

Overview of Interventional Radiology (IR) and Considerations for Applicants

Radiology residency can be flexible

There are three pathways to IR

Pathway	Match	# Programs	# Positions	Length	Certifications
Integrated IR	IR	96	188	6 years	DR/IR
Independent with ESIR	*DR	166	~159	7 years	
Independent without ESIR		91			

*DR = Diagnostic Radiology

Year	Integrated IR Residency	Independent IR Residency	Independent IR Residency with ESIR
PGY-1	1 year of ACGME-approved nonradiology clinical training (internship)		
PGY-2	Diagnostic radiology training + 3 IR rotations	Diagnostic radiology residency	Diagnostic radiology residency with ESIR: Program requires completion of 12 IR or IR-related rotations and, at least, 500 image-guided procedures within the IR domain.
PGY-3			
PGY-4			
PGY-5	2 years of IR training	2 years of IR residency training	1 year of IR residency training
PGY-6			N/A
PGY-7	N/A	N/A	N/A
Total years of training	6	7	6

ERAS is nuanced for IR applicants

Many M4s “triple apply” to ERAS & therefore “triple interview” for:

1. Integrated, AKA categorical, IR programs
2. DR programs (with affiliated ESIR program)
3. Preliminary year programs

Table 11A U.S. MD Seniors and U.S. DO Seniors Choices by Specialty, 2024

Specialty	U.S. MD Seniors					U.S. DO Seniors				Positions per All MD/DO Senior Applicants
	Total Positions	Preferred Choice			Positions per MD Senior	Preferred Choice			Positions per DO Senior	
		Only Choice	First Choice	Not First Choice		Only Choice	First Choice	Not First Choice		
Anesthesiology	2,135	897	731	66	1.3	166	361	41	4.0	1.0
Child Neurology	212	115	23	11	1.5	18	11	7	7.0	1.3
Dermatology	576	113	488	23	1.0	17	68	2	7.0	0.8
Emergency Medicine	3,026	1,218	54	114	2.4	908	110	153	3.0	1.3
Family Medicine	5,213	1,379	65	277	3.6	1,233	121	558	4.0	1.9
Internal Medicine	10,681	3,594	188	450	2.8	1,497	232	514	6.0	1.9
Internal Medicine (Prelim)	1,640	177	13	1,459	8.6	4	2	301	273.0	8.4
Internal Medicine/Emergency Medicine	31	0	33	19	0.9	0	24	19	1.0	0.5
Internal Medicine/Pediatrics	390	260	132	42	1.0	18	27	22	9.0	0.9
Internal Medicine/Psychiatry	26	1	32	25	0.8	1	2	7	9.0	0.7
Interventional Radiology	190	11	163	46	1.1	0	36	23	5.0	0.9
Neurological Surgery	241	269	28	2	0.8	10	4	1	17.0	0.8
Neurology	1,126	551	89	29	1.8	142	54	36	6.0	1.3
Obstetrics and Gynecology	1,539	1,011	273	25	1.2	269	161	28	4.0	0.9
Orthopaedic Surgery	916	878	115	15	0.9	149	97	10	4.0	0.7
Osteopathic Neuromusculoskeletal Medicine	34	0	0	0	0.0	5	0	7	7.0	6.8
Otolaryngology	382	339	75	8	0.9	12	29	2	9.0	0.8
Pathology-Anatomic and Clinical	628	269	6	21	2.3	92	11	15	6.0	1.7
Pediatrics	3,139	1,399	43	177	2.2	521	52	91	5.0	1.6
Pediatrics (Prelim)	21	0	0	35	0.0	0	0	1	0.0	0.0
Pediatrics/Medical Genetics	31	2	16	7	1.7	0	1	0	31.0	1.6
Pediatrics/Psychiatry/Child and Adolescent	28	0	29	29	1.0	0	7	5	4.0	0.8
Physical Medicine and Rehabilitation	577	190	153	17	1.7	108	158	43	2.0	0.9
Plastic Surgery	213	182	71	5	0.8	2	14	0	13.0	0.8
Psychiatry	2,261	1,317	146	97	1.5	467	133	72	4.0	1.1
Radiation Oncology	203	100	22	5	1.7	11	5	5	13.0	1.5
Radiology-Diagnostic	1,186	424	475	190	1.3	46	183	53	5.0	1.1
Surgery-General	1,717	889	368	223	1.4	206	173	82	5.0	1.0
Surgery-General (Prelim)	1,152	44	8	584	22.2	3	2	173	230.0	20.2
Thoracic Surgery	48	0	70	10	0.7	0	5	0	10.0	0.6
Vascular Surgery	100	50	37	6	1.1	2	7	4	11.0	1.0
TOTAL *	41,503	15,725	4,028	5,427		5,921	2,111	2,772		

Only Choice: includes applicants who ranked that specialty first on their rank order lists (ROLs) and ranked no other specialties. First Choice: includes applicants who ranked that specialty first and ranked at least one other specialty on their ROLs. Not First Choice: includes applicants who ranked another specialty first but also included that specialty on their ROLs. Preferred Choice: is defined as either only choice or first choice. Transitional Year programs were excluded from these counts because they are not considered a preference for a specific specialty.

Total Positions: includes all positions (categorical, advanced, primary care categorical, and physician) except preliminary positions offered in a specialty. Preliminary positions are reported separately.

Positions Per MD Senior: is the ratio of Total Positions to the number of MD seniors for whom that specialty was the first or only choice.

Positions Per DO Senior: is the ratio of Total Positions to the number of DO seniors for whom that specialty was the first or only choice.

Positions Per All Senior Applicants: is the ratio of Total Positions to the number of MD seniors and DO seniors for whom that specialty was the first or only choice.

Note: Specialties with fewer than 20 total positions are not displayed on this table.

IR can have a broad scope of practice

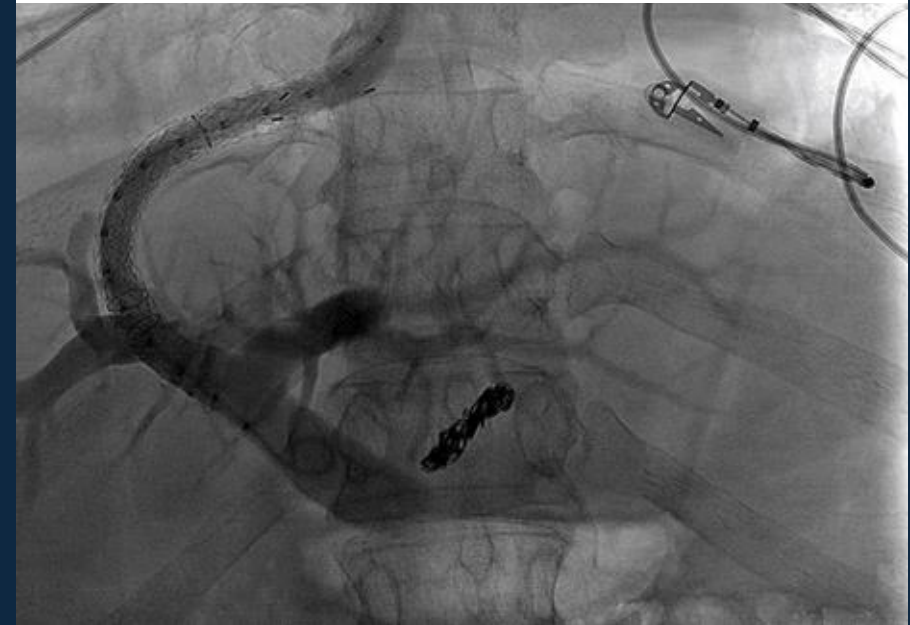
General IR manages vascular pathologies

Endovascular aneurysm repair (EVAR)



https://www.researchgate.net/publication/320479685_Endovascular_treatment_of_Brucella-infected_abdominal_aortic_aneurysm_A_case_report

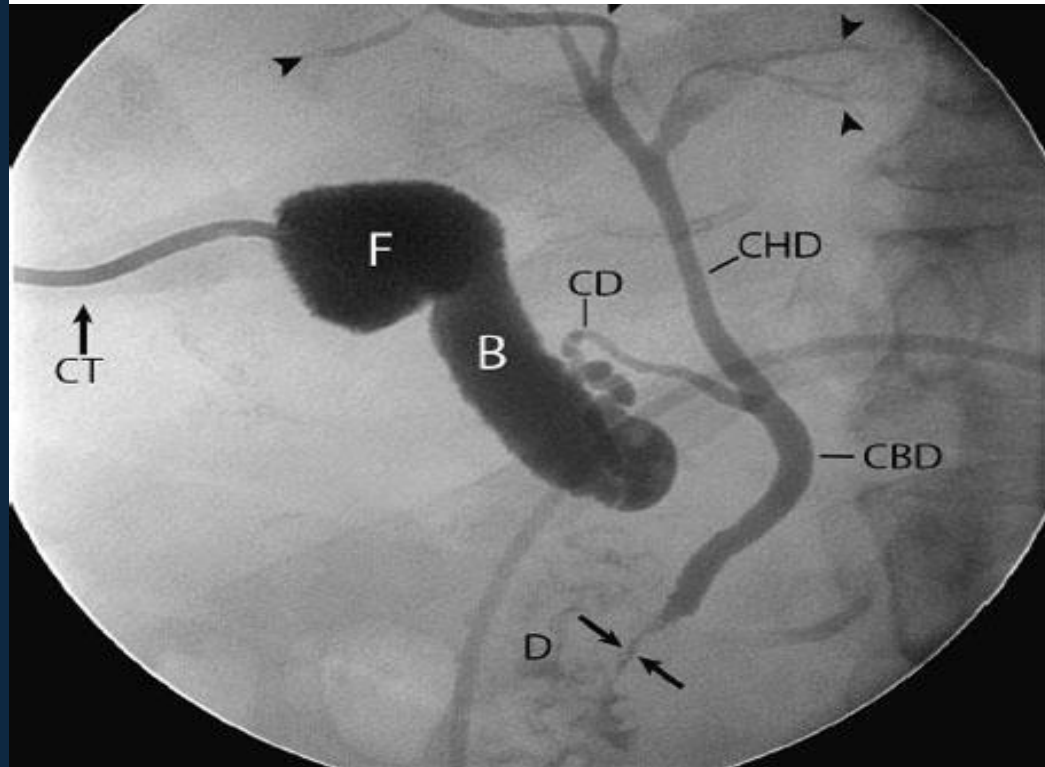
Transjugular intrahepatic portosystemic shunt (TIPS)



<https://www.nature.com/articles/s41598-022-07595-5/figures/3>

General IR manages **biliary** pathologies

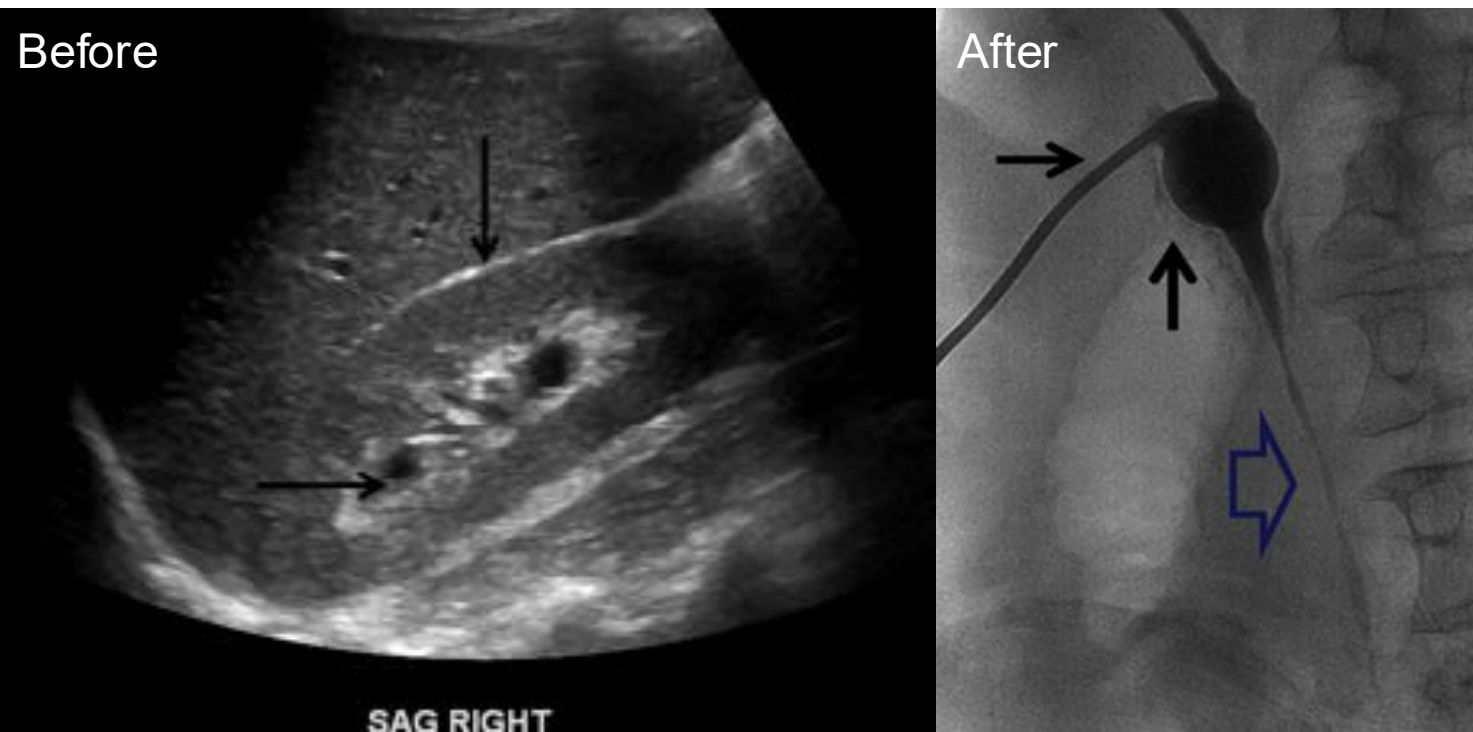
Percutaneous cholecystostomy (PC)



<https://radiologykey.com/percutaneous-cholecystostomy-2/>

General IR manages renal pathologies

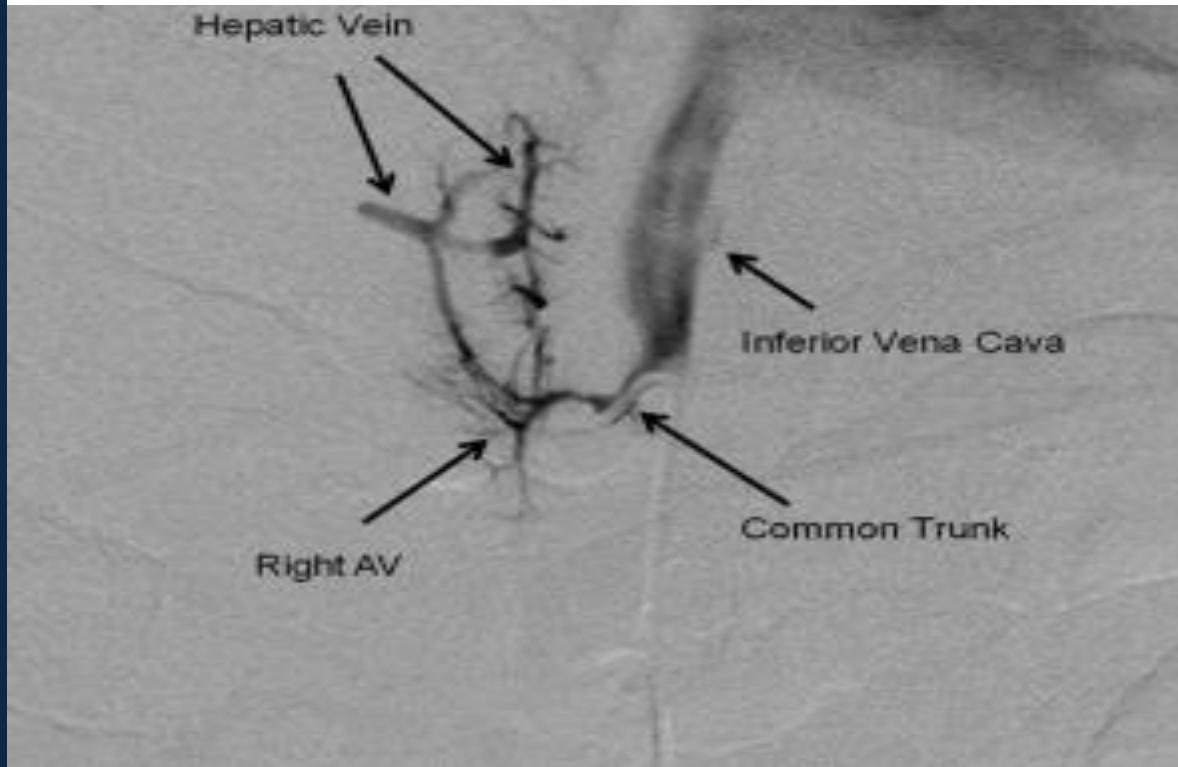
Percutaneous nephrostomy (PCN)



<https://www.sciencedirect.com/science/article/abs/pii/S1546084316000511>

General IR manages **endocrine** pathologies

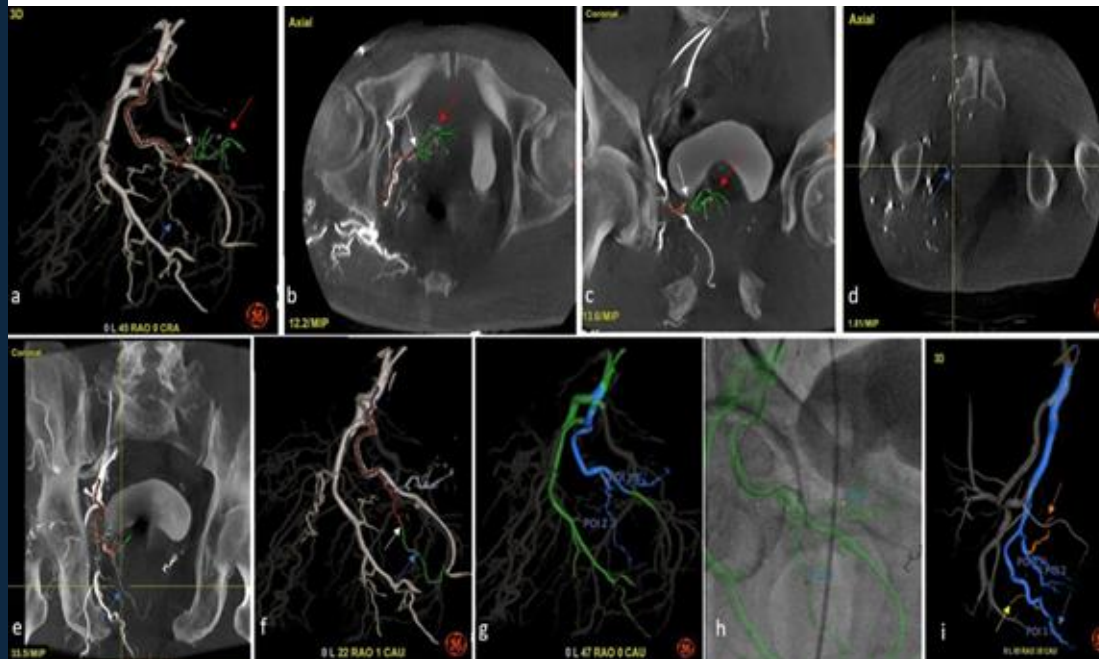
Adrenal venous sampling (AVS)



<https://www.sciencedirect.com/science/article/abs/pii/S0167527313007870>

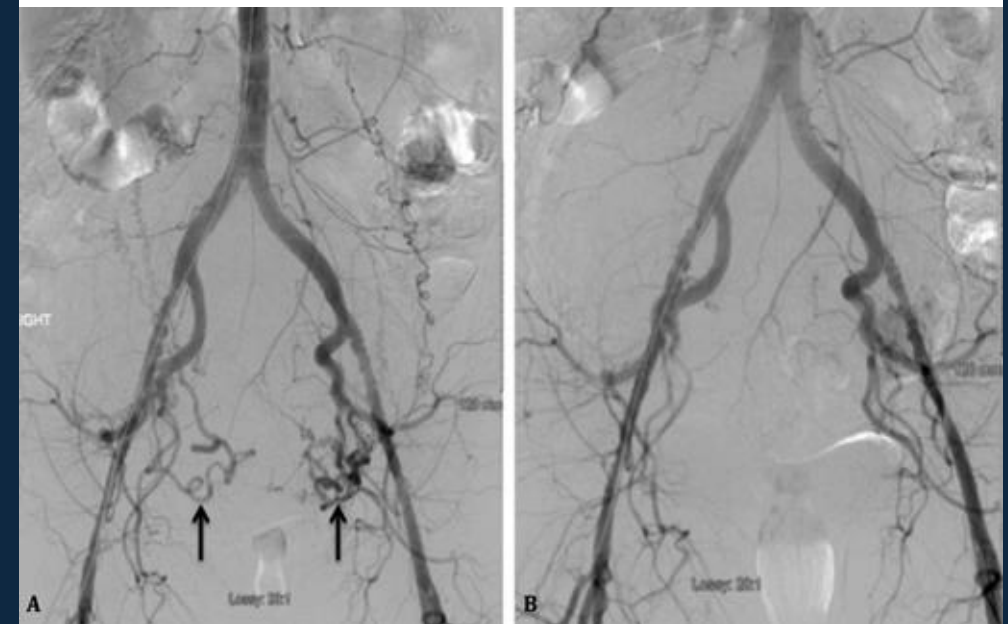
General IR manages reproductive pathologies

Prostatic artery embolization (PAE)



<https://cvirendovasc.springeropen.com/articles/10.1186/s42155-021-00249-z>

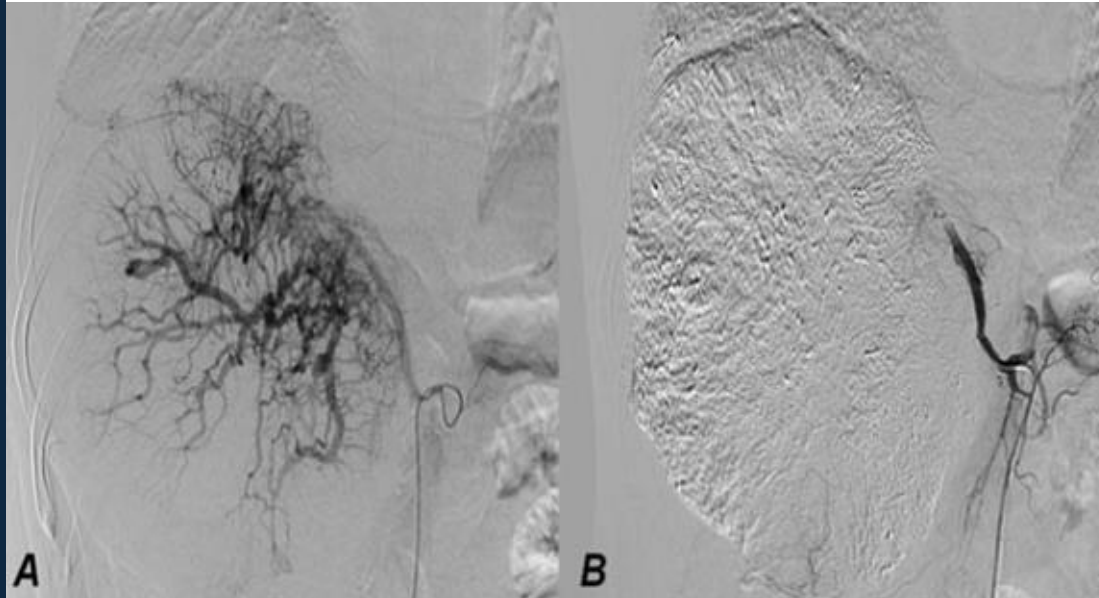
Uterine fibroid embolization (UFE)



https://www.researchgate.net/publication/332153939_Impending_fibroid_expulsion_on_MRI_after_uterine_fibroid_embolization

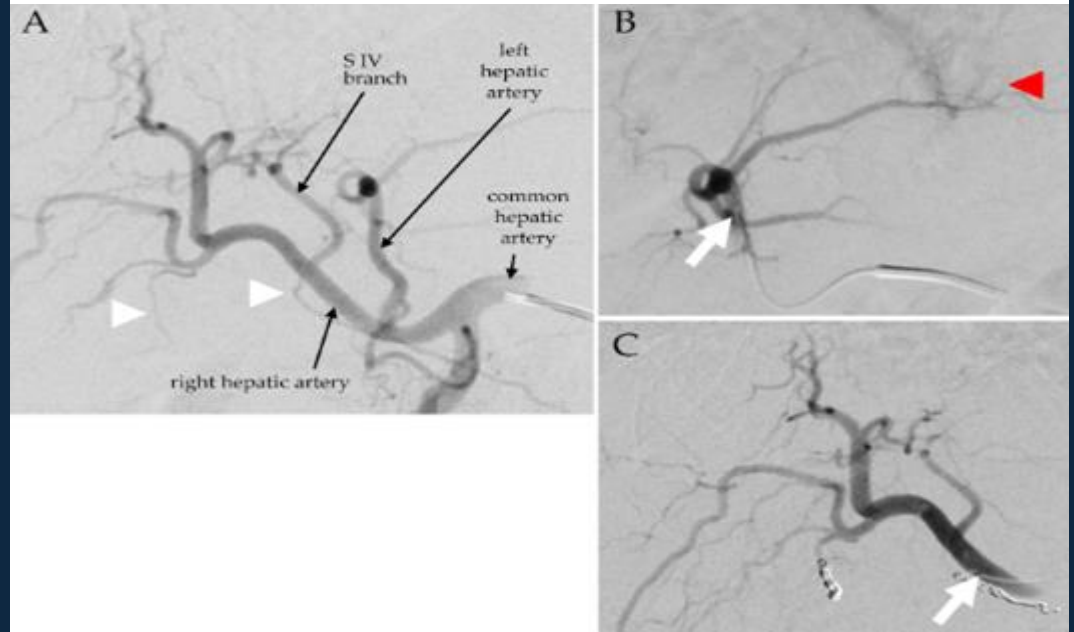
Interventional oncology is a growing field

Transarterial chemoembolization (TACE)



https://www.researchgate.net/publication/286156501_Transcatheter_Embolization_Therapy_in_Liver_Cancer

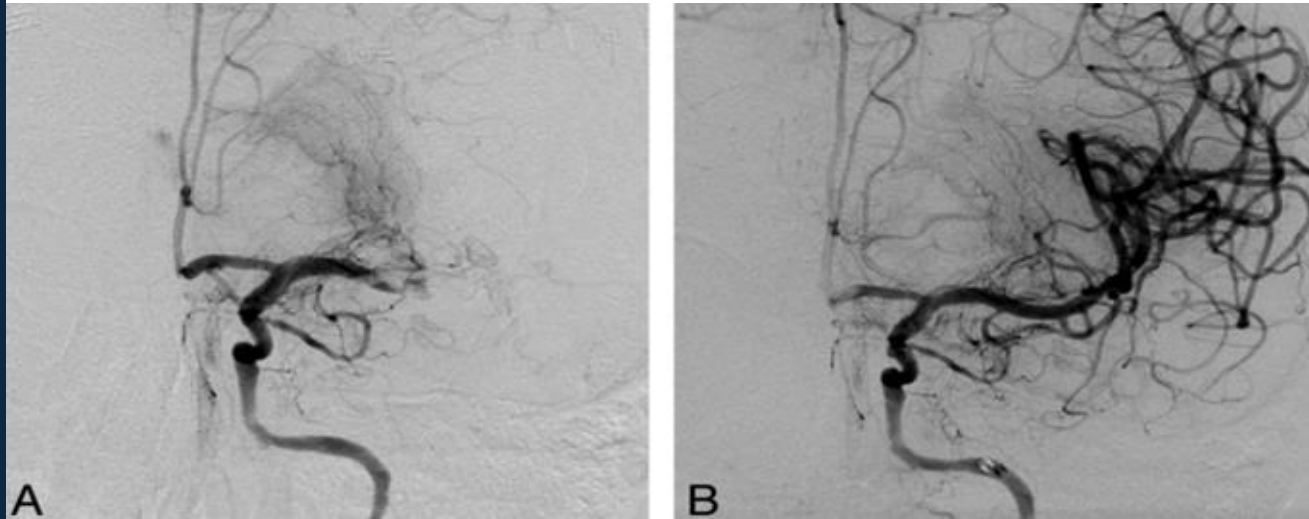
Transarterial radioembolization (TARE)



<https://www.mdpi.com/2227-9059/11/7/1831>

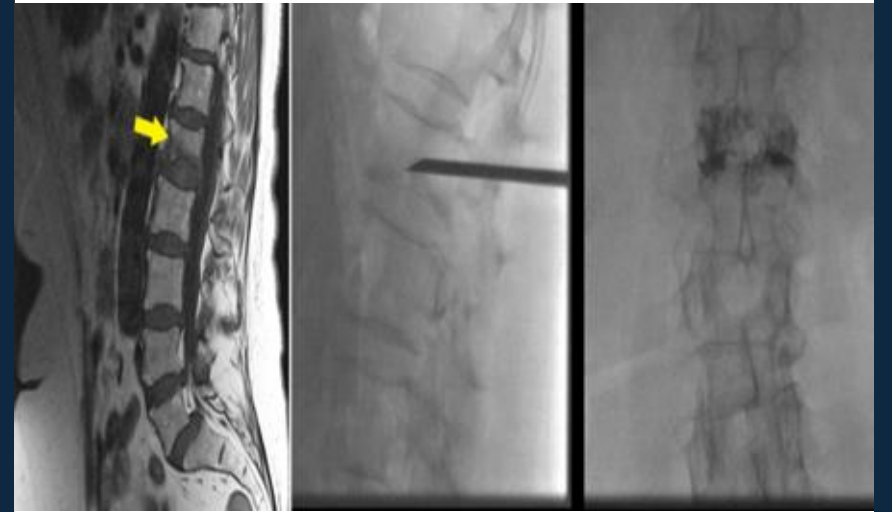
Neuro IR requires fellowship training

Mechanical thrombectomy (MK)



<https://www.ajnr.org/content/35/4/741>

Vertebroplasty



<http://www.svuhradiology.ie/case-study/vertebroplasty/>

The IR job market is flexible

Currently an applicants market

2025 Locum Interventional Radiology Coverage
Preferred
Confidential
Multiple Locations (On-Site)
1 hour ago

Interventional Radiologist
Preferred
Arthritis Relief & Vascular Centers
San Antonio, Texas, United States (On-Site)
1 day ago

Interventional Radiology
Preferred
Baptist Health
Little Rock, Arkansas, United States (On-Site)
5 days ago

High-Level Hybrid Community and Academic IR in Hampton Roads, Virginia
Preferred
Medical Center Radiologists
Williamsburg, Virginia, United States (On-Site)
7 days ago

Texas Private Practice Interventional Radiology
Preferred
High Plains Radiological Association
Amarillo, Texas, United States (On-Site)
8 days ago

Up to 100% IR Private Practice Immediate Financial Parity
Preferred
Cape Radiology Group
Cape Girardeau, Missouri, United States (On-Site)
8 days ago

Pediatric Vascular and Interventional Radiology Fellowship
Preferred
Boston Children's Hospital Department of Radio...
Boston, Massachusetts, United States (On-Site)
9 days ago

100% Outpatient Interventional Radiology Position
Preferred
Minimally Invasive Vascular Inc.
Multiple Locations (On-Site)
10 days ago

Director of Pediatric Interventional Radiology Faculty: All Ranks
Preferred
Columbia University, Department of Radiology
New York, New York, United States (On-Site)
12 days ago

Interventional Radiologist, Outstanding opportunity in the DC Metro Area
Preferred
Adventist Healthcare
Washington, Dist. Columbia, United States (On-Site)
12 days ago

Interventional Radiologist
Preferred
Regional Diagnostic Radiology
Multiple Locations (On-Site)
13 days ago

Interventional Radiologist - Assistant, Associate, or Full Professor (Faculty)
Preferred
Johns Hopkins School of Medicine
Baltimore, Maryland, United States (On-Site)
14 days ago

Interventional Radiologist - Raleigh-Durham Research triangle
Preferred
Champion Heart and Vascular Center
Multiple Locations (Hybrid)
16 days ago

100% IR in San Antonio; No Weekends/Call
Preferred
IR Centers
San Antonio, Texas, United States (On-Site)
16 days ago

100% IR in St. Louis; No Weekends/Call
Preferred
IR Centers
St Louis, Missouri, United States (On-Site)
16 days ago

*****New Facility*** Interventional Radiologist Desired for The OSU Wexn...**
Preferred
The Ohio State University Wexner Medical Center
Columbus, Ohio, United States (On-Site)
17 days ago

\$125k Commencement Bonus | Interventional Radiologist | Green Bay, WI
Preferred
Green Bay Radiology
Multiple Locations (On-Site)
20 days ago

\$125k Commencement Bonus | Interventional Radiologist
Preferred
Radiology Associates of the Fox Valley
Multiple Locations (On-Site)
20 days ago

Interventional Radiologist- Shareholder Track
Preferred
Skagit Radiology Inc PS
Mount Vernon, Washington, United States (On-Site)
20 days ago

Interventional Radiologist
Preferred
Tower Health
West Reading, Pennsylvania, United States (On-Site)
20 days ago

100% Remote Swing Shift, 1 week on/1 week off
Preferred
Advanced Midwest Radiology
Remote, United States (Remote)
22 days ago

Academics Vs Private Practice

Academics

- "100%" IR
 - DR duties typically limited to CTAs, Duplex
- Typically the highest level of complexity
- Administrative, teaching, and research responsibilities
- "more relaxed lifestyle"

Private Practice

- <100% IR
- High volume, "Bread and Butter" cases
- Typically expected to read a diverse range of DR studies
- Higher pay, more vacation

IR has pros and cons

Radiology is competitive

Table 1A Match Summary for U.S MD Seniors, 2024

Specialty	No. of Programs	No. of Positions		No. of Applicants*		No. of Matches*		% Filled	
		Offered	Unfilled	MD Seniors	Total	MD Seniors	Total	MD Seniors	Total
PGY-1 Positions									
Anesthesiology	178	1,695	0	1,691	3,034	1,192	1,695	70.3	100.0
Child Neurology	79	184	7	149	271	133	177	72.3	96.2
Dermatology	14	30	0	229	295	24	30	80.0	100.0
Emergency Med-Anesthesiology	1	2	1	9	11	1	1	50.0	50.0
Emergency Med-Family Med	3	7	0	18	31	4	7	57.1	100.0
Emergency Medicine	292	3,026	135	1,386	3,574	1,285	2,891	42.5	95.5
Family Medicine	796	5,213	636	1,721	7,081	1,521	4,577	29.2	87.8
Family Med-Preventive Med	1	1	0	6	8	1	1	100.0	100.0
Internal Medicine (Categorical)	707	10,264	404	4,226	16,464	3,606	9,767	35.0	85.3
Interventional Radiology (Integrated)	28	51	1	187	293	40	50	78.4	98.0
Medicine-Dermatology	5	8	0	28	34	7	8	87.5	100.0
Medicine-Emergency Med	12	31	0	52	109	21	31	67.7	100.0
Medicine-Medical Genetics	4	2	0	4	13	1	2	50.0	100.0
Medicine-Pediatrics	77	390	0	434	644	339	390	86.9	100.0
Medicine-Preliminary (PGY-1 Only)	329	1,640	133	3,749	5,890	1,175	1,507	71.6	91.9
Medicine-Preventive Med	5	6	0	18	102	2	6	33.3	100.0
Medicine-Primary	91	420	4	744	2,034	240	416	57.1	99.0
Medicine-Psychiatry	13	24	0	24	26	26	92.3	100.0	100.0
Neurodevelopmental Disabilities	4	6	0	3	6	6	50.0	100.0	100.0
Neurological Surgery	116	204	0	204	241	84.6	100.0	100.0	100.0
Neurology	148	466	0	466	877	53.1	99.9	99.9	99.9
OB/GYN-Preliminary (PGY-1 Only)	16	7	0	7	12	38.9	66.7	66.7	66.7
Obstetrics-Gynecology	291	1,103	0	1,103	1,533	71.7	99.6	99.6	99.6
Orthopaedic Surgery	218	726	0	726	915	79.3	99.9	99.9	99.9
Osteo Neuromusculoskeletal Med	8	0	0	0	8	0.0	33.3	33.3	33.3
Otolaryngology	138	339	0	339	381	88.7	99.7	99.7	99.7
Pathology	177	263	0	263	621	41.9	98.9	98.9	98.9
Pediatrics (Categorical)	251	1,464	0	1,464	2,827	47.6	91.8	91.8	91.8
Pediatrics-Anesthesiology	5	7	0	7	8	87.5	100.0	100.0	100.0
Pediatrics-Emergency Med	4	5	0	5	8	62.5	100.0	100.0	100.0
Pediatrics-Medical Genetics	22	18	0	18	26	58.1	83.9	83.9	83.9
Pediatrics-P M & R	3	3	0	3	4	75.0	100.0	100.0	100.0
Pediatrics-Preliminary	16	14	0	14	18	66.7	85.7	85.7	85.7
Pediatrics-Primary	12	14	0	14	60	23.0	98.4	98.4	98.4
Peds/Psych/Child Psych	11	28	0	28	26	75	92.9	100.0	100.0
Physical Medicine & Rehab	52	219	0	219	749	114	219	52.1	100.0
Plastic Surgery (Integrated)	92	213	0	258	362	188	213	88.3	100.0
Psychiatry	382	2,261	12	1,560	3,176	1,323	2,249	58.5	99.5
Psychiatry-Family Medicine	6	10	0	38	49	9	10	90.0	100.0
Psychiatry-Neurology	4	5	0	9	21	3	5	60.0	100.0
Radiation Oncology	8	43	0	43	77	43	68.0	100.0	100.0
Radiology-Diagnostic	34	145	3	743	1,171	79	142	54.5	97.9
Surgery-Preliminary (PGY-1 Only)	251	1,152	549	969	2,018	248	603	21.5	52.3
Thoracic Surgery	34	48	0	80	114	45	48	93.8	100.0
Transitional (PGY-1 Only)	217	1,747	231	2,893	4,746	1,034	1,516	59.2	86.8
Vascular Surgery	79	100	1	93	163	77	99	77.0	99.0
Total PGY-1	5,596	38,494	2,510	29,496	66,818	18,465	35,984	48.0	93.5

50/293
~17%

Table 1A Match Summary for U.S MD Seniors, 2024 (Continued)

Specialty	No. of Programs	No. of Positions		No. of Applicants*		No. of Matches*		% Filled	
		Offered	Unfilled	MD Seniors	Total	MD Seniors	Total	MD Seniors	Total
PGY-2 Positions									
Anesthesiology	52	305	0	1,227	2,011	209	305	68.5	100.0
Child Neurology	4	6	0	46	75	2	6	33.3	100.0
Dermatology	4	6	0	634	636	406	613	79.3	99.0
Interventional Radiology (Integrated)	68	137	2	215	349	111	135	81.0	98.5
Neurodevelopmental Disabilities	4	2	0	9	12	2	2	100.0	100.0
Neurology	40	225	3	499	1,037	142	222	63.1	98.7
Nuclear Medicine	2	3	0	1	13	1	3	33.3	100.0
Physical Medicine & Rehab	69	336	2	346	796	178	334	53.0	99.4
Radiation Oncology	80	175	17	127	237	114	163	65.1	93.1
Radiology-Diagnostic	170	1,017	1	1,086	1,880	717	1,016	70.5	99.9
Radiology-Nuclear Med	3	3	0	14	34	1	3	33.3	100.0
Total PGY-2	637	3,580	22	4,227	7,223	1,882	2,701	69.0	99.1
Physician (R) Positions**									
Anesthesiology	58	0	0	0	134	0.0	99.3	99.3	99.3
Child Neurology	18	0	0	9	9	0.0	40.9	40.9	40.9
Dermatology	21	0	0	29	0.0	100.0	100.0	100.0	100.0
Interventional Radiology (Integrated)	2	0	0	2	0.0	100.0	100.0	100.0	100.0
Neurology	16	0	0	23	0.0	100.0	100.0	100.0	100.0
Osteo Neuromusculoskeletal Med	3	0	0	2	0.0	20.0	20.0	20.0	20.0
Physical Medicine & Rehab	11	0	0	20	0.0	90.9	90.9	90.9	90.9
Radiation Oncology	13	0	0	13	0.0	81.3	81.3	81.3	81.3
Radiology-Diagnostic	20	0	0	24	0.0	100.0	100.0	100.0	100.0
Total Physician (R)	162	0	0	256	0.0	90.5	90.5	90.5	90.5
GRAND TOTAL	6,395	42,074	2,532	37,017	73,641	18,347	38,941	49.0	93.8

135/349
~38%

* Applicants can rank multiple specialties. As a result, the total number of applicants may exceed the number of positions; of those applicants, 1,401 were U.S. citizens.
** Physician (R) positions are PGY-2 positions starting in the year of the Match that are reserved for applicants who have had prior graduate medical education. Physician positions are not available to senior medical students.

Surgery-Lite??

Radiology will require adaptability

- Artificial intelligence (AI) will likely impact diagnostic radiology workflows
- Due to its procedural nature, IR might be impacted by AI to a lesser degree
- Adaptability to AI will become an essential attribute in both DR and IR doctors of the future

You can get started with IR today

It will be difficult, but **you can match IR**

- We are extremely lucky to have a home IR program; **take advantage of it**
 - Find a resident or attending mentor; if you would like help, come talk with us at the end of this meeting
 - **Spend time shadowing** in the IR department at UAMS or elsewhere
 - Attend radiology and/or surgery research meetings with Dr. Hanna Jensen
 - Apply for leadership position(s) in the IR and/or DR interest group(s)
 - Get involved in the SIR Biodesign competition
 - Get involved in [SIR volunteer experiences](#)
- Preclinical and clerkship performance matters
 - Try to maintain first or second quartile performance in preclinical courses
 - Try to achieve a Step 2 score > 250
- Plan for away rotations, AKA acting internships, during your M4 year
 - IR is a relatively small field, and connections can be extremely beneficial
 - Make connections with **IR attendings** that will enable them to write exemplary letters of recommendation

The UAMS IR department is eager to help



Mrs. Lacie Covington, MBA
Residency Program Manager
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Dr. Jeff Lynch
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Dr. Wayne Ngo
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Resources are available

- [SIR "IR residency training and pathways"](#)
- [UAMS Integrated IR Sample Block Diagram](#)

Appendix

Resident compensation varies by state

Resident compensation in Arkansas:

- PGY-1 “Intern” \$59,786
- PGY-2 “R1” \$62,088
- PGY-3 “R2” \$64,490
- PGY-4 “R3” \$67,044
- PGY-5 “R4” \$70,476 □ End of DR
- PGY-6 “R5” \$73,068

Resident benefits vary by program

- Insurance

- Professional Liability
- Health and Dental Insurance
- Basic Life Insurance
- Basic Long
- Term Disability

- Vacation

- Residents receive 21 days of paid vacation each year

- Sick/Parental leave

- Residents have a maximum of 12 days during each year of the residency program

- Travel

- The Department of Radiology will fund up to \$1,500 total per year and give professional leave time for those residents who are the first author on a paper or poster that is presented at a meeting.

- Radiologic Pathology

- All residents are expected to attend the 4-week (AIRP) course.

- Board Review

- The Department of Radiology will send 3rd-year residents to Board Reviews before the core exam, either physics or diagnostic or both (not to exceed \$2,500)

- Other benefits

- Free parking
- Meal tickets for in-house call
- Laboratory coats