

The University of Chicago Cardiothoracic Fellowship

Innovative approaches to training cardiothoracic surgeons

Acclaim

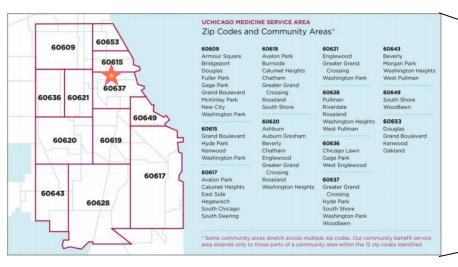
- #11 among universities (world)
- #18 among medical schools (US)*

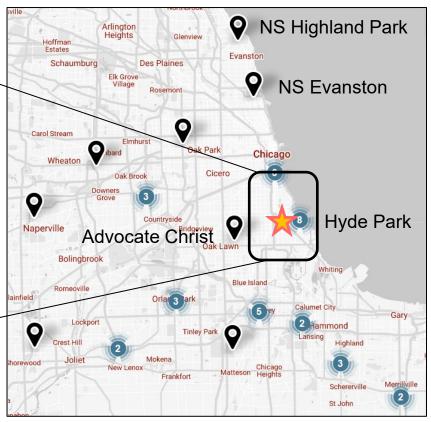






Training Sites and Service Areas





























811 licensed beds

900 attending physicians

1085 residents and fellows

46 operating rooms

34,116 admissions

24,497 operations

109,671 ER visits

\$246.3M NIH funding



Physical Space – Center for Care and Discovery





Physical Space – Cancer Center

First Free-standing Cancer Pavilion in Illinois: 575K sq ft





Program Objectives

- To be a premier multidisciplinary clinical program
- To train future leaders in cardiothoracic surgery
- To provide the highest standard of surgical care to our patients

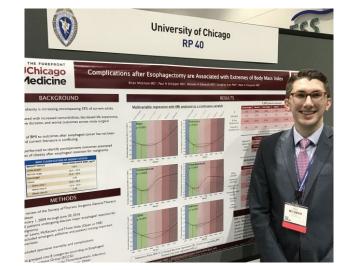






Program Profile

- Chicago-style surgery: multidisciplinary
 - Evidence-based training
 - Simulation
 - Maclean Center for Clinical Medical Ethics
 - MERITS fellowship in medical education
 - Bucksbaum Institute for Clinical Excellence







Department of Surgery

Wellness

Communications

Diversity, Equity, & Inclusion

Recruitment, Career Development,& Retention

Education & Evaluation

Clinical Care,

Access, &

Continuity

Community Engagement & Activism



DEI Steering Committee Leadership



Peter Angelos, MD,
PhD
Vice Chair for Ethics,
Wellness, and
Professional
Development



Vice-Chair of Diversity, Equity, and Inclusion, Department of Surgery



Jeffrey Matthews, MD Chair, Department of Surgery



Julian T. Owens
Department of Surgery
Core Operations
Manager, Administrative
Lead for Diversity,
Equity, and Inclusion

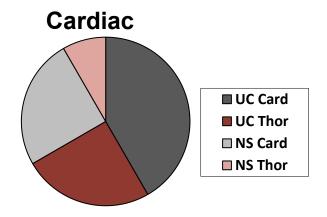
Diversity, Equity, and Inclusion

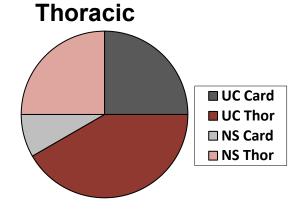
Mission: The University of Chicago Department of Surgery Diversity, Equity, and Inclusion (DEI) Steering Committee is committed to addressing and eliminating discrimination in all forms within our department through continuous self-assessment, targeted programming, advocacy, and creation of an increasingly diverse and culturally competent workforce by embedding diversity and inclusion as an integral component of surgical excellence.

In doing so, we aim to remove barriers to healthcare access, to provide the best care for our community, and to create an optimal and equitable environment to work, conduct research, and train.

Pathways

Quarter	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Fellow A	UC-T	CPB/ NS-C	CC/ CARD	NS-T	NS-T/ NS-C	UC-C	NS-T	Congenital/ UC-T	UC-C	UC-C	UC-T	UC-T
Fellow B					UC-T	CPB/NS-C	CC/UC-C	NS-T	NS-C	UC-T Congenital	NS-C	UC-C
Fellow C									UC-T	CBP/ NS-C	CC/UC-C	NS-T





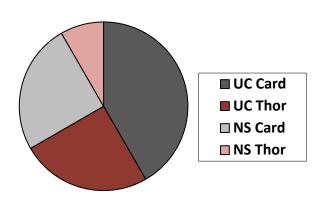


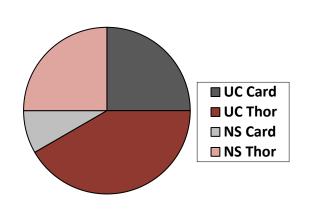
CC: Critical Care
CPB: Cardiopulmonary bypass

NS: NorthShore UC: UChicago

Cardiac Track

Thoracic Track





Highlights

- Two tracks
- Majority of time at UChicago (~70%)
- Elective time
 - •4mo in year 2
 - 8mo in year 3

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Year 3 (thoracic)	Elective (Thoracic)					Elective (Ipulm)	Elective (MIS)	Cardiac	Thoracic		ic	
Year 2 (cardiac)	Elective (Cardiac)			Congenital		Tho	racic	Cardiac		ırdiac		
Year 1 (cardiac)	Thoracic Cardiac		5	CTICU	CU Cardiac		Thoracic					



Other Specialty Experience Options

- Arrhythmia intervention
- Echocardiography
- PFT lab
- EUS/EBUS
- Esophageal function lab
- Endovascular therapies
- Cath lab
- Foregut rotations



Institutional Resources

Resource	U of C	NorthShore	Total	
Beds	568 (+80)	389	957	
ORs	44	12	54	
CVT ORs	7	1.5	7.5	
CVT floor beds	55	34	89	
CT ICU beds	28	26	54	
PA/NP	>20	6	30	
Outpatient clinic days/week	5	2	5	
Educational support staff	1	1	2.5	



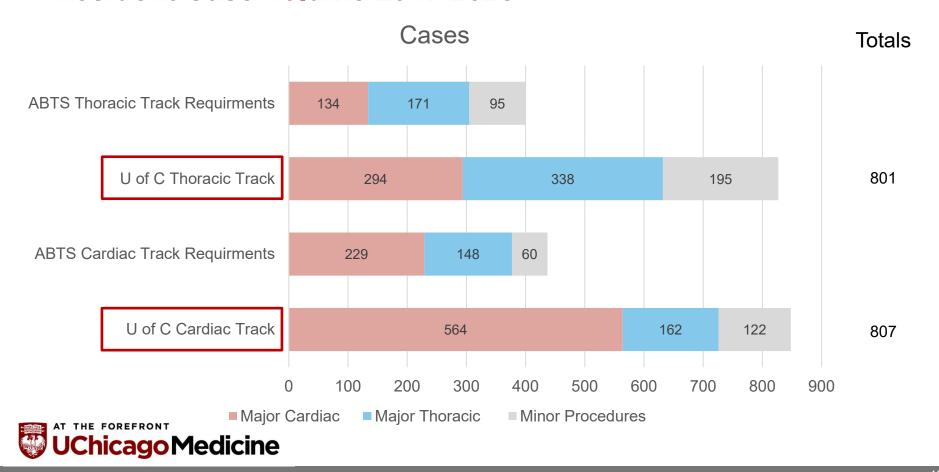


Annual Hospital Volume

	U of C	NorthShore	Total
Pulmonary/pleural	212	197	409
Esophagus	25	19	44
Other major	75	14	89
CABG	163	86	249
Valve	180	73	253
Congenital	100	3	103
Transplant	97	0	97
Other major	189	77	166
TOTAL MAJOR	1062	483	1545
Minor	418	258	676
TOTAL	1480	742	2221



Resident Case Volume 2017-2023





Educational Approaches

- Curricular design
 - Topic related learning objectives
 - Thoracic web of knowledge TSDA
 - Structured didactics
 - Simulation
 - Board question review (SESATS)
 - Mock orals
 - Key feature scenarios
- The unexamined case is not worth doing



Conference	Frequency				
Core curriculum	Tuesdays				
CT Morbidity and Mortality	Monthly				
Mock Orals	Wednesdays				
Board Review Session/KF scenarios	Thursdays				
UCMC Thoracic Case Conference	Weekly				
UCMC Attending Ward Rounds	Daily				
City-wide Joint Journal club	Quarterly				
UCMC Adult Cardiac Conference	Weekly				
UCMC Pediatric Cardiac Conference	Weekly				
UCMC Heart Transplant Conference	Weekly				
UCMC Thoracic Malignancies Staging Conferences	Weekly				
NSUH Cardiac Catheter Conference	Weekly				
NSUH Thoracic Oncology Conference	Weekly				



Other Educational Opportunities

- TSDA Boot Camp
- Education training
 - RIME (Research in Medical Education monthly lunch conferences)
 - MERITS (Medical Education Research Innovation and Teaching Scholarship—2-year scholarly track)
- Society meetings
- City-wide journal club
- City-wide mock orals
- Industry-funded courses

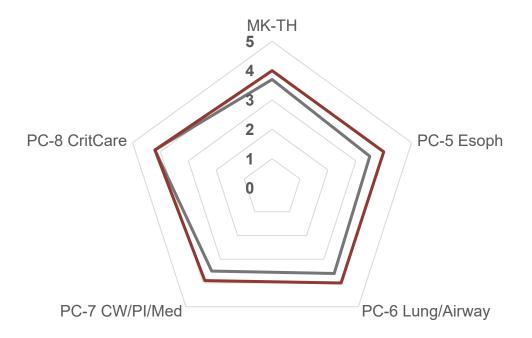


Unique Educational Opportunities

- Skinner lecture
- Benfield lecture
- Fry lecture
- Scholarship clinical research, reviews, curriculum development
- Research basic/translational, outcomes, modeling, education, simulation



Competencies – Thoracic Medical Knowledge & Patient Care



Relevant factors

Medical Knowledge:

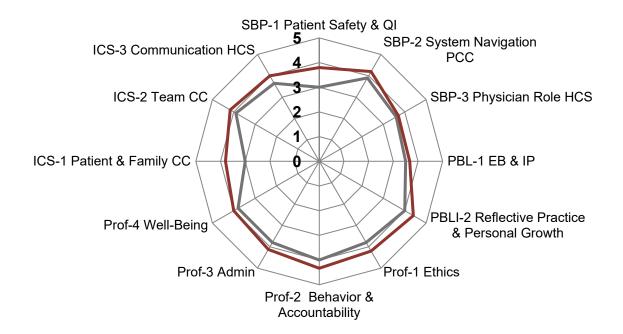
- · In-training exam
- Structured case discussions
- Simulation
- Evaluation of rotations
- Core curriculum presentations

Patient Care:

- Direct observation
- Structured case discussions
- Simulation
- Review sign-offs
- STAT



Competencies – Nonclinical Attributes



Relevant Factors:

Professionalism

- Direct observation
- Multi-source assessment
- Simulation
- · Chart review

<u>Practice-based learning</u> and improvement

- Case logs
- Teaching
- Pt outcomes
- Presentations

Interpersonal and communication skills

- Direct observation
- Chart review
- Mock orals
- Simulation
- Multi-source assess

Systems Based Practice

- · Direct observation
- Multi-source assessment
- Mock orals



Education and On-Call Responsibilities

- No in-house call
- APPs and other team members manage routine issues that arise at night and on weekends
- Night duties should be part of the curriculum rather than being a service function
- Transplant call rotations coming in when needed



Heart Failure Program

- Transplantation
- Devices as bridge to transplant
- Devices as destination therapy
- Multiple device studies
- Large support staff





Lung Failure Program

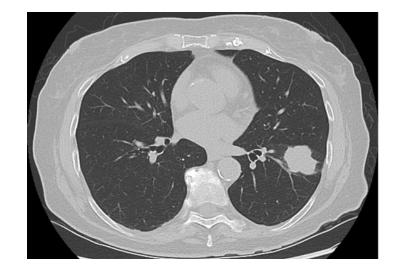
- Transplantation
- Pulmonary hypertension
- LVRS
- Multiple clinical studies
- Large support staff





Chest Oncology Program

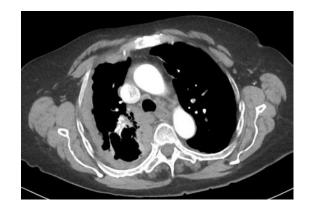
- Cooperative interdisciplinary group since 1973
- Advanced diagnostics and therapeutics in every aspect
 - Medical and radiation oncology, surgery, interventional pulmonary medicine, radiology, interventional endoscopy, pathology, cytology
 - Tissue bank
 - Multiple treatment research protocols





Mesothelioma Program

- Cooperative interdisciplinary group for 25 years
- Advanced diagnostics and therapeutics in every aspect
 - Medical and radiation oncology, surgery, palliative care medicine, radiology, pathology, cytology
 - Tissue bank
 - Multiple unique treatment research protocols





Airway Program

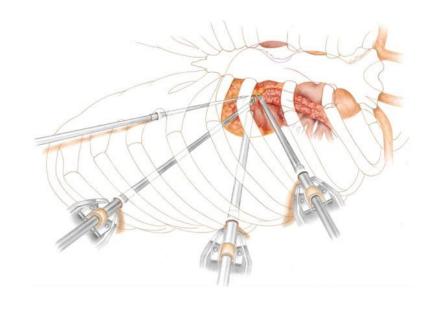
- Multidisciplinary group
 - Thoracic
 - ENT
 - Interventional pulmonary
- Expertise in every aspect, including endoscopic and resectional therapy





MIS and CT Surgery

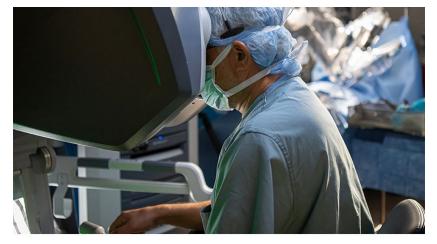
- Valve repair/replacement
- CABG
- Ablation
- RATS
- RAMIE





Robotic Cardiac Program

- Leader in tricuspid repair
- Many firsts
- Only program in the world to do totally robotic multivessel CABG
- 1685 total robotic cardiac cases
 - 200 in 2023







Simulation Curriculum

- Cardiac anatomy
- Airway management
- Interventional bronchoscopy
- CPB
- Vessel anastomosis
- AVR
- Mechanical support (acute, chronic)
- Basic robotic skills
- Cadaver labs





Cardiovascular Faculty



Val Jeevandum Columbia Columbia



Husam Bahlkey Tufts Tufts



David Onsanger Med Coll Wisconsin U Wisconsin



Takeyoshi Ota Kobe U Kobe U U Pittsburgh



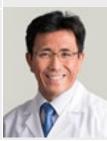
Christopher Salerno U Minnesota Stanford



Hyde Russell U Chicago Northwestern



Luca Vricella GWU Stanford



Narutoshi Hibino Ehime U TokyoWomen



Jonathan Somers Brown Rush



Nikola Dobrilovic Jewish Hospital UTSW

Thoracic Faculty



Jessica Donington Georgetown Mayo



Mark Ferguson U Chicago U Chicago



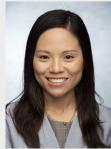
Lucia Madariaga MGH MGH



Darren Bryan U Chicago Brigham



Seth Krantz Northwestern Wash U



Weilen Su Indiana U U Pittsburgh



Pablo Sanchez Argentina Brazil U Pittsburgh

Research Initiatives

- Translational
- Clinical
- Outcomes
- Education and training















Residents

<u> </u>					
Name	Year	Medical School	Residency	Current position	Specialty
Trevor Williams, MD, MPH	2015	McGill University	UCSF East Bay	Private practice, CA	Thor
Zewditu Asfaw, MD	2016	Wake Forest University	Wayne State	Private practice, MI	Card
Diego Avella, MD	2017	Colombia	Penn State	Northwestern	Thor
Brian Mitzman, MD	2018	SUNY Buffalo	Lenox Hill	University of Utah	Thor
Jamie Eridon, MD	2019	UCSD	Lenox Hill	Private practice, CA	Card
Andrew Brownlee, MD	2020	University College Dublin	Lenox Hill	Cedars Sinai	Thor
Miroslav Peev, MD	2022	Koln, Germany	NYU	Private practice, WI	Card
Philip Erwin, DO	2023	W VA Sch of Osteo Med	U South Carolina	U South Carolina	Thor
Favin Babu, MD	2024	University of Illinois	Loyola University		Thor
Ahmed Hozain, MD	2025	Michigan State	SUNY Brooklyn		Card
Steven Qi, MD	2026	Tufts	U of Minnesota		Card
Matthew Wheelwright	2007	U of Minnesota	U of Minnesota		Card



Recent Resident Educational Activities

- TSRA Travel Award
- Intuitive Fellowship Award
- TSDA Bootcamp
- CT Critical Care Conference
- Thoracic Journal Club
- ACS Thoracic Workgroup
- AATS poster competition
- CTSNet resident video prize





What's new?

- 2023
 - Staffing Ingalls Hospital
 - Purchase of AdventHealth System
 - Outpt clinics River East, Flossmoor
- 2024
 - New hires in cardiac and thoracic
 - Outpatient facility in northwest Indiana
 - New location for NS cardiac program
 - New PD
- 2027
 - Free standing Cancer Center Hyde Park on campus





Leisure Time

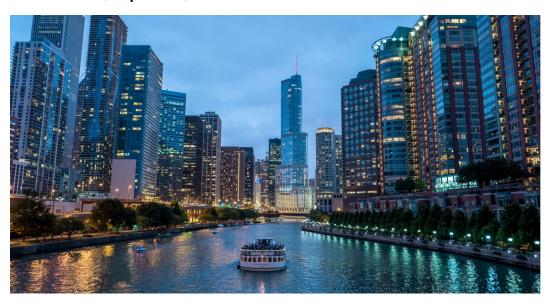
Chicago – my kind of town!

- Midwestern ambience, accessibility
- East coast / west coast amenities
- Theater, music festivals, restaurants, sports, outdoor activities

On Campus

- Ratner Center (gym)
- Doc Films (\$5 movies)
- Smart Museum of Art
- Oriental Museum
- Court Theatre
- · Cafés and bookstores























"Crescat scientia; vita excolatur"



"Let knowledge grow from more to more; and so be human life enriched"

