Work: Tampa General Hospital, 1 TGH Circle, Room H-125, Office, Tampa FL 33606 | 813.844.4570 | <a href="mailto:clifforddavis@tgh.org">clifforddavis@tgh.org</a> Home: 5009 W San Miguel St, Tampa FL 33629 | 813.919.5156 | cliffrdavis@yahoo.com

Practice: Associate Professor, Department of Radiology, University of South Florida Morsani College of Medicine

Radiology Associates of Florida Hybrid Practice

2008-2023

#### **EDUCATION**

University of Florida, Shands Hospital, Gainesville FL

Diagnostic Radiology Residency and Interventional Radiology Fellowship

2003-2008

Medical College of Virginia, Richmond VA

Medical Doctor 1998-2002

Virginia Tech, Blacksburg VA

Bachelor Science 1994-1998

## PROFESSIONAL LEADERSHIP/SERVICE

#### Vice President of Medical Affairs - Tampa General Hospital

2023-Current

 $\label{thm:committees} \textbf{Supervises major medical staff committees including Peer Review, Credentialing and}$ 

Professionalism Committee.

- Advises provider-based quality initiatives.
- Supervises credentialing/medical staff office for TGH system.

## Medical Staff Officers Board - Tampa General Hospital: Vice Chief-of-Staff

2022-2023

Elected two-year term by medical staff of 1080 bed teaching hospital.

- Vice COS chairs the Professionalism Committee 30-member physician committee charged with reviewing all professionalism events at TGH, developing interventions and recommendations to MEC/credentialing.
- Chair of TGH Policy Committee physician and administrative committee charged with reviewing Medical Staff policies and procedures, editing and presenting to MSO and MEC.
- MSO is responsible for overseeing credentialing, physician policies, developing and enforcing bylaws, assist in future hospital development.

## Executive Leadership Board – Radiology Associates of Florida: Vice President

2022-2023

Executive committee makes all major decisions of new business, contracting, hires, fee negotiation for RAF, a 150-physician radiology practice covering over 20 locations in Florida.

## Pulmonary Embolus Response Team - Director

2021-current

Developed multidisciplinary clinical pathway, ordersets and protocol in conjunction with Interventional Radiology, USF Pulmonary/Critical Care, USF Cardiology and TeamHealth Emergency physicians.

## Medical Staff Officers Board - Tampa General Hospital: Treasurer

2020 - 2022

Elected two-year term by medical staff of 1080 bed teaching hospital.

Board is responsible for overseeing credentialing, physician policies, developing and enforcing bylaws, assist in future hospital development. Elected 2020.

## TGH Surgical Suites Committee – Interventional Radiology Representative

2022-2024

Monthly meeting with surgical/procedural leadership and hospital administration to improve patient outcomes, quality and efficiency in procedural areas.

## Society of Interventional Radiology Private Practice Committee

2019-2021

Appointed to five-member committee to develop educational, leadership

and practice development programs to private practice interventional radiologists.

# Tampa General Hospital Quality Council – Committee member

2020-2022

Quality Council includes leaders throughout TGH/USF which report outcomes, trends and quality improvement. Reports are summarized and reported at monthly Medical Executive Committee meeting.

Medical Staff Executive Board – Tampa General Hospital: Member-at-Large  Elected to consecutive two-year terms by medical staff of 1080-bed teaching hospital.  Board is responsible for overseeing credentialing, physician policies, developing and enforcing bylaws, assist in future hospital development. Elected 2018.	2018 - 2020
Tampa General Hospital Hepatobiliary Symposium Co-Chair  Development and organization of regional multidisciplinary annual conference on hepatobiliary  disease with TGMG transplant, USF GI, USF HPB surgery and USF IR departments. Responsibilities included event location, program, corporate sponsorship, scheduling and CME for attendees.	2019
Society of Interventional Radiology – Prostate Embolization Research Consensus Panel Chief investigator charged with organization to lead national research, assist in developing multicenter trial on Prostate Artery Embolization.	2018 - 2019
Tampa General Hospital Hepatobiliary Symposium Co-Chair  Development and organization of regional multidisciplinary annual conference on hepatobiliary  disease with TGMG transplant, USF GI, USF HPB surgery and USF IR departments. Responsibilities included developing event location, program, corporate sponsorship, scheduling and CME for attendees.	2018
Medical Staff Executive Board – Tampa General Hospital: Member-at-Large  Elected to consecutive two-year terms by medical staff of 1080-bed teaching hospital.  Board is responsible for overseeing credentialing, physician policies, developing and enforcing bylaws, assist in future hospital development. Elected 2016.	2016 - 2018
Orion Medical Management Executive Board  Elected by partners of TOWER radiology - Management Service Organization (MSO) for TOWER radiology and associated medical groups. Board directs Revenue Cycle Management, IT, Clinical Management.	2014 - 2018
Tampa General Hospital/University of South Florida Leadership Academy  Twenty physicians selected by administration from TGH medical staff to attend twelve-month leadership course. Courses taught by medical business leaders and USF Muma business school faculty covering medical and small business accounting, leadership skills and techniques.	2018
Tampa General Hospital Professionalism Committee  Multispecialty committee reviews and investigates reports of unprofessional behavior by medical staff.  Recommends actions to medical staff officers and medical executive committee.	2018 - 2023
Cancer Committee, Tampa General Hospital Co-Chairman  Multispecialty committee appointed by hospital administration to obtain ASCO certification.	2012 – 2018
Physician Professional Review Committee - Radiology Assoc of Florida  Physician led committee chosen to review and investigate, recommend corrective measures for unprofessional behavior by physicians employed by RAF.	2014 - 2022
Tower Radiology/Advanced Diagnostic Imaging Board  Elected by partners of TOWER radiology. Executive board member of private outpatient imaging corporation employing over 500 persons, operating 15 imaging centers and independent MSO/billing corporation. Board duties included implementing and recommendations for all major business aspects of the corporation.	2012 – 2014
Society of Interventional Radiology Leadership Academy – 2012 SIR annual meeting  Nominated by peers and attended SIR leadership academy to promote and foster leadership  to future leaders in the field.	2012
Scheduling committee, Radiology Associates of Florida, Tampa FL  Developed Interventional and Neurointerventional IR call/clinic schedule for 8 physicians; manage office personnel and answering service.	2011-2016

# **Tower Imaging Qualified Retirement Plan Trustee** 2017-2021 Biannual committee charged with choosing investment plan options for ~ 500 Tower employees. PROFESSIONAL EXPERIENCE Program Director IR Integrated Residency (PGY 2-6) - Department of Radiology, USF Health 2018-2022 Perform GME and ACGME programmatic paperwork. Responsible for developing program curriculum and protocols. Develop lecture series for residents, interviews, oversee program committees, teaching conferences, research. Perform resident mentoring, faculty/resident evaluations. Program Director IR Independent Residency (PGY 6/7) - Department of Radiology, USF Health 2019-2022 Submitted initial application to GME/ACGME for approval. Perform programmatic paperwork. Responsible for developing program curriculum and protocols. Develop lecture series for residents, oversee program committees, interviews, teaching conferences, research. Perform resident mentoring, resident evaluations. Program Director/Mentor, Early Specialization in Interventional Radiology Pathway – USF Health 2019-2022 Developed program and submitted GME/ACGME application for initial approval. Pathway developed for diagnostic radiologist residents at USF to declare specialization in IR early in training. Offers additional IR training during DR residency. Program provides eligibility for "Independent IR residency" as PGY-6. Clinical Competency Committee - Interventional Radiology Integrated and Independent Residencies 2019-2023 Committee reviews resident performance biannually. Reviews evaluations, in-service exams, didactic attendance, scholarly activity. Recommends intervention or progression of residents. Program Evaluation Committee - Interventional Radiology Integrated and Independent Residencies 2019-2023 Committee meets annually to review program and faculty evaluations. Develops plan to overcome barriers to resident education, make changes to the residency program based on resident and faculty input. Associate Program Director Interventional Radiology Fellowship - University of South Florida 2016-2018 Assisted in initial application to GME/ACGME to develop IR fellowship into Integrated IR residency at USF. Responsible for organizing curriculum, resident call schedule, teaching conferences, research and fellow/resident evaluations. Perform fellow interviews/tours. **Interventional Radiology Lecture Series** 2009-Current Performed didactic teaching to Interventional Radiology Residents on following topics: Transjugular Intrahepatic Portosystemic Shunt (TIPS) – Placement, narrowing, PV recanalization. Chemoembolization for hepatic tumor therapy Radioembolization for hepatic tumor therapy – Dosimetry Radioembolization for hepatic tumor therapy – Procedure and delivery techniques Genitourinary IR – Nephrostomy, suprapubic tube placement Prostate Artery Embolization – Urologic workup, procedural techniques Thermal ablation of hepatic tumors - Cryoablation, IRE, RFA, Microwave Portal Vein Embolization – Procedure techniques and clinical uses Vertebral Augmentation - Kyphoplasty/Vertebroplasty Indications and procedure technique Commonly used medications in IR - Conscious sedation, opioids, reactions Uterine Artery Embolization - Patient evaluation, procedure techniques Anticoagulation - Heparin derivatives, NOACs, DOACS, heparin alternatives **Diagnostic Radiology Lecture Series** 2009-Current Performed didactic teaching to Diagnostic Radiology Residents on following topics: Transjugular Intrahepatic Portosystemic Shunt Central Venous Access Chemoembolization for hepatic tumor therapy

Radioembolization for hepatic tumor therapy

Diagnostic Imaging related to Interventional Oncology Portal vein interventions – Embolization, BRTO, CARTO

Thermal Ablation of hepatic tumors - Cryoablation, IRE, RFA, Microwave

Vertebral Augmentation - Kyphoplasty/Vertebroplasty Indications and procedure technique

USF Urologic Surgery Didactic Lecturer – Prostate Artery Embolization

2018

USF Internal Medicine Didactic Lecturer - Vertebral Augmentation, Dialysis Access.

2016

Cardiovascular Imaging Fellowship Developer – University of Florida at Shands

2006-2007

In conjunction with 3 diagnostic radiology residents; developed 6-week curriculum, syllabus, weekly practicum for fellowship in cardiovascular imaging attended by cardiologists and diagnostic radiologists.

#### AWARDS/HONORS

Society of Interventional Radiology Foundation Award "Grants for Education of Students"

8/2020

Sponsored and mentored medical student awarded a grant by SIR foundation to cover travel/living expenses during 4-week Interventional Radiology rotation at USF/TGH.

Tampa Magazine - "Top Physicians"

2017-2024

Named one of top physicians in the Tampa/St. Petersburg area. Non-solicited

"Best Doctors in America" - Non-Solicited

2019-2020

Radiology Resident Teaching Award - University of Florida

2007

Awarded to single resident each year who excelled at teaching students and residents

#### MEDICAL STUDENT MENTORSHIP

#### Medical student rotation mentor

2016-2023

Mentor 4-6 students annually from USF and outside programs rotating in USF IR during MS-4 year. Mentor on residency application, research requirements, expectations of IR residency. Perform teaching of basic techniques/principles and devices used in IR.

**Research Mentor** - Sponsored medical students in development of research topics, reviewed data, assisted in IRB and abstract submission, poster development for national IR meetings in following abstracts (**bold accepted for oral presentation**) – Detailed in abstract section.

Safety and Efficacy of Loop Snare Versus Endobronchial Forceps for Complex IVC Filter Retrieval (2021)

Effects of Tobacco Abuse and Other Patient-Specific Comorbidities on Technical Success of Prostate Artery Embolization (2021)

Post-Operative Liver Transplant Ultrasounds and Vascular Complications. (2020)

latrogenic Catheter Induced Pulmonary Artery Pseudoaneurysms: A Case Report (2019)

A Prospective Trial Evaluating Prostate Artery Embolization Outcomes for Benign Prostatic Hypertrophy (2019)

Prostate Artery Embolization: Midterm Results of Prospective Trial Evaluating PAE for BPH with Prostate Size > 90 (2018)

Prostate Artery Embolization of >1500 cc Prostate due to Benign Hypertrophy. (2018)

Acute Gouty Arthritis Following Percutaneous Cryoablation of Renal Cell Carcinoma. (2018)

Pulmonary Embolism: Do Pulmonary Artery Pressures Correlate with Laboratory and Imaging of RH Dysfunction (2017)

Pre-Procedure Paravertebral Block for ALS Patients Undergoing Percutaneous Radiologic Tube Placement. (2017)

Clinical Utility of Image-guided Biopsy in Diagnosis and Management of Vertebral Osteomyelitis-Retrospective Cohort Study. (2016)

Sonothrombolysis of Submassive and Massive Pulmonary Embolus with EKOS and tPa (2014)

Ultrasound Assisted Thrombolysis of IVC to Popliteal DVT, single center experience. (2014)

## PEER REVIEWED PUBLICATIONS

Multicenter Quantification of Radiation Exposure and Associated Risks for Prostate Artery Embolization in 1476 Patients. Ayyagari R, Rahman S, Grizzard K, Mustafa A, Davis C, et al. Radiology, Vol 310; No 3

2024

DOI: https://doi.org/10.1148/radiol.231877

Predictors of Endobronchial Forceps Utilization for IVC filter Retrieval: When Snare Retrieval Fails.

2023

Kang R, Schuchardt P, Charles J,  $\textbf{Davis}\ \textbf{C}$ , et al. Cardio Vasc Interv Radiology, Vol 6; Art 55

DOI: https://doi.org/10.1186/s42155-023-00392-9

Portal Vein Embolization: Rationale, Techniques, and Outcomes to Maximize Remnant Liver Hypertrophy
with a Facus on Contamorary Strategies, Charles L. Nazami N. Lova M. Shuho S. **Pavis C.** Hoots G. Sh

with a Focus on Contemporary Strategies. Charles J, Nezami N, Loya M, Shube S, Davis C, Hoots G, Shaikh J. Life. 2023; 13(2):279. DOI: https://doi.org/10.3390/life13020279

Safety and Efficacy of Inferior Vena Cava Filter Retrieval: A 5-year Single Center Retrospective Review from Tertiary Care Center. Schuchardt P, Kis L, Goloubev A, Keshishian E, Mhaskar R,

2022

2023

Hoots G, Davis C, Massis K, Shaikh J. Cardiovasc Inter Rad – Endovasc: Aug 2022; Vol 5; 29.

DOI: https://doi.org/10.1186/s42155-022-00316-z

Role of Image-Guided Biopsy in the Diagnosis and Antimicrobial Management of Vertebral Osteomyelitis.  Keshishian E, Ajrawat H, Declue C, Fisher W, Kumar A, Zwiebel B, <b>Davis C</b> , Massis K, Hoots G, Meader S.  Infect Dis in Clin Pract: July 2020; Volume 28; Issue 4; p 223-229. DOI: 10.1097/IPC.0000000000000867	2021
Multicenter Evaluation of Survival and Toxicities of Hepatocellular Carcinoma following Radioembolization: Analysis of the RESin Registry. Franz, S, Matsuoka L, Vaheesan K, et al. (Registry participant) J of Vac Interv Radiology Vol 32, Issue 6, June 2021, pg 845-852. PMID 33812981 DOI: https://doi.org/10.1016/j.jvir.2021.03.535	2021
Partial Splenic Embolization Treats Recurrent Left Pleural Effusions in a Patient with Portal  Venous System Thrombosis. Mohamed A, Jazayeri O, Markovitz M, Declue C, Barakat E, Davis C.  Rad Case Rep, Vol 16, Ussue 7, July 2021, Pg 1862-1864. PMID 34149975 DOI: 10.1016/j.radcr.2021.04.	<b>2021</b>
Prostatic artery embolization for bladder outlet obstruction in the setting of prior posterior  Urethroplasty. D Pierce, A Dahmen, <b>C Davis</b> , L Wiegand. Uro Case Reports. Vol 36; May 2021  PMID 33598406 DOI: 10.116/j.eucr.2021.101590	2021
Ultrasound-Accelerated Thrombolysis and Venoplasty for the Treatment of the Post Thrombotic  Syndrome: Results of the ACCESS PTS Study. Garcia MJ, Stearling, KM, Kahn SR, Comeroat AJ, Jaff MR,  Ouriel K, Weiber I; ACCESS PTS Investigators. J AM Heart Assoc. 2020 Feb 4; 9(3): E013398.  DOI: 10.1161/JAHA.119.013398. Epub 2020 Jan 25. PMID 31983322	2020
Development of a Research Consensus Agenda In Prostate Artery Embolization: Summary of Society of Interventional Radiology Consensus Panel. <b>Davis C</b> , Golzarian J, White S, Fischman A, et al. J Vasc Int Rad Jan 2020, Vol 31 (1), pg 108-113. DOI: 10.1016/j.jvir.2019.09.019. PMID 31771895	2020
Radiologic versus Endoscopic Placement of Gastrostomy Tube: Comparison of Indications  And Outcomes at a Tertiary Referral Center. Clayton S, DeClue C, Lewis T, Rodriguez A, Kokhorst K,  Syed R, Kumar A, Davis C, Brady P. Jan 2019, South Med J: 112 (1): 39-44 PMID 30608631	2019
Interventional Radiology Treatments of HCC. Davis C Cancer Control; 2010 Apr; 17 (2): 87-99 PMID 20404792	2010
Renal Artery Embolization: Application and Success in Patients with Renal Cell Carcinoma and Angiomyolipoma. Caridi J, <b>Davis C</b> , Boyett T. Semin Intervent Radiol 2007 March; 24(1): 111-116. PMID 21326748	2007
PUBLISHED ABSTRACTS	
Safety and Efficacy of Loop Snare Versus Endobronchial Forceps for Complex IVC Filter Retrieval. Kis, B.S, P Schuchardt, A Goloubev, E Keshishian, <b>C Davis</b> . ISET 2021. J Vasc Interv Radiol 2021; 32; E23. https://doi.org/10.1016/j.jvir.2021.03.539	2021
Reduction in Radiation Dose to Interventional Radiologist Using the StemRad MD Exoskeletal System.  M. Markovitz, E. Barakat, B. Zwiebel, <b>C. Davis.</b> ISET 2021. J Vasc Interv Radiol 2021; 32; E11. https://doi.org/10.1016/j.jvir.2021.03.539	2021
Effects of Tobacco Abuse and Other Patient-Specific Comorbidities on Technical Success of Prostate Artery Embolization. Goloubev A, Declue C, <b>Davis C.</b> SIR meeting 2021. J Vasc Intervent Rad, Vol 32; 5; S124. DOI: https://doi.org/10.1016/j.jvir.2021.03.294	2021
Prostate Artery Embolization: Prospective Single-Center Trial Evaluating Prostate Artery Embolization Outcomes for Benign Prostatic Hypertrophy (Prostates Over 90 cc).  K. Kuppler, R. Gnesda, L. Rachakonda, G. Hoots, C. Davis. ISET annual Meeting 2/2018. ISET annual Meeting 2018. J Vasc Interv Rad, Vol 29; 2; E11. DOI https://doi.org/10.1016/j.jvir.2017.12.007	2018
Acute Gouty Arthritis Following Percutaneous Cryoablation of Renal Cell Carcinoma. G. Hoots, S. Lu, A. Hussain, K. Massis, <b>C. Davis</b> , B. Zwiebel. ISET annual Meeting 2018. J Vasc Interv Rad, Vol 29; 2; E12. DOI https://doi.org/10.1016/j.jvir.2017.12.007	2018

A Case of Spontaneous Uterine Artery Pseudoaneurysm in a Primigravid Woman at 16 Weeks' Gestation G. Hoots, S. Shube, <b>C. Davis</b> , K. Kuppler, R. Gnesda, B. Zwiebel. ISET annual Meeting 2018. J Vasc Interv Rad, Vol 29; 2; E8. DOI https://doi.org/10.1016/j.jvir.2017.12.007	2018
Pulmonary Embolism: Do Pulmonary Artery Pressures Correlate with Laboratory and Imaging of Right Heart Dysfunction. <b>Davis C</b> , Lee J, Lambert N, Keasler E, et al. ISET annual meeting 2017. J Vasc Interv Rad, Vol 28; 2, E1, 2017. DOI https://doi.org/10.1016/j.jvir.2016.11.045	2017
Can the Pulmonary Embolism Severity Index (PESI) be used as a clinical tool prior to catheter Directed pulmonary artery thrombolysis? J. Lee, C. Wrigley, S. Perrin, C.Davis, et al. Abstract 580 IR annual meeting, 2017. J Vasc Interv Rad, Vol 28, 2, S246, 2017. DOI https://doi.org/10.1016/j.jvir.2016.12.1205	2017
Pre-Procedure Paravertebral Block for ALS Patients Undergoing Percutaneous Radiologic Tube Placement. Davis C, Decker S, Bermejo G, Zanga H, Zwiebel B, et al. Poster presentation CIO annual meeting 2017. J Vasc Interv Rad, Vol 28; 2; E24, 2017. DOI https://doi.org/10.1016/j.jvir.2016.11.06	<b>2017</b>
Midterm Results of a Prospective Single-Institution Trial of Prostate Embolization for BPH in Prostates > 90 grams. Davis C, Hernandez D, Bukkapatnam R, Meader S, Rojas H, et al. ISET annual meeting 2017 J Vasc Interv Rad, Vol 28; 2, E20, 2017. DOI https://doi.org/10.1016/j.jvir.2016.11.045	2017
Sonothrombolysis of Submassive and Massive Pulmonary Embolus with EKOS and tPa. Davis C, Zwiebel B, Samuel D, DeClue C, Lewis T, et al. ISET annual meeting 2014. J Vasc Interv Rad, Vol 25; 1; E6, 2014. DOI https://doi.org/10.1016/j.jvir.2013.11.028	2014
PRESENTED ABSTRACTS	
Post-Operative Liver Transplant Ultrasounds and Vascular Complications. Kanaparthi S, Kayaleh R,  Davis C, et al. Oral/Poster Presentations at Southern Surgical Conference 2/2020 and Amer Transplant Conf 4/2020	2020
latrogenic Catheter Induced Pulmonary Artery Pseudoaneurysms: A Case Report Keshishian E, Owens K, Dawson L, <b>Davis C</b> . Florida Rad Society Annual Meeting 7/2019, Miami FL	2019
A Prospective Trial Evaluating Prostate Artery Embolization Outcomes for Benign Prostatic Hypertrophy (Prostates > 90cc). Z. Asi, M. Campbell, C. Engle, <b>C.Davis</b> . ISET meeting 2019, Miami, FL	2019
Prostate Artery Embolization: Midterm Results of Prospective Trial Evaluating PAE for BPH with Prostate Size > 90, C. Davis, K. Kuppler, Y. Mayers. Oral Presentation, GEST Annual meeting 5/2018. Miami FL.	2018
Prostate Artery Embolization of >1500 cc Prostate due to Benign Hypertrophy. <b>C. Davis</b> , K. Kuppler, Y. Mayers. GEST Annual meeting 5/2018. Miami FL.	2018
Clinical Utility of Image-guided Biopsy in Diagnosis and Management of Vertebral Osteomyelitis- A Retrospective Cohort Study. Ajrawat H., Keshishian E., <b>Davis C</b> ., Massis K., Hoots G., Kumar A., Meader S Abstract AMA Research Symposium Orlando, FL. 11/2016	2016
Descriptive Analysis of Liver MR Enhancement Following Various Chemoembolization Techniques in Patients with Hepatocellular Carcinoma. Declue C., Ajrawat H., Keshishian E., Sherif A., Kedar R., <b>Davis C</b> . Poster - FRS 2016 annual meeting, Amelia Island, Florida	2016
Ultrasound Assisted Thrombolysis of IVC to popliteal DVT, single center experience. Davis C, Declue C, Francis C. Poster/Abstract presentation at Inter Soc of Vasc Surg annual meeting Miami FL.	2013
Assessment of Tumor Necrosis Following Chemoembolization for Hepatocellular Carcinoma in Liver Transplantation: Possible Benefit of Drug-eluting Beads. Alsina, A. MD, Franco, E.S. MD, Rojas, H., Brantley, S. MD, <b>Davis, C</b> . MD. AASLD, San Francisco 2011	2011
Impact of Drug-Eluting Bead Chemoembolization on Survival and Recurrence of Hepatocellular Carcinoma (HCC) Post Liver Transplantation. Rojas, H, Franco, E.S. MD, <b>Davis, C</b> . MD, Zwiebel, B. MD, Brantley, S. MD, Neff, G. MD, Alsina, A. MD. AASLD, San Francisco 2011	2011

# INVITED SPEAKER ENGAGEMENTS

Guest speaker – Outpatient Endovascular and Interventional Society Annual Meeting 5/2023  Topic: PAE – CTA and CBCT for PAE: How and when to use these technologies  Topic: PAE – How to ID the Prostate Artery Confidently	2023
Guest speaker – Outpatient Endovascular and Interventional Society Annual Meeting 6/2022  Topic: PAE – Who and Outcomes  Topic: PAE – How to ID the Prostate Artery Confidently	2022
Guest speaker – Society of Interventional Radiology Annual Meeting 6/2022  Topic: How to Get Started and Build a PAE practice  Topic: Hands-On-Lab: Women's & Men's Health – PAE – How I do it	2022
Guest Speaker – Association of Vascular Interventional Radiographers Annual Meeting 6/2022  Topic: Emerging Technologies - Histotripsy for Liver Tumors	2022
Guest speaker – American Society of Emergency Radiology Annual Meeting 9/2021  Topic: Effects of Locoregional Therapies in Emergency Imaging	2021
Guest speaker – Southeastern Angiographic Society Annual Meeting 10/2021  Topic: Histotripsy of hepatic tumors, Update on Prostate Artery Embolization	2021
Guest speaker and Moderator – Global Embolization Symposium and Technologies 6/2021 Topic: The Beauty of Radial Prostate Artery Embolization	2021
Guest speaker and Moderator - Global Embolization Symposium and Technologies (GEST) 9/2020  Topic: Difficult Superior Vesicular Artery During Prostate Embolization  Moderator: Prostate Artery Embolization	2020
Guest Speaker – Hepatobiliary Symposium  Specialty regional physician meeting hosted by TGMG/USF for community physicians.  Topic: Thermal Ablation for liver tumors, Transarterial therapies for liver tumors.	2019
Guest speaker-Spectrum Interventional Oncology Annual Meeting (SIO)  Topic: Art of Complex PAE, Triage and Post Procedure Care for PAE, Case Reviews	2018
Guest speaker- International Symposium on Endovascular Therapy (ISET) Annual Meeting Topic: My Worst Complication – Panel review of severe IR complications and avoidance.	2018
Guest Speaker – Hepatobiliary Symposium  Specialty regional physician meeting hosted by TGMG/USF for community physicians.  Topic: Alphabet Soup for Portal Intervention, Transarterial therapies for liver tumors.	2018
Interventional Radiology Fellowship Practicum Proctor – Topic Embolization Speaker/proctor at annual IR teaching program offered to U.S. IR residents	2017
Guest Speaker – Clinical and Contemporary IR – Annual meeting sponsored by UCLA  National meeting featuring upcoming procedures/technologies in IR  Topic: Prostate artery embolization	2017
Guest Speaker – Florida Liver Forum, St. Petersburg FL  Speaker at statewide multispecialty conference focused on current therapy for hepatitis and HCC  Topic: Locoregional Treatments of HCC	2012

# INDUSTRY SPONSORED ENGAGEMENTS 2021 Boston Scientific Strategic Advisory Board - Interventional Oncology Board advises corporation on advances in the field of IR, recommends strategic development. **Proctor Boston Scientific Salesforce Interventional Oncology Training Program** 2019 Organized lectures, on-site procedure schedules and dinner program for sales representatives and clinical staff from Boston Scientific on Thermal Ablation, Embolization, Y90. Boston Scientific Strategic Advisory Board - Embolization 2019 Board advises corporation on advances in the field of IR, recommends strategic development. **Prostate Artery Embolization Course Director** 2019 Two-day physician course with didactics and live cases at TGH/USF sponsored by Boston Scientific. 2019 **Moderator AngioVac National Training Program** Moderator at two-day course in Tampa on AngioVac device use sponsored by AngioDynamics **Proctor/Moderator Prostate Artery Embolization Course** 2018 Two-day course held at Boston Scientific Headquarters with physician learners sponsored by BSC. **Moderator Prostate Artery Embolization Course** 2018 Moderated two-day course on prostate artery embolization with physician learners sponsored by MERIT Speaker/Proctor - Prostate Artery Embolization Course 2017-2018 Traveled to other IR programs to assist in development of PAE program sponsored by MERIT Programs included Mayo Clinic Jacksonville, Radiology Associates of Hollywood. 2017 **Proctor/Moderator AngioVac National Training Program** Proctored two-day course/animal lab at CAMLS on use of AngioVac device sponsored by AngioDynamics. 2016 Guest Speaker - BTG - Annual Training Meeting BTG annual meeting to train sales and clinical staff related to Interventional Oncology Topic: Treatments Options for HCC: Transplant, Staging and LRT 2016 **Proctor/Moderator AngioVac National Training Program** Proctored two-day course/animal lab at CAMLS on use of AngioVac device sponsored by AngioDynamics. Boston Scientific Strategic Advisory Board - Venous Intervention 2015 Board advises corporation on advances in the field of IR, recommends strategic development. OTHER TEACHING ENGAGEMENTS 2016-2020 **CME Presentations on Prostate Artery Embolization** TGH sponsored CME to Urology, Geriatric and PCP groups on advances in Prostate Embolization Performed didactic CME 3 times annually in Tampa metropolitan area. CE Presentations to TGH Staff - Tampa General Hospital 2009-2020 Annual Interventional Radiology Technician/Nursing CE. Topics Include: Chemoembolization Radioembolization Vertebral Auamentation Thermal Ahlation **Prostate Artery Embolization**

TGH Sponsored Community Outreach Speaker

2015-2020

Locations: Sun City Center, Villages Community Center, South Tampa TGMG Primary Care office.

Topics: Prostate Artery Embolization Uterine Fibroid Embolization

Vertebral Augmentation Prostate MRI

## RESEARCH

Principal Investigator at TGH/USF–Industry Sponsored Multicenter International FDA IDE  Trial: #HOPE4LIVER Histosonics System for Treatment of Primary and Metastatic Liver Tumors  Utilizing Histotripsy. TGH/USF IR was first site initiated in the trial and first site in the U.S. to perform Hisotripsy on a human and was the 9 <sup>th</sup> and 10 <sup>th</sup> procedure in the world.	2020-2023
Investigator – Industry Sponsored Multicenter International RCT: MERCK LEAP-012. Lenvatinib and Pembrolizumab with TACE versus Placebo plus TACE in treatment of incurable non-metastatic HCC.	2020-2022
Principal Investigator – Investigator Initiated FDA IDE Trial: Prostate Artery Embolization for Treatment of BPH with Prostate Size Greater than 90 cc. Developed trial protocol, obtained IRB and FDA IDE approval for Embosphere particle use in PAE. Obtained CMS Local Coverage Determination (LCD) for the trial. Trial closed with 50% enrollment due to inability to enroll non-CMS patients.	2014-2021
Co-PI: RESIN Registry - Industry sponsored registry evaluating Y90 treatment and outcomes.	2017-2021
Principal Investigator – Industry Sponsored RCT FDA IDE device trial: BEST trial. Prostate Artery Embolization for BPH with MERIT Embospheres versus Transurethral Resection of the Prostate (TURP). Study terminated prior to full enrollment due to lack of patient interest in randomization and post-procedural testing.	2014-2020
Principal Investigator – Industry Sponsored Prospective Multicenter trial: ACCESS PTS. EKOS Sonothrombolysis for treatment of post thrombotic syndrome.	2013-2017
Principal Investigator at Tampa General Hospital: Biosphere Medical Hi-Q HCC-P3-11-01: PHASE 3 Prospective, Randomized, Blinded and Controlled Investigation of Hepaspher/Quadrasphere	2012-2016
Principal Investigator: Investigator Initiated Single Center RCT at TGH. Ultrasound Accelerated Thrombolysis of Submassive Pulmonary Embolism.	2011-2013

Previous or current investigator in the following studies at Tampa General Hospital: FALCON 1-BMS, Abbvie M16-127, Gilead GS-US-321-0105, Gilead GS-US-321-0106, Conatus IDN-6556-12, Conatus IDN-6556-14, Cumberland CPI-IFE-005, Galectin GT-026, Tobira 652-2-203, Tobira 3152-301-002.

## PIONEERING PROCEDURES

## Introduced the Following Novel Therapies at Tampa General Hospital:

Drug-Eluting Bead Chemoembolization (LC BEAD) at TGH in 2008  $\,$ 

Transarterial Radioembolization utilizing RESIN Y90 Microspheres (SirSpheres) at TGH in 2009

Irreversible Electroporation (Nanoknife) procedure on hepatic tumors at TGH in 2010.

Drug-Eluting Bead Chemoembolization (Quadraspheres) at TGH in 2011

Percutaneous Microwave (NeuWave) thermal ablation of hepatic tumors at TGH in 2013

Prostate Artery Embolization (Embosphere) at TGH in 2014.

Transarterial Radioembolization utilizing glass Y90 microspheres (TheraSphere) at TGH in 2015

Histotripsy ablation (Edison Histosonics) of hepatic tumors at TGH in 2021 – First two procedures in the United States

## PEER-REVIEWED JOURNAL REVIEWER

Cardiovascular and Interventional Radiology (CVIR)

PROFESSIONAL MEMBERSHIPS

Radiological Society of North America (RSNA) Society of Interventional Radiology (SIR) CardioVascular and Interventional Radiology (CVIR) Hillsborough County Medical Assoc (HCMA) Florida Medical Association (FMA)