

CLIFFORD K. YANG, MD, FACR

UCONN Health
263 Farmington Ave.
Farmington, CT 06030
cyang@uchc.edu

Date of Primary Appointment:

September 2002

Academic Appointments:

UNIVERSITY OF CONNECTICUT HEALTH CENTER

Department of Medicine

Associate Professor of Medicine (Cardiology)

Secondary Appointment

December 23 2013 - present

UNIVERSITY OF CONNECTICUT HEALTH CENTER

Farmington, CT

Department of Diagnostic Imaging and Therapeutics

Associate Professor of Radiology

September 1 2013 - present

UNIVERSITY OF CONNECTICUT HEALTH CENTER

Farmington, CT

Department of Diagnostic Imaging and Therapeutics

Assistant Professor of Radiology

September 2002 – August 2013

UNIVERSITY OF CONNECTICUT HEALTH CENTER

Department of Medicine

Assistant Professor of Medicine (Cardiology)

Secondary Appointment

November 2010 – December 2013

Chest: Interim Chief of Chest Radiology

June 2018 – December 2018

Cardiac: Chief of Cardiac Radiology

September 2007 – present

CONNECTICUT CHILDREN'S MEDICAL CENTER

Associate Active Staff of Connecticut Children's Medical Center in the Division of Radiology

Division of Radiology

November 2010-present

Orthopedics: Chief of Orthopedic Radiology. Responsible for musculoskeletal radiology/orthopedic joint conferences and magnetic resonance imaging protocols for orthopedic imaging.

May 2006 – June 2008

Lecture to Radiology Residents on Orthopedic Radiology

2004 – June 2008

Computed Tomography: Chief of computed tomography section. Responsible for Multidetector 16 Slice

computed tomography scanner protocols. Taught medical students and residents about computed tomography applications.

September 2002 – 2007

Genitourinary: Chief of Genitourinary Radiology. Taught medical students and residents about Genitourinary Radiology.

September 2002 – 2003

Past Experience:

CAPE COD HOSPITAL

Hyannis, MA

Department of Diagnostic Radiology

General Diagnostic Radiologist

July 2001 – July 2002

Education:

AMERICAN COLLEGE OF RADIOLOGY

Certificate of Proficiency Cardiac Magnetic Resonance

October 2017

AMERICAN COLLEGE OF RADIOLOGY

Certificate of Proficiency Coronary Computed Tomographic Angiography

December 2016

SOCIETY OF CARDIOVASCULAR MR

Level 2 Cardiac MR certificate

February 2, 2010

SOCIETY OF CARDIOVASCULAR CT

Diplomate of the Certification Board of Cardiovascular Computed Tomography

November 2009

BOSTON UNIVERSITY

Boston, MA

Department of Diagnostic Radiology

Body Imaging Fellow. CT/MRI/US fellowship.

July 2000 – June 2001

UNIVERSITY OF CONNECTICUT HEALTH CENTER

Farmington, CT

Department of Diagnostic Imaging and Therapeutics

Radiology Resident

July 1996 – June 2000

ROGER WILLIAMS HOSPITAL, BROWN UNIVERSITY

Providence, RI

Department of Internal Medicine

Intern

July 1995 – June 1996

UNIVERSITY OF CONNECTICUT HEALTH CENTER

Farmington, CT

Department of Anatomic Pathology

Honors Pathology Fellow. Performed autopsies, analyzed surgical specimens, organized radiology/pathology, and orthopedics/pathology correlation conferences.

August 1994 – June 1995

UNIVERSITY OF CONNECTICUT HEALTH CENTER

Farmington, CT

M.D.

August 1989 – July 1994

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Cambridge, MA

S.B. Electrical Engineering

September 1984 – May 1988

Publications:

*Jun Bai, Tianyu Wang, **Clifford Yang**, and Sheida Nabavi, Feature Map Pixel-Fusion Siamese Network for Breast Cancer Detection Comparing Current and Prior Mammograms, March 5, 2021. *In Press*

*Jun Bai, Russell Posner, Tianyu Wang, **Clifford Yang**, Sheida Nabavi, Applying Deep Learning in Digital Breast Tomosynthesis for Automatic Breast Cancer Detection: A Review, *Medical Image Analysis*, March 19, 2021.

* Kim, Jaimy Villavicencio; Saraceni, Corey; Savir, Myra; **Yang, Clifford**; Levine, Joel, Extramedullary hematopoiesis Causing Acute Cholecystitis, *The American Journal of Gastroenterology*. 115: S694, October 2020.

*Yufeng Zheng, **Clifford Yang**, and Hongyu Wang, Enhancing Breast Cancer Detection with Recurrent Neural Network, Proc. SPIE 11399, Mobile Multimedia/Image Processing, Security, and Applications 2020, 113990C (21 April 2020); doi: 10.1117/12.2558817 Event: SPIE Defense + Commercial Sensing, 2020, Online Only, California, United States.

* Yufeng Zheng and **Clifford Yang**, Enhancing Breast Cancer Detection with Recurrent Neural Network and Follow-up Digital Mammography, SPIE conference on Computer Aided Diagnosis, Houston, TX, February 15-20, 2020.

*Dina Abdelhafiz, Sheida Nabavi, Reda Ammar, **Clifford Yang**, Jinbo Bi, Residual Deep Learning System for Mass Segmentation and Classification in Mammography, In 10th ACM International Conference on Bioinformatics, Computational Biology and Health Informatics (ACM-BCB '19), September 7–10, 2019, Niagara Falls, NY, USA. ACM, New York, NY, USA, 10 pages. <https://doi.org/10.1145/3307339.3342157>

*Dina Abdelhafiz, Deep Learning Systems for Automated Lesion Detection, Segmentation and Classification in Mammography, Doctoral Proposal Defense, Advisory Committee, Prof. Reda Ammar, Prof. Sheida Nabavi, Prof. Sanguthevar Rajasekaran, Prof. **Clifford Yang**, Department of Computer Science and Engineering University of Connecticut, June 13, 2019.

*John A. Cieslak, M.D., Ph.D., Elena G. Violari, M.D., and **Clifford Yang**, M.D., A Case of Torsion of a “Wandering Spleen” in a 29 Year-Old Female with Left Upper Quadrant Abdominal Pain Diagnosed on Contrast enhanced CT of the Abdomen, *Connecticut Medicine*, Volume 82, Number 9, p. 547-549, October 2018.

*Dina Abdelhafiz, Jinbo Bi, **Clifford Yang**, Reda Ammar, Sheida Nabavi, Convolutional Neural Network for Automated Mass Segmentation in Mammography, *8th International Conference on Computational Advances in Bio and Medical Sciences (ICCABS2018)*, August 2018.

*Yufeng Zheng ; **Clifford Yang** ; Alex Merkulov, Breast Cancer Screening Using Convolutional Neural Network and Follow-up Digital Mammography, *SPIE*, June 1, 2018.

*John Cieslak, Elena Violari, **Clifford Yang**, Hydranencephaly in a 25 Year-Old Male With Seizures Diagnosed on Non-Contrast CT of the Brain, *Radiology Today*, May, 2018.

*Lu MT, *Meyersohn NM, Mayrhofer T, Bittner DO, Emami H, Puchner SB, Foldyna B, Mueller M, Hearne S, **Yang C**, Achenbach S, Truong QA, Ghoshhajra BB, Patel MR, Ferencik M, Douglas PS, Hoffmann U. Central Core Laboratory versus Site Interpretation of Coronary CT Angiography: Agreement and Association with Cardiovascular Events in the PROMISE Trial. *Radiology*, November 27, 2017.

*Dina Abdelhafiz, Sheida Nabavi, Reda Ammar, **Clifford Yang**, Survey on Deep Convolutional Neural Networks in Mammography, *IEEE* October, 2017.

*Dina Abdelhafiz, **Clifford Yang**, Reda Ammar and Sheida Nabavi, Deep Convolutional Neural Networks for Mammography: Advances, Challenges and Applications. From 7th IEEE International Conference on Computational Advances in Bio and Medical Sciences (ICCABS2017) Orlando, FL, USA. 19-21October 2017.

*Erick Avelar and **Clifford Yang** et. al, Effect of Adjuvant Chemotherapy on Left Ventricular Remodeling in Newly Diagnosed Primary Breast Cancer Women: A Pilot Prospective Longitudinal Cardiac Magnetic Resonance Imaging Study, *Journal of Thoracic Imaging*, July 7, 2017.

*Hoffmann U, Ferencik M, Udelson JE, Picard MH, Truong QA, Patel MR, Huang M, Pencina M, Mark DB, Heitner JF, Fordyce CB, Pellikka PA, Tardif JC, Budoff M, Nahhas G, Chow B, Kosinski AS, Lee KL, Douglas PS; **PROMISE Investigators**, Prognostic Value of Noninvasive Cardiovascular Testing in Patients With Stable Chest Pain: Insights From the PROMISE Trial (Prospective Multicenter Imaging Study for Evaluation of Chest Pain), *Circulation*. 2017 Jun 13;135(24):2320-2332. doi: 10.1161/CIRCULATIONAHA.116.024360. Epub 2017 Apr 7.

*Mark, Daniel et. al for the **PROMISE Investigators**, Economic Outcomes With Anatomical Versus Functional Diagnostic Testing For Coronary Artery Disease, *Ann Intern Med*. 2016;165:94-102. doi:10.7326/M15-2639

*Mark DB, Anstrom KJ, Sheng S, Baloch KN, Daniels MR, Hoffmann U, Patel MR, Cooper LS, Lee KL, Douglas PS; **PROMISE Investigators**, Quality-of-Life Outcomes With Anatomic Versus Functional Diagnostic Testing Strategies in Symptomatic Patients With Suspected Coronary Artery Disease: Results From the PROMISE Randomized Trial, *Circulation*. 2016 May 24;133(21):1995-2007. doi: 10.1161/CIRCULATIONAHA.115.020259. Epub 2016 Apr 27.

*Yufeng Zheng; **Clifford Yang**; Alex Merkulov; Malavika Bandari, Early breast cancer detection with digital mammograms using Haar-like features and AdaBoost algorithm, Proc. SPIE 9871, *Sensing and Analysis Technologies for Biomedical and Cognitive Applications* 2016, 98710D (May 19, 2016); doi:10.1117/12.2227342

*Douglas PS, Hoffmann U, Patel MR, Mark DB, Al-Khalidi HR, Cavanaugh B, Cole J, Dolor RJ, Fordyce CB, Huang M, Khan MA, Kosinski AS, Krucoff MW, Malhotra V, Picard MH, Udelson JE, Velazquez EJ, Yow E, Cooper LS, Lee KL; **PROMISE Investigators**, Outcomes of anatomical versus functional testing for coronary artery disease, *N Engl J Med*. 2015 Apr 2;372(14):1291-300. doi: 10.1056/NEJMoa1415516. Epub 2015 Mar 14.

*Douglas PS, Hoffmann U, Lee KL, Mark DB, Al-Khalidi HR, Anstrom K, Dolor RJ, Kosinski A, Krucoff MW, Mudrick DW, Patel MR, Picard MH, Udelson JE, Velazquez EJ, Cooper L; **PROMISE investigators**, PROspective Multicenter Imaging Study for Evaluation of chest pain: rationale and design of the PROMISE trial, *Am Heart J*. 2014 Jun;167(6):796-803.e1. doi: 10.1016/j.ahj.2014.03.003. Epub 2014 Mar 18.

*Kumar S, Marfatia, R, Tannenbaum S, **Yang C**, Avelar E. Doxorubicin-Induced Cardiomyopathy 17 Years after Chemotherapy, *The Texas Heart Institute Journal*, volume 39, number 3, 2012; 42-47.

*Busque S, Cantarovich M, Mulgaonkar S, Gaston R, Gaber AO, Mayo PR, Ling S, Huizinga RB, Meier-Kriesche HU; **PROMISE Investigators**, The PROMISE study: a phase 2b multicenter study of voclosporin (ISA247) versus tacrolimus in de novo kidney transplantation, *Am J Transplant*. 2011 Dec;11(12):2675-84. doi: 10.1111/j.1600-6143.2011.03763.x. Epub 2011 Sep 22.

*Rios CG, Leger RR, Cote M, **Yang C**, Arciero RA. Posterolateral Corner Reconstruction of the Knee: Evaluation of a Technique with Clinical Outcomes and Stress Radiography, *The American Journal of Sports Medicine*, 2010 May 5. Podium presentation at the AOSSM Specialty Day, March 13, 2010. New Orleans, LA.

*Dr. Venkatesh Handratta, Dr. Ellen Hsu, Dr. John Vento, Dr. **Clifford Yang**, Dr. Kaloyan Tanev, Neuroimaging findings and brain-behavioral correlates in a former boxer with Chronic Traumatic Brain Injury, *Neurocase*, 2009 Dec. 4: 1-10.

*John Papanikolaou, Dimitrios Karakitsos, **Clifford Yang**, Theodosios Saranteas, Andreas Karabinis, Transesophageal Echocardiography in Detecting Tricuspid Valve Pathology in an Intensive Care Unit Patient, March 13, 2009. Letter to the Editor, *Journal of Cardiothoracic and Vascular Anesthesia*, February 2010 (Vol. 24, Issue 1, Pages 211-213).

*Kaloyan S. Tanev, Melissa Roether, **Clifford Yang**, Alcohol Dementia and Thermal Dysregulation: A Case Report and Review of the Literature, *American Journal of Alzheimer's Disease and Other Dementias*, Dec./Jan. 2009 Vol. 23, No. 6, Pages 563-570.

*Andreas Karabinis MD, PhD, Theodosios Saranteas MD, DDS, PhD, Dimitrios Karakitsos MD, PhD, Daniel Lichtenstein MD, PhD, John Poularas MD, **Clifford Yang MD**, and Christodoulos Stefanadis MD, PhD, The "cardiac-lung mass" artifact: an echocardiographic sign of lung atelectasis and/or pleural effusion, *Critical Care*, September 30, 2008, pages 1-6 (not for citation).

*Neil Gupta MD, Radiology Resident, and **Clifford Yang MD**, Assistant Professor of Radiology, Case of the Month: Aneurysmal Bone Cyst. *Diagnostic Imaging*, December 2007, p. 17.

*Zahedi, Sohrab MD; **Yang, Clifford MD**; O'Hanlon, Donal MD; Tanev, Kaloyan MD; Shea, William P. MD, Electroconvulsive Therapy and Venous Angiomas: Two Case Reports and Review of the Literature. *Journal of ECT*. 22(3):228-230, September 2006.

***C. Yang**, B. Jagjivan, and K. Rao: Germinoma -- Unusual Presentation: A Case Report. *Connecticut Medicine* 2004; 68: 617-619.

***C. Yang**, S. Brown. Varicocele Detection. Letter to the Editor, *Journal of Ultrasound in Medicine*. June 1998, vol. 17, number 6, p. 392.

***C. Yang**, J. F. Reintjes (advisor). Fidelity of Analog to Digital Conversion. MIT B.S. Thesis. May 1988.

***C. Yang**. Integrated Circuit Package Impedance Characterization. Fairchild Semiconductor Internal Publication. May 1988.

Internet Journal Publications:

*Keerthana Sharma Anand MBBS, **Clifford Yang** (editor), Persistent Primitive Trigeminal Artery, Radiology Online 2021.

*Keerthana Sharma Anand MBBS, **Clifford Yang** (editor), Intracranial Dermoid Cyst, Radiology Online 2021.

*Keerthana Sharma Anand MBBS, **Clifford Yang** (editor), Spontaneous Intracranial Hypotension, Radiology Online 2021.

*Keerthana Sharma Anand MBBS, **Clifford Yang** (editor), Cavernous Angioma, Radiology Online 2021.

*Rahul Dey MD, **Clifford Yang** (editor), Non compaction Cardiomyopathy. Radiology Online, 2021
https://health.uconn.edu/radiology-online/wp-content/uploads/sites/175/2021/06/RD_Noncompaction_cm.pdf

- *Michael Chung, **Clifford Yang**, Cystic Bronchiectasis. Radiology Online, 2021.
- *Shen, E., **Yang, C.**, Wolansky, L. Craniopharyngioma. Radiology Online, 2021
<https://health.uconn.edu/radiology-online/wp-content/uploads/sites/175/2021/02/S-Craniopharyngioma.pdf>
- *Shen, E., **Yang, C.**, Wolansky, L. Fahr's Disease. Radiology Online, 2021.
- *Shen, E., **Yang, C.**, Wolansky, L. Gorlin's Syndrome. Radiology Online, 2021.
- *Bradley Kincaid MD and **Clifford Yang** MD, Calcified Disc Extrusion. Radiology Online (2020).
- *Mohaned Serdah, MS3, Brad Kincaid MD and **Clifford Yang** (editor). Cardiac Amyloidosis. Radiology Online (2020)
<https://health.uconn.edu/radiology-online/wp-content/uploads/sites/175/2020/03/BK-20-Thoracic-MRI-Cardiac-Amyloidosis.pdf>
- *Elena Viola MD and **Clifford Yang** MD (editor). Aortic Dissection, Stanford Type A. Radiology Online (2018)
<https://health.uconn.edu/radiology-online/wp-content/uploads/sites/175/2018/03/EV-11-Cardiac-Thoracic-Vascular-CT-Aortic-Dissection-Stanford-Type-A.pdf>
- *Krithika Srikanthan, MD; Electra Kaloudis MD; **Clifford Yang** MD (editor). Ebstein Anomaly. Radiology Online (2018)
<https://health.uconn.edu/radiology-online/wp-content/uploads/sites/175/2018/01/KS-15-Thoracic-CT-Cardiac-ebstein-anomaly.pdf>
- *Jeff Guzelian MD and **Clifford Yang** MD (editor). Right Heart Failure. Radiology Online (2018)
<https://health.uconn.edu/radiology-online/wp-content/uploads/sites/175/2018/01/JPG-8-US-Vascular-Cardiac-Right-heart-failure.pdf>
- *Krithika Srikanthan, MD and **Clifford Yang**, MD (editor). Right Arch with ALSA. Radiology Online (2018)
<https://health.uconn.edu/radiology-online/wp-content/uploads/sites/175/2018/01/KS-16-Thoracic-Vascular-Cardiac-CT-Right-aortic-arch-w-ALSA.pdf>
- *Jeffrey Guzelian, MD and **Clifford Yang** MD (editor). Sickle Cell Anemia. Radiology Online (2018)
<https://health.uconn.edu/radiology-online/wp-content/uploads/sites/175/2018/01/JPG-4-CT-Thoracic-GI-Cardiac-M SK-Sickle-Cell-Anemia.pdf>
- *Erin Rowe MD, Alex Merkulov MD and **Clifford Yang** MD, Anomalous origin of the right coronary from the left cusp with an interarterial (malignant) course., *Radiology Today*, August 2015.
- *Ryan Joyce MD, PGY-2 and **Clifford Yang** MD, Associate Professor of Radiology, Femoral Artery Pseudoaneurysm: *Aunt Minnie*, August 19, 2014.
- *Chris Badalucco BS, MS3; Raphael Pacheco MD, PGY-5 and **Clifford Yang** MD, Associate Professor of Radiology, Constrictive Pericarditis: *Case in Point*, July 17, 2014.
- *Zaixiang Sherry Zhang, Radiology Resident and **Clifford Yang**, Assistant Professor of Radiology, Petrous Apex Cholesterol Granuloma: *Case in Point*, November 4, 2008.
- *Zaixiang Sherry Zhang, Radiology Resident and **Clifford Yang**, Assistant Professor of Radiology, Left Ventricular Aneurysm: *Case in Point*, May 19, 2008.
- *Zaixiang Sherry Zhang, Radiology Resident and **Clifford Yang**, Assistant Professor of Radiology, Lipoma Arboreescens: *Case in Point*, March 20, 2008.

*Zaixiang Sherry Zhang, Radiology Resident and **Clifford Yang**, Assistant Professor of Radiology, Fusiform Basilar Artery Aneurysm: *Case in Point*, December 21, 2007.

*Neil Gupta, Chief Radiology Resident, and **Clifford Yang**, Assistant Professor of Radiology, Hydrancephaly: *Case in Point*, November 21, 2007.

*Christine L. Vetter, Chief Radiology Resident, and **Clifford Yang**, Assistant Professor of Radiology, Third Ventricle Arachnoid Cyst: *Case in Point*, January 19, 2007.

Invited Lectures:

Cardiac MRI
Boston University Medical Center
Department of Radiology
Lecture to Radiology Residents on Cardiac Masses
October 19, 2021

Diagnostic Radiology
MIT Media Lab, Cambridge MA
Advanced Imaging Group
August 6, 2015

Cardiac MRI
The Hospital of Central Connecticut, New Britain CT
Department of Cardiology
CME lecture on the clinical application of Cardiac MRI
March 25, 2015

Cardiac and Brain Perfusion CTA Training Phantoms
Toshiba Medical Center, Irving CA
Demonstration of the Cardiac and Brain Phantom for potential commercial license
August 28, 2014

Cardiac and Brain Perfusion CTA Training Phantoms
RSNA Chicago, IL
Gammex, Inc.
Demonstration of the Cardiac and Brain Phantom for potential commercial license
December 5, 2013

Cardiac and Brain Perfusion CTA Training Phantoms
RSNA Chicago, IL
CIRS, Inc.
Demonstration of the Cardiac and Brain Phantom for potential commercial license
December 4, 2013

Cardiac CTA Training Phantom
Massachusetts General Hospital, Boston MA
Department of Radiology
Demonstration of the Cardiac Phantom with atrial fibrillation simulator
March 30, 2012

Cardiac CTA Training Phantom
Massachusetts General Hospital, Boston MA
Department of Radiology
Demonstration of the Cardiac Phantom
February 16, 2012

Cardiac CTA Training Phantom
Columbia University
New York Presbyterian Hospital, New York City NY
Department of Cardiology and Radiology
Demonstration of the Cardiac Phantom
December 19, 2011

Cardiac CTA Training Phantom
Hartford Hospital, Hartford CT
Department of Radiology
Demonstration of the Cardiac Phantom
October 19, 2011

Cardiac CTA Training Phantom
Yale University, New Haven CT
Department of Radiology
Lecture and Demonstration of the Cardiac Phantom
September 25, 2011

Cardiac CTA Training Phantom
Boston University Medical Center, Boston MA
Department of Radiology
Lecture on the Cardiac Phantom
July 13, 2011

Cardiac CTA Training Phantom
University of Massachusetts Medical School, Worcester MA
Department of Radiology
Live demonstration of the Cardiac Phantom
July 11, 2011

Cardiac CTA
Hartford Hospital, Hartford CT
Department of Radiology
Cardiac CTA case lecture to radiology residents
November 1, 2010

Cardiac MRI
St. Vincent's Medical Center, Bridgeport CT
Department of Radiology
Grand Rounds 1 hour lecture to radiology residents
September 13, 2010

Cardiac CTA
Wayne State Medical Center, Detroit MI
Department of Radiology
Grand Rounds 1 hour CME lecture to radiologists and technologists
June 21, 2010

Cardiac CTA
St. Vincent's Medical Center, Bridgeport CT
Department of Radiology
Grand Rounds 1 hour CME lecture to radiologists and technologists
March 19, 2010

Posters:

*Dina Abdelhafiz, Sheida Nabavi, Reda Ammar, **Clifford Yang**, The Effect of Pre-Processing on Breast Cancer Detection Using Convolutional Neural Networks, 2018 IEEE International Symposium on Biomedical Imaging, Washington D.C., April 6, 2018.

*Marisa Terino, Aakash Aggarwal, Haleh Vaziri, **Clifford Yang**, Superior Mesenteric Artery Syndrome; A Typical Presentation of an Uncommon Clinical Entity. American College of Gastroenterology, Las Vegas, NV October 14-19, 2016.

*P. Athwal MD, S. Bahadori MD, C. Frechette RTR, M. Galiette MSE, **C. Yang MD**, Carotid and Neuroperfusion CTA phantom. ASNR 52nd annual meeting, Montreal, Quebec, CANADA, May 17-22, 2014.

*RS. Marfatia, MD, D. Inyangetor, MD, N. Alluri, MD, **C. Yang**, MD, E. Kaloudis, MD, MPH, D. Fellows, MD, D. Hager, MD, BT. Liang MD, CD. Runowicz, MD, S. Tannenbaum, MD and E. Avelar, MD Early Detection of Cardiotoxicity by Advanced Cardiac Imaging and a Novel Biomarker in Breast Cancer Patients Undergoing Chemotherapy. 34th Annual San Antonio Breast Cancer Symposium, San Antonio, Texas, December 6- 10, 2011.

*R.S. Marfatia, S. Kumar, M. Rai, R. Feinn, E. Kaloudis, **C. Yang**, E. Avelar, Cardiac Magnetic Resonance Imaging Assessment of Right to Left Ventricular Interaction in Sleep Apnea Patients with Normal Pulmonary Pressure, International Academy of Cardiology, 16th World Congress on Heart Disease, Annual Scientific Sessions 2011, Vancouver, BC, Canada July 23-26, 2011.

*Sohrab Zahedi M.D., William B. Shea M.D., Donal O'Hanlon M.D., Kaloyan Tanev M.D., **Clifford Yang M.D.**, ECT and Venous Angiomas: Two Case Reports and Review of the Literature, University of Connecticut Health Center, April 27, 2006.

Oral Presentations:

*Dina Abdelhafiz, Sheida Nabavi, Reda Ammar, **Clifford Yang** and Jinbo Bi, Convolutional Neural Network for Automated Mass Segmentation in Mammography, ICCABS, Las Vegas, NV September 2018.

* Yufeng Zheng, Alcorn State Univ. (United States); **Clifford Yang**, Aleksey Merkulov, Univ. of Connecticut Health Ctr. (United States). Breast cancer screening using convolutional neural network and follow-up digital mammography Paper 10669-4 Time: 9:40 AM - 10:00 AM. SPIE Conference, Orlando, FL April 15, 2018.

*Dina Abdelhafiz MS, Sheida Nabavi PhD, Reda Ammar PhD, **Clifford Yang MD**, The Effect of Pre-processing on Breast Cancer Detection with Convolutional Neural Networks, International Symposium of Biomedical Imaging, Washington DC April 4-7, 2018.

*Lu MT, *Meyersohn NM, Mayrhofer T, Bittner DO, Emami H, Puchner SB, Foldyna B, Mueller M, Hearne S, **Yang C**, Achenbach S, Truong QA, Ghoshhajra BB, Patel MR, Ferencik M, Douglas PS, Hoffmann U. Central Core Laboratory versus Site Interpretation of Coronary CT Angiography: Agreement and Association with Cardiovascular Events in the PROMISE Trial. High Impact Clinical Trial Session at RSNA, November 27, 2017.

*Huq Samantha, Gomes Danilo, **Yang Clifford**. The Phantom Watermelon: a First Order Model for Single vs. Dual-Energy CT Radiation Dose. American College of Radiology, Washington, DC. May 15-19, 2016.

*Yufeng Zheng PhD, **Clifford Yang MD**, Alex Merkulov MD, Malavika Bandari MD, Early Breast Cancer Detection with Digital Mammograms Using Haar-like Features and AdaBoost Algorithm, SPIE DSS Conference, Baltimore MD April 17-21, 2016.

*R.S. Marfatia, S. Kumar, M. Rai, R. Feinn, E. Kaloudis, **C. Yang**, E. Avelar, Left Ventricular Mass Correlates with Abnormal Peak Filling Rate by Cardiac Magnetic Resonance Imaging in Hypertensive Patients with Normal Echocardiographic Diastolic Parameters, International Academy of Cardiology, 16th World Congress on Heart

Disease, Annual Scientific Sessions 2011, Vancouver, BC, Canada, July 23-26, 2011.

Research:

Deep Learning for Analyzing 3D Digital Breast Tomosynthesis \$50K grant, Dr. Sheida Nabavi July 8, 2020. This is an internal UCONN grant supporting artificial intelligence in the quest to read 3D mammograms. In addition to Jun Bai a PhD candidate and Annie Jin, medical student, I am working with Dr. Jinbo Bi a computer scientist. I am a co-PI and the radiologist on the team.

PROMISE Trial (Prospective Multicenter Imaging Study for Evaluation of Chest Pain) Goal: To determine whether the information derived from an anatomic imaging strategy (> 64 slice CTA) as compared to a functional testing strategy (usual care) will provide superior clinical outcomes in patients with symptoms concerning for coronary artery disease (CAD). Aim: 200 sites; follow-up: 5 years. Principal Investigator Pam Douglas, Udo Hoffman, Participants at UCONN Dr. Erick Avelar, Clifford Yang. February 2010. I was Principal Investigator at UCONN October 10, 2013 to December 4, 2014. IRB# 11-007-3.

Utility of Cardiac Magnetic Resonance Imaging (CMR), Serum CASPASES, and Three Dimensional Echocardiography (3-D Echo) in Monitoring Patients on Chemotherapy. American Cancer Society Grant leadership #635379. (Dr. Carolyn Runowicz). Principal Investigator Dr. Erick Avelar, Co Investigators Susan Tannenbaum, Carolyn Runowicz, Bruce Liang, David Hager, Douglas Fellows, Clifford Yang, Nitya Alluri, Simi Kumar, Ravi Marfatia. February 2010

Inventions:

Computer-Aided Detection Methods and System for Breast Cancer Screening. US Provisional Patent Application Serial No. 62657430, UCONN Internal No. UCONNCG-18047, filed April 13, 2018. This is a machine learning artificial intelligence program that reads mammograms to detect cancer.

NeuroPhantom for Interventional Radiology Training. Used a 3D printer to make a model of the carotid arteries, vertebral arteries and Circle of Willis for interventional radiology resident training. UCONN Health Journal. The Brain Issue. November 21, 2017. Software for the model made available for free public use.

Cardiac CTA Practice Phantom. U.S. Utility Patent No. 8920176 for "Training System for Cardiac Computed Tomography Angiography" filed April 25, 2012, issued December 30, 2014. This is a phantom so that CT technologists can learn how to do Cardiac CTA before scanning patients.

CT Perfusion Brain Phantom. US Provisional Patent Application Serial No. 61872679, UCONN Internal No. 12-019R, filed August 31, 2013. This is a training phantom for CT technologists to learn how to do CT brain perfusion before scanning patients.

Awards:

Fellow of the American College of Radiology. May 16, 2021 Washington, D.C. This honor is bestowed to the top 10% of radiologists by the American College of Radiology.

University of Connecticut Health Center Radiology Residents' Teaching Attending of the Year
2005-2006, 2014-2015

University of Connecticut Department of Orthopedic Surgery Residency Program Certificate of Appreciation
July 2006

Board Certified in Diagnostic Radiology (American Board of Radiology)
November 6, 2000

Massachusetts General Hospital: 4th year medical student diagnostic radiology elective. Received Honors grade.
June 1994

Massachusetts Institute of Technology 3rd place in Engineering Writing for MIT B.S. Thesis
March 1988

National Science Foundation Honorable Mention
Cambridge, MA
March 1988

Activities:

Asian Pacific American Medical Students Association (APAMSA)

Member of RSNA, Fellow ACR, Radiological Society of Connecticut, Society of Cardiovascular CT, and Society of Cardiovascular MRI.

MIT career mentor.