

Chapter News

Education, networking, and advocacy – the Nebraska ACC has it all!

- Registration is open! The Nebraska ACC 5th Annual Meeting is scheduled for Wednesday, October 19, 2022 at the Regency Marriott, Omaha. National ACC President Dr. Ed Fry will be the keynote speaker. All Nebraska cardiologists, trainees, and CVT members are invited, whether or not they are ACC members. Register now at <u>www.nebraskacardiology.org/events/annual-meeting-2022</u>.
- The 4th Annual FIT Abstract Competition will take place at the Annual Meeting. The Call for Abstracts will be sent out in the coming weeks. Thanks to FIT Section chairs Drs. Waiel Abusnina, Navya Alugubelli, Robbie Garvin, and Kara Stout for organizing this event.
- The Nebraska ACC Advocacy Committee plans to **meet with State Senator Jen Day** (District 49) this summer to discuss telehealth coverage, prior authorization, and pharmacy benefit pricing regulation. E-mail executive director Carmen Chinchilla Gutierrez (<u>carmencg@nebmed.org</u>) if you would like to participate.
- The Nebraska ACC 2nd Annual Cardiovascular Team Meeting took place on May 19, 2022 at the Happy Hollow Club. Tremendous thanks to meeting chair and CVT Representative Jessica Livingston, MSN, AAAC and to speakers Lee Hansen, RN and Marnie Max, PharmD. Contact Jessica at <u>jlivingston@nebraskamed.com</u> to get involved in future CVT events.
- The **Nebraska FIT Jeopardy Team** played very well at ACC.22! Congratulations to Drs. Shantanu Patil and Gaurav Gill from Creighton and Dr. Kara Stout from UNMC.
- We want to hear from YOU! Contact <u>Dr. Anu Tunuguntla</u> if you would like to **write for this Newsletter**. The Newsletter features four brief articles quarterly: Chapter News, Cardiology Update (by a cardiologist), FIT Corner (by a fellow in training), and CVT Corner (by a CV team member).
- Please follow us on <u>Twitter</u> and <u>Facebook</u>!



Andrew M. Goldsweig, MD, MS, FACC, FSCAI, FSVM, RPVI Governor, Nebraska ACC





Isaac Meier, MD, FACC Interventional Cardiology Bryan Heart

CARDIOLOGY UPDATE

SAVE A LIMB, SAVE A LIFE

Peripheral artery disease (PAD) resulting in amputation carries a mortality rate similar to many advanced cancers.¹ Management of PAD is ever-evolving, now with many evidence-based interventions to allow earlier diagnosis, slow disease progression, and ultimately prevent non-traumatic amputations. Unfortunately, despite the grim prognosis, this common condition remains neglected and undertreated.

In the US, PAD affects an estimated 8-10 million adults. Of those affected, around 10% progress to chronic limb-threatening ischemia (CLTI, also known as critical limb ischemia), which is characterized by ischemic rest pain or tissue loss.^{2,3} Within one year of CLTI diagnosis, one quarter of patients will develop complications resulting in amputation. This is further complicated by the unfavorable trend in amputation rates from 2009-2015 which increased 50% compared to the prior decade.⁴ Even more concerning, the risk of amputation is disproportionately afflicting minorities, with Black patients having a 2-4x higher rate of amputation compared to White patients.⁵

Multiple interventions for PAD have been shown to improve outcomes but are underutilized. The 2016 AHA/ACC PAD guidelines support screening ABIs in high risk patients and this practice is further supported by the VIVA trial which demonstrated that vascular screening with subsequent medical management resulted in a 7% reduction in mortality.^{6,7} However, this practice not been widely adopted. Antithrombotics, statin therapy, and smoking cessation counseling and treatment have well established benefits but are only employed in about a third of patients and studies have shown that patients with PAD alone are less likely to receive treatment compared to those who also have coronary artery disease.^{8,9} We know that early detection and treatment are beneficial, but we must improve our adherence to these best practices.

Diabetes is closely linked to PAD and half of all patients with diabetic foot ulcers have concurrent PAD.¹⁰ Annual comprehensive foot exams increase early detection and strict glucose control reduces amputations.^{11,12} Revascularization has been shown to decrease amputation rates and improve mortality and it should be considered in all patients at risk for amputation.¹³ Regrettably, less than half of patients have a diagnostic angiogram or intervention prior to undergoing amputation.^{14,15} Improving access to specialty care including endocrinology, podiatry, wound care, and vascular specialists is imperative to reduce amputations and optimize PAD outcomes. While treatment of PAD is overall lacking, race and socioeconomic status (SES) magnify the limitations of our health systems. Health disparities for patients with PAD exist across all facets of care with under-diagnosis, limited access, and cost of care all playing a role. Black patients are less likely to be prescribed medical therapy or have revascularization for limb salvage prior to amputation compared to White patients.^{16,17} Patients with lower income and non-private insurance have a higher likelihood of undergoing major amputation and Black and Hispanic patients are more likely to have an amputation regardless of SES.^{14,18}

The AHA released a statement in April 2021 with a goal of reducing non-traumatic amputations by 20% by 2030.¹⁹ While the task at hand is daunting, there are several reasons to be hopeful. For starters, we have done this before. From 1980 to 2000, the mortality rate for coronary artery disease fell by 40% with over half of that decrease attributed evidence-base medical therapies.²⁰ We start by increasing awareness, which in turn will encourage patients to seek care as well as empower providers to initiate validated therapies and refer to specialty care. At a larger level, Creager et al. include several policy recommendations aimed at reducing disparities in PAD care. Implementing systems-wide evidence-based practice models and public reporting of quality measures are known to improve health equity.^{19,21} Last, and perhaps most difficult, we must all confront our own implicit biases that perpetuate these disparities. Henry David Thoreau said, "It's not what you look at that matters, it's what you see." I encourage everyone to not look at PAD as another comorbidity or risk factor for cardiac disease, but see it for what it is, a potentially life threatening condition that is disproportionately affecting vulnerable and under-represented populations. If we accept this fact, we have the ability make a significant difference in patient outcomes just as we have with coronary artery disease.

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CARDIOLOGY UPDATE (CONTINUED)

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FIT CORNER

RESEARCH AS A RESIDENT

Research during training complements learning, helping to develop and reinforce core competencies. Although scholarly activity is a requirement of post-graduate medical education, enthusiasm for and participation in research by trainees is usually suboptimal. If you were like me who did not have good exposure to research during medical school or someone who did not deviate from the usual pathway and went onto obtain a MS or MPH along with your medical degree, then there is a good chance that your participation in research during residency training will continue to be below average.

On the other hand, as trainees we are always busy hopping from one rotation to another, surviving calls and acquiring new procedural skills; therefore, starting/working on a research paper can feel like a daunting task. Not knowing where to begin, which topic to select, who to approach etc. Although, I only consider myself as a person who just knew enough to get by, following are some of the pointers that can be very helpful and save you some precious time:

Mentor: Establishing a mutually beneficial mentor-mentee relationship is extremely important. In the beginning, you may want to start with someone who is more approachable like a fellow or a junior faculty. They can be a very good resource and will have more time for you. Once, you get a know-

how of how a research project goes, then you would want to approach someone more designated, experienced in research and wellrenowned. This sounds like a mammoth task but trust me, it is much easier than you think. As long as you are hardworking, flexible, and willing to invest your time, you can get in touch with anyone you want to. This will be a very important relationship as it will serve as a gateway for future opportunities.

Selecting a topic: Spending too much or too little time at this step can be very counterproductive. In my opinion, there are many efficient ways to go about this: First, you can subscribe to major journals (this is free) and turn on notifications so that whenever there is an issue out you will know about it, this way you learn what people are working on and how they are doing it and can easily find a topic for yourself from the studies that you come across. Second, you can approach an attending to give you a topic. Third, the guidelines and major journals always publish somethings about future directions or gaps in knowledge, you can easily get a topic by reading these sections. Fourth, you can always reciprocate a study that was done somewhere else at your own center by improving it with satisfying some of the limitations mentioned in the original study.

Balance quantity and quality: Once I have had a few publications. I started working on too many projects at one time. Some of these topics required data collection spanning over weeks/months. This can be a very challenging situation as you are putting too much pressure on yourself. I would suggest that you first get comfortable with one format like systemic review, meta-analysis, retrospective studies and put out as many publications as you can so that you know that you have enough for applying for fellowship etc. and doing this kind of work becomes natural to you. Afterwards, you can start pitching into more sophisticated things like prospective studies, working with databases etc.

Work in an area that interests you: As trainees, our time is finite. If you work on something that does not interest you, it is likely that you will get burned out. Alternatively, you will be easily and happily able to work on something that you like because motivation and passion for that will be much easier to come by.

Read: The physical task of writing itself is not much challenging as you write how fast you type. What you write defines

your paper and this depends on how well you read. I feel if you want to write a strong paper then as an estimate,

you may need to read 100-1000 articles. This does not mean read from start to finish but more like

skimming as to see if a particular topic is of interest and if yes, then taking a closer look. Why

this many papers? Instead of sending your paper to a general/community medicine journal,

I would advise that you target journals that are particular for your field of interest.

FIT CORNER (CONTINUED)

While doing that you would realize that even though some of these journals will have a relatively humble impact factor (1.5-2.5) but all the editors and reviewers would be from that particular specialty. Therefore, most of the senior authors will already have a knowhow of the current data, so if you want to get accepted you may want to take a deeper dive of the current pool of information as to properly highlight why your paper is important and how it contributes to the current knowledge. This will require significant reading.

Managing time between research and clinical responsibilities: During training, clinical duty and patient are the more important counter parts. Therefore, balancing these with research work is a constant routine. Important points to remember: Be a planner-make your schedule beforehand, decide early how much time you are going to give to a paper, what days you are going to work, what days you are going to take off. Speak with seniors-see how they manage their time; what advice can they give you. Take responsibility and be a leader-always try to control the flow of a project, keep communicating with team members as to keep things to track.

Statistics: Doing research requires you to have a basic knowledge of statistics. Fortunately, the statistics used in clinical research is not very complex. You will need to read about the common statistical tests, how they are conducted, interpreting their analysis etc. This is easily achieved through books, courses (Stanford online courses: <u>Stanford University Explore Courses</u>), YouTube (search for short videos regarding excel formulae/commands etc.), google (<u>Social Science Statistics (socscistatistics.com</u>)).

Paper writing: You may want to read about and develop a general skeleton of a manuscript that you intend to write. As an example, when I am writing a manuscript, I write in sections. First, Introduction-I create three paragraphs, beginning by giving a general intro to the topic, then highlighting the current evidence and gaps in knowledge, and lastly; defining the importance of your paper and what exactly you are going to do. Second, Methods and Results-Writing these sections does not require much effort, as you are just writing about what you are already doing. If you plan to submit to a particular journal, then pull a couple of papers from that journal that meet your genre and follow their pattern. Third, Discussion-the make-or-break section. There are two parts to it, for the first part you can follow two patterns. A-Take 4 or 5 main points from your paper and discuss them one by one. B-Follow a general pattern of first writing the main points in one paragraph, followed by discussing them in the next one to two paragraphs, then comparing/correlating your study to the available data. The second part of discussion is more or less the same for each paper and constitutes points on limitations, future directions and conclusion.

Timing: Being focused is very important. You have to understand that you are not memorizing what you are writing, hence once you start to do a part of the project, like searching topic, data collection or paper writing, you would want to do this by working constantly for a few days. Taking breaks creates blocks in your reading, thought process. The more breaks you take, the lesser your motivation is going to become with each one. Hence, take timely breaks, ideally between, but not during, each part of the project.

In the end, keep in mind that there is no particular form of research nor a particular pathway. Remember that everyone gets exposed to research in some way during their career. Starting early and setting a structure in the beginning will make it easier in the future. Therefore, following some of the aforementioned points may help improve your insight into the process and hopefully make it a little bit easier to pursue this path.



Joan Olson, BS, ACS, RDCS, RVT, FASE University of Nebraska Medical Center

CVT CORNER

SONOGRAPHER CORNER

This is an exciting time for the profession of Cardiac and Vascular Sonography. A career as a Diagnostic Medical Sonographer can be very rewarding, however, there can be challenges in terms of growth/advancement opportunities in this specialized field. These challenges prompted the management teams at Nebraska Medicine echo/vascular imaging labs to design a program that would give Sonographers the opportunity to advance in their career. The echocardiography and vascular imaging labs recently implemented a new Sonographer Tier System both at Nebraska Medicine main and Nebraska Medicine Bellevue campuses. The new program took over a year to plan and design. While we designed and planned the program the hospital "I Teach" values were at the core of every decision. It was a collaborative effort. Several departments including the Heart and Vascular Service Line and Imaging Medical Directors at Nebraska Medicine were extremely supportive with all phases of this initiative.

CVT CORNER(CONTINUED)



Heather Niewald, BS, RVT University of Nebraska Medical Center



Scott Have, RDC, RVS, LRCP University of Nebraska Medical Center The program designed at Nebraska Medicine has 9 levels of opportunity. Within the field of Sonography one can hold several different registries or specialize in one area such as Cardiac or Vascular. The University of Nebraska Medical Center (UNMC) College of Allied Health has recently offered a new dual Cardiac and Vascular training program. The idea behind the Tier System was to ensure it provided advancement for both a dual trained Sonographer (Cardiac & Vascular) and for Sonographers who specialize in one area whether it is Cardiac or Vascular. Within the Tier system there are 3 levels for Cardiac Sonographers, Vascular Sonographers and Dual (cardiovascular) trained Sonographers. These 3 Sonographer options create a diverse and specialized work force for both the echocardiography and vascular labs. Each level has its own set of qualifications and essential job functions and to advance to the next level one needs to be competent within their current level and meet the requirements for the higher level. Upon implementation of the program, management placed current Sonographers into the level that was deemed appropriate. In the future any new levels higher than a level I will be posted internally, and staff can apply accordingly if they meet the requirements. The number of new positions of a level I or higher will be determined by the management team. Level II is considered a Senior Sonographer and Level III is a Sonographer specialist or the equivalent to a Lead position.

Sonographers can advance in their career whether they choose the dual option or specialize in one area. Levels I, II and III are vitally important to the success of both labs. This program was recently implemented, and as challenges are anticipated along the way, we will adapt/modify the program to fit the needs of the department and staff. Overall, the management team is happy to announce the program thus far has been a success.

A special thank you to Michaela Newman, Tom Macy, Andrea Gregerson, Lisa Reed, Dr. Sayyed, Dr. Longo and Dr. Thompson for their support throughout the planning and designing of this program.



CVT CORNER(CONTINUED)



ACC CV TEAM NEWSLETTER

Did you know? The ACC has a monthly newsletter for CV Team Members. Click on the link below to learn more about what is happening on the national stage!

Read the ACC CV Team Newsletter here!

ACC'S LEGISLATIVE CONFERENCE TAKING PLACE OCTOBER 16-18!



We are looking forward to welcoming everyone back to DC for the first in-person Legislative Conference since 2019. The meeting will offer cardiovascular clinicians spanning the entire care team a chance to hear from ACC leaders, staff and other experts on health policy issues affecting patients and the profession, while also providing an important opportunity to speak directly with members of Congress and their staff.

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The Nebraska Chapter of the American College of Cardiology invites you to join us for its Annual Meeting 2022! We are happy to host Dr. Edward Fry as our speaker. We will also be hosting our annual Fellows Abstract Competition.

Wednesday, October 19, 2022 • 5:00pm-8:30pm CDT • Omaha Marriott 20220 Regency Circle, Omaha, Nebraska

Agenda	
5:00-7:00pm	Fellows Abstract Competition
5:00-7:00pm	Cocktail Reception with Sponsors
7:00-8:00pm	Dinner & Keynote
8:00-8:30pm	Chapter Business Meeting

To register, please visit our <u>event website</u>. We look forward to seeing you there!

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