A Message from System Leadership:
We are very excited to provide our recognition and continued support to the Hartford HealthCare Heart & Vascular Institute (HVI) research program. The clinicians in many divisions of HVI have a long history of excellence in clinical research and academic achievement.

We are grateful for the acknowledgment by the HVI leadership of the importance of research in the delivery of quality care to our patients. Congratulations on the publication of this first issue of the HVI Research Newsletter. We look forward to joining the first HVI Research Council meeting very soon.
A Message from the Medical Director:

We are proud to present the inaugural edition of the Hartford HealthCare Heart & Vascular Institute Research Newsletter. The purpose of this publication is to highlight the expansive range of research endeavors by our many investigators across all departments of the HVI.

Given the explosive growth of research interests in cardiology, cardiac surgery and vascular surgery, the newsletter will be published on a quarterly basis with opportunities for all staff to share their current research undertakings and accomplishments.

Included in each edition will be a current list of recent peer-reviewed publications and a list of industry/government-funded, IRB-approved trials. Our goal is to support and facilitate the growth of HVI research, promote interdisciplinary collaboration between investigators and help inform our patients about access to new and novel treatment options. It is our privilege to support our clinicians and research colleagues as they contribute to advances in cardiovascular and vascular medicine and improved care for our patients.

It is our honor, as well, to dedicate our first newsletter to Dr. Paul D. Thompson, Chief of Cardiology-Emeritus. After a distinguished 25-year career at Hartford Hospital, Dr. Thompson formally retired on October 1, 2021. Over the course of his career, Dr. Thompson, founder of the Athlete’s Heart Program at Hartford Hospital, has become an internationally-renowned expert in sports cardiology. As a clinical investigator, he serves as a role model for any researcher, authoring more than 500 articles related to athletic performance and preventative cardiology. We are all indebted to Dr. Thompson for his many years of leadership and research mentorship.

Raymond G. McKay MD
HVI Director of Research
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Research coordinator profile:

Each issue, we will profile a research coordinator from each part of the HVI Research Program. Jill Cloutier currently serves as the Lead Coordinator of the HVI Research Department and currently reviews all proposals submitted to the HVI for new industry or government funded trials. In the past, she has been instrumental in establishing Hartford Hospital as an investigative site for numerous research studies from the internationally known TIMI STUDY Group. More recently, she has successfully led her research teams in the completion of multiple national trials investigating the safety and efficacy of transcatheter aortic valve replacement and percutaneous mitral valve repair. Her leadership has been critical in identifying Hartford Hospital as a nationally known structural heart research center committed to high patient recruitment and excellent clinical outcomes.

Jill Cloutier, CRC
What is your title? Your educational background? Your work background prior to HHC? When did you join HHC?
I have worked at Hartford Hospital as a research coordinator for almost 26 years, participating in numerous research trials primarily centered in the Hartford Hospital Cardiac Catheterization Laboratory and Structural Heart Department. Prior to coming to Hartford HealthCare, I served as the TIMI research coordinator at Brigham and Women’s Hospital in Boston under the direction of Dr. Eugene Braunwald. In the past, I have also overseen the performance of many cholesterol trials in the preventative cardiology department at Massachusetts General Hospital and in the conduction of interventional cardiology trials in the Beth Israel Hospital Catheterization Laboratory under the direction of Dr. Donald Baim.

What intrigues you about research, and how did you come to focus on heart and vascular disease specifically?
My personal journey into cardiology research was merely by happenstance as a former colleague from the University of Vermont Medical Center had gone to medical school with Dr. Donald Baim, who hired me for an administrative role under his direction when I relocated to Boston.

What are your favorite research projects to date and why?
The most challenging yet gratifying research to date has been our participation over the last 10 years in the national TAVR trials assessing the safety and efficacy of both balloon-expandable and self-expanding TAVR valves. The results of these trials have ultimately led to the FDA approval
of TAVR as a ground-breaking treatment for both inoperable patients and healthier ones with severe aortic stenosis.

**What are your current research projects?**
Current research trials include: the **APOLLO Trial** to evaluate whether TMVR with the Medtronic Intrepid System is non-inferior to conventional mitral surgery; the **RESTORE Trial** to evaluate the Harpoon Beating Heart Mitral Valve Repair System in patients with degenerative mitral regurgitation; the **Protected TAVR Trial** to assess whether use of the Sentinel Cerebral Protection System significantly reduces the risk of peri-procedural stroke after TAVR; and the **STEMI-DTU Trial** which randomizes patients experiencing an acute anterior wall STEMI to either standard immediate PCI or to 30 minutes of IMPELLA unloading followed by standard PCI.

**What is the biggest challenge you face in research?**
My biggest challenge is ensuring that all personnel involved in a patient’s care are aware of the required protocol assessments for compliance and patient safety.

**If you weren’t a heart and vascular researcher, what would you be doing?**
I would most likely be involved in social work/foster care.

**What do you do for fun?**
I enjoy traveling with my girlfriends, spending time with my two beautiful daughters, cooking dinner for family and friends and playing with my adorable puppy, Finnigan.
Investigator Profiles:

Sabet Hashim, MD

Chairman of Cardiac Surgery; Co-Physician-in-Chief, Hartford HealthCare Heart & Vascular Institute

What is your educational background? Your work background prior to HHC? When did you join HHC?

After receiving a Baccalauréat in Mathematics from Lycée Français in Beirut in 1968 and my M.D. degree from St. Joseph’s Jesuit University School of Medicine in Beirut in 1975, I completed a General Surgery internship and residency at St. Luke’s Hospital Medical Center in New York from 1975-1979. I had my Cardiac Surgery residency training at Yale-New Haven Hospital from 1979-1981, and joined the full time faculty. While at Yale, I served as the Co-Director of Cardiac Transplantation from 1981-86, the Director of Cardiac Valve Surgery between 2006 and 2016. In 2010, I was appointed clinical Chief of the Section of Cardiac Surgery and Surgical Director of the Heart and Vascular Center. In 2016, I assumed the role of the Chairman of Cardiac Surgery and the Co-Physician-in-Chief of the HHC Heart & Vascular Institute.

What do you consider to be your most important academic accomplishments?

I initiated the first mitral valve repair program in New England in 1984 and performed the first heart transplant in Connecticut the same year. I developed the atrial fibrillation surgery program in 2001 and introduced aortic valve replacement through a mini-upper sternotomy incision in 2005. I developed a technique of mitral valve repair for ischemic mitral regurgitation. I described and presented a method that simplifies the surgical treatment of Barlow’s mitral regurgitation. I made several modifications to the minimally-invasive techniques of mitral valve repair. I served as a principal investigator of the Abbot MitraClip COAPT trial, the Medtronic Pivotal and Intermediate Risk TAVR Trial, and the Commence Trial.
What are your current HVI research projects?
I currently lead two national trials at Hartford Hospital related to minimally-invasive mitral valve surgery – the APOLLO and RESTORE trials. Both involve either replacing or repairing the mitral valve through a transapical approach. The Medtronic APOLLO Trial (co-principal investigators: myself; Robert Hagberg, MD; Talhat Azemi, MD; Immad Sadiq, MD) is designed to evaluate the safety and efficacy of the Intrepid Transcatheter Mitral Valve Replacement System for patients with symptomatic moderate-to-severe or severe mitral regurgitation who are unsuitable for traditional mitral valve surgery. This system integrates self-expanding stent technology with a tissue heart valve, pictured at left, to facilitate minimally-invasive, catheter-based implantation. The prosthesis is compressed inside a hollow delivery catheter and implantation is completed through transapical access. It is designed to engage and conform to the native annulus without need for additional sutures, tethers, or anchors.

The Edward’s Life Sciences RESTORE Trial (co-principal investigators: myself and Talhat Azemi, MD) is designed to assess the safety and efficacy of the Harpoon Mitral Valve Repair System, pictured at right, in patients with severe degenerative mitral regurgitation secondary to prolapse of the mid-segment of the mitral posterior leaflet. The HARPOON system is designed to be used transapically with transesophageal echocardiography guidance to repair mitral valve posterior leaflet prolapse with self-tying ePTFE chords.

What are potential benefits of these research trials?
Both of these procedures avoid cardiopulmonary bypass. While conventional mitral valve repair surgery is an excellent treatment approach, the ability to achieve a reliable good outcome varies among surgeons and depends greatly on their skill and experience. The promise of these two trials is to decrease the variability of the outcome of mitral valve operations.
Edward Gifford, MD
Director, East Region Vascular and Endovascular surgery; Co-Director, East Region Limb Preservation Program

What is your educational background? Your work background prior to HHC? When did you join HHC?
I joined HHC in 2018 after a two-year vascular surgery fellowship at the Mayo Clinic in Rochester, MN. Prior to that, I completed general surgery residency at Harbor-UCLA Medical Center in Torrance, CA. I completed my undergraduate work at UCLA and received my MD degree at Albany Medical College in New York.

How did you come to focus on heart and vascular disease research?
I appreciate both the innovative side and quality aspect of clinical research. Utilizing new technologies to address vascular problems allows us to push the envelope, particularly in a minimally-invasive manner. Quality improvement through researching and implementing pre- and post-op care algorithms helps streamline and make the care we provide more uniform. I started in heart and vascular research after college as a clinical research associate for Ardian on the development of a novel treatment for hypertension via renal artery denervation.

What are your current HVI research projects?
I am currently involved in examining outcomes between men and women undergoing complex endovascular aortic aneurysm repair, investigating system-wide outcome disparities of racial and ethnic groups following lower extremity revascularization for chronic limb-threatening ischemia, and studying ways to improve completion rates of supervised exercise therapy (SET) for patients with claudication.

What is the biggest challenge you face in research?
Research takes time, which often means having to pick and choose projects, and making sacrifices to devote time to research.

What do you feel research has contributed to the field in the past two or three decades?
The work in fenestrated and branched endovascular aortic repair for complex aortic and thoracoabdominal aneurysms is a game-changer for reducing morbidity and mortality in these difficult patients.
What is your favorite research project to date and why?

As a fellow, we combined our institutional data with one of our quality registries to look at our opiate prescribing after common vascular procedures. With that information, we made recommendations about when and how much medication should be prescribed. I am currently involved in a writing group to roll those recommendations out to our national society. Over-prescription of opioid medication is a major public health crisis, and combining a clinical research question with our quality improvement database quickly identified that many patients undergoing vascular procedures do not require any opioid medication at all.

If money and time were not factors, what medical question would you research?

I would like to work on methods to deliver better information to patients, particularly in underserved populations, and identify the best way patients internalize that information to make favorable health choices. For instance, how do our patients best learn about vascular disease, in particular PAD? How can we provide community-level vascular care and target underlying risk factors across a large healthcare network?

If you weren’t a heart and vascular researcher, what would you be doing?

I have always enjoyed research in medicine, so I can’t imagine separating the two. If I had not gone into medicine I would probably have pursued marine biology further.

What do you do for fun?

We have a 200-year-old house, and enjoy doing a lot of home improvement work ourselves. I enjoy getting down to the shore whenever possible, either to go surfing in Rhode Island or sailing with my father-in-law out of Groton.

Patient and institutional factors associated with postoperative opioid prescribing after common vascular procedures


Abstract

Objective: Overprescription of postoperative opioid medication is a major contributor to the opioid abuse epidemic in the United States. Research into prescribing practices has suggested that patients be limited to 7 days or <200 morphine milligram equivalents (MME) after surgical procedures. Our aim was to identify patient or institutional factors associated with increased opioid prescriptions.

Methods: Opioid naïve patients from an integrated health system undergoing one of nine surgical and endovascular procedures tracked within the Vascular Quality Initiative from 2015 to 2017 were identified and matched to their discharge and refill opioid prescriptions. Discharge opioid prescriptions were converted to MME. The primary outcome was discharge MME >200, and secondary outcomes were procedure-specific top-quartile opioid prescription and medication refills. Multivariable logistic regression was used to assess patient and perioperative factors associated with each outcome.

Results: Among 1546 opioid naïve patients, 739 (48%) received a discharge opioid prescription; median MME was 0 (interquartile range, 0-150), and 349 (23%) had >200 MME. Among those with a discharge prescription, median MME was 180 (interquartile range, 150-300). MME varied by procedure (P < .001), with highest MME after suprainguinal bypass (median, 225) and infrainguinal bypass (200) and lowest MME after carotid artery stenting, carotid endarterectomy, and percutaneous peripheral vascular intervention (all medians of 0). On multivariable analysis, factors associated with MME >200 included younger patient age (<65 vs ≥ 80 years; odds ratio [OR], 3.0; 95% confidence interval [CI], 1.9-4.6; P < .001), treating institution B vs A (OR, 3.50; 95% CI, 2.42-5.07; P < .001) and C vs A (OR, 3.90; 95% CI, 2.66-5.74; P < .001), procedure-specific top-quartile length of stay (OR, 1.45; 95% CI, 1.01-2.08; P = .047), and prior tobacco use (OR, 1.60; 95% CI, 1.07-2.37; P = .02). The same variables along with current tobacco use and lack of preoperative aspirin were associated with procedure-specific top-quartile MME at discharge. Chronic beta-blocker use was protective of top-quartile MME. Based on the observed variability, an institutional standard for opioid prescribing has been developed for standardization.

Conclusions: Opioid prescriptions at discharge vary with the invasiveness of vascular surgical procedures. Less than 25% of patients receive >200 MME. Variation by center represents a lack of standardization in prescribing practices and an opportunity for further improvement based on developed guidelines. Patient factors and procedure type can alert clinicians to patients at risk of higher than recommended MME.
Eric Oligino, MD  
Director, Cardio-Oncology Program  

What is your educational background? Your work background prior to HHC? When did you join HHC?
I attended the University of Notre Dame and University of Connecticut Medical School, and then did my internal medicine internship and residency at the University of Pennsylvania and my cardiology fellowship through Yale University. I joined Cardiology PC in 2013, and transitioned to HHCMG in April 2021.

How did you come to focus on heart and vascular disease?
I completed a Sarnoff Cardiovascular Research Foundation fellowship in medical school. This exposed me to academic medicine and, more importantly, provided mentorship from some of the leading physician scientists in cardiovascular research.

What are your current research projects?

If money and time were not an option, what medical question would you research?
How can we actually change behaviors that impede a healthy lifestyle?

What is the biggest challenge you face in research?
Time, specifically, balancing research with other professional responsibilities and personal priorities.

If you weren’t a heart and vascular physician, what would you be doing?
If I were not a physician and knew anything at all about the restaurant business, I would open a gastropub.

**What do you do for fun?**
Travel, sports, yard games and being a girl dad.
Joseph Radojevic, MD  
Chief of Cardiology, Hartford Region; Regional Medical Director, Cardiology, Heart & Vascular Institute

What is your educational background? Your work background prior to HHC? When did you join HHC?
I joined Hartford Hospital in 2008 after finishing a heart failure fellowship at Columbia.

How did you come to focus on heart and vascular disease?
Research is intriguing as it offers the promise of new treatment possibilities for patients with limited options or who have exhausted other options. It is also intellectually stimulating.

How long have you been involved in research in general? In heart and vascular research?
I started participating with multicenter studies of new therapies soon after joining HH.

What are your current research projects?
I am currently involved with the ANTHEM HFrEF and the AT HOME-HF research trials.

What is your favorite research project to date and why?
I enjoy every study as each involves a different treatment for heart failure. The current ANTHEM-HFrEF study is interesting to me as it explores autonomic regulation therapy with an electrical stimulator for patients with systolic heart failure in addition to medical therapy. We are seeing promising results in patients currently enrolled.
If money and time were not an option, what medical question would you research?
I am interested in treatment strategies aimed at patients with heart failure, specifically keeping patients home to improve quality of life, and expanding treatment options for patients who have exhausted oral medications and face advanced therapies such as intravenous medications, heart transplant or left ventricular assist devices (LVAD).

What is the biggest challenge in research?
Finding time by balancing a busy growing heart failure service, administrative responsibilities, teaching and research.

What do you feel research has contributed to the field in the past two or three decades?
For heart failure, oral medical therapy and device therapy have advanced considerably. There have also been major advances in the treatment of conditions leading to heart failure such as cardiac amyloidosis. These advances not only improve quality of life but also survival.

If you weren’t a heart and vascular researcher, what would you be doing?
I would probably be doing something related to the oceans, marine biology and boating.

What do you do for fun?
My free time is spent trying to keep up with my four young children!
Asad A. Rizvi, MD  
Interventional Cardiologist, Hartford Hospital

What is your educational background? Your work background prior to HHC? When did you join HHC?
I am a board-certified cardiologist and interventional cardiologist who completed most of my training here at Hartford Hospital and the University of Connecticut residency and fellowship programs. I have been an attending on staff at Hartford Hospital since 2002, and joined the HHC Catheterization Laboratory in 2014.

How did you come to focus on heart and vascular disease?
Being able to take care of patients and having the ability to contribute new scientific information is what drives my interest in clinical research. Participating in research and collaborating with colleagues at HHC and nationally is personally gratifying and important for future patient care.

How long have you been involved in research in general? In heart and vascular research?
I have had an interest since fellowship. HHC has always had nationally- and internationally-renowned clinician-scientists who have been great mentors for physicians like myself.

What are your current HVI research projects?
I am currently involved with research and quality improvement projects related to out-of-hospital cardiac arrest, serve as the Co-Principal Investigator with Dr Jeffrey Hirst on the STEMI-DTU trial, and involved with multiple studies related to TAVR.

What is your favorite research project to date and why?
I am really excited about the STEMI-DTU trial. This is an international, randomized controlled trial investigating whether the current standard of care for managing STEMI patients can be improved by utilizing the IMPELLA pump to unload the pressure in the left ventricle before proceeding with the standard angioplasty/stenting procedure we currently utilize. Preclinical animal studies and preliminary human studies suggest this technique may change how we practice and manage patients with this condition.
If money and time were not a factor, what medical question would you research?
Improving outcomes for cardiogenic shock and cardiac arrest following myocardial infarction.

What is the biggest challenge you face in research?
Having more time in addition to clinical responsibilities.

What do you feel research has contributed to the field in the past two or three decades?
In cardiology, structural heart technology, better coronary stent designs and novel antiplatelet, cholesterol lowering and oral anticoagulants have revolutionized care. In medicine, in general, the treatment of HIV, curative therapies for hepatitis C and immunotherapy for cancer all represent major advances.

If you weren’t a heart and vascular researcher, what would you be doing?
If I weren’t a physician, I would have been a journalist.

What do you do for fun?
Watching movies with the family, reading books outside medicine and aspiring to be a weekend warrior.
Stephanie Saucier, MD  
Co-director, Women’s Heart Wellness Program

What is your educational background? Your work background prior to HHC? When did you join HHC?

I went to Ross University School of Medicine, and then did my internal medicine residency and cardiology fellowship at UCONN. I joined HHC in August 2020 after completing my fellowship.

How did you come to focus on heart and vascular disease specifically?

Research intrigues me as it is the foundation of how our practice changes and grows to allow providers to give evidence-based, high-quality care to our patients. Through research, we learn about limitations and ways to improve our care.

How long have you been involved in research in general? In heart and vascular research?

I have been involved in research since my residency training, and heart and vascular research for the past three years.

What is your favorite research project to date and why?

I have collaborated with Dr. Lane Duvall on a project on cardiac amyloidosis imaging and use of fused SPECT and CT imaging to provide more accurate imaging interpretation. This technique allows us as nuclear cardiology readers to provide more accurate diagnostic testing for TTR amyloid.

What are your current research projects?

I am involved with multiple studies including collaboration with the OB teams to look at patients with severe HTN during pregnancy and collaboration with Dr. Antonio Fernandez to look at cardiovascular effects in college athletes who recovered from COVID. I am part of the Endocarditis Pilot program, looking at MAT in patients with IVDU and infective endocarditis, as well as cardiac rehabilitation’s role in patients with infective endocarditis. Drs. Heather Swales, Melissa Ferraro-Borgida and I are also working to establish a Women’s Heart Registry.
If money and time were not factors, what medical question would you research?
I would research microvascular disease, the effects of IVF and infertility on cardiovascular risk, and the optimal management/treatment of SCAD.

What is the biggest challenge you face in research?
The biggest challenge in research is time dedicated to research.

What do you feel research has contributed to the field in the past two or three decades?
Cardiology as a whole has contributed: TAVR, Mitral Clip, stents, PCSK9i, LVAD, Transplant, ECMO, SGLT2i, and the list really goes on.

If you weren’t a heart and vascular researcher, what would you be doing?
I would still be a practicing cardiologist.

What do you do for fun?
I enjoy travelling to new places and spending time with family and friends.
David I. Silverman, MD  
Director, Echocardiography Laboratory

What is your educational background? Your work background prior to HHC? When did you join HHC?  
After earning a master’s degree in biochemistry from the University of Chicago, I attended medical school at the University of Illinois. I did my internal medicine residency at Boston City Hospital, my clinical cardiology fellowship at the West Roxbury Veterans Administration Medical Center, and a post-doctoral fellowship at the Beth Israel and Brigham & Women’s hospitals. I joined Hartford Hospital in 2007.

How did you come to focus on heart and vascular disease?  
I found cardiac physiology fascinating, and learned to use echocardiography to apply that physiology directly to challenging problems in patients.

How long have you been involved in research?  

What are your current research projects?  
Dr. Sean McMahon and I are studying left atrial strain in stroke patients to see if it adds power as a predictor of events. I also have an interest in seeing if meditation can improve outcomes in cardiovascular patients, in whom depression and anxiety are powerful predictors of adverse events.

If money and time were not factors, what medical question would you research?  
Developing a coherent strategy for prevention of atrial fibrillation.
What is your favorite research project to date and why?
I am one of the co-inventors of transesophageal echocardiogram (TEE)-guided cardioversion. With Dr. Warren Manning, who came up with the idea and designed our study, we recruited a majority of participants, wrote a manuscript, and sent it to the New England Journal of Medicine. Thirty years later, our technique is used in hospitals worldwide on a daily basis.

What is the biggest challenge you face in research?
Time and energy. Clinical and administrative duties do not leave room for much.

What do you feel research has contributed to the field in the past two or three decades?
We live in a golden age of cardiology, with a 25-percent drop in mortality per decade over that time period. Establishing the value of prevention - lipid lowering, treatment of hypertension, smoking cessation, and regular exercise - are responsible for much of that improvement. But, the most dramatic innovation is percutaneous angioplasty. For heart attack patients, it literally turns back the clock and gives them a second chance.

If you weren’t a heart and vascular researcher, what would you be doing?
Writing mediocre novels.

What do you do for fun?
I seem to have an unshakable need to go up and down the mountain, and to cajole my long-suffering spouse to do it with me.
Paul Thompson, MD
Chief of Cardiology-Emeritus, Hartford Hospital

What is your educational background?
I was an undergraduate at Tufts University, did medical school there, was an intern and medical resident at the Tufts New England Medical Center, and did one year of cardiac catheterization fellowship at Tufts before I did two years of general cardiology and preventive cardiology at Stanford University.

What intrigues you about research and how did you come to focus on heart and vascular disease specifically?
I am interested in research because it is fun. Moreover, it helps make me a better clinician who can provide more authoritative and definitive recommendations to patients. I have a lot more confidence when recommending treatments to patients because after writing more than 500 peer-reviewed manuscripts, I have often done some research into that patient’s problem.

How long have you been involved in research in general? In heart and vascular research?
I published my first case report in 1973. I have been involved in cardiovascular research since my fellowship training at Stanford. At Stanford, it you did not do research as a fellow, you were essentially non-existent to the faculty!

What is your favorite research project to date and why?
One of my rules for research is that you should follow your bliss. Perhaps my favorite was part of the 11-year, NIH-funded project “Lipoproteins in Active Men: Role of Exercise & Diet” at Brown University in the 1980s. We studied how HDL cholesterol was metabolized in distance runners compared to sedentary controls. We demonstrated that the runners broke down HDL more slowly. In those days, it was okay to be a research subject so I was one of the runners.

What is the biggest challenge you face in research?
The biggest challenge everyone faces in research is finding the time to do it. It is very important to time for research because clinicians know the medical questions that need to be solved to move medicine forward.

What are your current research projects?
Sponsored by Novartis, we are studying if people who have had heart disease and have a high lipoprotein a level have fewer repeat heart attacks if they are injected with a drug that reduces lipoprotein by blocking messenger RNA. This project might help a treatment.

What do you feel research has contributed to the field in the past two or three decades? It is impossible to describe all the advances over just the last five years! We have new cholesterol and diabetes drugs, new ways to treat heart disease, things I never would have imagined.

If you weren’t a heart and vascular researcher, what you be doing? I would be taking care of heart and vascular patients.

What do you do for fun? I run and ride my bike through the hills of western Connecticut.
Aneesh V. Tolat, MD  
Director of VT Ablation, Cardiac Electrophysiology

What is your educational background? Your work background prior to HHC? When did you join HHC?
I graduated from New York University School of Medicine, worked at the National Institutes of Health in experimental immunology for six months, and then performed my residency at Columbia-Presbyterian Medical Center where I was awarded the Housestaff Research Award for best research proposal (comparing QT Dispersion and T Wave Alternans for predicting risk of sudden cardiac death). I did further training in cardiology and cardiac electrophysiology at Beth Israel Deaconess Medical Center, Harvard Medical School. I practiced for 15 years at St. Francis Medical Center before joining Hartford HealthCare in July 2020.

How did you come to focus on heart and vascular disease?
Research helps move the field forward and provide better care for our patients. It allows us to get excited about new discoveries and provides intellectual stimulation.

How long have you been involved in research in general? In heart and vascular research?
I have been involved in biomedical research since college, when I was selected as a Howard Hughes Medical Institute Scholar. I have been involved in cardiac research since being an intern at Columbia-Presbyterian where I worked on QT Dispersion.

What is your favorite research project to date and why?
One of my favorite projects was looking at outcomes of patients implanted with defibrillators on warfarin anticoagulation and discharged the same day. We showed there was no difference in major complications, although there were more hematomas in the warfarin anticoagulation group.
What are your current research projects? I have initiated Hartford Hospital’s participation in the International VT Center Collaborative Group Registry, a 30-center study. In addition, I am leading my own investigator-initiated randomized study of ablation of atrial arrhythmias through the arm, and serving as a co-investigator with Dr. Jeffrey Kluger on effect of VT ablation on ICD therapy. I am also currently writing an IRB proposal on the COVID long hauler cardiac clinic registry, and supporting industry-sponsored trials of the ECG Belt (Medtronic), the Post TAVR LBBB study with loop monitoring (Preventice), an Afib ablation study (Acutus), and an Atrial flutter ablation study (Acutus).

If money and time were not factors, what medical question would you research? The safety and efficacy of VT ablation using radiation therapy. This is a new frontier in cardiac electrophysiology with the promise of treating a patient’s arrhythmias non-invasively.

What is the biggest challenge you face in research? Finding time to organize and carry out research. Most of it is done at night and on weekends.

What do you feel research has contributed to the field in the past two or three decades? Research has allowed us to understand the mechanism of many arrhythmias, and best ways to treat with ablation. We have been able to cure SVT, WPW and VT.

If you weren’t a heart and vascular researcher, what would you be doing? I would probably either be a professor of biology on a college campus, or practicing medicine.

What do you do for fun? I like to run, hike and work outdoors, while also spending time with family.
Adaya Weissler-Snir, MD
Director of the Inherited Cardiovascular Disease Program, Clinical Electrophysiologist

What is your educational background? Your work background prior to HHC? When did you join HHC?
I hold an MD from Sackler Medical School, Tel-Aviv University, and an MSc in epidemiology from The London School of Hygiene & Tropical Medicine, London University. I completed two fellowships in inherited cardiovascular diseases at University College London and the University of Toronto. I then completed a fellowship in electrophysiology at the University of Toronto. I joined Hartford HealthCare in February 2019.

How did you come to focus on heart and vascular disease?
I find research extremely challenging and creative. It provides me great satisfaction to find answers to my research questions, which can have direct impact on patient management.

How long have you been involved in research in general? In heart and vascular research?
I have been in research since medical school and heart and vascular research since residency.

If money and time were not factors, what medical question would you research?
Understanding the causes for the lack of genotype phenotype association in inherited cardiomyopathies and arrhythmia syndromes such as epigenetics and gene modifiers.

What is the biggest challenge you face in research?
Getting funding, grants and staff to support my research.

What do you feel research has contributed to the field in the past two or three decades?
Better understanding of the genetic basis and pathophysiology of hypertrophic cardiomyopathy has led to the development of cardiac myosin inhibitors which can reduce the left ventricular outflow tract obstruction caused by cardiac hypercontractility. This is expected to help many patients with this condition avoid the need for open heart surgery to relieve the obstruction.
What is your favorite research project to date and why?

I served as the principal investigator on “Hypertrophic Cardiomyopathy-Related Sudden Cardiac Death in Young Persons in Ontario,” which was published in Circulation. We found that the incidence of hypertrophic cardiomyopathy (HCM)-related sudden cardiac death (SCD) in the age group 10 to 45 is an order of magnitude lower than previously reported. We also found that sudden cardiac death in HCM is rarely associated with exercise. Current guidelines recommend that patients with HCM avoid high and moderate intensity exercise or competitive sports. We found nearly 85 percent of cases occurred during rest or light activity. I was then part of a team developing a fitness program for HCM patients.

What are your current research projects?

My current research focuses on inherited cardiovascular diseases and SCD and I am working on studies on hypertrophic cardiomyopathy, including a partnership with Apple on the detection of atrial fibrillation in HCM patients using the Apple watch, studies on the effects of resistance exercise on HCM, and studies on the psychological effects of the diagnosis of inherited cardiovascular disease.

If you weren’t a heart and vascular researcher, what would you be doing?

A neuroscience researcher.
2020-2021 HVI Peer-Reviewed Publications


37. Henzlova MJ, Duvall WL. Temporal changes in cardiac SPECT utilization and imaging findings: Where are we going and where have we been? J Nucl Cardiol. 2020 Dec;27(6):2178-2182.
44. Joshi S, Mosleh M, Kiernan FJ, McKay RG, Piccorilo B. Outcomes of Transcatheter Aortic Valve Replacement in Patients Treated with Systemic Steroids. J Invasiv Cardiol (in press)


71. Thompson PD, Arora S, Duvall WL. Tendonopathy Due to Simvastatin and Ezetimibe, Amyloidosis or Both? Am J Cardiol. 2020 Sep 1;130:165.


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2021 HVI Industry/Government-Funded Trials:

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