I hope everyone has had an excellent summer. The summer student program was extremely successful. I want to personally thank the outstanding mentors, research coordinators, Fellows and Residents that helped support the program. I want to extend a special thank you to Mary Jo Goetz as the coordinator for the logistics of the program! Great job, Mary Jo! This was a very productive summer and will lead to a number of abstracts and manuscripts.

Speaking of abstracts, we recently found out that we have at least 6 abstracts accepted for the AHA Scientific Sessions in November and we have 2 presentations at the ACC Quality Meeting in October. TCT abstracts are still being graded. In addition, I am excited to report that Christ Hospital was the recipient of three ACC Accreditation grants: “Improving Capture of Hereditary Cardiovascular Disease Risk with a Novel, Pre-Visit Chatbot Tool” (Burns Blaxall), “Improving Medication Protocols and Attenuating Cost of Treatment, Follow-up Longitudinal (IMPACTFUL) Study in Cardiology Patients” (Blaxall) and “Enhancing Awareness and Prevention of Cardiovascular Disease in a Vulnerable Population: The South Asian Community in Tri-State Area” (Santosh Menon).

Finally, I’m excited to welcome five new Cardiologists and new Nurse Practitioners to the rapidly growing Christ Cardiovascular family!

* If there are publications and presentations not listed please email Kristi.Reynolds@thechristhospital.com

## EP Trials

<table>
<thead>
<tr>
<th>Trial</th>
<th>PI</th>
<th>Status</th>
<th># Months Active</th>
<th># Screened</th>
<th># Enrolled</th>
<th>Last Patient Enrolled</th>
<th>Brief Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapt Response Sponsor: Medtronic</td>
<td>Chung/ Schloss</td>
<td>Follow-up</td>
<td>82</td>
<td>62</td>
<td>59</td>
<td>1/17/19</td>
<td>Randomized study with approved CRT devices that contain the AdaptivCRT algorithm which may reduce the</td>
</tr>
<tr>
<td>Artesia Sponsor: Hamilton Health Sciences</td>
<td>Schloss</td>
<td>Follow-up</td>
<td>34 months</td>
<td>10</td>
<td>8</td>
<td>7/12/21</td>
<td>To determine if the use of apixaban in patients with device detected sub-clinical atrial fibrillation will reduce the incidence of stroke and systemic embolism compared to aspirin.</td>
</tr>
<tr>
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<td>---</td>
</tr>
<tr>
<td>Conformal Sponsor: Conformal Medical, Inc</td>
<td>Choo/Gupta/Beyerbach</td>
<td>On hold until devices are available</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>Evaluation of the safety and effectiveness of the Conformal left atrial appendage occlusion device in patients with non-valvular AF. The device offers a simplified implant procedure and conformability to diverse LAA anatomies as compared to the WACTHMAN device.</td>
</tr>
<tr>
<td>Cryo Global Registry Sponsor: Medtronic Beyerbach</td>
<td>On hold for sponsor amendment</td>
<td>26</td>
<td>23</td>
<td>23</td>
<td>8/8/2019</td>
<td>Registry to collect safety and effectiveness data on Medtronic market released cardiac ablation therapy.</td>
<td></td>
</tr>
<tr>
<td>Stop Persistent AF Post-Approval Study (Addendum to Cryo-Global Registry) Beyerbach</td>
<td>To begin enrollment soon</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>Sub-study to describe long-term clinical performance and safety data in the persistent AF population treated with Medtronic ARTIC Front and</td>
<td></td>
</tr>
<tr>
<td>Study</td>
<td>Sponsor</td>
<td>Principal Investigator</td>
<td>Status</td>
<td>Enrollment</td>
<td>Follow-up</td>
<td>Enrollment Months</td>
<td>Data Collection Date</td>
</tr>
<tr>
<td>-------</td>
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</tr>
<tr>
<td>Freezor MAX</td>
<td>Atricure</td>
<td>J. Michael Smith/ Beyerbach Pelchovitz</td>
<td>On hold</td>
<td>16</td>
<td>2</td>
<td>0</td>
<td>NA</td>
</tr>
<tr>
<td>DEEP</td>
<td>University of Rochester</td>
<td>Schloss</td>
<td>Enrolling</td>
<td>14 months</td>
<td>4</td>
<td>4</td>
<td>6/1/21</td>
</tr>
<tr>
<td>MARVEN</td>
<td>University of Rochester</td>
<td>Schloss</td>
<td>Enrolling</td>
<td>14 months</td>
<td>4</td>
<td>4</td>
<td>6/1/21</td>
</tr>
<tr>
<td>OPTION</td>
<td>Boston Scientific</td>
<td>Gupta</td>
<td>Follow-up</td>
<td>20</td>
<td>200</td>
<td>34</td>
<td>7/8/21</td>
</tr>
</tbody>
</table>
Highlighted Trials

ASTRAAS-HF - ASO Targeting the RAAS System for Heart Failure

**PI:** Timothy Raymond, DO
**Study Coordinator:** Katherine Gloria

A double-blind, placebo-controlled, randomized, multicenter, phase 2 study assessing the safety, tolerability, and efficacy of IONIA-AGT-LRX, an antisense inhibitor of angiotensinogen production, administered subcutaneously over 12 weeks in patients with chronic heart failure with reduced ejection fraction. Approximately 72 patients will be enrolled into 1 of 2 cohorts, randomized in a 2:1 ratio.

**Inclusion criteria:** BMI ≤ 40; Screening NT-proBNP ≥ 600 and < 8500 (different for patients in afib); Diagnosis of Hf w/ reduced systolic function for at least 6 months; NYHA class I-III; Should receive background standard of care for HFrEF, therapy should be stable for ≥ 4 weeks.

**Exclusion criteria:** Cause of chronic HF other than ischemic cardiomyopathy and dilated cardiomyopathy; Acute decompensated HF requiring IV, diuretics, IV inotropes or IV vasodilators within 30 days or acute mechanical support within 90 days; Clinically significant persistent coronary ischemia; Symptomatic hypotension or SBP ≤ 90; Uncontrolled hypertension SBP>160 or DBP >100; Hemodynamically unstable cardiac arrhythmia within 3 months; Symptomatic bradycardia or second or third degree heart block without pacemaker; Severe, uncorrected, cardiac valvular disease; Heart transplant or LVAD; Implantation of CRT within 3 months; ACS, unstable angina, TIA, coronary revascularization, cardiac device implantation, cardiac valve repair, carotid or other major surgery within 3 months; Do not meet screening lab requirements; Requirement of treatment with both ACE/ARB; Previous history of intolerance to ACE/ARB; Positive test for blood on urinalysis.

**PROTECT IV**

**PI:** Timothy Smith, MD
**SI(s):** Steven Ruddick, MD; Robert Riley, MD; James Kong, MD
**Study Coordinator:** Mary Kreimer

A prospective, multicenter, randomized, parallel-controlled, open-label, two-arm trial with an adaptive design to assess Impella supported PCI in high-risk patients with complex coronary artery disease and reduced left ventricular function. Approximately 1,252 subjects will be randomized in a 1:1 ratio to PCI with Impella CP (Intervention Group) versus standard of care PCI with or without IABP (Control Group).
Inclusion criteria: CCS or NSTEMI with an LVEF ≤ 40% OR STEMI ≥ 24 hours and <30 days after symptom onset w/ LVEF ≤ 30%; PCI is indicated and most appropriate for management; Triple vessel disease present OR left main distal bifurcation or trifurcation disease OR left main equivalent disease with both ostial LCX having visually-assessed OR intervention of the last remaining vessel OR multivessel disease is present.

Exclusion criteria: STEMI ≤24 hours from the onset of ischemic symptoms; Cardiogenic shock; Presently or recently intubated for current admission; Cardiorespiratory arrest related to current admission; Contraindication to Impella placement in both the left and right common femoral artery; Iliofemoral stents placed within 6 months; Known left ventricular thrombus; Incessant ventricular arrhythmias; Severe aortic stenosis or severe aortic insufficiency; Severe pulmonary hypertension; Severe RV dysfunction; Platelet count <75,000 cells/mm³; On dialysis; Taking chronic oral anticoagulant that cannot be safely discontinued for 72 hrs before & after procedure; Stroke with permanent neurologic deficit.

July Publications


Research Highlights

Meet the Lindner Research team!
Each month in our newsletter, we will be highlighting a few of our Lindner Research staff members.

Terah Meek, RN, BSN
Screener

I have been a nurse for 8 years with all of my experience being in Cardiology. I went to nursing school here at The Christ College of Nursing. After graduating with my Associate Degree, I participated in the Critical Care Internship program here at The Christ Hospital. I began my nursing career working bedside on 6 South in Telemetry. I did not take much time off after graduating, and went right back to school to get my BSN. I left Christ Hospital to expand my nursing knowledge further and worked out patient cardiology at Tri-Health. I worked for Dr. Puvi Seshiah for almost two years. I really enjoyed that job and learned a lot, but I was looking for part time hours after I had my daughter. That is when I decided to apply for a Research position here. I have been at The Lindner Center for 5 years, and can honestly say this has become my passion. I absolutely love what I do here. At the end of the day it is extremely rewarding and I love the variety this position offers!

Ellen Anderson, RN, BSN, M. Ed

I have worked at Lindner Research for over 2 years now. I came here after working in SICU, mainly cardiovascular, PICU, PACU, and, most recently, Vascular Access here at Christ. I have had staff and management positions in nursing, and actually took a detour from nursing, got my M.Ed, and taught chemistry, physics and earth and space science to 8th and 9th grade students locally for 14 years. I use this experience every day at Lindner! My favorite parts of the job are the patient visits and delving into the patients’ stories, learning new physiology and the study content, and contributing to bringing cutting edge, innovative solutions to patients’ medical problems through research.

Thank you!
After a productive ~8 weeks, our summer students have left to return to school. Some students will be continuing to volunteer here to wrap up projects; we appreciate all they’ve accomplished and are excited to see what the future holds.
Thank you, students, for another great summer and for all your hard work! And thank you to our Physician mentors!
Congratulations!

The following abstracts have been accepted for AHA Scientific Sessions 2021:

- Sex-Specific Mortality Associated With High Left Ventricular Ejection Fraction After ST-segment Elevation Myocardial Infarction
- Sex-Differences by Body Mass Index After ST-Elevation Myocardial Infarction
- The Obesity Paradox in ST-elevation Myocardial Infarction
- Quantity of Cardiovascular Risk Factors and Associated Outcomes in Young Women With ST-Elevation Myocardial Infarction
- Sex-Differences in Nonagenarians With ST Elevation Myocardial Infarction
- Sex Disparities in ST-Elevation Myocardial Infarction Stratified by Age: Insights From Regional ST-Elevation Myocardial Infarction Systems of Care

The following abstracts have been accepted to ACC Quality Summit:

- 12-Lead ECG Training to Ensure Optimal Triage and Treatment of Patients with Acute Coronary Syndromes and Life-Threatening Arrhythmias.
- A Novel STEMI Registry: the Midwest STEMI Consortium

Welcome!

Andrew Noll, EP
Mark Berlacher, Cardiology
Peter Macander, Interventional Cardiology
Ankit Bhatia, Heart Failure/Transplant
Senan Yasar, Cardiology
Janet Hollmann, NP, Structural Heart
Scheduled Meeting Reminder

Research Group Meeting
September 8, 2021 6:30am-7:30am
Linder Research Center - Large Conference Room/Teams Meeting
Topic: CV Surgery
Dr. Decker of Wright-Patterson to speak re: his research experience