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Mendeley: https://www.mendeley.com/profiles/william-sensakovic2/
Academia.edu: https://floridahospitalhealthsciences.academia.edu/WilliamSensakovic
ResearcherID: http://www.researcherid.com/rid/J-5955-2017
NCBI:
https://www.ncbi.nlm.nih.gov/sites/myncbi/william.sensakovic.1/bibliography/49379880/public/?sort=date&direction=descending

Licenses and Certifications

Diplomate, American Board of Radiology (DABR) in Diagnostic Medical Physics
RSO-eligible

Diagnostic Radiological Physicist, License# DRP 137, State of Florida (2012 – 2019)

Magnetic Resonance Safety Certified (MRSC) as a Magnetic Resonance Safety Expert (MRSE), American Board of Magnetic Resonance Safety

Fellow (Silver Level), Mayo Clinic Quality Academy (2021)

Associate, Mayo Academy of Educational Excellence (2021)

Education and Training Positions

Rush University Medical Center, Chicago, IL

Medical Physics Residency: Radiation Therapy, 2011-2012

The University of Chicago, Chicago, IL

Ph.D. in Medical Physics, 2010
Thesis: Computerized Segmentation and Measurement of Pleural Disease

B.A. in Physics with Honors, 2001
Honors Thesis: Multiple Feature Analysis of Emphysema in High-Resolution Computed Tomography Scans

B.S. in Mathematics, 2001 (All Requirements Fulfilled)

Clinical Positions (Non-Training Only)

Division Chair Radiology Medical Physics, 2020-Present
Senior Associate Consultant, 2019-Present
Radiology, Mayo Clinic, Scottsdale, Az

Medical Physicist, 2012-2019
Radiology, Florida Hospital, Orlando, FL
Selected representative accomplishments:
Reduced pediatric CT dose by 20% - 60% on average.
Created low-dose specialty protocols (e.g., robotic surgery guidance, shunt revision, etc.).
Performs dozens of physician consults yearly on safety, image quality, and dose for all modalities.
Created QC regimen for specialty SPECT-only head scanner (Samsung Inspira).
Lead efforts to purchase dose tracking software and apply to the ACR Dose Index Registry.
Selected representative responsibilities:
Radiation dose optimization, clinical auditing, regulatory compliance, protocol assessment, image quality review and trouble shooting, informatics and image processing improvement, advise on equipment purchase, and discuss and address physician concerns.

Research Positions

Division Chair Radiology Medical Physics, 2020-Present
Senior Associate Consultant, 2019-Present
Radiology, Mayo Clinic, Scottsdale, Az

Medical Physicist, 2012-2019
Radiology, Florida Hospital, Orlando, FL
Selected representative projects:
Developing a method to select endotracheal tube size for neonates in NICU (Ongoing)
Comparing CT fetal dose calculation methods (Ongoing)
Assessed vendor image processing impact on image quality and dose in neonatal chest radiographs.
Quantified occupational dose and assessed impact of proposed NRC rules on workers and the hospital.

Adjunct Professor, 2016-2018
Adventist University, Orlando, FL
Responsibility:
Develop collaborative research projects between Florida Hospital and Adventist University.

Co-founder and CTO, 2013-2017
YellowDot Innovations, LLC
Selected representative responsibilities:
Conceptualize new technology.
Guide development and FDA approval of touch-free visualization and equipment manipulation software for use in the operating room.
Wrote provisional patents, managed three software engineers, and was responsible for regulatory compliance.

Resident/Postdoctoral Research Fellow, 2011 – 2012
Department of Radiation Oncology, Rush University, Chicago, IL
Selected representative projects:
Investigated scattered radiation from therapeutic beam for patient localization (Patent Pending).
Wrote software to assess skin damage in mice using thermal imaging.

Postdoctoral Research Scholar, 2010 – 2011
Department of Radiology/Committee on Medical Physics, The University of Chicago, Chicago, IL
Selected representative projects:
Developed algorithms to identify and quantify of pleural disease and sinonasal disease.
Quantified post-surgical improvement of mesothelioma patients undergoing surgery.
Developed an experimental protocol for CT perfusion imaging of mesothelioma.

Graduate Research Assistant, 2001 – 2010
Department of Radiology/Committee on Medical Physics, The University of Chicago, Chicago, IL
Selected representative projects:
Developed algorithms segmenting of thoracic structures
Investigated deconvolution algorithms to improve texture analysis
Quantified variability inherent in semi-computerized segmentation algorithms
Developed an algorithm to automatically assess mesothelioma
Co-developed an in-house computer visualization and measurement system.

Computer Scientist, Summers of 1997 – 2001
Intelligence and Information Warfare Directorate (I2WD), US Army, Ft. Monmouth, NJ
Projects:
Assisted in the investigation of an ultra-wideband fractal superconducting antenna.
Assisted in investigation of new ground penetrating radar system.

Research Assistant, Summer of 1996
Intelligence and Electronic Warfare Directorate (IEWD), US Army, Ft. Monmouth, NJ
Project:
Assisted in the investigation of antennae receivers.

Teaching Positions

Associate Professor of Medical Physics, 2019-Present
Radiology, Mayo Clinic, Scottsdale, Az

Founder, 2017-Present
Telerad Physics Teaching, LLC
Company focus:
My program currently contracts with residency programs to provide online and/or in-person physics and informatics education .

Medical Physicist, 2012-2018
Radiology Residency, Florida Hospital, Orlando, FL
Selected representative accomplishments:
Developed the physics curriculum for a new radiology residency program.
Residents typically rank in the 90-99th percentile on national in-service exams.
Selected representative responsibilities:
Teach all aspects radiology resident physics curriculum.
Run weekly problem sessions for residents.
Mentor radiology resident research (see awards, presentations, and publications below).

Associate Professor of Medical Education, 2015-2019 (Assistant Prof. 2012-2015)
College of Medicine, University of Central Florida, FL
Responsibilities:
Developed and taught radiological physics curriculum to rotating medical students.
Available as mentor for advanced student research.

Clinical Assistant Professor (Medical Physics), 2012-2019
Department of Clinical Sciences, Florida State University, FL
Responsibilities:
Developed and taught radiological physics curriculum to rotating medical students.
Available as mentor for advanced student research.

Instructor, 2014-2015
Hot Seats Review Course, University of Florida, Gainesville, FL
Accomplishments:
Developed and lead radiology resident review session.
Note: Review course was discontinued by the university in 2015.

Lecturer, 2012
Dept. of Medical Radiation Physics, Rosalind Franklin University of Medicine and Science, North Chicago, IL
Accomplishments:
Developed and taught "Mathematical Methods for Imaging" to medical physics residents.
Note: Residency was closed by the university in late 2012.

Adjunct Professor, 2011 - 2012
Dept. of Science, Triton College, River Grove, IL
Accomplishments:
Developed and taught General Physics (PHY 100)
Supervised student labs and taught lab skills.

Guest Lecturer, 2011
Committee on Medical Physics/Dept. of Computer Science, The University of Chicago, Chicago, IL
Accomplishments:
Developed and taught 10% of total course for Introduction to Image Processing and Computer Vision (MPHY 39600/CMSC 35600).

Teaching Assistant, 2001, 2003, 2006, 2007, 2010
Committee on Medical Physics/Dept. of Computer Science, The University of Chicago, Chicago, IL
Accomplishments:
Graded homework, developed and prepared class project, developed and delivered "Information Theory" lecture for Introduction to Image Processing and Computer Vision (MPHY 39600).
Graded homework and led discussion section for Medical Imaging I (MPHY 38600).
Graded homework and led discussion section for Interactions of Ionizing Radiation with Matter (MPHY 35000)

Tutor (Math and Physics), 2006
High School Students at The University of Chicago Laboratory School

Guest Lecturer, 2001
Information and Intelligence Warfare Directorate, US Army, Ft. Monmouth, NJ
Accomplishments:
Developed and delivered lecture: "Superconductivity and Superconducting Devices" for Signal Processing 101.

Project Support

G1. Roubos Family Fund in Research. "AI-derived biomarker for referral of incidental osteopenia/osteoporosis identified on CT" Samuel Fahrenholtz, P.I. 6/15/2020 - 6/15/2021
Total direct cost $70,000 (20% effort as Co-Investigator).

G2. Mayo Clinic Clinical Innovations Program Grant. "Modernizing Radiology Protocol Management" William F. Sensakovic, P.I.
Total direct cost $50,000 (30% effort).

G3. American Radium Society Multidisciplinary Seed Grant. "18F-FDG PET/CT and MRI Radiomics to Predict Outcome in Locally Advanced Cervical Cancer" Kunal Saigal, P.I.
Total direct cost $25,000 (4.2% effort as Consultant).

G4. Central Florida Health Research Award. "Enabling one-stop definitive prostate cancer diagnosis using a registration-free MRI-guided targeted biopsy" Jeremy Burt, P.I.
10/1/2016 - 3/31/2018.
Total direct cost $20,000 (3% effort as Co-Investigator).

G5. Florida Dept. of Health Zika Research Initiative to the University of Central Florida. Grant 7ZK32 "Utilization of in utero diffusion tensor magnetic resonance imaging to evaluate neurological disorders caused by Zika virus", Ulas Bagci, P.I., 3/09/2017 – 3/31/2018. Total direct cost $199,254.00 (0.5% effort as Co-Investigator).

G6. Clinical and Translational Science Award NCRR/UC-CTSA-Clinical Resource Center, "Development of a Novel Tool for Measuring Upper Airway Inflammation: 3D Computer Imaging Analysis," Samuel G. Armato III, P.I., 9/21/2010-9/06/2011. Total direct cost $34,758 (60% effort as Postdoctoral Scholar)

G7. Paul Hodges Society Research Grant, "Dynamic Perfusion Computed Tomography for Malignant Pleural Mesothelioma," **William F. Sensakovic** and Zachariah Labby, P.I., 12/01/2009. Total direct cost $5,000 (10% effort as Graduate Student).

G8. NIH/NCI, R01 CA102085, "Computerized Analysis of Mesothelioma on CT Scans," Samuel G. Armato III, P.I., 6/01/06-5/31/10. Total direct cost $1,000,000 (100% effort as Graduate Student).

G9. Ruth L. Kirschstein National Research Service Award, Julian Solaway, P.I., 9/25/2002-6/10/2004. Total cost $105,484 (100% effort as Graduate Student).

Professional Association Membership

Radiological Society of North America (RSNA), 2016 - Present

International Society for Magnetic Resonance in Medicine (ISMRM), 2017 - 2018

Society for Pediatric Radiology (SPR), 2016 – 2018

Public Responsibility in Medicine and Research (PRIM&R), 2016 - 2017

American College of Radiology (ACR), 2014 - Present

Arizona Radiological Society, 2019 – Present

Florida Radiological Society (FRS), 2014 – 2018

American Board of Radiology (ABR), 2014 – Present

American Association of Physicists in Medicine (AAPM), 2005 - Present

AAPM Regional Chapter Arizona (AzAAPM), 2019 - Present

AAPM Regional Chapter Florida (FLAAPM), 2012 – 2018

AAPM Regional Chapter (Midwest), 2009 - 2012

American Roentgen Ray Society (ARRS), 2014 - 2016

SPIE, 2010 – 2012

Sigma Phi Epsilon - Illinois Mu Chapter (Position: Marshall), 1997 – 2001

Honors (* indicates senior author if not listed as first author)

RSNA 2019 Presentation "Contrast Enhanced Spectral Mammography (CESM): How Does It Work?" chosen for automatic inclusion in 2020 Korean Congress of Radiology. Honor to 20 top award winning posters from RSNA.

2020 Top 10% Downloaded from Journal of Applied Clinical Medical Physics in 2018 and 2019 "Sample content of kinesthetic educational training: Reducing scattered x-ray exposures to interventional physician operators of fluoroscopy."

RSNA 2019 Presentation "Contrast Enhanced Spectral Mammography (CESM): How Does It Work?" Magna Cum Laude Award.

RSNA 2019 Presentation "Contrast Enhanced Spectral Mammography (CESM): How Does It Work?" chosen for publication in RadioGraphics.

RSNA 2018 Presentation "Fetal Dosimetry in CT: A Primer" chosen for publication in RadioGraphics and for inclusion into the ImageWisely website.

Editor's Recognition Award, RSNA Journal: Radiology (Awarded to 77 of 1000 reviewers), 2017

Academia.edu ranked in the top 5% of researchers 30-day views, June 2017.

2nd Place, Florida Medical Association, "Investigation of Fetal Radiation Dose Estimation Methods" to Royall I, ***Sensakovic WF** (Mentor).

RSNA 2016 Presentation "Troubleshooting Image Quality and Other Problems Using the DICOM Header" by resident David Warden chosen for inclusion in Radiographics Fundamentals: http://pubs.rsna.org/page/radiographics/fundamentals. ***Sensakovic WF** (Mentor).

RSNA 2016 Travel Award to resident Bo Liu for "Prevalence of Coronary Artery Disease in Adults Under 30 Presenting with Acute Chest Pain - A Retrospective Study" **Sensakovic WF** (study team member).

RSNA 2015 Presentation "Bariatric CT imaging: challenges and solutions" by resident Dzmitry Fursevich chosen for inclusion in Radiographics Fundamentals: http://pubs.rsna.org/page/radiographics/fundamentals. ***Sensakovic WF** (Mentor).

Best Oral Presentation, Florida Hospital GME Research Symposia, 2016, "CT Radiation Dose Reduction in Robot-Assisted Pediatric Spinal Surgery" for medical student Ali Agha ***Sensakovic WF** (mentor).

Cover Image for *International Forum of Allergy & Rhinology*, 5(7), 2015. Image from article: Computer-assisted staging of chronic rhinosinusitis correlates with symptoms.

Finalist (Top 3) - Best Paper for medical student Ali Agha from Society for Minimally Invasive Spine Surgery (SMISS) Global Forum, "A Low-Dose Protocol for Robot-Assisted Spinal Surgery of Pediatric Scoliosis Patients." ***Sensakovic WF** (Mentor), 2015.

Florida Hospital Radiology Teaching Award – "Courage to Teach" (2014)

Tied 1st Place – Quality Improvement, to residents Matthew Cody O'Dell and Haley Letter at Florida Hospital Research Day, "Pediatric CT Dose Reduction: Maximizing Diagnostic Accuracy with Minimum Radiation Exposure." ***Sensakovic WF** (Mentor), 2014.

Tied 1st Place – Quality Improvement to resident Nathan Kohler at Florida Hospital Research Day, "A Low-Dose Head CT Protocol for Assessment of Pediatric Shunt Failure." ***Sensakovic WF** (Mentor), 2014.

1st Place Highest Honors to resident Nathan Kohler at Florida Radiological Society Research Symposium, "A Low-Dose Head CT Protocol for Assessment of Pediatric Shunt Failure." ***Sensakovic WF** (Mentor), 2014.

Certificate of Merit, RSNA Annual Meeting, "Abras 2: A Rapid Application Development Environment for Prototyping and Deploying Quantitative Imaging Software" **Sensakovic WF** (Study Team Member), 2013.

AAPM Midwest Chapter Spring Meeting (2nd Place) "Helical Tomotherapy DQA with ArcCHECK: Sensitivity to Possible Delivery Errors" **Sensakovic WF** (Study Team Member), 2012.

AAPM Midwest Chapter Spring Meeting (3rd Place) "Lung Texture in Serial Thoracic CT Scans: Assessment of Changes Introduced by Image Registration" **Sensakovic WF** (Study Team Member), 2012.

AAPM North Chapter Fall Meeting (1st Place) "Prognostic Value of Automatically Segmented Lung Volumes during Chemotherapy for Patients with Mesothelioma" **Sensakovic WF** (Study Team Member), 2010.

University of Chicago Biological Sciences Travel Award, 2009.

Paul C. Hodges Research Award, 2009.

IEEE Trainee Grant, 2008.

Harrison-Doolittle Fellowship, 2008.

Outstanding Medical Physics Journal Club Presentation, 2007.

Top 25 Hottest Articles ScienceDirect January to March 2005. Armato SG III and **Sensakovic WF**: Automated lung segmentation for thoracic CT: Impact on computer-aided diagnosis. *Academic Radiology* 11:1011–1021, 2004.

AAPM Midwest Chapter Spring Meeting (3rd Place) "Automated Lung Segmentation of Diseased and Artifact-Corrupted MR Sections" **Sensakovic WF**, 2005.

Co-President, Medical Physics Graduate Student Association, 2004 – 2005.

Ruth L. Kirschstein National Research Service Award, 2002-2004

The Career Related Experience in Science and Technology Program (CREST), 2001.

Dean's List, The University of Chicago, 2000 – 2001.

The Science and Engineering Apprentice Program (SEAP), 1997 – 2000.

Attained highest level of security clearance granted by the US Government, 1997.

Student Career Education Program (SCEP), 1996 - 1997.

Professional Activities

State, National, and International

The American Board of Radiology (ABR)

Member, Diagnostic Radiology Core Exam Committee, 2016 - 2017

Florida Department of Health

Vice-chair, Advisory Council of Medical Physicists, 2015 – 2016

Radiological Society of North America (RSNA)

Physics Chair, Education Exhibits Committee, 2019 – 2021, Member 2017 - 2021

Organizer/Moderator, Annual Meeting Refresher Course, 2018 - 2021

Member, Daily Bulletin Editorial Board, 2017 – Present

Reviewer, Radiographics Award Subcommittee, 2016 - Present

The American College of Radiology (ACR)

Member, Economic Pediatric Radiology Committee, 2020 - Present

Member, Council Steering Committee, 2020 - Present

Councilor-at-Large, 2020 - Present

Chair, Dose Index Registry Committee – Quality & Safety; 2018 – Present

Member & Liaison for Dose Index Registry, Commission on Medical Physics, 2018 - Present

Member, National Radiology Data Registry Steering Committee, 2018 - Present

Councilor (Florida Radiological Society), 2017 – 2019; Alternate 2015 - 2017

Question Writer (Physics), Diagnostic In-Service Exam (DXIT), 2017 – Present

Senior Section Editor (Physics), RadExam created by the ACR and The Association of Program Directors in Radiology (APDR), 2016 – Present

Chair (Physics Section), Radiology Assessment and Review Series 2 (RADAR 2), 2016 – 2018

Member, Committee on Government Relations, Medical Physics, 2015 – Present

Member, ACR Subcommittee on Appropriateness Criteria (AC) Radiation Exposure, 2017 – Present

Councilor-at-Large (Medical Physics), 2017

The American Association of Physicists in Medicine (AAPM)

Chair, Medical Physics Education of Physicians Committee, 2020 – Present, Vice-Chair 2018 – Present, Member 2016 - Present

Chair, Imaging Physics Curricula Subcommittee, 2015 – 2021, Vice-chair 2014 – 2015, Member 2012 – 2014

Member, Diagnostic Radiology Resident Physics Curriculum Working Group, 2021 - Present

Member, Education Council 2021 – Present

Chair, Cardiology Fellow Physics Curriculum Working Group 2021 - Present

President (Florida Chapter), 2018 – 2019; President-Elect (Florida Chapter), 2017 – 2018

Director (Imaging Track), AAPM Spring Clinical Meeting, 2019 – 2020, Co-Director 2017 - 2019

Director & Chair of Voting Committee, Summer School, Practical Medical Image Analysis, 2019

Organizer/Moderator, Professional Symposium, Annual Meeting of the AAPM, 2015 – 2018

Member, Medical Physics Board of Associate Editors, 2016 – Present

Member, Physics Education Taskforce Subcommittee, 2016 - 2021

Member, Task Group No. 305 - Task Group on Development of Standards for Vendor-Neutral Reject Analysis in Radiography, 2017 - Present

Member, Working Group on Computer-Aided Diagnosis, 2016 - 2021

Member, Radiation Oncology Medical Physics Education Subcommittee, 2016 - 2021

Member, Imaging Informatics Subcommittee, 2015 - Present

Member, Task Group 273 - CAD Assessment, Quality Assurance and Training, 2015 - Present

Invited Reviewer, Annual Meeting of the AAPM, 2012 – Present

Invited Reviewer, AAPM Spring Clinical Meeting, 2016 - Present

Member, Computer-Aided Image Analysis Subcommittee, 2012 – Present

Member, Spring Clinical Meeting Subcommittee, 2015 – 2020

Board Member, American Board of Magnetic Resonance Safety (ABMRS), 2016 – Present

Grant Reviewer (Internal), University of Central Florida, 2017 – 2018

Editorial Advisory Board, Applied Radiology, 2021 - Present

Associate Editor, *Medical Physics,* 2016 – Present (Guest Associate Editor, 2008 – 2016, Reviewer 2005 – Present)

Editorial Advisory Board, Applied Radiology, 2021 – Present

Reviewer, *Radiology*, 2011 – Present

Reviewer, *Journal of Vascular and Interventional Radiology*, 2017 - Present

Reviewer, *Thorax*, 2016 - 2018

Reviewer, *Journal of Medical Imaging*, 2015 - 2018

Reviewer, *American Journal of Roentgenology (AJR)*, 2014 - Present

Reviewer, *IEEE Transactions on Medical Imaging*, 2006 – 2016

Reviewer, *Academic Radiology*, 2007 – 2018

Reviewer, *IEEE Transactions on Biomedical Engineering*, 2008 - 2015

Reviewer*, Optical Engineering*, 2009 – 2015

Reviewer, *Computational and Structural Biotechnology Journal*, 2013 - 2015

Reviewer*, Image & Vision Computing*, 2008

Reviewer, *IEEE Transactions on Nuclear Science*, 2007

Reviewer, *Medical Image Analysis*, 2006

Reviewer, *Artificial Intelligence in Medicine*, 2005

Institutional

Mayo Clinic

Chair, MCA Radiology Medical Physics Division, 2020 – Present
Member, Radiation Safety Committee, 2021 – Present
Member, Enterprise Radiology Artificial Intelligence Subcommittee, 2019 – Present
Member, Enterprise Radiology Analytics Committee, 2019 – Present

Member, Enterprise Laurel Bridget Support Group, 2019 – Present
Member, Enterprise Radiology Education Committee, 2019 - Present
Member, Enterprise Radiology Marketing, 2019
Member, MCA Radiology Education Committee, 2019 – Present
Member, MCA CT Protocol Committee, 2019- Present
Member, MCA DIT, 2019- Present
Member, MCA CR DR Committee, 2019 – Present
Member, MCA Radiology Discipline Oriented Group, 2019 - Present

Florida Hospital
Committee Head and Founder, CT Protocol Committee, 2014 – 2018
Committee Head and Founder, Pediatric Dose Subcommittee, 2013 - 2016
Full Member (Scientific), Florida Hospital Institutional Review Board (IRB), 2013 – 2018
Member, Radiology Research Committee, Florida Hospital, 2014 - 2018
Member, Radiation Safety Committee, Florida Hospital, 2012 – 2018
Member, Radiology Residency Educational Committee, Florida Hospital, 2012 – 2018
Member, Radiology Clinical Competency Committee, Florida Hospital, 2012 - 2018
Member, ACGME Patient Safety Subcommittee, Florida Hospital, 2013 – 2014

Publications

Peer-Reviewed Articles (* indicates senior author if not listed as first author)

J1. Kanal K, Butler P, Chatfield M, Wells J, Samei E, Simanowith M, Golden D, Gress D, Burleson J, **Sensakovic WF**, et al. U.S. diagnostic reference levels and achievable doses for 10 pediatric CT examinations, 2021 (accepted).

J2. Davenport MS, Fruscello T, Chatfield M, Weinstein S, **Sensakovic WF**, Larson DB. Computed Tomography Volumes from 2,398 Radiology Practices in the United States: A Realtime Indicator of the Effect COVID-19 on Routine Care, January to September 2020, *Journal of the American College of Radiology*, 18(3 pt A), 380-387, 2021. https://doi.org/10.1016/j.jacr.2020.10.010

J3. **Sensakovic WF**, et al. Contrast-enhanced mammography: How does it work? *RadioGraphics*, 41(3), 829-839, 2021. https://doi.org/10.1148/rg.2021200167

J4. Don S, **Sensakovic WF**, et al. ACR Dose Index Registry – Digital radiography pilot. *Journal of the American College of Radiology*, 18(8), 1213-1215, 2021. https://doi.org/10.1016/j.jacr.2021.04.001

J5. Long JR, Verhey JT, **Sensakovic WF**, et al. Digital subtraction air arthrography: an innovative technique for needle tip location confirmation. *Current Problems in Diagnostic Radiology*, 50(4), 485-488, 2021. https://doi.org/10.1067/j.cpradiol.2020.04.003. PMID: 32507654

J6. Foy JJ, Al-Hallaq HA, Grekoski V, Tran T, Guruvadoo K, Crofton AR, Armato SG III, ***Sensakovic WF**. Harmonization of radiomic feature variability resulting from differences in CT image acquisition and reconstruction: assessment in a cadaveric liver, *Physics in Medicine and Biology*, 65(20), 1-11, 2020. https://doi.org/10.1088/1361-6560/abb172. PMID: 33063693

J7. **Sensakovic WF**, et al. Fetal dosimetry in CT: A primer. *RadioGraphics*, 40(4), 1061-1070, 2020. https://doi.org/10.1148/rg.2020190166. PMID: 32559149

J8. Pavlicek W, **Sensakovic WF**, et al. Sample content of kinesthetic educational training: Reducing scattered x-ray exposures to interventional physician operators of fluoroscopy. *Journal of Applied Clinical Medical Physics*, 21(7), 196-208, 2020. https://doi.org/10.1002/acm2.12801. PMID: 31886595

J9. Mirza HS, Varich L, **Sensakovic WF**, et al. Tracheomegaly among extremely preterm infants on prolonged mechanical ventilation. *Journal of Pediatrics*, 218, 232-233.E1, 2020. https://doi.org/10.1016/j.jpeds.2019.10.024

J10. Rehani M, Yang K, Melick ER, Heil J, Salat D, **Sensakovic WF**, et al. Patients undergoing recurrent CT scans: Assessing the magnitude. *European Radiology*, 1-9, 2019. https://doi.org/10.1007/s00330-019-06523-y

J11. Agha, AM, Burt JR, Beetler D, Tran T, Parente R, **Sensakovic WF**, et al. The association between transcatheter aortic valve replacement (TAVR) approach and new-onset bundle branch blocks. *Cardiology and Therapy*, 2019. https://doi.org/10.1007/s40119-019-0137-2.

J12. **Sensakovic WF**, Paden RG, Pavlicek W, et al. Protocol optimization in the era of informatics. *Journal of the American College of Radiology*, 16(8): 1121-1122, 2019. https://doi.org/10.1016/j.jacr.2019.04.002

J13. Agha, AM, Bryant JP, Marquez M, Buttc K, Feranec N, **Sensakovic WF**, et al. The frequency of premature coronary artery disease identified on coronary CT angiography among patients presenting with chest pain at a single institution. *Journal of the American College of Cardiology*, *JACC Cardiovasc Imaging*. 12(2):372-374, 2019. https://doi.org/10.1016/j.jcmg.2018.08.011

J14. **Sensakovic WF** and Mahesh M. Role of the medical physicist in the healthcare Artificial Intelligence revolution. *Journal of the American College of Radiology*, 16(3): 393-394, 2018. https://doi.org/10.1016/j.jacr.2018.09.022

J15. Potrebko P, Keller A, Thannoo D, Rao N, Pepe J, Saigal K, Kandula S, **Sensakovic WF**, et al. Gamma Knife versus VMAT Radiosurgery Plan Quality for Many Brain Metastases. *Journal of Applied Clinical Medical Physics*, 19(6):159-165, 2018. https://doi.org/10.1002/acm2.12471

J16. Potrebko P, Shridhar R, **Sensakovic WF**, et al. SPECT/CT Image-based dosimetry for yttrium-90 radionuclide therapy. *Journal of Applied Clinical Medical Physics*, 19(5):435–443, 2018. https://doi.org/10.1002/acm2.12400

J17. Gudmundsson E, Labby Z, Straus, C, **Sensakovic WF**, et al.: Dynamic contrast-enhanced CT for the assessment of tumor response in malignant pleural mesothelioma: A pilot study. *European Radiology*, 2018. https://doi.org/10.1007/s00330-018-5533-9

J18. King M, **Sensakovic WF**, Maxim P, Diehn M, Loo B, Xing L: Line-enhanced deformable registration of pulmonary computed tomography images before and after radiation therapy with radiation-induced fibrosis. *Technology in Cancer Research & Treatment*, 17: 1-11, 2017. https://doi.org/10.1177/153303461774941

J19. **Sensakovic WF**, Warden DR, Bancroft LW. The link between radiation optimization and quality. *Journal of the American College of Radiology*, 14(6): 850-851, 2017. https://doi.org/10.1016/j.jacr.2017.03.020

J20. **Sensakovic WF**, Warden DR, Hough M: Troubleshooting image quality and other problems using the DICOM header. *Radiographics*, 38:847–848, 2018. https://doi.org/10.1148/rg.2018170057.

J21. **Sensakovic WF**: Role of medical physicists in the diagnostic residency training program. *Journal of the American College of Radiology*, 14: 119-121, 2017. http://dx.doi.org/10.1016/j.jacr.2016.08.021; PMID: 27717577

J22. **Sensakovic WF**, O'Dell, MC, Agha A, Woo R, Varich L: CT radiation dose reduction in robot-assisted pediatric spinal surgery. *Spine*, 42(7): E417-E424, 2016. http://dx.doi.org/10.1097/BRS.0000000000001846; PMID: 27513224

J23. **Sensakovic WF** and Warden DR: What is the CT dose report sheet and why is it useful? *American Journal of Roentgenology*. 207(5): 929-930, 2016. http://dx.doi.org/10.2214/AJR.16.16686; PMID: 27490130

J24. **Sensakovic WF**, O'Dell M, Letter H, Kohler N, Rop B, Cook J, Logsdon G, Varich L: Image quality and dose differences caused by vendor-specific image processing of neonatal radiographs. *Pediatric Radiology*, 46(11), 1606-1613, 2016. http://dx.doi.org/10.1007/s00247-016-3663-2; PMID: 27488507

J25. **Sensakovic WF**, Flores M, Hough M: Occupational dose and dose limits: Experience in a large multi-site hospital system. *Journal of the American College of Radiology*, 13 (6), 649-655, 2016. http://dx.doi.org/10.1016/j.jacr.2016.01.014; PMID 27033162

J26. Fursevich D, LiMarzi G, Odell MC, Hernandez MA, ***Sensakovic WF**: Bariatric CT imaging: challenges and solutions. *Radiographics*, 36(4), 1076-1086, 2016. http://dx.doi.org/10.1148/rg.2016150198; PMID 27232505

J27. **Sensakovic WF**, Agha A, Hough M, Rop B, Howley J, Donohoe A, Varich L: Impact of an infant transport mattress on CT dose and image quality. *Academic Radiology*, 23, 209-219, 2016. http://dx.doi.org/10.1016/j.acra.2015.10.011; PMID 26625704

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Non-Peer-Reviewed Articles (* indicates senior author if not listed as first author)

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Books and Book Chapters

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C2. Abrahams RB, Huda W, **Sensakovic WF**: Imaging Physics Case Review. Elsevier, Netherlands, 2019.

C3. **Sensakovic WF**: Magnetic resonance imaging. In: Locko RC, ed. Handbook of Quality and Safety in Medical Imaging. Springer Nature, Netherlands, 2020 (In Press).

C4. **Sensakovic WF** and Armato SG III: Techniques for the automated segmentation of lung parenchyma in thoracic computed tomography scans. In: Suzuki K, ed. *Machine Learning in Computer-Aided Diagnosis: Medical Imaging Intelligence and Analysis*. IGI Global, USA, 2012.

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Published Abstracts (* indicates senior author if not listed as first author) See also "Invited Presentations"

A1. Kanal K, Butler P, Chatfield M, Wells J, Samei E, Simanowith M, Golden D, Gress D, Burleson J, **Sensakovic WF**, et al. Diagnostic Reference Levels (DRLs) and Achievable Doses (Ads) for the 11 Most Commonly Performed Pediatric CT Examinations in the United States (USA) as a function of Patient Age and Size using 1.5 Million Examinations in the American College of Radiology (ACR) CT Dose Index Registry. *Medical Physics*, 2021.

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A3. Gertsenshteyn I, Foy J, Crofton A, Grekoski V, Tran T, Guruvadoo K, Al-Hallaq H, Armato S, ***Sensakovic WF**: Dependence of radiomics features on CT image acquisition and reconstruction parameters using a cadaveric human liver. *Medical Physics*, 46(6):E95, 2019.

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A32. Labby Z, Armato SG III, **Sensakovic WF**, Starkey A, Roberts RY, Straus C, Caligiuri P: Inter-observer variability of mesothelioma area measurements on CT scans. *Medical Physics* 36: 2436, 2009.

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A43. **Sensakovic WF**, Armato SG III, Starkey A: Automatic matching of temporally sequential CT scans. *Radiology* 229(P): 330, 2003.

Non-Abstracted Presentations (* indicates senior author if not listed as first author) See also "Invited Presentations"

N1. Fahrenholtz SJ, Long J, Fox M, Palmieri J, Whitaker M, ***Sensakovic WF**. "Mind Your T's And Z's: Discovery and Correction of Dual Energy X-ray Cross-calibration Bias." Radiological Society of North America (RSNA), Chicago, Illinois, 2021.

N2. **Sensakovic WF**, et al.: Contrast-Enhanced Spectal Mammography (CESM): How Does it Work? Korean Congress of Radiology, Seoul, South Korea, 2020.

N3. **Sensakovic WF**, et al.: Contrast-Enhanced Spectal Mammography (CESM): How Does it Work? Radiological Society of North America (RSNA), Chicago, Illinois, 2019.

N4. Agha AM, Beetler D, Tran T, Parente R, **Sensakovic WF**, et al.: The association between TAVR approach and complete bundle branch blocks. The Society for Cardiovascular Angiography and Interventions Annual Meeting, 2019.

N5. Ahmad Y, **Sensakovic WF**, et al.: Investigation of Brain Anatomy in Individuals with Trisomy 21 versus Euploid Controls. Experimental Biology, Orlando, Florida 2019.

N6. Ahmad Y, **Sensakovic WF**, et al.: Comparison of Brain Anatomy between Individuals with Ts21 and Euploid Controls. Southwestern Social Science Association Annual Meeting, Orlando, Florida, 2018.

N7. Lucia S, **Sensakovic WF**, et al.: 2017. Investigation of Down Syndrome Morphology: Visualizing the Brains and Skulls of Children in 3D using Amira. Eureka Research Society, Orlando, FL, 2017.

N8. Royall IR, Grekoski V, Hough M, **Sensakovic WF**: Comparison of fetal radiation dose estimation methods. Society for Pediatric Radiology Annual Meeting, Nashville, Tennessee, 2018.

N9. Agha AM, Bryant JP, Marquez M, Kendall M, **Sensakovic WF**, et al.: Prevalence of Age-Advanced Coronary Artery Disease on Coronary CT Angiography. American Heart Association Annual Meeting, Anaheim, California, 2017.

N10. **Sensakovic WF**, et al.: Characterization of 3D printing materials: Hounsfield unit energy dependence and comparison to commercially-available tissue equivalent materials. Radiological Society of North America (RSNA), Chicago, Illinois, 2017.

N11. **Sensakovic WF**, et al.: Towards endotracheal tube sizing by measurement on neonatal radiographs. Radiological Society of North America (RSNA), Chicago, Illinois, 2017.

N12. Liu B, Odell MC, Beavers K, Valente M, Ramirez A, Kendall M, **Sensakovic WF**, et al.: Prevalence of coronary artery disease in adults under 30 presenting with acute chest pain – A retrospective study. Radiological Society of North America (RSNA), Chicago, Illinois, 2016.

N13. **Sensakovic WF**, Warden D, Hough MC: Troubleshooting image quality and other problems using the DICOM header. Radiological Society of North America (RSNA), Chicago, Illinois, 2016.

N14. Agha A, Varich L, Woo R, ***Sensakovic WF**: A low-dose protocol for robot-assisted spinal surgery of pediatric scoliosis patients. Society for Minimally Invasive Spine Surgery (SMISS) Global Forum, Las Vegas, Nevada, 2015.

N15. King MT, **Sensakovic WF**, et al: Prediction of pathologic complete response after neoadjuvant chemoradiation therapy for rectal cancer using radiographic texture analysis. American Radium Society (ARS), Kauai, Hawaii, 2015.

N16. **Sensakovic WF**, O'Neal L, Flores MA: Considerations when selecting a patient dose tracking system. American College of Radiology (ACR), Washington, DC, 2015.

N17. **Sensakovic WF**, Kohler N, Odell MC, Rop B, Letter H, Apgar B, Curley G, Pepe J: Reduction of pediatric x-ray dose using image processing. Roentgen Ray Society (ARRS), Toronto, Canada, 2015.

N18. **Sensakovic WF**, Odell MC: Sinonasal lesion measurement: Impact of radiation dose and view. Roentgen Ray Society (ARRS), Toronto, Canada, 2015.

N19. Fursevich D, Odell MC, Hernandez MA, ***Sensakovic WF**: CT imaging of obese patients: Obesity-related artifacts and methods to avoid them. Radiological Society of North America (RSNA), Chicago, Illinois, 2014.

N20. **Sensakovic WF**, Hough MC, Kimbley L: Conventional vs. Dedicated head SPECT system: Image quality comparison. Radiological Society of North America (RSNA), Chicago, Illinois, 2013.

N21. Starkey A, **Sensakovic WF**, Armato SG III: Abras 2: A rapid application development environment for prototyping and deploying quantitative imaging software. Radiological Society of North America (RSNA), Chicago, Illinois, 2013.

N22. **Sensakovic WF**, Garneau J, Baroody F, Pinto J, Armato SG III: Objective assessment of rhinosinusitis using volumetric computer analysis: Preliminary results. Radiological Society of North America (RSNA), Chicago, Illinois, 2012.

N23. Labby, Z, **Sensakovic WF**, Kindler H, Straus C, Armato SG III: Dynamic CT and tumor response for patients with mesothelioma. Eleventh Meeting of the International Mesothelioma Interest Group (IMIG), Boston, Massachusetts, 2012.

N24. **Sensakovic WF**, Garneau J, Baroody FM, Pinto JM, and Armato SG III: A new radiologic staging system for rhinosinusitis: Preliminary results. AAPM Midwest Chapter Fall Meeting, Chicago, Illinois, 2011.

N25. **Sensakovic WF**, Armato SG III, Starkey A, Kindler HL, Vigneswaran WT. Armato SG III: Lung volume improvement in malignant pleural mesothelioma patients undergoing pleurectomy/decortication. Tenth Meeting of the International Mesothelioma Interest Group (IMIG), Kyoto, Japan, 2010.

N26. **Sensakovic WF**, Starkey A, Straus C, Caligiuri P, Roberts RY, Kindler H, Armato SG III: Automated segmentation and measurement of mesothelioma. Tenth Meeting of the International Mesothelioma Interest Group (IMIG), Kyoto, Japan, 2010.

N27. Parsad NM, Silverstein JC, Armato SC III, **Sensakovic WF**, Salgia R, Kindler H, Vigneswaran WT: Virtual surgical planning for mesothelioma: Interactive volume visualization and automated quantification of pleural tumors on a 3D stereoscopic graphics cluster. Tenth Meeting of the International Mesothelioma Interest Group (IMIG), Kyoto, Japan, 2010.

N28. **Sensakovic WF**, Pinto J, Chaaban M, Baroody F, Starkey A, Armato SG III: Development of a novel tool for objective measurement of sinonasal inflammation: 3D computer image analysis. 17th Annual Charles B. Huggins Research Symposium, Chicago, Illinois, 2010.

N29. **Sensakovic WF**, StarkeyA, Pinto J, Baroody F, Armato SG III: Automated segmentation of mucosal change in rhinosinusitis patients. SPIE Medical Imaging, San Diego, California, 2010.

N30. **Sensakovic WF**, Armato SG III, Starkey A: A general method for the identification and repair of concavities in segmented medical images. IEEE Medical Imaging Conference and Nuclear Science Symposium, Dresden, Germany, 2008.

N31. Armato SG III, Osborne M, Hwang DH, Roberts RY, **Sensakovic WF**, Starkey A, MacMahon H, Kindler HL: Thickness and area in the CT-based assessment of mesothelioma tumor response. Ninth Meeting of the International Mesothelioma Interest Group (IMIG), Amsterdam, The Netherlands, 2008.

N32. **Sensakovic WF**, Armato SG III, Starkey A: Extrapolation techniques for textural characterization of tissue in medical images. SPIE Medical Imaging 2007, San Diego, California, 2007.

N33. **Sensakovic WF**, Armato SG III, Starkey A: Automated lung segmentation in magnetic resonance images. SPIE Medical Imaging 2005, San Diego, California, 2005.

N34. **Sensakovic WF**, Armato SG III, and Starkey A: Automated lung segmentation of diseased and artifact-corrupted MR sections. AAPM Midwest Chapter Spring Meeting, Chicago, Illinois, 2005.

N35. **Sensakovic WF**: Low-Profile Antennae. AOC Focus on the Future: The Impact of IEW on the Transformation, New Jersey, 2001.

Invited Presentations (Note: published abstract citation given when available)

I1. Introduction: Overview of regulatory requirements and the physicist's role in the dose monitoring process. Annual Meeting of The American Association of Physicists in Medicine (AAPM), Nashville, TN, July 2018. (Medical Physics 45(6):e462)

I2. Education as a tool for directing our future. Annual Meeting of The American Association of Physicists in Medicine (AAPM), Nashville, TN, July 2018. (Medical Physics 45(6):e120)

I3. Linear and logistic regressions: What they try to explain, and how to interpret the results. Annual Meeting of The American Association of Physicists in Medicine (AAPM), Nashville, TN, July 2018. (Medical Physics 45(6):e456)

I4. Assessing CT image quality and matching protocols across vendors. Annual Meeting of The American Association of Physicists in Medicine (AAPM), Nashville, TN, July 2018. (Medical Physics 45(6):e585)

I5. Fluoroscopic Dose Calculation and Policy. Annual Meeting of The American Association of Physicists in Medicine (AAPM), Nashville, TN, July 2018. (Medical Physics 45(6):e451)

I6. Review of Radiologic Physics, School of Dental Medicine for Oral & Maxillofacial Surgery, University of Connecticut, Farmington, CT, July 2018.

I7. Diagnostic Medial Physics, Dept. of Physics, University of Central Florida, Orlando, FL, May 2018.

I8. Image Wisely – Team approach to teaching radiation safety. Annual Meeting of The Radiological Society of North America (RSNA), Chicago, IL, December 2017.

I9. Case of the day: Physics, Annual Meeting of The Radiological Society of North America (RSNA), Chicago, IL, December 2017.

I10. Trials and tribulations (and solutions) implementing a dose tracking system, Radimetrics working group meeting sponsored by Bayer, Denver, CO, July 2017.

I11. Best practices for statistics in your own projects, Annual Meeting of The American Association of Physicists in Medicine (AAPM), Denver, CO, July 2017. (Medical Physics 44(6):2685)

I12. Practical statistics refresher, Spring Meeting of the Florida Chapter of The American Association of Physicists in Medicine (AAPM), Orlando, FL, March 2017.

I13. Occupational limits/Fetal dose, Spring Meeting of the Florida Chapter of the Health Physics Society, Lake Mary, FL, April 2017.

I14. Beat the clock: Radiology rapid-fire review, Annual Meeting of the American College of Radiology, Washington, DC, May 2017.

I15. Diagnostic medical physics, College of Engineering and Computer Science, University of Central Florida, Orlando, FL, October 2016.

I16. Implementation and analysis of observer studies in medical physics, Annual Meeting of The American Association of Physicists in Medicine (AAPM), Washington, DC, July 2016. (Medical Physics 43(6):3714)

I17. Diagnostic Radiology Residents Physics Curriculum and Updates, Annual Meeting of The American Association of Physicists in Medicine (AAPM), Washington, DC, July 2016. (Medical Physics 43(6):3893-3894)

I18. Practical statistics for medical physicists, Annual Meeting of The American Association of Physicists in Medicine (AAPM), Washington, DC, July 2016. (Medical Physics 43(6):3714)

I19. Medical Physics Imaging Informatics in the Classroom and in Practice, Annual Meeting of The American Association of Physicists in Medicine (AAPM), Washington, DC, July 2016. (Medical Physics 43(6):3760)

I20. Diagnostic medical physics, College of Engineering and Computer Science, University of Central Florida, Orlando, FL, September 2015.

I21. A review of image artifacts, Imaging Continuing Education Symposium, Adventist University, Orlando, FL, September 2015.

I22. Applying and evaluating image processing to reduce radiation dose in radiography, Imaging Technology News Network, Webinar, July 2015.

I23. Practical statistics for medical physicists, Annual Meeting of The American Association of Physicists in Medicine (AAPM), Anaheim, CA, July 2015. (Medical Physics 42(6):3683)

I24. Case of the day: Physics, Annual Meeting of The Radiological Society of North America (RSNA), Chicago, IL, December 2014.

I25. Imaging refresher for standard of care radiation therapy: Review of PET/CT imaging, Annual Meeting of The American Association of Physicists in Medicine (AAPM), Austin, TX, July 2014. (Medical Physics 41(6):441-442)

I26. Clinical diagnostic medical and health physics: An opportunity for researchers as well. Dept. of Medical Physics, University of Chicago, Chicago, IL, December 2013.

I27. ACR accreditation and image quality of a dedicated head SPECT system. American Association of Physicists in Medicine (AAPM) – Florida Chapter Meeting, Orlando, FL, April 2013.

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