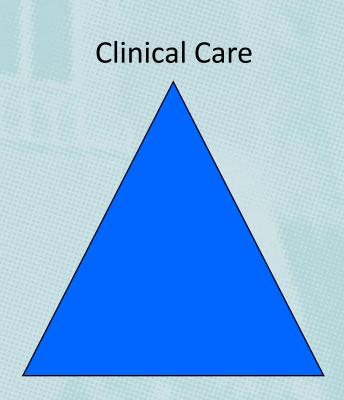


#### **Our Mission**

"Our mission is to produce a modern vascular surgeon with the necessary technical skills in open vascular surgery and endovascular therapies in order to independently manage the entire spectrum of vascular disease. These technical skills are backed by a broad knowledge base of the fundamentals of vascular literature through a structured program of didactic and interactive case conferences. The Fellowship program has been designed to accommodate applicants with future interests in either academic vascular surgery or private practice and past graduates have been successful in both arenas."



## **Standards of Excellence**



Research Education

## **Gainesville Clinical Faculty**



Martin R. Back, MD, MS
Professor and Chief

**Medical School:** 

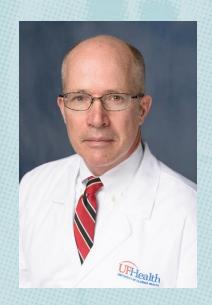
UCLA

**Residency:** 

UCLA

Fellowship:

University of Florida



Thomas S. Huber, MD, PhD Professor

**Medical School:** 

University of Michigan

**Residency:** 

University of Michigan

Fellowship:

University of Michigan

American Board of Surgery



Gilbert R. Upchurch, Jr., MD Professor and Chair of Surgery

**Medical School:** 

**UNC-Chapel Hill** 

**Residency:** 

Brigham and Women's

Fellowship:

Brigham and Women's

American Board of Surgery

## **Gainesville Clinical Faculty**



Scott A. Berceli, MD, PhD Professor and Chief VAMC

Medical School:

University of Pittsburgh

**Residency:** 

**Beth Israel Deaconess** 

Fellowship:

**University of Washington** 



Salvatore T. Scali, MD Professor Program Director

**Medical School:** 

Georgetown

**Residency:** 

Beth Israel Deaconess

Fellowship: Dartmouth



Michol Cooper, MD, PhD Assistant Professor

**Medical School:** 

**University of Cincinnati** 

**Residency:** 

Johns Hopkins

Fellowship:

Massachusetts General

## **Gainesville Clinical Faculty**



Samir Shah, MD, MPH Assistant Professor

Medical School: Baylor

Residency:

Cleveland Clinic

Fellowship:

Brigham and Women's



Zain Shahid, MD Assistant Professor

**Medical School:** 

Aga Khan University

**Residency:** 

**UT-Southwestern** 

Fellowship:

University of Florida



Ben Jacobs, MD Assistant Professor

**Medical School:** 

University of Toledo

**Residency:** 

Michigan

Fellowship:

Dartmouth



Scott Robinson, MD, PhD Assistant Professor

**Medical School:** 

**Emory** 

**Vascular Residency:** 

Michigan



## **Halifax Clinical Faculty**



Robert J. Feezor, MD
Associate Professor and Chief

**Medical School:** 

Medical College of Virginia

**Residency:** 

University of Florida

Fellowship:

University of Florida



Michael Yacoub, MD Assistant Professor

**Medical School:** 

**Ross University** 

**Residency:** 

St John Hospital

Fellowship:

West Virginia University Charleston Division



Felipe Cadavid, MD Assistant Professor

**Medical School:** 

Florida State

**Residency:** 

University of Florida

Fellowship:

**UAB** 

## **Research Faculty**

### Research – UF College of Medicine

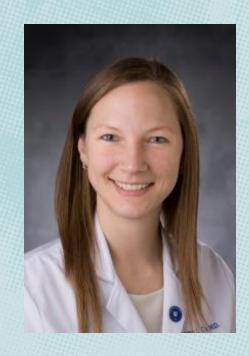
- Ashish K. Sharma, MBBS, PhD, Associate Professor
- Kerri O'Malley, PhD, Assistant Professor
- Zhihua Jiang, PhD, Associate Professor
- Yong He, PhD, Assistant Professor
- Guanyi Lu, MD, PhD, Associate Professor





## **Current Fellows**

#### 2<sup>nd</sup> Year Fellows



Morgan Cox, MD Residency: Duke



Christopher Jacobs, MD Residency: UF

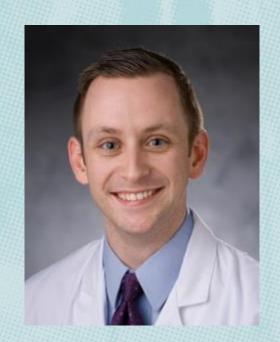


## **Current Fellows**

1<sup>st</sup> Year Fellows



Sarah Gray, MD Residency: UF



Brian Gilmore, MD Residency: Duke



Drew Martin, MD Residency: UF



## **Incoming Fellows**



Kha Tran, MD Residency: University of Chicago



Derek Leaderer, MD, PhD Residency: UF



Standards of Excellence: Clinical Care





## **Heart and Vascular Hospital 12/2017**





## Vascular Service – House Officer Complement '22-'23

Shands/UF Health

- 4 Vascular Fellows
- 1 PGY-3
- 2 PGY-1

Malcom Randall VAMC

- 1 Vascular Fellow
- PGY-4 Chief Resident
- PGY-1

UF/Halifax

Transition to Practice

- 1 Vascular Fellow
- Alternating block scheme w/ UF Flex rotation

Still planning not finalized

### **Current Vascular Fellowship Rotations**

#### **UF 'Open'**

- Runs clinical service
- Majority of "open" cases
- Clinic on Friday

#### **UF 'Endo'**

- Assists with clinical service
- Majority of "endo" cases
- Clinic on Tuesday

#### **UF 'Consult'**

- Assists with consult service
- Clinic on Wednesday

#### **VAMC**

- Endovascular cases
- Vascular Ultrasound
- Teaching conference
- Resource for PGY-4

#### **UF 'Flex'**

- UF PMEG program
- Case planning
- Vein practice
- Clinic on Thursday

## **Current Fellowship Rotation Block Schedule**

Start Date	End Date	# of weeks	UF OPEN 1° Service Clinic Fri	UF ENDO Pre-op Clinic Tue	UF CONSULTS Consults Clinic Wed	UF FLEX Clinic Thur (PMEG/veins)	VA Clinic Fri
8/1/2022	9/18/2022	7	Cox	Gray	Jacobs	Gilmore	Martin
9/19/2022	10/23/2022	5	Gray	Jacobs	Martin	Cox	Gilmore
10/24/2022	11/27/2022	5	Jacobs	Cox	Gilmore	Martin	Gray
11/28/2022	1/1/2023	5	Martin	Gilmore	Cox	Gray	Jacobs
1/2/2023	2/5/2023	5	Gilmore	Martin	Gray	Jacobs	Cox
2/6/2023	3/12/2023	5	Gray	Cox	Martin	Gilmore	Jacobs
3/13/2023	4/16/2023	5	Cox	Gilmore	Jacobs	Martin	Gray
4/17/2023	5/21/2023	5	Jacobs	Martin	Gilmore	Gray	Cox
5/22/2023	6/25/2023	5	Gilmore	Gray	Cox	Jacobs	Martin
6/26/2023	7/31/2023	5	Martin	Jacobs	Gray	Cox	Gilmore

Schedule generated by  $2^{nd}$  year fellows in coordination with  $1^{st}$  year fellows and PD



## Fellows' Weekly UF/Health Shands Schedule

	ALT ALTOHOUS AND ADDRESS OF THE PARTY OF THE	1982 9 4 2 4 4 2 4 4 2 4 4 2			
	Monday	Tuesday	Wednesday	Thursday	Friday
UF 'Open'	OR	OR	OR	OR	Clinic
UF 'Endo'	OR	Clinic	OR	OR	OR
UF 'Consult'	OR	OR	Clinic	OR	OR
UF 'Flex'	PRN	OR	OR	Clinic	OR
VA Fellow	OR	OR	Research/Vasc Lab	OR	Clinic
<b>VA Chief Resident</b>	OR	OR	OR	OR	Clinic

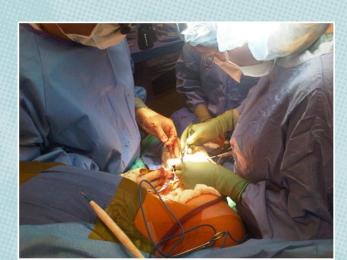
Room 5 – Traditional operating room

Room 9 – hybrid fixed imaging suite

Room 10 – hybrid fixed imaging suite

## **UF/Health Vascular Team**

- Attending's (Back, Huber, Upchurch, Cooper, Shah, Shahid, Jacobs)
- Vascular Fellows (4) /General Surgery Residents (PGY3, PGY1 x2)
- Advanced Practice Providers
- Research Coordinators (2)
- Vascular Technologists (~8700 studies/year)
- Discharge Coordinator/Social Worker
- Dedicated OR personnel
- Electronic medical record (EPIC)



### **Possible Future Fellowship Rotations**

#### **UF 'Open'**

- Runs clinical service
- Majority of "open" cases
- Clinic on Friday

#### **UF 'Endo'**

- Assists with clinical service
- Majority of "endo" cases
- Clinic on Tuesday

#### **UF 'Consult'**

- Assists with consult service
- Clinic on Wednesday

#### **VAMC**

- Endovascular cases
- Vascular Ultrasound
- Teaching conference
- Resource for PGY-4

# UF 'Flex' & Transition to Practice

- UF PMEG program alternate with UF/Halifax
- Case planning
- Vein practice
- Clinic on Thursday



## **Transition to Practice (planning)**



- One time per year per fellow at UF/Halifax
   (~5 week block or 10 weeks in 2 years/fellow)
- Plan to have apartment/food allowance
- Busy practice with spectrum of vascular care
- Practice Development & Education
- RVU/Billing Instruction
- Vascular clinic
- Call 1 weekend out of 5
- "Junior Faculty Role"
- In alternating month, will be at UF/Health Shands, to have focused PMEG, vein practice, vascular lab and clinical research experience





~100 miles
2 hour drive
[plan to stay at apartment M-F]

#### **VAMC Vascular Team**

- Attending's (Berceli, Robinson, Scali)
- Vascular Fellow (1)/General Surgery Residents (PGY4, PGY1)
- Physician Assistants (2)
- Research Coordinators (3)
- Vascular Technologists (~2500 studies/year)
- Electronic medical record (CPRS)
- Dedicated endovascular suite



**Philips Fixed Imaging Hybrid OR** 

## **UF/Health Shands Hospital**

- Clinical enterprise (>1000 beds)
- Teaching Hospital
- Tertiary care center
- Aortic Treatment Center
- Excellent referral base
- Level I Trauma
- Critical Care Service









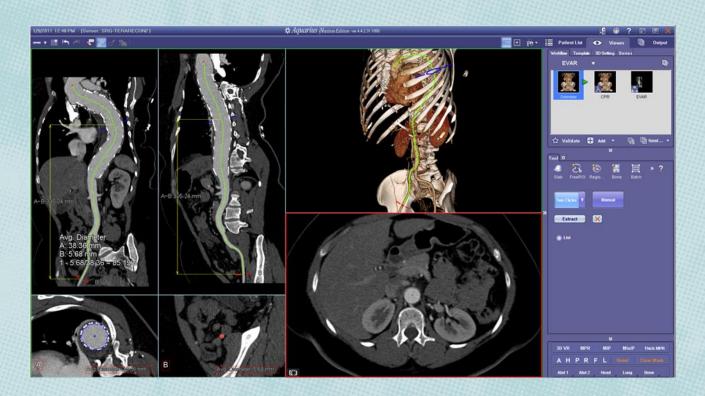
# **Artis zee- Siemens Fixed Imaging Hybrid OR**





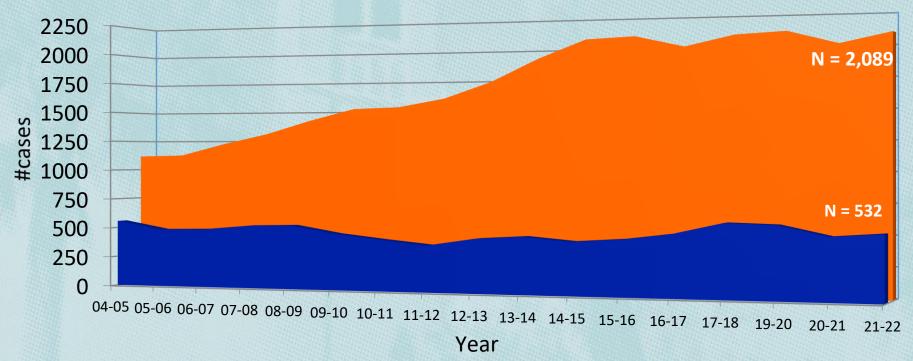
## **UF Health Imaging Laboratory**

- TeraRecon Aquarius workstations
- Cardiology Web digital image workstation- US



## Case Volumes – UF/Health & VAMC





AY'21-22 = 2,621 total cases



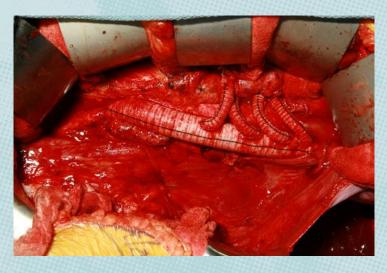
## **Open Vascular Procedures**

## Total Open cases—Shands (2021-2022)

- 185 Aortic/mesenteric
- 68 Carotid/cerebrovascular
- 225 Distal revascularization
- 45 Visceral revascularization
- 235 Dialysis
- 382 Amputations







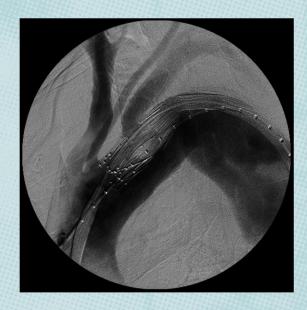
## **Endovascular Procedures**

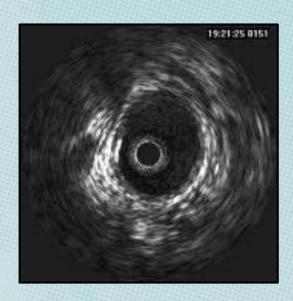
## UF/Health (2021-2022)

- 220 Aortic
- 264 Peripheral

## VAMC (2021-2022)

- 38 Aortic
- 148 Peripheral









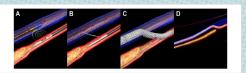
#### **Endovascular Procedures**

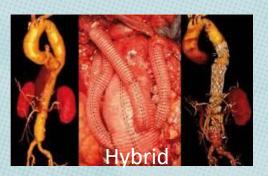
## Therapeutic Case Mix

- Carotid stents
- F/B-EVAR (including PMEG)
- Arch vessel interventions
- Renal/visceral interventions
- Aorto-iliac interventions
- Infrainguinal interventions
- Dialysis-related interventions
- Venous interventions (complex)
- Others











## **Typical Week (2/5-2/10)**

#### Sunday

- Symptomatic AAA repair (open)
- Ankle disarticulation

# Wednesday 3 rooms

#### • Ruptured AAA repair

- •L groin debridement, mm flap
- •TEVAR/C-S Bypass
- •R Brach-Ax AV graft
- •TEVAR/C-S Bypass
- •LLE SFA/tibial PTA
- •RLE iliac/SFA stenting
- •Fem-fem bypass

# Monday 3 rooms

- RLE stab phlebectomy
- •RLE stab phlebectomy
- •RLE stab phlebectomy
- •L foot wound debridement
- Femoral thromboembolectomy
- PMEG
- •L Fem-BK pop bypass
- •B/L LE angio, tibial intervention
- •R 4<sup>th</sup> met head resection
- •R forefoot wound closure

# Thursday 3 rooms

- Visceral debranching
- Reopening abdomen/washout
- •R AK-BK pop bypass
- RLE agram, SFA/tibial intervention
- •L femoral recon/iliac stenting
- •B/I venous closure/stabs

# Tuesday 3 rooms

- •LLE Agram, SFA intervention
- •LLE Agram, iliac/SFA intervention
- •LUE fistulagram with venous PTA
- •Left iliofem TEA, iliac stenting
- •R AKA
- Aortobifemoral bypass

# Friday 3 rooms

- Exploration of neck hemorrhage
- •L SCA embolization
- •Fem-fem bypass
- •Open AAA repair/L renal bpg
- •R Ax-Ax Loop AV graft
- •R BKA
- LAKA
- TEVAR
- PMEG

## **Focus on Aortic Surgery**

#### **EDUCATION CORNER**

The decline of open abdominal aortic aneurysm surgery among individual training programs and vascular surgery trainees



Margaret E. Smith, MD, MS,<sup>a</sup> Elizabeth A. Andraska, MD, MS,<sup>b</sup> Danielle C. Sutzko, MD, MS,<sup>c</sup> Anna M. Boniakowski, MD,<sup>c</sup> Dawn M. Coleman, MD,<sup>c</sup> and Nicholas H. Osborne, MD, MS,<sup>c</sup> Ann Arbor, Mich; and Pittsburgh, Pa

J Vasc Surg 2020 Apr;71(4):1371-1377

".... Vascular fellows will complete 10 open aortic repair cases in 2015 and five in 2020 ..."

# National Avg. 2019-2020 APDVS Report

- Open Infrarenal AAA repair,
   Flective n = 8.2
- Open Infrarenal AAA repair,
   Rupture n = 2.6
- Aorto-iliac/femoral bypass,
   Obstructive, n = 8.0
- Open TAAA repair, n = 2.8

UF Graduating Year	Percentile aortic aneurysm	Percentile abdominal obstructive
2022	99	94
2021	99	92
2020	99	95
2019	98	92
2018	99	97

# **Aortic Volume at UF/Health**

M - 11 - 1				
Aortic Procedure Jan Feb <mark>Mar Apr May </mark> Jun Jul Aug	Sep O	ct Nov	Dec	Total
Aortic Root 13 9 13 8 14 13 10 9	12	11 5	11	128
Aorto-Iliac/Femoral 5 7 7 6 4 2 3	5	3 8	1	51
Aorto-Mesenteric/Renal 2 1 5 3 3 2 3 4	4	4 2	1	34
Ascending 2 2 2 4 4		1 3	2	20
Ascending w Hemi- Arch 6 7 6 4 12 7 5 5	7	6 6	4	75
Ascending w Total Arch 8 6 4 5 8 8 8 6	8	5 4	3	73
EVAR 3 3 3 7 1 4 5	2	1 3	4	39
EVAR + Visceral Stent 1 0	1			2
FEVAR 1 3 1 4 5 3 3	1	3 5	2	31
Hemi-/Total Arch+FrozEleTmk 2 2 1 5 3 2 3	2	1		21
Hybrid Arch 0		1		1
Ilio-Mesenteric/Renal 1 1 1 2 2 1 3	1	2		14
Open AAA 7 6 7 4 8 11 7 3	3	8 3	3	70
Open TAA 2 1 1 0		1 1		6
Open TAAA 2 3 4 1 1 3 3		2 1	3	23
TEVAR 3 5 9 3 6 8 11 2		10 9		78
TEVAR + Visceral Stent 1 2 2 2 0 2		1		10
58 55 63 40 79 65 63 51	53	59 51	39	676
CY22				
Aortic Procedure Ian Feb Mar Apr May Jun Jul Aug S	ep Oct	t Nov	Dec	Total
Aortic Root 11 14 17 11 4 15 9 14	12	10 9		126
Aorto-Iliac/Femoral 4 5 6 7 3 3 7 2	5	4 2		48
Aorto-Mesenteric/Renal 2 3 3 2 3 5		2 1		24
Ascending 2 3 3 1 3 5 2 7	1	1 1		29
Ascending w Hemi- Arch 5 5 2 3 9 2 2 4	5	10 7	,	54
Ascending w Total Arch 6 5 8 8 3 4 3	4	3 3		47
EVAR 2 2 4 2 1 1 7 5	4	4 2		34
EVAR + Visceral Stent 1 1 1				3
FEVAR 5 8 7 5 2 9 7 6	7	10 7	'	73
Hemi-/Total Arch+FrozEleTmk 1 2 2 2		2 4		13
Hybrid Arch 1				1
Ilio-Mesenteric/Renal 3 1 3 3 4	1	1 1		17
Open AAA 4 8 7 12 9 8 11 6	6	3 3		77
Open TAA 2 1 2 2		2		9
Open TAAA 3 2 1 2 1 2 2	2	3 2		20
TEVAR 6 4 2 13 11 12 9 5	4	13 5		84
TEVAR + Visceral Stent 2 1 1 3	1	1		9 600

## **Aortic Volume at UF/Health**

# **Top 10 Vizient Volume**

<u>Hospital</u>	<u>Cases</u>
CLEVELAND CLINIC	1,507
MAYO CLINIC ROCHESTER	710
SHANDS_UF	690
MICHIGAN	683
UPHS-HUP (UPMC)	609
ALABAMA (UAB)	605
STANFORD	473
USC KECK	449
INOVA FAIRFAX	430
MASS GENERAL/ BRIGHAM	422

## **UF Vascular Fellow Case Volumes & ACGME Case Logs**

Graduating Year	Index case number
2009	845
2010	721
2011	841
2012	842
2013	846
2014	1047
2015	775
2016	902
2017	1027
2018	1071
2019	998
2020	1022
2021	980

Category	National Average	UF Fellow (%)	
Aneurysm	87	165 (99)	
Cerebrovascular	67	63 (48)	
Peripheral	175	203 (72)	
Mesenteric/renal	15	32 (99)	
Venous	59	45 (43)	
Endo. diagnostic	105	202 (82)	
Vascular access (total)	60	82 (84)	
Total operations	881	980 (70)	

- Cerebrovascular Cases- ~40-50<sup>th</sup> percentile nationally; remaining core categories > 70<sup>th</sup>percentile
- AY22 fellows: ~ 21-25 CEA each ['60-65' cerebrovascular]



Standards of Excellence: Education

## **Clinical Curriculum (APDVS)**

- Aneurysms (4 mos)
- PAOD (4 mos)
- Renal (1 mos)
- Mesenteric (1 mos)
- CVOD (3 mos)
- Venous (3 mos)
- Diagnostic (1 mos)

- Trauma (1 mos)
- Complications (1 mos)
- Risk/non-op (1 mos)
- Hematology (1 mos)
- Hemodialysis (1 mos)
- Clin Science (1 mos)
- Other (1 mos)

## **Conference Schedule**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30	31	1	2	3	4
				7:00a VSCORE Chaps: 154, 155	7:00 a Grand Rounds  North Tower 6120	
		7	8	HVH 6546/Zoom	10	11
		7:00a Aortic Treat	7:00a Case	7:00 a no VSCORE – no	7:00 a M + M	VSITE
		7.00a AUTIL Heat	Conference	conf	7.00 a 1VI + 1VI	VSITE
		HVH 6546	HVH 6546/Zoom	HVH 6546/Zoom	North Tower 6120	
12	13	14	15	16	17	18
		7:00a Clinical Practice  – Shands Faculty  HVH 6546	7:00a Case Conference HVH 6546/Zoom	7:00a JVS conf Chaps: 83,84 HVH 6546/Zoom	7:00 a Grand Rounds  North Tower 6120	
19	20	21	22	23	24	25
19	Fellowship Interviews	7:00a Aortic Treat	7:00a Vascular M + M	7:00a Vasc Lab conf Chaps: 55,71,78-81	7:00a M+M	25
		HVH 6546	HVH 6546/Zoom	HVH 6546/Zoom	North Tower 6120	
26	27	28	1	2	3	4

## **Educational Block**

- VSCORE/Rutherford
- Case conference
- VQI / Morbidity and Mortality
- Vascular lab curriculum/ RPVI preparation
- JVS conference
- Endo case planning (quarterly)
- Statistical Analysis/Review (bi-annually)
- DOS Grand Rounds/MM

## **Visiting Professors**

Kimberley J. Hansen, M.D. Michael S. Conte, M.D. Louis Messina, M.D. Ronald Dalman, M.D. David M. Williams, M.D. Gregorio A. Sicard, M.D. Frank W. Logerfo, M.D. Robert M. Zwolak, M.D. Ronald M. Fairman, M.D. Michael Lawrence-Brown, M.D. Spence Taylor, M.D. Joseph Mills, M.D. Timothy A. M. Chuter, MD Harry (Hal) Dietz, MD Gerald B. Zelenock, MD Richard P. Cambria, MD Carlos Donayre, MD Ali AbuRhama, MD





Standards of Excellence: Research

## **Clinical Research Interests**

- Aneurysm disease
- Aortic dissection
- Endovascular aortic repair
- Hemodialysis access
- Lower extremity bypass
- Nutritional modulation of inflammation and frailty
- Venous disease
- Tertiary care vascular surgery

"Write about what you do..."

-JMS



### **Research - Clinical**

#### UF D.O.S. Ranked #4 in NIH Funding

- Clinical Outcomes Research
- NIH Hemodialysis Fistula Maturation
- NIH BEST Chronic Limb Ischemia
- Vascular Quality Initiative
- VA Cooperative studies
- Industry-sponsored device trials
- Industry-sponsored pharmaceutical trials
- 18 actively enrolling studies, 6 in start-up, 3 in follow-up
- 85 total IRB approved studies
- Seven active R01 grants within division
- One active K-award
- Over 75 publications generated AY21-22

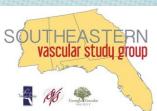




















## Fellow / Resident Research

<u>Treatment and Outcomes of Aortic Graft Infections: a Single</u>
<u>Center Experience</u> Amanda Filberto, Craig Elder, Javairiah Faitma,
Sal Scali, Gilbert Upchurch, Jr, Martin Back, Thomas Huber *PVSS, Colorado, February 2021* 

Comparative Outcomes of Open Mesenteric Bypass after Prior
Failure of Endovascular or Open Revascularization for Acute and
Chronic Mesenteric Ischemia Chris Jacobs, Salvatore Scali, Gib
Upchurch, Jr, Javairiah Fatima, Martin Back, Thomas Huber,
Kristina Giles

SCVS, Huntington Beach, CA, March 2021

Cause Specific Long-Term Mortality Outcomes after Physician Modified Endovascular Aortic Repair

Scott Robinson, Sal Scali, Kristina Giles, Martin Back, Tom Huber, Phil Goodney, Bjoern Suckow, Richard Powell, Adam Beck VAM, Boston, MA, June 2021

15-year Trends in Participation of Women in Presentation and Leadership Positions in the SAVS, 2006-2020 Libby Weaver, Rebecca Sorber, Michol Cooper

SAVS, Scottsdale, AZ, 2021

Non-guideline Compliant EVAR in Women is Associated with Increased Mortality and Re-intervention Compared to Men Sadia Ilyas, Dave Stone, Jean Kang, Michol Cooper, Jesse Columbo, Tom Huber, Bjoern Suckow, Phil Goodney, Richard Powell, Sal Scali SAVS, Scottsdale, AZ, 2021





Outcomes of EVAR Conversion in Octogenarians at a High
Volume Aorta Center Chris Jacobs, Sal Scali, Kyle Staton, Dan
Neal, Michol Cooper, Scott Robinson, Ben Jacobs, Zain
Shahid, Martin Back, Gib Upchurch, Jr., Thomas Huber
SAVS, San Diego, CA, June, 2021

<u>Uremic Contribution to Skeletal Muscle Mitochondrial</u>
<u>Bioenergetic Dysfunction in a Novel Murine AVF Model</u> Erik
Anderson, Raymond Kim, Brian Fazzone, Kerri O'Malley,
Scott Berceli, Terence Ryan, Sal Scali

SAVS, Palm Beach, FL, January 2022

Psoas Muscle Area is a Useful Prognostic Tool for Risk

Stratifying Patients Undergoing EVAR Conversion

Chris Jacobs, Sal Scali, Amanda Filiberto, Kyle Staton, Scott
Robinson, Martin Back, Michol Cooper, Gib Upchurch, Jr.,
Thomas Huber

VESS, Aspen, CO, January, 2022

Paradoxical Arterial Embolization of a Missile Via the

Pulmonary Vein in a Pediatric Penetrating Trauma Patient

Weaver ML, Jenkins P, Badru F, Staton KM, Huber TS,

Mustafa MM< Shah SK

VESS, Aspen, CO, January, 2022

Impact of C Difficile Infection on Contemporary Vascular

Surgery Outcomes Morgan Cox, David Stone, Jesse

Columbo, George Sarosi, Cris Crippen, Thomas Huber,

Sal Scali FVS, Orlando, FL, April 2022





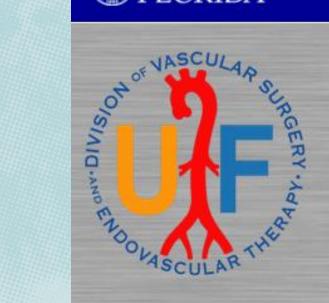












effective since July 1, 2002

# Vascular Database

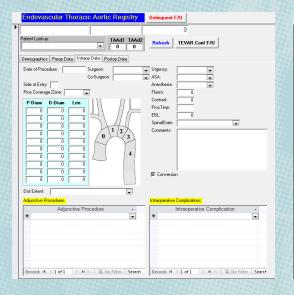
OR Scheduler

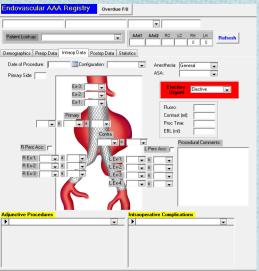
Enter Faculty Days Out

- Main Switchboard
- Endovascular AAA Registry
- Endovascular TAA Registry
- VA Endo AAA F/U List
- VIEW Endovascular Case List
- VIEW Shands Morbidity and Mortality List
  - VIEW VA Morbidity and Mortality List
  - VIEW Morbidity/Mortality Summary Report



### Research Databases

















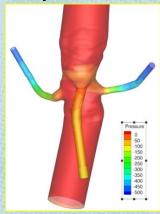


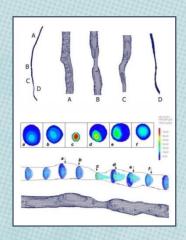




### **Research - Translational**

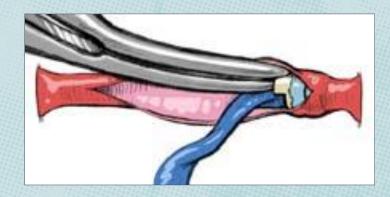
- Industry/University Cooperative Research Center -Computational Biology and Surgical Innovation
- Genomic determinants of revascularization failure
- Shear stress and the localization of vein graft lesions
- Biologic mechanisms underlying ARHI
- Biomechanics of advanced stent graft repair
- Biomarkers of spinal cord ischemia
- Short-term protein calorie restriction
- & immunomodulation
- Venous disease compression





### Research - Basic Science

- Hemodynamics and vascular remodeling
- Systems biology
- Inflammation and immune response
- Molecular basis for aneurysm development
- Aortic Dissection Disease
- Biology of Frailty and Nutritional Modulation of Surgical Stress Response
- Biology of Access Related Hand Ischemia
- Biology of venous hypertension







## **Fellow Support**

- Computer/laptop
- Administrative support
- Educational support
- Travel anticipated (SVS, SAVS, FVS)
- Travel presentations
- Rutherford's Vascular Surgery
- Journal of Vascular Surgery

- Pellerito & Polak 7<sup>th</sup> Ed. Intro Vascular Ultrasound
- Equipment (i.e. apron, glasses, coats, cards)
- Hand-held Doppler
- Discretionary funds (~\$1000/yr.)

## Gainesville, Florida

- College town
- Great sports
- Great weather
- Affordable, quality housing
- Excellent for families
- Great weekend getaway spots









### **Future Directions**

- Sustained clinical growth
  - Cardiovascular Center
  - Heart and Vascular Hospital
  - Aortic Treatment Center
  - Limb Salvage initiative
  - Vein center initiative
- Continued academic emphasis
- T32 Program
- Addition of transition to practice opportunities (AY '23-24)



### Thank You and Welcome!







Tradition of excellence
Rich educational experience
Supportive environment







