, Dubai, Asia Pacific League of Associations for Rheumatology (APLAR 2017), Oct 18, 2017.
5. "Voxel-wise lung pattern transition scores on HRCT images and their association with symptoms in patients with idiopathic pulmonary fibrosis" Milan Italy, IPF: clinical problems, ERS Sep 11, 2017.
6. "Automatic quantitative fibrosis scores at baseline is a predictor pf progression in patients with IPF", Milan Italy, IPF: clinical problems, European Respiratory Society (ERS) Sep 11, 2017.
7. "HRCT Texture Feature Selection Using Particle Swam Optimization in Unbalanced Data" Washington DC, Math Applied Mat, and Statistics section, UKC Aug 11, 2017.
8. "Prediction of IPF with the Early Changes in Quantitative Imaging Patterns Using High Resolution Computed Tomography", Dublin Ireland, International Colloquium on Lung and Airway Fibrosis (ICLAF), Sep 27, 2016.
9. "Quantitative Lung Fibrosis Score under Different CT Technical Parameters", Technical session- Math/Applied Math/Statistics, Dallas Texas, UKC Aug 12, 2016.
10. "Double Dare" Dallas Texas, Korean Women in Science and Engineering, UKC Aug 12, 2016.
11. "Quantitative HRCT scores in IPF and Other Application" Connective Tissue Disease ILD meeting, UCLA, June 22, 2016.
12. "Denoise, Classification, and Quantitative Markers", Department of Biostatistics Seminar (BIOSTAT 245), UCLA, May 25, 2016."
13. "What Do We Mean By $p<0.05$?", "Univariate and Multi-variate Analysis", "Kaplan Meier Curves and Net Classification", Los Angeles, CA, Trial Design and Analysis Part 2, Clinical Trials Workshop, Society for Cardiovascular Magnetic Resonance (SCMA), Jan 28, 2016
14. "Robustness-driven feature selection in classification of fibrotic interstitial lung disease patterns in computed tomography using 3D texture features", Claremont, CA, The Korean Computer Scientists and Engineers Association of America (KOCSEA) Technical Symposium, Dec 11, 2015
15. "The Role of Metrology in Quantitative Imaging", Quantitative Imaging Mini-Course Statistical Analysis/Metrology Issue, Chicago, IL, RSNA, December 1, 2015
16. "The Utilization and Role of Elderly Imaging: Analysis Using Electronic Health Record Data", Providence, RI, International Conference on Health Policy Statistics (ICHPS), Oct 8, 2015
17. "Quantitative Lung Fibrosis Score Using Low Dose Technique", Atlanta, GA, UKC, Aug 1, 2015
18. "Initial Study of Spatial Heterogeneity in Lung Air-trapping", San Francisco, CA, UKC, Aug 9, 2014
19. "Analytic Development of Heterogeneous Patterns", Boston MA, Joint Statistical Meeting, August 6, 2014
20. "Idiopathic Pulmonary Fibrosis: Comparison of a Quantitative Fibrosis Score and CT Indexes from Histogram as Biomarkers of Disease Severity and Surrogate Endpoints in Assessing Change", Scientific Paper Presentation, RSNA, December 4, 2013
21. "Denoise using the characteristics of CT Images and Classification", San Diego State University (SDSU), CA, Oct 8, 2013.
22. "Development and Evaluation of an Imaging Biomarker: A Transitional Research Approach", East Rutherford, NJ, UKC, Aug 10, 2013
23. "Quantitative Imaging Biomarker and Noise Characteristics in Computerized Tomography", Montreal Quebec Canada, Joint Statistical Meeting, August 4, 2013
24. "Denoise using the characteristics of CT Images and Classification of Interstitial Lung Disease for a Multi-center Trial" , Samsung Medical Hospital, Seoul, Korea, Jun 26, 2013
25. "Adaptive CT Denoising for Image Quality Control in Quantitative Assessment of Lung Fibrosis", Seoul, Korea, June 11, WCTI 2013
26. "Quantitative CT Lung Fibrosis Score To Assess Longitudinal Changes in IPF Patients Treated with Immune Suppression", Seoul, Korea, June 9, WCTI, 2013
27. "Lung Cancer - Non-small Cell Local-regional/Small Cell/Other Thoracic Cancers", June 01, ASCO 2013

28. “An Index To Assess Multi-Factorial Transitional Changes In Interstitial Lung Disease”, May 20, ATS 2013
29. “Comparative Evaluation of Multiple Programs Designed to Estimate Nodule Volumes from CT Scans”, May 20, ATS 2013
30. “Denoise Using Noise characteristics in CT and Classification” , UCR Statistics Colloquium, Riverside, CA, Mar 12, 2013
31. “Denoise Using Noise characteristics in CT and Classification for Unbalanced Categories”, Statistics in Imaging Section: Workshop on Statistical Image Analysis, Santa Fe, NM, Mar 7, 2013
32. “QIBA: Overview of completed Phantom Study”, the joint QIBA Challenge and QI-Bench face-to-face meeting, NIST Campus, Gaithersburg, MD, Feb 25, 2013
33. *“Classification of CT Image in interstitial Lung Disease and Clinical Trials” Applied Statistics Seminar, Statistics Department, UCLA, 2-Oct 2012*
34. “Correlation of Quantitative Fibrosis Score with Pulmonary Function Tests in Scleroderma Population”, Scientific Paper Presentation, RSNA, December 2, 2011
35. “An Insightful 5D Display of Air Trapping in Anatomic Segments of CT in Asthma Patients”, Education Exhibit, RNSA, 2011
36. “Changes in ADC Histograms between Pre-surgical Scan and Post-recurrence Scan Predict the Survival of GBM Patient”, Scientific Poster Informal Presentation, RNSA, November 27, 2011
37. “Association of texture-based quantitative fibrotic patterns and pulmonary function test”, European Respiratory Society, Amsterdam, Netherland, Session 157, September 25, 2011.
38. “Imaging Biomarker and Clinical Trial”, Seminar, Radiology, Nijmegen Hospital/University, Nijmegen, Netherland, September 26, 2011.
39. “Evaluation Process of Imaging Biomarker: Quantitative Lung Fibrosis (QLF) Score for Computer Tomography (CT) Data in Interstitial Lung Disease”, Biostatistical Summer Seminar, Seoul National University, Seoul, Korea, August 4, 2011.
40. “Quantitative Pulmonary Fibrotic Reticular Pattern as Imaging Biomarker in Treatment Efficacy in Scleroderma/IPF”, Sunrise Seminar (SS214), American Thoracic Society, Denver, May 17, 2011.
41. "Biostatistics, Analytical Support and Evaluation (BASE) Unit in Jonsson Cancer at UCLA ", Moving Forward in the Efficient Management and Use of Core Facilities, National Center for Research Resources, NIH, October 15, 2010
42. “Development of Imaging Biomarkers for Clinical Trials: Applications in Glioblastoma Multiform”, Joint Statistical Meeting, Vancouver, Canada, August 2010.
43. “Enhanced Clinical Trial Study Design Using Imaging Biomarkers in COPD/Emphysema”, Sunrise Seminar (SS206), American Thoracic Society, New Orleans, May 18, 2010.
44. “Cyclophosphamide versus Placebo in Scleroderma Lung Study using Total Quantitative Score of Fibrosis, Groundglass Opacity, and Honeycomb”, American Thoracic Society, New Orleans, LA, May 16, 2010.
45. “Imaging Biomarker in Clinical Trial”, UCLA Computer Vision in Medicine Workshop, Los Angeles, CA, February 19, 2010.
46. “Effect of Denoise in Classification”, UCLA Department of Radiological Sciences and the Research Affairs Office, Research Seminar Dinner, Los Angeles, CA, November 18, 2009.
47. “Cyclophosphamide versus Placebo in Scleroderma Lung Study using Quantitative Fibrosis Score”, Radiological Society of North America (RSNA), Chicago IL, December, 2009
48. “Can Apparent Diffusion Coefficient (ADC) be a predictive biomarker in Glioblastoma multiforme (GBM) patients”, Joint Statistical Meeting (JSM), Washington, DC, August, 2009.
49. “Quantitative Lung Fibrosis as Biomarker in Treatment Efficacy in Scleroderma”, Sunrise Seminar (SS117), American Thoracic Society, San Diego, May 18, 2009.
50. “Evaluation of an automated fibrosis score using CT texture features in patients with scleroderma”, Mini symposium, American Thoracic Society, San Diego, May 19, 2009.
51. “Imaging biomarker in a view as biostatistician”, Noon lecture, Discussion Room, Department of Radiology, Seoul National University Hospital, October 17, 2008
52. “Quantitative Lung Fibrosis (QLF) Score for Computer Tomography (CT) Data in Interstitial Lung Disease”, Joint Statistical Meeting (JSM), Colorado, Denver, August, 2008.
53. “Cyclophosphamide versus Placebo in Scleroderma Lung Study using Quantitative Fibrosis Score”, American Thoracic Society (ATS), Toronto, Canada, May, 2008.
54. “CT Image as Biomarker in Clinical Trial”, UCLA Computer Vision in Medicine Workshop, Los Angeles, CA, February, 2008.
55. “Development of an Automated Fibrosis Score Using CT Texture Features in Patients with Scleroderma”, Radiological Society of North America (RSNA), Chicago IL, November, 2007.
56. “Classification in Scleroderma Lung disease”, Evening lecture, Seoul Asian Hospital, September 2007.
57. “Variable Selection and Classification Using Computed Tomography (CT) Medical Image Data”, Joint Statistical Meeting (JSM), Salt Lake City, Utah, August, 2007.

58. "Bayesian Spatial Hierarchical Modeling for Asthmatic Patients and Non-asthmatic Adults", Joint Statistical Meeting (JSM), Minneapolis, Minnesota, August, 2005.
59. "Emphysema Classification based on a novel texture feature approaches", American Thoracic Society (ATS), San Diego, California, May, 2005.
60. "Texture Feature Analysis using Principal Component & Factor Analysis with validating -950Hu Density Mask", Joint Statistical Meeting, Toronto, Canada, August, 2004.

PUBLICATION/BIBLIOGRAPHY:

RESEARCH PAPERS

RESEARCH PAPERS (PEER REVIEWED)

Primary author is listed first in these publications.
* student or postdoctoral scholar supervised by me at the time.

1. Shah SK, McNitt-Gray MF, De Zoysa KR, Sayre JW, **Kim HJ,** Batra P, Bahtashi A, Brown, K, Greaser LE, Park JM, Roback DK, Wu C, Zaragoza E, Goldin JG, Brown MS, Aberle DR. Solitary pulmonary nodule diagnosis on CT: results of an observer study. Acad Radiol. 2005 Apr;12(4):496-501. (Statistical analysis plan and data analysis)

2. Shah SK, McNitt-Gray MF, Rogers SR, Goldin JG, Suh RD, Sayre JW, Petkovska I, **Kim HJ**, Aberle, DR. Computer-aided diagnosis of the solitary pulmonary nodule. Acad Radiol. 2005 May;12(5):570-5. (Statistical analysis plan and data analysis)

3. Brown MS, Goldin JG, Rogers SR, **Kim HJ,** McNitt-Gray MF, Shah, SK, Troung D, Brown K, Sayre JW, Gjertson DW, Batra P, Aberle DR. Computer-aided lung nodule detection in CT: results of large-scale observer test. Acad Radiol. 2005 Jun;12(6):681-6. (Statistical analysis plan, data analysis, and manuscript editing)

4. Shah SK, McNitt-Gray MF, Rogers SR, Goldin, JG, Suh RD, Sayre JW, Petkovska, I, **Kim HJ,** Aberle DR (2005). Computer aided characterization of the solitary pulmonary nodule using volumetric and contrast enhancement features. Acad Radiol. 2005 Oct;12(10):1310-9. (Statistical analysis plan, data analysis, and manuscript editing)

5. Zeidler MR, Kleerup EC, Goldin JG, **Kim HJ,** Truong DA, Simmons MD, Sayre JW, Liu W, Elashoff R, Tashkin DP. Montelukast improves regional air-trapping due to small airways obstruction in asthma. Eur Respir J. 2006 Feb;27(2):307-15. (Statistical analysis plan, data analysis, and manuscript editing)

6. Petkovska I, Shah SK, McNitt-Gray MF, Goldin JG, Brown MS, **Kim HJ,** Brown K, Aberle DR. Pulmonary nodule characterization: a comparison of conventional with quantitative and visual semi-quantitative analyses using contrast enhancement maps. Eur J Radiol. 2006 Aug;59(2):244-52. Epub 2006 Apr 17. (Statistical analysis plan, data analysis, and manuscript editing)

7. Zeidler MR, Goldin JG, Kleerup EC, **Kim HJ**, Truong DA, Gjertson DW, Kennedy NJ, Newman KB, Tashkin DP, Silverman JM, Corren J (2006). Small airways response to naturalistic cat allergen exposure in subjects with asthma. J Allergy Clin Immunol, 118(5), 1075-81. (Statistical analysis plan, data analysis using new longitudinal model, and manuscript editing)

8. Petkovska I, Brown MS, Goldin JG, **Kim HJ**, McNitt-Gray MF, Abtin F, Ghurabi RJ, Aberle DR. The effect of lung volume on nodule size on CT. Acad Radiol. 2007 Apr;14(4):476-85 (Study design, statistical analysis plan, data analysis using cluster robust linear regression model, and manuscript editing)

9. Ochs R, Goldin J, Abtin F, **Kim HJ,** Brown K, Batra P, Roback D, McNitt-Gray MF, Brown MS, Automated classification of lung bronchovascular anatomy in CT using AdaBoost. Med Image Anal. 2007 Jun;11(3):315-24 Epub 2007 Mar 30. (Study design and statistical analysis plan)

10. **Kim HJ,** Li G, Gjertson DW, Elashoff R, Shah SK, Ochs R, Vasunilashorn F, Abtin F, Brown MS, Goldin J (2008). Classification of parenchymal abnormality in scleroderma lung using a novel approach to denoise

images collected via a multicenter study. Acad Radiol. 2008 Aug;15(8):1004-16 (Concept and design of study, method development, data analysis, manuscript preparation)

11. Prasad MN, Brown MS, Ahmad S, Abtin F, Allen J, da Costa I, **Kim HJ**, McNitt-Gray MF, Goldin JG. Automatic segmentation of lung parenchyma in the presence of diseases based on curvature of ribs. Acad Radiol. 2008 Sep;15(9):1173-80. (Statistical analysis plan and data analysis)

12. Ochs RA, Petkovska I, Kim **HJ**, Abtin F, Brown MS, Goldin JG. Prevalence of Trachea Collapse in an Emphysema Cohort as Measured with End-expiration CT. Acad Radiol. 2009 Jan;16(1):46-53. (Method development, data analysis, manuscript preparation)

13. Turner A, Zhang D, **Kim HJ**, Demarco JJ, Cagnon CH, Cody DD, Stevens DM, Primak AN, McCollough CH, McNitt-Gray MF, A method to generate equivalent energy spectra and filtration models based on measurement for multidetector CT Monte Carlo dosimetry simulations. Med Phys. 2009 Jun;36(6):2154-64. (Statistical analysis plan, data analysis in threshold approach)

14. Pope WB, **Kim HJ**, Huo J, Alger J, Brown MS, Gjertson D, Sai V, Young JR, Tekchandani L, Cloughesy T, Mischel PS, Lai A, Nghiemphu P, Rahmanuddin S, Goldin J. Recurrent glioblastoma multiforme: ADC histogram analysis predicts response to bevacizumab treatment. Radiology. 2009 Jul;252(1):182-9. (development of features in ADC histogram; low mean from the mixture Gaussian model as prognostic factor; statistical analysis)

15. Goldin J, Elashoff R, **Kim HJ**, Yan X, Lynch D, Strollo D, Roth MD, Clements P, Furst DE, Khanna D, Vasunilashorn S, Li G, Tashkin DP. (2009). Treatment of scleroderma-interstitial lung disease with cyclophosphamide is associated with less progressive fibrosis on serial thoracic high-resolution CT scan than placebo: findings from the scleroderma lung study. Chest, 136(5), 1333-40. (Statistical analysis, de-randomized code properly, made radiological component Table and Figures)

16. McNitt-Gray MF, Bidaut LM, Armato SG, Meyer CR, Gavrielides MA, Fenimore C, McLennan G, Petrick N, Zhao B, Reeves AP, Beichel R, **Kim HJ**, Kinnard L. Computed tomography assessment of response to therapy: tumor volume change measurement, truth data, and error. Transl Oncol. 2009 Dec; 2(4): 216-22. (Design of the study, study methodological development, manuscript preparation)

17. Buckler AJ, Mozley PD, Schwartz L, Petrick N, McNitt-Gray MF, Fenimore C, O'Donnell K, Hayes W, **Kim HJ**, Clarke L, Sullivan D. (2010). Volumetric CT in lung cancer: an example for the qualification of imaging as a biomarker. Acad Radiol. 2010 Jan;17(1):107-15. (Design of the study, study methodological development, manuscript preparation)

18. Cody DD, **Kim HJ**, Cagnon CH, Larke FJ, McNitt-Gray MF, Kruger RL, Flynn MJ, Seibert JA, Judy PF, Wu X. Normalized CT dose index of the CT scanners used in the National Lung Screening Trial. AJR Am J Roentgenol. 2010 Jun;194(6):1539-46. (Method development, data analysis, manuscript preparation: Featured in http://www.healthimaging.com/index.php?option=com_articles&view=article&id=22747:ajr-ct-showed-dose-variability-in-national-lung-screening-trial, sited on Jun/17/10)

19. Brown MS, **Kim HJ**, Abtin F, Da Costa I, Pais R, Ahmad S, Angel E, Ni C, Kleerup EC, Gjertson DW, McNitt-Gray MF, Goldin JG. Reproducibility of Lung and Lobar Volume Measurements Using Computed Tomography. Acad Radiol. 2010 Mar;17(3), 316-322. Epub 2009 Dec 8. (Method development, data analysis, manuscript preparation)

20. Mathieu KB, McNitt-Gray MF, Zhang D, **Kim HJ,** Cody DD (2010). Precision of dosimetry-related measurements obtained on current multidetector computed tomography scanner. Med Phys. 2010 Aug;37(8):4102-9. (Study Design, data analysis, manuscript preparation)

21. **Kim HG**, Tashkin DP, Clements PJ, Li G, Brown MS, Elashoff R, Gjertson DW, Abtin F, Lynch DA, Strollo DC, Goldin JG. A computer-aided diagnosis system for quantitative scoring of extent of lung fibrosis in scleroderma patients. Clin Exp Rheumatol 2010; 28 (5 Suppl 62): S26-35. (Concept and design of study, method development, data analysis, manuscript preparation)

22. Pope WB, Xia Q, Paton VE, Das A, Hambleton J, **Kim HJ**, Huo J, Brown MS, Goldin J, Cloughesy T (2011). Patterns of progression in patients with recurrent glioblastoma treated with bevacizumab. Neurology 2011 Feb 1;76(5):432-7. (Concept, method development for classifying patterns of progression, data analysis plan, manuscript preparation)

23. Xie C, **Kim HJ**, Haw JG, Kalbasi A, Gardner BK, Li G, Rao J, Chia D, Liong M, Punzalan R, Marks LS, Pantuck AJ, de la Taille A, Wang G, Mukouyama H, Zeng G. A Novel Multiplex Assay Combining Autoantibodies Plus PSA Has Potential Implications for Classification of Prostate Cancer from Non-malignant Cases. J Transl Med. 2011 Apr 19;9:43. A news release by UCLA on the study result is scheduled on May 16th http://newsroom.ucla.edu/portal/ucla/new-experimental-test-for-prostate-203687.aspx. Features on KABC 5 PM news on 19-May-2011 http://abclocal.go.com/kabc/story?section=news/health/your_health&id=8138900. (Statistical design, data analysis, manuscript preparation)

24. Pope WB, Lai A, Mehta R, **Kim HJ**, Qiao J, Young JR, Xue X, Goldin J, Brown MS, Nghiemphu PL, Tran A, Cloughesy TF. Apparent Diffusion Coefficient Histogram Analysis Stratifies Progression-Free Survival in Newly Diagnosed Bevacizumab-Treated Glioblastoma. AJNR Am J Neuroradiol; 2011 May;32(5): 882-9. (Evaluate the pattern scores in the system, data analysis, manuscript preparation)

25. **Kim HJ**, Brown MS, Elashoff R, Li G, Gjertson DW, Lynch DA, Strollo DC, Kleerup E, Chong D, Shah SK, Ahmad S, Abtin F, Tashkin DP, Goldin JG. Quantitative texture-based assessment of one-year changes in fibrotic reticular patterns on HRCT in scleroderma lung disease treated with oral cyclophosphamide. Eur Radiol. 2011Dec;21(12):2455-65 (Using a previously developed CAD score to tests hypothesis of low mean from ADL as a predictive marker of the next progression or survival)

    Cited by: Nathan, Steven D. et al.: IPF clinical trial design and endpoints. Current Opinion in Pulmonary Medicine. 463. Volume: 20. Issue: 5. 2014.
    Commented: http://www.nasdaq.com/article/intermune-is-set-to-outperform-its-main-competitor-cm327081 (cites on Oct/10/2014)

26. van Rikxoort EM, Goldin JG, Galperin-Aizenberg M, Abtin F, **Kim HJ**, Lu P, van Ginneken B, Shaw G, Brown MS. A method for the automatic quantification of the completeness of pulmonary fissures: evaluation in a database of subjects with severe emphysema. Eur Radiol. 2012 Feb;22(2):302-309 Epub 2011 Oct 8 (Data analysis and manuscript preparation)

27. Chong D, Brown MS, **Kim HJ**, van Rikxoort EM, Guzman L, McNitt-Gray MF, Khatonabadi M, Galperin-Aizenberg M, Coy H, Yang K, Jung Y, Goldin JG. Reproducibility of volume and densitometric measures of emphysema on repeat computed tomography with an interval of 1 week. Eur Radiol. 2012 Feb;22(2):287-94. (Concept and study design, management of data analysis, manuscript preparation)

28. Brown MS, Chu GH, **Kim HJ**, Allen-Auerbach M, Poon C, Bridges J, Vidovic A, Ramakrishna B, Ho J, Morris MJ, Larson SM, Scher HI, Goldin JG. Computer-aided quantitative bone scan assessment of prostate cancer treatment response. Nucl Med Commun. 2012 Apr;33(4):384-94. (Concept and collaboration in the development of method in CAD score using ROC analysis, data analysis, manuscript preparation)

29. Pope WB, Mirsadraei L, Lai A, Eskin A, Qiao J, **Kim HJ**, Ellingson B, Nghiemphu PL, Kharbanda S, Soriano RH, Nelson SF, Yong W, Phillips HS, Cloughesy TF. Differential Gene Expression in Glioblastoma Defined by ADC Histogram Analysis: Relationship to Extracellular Matrix Molecules and Survival. AJNR Am J Neuroradiol. 2012 Jun;33(6):1059-64. (Data analysis and manuscript preparation)

30. Pope WB, Qiao XJ, **Kim HJ**, Lai A, Nghiemphu P, Xue X, Ellingson BM, Schiff D, Aregawi D, Cha S, Puduvalli VK, Wu J, Yung WK, Young GS, Vredenburgh J, Barboriak D, Abrey LE, Mikkelsen T, Jain R, Paleologos NA, Rn PL, Prados M, Goldin J, Wen PY, Cloughesy T. Apparent diffusion coefficient histogram analysis stratifies progression-free and overall survival in patients with recurrent GBM treated with bevacizumab: a multi-center study. J Neurooncol. 2012 Jul;108(3):491-8. (Concept and collaboration in the development of method in ADC histogram using a mixture model, data analysis, manuscript preparation)

31. Brown MS, **Kim HJ**, Abtin FG, Strange C, Galperin-Aizenberg M, Pais R, Da Costa IG, Ordookhani A, Chong D, Ni C, McNitt-Gray MF, Tashkin DP, Goldin JG. Emphysema lung lobe volume reduction: effects on the

ipsilateral and contralateral lobes. Eur Radiol. 2012 Jul;22(7):1547-55. (study design, method development, data analysis, manuscript preparation)

32. Khatonabadi M, Zhang D, Mathieu K, **Kim HJ,** Lu P**,** Cody DD, DeMarco J, Cagnon CH, McNitt-Gray MF. A Comparison of Methods to Estimate Organ Doses in CT When Utilizing Approximations to the Tube Current Modulation Function. Medical Physics: Med Phys, 2012 Aug; 39(80): 5212-28. PMID: 22894446. (Statistical analysis plan, data analysis using equivalence test for algorithm comparisons, and manuscript editing)

33. Carrillo JA, Lai A, Nghiemphu PL, Kim HJ, Phillips HS, Kharbanda S, Moftakhar P, Lalaezari S, Yong W, Ellingson BM, Cloughesy TF, Pope WB. Relationship between tumor enhancement, edema, IDH1 mutational status, MGMT promoter methylation, and survival in glioblastoma. AJNR Am J Neuroradiol. 2012 Aug;33(7):1349-55. PMID: 22322613. (Statistical analysis plan, data analysis using equivalence test for algorithm comparisons, and manuscript editing)

34. Mong S, Ellingson BM, Nghiemphu PL, **Kim HJ**, Mirsadraei L, Lai A, Yong W, Zaw TM, Cloughesy TF, Pope WB. Persistent Diffusion-Restrited Lesions in Bevacizumab-Treated Malignant Gliomas Are Associated with Improved Survival Compared with Matched Controls. AJNR Am J Neuroradiol. 2012 Oct;33(9):1763-70. (Concept and study design for a retrospective study using case-control study, method development, data analysis, manuscript preparation)

35. Khatonabadi M, **Kim HJ**, Lu P, Cody DD, DeMarco J, Cagnon CH, McNitt-Gray MF. The feasibility of a regional CTDIvol to estimate organ dose from tube current modulated CT exams. Med Phys. 2013;40(5):051903. (Statistical analysis plan, data analysis using equivalence test for algorithm comparisons, and manuscript editing)

36. Huo J, Okada K, van Rikxoort E M, **Kim H J**, Alger J R, Pope W B, Goldin J G, Brown M S. Ensemble segmentation for GBM brain tumors on MR images using confidence-based averaging. Medical physics 2013; 40(9):093502-093502. (Statistical Experimental Design, supervise data analysis of ANOVA test, and manuscript editing)

37. Chu G, Lo P, Ramakrishna B, Kim H, Morris D, Goldin J, Brown M. Bone tumor segmentation on bone scans using context information and random forests. Med Image Comput Comput Assist Interv 2014;17(1):601-8 (Statistical analysis plan).

38. Petrick N, **Kim HJ**, Clunie D, Borradaile K, Ford R, Zeng R, Gavrielides MA, McNitt-Gray MF, John Lu ZQ, Fenimore C, Zhao B, Buckler AJ. Comparison of 1D, 2D and 3D nodule sizing methods by radiologists for spherical and complex nodules on thoracic CT phantom images. Acad Radiol. 2014 Jan;21(1):30-40 (Statistical analysis plan, data analysis using equivalence test for algorithm comparisons, and manuscript editing)

39. Sepahdari AR, Politi LS, Aakalu VK, **Kim HJ**, Abdel Razek AA. Diffusion-Weighted Imaging of Orbital Masses: Multi-Institutional Data Support a 2-ADC Threshold Model to Categorize Lesions as Benign, Malignant, or Indeterminate. AJNR, Am J Neuroradiol 2014 Jan;35(1):170-5. PMID: 43868150. (Statistical analysis plan, supervise data analysis of ANOVA test, and manuscript editing)

40. Harris RJ, Bookheimer SY, Cloughesy TF, **Kim HJ**, Pope WB, Lai A, Nghiemphu PL, Liau LM, Ellingson B M. Altered functional connectivity of the default mode network in diffuse gliomas measured with pseudo-resting state fMRI. Journal of neuro-oncology 2014;116(2):373-9. (Statistical analysis plan, data analysis using survival, and manuscript editing)

41. Reyhan M, **Kim HJ**, Brown MS, Ennis DB. Intra- and interscan reproducibility using fourier analysis of stimulated echoes (FAST) for the rapid and robust quantification of left ventricular twist. J Magn Reson Imaging. 2014;39(2):463-8. (Statistical analysis plan, supervise data analysis of ANOVA test, and manuscript editing)

42. Woodworth DC, Pope WB, Liau LM, **Kim HJ**, Lai A, Nghiemphu PL, Cloughesy TF, Ellingson BM. Nonlinear distortion correction of diffusion MR images improves quantitative DTI measurements in glioblastoma. Journal of neuro-oncology 2014;116(2):373-9. (Continuously investigating ADC high mean and low mean from Gaussian mixed effect model. Statistical analysis plan, data analysis using survival, and manuscript editing)

43. Ellingson B M, **Kim H J**, Woodworth D C, Pope W B, Cloughesy J N, Harris R J, Lai A, Nghiemphu P L, Cloughesy T F. Recurrent glioblastoma treated with bevacizumab: contrast-enhanced T1-weighted subtraction maps improve tumor delineation and aid prediction of survival in a multicenter clinical trial. Radiology 2014;271(1):200-210. (Involve Statistical analysis plan, review of statistical analysis, and manuscript editing)

44. Ellingson BM, Sahebjam S, **Kim HJ**, Pope WB, Harris RJ, Woodworth DC, Lai A, Nghiemphu PL, Mason WP, Cloughesy TF. Pretreatment ADC Histogram Analysis Is a Predictive Imaging Biomarker for Bevacizumab Treatment but Not Chemotherapy in Recurrent Glioblastoma. AJNR, American journal of neuroradiology, Am J Neuroradiol 2014;35(4):673-9. (Continuously investigating ADC high mean and low mean from Gaussian mixed effect model. Statistical analysis plan, data analysis using survival, and manuscript editing)

45. Gompelmann D, Eberhardt R, Slebos D, Brown MS, Abtin F, **Kim HJ**, Holmes Higgin D, Radhakrishnan S, Herth FJ, Goldin J. Diagnostic performance comparison of the Chartis System and high-resolution computerized tomography fissure analysis for planning endoscopic lung volume reduction. Respirology 2014 May;19(4):524-30. doi: 10.1111/resp.12253. Epub 2014 Feb 25. (Involve Statistical analysis plan, review of statistical analysis, and manuscript editing)

46. Brown MS, Lo P, Goldin JG, Barnoy E, **Kim HJ**, McNitt-Gray MF, Aberle DR, Toward clinically usable CAD for lung cancer screening with computed tomography, Eur Radiol 2014 Nov;24(11):2719-28. PMID:2505208 (Involve Statistical analysis plan, review of statistical analysis, and manuscript editing)

47. Lee SJ, Chong SC, Hur J, Hong B, **Kim HJ**, Kim SJ. Semi-automated thyroid volumetry using three-dimensional computed tomography: Prospective comparative study of thyroid volumes measured by two-dimensional ultrasonography, two-dimensional computed tomography and specimen, AJR 2014 (Manuscript Number 13-12206R1) (Involve Statistical analysis, review of statistical analysis, and manuscript editing).

48. **Kim HJ**, Brown MS, Chong D, Lu P, Kim H, Coy H, Goldin JG, Comparison of the Quantitative CT Imaging Biomarkers of Idiopathic Pulmonary Fibrosis at baseline and early change with an interval of 7 month. (Using a previously developed CAD score to tests association with Pulmonary function tests at baseline and the change assessment) Acad. Radiol, 2015;22: 70-80 PMID: 25262954

49. Lazovic J, Guo L, Nakashima J, Mirsadraei L, Yong W, **Kim HJ**, Ellingson B, Wu H, Pope WB. Nitroxoline induces apoptosis and slows glioma growth in vivo. Neuro Oncol. Neuro Oncol. 2015 Jan;17(1):53-62. [Epub ahead of print] (Involve Statistical analysis plan, review of statistical analysis, and manuscript editing)

50. *Lee J, Wu Y, **Kim H**, Unbalanced Data Classification Using Support Vector Machines with Active Learning on Scleroderma Lung Disease Patterns, Journal of Applied Statistics. 2015 42:3, 676-689 (mentoring Jewel Lee and developed a classifier model schema for unbalanced classes and manuscript editing)

51. McNitt-Gray MF, Kim GH, Zhao B, Schwartz LH, Clunie D, Cohen K, Petrick N, Fenimore C, Lu ZQ, Buckler AJ. Determining the Variability of Lesion Size Measurements from CT Patient Data Sets Acquired under "No Change" Conditions. Transl Oncol. 2015;8(1):55-64. doi: 10.1016/j.tranon.2015.01.001. PubMed PMID: 25749178; PubMed Central PMCID: PMC4350642.

52. Bostani M, McMillan K, Lu P, Kim HJ, Cagnon CH, DeMarco JJ, McNitt-Gray MF. Attenuation-based size metric for estimating organ dose to patients undergoing tube current modulated CT exams. Med Phys. 2015 Feb;42(2):958-68. doi: 10.1118/1.4906132. PubMed PMID: 25652508.

53. Obuchowski N, Kinahan P, Jackson E, Reeves A, **Kim HJ**, Kalpathy-Cramer J, Barnhart H, Tatiyana. QIB Algorithm Comparisons: Review, Critique, and Recommendations. Stat Methods Med Res. 2015; 24(1):68-106 Jun 11. pii: 0962280214537390. (Discussion of imaging biomarker and the corresponding statistical metric, review of statistical analysis, and manuscript editing)

54. Obuchowski N, Barnhart H, Buckler A, Kalpathy-Cramer J, Kim **HJ**, Obuchowski N, Pennello G, Reeves A, Wang A, Statistical Issues in the Comparison of Quantitative Imaging Biomarker Algorithms using Pulmonary Nodule Volume as an Example. Stat Methods Med Res. 2014 Jun 11. pii: 0962280214537392. (Discussion of

imaging biomarker and the corresponding statistical metric, review of statistical analysis, and manuscript editing)

55. Qiao XJ, Ellingson BM, **Kim HJ**, Wang DJ, Salamon N, Linetsky M, Sepahdari A, Jiang B, Cloughesy T, Lai A, Nghiemphu L, Pope WB. MR Perfusion Imaging Using the Arterial Spin Labeling for Brain Glioblastoma: Prediction for Tumor Progression, AJNR Am J Neuroradiol. 2014 Dec 26. (Involved Statistical analysis plan, statistical analysis, and manuscript editing)

56. Lo P, Brown M, H Kim, **Kim HJ**, R Argula, Strange C, JG Goldin, "Cyst-based measurements for assessing lymphangioleiomyomatosis in computed tomography". Medical Physics 2015. 42:2287**;** (Brain storming metric of cyst using water-shed algorithm, Statistical analysis plan, review of statistical analysis, and manuscript editing)

57. Young S, **Kim H**, Ko M, Ko W, Flores Carlos, McNitt-Gray MF, Variability in lung-nodule volumetry: effects of dose reduction and reconstruction methods. Medical Physics 2015;42(5):2679-89 (Statistical analysis plan, review of statistical analysis, and manuscript editing) PMID: 25979066

58. Sepahdari AR, Bahl M, Harari A, **Kim HJ**, Yeh MW, Hoang JK. Predictors of Multigland Disease in Primary Hyperparathyroidism: A Scoring System with 4D-CT Imaging and Biochemical Markers" *AJNR AM J Neuroradiol* AJNR Am J Neuroradiol. 2015 May 29; 36(5):987-92 (Involved Statistical analysis plan, reviewed of statistical analysis, and manuscript editing)

59. Park J, Saab S, Lee ST, Busuttil RW, **Kim HJ**, Durazo F, Cho S, Lee EW, Balloon-Occluded Retrograde Transvenous Obliteration (BRTO) for the Treatment of Gastric Varices: Review and Meta-analysis, Dig Dis Sci. 2014 Dec 18 [Epub ahead of print] PMID: 25519690 (Involved Statistical analysis plan, statistical analysis, guiding Jonathan Park responding reviewers' comments, and manuscript editing)

60. Reyhan M,Li M, Gupta Himanshu, Llyod SG, Dell'ltlia LJ, **Kim HJ**, Denney TS, Ennis DB. Left ventricular twist and shear-angle in patients with mitral regurgitation. J Cardiovascular Magn Reson Imaging. 2013 Jan 30. 15(1). (Statistical analysis plan, supervise data analysis of ANOVA test, and manuscript editing)

61. Banerjee S, Wang DS, **Kim HJ**, Sirlin CB, Chan MG, Korn RL, Rutman AM, Siripongsakun S, Lu D, Imanbayev G, Kuo MD. A computed tomography radiogenomic biomarker predicts microvascular invasion and clinical outcomes in hepatocellular carcinoma. Hepatology 2015; 2015 Apr 30. doi: 10.1002/hep.27877. [Epub ahead of print] (Statistical analysis plan, analysis, assisting the interpretation of data, manuscript editing)

62. Khanna D, Nagaraja V, Tseng C, Abtin F, Suh R, **Kim G**, Wells A, Furst D E, Clements P J, Roth M D, Tashkin D P, Goldin J. Predictors of lung function decline in scleroderma-related interstitial lung disease based on high-resolution computed tomography: implications for cohort enrichment in systemic sclerosis-associated interstitial lung disease trials. Arthritis research & therapy 2015;17(1):372. PMID: 26704522.

63. Chong D*, **Kim HJ**, Lo P, Young S, McNitt-Gray M, Abtin F, J.G. Goldin JG, Brown M. Robustness-driven feature selection in classification of fibrotic interstitial lung disease patterns in computed tomography using 3D texture features. IEEE Trans Med Imaging 2016; 35(1): 144-57 PMID: 26208309 (Research hypothesis, study direction and guidance in research study, Statistical analysis plan, review of statistical analysis, and manuscript editing)

64. Tashkin DP, Volkmann ER, Tseng CH, **Kim** HJ, **Goldin** J, Clements P, Furst D, Khanna D, Kleerup E, Roth MD, Elashoff R. Relationship between quantitative radiographic assessments of interstitial lung disease and physiological and clinical features of systemic sclerosis. Ann Rheum Dis. 2016 Feb;75(2):374-81. PMID: 25452309. (Involved Statistical analysis plan, provide my patent quantitative lung fibrosis (QLF) scores for this statistical analysis, and manuscript editing)

65. Argula RG, Strange C, Kokosi M, Lo P, **Kim HJ**, Ravenel JG, Meyer C, Goldin J, Lee H, Francis X, McCormack, MILES Study Investigators. "A Novel Quantitative Computed Tomographic Analysis Suggests How Sirolimus Stabilizes Progressive Air Trapping in Lymphagioleiomatosis. Ann Am Thorac Soc. 2016;13(3):342-9. (Apply the idea of Markov chain transition probability to size of cyst and develop a sensitive measurement of changes and manuscript editing) PMID: 26799509.

66. Felker ER, Lee-Felker SA, Feller J, Margolis DJ, Lu DS, Princenthal R, May S, Cohen M, Huang J, Yoshida J, Greenwood B, **Kim** HJ, Raman SS. In-bore Magnetic Resonance-Guided Transrectal Biopsy for the Detection of Clinically Significant Prostate Cancer Abdominal Radiology. Abdom Radiol (NY). 2016 May;41(5):954-62. PMID: 27118268. (Involved Statistical analysis plan, reviewed of statistical analysis, and manuscript editing)

67. Pakdaman MN, Ishiyama G, Ishuyama A, Peng KA, **Kim HJ**, Pope WB, Sepahdari AR. Blood-Labyrinth Barrier Permeability in Meniere Disease and Idiopathic Sudden Sensorineural Hearning Loss: Findings on Delayed Postcontrast 3D-FLAIR MRI. *AJNR AM J Neuroradiol* AJNR Am J Neuroradiol. 2016 June [epub] PMID: 27256854 (Involved Statistical analysis plan, reviewed of statistical analysis, and manuscript editing)

68. **Kim HJ**, Tashkin DP, Gjertson DW, Brown MS, Kleerup R, Ching S, Belperio JA, Roth M, Elashoff R, Tseng C, Khanna D, J.G. Goldin JG. Transition to Different Patterns of Interstitial Disease in Scleroderma with and without treatment. Ann Rheum Dis. 2016;75(7):1367-71. PMID:26757749 (Developed a quantitative interstitial lung disease score and applied the idea of Markov chain transition probability to the different patterns of interstitial lung disease with and without treatment. Wrote a manuscript).

69. *Barnoy E, **Kim HJ**, Gjertson DW. Complexity in Applying Spatial Analysis to Describe Heterogeneous Air-trapping in Thoracic Imaging Data. Journal of Applied Statistics 1360-0532. (mentoring Eran Barnoy and guiding for the development and implementation of a heterogeneous index for thoracic images and manuscript editing)

70. Lo P, Young S, **Kim HJ**, Brown MS, McNitt-Gray MF. Variability in CT lung-nodule quantification: Effects of dose reduction and reconstruction methods on density and texture based. Med Phys. 2016; 43(8):4854. PMID: 27487903. (Developed a study design and discussion of texture feature, educating applied statistical idea. Revised a manuscript)

71. Athelogou M, **Kim HJ**, Dima A, Obuchowski N, Peskin A, Gavrielides MA, Petrick N, Saiprasad G, Colditz, Colditz D, Beaumont H, Oubel E, Tan Y, Zhao B, Kuhnigk JM, Moltz JH, Orieux G, Gillies RJ, Gu Y, Mantri N, Goldmacher G, Zhang L, Vega E, Bloom M, Jarecha R, Soza G, Tietjen C,Takeguchi T, Yamagata H, Peterson S, Masoud O[19], Buckler AJ[20]. Algorithm variability in the estimation of lung nodule volume from phantom CT scans: results of the QIBA 3A Public Challenge. Acad Radiol. 2016 Aug;23(8):940-52. PMID: 27215408. (Discussion of imaging biomarker, Statistical analysis plan, review of statistical analysis, and manuscript editing)

72. Tashkin DP, Roth MD, Clements PJ, Furst DE, Khanna D, Kleerup EC, **Goldin** J, Arriola E, Volkmann ER, Kafaja S, Silver R, Steen V, Strange C, Wise R, Wigley F, Mayes M, Riley DJ, Hussain S, Assassi S, Hsu VM, Patel B, Phillips K, Martinez F, Golden J, Connolly MK, Varga J, Dematte J, Hinchcliff ME, Fischer A, Swigris J, Meehan R, Theodore A, Simms R, Volkov S, Schraufnagel DE, Scholand MB, Frech T, Molitor JA, Highland K, Read CA, Fritzler MJ, **Kim GH**, Tseng CH, Elashoff RM; Sclerodema Lung Study II Investigators. Mycophenolate mofetil versus oral cyclophosphamide in scleroderma-related interstitial lung disease (SLS II): a randomised controlled, double-blind, parallel group trial. Lancet Respir Med. 2016;4(9):708-19.

73. Huo J, Alger J, **Kim H**, Brown M, Okada K, Pope W, Goldin J. Between-Scanner and Between-Visit Variation in Normal White Matter Apparent Diffusion Coefficient Values in the Setting of a Multi-Center Clinical Trial. Clin Neuroradiol. 2016; 26(4):423-430. PMID:25791203

74. Zhou Z, Han F, Rapacchi S, Nguyen KL, Brunengraber DZ, Kim GJ, Finn JP, Hu P. Accelerated ferumoxytol-enhanced 4D multiphase, steady-state imaging with contrast enhancement (MUSIC) cardiovascular MRI: validation in pediatric congenital heart disease. NMR in biomedicine. 2017; 30(1). NIHMSID: NIHMS845023. Statistical study design and support and Revising a manuscript).

75. Young JR, Coy H, **Kim HJ,** Douek M, Lo P, Pantuck A, Raman SS. Performance of Relative Enhancement on Multiphasic MR Imaging for Differentiation of Clear Cell Renal Cell Carcinoma from Papillary and Chromophobe RCC Subtypes and Oncocytoma. AJR 2017; 208:1-8. (Statistical study design and support and Revising a manuscript).

76. Reyhan ML, Wang Z, **Kim H**J, Halnon NJ, Finn JP, Ennis DB. Effect of free-breathing on left ventricular rational mechanics in healthy subjects and patients with duchenne muscular dystrophy. Magnetic resonance in medicine. 2017; 77(2):864-869. (Involved Statistical analysis plan, statistical analysis, and manuscript editing)

77. Young S, Lo P, **Kim** G, Brown M, Hoffman J, Hsu W, Wahi-Anwar W, Flores C, Lee G, Noo F, Goldin J, McNitt-Gray M. The Effect of Radiation Dose Reduction on Computer-Aided Detection (CAD) Performance in a Low-Dose Lung Cancer Screening Population. Med Phys. 2017; 44(4):1500-1513.

78. Bostani M, McMillan K, Lu P, **Kim** GH, Cody D, Arbique G, Bruce Greenberg S, DeMarco JJ, Cagnon CH, McNitt-Gray MF. Estimating Organ Doses from Tube Current Modulated CT Examinations using a Generalized Linear Model. Med Phys. Medical physics. 2017; 44(4):1500-1513.

79. Tashkin DP, Volkmann E R, Tseng C, Roth M D, Khanna D, Furst D E, Clements P J, Theodore A, Kafaja S, **Kim G H**, Goldin J, Ariolla E, Elashoff R M. Improved cough and cough-specific quality of life in patients treated for scleroderma-related interstitial lung disease (SSc-ILD): Results of Scleroderma Lung Study II. Chest. 2017; 151(4):813-820.

80. Volkmann ER, Tashkin DP, Li N, Roth M D, Khanna D, Hoffmann-Vold AM, **Kim G**, Goldin J, Clements P J, Furst D E, Elashoff RM . Mycophenolate versus Placebo for Systemic Sclerosis-Related Interstitial Lung Disease: An Analysis of Scleroderma Lung Studies I and II. Arthrithis Rheumatol. 2017; 69(7):1451-1460. NIHMSID: NIHMS863914 PMID: 28376288

81. Martyanov V, **Kim HJ***, Hayes WI, Du S, Ganguly Bishu, Sy O, Lee SK, Bogatkev, Schieven G, Eschiopu, Marangoni R, Goldin JG, Varga J. Novel lung imaging biomarkers and skin gene expression subsetting in dasatinib treatment of systemic sclerosis-associated interstitial lung disease. Accepted PONE-D-17-06606R1 EMID:e8728eb43d58f90b (*contributed equally) PLoS One. 2017 Nov 9;12(11):

82. Kafaja S, Clements P, Wilhalme H, Tseng C, Furst D, **Kim GH**, Goldin J, Volkmann E, Roth M, Tashkin D, Khanna D. Reliability and minimal clinically important differences of forced vital capacity: Results from the Scleroderma Lung Studies (SLS-I and SLS-II). Accepted by American Journal of Respiratory and Critical Care Medicine17198SSR 201709-1845OC.R1 (Am J Respir Crit Care Med. 2017 Nov 3. doi: 10.1164/rccm.201709-1845OC.)

83. Tsai EB, Pomykala K, Ruchalski K, Genshaft S, Abtin F, Gutierrez A, **Kim HJ**, Li A, Adame C, Jalalian A, Wolf B, Garon EB, Goldman JW, Suh R.Feasibility and Safety of Intrathoracic Biopsy and Repeat Biopsy for Evaluation of Programmed Cell Death Ligand–1 Expression for Immunotherapy in Non–Small Cell Lung Cancer. Radiology. 2017 Dec 12:170347. doi: 10.1148/radiol.2017170347.

84. Brown MS, **Kim GHJ**, Chu GH, Ramakrishna B, Allen-Auerbach M, Fischer CP, Levine B, Gupta PK, Schiepers CW, Goldin JG. Quantitative bone scan lesion area as an early surrogate outcome measure indicative of overall survival in metastatic prostate cancer. J Med Imaging (Bellingham). 2018 Jan;5(1):011017.

85. Hoffman C, Yarosh C, Boyd E, Koh W, **Kim GJ**, Chaabane S, Jahr J. Superior Hypogastric Nerve Block in Unterine Fibroid Embolization Patients with Radial Artery Access: Vascular Considerations, Anesthetic Choices, and Rescue Options. J Vasc Interv Radiol. 2018;29(5):745-747.

https://www.ncbi.nlm.nih.gov/sites/myncbi/1xSfwgztedbAX/bibliography/51311361/public/?sort=date&direction=descending

RESEARCH PAPERS - PEER REVIEWED (IN PRESS or available as E-print)

RESEARCH PAPERS - PEER REVIEWED (SUBMITTED)

1. Brown MS, Kim HJ, Chu G, Ramakrishna B, Auerbach M, Levine B, Gupta P, Schiepers C, Fisher C, Goldin JG. Quantitative Bone Scan Lesion Area as an Early Surrogate Outcome Measure Indicative of Overall Survival in Metastatic Prostate Cancer. Accepted by Journal of Medical Imaging 17198SSR

2. Zhang D - Observer performance at reduced radiation dose levels in CT diagnosis of appendicitis, Major Revision ARJ

CHAPTERS: None

LETTERS TO THE EDITOR: None

REVIEWS: None

EDITORIALS:

1. Tashkin DP, Kim HJ, Zeidler M, Kleerup EC, **Goldin J**G. Evaluating Small Airway Disease in Asthma: The Utility of Quantitative Computed Tomography (QCT). J Allergy Clin Immunol. 2016; Nov 21. pii: S0091-6749(16)31373-2. (Challenging new ideas in QCT in the field of asthma)

PAPERS IN PREPARATION (RESEARCH COMPLETED)

3. Qiao XJ, **Kim HJ**, Lai A, Nghiemphu P, Xue X, Roring K, M Brown, Goldin J, Cloughesy T, Pope WB, hanges in ADC Histograms between pre-surgical scan and post recurrence scan predict the surv... of GBM patients. To be submitted to American Journal of Neuroradiology,

4. Zeidler MR, Kleerup EC, **Kim HJ**, Rodriguez C, Tashkin DP, Goldin JG, Subclinical Cat Room Challenge Induces Airway Eosinophilia. To be submitted to J Allergy Clin Immunol,

5. Chong D, Brown MS, **Kim HJ**, McNitt-Gray MF, Khatonabadi M, Galperin-Aizenberg M, Coy H, Yang K, Jung Y, Goldin JG. Reproducibility of densitometric measures of emphysema in computed tomography scans one week apart: the effect of breathhold and scanner calibration. To be submitted to Academic Radiology

RESEARCH PAPERS (NOT-PEER REVEWED)

1. Shah SK, McNitt Gray MF, Petkovska I, **Kim HJ**, DeZoysa KR, Goldin JG, Suh RD, Aberle DR. Solitary pulmonary nodule characterization on CT by use of contrast enhancement maps. SPIE- vol.5747, 2005, pp.1950-1954.

2. Ochs R, **Kim HJ**, Angel E, Panknin C, McNitt-Gray MF, Brown MS. Forming a reference standard from LIDC data: impact of reader agreement on reported CAD performance. Proceedings SPIE Medical Imaging Conference - vol.6514, 2007.

3. Prasad MN, Meza A, **Kim HJ**, Brown MS, Abtin F, Goldin JG, McNitt-Gray MF. Dependence of CT attenuation values on scanner type using in vivo measurements. Proceedings SPIE Medical Imaging Conference - vol.6913, 2008.

4. Prasad MN, Brown MS, Ahmad S, Abtin F, Allen J, da Costa I, **Kim HJ**, McNitt-Gray MF, Goldin JG. Automatic segmentation of lung parenchyma based on curvature of ribs using HRCT images in scleroderma studies. Proceedings SPIE Medical Imaging Conference - vol.6913, 2008.

5. Chong DY, Angel E, **Kim HJ**, Cole GB, Boyadzhyan L, Panknin C, Gomez AN, Goldin JG, Brown MS, McNitt-Gray MF. Separation of bone from iodine- and gadolinium-based contrast agents using dual energy CT Proceedings SPIE Medical Imaging Conference - vol.6913, 2008.

6. Angel E, Yaghmai N, **Kim HJ**, Demarco J, Cagnon C, Turner A, Zhang D, Goldin JG, McNitt-Gray M. WED332-03: How Well Does CTDI Estimate Organ Dose to Patients From Multidetector (MDCT) Imaging? MED PHYS 2008 Jan; 35(6): . (Statistical analysis plan and data analysis)

7. Ochs RA, **Kim HJ**, Goldin JG, McNitt-Gray MF, Brown MS. Evaluation of airway measurements in phantom parenchyma and soft tissue regions. SPIE Medical Imaging Conference - vol.6916, 2008.

8. Petrick N, **Kim HJ**, Clunie D, Borradaile K, Ford R, Zeng R, Gavrielides MA, McNitt-Gray MF, Fenimore C, Lu ZQ, Zhao B, Buckler AJ. Evaluation of 1D, 2D and 3D nodule size estimation by radiologists forspherical and non-spherical nodules through CT thoracic phantom imaging. SPIE Volume 7963: Medical Imaging 2011: Computer-Aided Diagnosis.

9. Zhang D, Khatonabadi M, **Kim HJ**, Jude M, Zaragoza E, Lee M, Patel M, Poon C, Douek M, Andrews-Tang D, Doepke L, McNitt-Gray S, Cagnon CH, DeMarco JJ, McNitt-Gray MF.. Diagnostic accuracy at several reduced radiation dose levels for CT imaging in the diagnosis of appendicitis. SPIE Volume 8313: Medical Imaging 2012: Physics of Medical Imaging

ABSTRACTS

* student or postdoctoral scholar supervised by me.

1. Goldin JG, Zeidler M, Truong DA, **Kim HJ**, Sayre JW, "Novel Application of Functional CT as Primary Outcome Measure of Small Airway Function in Asthma Drug Trials", Submitted (talk) to Radiological Society of North America Radiological Society of North America (RSNA), 2002. Chicago IL, December, 2002.

2. Rogers SR, Brown MS, Goldin JG, Suh RD, **Kim HJ,** Aberle DR, "Automated Lung Nodule Detection in CT: Nodule Inclusion Criteria for Determining Ground Truth", Submitted (talk) to Radiological Society of North America (RSNA), 2002. Chicago IL, December, 2002.

3. Wu C, **Kim HJ,** Bortz J, Sayre JW, Goldin JG, "Physician vs. Self-referred Utility of Screening Imaging Studies", Submitted (talk) to Radiological Society of North America (RSNA), 2002. Chicago IL, December, 2002

4. Rogers SR, Suh RD, Batra P, Brown K, **Kim HJ,** Brown MS, "Inter Observer Variability in Assessing Lung Nodule Characteristics on CT", Radiological Society of North America (RSNA), 2003. Chicago IL, December, 2003.

5. Brown MS, Rogers SR, Goldin JG, **Kim HJ,** Suh RD, Aberle DR, "Computer-aided Lung Nodule Detection in CT: Results of Larger Scale Observer Test at RSNA2002", Radiological Society of North America (RSNA), 2003. Chicago IL, December, 2003.

6. Zeidler MR, Goldin JG, Kleerup EC, Truong DA, Simmons M, **Kim HJ,** Sayre JW, Tashkin DP, "Decreased Small Airways Obstruction after Treatment with Montelukast but Not Placebo Detected with Quantitative HRCT", American Thoracic Society (ATS), 2004. Orlando, FL. May, 2004.

7. Goldin JG, Lynch D, Strollo D, **Kim HJ,** Vasunilashorn F, Tashkin DP, Clements P. Elashoff R, Scleroderma Lung Study Research Group, "CT Detection of Alveolitis: Is There Inter-Reader Agreement?", American Thoracic Society (ATS), 2004. Orlando, FL. May, 2004.

8. Silver R, Goldin JG, Strange C, Lynch D, Roth M, Strollo D, Tashkin DP, Clements P, **Kim HJ,** Elashoff, R, Scleroderma Lung Study Research Group "Alveolitis Determination in Scleroderma Lung Disease: CT or Bronchoalveolar Lavage (BAL)?**",** Poster presented at the American Thoracic Society (ATS), 2004. Orlando, FL. May, 2004.

9. Lee C, Truong DA, **Kim HJ,** Gjertson DW, Goldin JG, "Quantitation of Functional Impairment in Patients with Emphysema Using Dynamic CT: Structure Does Not Predict Function", Poster presented at the American Thoracic Society (ATS), 2004. Orlando, FL. May, 2004.

10. Tam SL, Brown MS, Truong DA, **Kim HJ**, Yan X, Gjertson D, Goldin JG., "CT Lung Weight: A Better Measure of Emphysema", Poster presented at the American Thoracic Society (ATS), 2004. Orlando, FL. May, 2004.

11. **Kim HJ,** Truong D, Lee C, Gjertson DW, Goldin J (May 2004), "Categorizing the Emphysema Patients by Airflow and Density Mask", Poster presented at the American Thoracic Society, Orlando, Florida

12. Lee C, **Kim HJ,** Truong DA, Gjertson DW, Goldin JG, "Pulmonary Function Tests Versus Quantitative CT: Assessment of Airflow and Function in Patients with Emphysema", Poster presented at the American Thoracic Society (ATS), 2004. Orlando, FL. May, 2004.

13. Brown MS, **Kim HJ,** De Zoysa K, Goldin JG, "Combing MIP with CAD for Lung Nodule Detection in CT", Presentation at Radiological Society of North America (RSNA), Chicago IL, December, 2004

14. Shah SK, Rogers S, De Zoysa K, **Kim HJ,** Goldin JG, Aberle DR, "Solitary Pulmonary Nodules Diagnosis on CT: Results of a Large-scale Observer Study", Presentation at Radiological Society of North America (RSNA), Chicago IL, December, 2004.

15. Shah SK, McNitt-Gray MF, Petkovska I, **Kim HJ,** De Zoysa, K, Goldin JG, Suh RD, Aberle DR, "Solitary Pulmonary Nodule Characterization on CT by use of Contrast Enhancement Maps", Presentation at SPIE 2005.

16. Petkovska I, Shah SK, McNitt-Gray MF, **Kim HJ,** Goldin JG, Aberle DA, "Qualitative and quantitative analysis of contrast enhancement maps for pulmonary nodule characterization", Presentation at ECR 2005 - 17th European Congress of Radiology (ECR), Vienna, Austria, Mar 04 2005-Mar 08 2005. "Magna Cum Laude" Award in poster

17. Petkovska I, Shah SK, **Kim HJ,** McNitt-Gray MF, Goldin JG, Brown K, Aberle DA, **"**Pulmonary Nodule Characterization: Qualitative Analysis of Dynamic CT Contrast Enhancement Maps", Poster presentation at the American Thoracic Society (ATS), San Diego, CA. May, 2005.

18. **Kim HJ,** Gjertson DW, Tam SD, Shah SK, Brown MS, Goldin J (May, 2005). "Emphysema Quantitation and Classification based on a novel texture feature approaches", Poster presented at the American Thoracic Society, San Diego, California

19. **Kim HJ,** Shah SS, Ochs R, Vasu F, Gjertson DW, Brown MS, Goldin J, (May 2006). A novel texture feature approach for scleroderma quantitation based on decomposed image. Poster presented at American Thoracic Society, San Diego, California.

20. **Kim HJ,** Ochs R, Vasu F, Gjertson DW, Brown MS, Goldin J, (May 2007). A novel texture feature approach for scleroderma quantitation based on decomposed image extended to whole lung. Poster will be presented at American Thoracic Society, San Francisco, California.

21. **Kim HJ,** Goldin JG, Lynch D, Strollo D, Strange C, Silver R, Bolsterl M, Gjertson D, Elashoff, R, Roth M, Furst D, Clements P, Tashkin D, and for the Scleroderma Lung Study Research Group, Bronchoalveolar Lavage (BAL) Correlated with Quantitative Lung Fibrosis (QLF) and Quantitative Ground Glass. Poster was presented at American Thoracic Society, Toronto, Canada, (May, 2008).

22. **Kim HJ,** Lynch DA, Strollo DC, Abtin F, Brown MS, Ochs R, Shah SK, Gjertson DW, Ahmad S, Li G, Elashoff R, Tashkin DP, Goldin JG, Evaluation of an automated fibrosis score using CT texture features in patients with scleroderma, American Thoracic Society, Toronto, Canada, (May, 2008)

23. Angel E, Yaghmai N, **Kim H**, DeMarco J, Cagnon C, Turner A, Zhang D, Goldin J, McNitt-Gray M. How Well Does CTDI Estimate Organ Dose to Patients From Multidetector (MDCT) Imaging? Poster Presentation at AAPM meeting July 2008.

24. Boitnott K, **Kim H**, McNitt-Gray M, Cagnon C, Zhang D, Cody D. Precision of Exposure Measurements Obtained On Current Multi-Slice CT Scanners. Poster Presentation at AAPM meeting, July 2009.

25. **Kim HJ,** Goldin JG, Brown MS, Gjertson D, Pope W, Can Apparent Diffusion Coefficient (ADC) be a predictive biomarker in Glioblastoma multiforme (GBM) patients?, Washington, DC, (Aug, 2009)

26. **Kim HJ,** Goldin JG, Lynch D, Strollo D, Strange C, Silver R, Bolsterl M, Gjertson D, Elashoff, R, Roth M, Furst D, Clements P, Tashkin D, and for the Scleroderma Lung Study Research Group, Cyclophosphamide versus Placebo in Scleroderma Lung Study using Quantitative Fibrosis Score. Paper Presentation at Radiological Society of North America (RSNA), Chicago IL, (December, 2009).

27. **Kim HJ,** Goldin JG, Brown MS, Lynch D, Strollo D, Shah S, Ahmad S, da Costa I, Gjertson DW, Elashoff R, Tashkin D, Cyclophosphamide versus Placebo in Scleroderma Lung Study using Total Quantitative Score of Fibrosis, Groundglass Opacity, and Honeycomb. Poster Discussion at American Thoracic Society (ATS), New Orleans LA, (May, 2010).

28. Abtin F, Khanna D, Furst D, Brown M, Saidian L, **Kim HJ,** Goldin J, Validation of a Computer Aided Quantitative Lung Fibrosis Score in Systemic Sclerosis Patients, Poster Discussion at American Thoracic Society (ATS), New Orleans LA, (May, 2010).

29. *Balasubramanian V, **,** Gjertson D, Kleerup E, **Kim, HJ,** Zeidler M, Ni C, Tashkin D, Goldin J, Correlation of Composite CT Scores with Spirometry and Quality of Life Data in Clinical Asthma Trial, Poster Presentation at American Thoracic Society (ATS), New Orleans LA, (May, 2010).

30. Larson J, Zeidler MR, Kleerup EC, **Kim HJ**, Tashkin DP, Correlation of Alveolar Nitric Oxide with Methacholine Responsiveness in Asthmatic Subjects Following a Naturalistic Cat Challenge, Poster Presentation at American Thoracic Society (ATS), Denver, CO (May, 2011).

31. Kleerup EC, Zeidler MR, Fedor BC, **Kim HJ**, Tashkin DP, Adjustment Of Diffusing Capacity (DLCO) Using Exhaled Carbon Monoxide (eCO), Poster Presentation at American Thoracic Society (ATS), Denver, CO (May, 2011).

32. Cheng EC, Kleerup EC, Zeidler MR, **Kim HJ**, Perdomo C, Tashkin DP, Estimation Of Carboxyhemoglobin From Exhaled Carbon Monoxide, Poster Presentation at American Thoracic Society (ATS), Denver, CO (May, 2011).

33. Kleerup EC, Tashkin DP, Zeidler MR, Yang K, **Kim HJ**, Goldin JG, Methacholine Response In Asthma Evaluated With FVC, HRCT Lung Volumes And FEV1 , Poster Presentation at American Thoracic Society (ATS), Denver, CO(May, 2011).

34. Zeidler MR, Kleerup EC, Huerta-Yepez S, Baay-Guzman GJ, Bebenek IG, Hernandez-Pando R, **Kim HJ**, Tashkin DP, Subclinical Cat Room Challenge Induces Airway Eosinophelia, Poster Presentation at American Thoracic Society (ATS), Denver, CO (May, 2011).

35. Zeidler MR, Kleerup EC, **Kim HJ**, Tashkin DP, Rodriguez C, Ni C, Yang K, Goldin JG, Changes in HRCT Lung Attenuation Measured by Quantitative Image Analysis After Bronchoalveolar Lavage, Poster Presentation at American Thoracic Society (ATS), Denver CO (May, 2011).

36. van Rikxoort EM, Galperin-Aizenberg M, Abtin F, **Kim HJ**, Lu P, Shaw G, Goldin JG, Brown MS, Pulmonary Fissure Integrity Assessment In Subjects With Severe Emphysema: Evaluation Of A Fully Automatic Method, Poster Presentation at American Thoracic Society (ATS), Denver, CO (May, 2011).

37. Galperin-Aizenberg M, van Rikxoort EM, Brown MS, **Kim HJ**, Abtin F, Goldin JG, Automatic Fissural Integrity Quantification From Chest CT Predicts Lobar Atelectasis In Endobronchial Treatment, Poster Presentation at American Thoracic Society (ATS), Denver, CO (May, 2011).

38. *Galperin-Aizenberg M, **Kim HJ**, Chong D, Guzman L, Coy H, Brown MS, Goldin JG, De-noising Of Chest HRCT Images Improves Correlation Of Quantitative And Visual Assessment Of Emphysema Lung Destruction. Poster Presentation at American Thoracic Society (ATS), Denver, CO (May, 2011).

39. Galperin-Aizenberg M, **Kim HJ**, Lu P, Chong D, Guzman L, Coy H, Brown M, Goldin JG, Reproducibility Of Lung Volume Measurements Using Computed Tomography From Repeated Scans In A Multicenter Clinical Trial, Poster Presentation at American Thoracic Society (ATS), Denver, CO (May, 2011).

40. Chong D, **Kim HJ**, van Rikxoort EM, Galperin-Aizenberg M, Yang K, Jung Y, McNitt-Gray MF, Goldin JG, Brown MS, Reproducibility of densitometric measures of emphysema in computed tomography scans one week apart: the effect of breathhold and scanner calibration, Poster Presentation at American Thoracic Society (ATS), Denver, CO (May, 2011).

41. Brown MS, Chu GH, **Kim HJ**, Auerbach M, Poon C, Vidovic A, Ramakrishna B, Gjertson DW, Morris MJ, Larson SM, Scher HI, Goldin JG, Automated tumor detection on bone scans for treatment response assessment, Poster Print at ASCO, Chicago IL, (June, 2011).

42. **Kim HJ**, Brown MS, Chu GH, Auerbach M, Poon C, Vidovic A, Ramakrishna B, Gjertson DW, Morris MJ, Larson SM, Scher HI, Goldin JG. Initial study of bone scan tumor area for early surrogate outcome assessment in patients with metastatic castration resistant prostate cancer, Poster Print at ASCO, Chicago IL, (June, 2011)

43. Brown MS, Chu GH, **Kim HJ**, Auerbach M, Poon C, Vidovic A, Ramakrishna B, Gjertson DW, Morris MJ, Larson SM, Scher HI, Goldin JG. Initial analytic validation of automated bone scan measures for treatment response assessment in patients with metastatic castration resistant prostate cancer (CRPC), Poster Print at ASCO, Chicago IL, (June, 2011)

44. Brown MS, Chu GH, **Kim HJ**, Auerbach M, Poon C, Vidovic A, Ramakrishna B, Gjertson DW, Morris MJ, Larson SM, Scher HI, Goldin JG, Smith MR. Cabozantinib effects on bone metastasis: Computer-aided quantitative bone scan assessment of prostate cancer treatment response. AACR-NCI-EORTC International Conference: Molecular Targets and Cancer Therapeutics-Nov 12-16, 2011; San Francisco, CA

45. *Shaw GA, Lu P, **Kim HJ**, Galperin-Aizenberg M, Yang K, Ni C, Chong D, Zeidler M, Kleerup E, Brown M, Goldin JG, CT-detected Changes in Segmental Airways Correlate with Air-trapping In Asthmatics, Paper Presentation at Radiological Society of North America (RSNA), Chicago IL, (Nov, 2011).

46. Chu GH**,** Lo P, **Kim HJ**, Lu P, Ramakrishna B, Gjertson D, Poon C, Auerbach M, Goldin J, Brown MS. "Automated segmentation of tumors on bone scans using anatomy-specific thresholding." In: Proceedings SPIE Medical Imaging 2012: Computer-aided Diagnosis.

47. Zhang D, Khatonabadi M, **Kim H**, Jude M, Zaragoza E, Lee M, Patel M, Poon C, Douek M, Andrews D, Laura Doepke L, McNitt-Gray M. "Diagnostic accuracy at several reduced radiation dose levels for CT imaging in the diagnosis of appendicitis". In: Proceedings SPIE Medical Imaging 2012: Computer-aided Diagnosis

48. **Kim HJ**, Gjertson DW, Goldin JG, Lu P, Changes in patients with asthma in CT imaging using with temporal and spatial correlation. Poster Presentation in Conference on Statistical Practice, Orleans LA (Feb 2013)

49. Brown MS, Lo P, Barnoy E, **Kim HJ**, McNitt-Gray MF, Goldin JG. "Clinically Usable Computer-Aided Detection (CAD) System For Lung Cancer Screening With CT", ATS, Philadelphia PA, May 2013

50. Chong D, **Kim HJ**, Goldin JG, Abtin FG, Brown MS. "Computer-Aided Classification Of Interstitial Lung Diseases In High-Resolution Computed Tomography Using 3D Multiscale Texture Features", ATS, Philadelphia PA, May 2013

51. Chong D, Lu P, **Kim HJ**, Lo P, Da Costa IG, Yang K, Aryanfar M, Oria A, Jung Y, Khatonabadi M, Brown MS, Goldin JG. "Reproducibility Of Breathhold And Densitometric Measures Of Emphysema In Computed Tomography Scans With A One-Week Interval", ATS, Philadelphia PA, May 2013

52. Chong D, Lu P, **Kim HJ**, Da Costa IG, Yang K, Aryanfar M, Oria D, Jung Y, Khatonabadi M, Brown MS, Goldin JG "Quantitative Reproducibility Of Densitometric Measures Of Emphysema In A Multicenter Clinical Trial: The Influence Of Breathhold, Site, And Scanner Manufacturer", ATS, Philadelphia PA, May 2013

53. Chong D, Lu P, **Kim HJ**, Brown MS, Goldin JG. "Reproducibility Of In Vivo Measurements Of Attenuation Values In Computed Tomography Scans With A One-Week Interval", ATS, Philadelphia PA, May 2013

54. Lo P, Kaplan A, **Kim HJ**, Goldin JG, Brown M. "Hole Based Analysis Of Emphysema In Volumetric Computed Tomography", ATS, Philadelphia PA, May 2013

55. Lo P, Kim HJ, **Kim HJ**, Strange C, Goldin JG, Brown MS. "Lung Parenchymal Cyst Analysis Of Lymphangioleiomyomatosis In Volumetric Computed Tomography", ATS, Philadelphia PA, May 2013

56. Kiertscher SM, Tseng C, Keane MP, Tashkin DP, Elashoff R, **Kim HJ**, Goldin J, Silver RM, Strange C, Bolster MB, Roth MD. Correlations between bronchoalveolar lavage (BAL) cell differential, measured BAL proteins and other features of Scleroderma-Related Interstitial Lung Disease. ATS, Philadelphia PA, May 2013

57. Roth MD, **Kim HJ**, Tseng C, Kiertscher SM, Keane MP, Tashkin DP, Elashoff M, Goldin J. Bronchoalveolar Lavage Correlates of Quantitative Lung Fibrosis CT Scores in Scleroderma-related Interstitial Lung Disease. ATS, Philadelphia PA, May 2013

58. Tashkin DP, Roth MD, Furst D, Clements P, Khanna D, Goldin JG, Arriola E, Kotlerman J, Tseng CH, **Kim G**, Elashoff R, for the Scleroderma Lung Study Research Group. Double-blind comparison of mycophenolate mofetil and cyclophosphamide for treatment of SSc-ILD (Scleroderma Lung Study II): Rationale, design, methods, baseline characteristics/intercorrelations and patient disposition. ATS, Philadelphia PA, May 2013

59. Lo P, Brown MS, **Kim HJ**, Goldin JG, Aberle D. Automated tumor size assessment: Consistency of computer measurements with an expert panel, ASCO, Chicago IL, May 2013

60. Woodworth DC, **Kim HJ**, Brown MS, T Clougey, B Ellington. "Contrast-enhanced T1-weighted subtraction maps for response assessment in recurrent glioblastoma treated with bevacizumab", ASCO, Chicago IL, May 2013

61. Kim HJ, Shino M, Jung Y, Weigt S, Belperio J, Yang K, Coy H, Brown M, Goldin JG, Longitudinal Changes Using a Quantitative Lung Fibrosis Score in the Native IPF Lung and Post-Single Lung Transplanted Patients Treated with Immune Suppression. (WCTI 2013: Abstract SP-0139).

62. *Lee J, **Kim HJ**, Wu Y, Unbalanced Data Classification Using Support Vector Machines with Active Learning on Scleroderma Lung Disease Patterns, WNAR, Los Angeles CA, June 2013

63. *Barnoy E, **Kim HJ**, Gjertson DW, Goldin J, Heterogeneity Index for Spatial Distribution in CT images and Correlation with Symptom Scores, Montreal Quebec Canada, Joint Statistical Meeting, August 4, 2013

64. Felker E, Lee-Felker S, Tan N, Margolis D, **Kim HJ**, Raman S, Evalution of a standardized prostate MR score for multiparametric prostate MR in patients undergoing MR-guided prostate biopsy, Society of Abdominal Radiology meeting, March 2014

65. Coy H, Nelly T, Margolis D, Lu P, **Kim H**, Brown MB, Goldin J, Raman S, Efficacy of MR-guided Focused Ultrasound Ablation for Localized Adenomyosis in Comparison to Leiomyoma, International Symposium on Focused Ultrasound, October 2014

66. Young J, Coy H, Ko M, Lo P, Douek M, Bharath R, **Kim H**, Brown M, Goldin J, Steve R, Clear Cell Renal Cell Carcinoma: Discrimination from Oncocytoma and Other RCC Subtypes Using Volumetric CAD-Based Quantification of Peak Enhancement on Multiphasic MR, Society Abdominal Radiology San Diego March 2015

67. Young J, Coy H, Ko M, Ko M, Lo P, Douek M, Bharath R, **Kim H**, Brown M, Goldin J, Steve R Performance Characteristics of Using a CAD Algorithm to Derive Multiphasic MDCT Peak Enhancement in Discriminating Clear Cell Renal Cell Carcinoma from Oncocytoma and Other RCC Subtypes , Society Abdominal Radiology San Diego March 2015

68. Hsu W, Goldin JG, Kim GJ. Characterizing Differences in Imaging Utilization in the Geriatric Population by Gender: A Study of UCLA Patients from 2007-2012, 2015 UCLA Research Conference on Aging, July 2015.

69. **Kim GJ**, Gjertson D, Kaplan A, Kleerup E, Difference in Aging and Gender of Pulmonary Function and Air trapping on High Resolution Computed Tomography Images in Patients, 2015 UCLA Research Conference on Aging, July 2015.

70. **Kim GJ**, Kaplan A, Kleerup E, Difference in Gender of Pulmonary Function and Air trapping on High Resolution Computed Tomography Images within the same state in Chronic Obstructive Pulmonary Disease, Gender Summit 6Asia Pacific, Seoul Korea, August 2015.

71. **Kim GJ**, Brown M, Weigt S, Belprio J, Goldin J, "Prediction of IPF with the Early Changes in Quantitative Imaging Patterns Using High Resolution Computed Tomography", Poster discussion session, American Thoracic Society (ATS), May 9, 2016. Am J Respir Crit Care Med 193; 2016:195:A2706.

72. Lo P, Young S, Hoffman J, Wahi-Anwar M, **Kim** H, **McNitt-Gray** M. Effects of Dose Reduction On Emphysema Score. AAPM 2016

73. Wahi-Anwar M, Young S, Lo P, Raman S, **Kim** H, Brown M, **McNitt-Gray** M, Coy H, Ashen-Garry D, Pace-Soler E. Effects of Radiation Dose Reduction On Renal Cell Carcinoma Discrimination Using Multi-Phasic CT Imaging. AAPM 2016

74. Wahi-Anwar M, Lo P, **Kim** H, Brown M, **McNitt-Gray** M. A Fully Automated CT Tool to Facilitate Phantom Image QA for Quantitative Imaging in Clinical Trials. AAPM 2016

75. Young S, Lo P, Hoffman J, **Kim** H, Hsu W, Flores C, Lee G, Brown M, McNitt-Gray M. CT Lung Cancer Screening and the Effects of Further Dose Reduction on CAD Performance. AAPM 2016.

76. Goldin JG **, Kim** GJ, Kleerup E, Elashoff R. Lu P, Clements P, Roth MD, Tashkin DP. Association of Changes in Quantitative CT with Outcome Measures in the Scleroderma Lung Study II. ATS 2017

77. **Kim** GJ, Brown MS, Weigt S, Belperio JA, Huynh RH, Shi Y, Goldin JG. Prediction of IPF Using Early Changes in Quantitative Imaging Patterns on High Resolution Computed Tomography. ATS 2017. Am J Respir Crit Care Med 195; 2016:195: A5432.

78. **Kim** GJ, Hsu W, Brown M, Weigt S, Belperio JA, Lo P, Goldin JG. Prediction of IPF Progression Using HRCT Imaging Patterns in Elderly Population. ATS 2017. Am J Respir Crit Care Med 195; 2017:195: A5431.

79. **Kim** GJ, Weigt S, Brown M, Sorge K, Sultan A, Goldin JG. Association of a Composite Physiologic Index with Quantitative Scores from Texture Features on HRCT Images in Subjects with Idiopathic Pulmonary fibrosis. PFF 2017

80. **Kim** HJ, Brown MS, Sorge K, L Pourzand, Goldin JG. Associations of Clinical Physiological Index from Pulmonary Function Tests with Quantitative Scores from HRCT Image Using Texture Features in Subjects with Idiopathic Pulmonary Fibrosis compared to Scleroderma-related Interstitial Lung Disease. Scientific Poster RSNA 2017.

81. Pace-Soler E, Coy H, Douek ML, Gutierrez AJ, Ruchalski K, Patel MK, Sai V, Margolis D, Ashen-Garry D, **Kim** HJ, Kaplan A, Brown MS, Goldin JG, Raman S. Clear Cell Renal Cell Carcinoma Treated by Antiangiogenic Therapy: Distribution of Metastatic Sites at Baseline and at Time of Progressive Disease Determination. Scientific Oral presentation RSNA 2017.

82. N Emaminejad N, Wahi-Anwar MW, Hoffman JM, Ruchalski K, Goldin JG, Sultan A, **Kim** HJ, Brown MS, McNitt-Gray M. Assessing the Performance of CAD in Lung Nodule Detection from Low-Dose Lung Cancer Screening CT Exams Under Different Combinations of Radiation Dose Level, Slice Thickness, and Reconstruction Kernel. Scientific Oral presentation RSNA 2017.

83. Shi Y, Goldin JG, Wong W, Lai J, Brown MS, **Kim** HJ. HRCT Texture Feature Selection and Imaging Pattern Prediction of IPF using Quantum Particle Swarm Optimization. Scientific Oral presentation RSNA 2017. Featured as "RSNA 2017 Highlights" under Chest Radiology – SSK05-04 in RSNA News.

84. Hoffman JM, Kim HJ, Goldin JG, Brown MS, McNitt-Gray MF. Robustness Evaluation of RA-950 Scoring in a Cohort of CT Lung Screening Patients Across a Large Range of CT Acquisition and Reconstruction Conditions. Scientific Oral presentation RSNA 2017.

85. Kim GJ, Weigt SS, Brown MS, Sorge K, Pourzand L, Shi Y, Goldin JG. Associations of a Composite Physiologic Index with Quantitative Scores from Texture Features on HRCT images in Subjects with Idiopathic Pulmonary Fibrosis. Pulmonary Fibrosis Foundation Summit 2017. (One of top 10 abstracts).

86. Kim GJ, Tashkin DP, Brown MS, Volkmann E, L P, Gjertson DW, Lu P, Chong D, Goldin JG. Using Transitional Changes on HRCT to Assess the Impact of Treatment with Cyclophosphamide or Mycophenolate on Systematic Sclerosis-related Interstitial Lung Disease from Scleroderma Lung Study II. Poster presentation on Systematic Sclerosis World Congress 2018 Bordeaux France, Feb 16 2018.

87. Young R, Qiao , Orosz I, Nariko A, Franke M, Kim G, Whitney P. Gadolinium Deposition in the Pediatric Brain: No Increased Intrinsic T1-Weighted Signal Intensity within the Dentate Nucleus Following the Repeated Administration of the Macrocyclic Agent Gadobutrol" was accepted for a scientific oral presentation at the 2018 ASNR Annual Meeting

DISSERTATION

1. Applied Math in MS: Risk Assessment Using Weibull Model

2. Biostatistics in PhD: Classification in Thoracic Computed Tomography Image Data