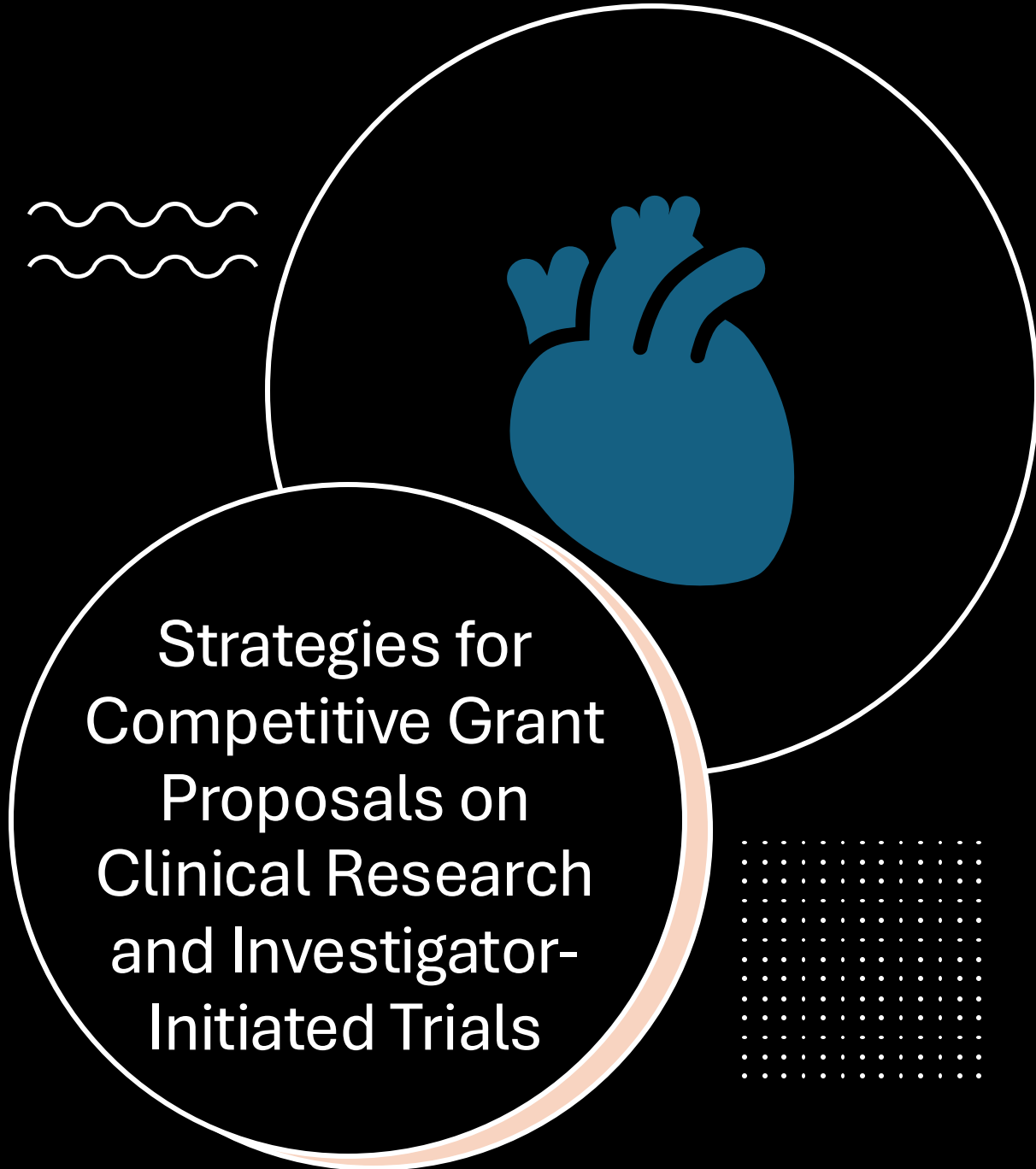




Christopher J. Cooper, MD

Distinguished University Professor

Department of Medicine, Division of
Cardiovascular Medicine

University of Toledo

Fall 2025

Funded Investigator- Initiated Trials

- PREFER, Cordis Corporation, \$40,000
- PHTN in heart failure, Ohio Affiliate, AHA, \$30,000
- Pulmonary hypertension in heart failure, National American Lung Association \$25000
- Multicenter IABP - Balloon Pump Registry, Cordis Corporation, \$55,000
- PREFER CLOSURE, Cordis Corporation \$15,000
- Critical Limb Ischemia/CD133, NIH SBIR
- CORAL, NIH-NHLBI \$15,616,169
- CORAL, NIH-NHLBI supplement, \$5,342,268
- CORAL Study: Ancillary , Pfizer, \$2,160,000 + drugs
- CORAL Study: Astra Zeneca, drugs
- CORAL Study: Cordis, devices
- RESIST: Centocor and Cordis, \$674,575
- Carvedilol and CDK: Carvedilol and Micro T-Wave Alternans \$250,000

New approaches

- Colyer WR, Moore JA, Burket MW, **Cooper CJ**. Intra-Aortic balloon pump insertion after percutaneous revascularization in patients with severe peripheral vascular disease. *Cath and Card Diagn* 1997 42:1-6.
- **Cooper CJ**, El-Shiekh RA, Cohen DJ, Blaesing L, Burket MW, Basu A, Moore JA. Effect of transradial access on quality of life and cost of cardiac catheterization: A randomized comparison. *Am Heart J* Sept. 1999, 199:430-436. (**839 citations**)
- **Cooper CJ**, Haller ST, Colyer W, Steffes M, Burket MW, Thomas WJ, Safian R, Reddy B, Brewster P, Ankenbrandt MA, Virmani R, Dippel E, Rocha-Singh K, Murphy TP, Kennedy DJ, Shapiro JJ, D'Agostino RD, Pencina MJ, Khuder S. Embolic Protection and Platelet Inhibition During Renal Artery Stenting. *Circulation*. 2008 May 27;117(21):2752-60.

High Impact Journals

- Dworkin LD, **Cooper CJ**. Clinical practice. Renal-artery stenosis. *N Engl J Med* 2009;361(20):1972-8.
- Haller S, Kalra PA, Ritchie JP, Chrysochou T, Brewster P, He W, Yu H, Shapiro JJ, **Cooper CJ**. Effect of CD40 and sCD40L on Renal Function and Survival in Patients with Renal Artery Stenosis. *Hypertension*. 2013 Apr;61(4):9894-900.
- **Cooper CJ**, Murphy TP, Cutlip DE, Jamerson K, Henrich W, Reid DM, Cohen DJ, Matsumoto AH, Steffes M, Jaff MR, Prince MR, Lewis EF, Tuttle KR, Shapiro JJ, Rundback JH, Massaro J, D'Agostino R, Dworkin LD, CORAL Investigators. Stenting and Medical Therapy for Atherosclerotic Renal Artery Stenosis. *N Engl J Med*. 2014 Jan 2;370(1):13-22. (**1220 citations**)

New Observations

- Murphy TP, **Cooper CJ**, Pencina KM, D'Agostino R, Massaro J, Cutlip DE, Jamerson K, Matsumoto AH, Henrich W, Shapiro JJ, Tuttle KR, Cohen DJ, Steffes M, Gao Q, Metzger DC, Abernethy WB, Textor SC, Briguglio J, Hirsch AT, Tobe S, Dworkin LD. Relationship of Albuminuria and Renal Artery Stent Outcomes: Results From the CORAL Randomized Clinical Trial (Cardiovascular Outcomes With Renal Artery Lesions). *Hypertension*. 2016 Nov;68(5):1145-1152.
- Tuttle KR, Dworkin LD, Henrich W, Greco BA, Steffes M, Tobe S, Shapiro JJ, Jamerson K, Lyass A, Pencina K, Massaro JM, D'Agostino RB Sr, Cutlip DE, Murphy TP, **Cooper CJ**. Effects of Stenting for Atherosclerotic Renal Artery Stenosis on eGFR and Predictors of Clinical Events in the CORAL Trial. *Clin J Am Soc Nephrol*. 2016 Jul 7;11(7):1180-8.

Making space for others...

- Tian J, Haller S, Periyasamy S, Brewster P, Zhang H, Adlakha S, Federova OV, Xie AJ, Bagrov AY, Shapiro JI, **Cooper CJ**. Renal ischemia regulates marinobufagenin release in humans. *Hypertension* 2010 Nov;56(5):914-9.
- Ren K, Drummond CA, Brewster PS, Haller ST, Tian J, **Cooper CJ**, Zhang B. An alternative empirical-likelihood method in missing response problems in casual inference. *Stat Med*. 2016 Nov 30;35(27):5009-5028.
- Haller S, Adlakha S, Reed G, Brewster P, Kennedy D, Burket MW, Colyer W, Yu H, Zhang D, Shapiro JI, **Cooper CJ**. Platelet Activation in Patients with Atherosclerotic Renal Artery Stenosis Undergoing Stent Revascularization. *Clin J Am Soc Nephrol*. 2011 Sep;6(9):2185-91.

Going back to the lab

- Haller ST, Kumarasamy S, Folt DA, Wuescher LM, Stepkowski S, Karamchandani M, Waghulde H, Mell B, Chaudhry M, Maxwell K, Upadhyaya S, Drummond CA, Tian J, Filipiak WE, Saunders TL, Shapiro JJ, Joe B, **Cooper CJ**. Targeted disruption of Cd40 in a genetically hypertensive rat model attenuates renal fibrosis and proteinuria, independent of blood pressure. *Kidney Int.* 2017 Feb;91(2):365-374.

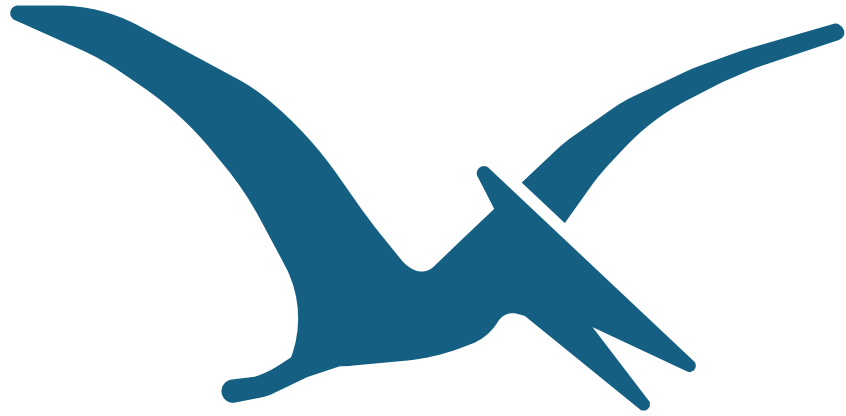
Lab back to humans, Synthesizing studies

- Xie JX, Alderson H, Ritchie J, Kalra PA, Xie Y, Ren K, Nguyen H, Chen T, Brewster P, Gupta R, Dworkin LD, Malhotra D, **Cooper CJ**, Tian J, Haller ST. Circulating CD40 and sCD40L Predict Changes in Renal Function in Subjects with Chronic Kidney Disease. *Sci Rep*. 2017 Aug 11;7(1):7942.
- Hicks CW, Clark TW, **Cooper CJ**, de Bhailis AM, De Carlo M, Green D, Malyszko J, Miglinas M, Textor SC, Herzog CA, Johansen KL, Reinecke H, Kalra PA. Atherosclerotic renovascular disease: A KDIGO (Kidney disease: improving global outcomes) controversies conference. *Am J Kidney Dis* 2022;79(2):289-301.

Changing Clinical Practice:

**2025 AHA/ACC/AANP/AAPA/ABC/ACCP/
ACPM/AGS/AMA/ASPC/NMA/PCNA/
SGIM Guideline for the Prevention, Detection,
Evaluation and Management of High Blood
Pressure in Adults:**

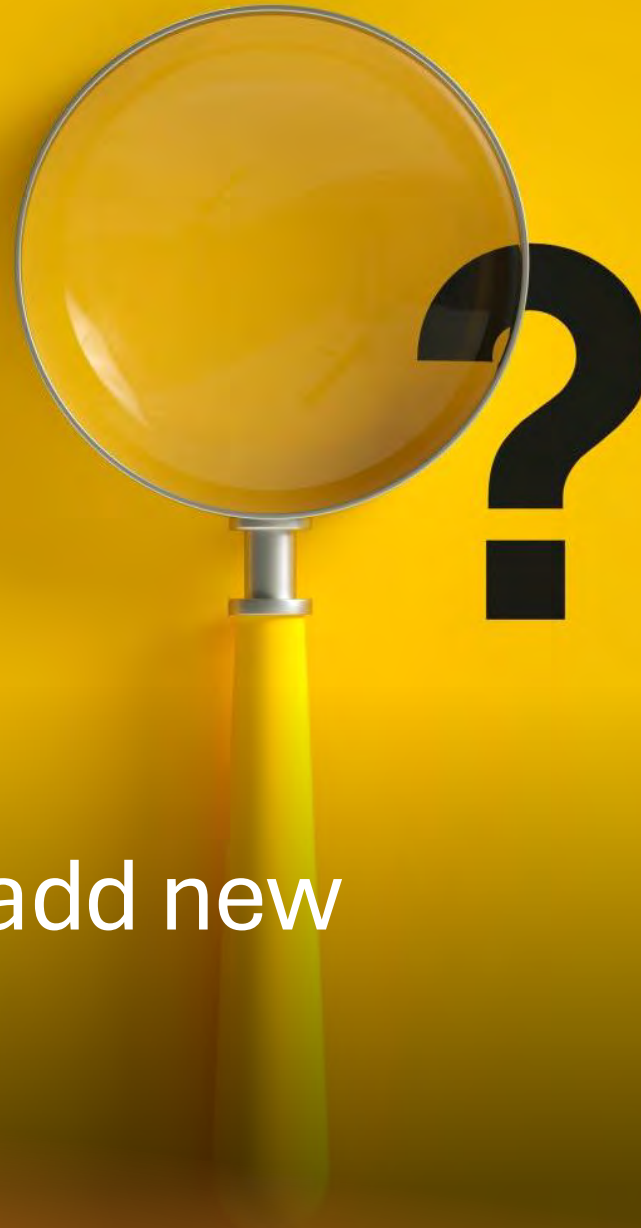
- ***“On the basis of the CORAL (Cardiovascular Outcomes in Renal Atherosclerotic Lesions) trial, the recommended medical approach encompasses optimal management of hypertension with an antihypertensive regimen that includes a renin-angiotensin system (RAS) blocker, in addition to reduction of low-density lipoprotein cholesterol with a high-intensity statin, smoking cessation, HgbA1c reduction in patients with diabetes, and antiplatelet therapy.”***



Q1: are you willing to work
harder than others before you?



Q2. Do you have a
testable idea?



Q3. Will your study add new information?

Q4. Is there a
source of potential
funding?



Q5. Do you
have
sufficient
preliminary
data?





Q6. Do you have enough patients, or do you need additional sites to get it done in a reasonable period?