

# Utah Medical Education Council

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Academic Year 2017-2018

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# Utah's GME Program Retention Summary Academic Year 2017-2018

The *Utah Medical Education Council* (UMEC) works with Utah's Graduate Medical Education (GME) institutions to monitor the retention of GME-trained physicians in Utah. The retention of these graduates is vital to maintaining a competent and adequately dispersed physician workforce in Utah. Indeed, monitoring the distribution of these physicians by geography and specialty provides insight to GME programs to help them meet the needs of both their individual institution as well as the health of Utah's communities.

The retention rates are based on data received from the McKay Dee Family Medicine residency program, St. Mark's Family Medicine residency program, Utah Valley Family Medicine residency program, Intermountain Medical Center programs, and the University of Utah GME Office. In addition, the UMEC uses licensing data provided by the Utah Division of Occupational and Professional Licensing (DOPL), and works with each GME program in validating the accuracy of the information compiled by the UMEC.

#### **Retention Formula**

Active Utah program graduate physicians , practicing , teaching or conducting research in Utah (Utah program graduates) - (Residents who are deceased )

- Retention is program specific.
- International Medical Graduates (IMGs) are included in the program graduate count.

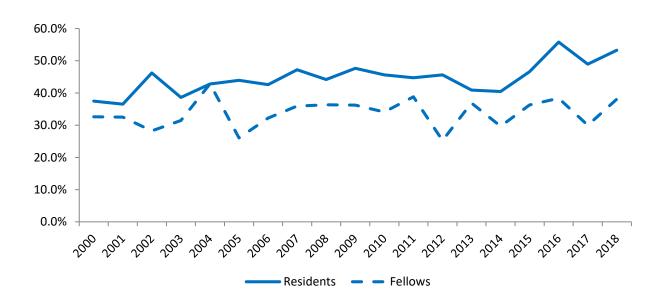


Figure 1: Retention Rate of Utah Trained Residents & Fellows by Year (as of January 2019)

The above graph illustrates the percentage of each graduating cohort in terms of those individuals who were Utah trained (either in a residency or fellowship program) and who are actively practicing in Utah as of January 2019. Individuals who are deceased, did not graduate, or are not practicing in Utah as of January 2019 are excluded from the overall retention percentage.

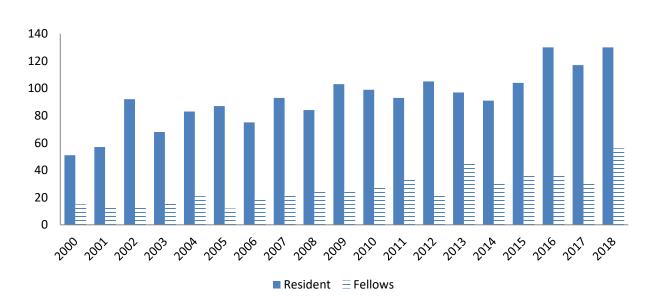


Figure 2: Total Residents and Fellows Retained each Year (as of January 2019)

Utah Trained Residents/Fellows	<b>Residents/Fellows</b>			
Total Residencies/Fellowships Completed*	5,731			
Unique Graduates**	5,360			
Unique Active in Utah	2,191 (40.9%)			

\* This number includes the total number of residencies and fellowships that have been completed within Utah from 1998-2018. Residents/fellows who completed more than one program within Utah are counted as a graduate from each respective program.

\*\* This is the total number of *unique* individuals who have completed a residency or fellowship in Utah from 1998-2018. Specifically, this number excludes counting residents/fellows who have completed more than one program as representing more than one resident/fellow. Thus, 5,360 individuals have completed 5,731 total residencies/fellowships in Utah from 1998-2018.

#### Table 2: Utah Trained Residents/Fellows Currently Practicing in the United States

Region*	Number of Utah Trained Residents	Number of Utah Trained Fellows
West**	3,053 (73.1%)	958 (61.7%)
South	447 (10.7%)	203 (15.5%)
Midwest	380 (9.1%)	218 (14.0%)
Northeast	173 (4.1%)	78 (5.0%)
TOTAL***	<b>4,053</b> (97.0%)	<b>1,553</b> (96.3%)

\* Regions are here taken from the *Bureau of Labor Statistics*. See the Bureau's "Economy at a Glance" for region specific information.

\*\*Includes Utah in region.

\*\*\*Not all Utah trained residents/fellows are currently practicing within the United States. In addition, not all residents are practicing medicine at this time.

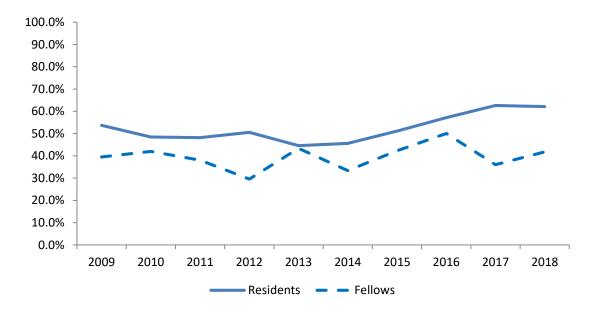
#### Table 3: Top Five States containing Utah Trained Resident/Fellows (1998-2018)

State		Number of Utah Trained Residents
	California	309
	Oregon	226
	Washington	221
	Colorado	216
	Idaho	204

	Re	esidency		Fell	owship	
Year	Total	Retained in	% Retained in	Total	Retained in	% Retained in
	Graduates	Utah (2018)	Utah (2018)	Graduates	Utah (2018)	Utah (2018)
2009	95	51	53.7%	38	15	39.5%
2010	99	48	48.5%	50	21	42.0%
2011	83	40	48.2%	50	19	38.0%
2012	97	49	50.5%	44	13	29.5%
2013	101	45	44.6%	60	26	43.3%
2014	101	46	45.5%	60	20	33.3%
2015	90	46	51.1%	52	22	42.3%
2016	98	56	57.1%	56	28	50.0%
2017	99	62	62.6%	50	18	36.0%
2018	103	64	62.1%	79	33	41.8%
Total	966	507	52.5%	539	215	39.9%

# Table 4: Retention of Primary Care (2009-2018) Residency Fellowship

Figure 3: Primary Care Retention, 2009-2018

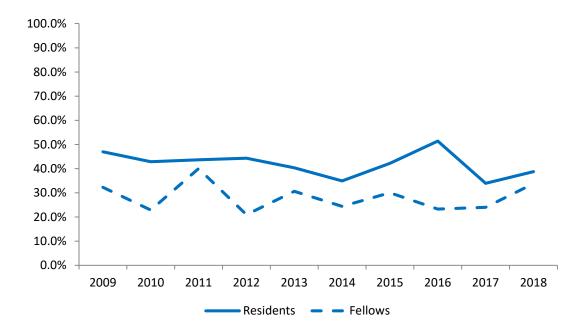


Residency			Fe	ellowship		
Year	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)
2009	98	46	46.9%	31	10	32.3%
2010	98	42	42.9%	35	8	22.9%
2011	103	45	43.7%	35	14	40.0%
2012	106	47	44.3%	43	9	20.9%
2013	114	46	40.4%	62	19	30.6%
2014	103	36	35.0%	41	10	24.4%
2015	109	46	42.2%	50	15	30.0%
2016	107	55	51.4%	43	10	23.3%
2017	115	39	33.9%	50	12	24.0%
2018	111	43	38.7%	68	23	33.8%
Total	1064	445	41.8%	458	130	28.4%

 Table 5: Retention of Specialty Care (2009-2018)

 Decidency

Figure 4: Specialty Care Retention, 2009-2018



Specialty	Residency	Fellowship
Adult Psychiatry	77.9%	75.0%
Anesthesiology	59.4%	32.4%
Child Psychiatry	75.0%	66.7%
Dental	32.0%	-
Dermatology	43.3%	-
Diagnostic Radiology	35.6%	29.4%
<b>Emergency Medicine</b>	52.3%	50.0%
Family Medicine	63.3%	21.9%
General Surgery	25.0%	25.0%
<b>General Surgery - PRELIM</b>	64.3%	-
Internal Medicine	50.2%	37.2%
Internal Medicine - PRELIM	46.3%	-
Internal Medicine - PEDIATRICS	48.1%	0.0%
Medical Genetics	-	20.0%
Neurology	34.5%	34.9%
Neurosurgery	25.9%	29.4%
OBGYN	47.5%	38.7%
<b>Occupational Medicine</b>	45.9%	-
Ophthalmology	45.2%	-
Orthopedics	37.3%	14.7%
Otolaryngology	16.1%	33.3%
Pathology	55.8%	42.6%
Pediatrics	45.5%	50.4%
Physical Rehabilitation	36.2%	8.3%
Plastic Surgery	27.8%	18.2%
Podiatry	44.2%	-
Radiation Oncology	10.5%	-
Transitional Year	31.7%	-
Triple Board	63.2%	-
Urology	40.0%	100.0%

Table 6: Total Retention by Specialty (Over last decade, 2009-2018)

#### Table 7: Total Retention (4 year intervals, 1999-2018)

Period	Total Graduates	Retained in Utah (2017)	Percent Retained
1999-2002	811	296	36.5%
2003-2006	952	382	40.1%
2007-2010	1,104	480	43.5%
2011-2014	1,295	516	39.8%
2015-2018	1,387	642	46.3%
Total	5,549	2,316	41.7%

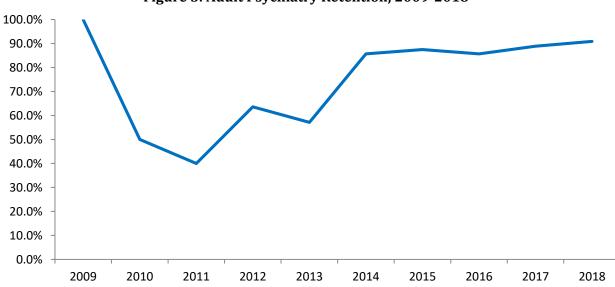
## **Retention by Specialty**

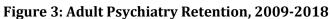
Adult Psychiatry -	<b>Residency</b> and	Fellowship	Graduates

Residency				1000, <u>-</u> 007	Fellowship	
Year	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)
2009	7	7	100.0%	0	0	-
2010	4	2	50.0%	0	0	-
2011	5	2	40.0%	0	0	-
2012	11	7	63.6%	0	0	-
2013	5	3	60.0%	2	1	50.0%
2014	7	6	85.7%	0	0	-
2015	7	6	85.7%	1	1	100.0%
2016	6	6	100.0%	1	0	0.0%
2017	9	8	88.9%	0	0	-
2018	7	6	85.7%	4	4	100.0%
Total	68	53	77.9%	8	6	75.0%

#### Table 8: Annual Adult Psychiatry Retention, 2009-2018

\*\* Fellowship programs contain: *Addiction Psychiatry* 





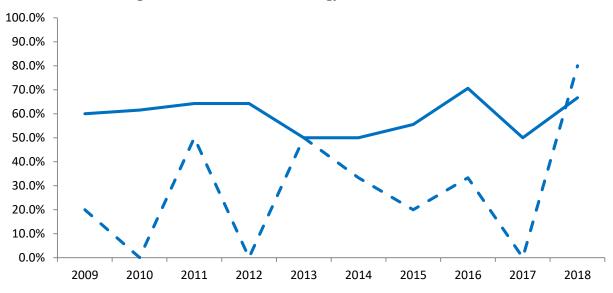
With so few residents and fellows, their numbers have been combined.

#### Anesthesiology - Residency and Fellowship Graduates

_		Residency			Fellowship	
Year	Total	Retained in	% Retained in	Total	Retained in	% Retained in
	Graduates	Utah (2018)	Utah (2018)	Graduates	Utah (2018)	Utah (2018)
2009	10	6	60.0%	5	1	20.0%
2010	13	8	61.5%	4	0	0.0%
2011	14	9	64.3%	2	1	50.0%
2012	14	9	64.3%	3	0	0.0%
2013	16	8	50.0%	4	2	50.0%
2014	14	7	50.0%	3	1	33.3%
2015	9	5	55.6%	5	1	20.0%
2016	17	12	70.6%	3	1	33.3%
2017	14	7	50.0%	0	0	-
2018	12	8	66.7%	5	4	80.0%
Total	133	79	59.4%	34	11	32.4%

#### Table 9: Annual Anesthesiology Retention, 2009-2018

\*\* Fellowship programs contain: Anesthesia Pain Management and Pain Medicine



#### Figure 4: Annual Anesthesiology Retention, 2009-2018

	Table 10: Annual Child Psychiatry Retention, 2009-2018								
_		Residen	су	Fellowship					
Year	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)			
2009	0	0	-	2	1	50.0%			
2010	2	1	50.0%	0	0	-			
2011	3	2	66.7%	0	0	-			
2012	1	1	100.0%	0	0	-			
2013	2	1	50.0%	0	0	-			
2014	0	0	-	1	1	100.0%			
2015	3	3	100.0%	0	0	-			
2016	2	1	50.0%	0	0	-			
2017	3	3	100.0%	0	0	-			
2018	0	0	-	0	0	-			
Total	16	<b>12</b>	75.0%	3	2	66.7%			

#### **Child Psychiatry - Residency and Fellowship Graduates**

\*\* Fellowship programs contain: *Child Psychiatry* 

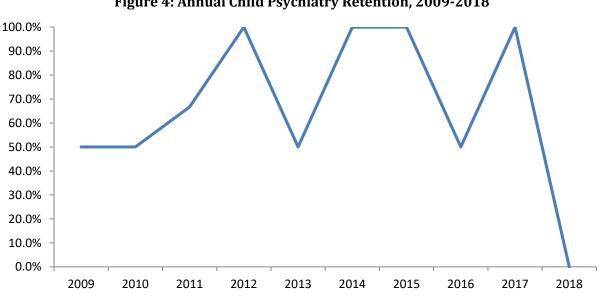


Figure 4: Annual Child Psychiatry Retention, 2009-2018

With so few residents and fellows, their numbers have been combined.

#### **Dental – Residency Graduates Only**

Year	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)
2009	10	6	60.0%
2010	10	4	40.0%
2011	10	5	50.0%
2012	11	4	36.4%
2013	10	5	50.0%
2014	10	1	10.0%
2015	10	3	30.0%
2016	10	2	20.0%
2017	9	1	11.1%
2018	10	1	10.0%
Total	100	32	32.0%

#### Table 11: Annual Dentistry Retention, 2009-2018

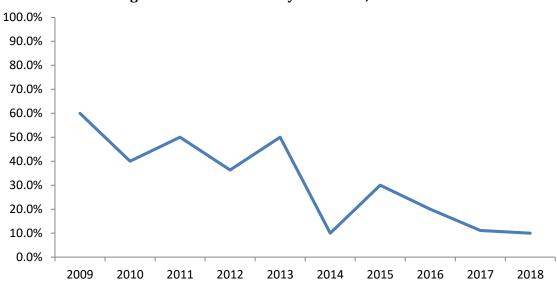
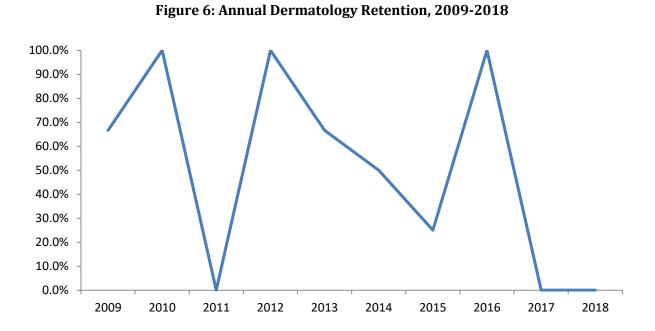


Figure 5: Annual Dentistry Retention, 2009-2018

### **Dermatology - Residency Graduates Only**

	Year	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)
	2009	3	2	66.7%
	2010	2	2	100.0%
	2011	3	0	0.0%
	2012	1	1	100.0%
	2013	3	2	66.7%
	2014	4	2	50.0%
	2015	4	1	25.0%
	2016	3	3	100.0%
	2017	3	0	0.0%
	2018	4	0	0.0%
Тс	otal	30	13	43.3%
Year	Total Gradu	ates Retained in Utah (2018)	% Retained in	Otan (2018)
2009	3	2	66.7	7%
2010	2	2	100.	0%
2011	3	0	0.0	%
2012	1	1	100.	0%
2013	3	2	66.7	7%
2014	4	2	50.0	0%
2015	4	1	25.0	0%
2016	3	3	100.	0%
2017	3	0	0.0	%
2018	4	0	0.0	%
Total	30	13	43.3	3%

#### Table 12: Annual Dermatology Retention, 2009-2018



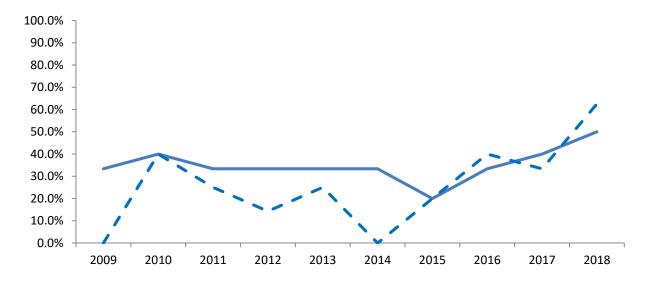
#### **Diagnostic Radiology - Residency and Fellowship Graduates**

		Residenc	y	<b>5</b> 9 <b>e</b> e e e e e e e e e e e e e e e e e e	Fellowsh	ip
Year	Total Retained in		% Retained in	Total	Retained in	% Retained in
	Graduates	Utah (2017)	Utah (2017)	Graduates	Utah (2017)	Utah (2017)
2009	6	2	33.3%	2	0	0.0%
2010	5	2	40.0%	5	2	40.0%
2011	6	2	33.3%	4	1	25.0%
2012	6	2	33.3%	7	1	14.3%
2013	6	2	33.3%	4	1	25.0%
2014	6	2	33.3%	5	0	0.0%
2015	5	1	20.0%	5	1	20.0%
2016	6	2	33.3%	5	2	40.0%
2017	5	2	40.0%	6	2	33.3%
2018	8	4	50.0%	8	5	62.5%
Total	59	21	35.6%	51	15	29.4%

#### Table 13: Annual Diagnostic Radiology Retention, 2009-2018

Year	Total Graduates	Retained in	% Retained in Utah	Total	Retained in Utah
ieai		Utah (2018)	(2018)	Graduates	Retained in Otan
		01011 (2010)	(2010)	Gradates	
2009	6	2	33.3%	2	0
2010	5	2	40.0%	5	2
2011	6	2	33.3%	4	1
2012	6	2	33.3%	7	1
2013	6	2	33.3%	4	1
2014	6	2	33.3%	5	0
2015	5	1	20.0%	5	1
2016	6	2	33.3%	5	2
2017	5	2	40.0%	6	2
2018	8	4	50.0%	8	5
Total	59	21	35.6%	51	15

\*\* Fellowship programs contain: Neurointerventional Surgery, Vascular/Interventional Radiology, Neuroradiology, and Nuclear Radiology.



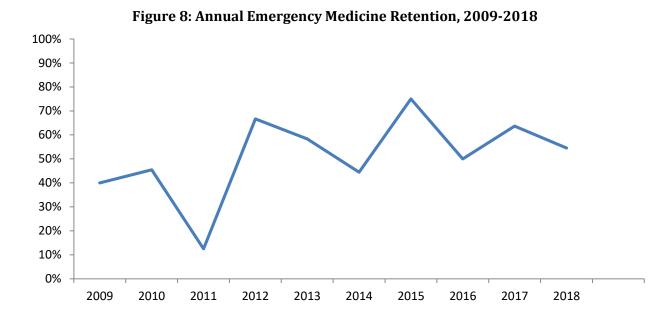
#### Figure 7: Annual Diagnostic Radiology Retention, 2009-2018

#### **Emergency Medicine - Residency and Fellowship**

Year	Total Graduates	Retained in Utah (2017)	% Retained in Utah (2017)	Total Graduates	Retained in Utah (2017)	% Retained in Utah (2017)
2009	5	2	40.0%	0	0	-
2010	11	5	45.5%	0	0	-
2011	8	1	12.5%	0	0	-
2012	9	6	66.7%	0	0	-
2013	9	5	55.6%	3	2	66.7%
2014	8	4	50.0%	1	0	0.0%
2015	7	5	71.4%	1	1	100.0%
2016	9	5	55.6%	1	0	0.0%
2017	10	6	60.0%	1	1	100.0%
2018	10	6	60.0%	1	0	0.0%
Total	86	45	52.3%	8	4	50.0%

# Table 14: Annual Emergency Medicine Retention, 2009-2018ResidencyFellowship

Year	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)	Total Graduates	Retain in Uta (2018
2009	5	2	40.0%	0	0
2010	11	5	45.5%	0	0
2011	8	1	12.5%	0	0
2012	9	6	66.7%	0	0
2013	9	5	55.6%	3	2
2014	8	4	50.0%	1	0
2015	7	5	71.4%	1	1
2016	9	5	55.6%	1	0
2017	10	6	60.0%	1	1
2018	10	6	60.0%	1	0
Total	86	45	52.3%	8	4



#### Family Medicine – Residency and Fellowship for <u>ALL</u> Programs

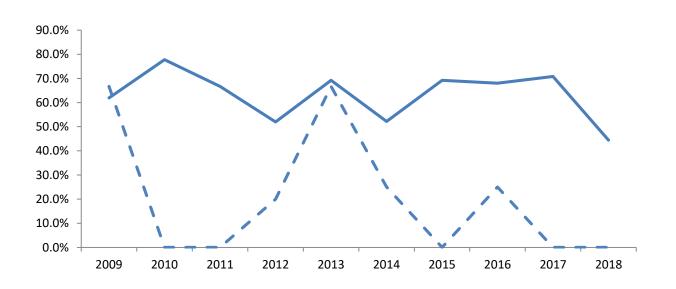
		Resider	icy	Fellowship			
Year	Total Graduates	Retained in Utah (2017)	% Retained in Utah (2017)	Total Graduates	Retained in Utah (2017)	% Retained in Utah (2017)	
2009	21	13	61.9%	3	2	66.7%	
2010	27	21	77.8%	2	0	0.0%	
2011	24	16	66.7%	2	0	0.0%	
2012	25	13	52.0%	5	1	20.0%	
2013	26	18	69.2%	3	2	66.7%	
2014	23	12	52.2%	4	1	25.0%	
2015	26	18	69.2%	4	0	0.0%	
2016	25	17	68.0%	4	1	25.0%	
2017	24	17	70.8%	2	0	0.0%	
2018	27	12	44.4%	3	0	0.0%	
Total	248	157	63.3%	32	7	21.9%	

## Table 15: Annual Family Medicine Retention, 2009-2018

Year	Total Graduates	Retained in % Retained in Utah Utah (2018) (2018)		Total Graduates	Retained in Utah (201
2009	21	13	61.9%	3	2
2010	27	21	77.8%	2	0

2018 Total	27 <b>248</b>	12 <b>157</b>	44.4% 63.3%	3 <b>32</b>	0 7
				2	0
2017	24	17	70.8%	2	0
2016	25	17	68.0%	4	1
2015	26	18	69.2%	4	0
2014	23	12	52.2%	4	1
2013	26	18	69.2%	3	2
2012	25	13	52.0%	5	1
2011	24	16	66.7%	2	0

\*\* Fellowship programs contain: *Family Medicine (OBGYN)* and *Sports Medicine* 



#### Figure 9: Annual Family Medicine Retention, 2009-2018

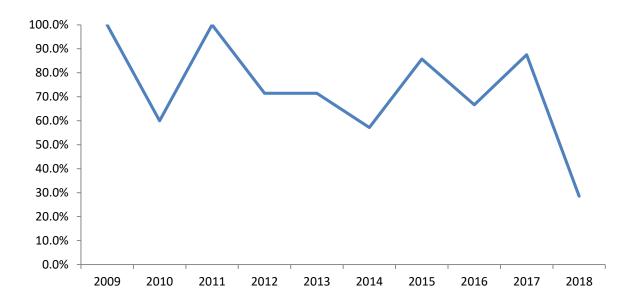
#### Family Medicine Cont. - Residents and Fellows by Program

Year	Total	Retained in	% Retained in
	Graduates	Utah (2017)	Utah (2017)
2009	7	7	100.0%
2010	5	3	60.0%
2011	6	6	100.0%
2012	7	5	71.4%
2013	7	5	71.4%

#### Table 16: <u>Utah Valley</u>: Annual Family Medicine Retention, 2009-2018

		2014	7	4			57.1%	
		2015	7	6			85.7%	
		2016	6	4			66.7%	
		2017	8	7			87.5%	
		2018	7	2			28.6%	
		Total	67	49			73.1%	
Year	Total	Retained	%	Total	Retain	ned	%	
	Graduat	in Utah	Retained	Graduat	in Uta	ah	Retained	
	es	(2018)	in Utah	es	(2018	8)	in Utah	
			(2018)				(2018)	
2009	7	7	100.0%	0	0		-	
2010	5	3	60.0%	0	0		-	
2011	6	6	100.0%	0	0		-	
2012	7	5	71.4%	0	0		-	
2013	7	5	71.4%	0	0		-	
2014	7	4	57.1%	0	0		-	
2015	7	6	85.7%	0	0		-	
2016	6	4	66.7%	0	0		-	
2017	8	7	87.5%	0	0		-	
2018	7	2	28.6%	0	0		-	
Total	67	49	73.1%	0	0			

### Figure 10: <u>Utah Valley</u>: Annual Family Medicine Retention, 2009-2018



#### Family Medicine Cont. - Residents and Fellows by Program

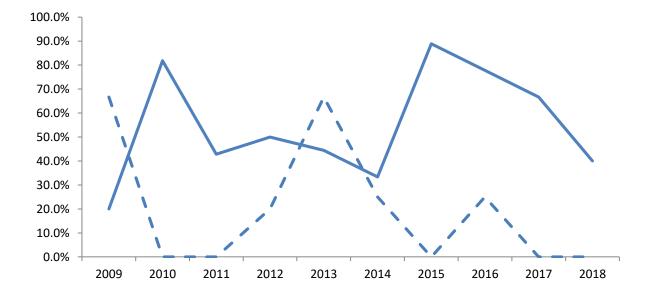
 Table 17: University of Utah: Annual Family Medicine Retention, 2009-2018

Year	Total	Retained in	% Retained in	Total	Retained in	% Retained in
	Graduates	Utah (2017)	Utah (2017)	Graduates	Utah (2017)	Utah (2017)
2009	5	1	20.0%	3	2	66.7%
2010	11	9	81.8%	2	0	0.0%
2011	7	3	42.9%	2	0	0.0%
2012	8	4	50.0%	5	1	20.0%
2013	9	4	44.4%	3	2	66.7%
2014	6	2	33.3%	4	1	25.0%
2015	9	8	88.9%	4	0	0.0%
2016	9	7	77.8%	4	1	25.0%
2017	6	4	66.7%	2	0	0.0%
2018	10	4	40.0%	3	0	0.0%
Total	80	46	57.5%	32	7	21.9%

Year	Total	Retained	%	Total	Retained	%
	Graduat	in Utah	Retained	Graduat	in Utah	Retained
	es	(2018)	in Utah	es	(2018)	in Utah
			(2018)			(2018)
2009	5	1	20.0%	3	2	66.7%

2010	11	9	81.8%	2	0	0.0%
2011	7	3	42.9%	2	0	0.0%
2012	8	4	50.0%	5	1	20.0%
2013	9	4	44.4%	3	2	66.7%
2014	6	2	33.3%	4	1	25.0%
2015	9	8	88.9%	4	0	0.0%
2016	9	7	77.8%	4	1	25.0%
2017	6	4	66.7%	2	0	0.0%
2018	10	4	40.0%	3	0	0.0%
Total	80	46	57.5%	32	7	21.9%

Figure 11: <u>University of Utah</u>: Annual Family Medicine Retention, 2009-2018



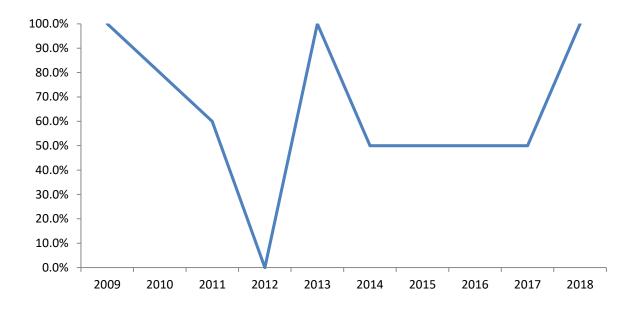
### Family Medicine Cont. - Residents and Fellows by Program

Table 18: St	<u>. Mark's</u> : Annua	l Family	Medicine	Retention.	2009-2018
	<u>- Mark 5</u> . Annua	i i uning	meanenic	necention,	2007 2010

Year	Total	Retained in	% Retained in
	Graduates	Utah (2017)	Utah (2017)
2009	3	3	100.0%
2010	5	4	80.0%
2011	5	3	60.0%

		2012	4	0	0.0%
		2012	4	4	100.0%
		2014	4	2	50.0%
		2015	4	2	50.0%
		2016	4	2	50.0%
		2017	4	2	50.0%
		2018	4	4	100.0%
		Total	41	26	63.4%
Year	Total	Retained	%		
	Graduat	in Utah	Retained		
	es	(2018)	in Utah		
			(2018)		
2009	3	3	100.0%		
2010	5	4	80.0%		
2011	5	3	60.0%		
2012	4	0	0.0%		
2013	4	4	100.0%		
2014	4	2	50.0%		
2015	4	2	50.0%		
2016	4	2	50.0%		
2017	4	2	50.0%		
2018	4	4	100.0%		
Total	41	26	63.4%		

Figure 12: <u>St. Mark's</u>: Annual Family Medicine Retention, 2009-2018



#### Family Medicine Cont. - Residents and Fellows by Program

Table 19: <u>McKay Dee</u> : Annual F	amily Medicine Retention,	2009-2018

Year	Total	Retained in	% Retained in
	Graduates	Utah (2018)	Utah (2018)
2009	6	2	33.3%
2010	6	5	83.3%
2011	6	4	66.7%
2012	6	4	66.7%
2013	6	5	83.3%
2014	6	4	66.7%
2015	6	2	33.3%
2016	6	4	66.7%
2017	6	4	66.7%
2018	6	2	33.3%
Total	60	36	60.0%

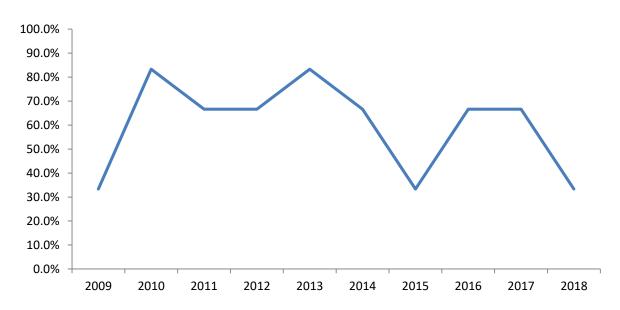


Figure 13: McKay Dee: Annual Family Medicine Retention, 2009-2018

#### **General Surgery - Residency and Fellowship Graduates**

Table 20: Annual General Surgery Retention, 2009-2018 Residency

	Residency			Fellowship			
Year	Total	Retained in	% Retained in	Total	Retained in	% Retained in	
	Graduates	Utah (2018)	Utah (2018)	Graduates	Utah (2018)	Utah (2018)	
2009	7	2	28.6%	1	0	0.0%	
2010	8	2	25.0%	1	0	0.0%	
2011	8	3	37.5%	6	3	50.0%	
2012	8	1	12.5%	3	1	33.3%	
2013	12	3	25.0%	3	0	0.0%	
2014	7	1	14.3%	3	0	0.0%	
2015	7	1	14.3%	4	1	25.0%	
2016	6	4	66.7%	5	1	20.0%	
2017	6	2	33.3%	6	2	33.3%	
2018	7	0	0.0%	8	2	25.0%	
Total	76	19	25.0%	40	10	25.0%	

Year	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)	Total Graduates	Retained in Utah (2018)
2009	7	2	28.6%	1	0

2010	8	2	25.0%	1	0
2011	8	3	37.5%	6	3
2012	8	1	12.5%	3	1
2013	12	3	25.0%	3	0
2014	7	1	14.3%	3	0
2015	7	1	14.3%	4	1
2016	6	4	66.7%	5	1
2017	6	2	33.3%	6	2
2018	7	0	0.0%	8	2
Total	76	19	25.0%	40	10

\*\* Fellowship programs contain: Vascular Surgery, Surgical Critical Care, Pediatric Surgery, Cardiothoracic Surgery, and Colorectal Surgery (St. Mark's)

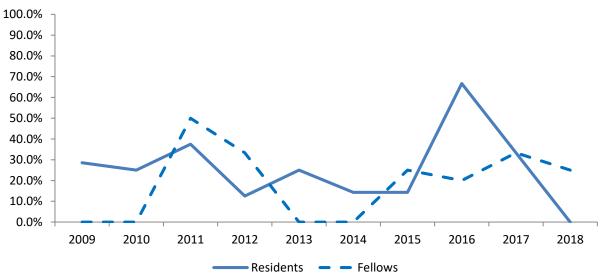


Figure 14: Annual General Surgery Retention, 2009-2018

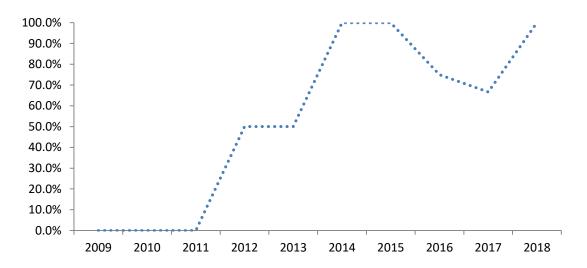
#### **General Surgery PRELIM- Residency Graduates Only**

#### Table 21: Annual General PRELIM Surgery Retention, 2009-2018

Year	Total Graduates	Retained in Utah	% Retained in Utah
		(2018)	(2018)
2009	3	0	0.0%
2010	1	0	0.0%
2011	1	0	0.0%

Total	28	18	64.3%
2018	4	4	100.0%
2017	3	2	66.7%
2016	4	3	75.0%
2015	3	3	100.0%
2014	3	3	100.0%
2013	2	1	50.0%
2012	4	2	50.0%

\*\* Residency programs contain: Otolaryngology, Anesthesiology, General Surgery, Urology, Orthopedic Surgery, Diagnostic Radiology, and Plastic Surgery.





#### **Internal Medicine - Residency and Fellowship Graduates**

	1 41	Resider		Fellowship			
Year	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)	
	Ulauuales	0tan (2018)	0tan (2018)	Ulauuales	0tan (2018)	Otali (2018)	
2009	39	20	51.3%	23	5	21.7%	
2010	33	12	36.4%	34	12	35.3%	
2011	25	12	48.0%	35	13	37.1%	
2012	27	11	40.7%	26	8	30.8%	
2013	36	9	25.0%	34	13	38.2%	

#### Table 22: Annual Internal Medicine Retention, 2009-2018

2014	40	16	40.0%	36	11	30.6%
2015	27	11	40.7%	30	14	46.7%
2016	34	21	61.8%	31	16	51.6%
2017	34	23	67.6%	34	11	32.4%
2018	38	32	84.2%	50	21	42.0%
Total	333	167	50.2%	333	124	37.2%

Year	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)	Total Graduates	Retained in Utah (2018)
2009	39	20	51.3%	23	5
2010	33	12	36.4%	34	12
2011	25	12	48.0%	35	13
2012	27	11	40.7%	26	8
2013	36	9	25.0%	34	13
2014	40	16	40.0%	36	11
2015	27	11	40.7%	30	14
2016	34	21	61.8%	31	16
2017	34	23	67.6%	34	11
2018	38	32	84.2%	50	21
Total	333	167	50.2%	333	124

\*\* Fellowship programs contain: Infectious Disease, Hematology and Oncology, Gastroenterology, Cardiology, Interventional Cardiology, Cardiology Transplant, Pulmonary Disease and Critical Care Medicine, Cardiology/ Sleep Medicine, Rheumatology, Nephrology, Endocrinology, Diabetes and Metabolism, Geriatric Medicine, Sleep Medicine, Clinical Cardiac Electrophysiology, Bone Marrow Transplant, Advanced Cardiac Imaging, and Wilderness Medicine.

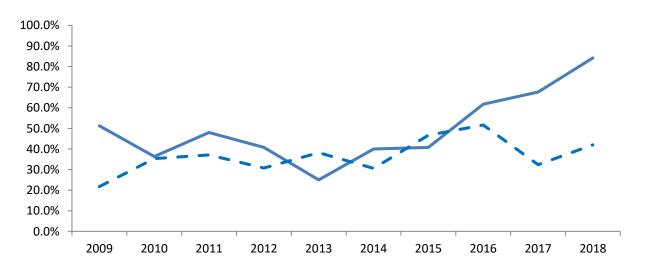


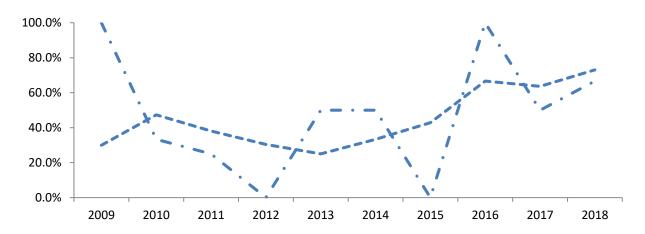
Figure 16: Annual Internal Medicine Retention, 2009-2018

_	PRE	LIM		PED	DIATRICS	
Year	Total	Retained in	% Retained in	Total	Retained in	% Retained in
	Graduates	Utah (2018)	Utah (2018)	Graduates	Utah (2018)	Utah (2018)
2009	20	6	30.0%	39	20	51.3%
2010	19	9	47.4%	33	12	36.4%
2011	21	8	38.1%	25	12	48.0%
2012	23	7	30.4%	27	11	40.7%
2013	20	5	25.0%	36	9	25.0%
2014	18	6	33.3%	40	16	40.0%
2015	21	9	42.9%	27	11	40.7%
2016	24	16	66.7%	34	21	61.8%
2017	22	14	63.6%	34	23	67.6%
2018	26	19	73.1%	38	32	84.2%
Total	214	99	46.3%	333	167	50.2%

Table 23: Annual Internal Medicine PRELIM and PEDIATRICS Retention, 2009-2018

#### Internal Medicine PRELIM and PEDIATRICS- Residency Graduates Only

\*\* Residency programs contain: Radiology, Pain Medicine, Dermatology, Anesthesiology, Ophthalmology, Neurology, Physical Med and Rehab, Diagnostic Radiology, Radiation Oncology, OBGYN, Occupational Medicine, Aerospace Medicine, General Practitioner, Internal Medicine, and Pediatrics.





#### Medical Genetics - Fellowship Graduates Only

Year	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)
2009	0	0	-	0	0	-
2010	0	0	-	0	0	-
2011	0	0	-	1	0	0.0%
2012	0	0	-	2	0	0.0%
2013	0	0	-	0	0	-
2014	0	0	-	0	0	-
2015	0	0	-	1	1	100.0%
2016	0	0	-	0	0	-
2017	0	0	-	0	0	-
2018	0	0	-	1	0	0.0%
Total	0	0	-	5	1	20.0%

#### Table 24: Annual Medical Genetics Retention, 2009-2018

			·			•
Year	Total	Retained in	% Retained in	Total	Retained in	% Retained in
	Graduates	Utah (2018)	Utah (2018)	Graduates	Utah (2018)	Utah (2018)
2009	5	1	20.0%	3	1	33.3%
2010	5	3	60.0%	3	1	33.3%
2011	5	1	20.0%	2	1	50.0%
2012	5	1	20.0%	5	1	20.0%
2013	5	2	40.0%	7	2	28.6%
2014	6	1	16.7%	5	2	40.0%
2015	6	2	33.3%	4	1	25.0%
2016	5	3	60.0%	3	1	33.3%
2017	7	2	28.6%	5	3	60.0%
2018	6	3	50.0%	6	2	33.3%
Total	55	19	34.5%	43	15	34.9%

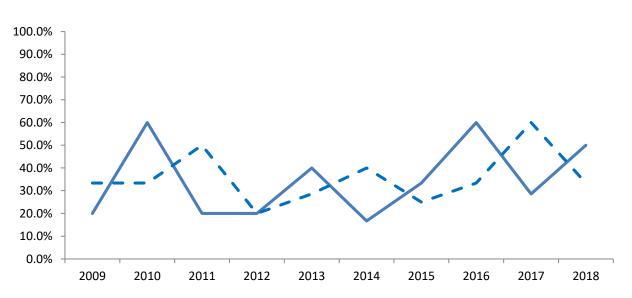
Table 25: Annual Neurology Retention, 2009-2018

**Fellowship** 

#### **Neurology - Residency and Fellowship Graduates**

Residency

\*\* Fellowship programs contain: Clinical Neurophysiology, Child Neurology, Neurogenetics, Neuro Critical Care, and Vascular Neurology.



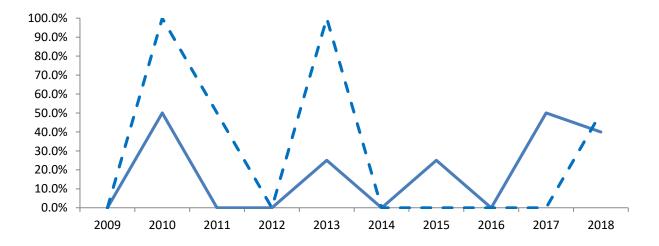
#### Figure 18: Annual Neurology Retention, 2009-2018

#### Residency **Fellowship** Retained in % Retained in Total Retained in % Retained in Year Total Graduates Graduates Utah (2018) Utah (2018) Utah (2018) Utah (2018) 2009 3 0 1 0 0.0% 0.0% 2010 4 2 50.0% 1 100.0% 1 2 1 50.0% 2011 1 0 0.0% 2012 0 2 0.0% 2 0 0.0% 2013 4 1 25.0% 1 1 100.0% 2014 0 0 -1 0 0.0% 2015 4 1 25.0% 1 0 0.0% 2016 2 0 0.0% 2 0 0.0% 2017 2 1 2 0 50.0% 0.0% 2018 5 2 40.0% 4 2 50.0% 27 7 5 Total 25.9% 17 29.4%

#### **Neurosurgery - Residency and Fellowship Graduates**

Table 26: Annual Neurosurgery Retention, 2009-2018

\*\* Fellowship programs contain: Spine, Skull Base, and Endovasc NeuroRadio.



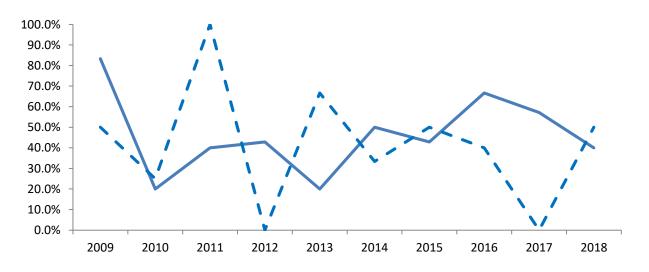
#### Figure 19: Annual Neurosurgery Retention, 2009-2018

		Residenc	y	0,	Fellowsh	lip
Year	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)
2009	6	5	83.3%	2	1	50.0%
2010	5	1	20.0%	4	1	25.0%
2011	5	2	40.0%	2	2	100.0%
2012	7	3	42.9%	3	0	0.0%
2013	5	1	20.0%	3	2	66.7%
2014	6	3	50.0%	3	1	33.3%
2015	7	3	42.9%	2	1	50.0%
2016	6	4	66.7%	5	2	40.0%
2017	7	4	57.1%	3	0	0.0%
2018	5	2	40.0%	4	2	50.0%
Total	59	28	47.5%	31	12	38.7%

#### **Obstetrics & Gynecology - Residency and Fellowship Graduates**

 Table 27: Annual Obstetrics & Gynecology Retention, 2009-2018

\*\* Fellowship programs contain: Reproductive Endocinology and Infertility, Maternal Petal Medicine, and OB Family Planning.



#### Figure 20: Annual Obstetrics & Gynecology Retention, 2009-2018

#### **Occupational Medicine - Residency Graduates Only**

Year	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)
2009	5	3	60.0%
2010	2	1	50.0%
2011	2	2	100.0%
2012	4	2	50.0%
2013	5	2	40.0%
2014	2	0	0.0%
2015	3	1	33.3%
2016	4	1	25.0%
2017	6	3	50.0%
2018	4	2	50.0%
Total	37	17	45.9%

#### Table 28: Annual Occupational Medicine Retention, 2009-2018

\*\* Residency programs contain: Family Practice/Occupational Medicine, Physical Medicine & Rehab, Aerospace Medicine, Clinical Genetics, Internal Medicine, Occupational Medicine, Public Health, Otolaryngology, Preventative Medicine/Occupational Environmental Medicine, and Family Medicine.

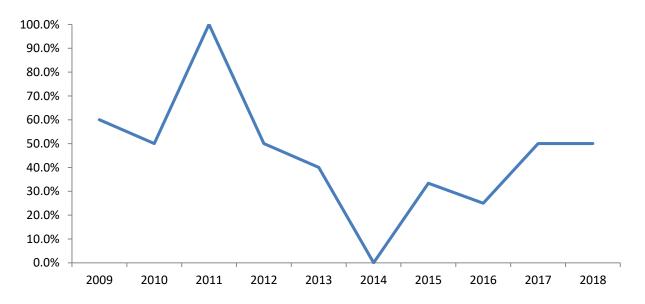


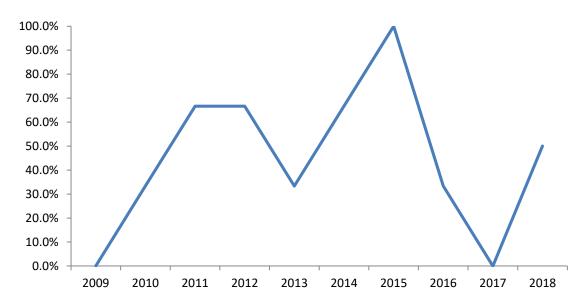
Figure 21: Annual Occupational Medicine Retention, 2009-2018

#### **Ophthalmology – Residency Graduates Only**

Year	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)
2009	3	0	0.0%
2010	3	1	33.3%
2011	3	2	66.7%
2012	3	2	66.7%
2013	3	1	33.3%
2014	3	2	66.7%
2015	3	3	100.0%
2016	3	1	33.3%
2017	3	0	0.0%
2018	4	2	50.0%
Total	31	14	45.2%

#### Table 29: Annual Ophthalmology Retention, 2009-2018

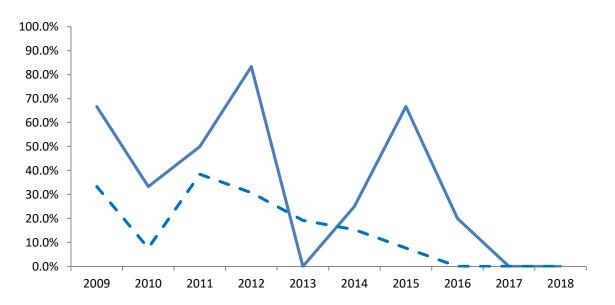
Figure 22: Annual Ophthalmology Retention, 2009-2018



#### Table 30: Annual Orthopedics Retention, 2009-2018 **Residency Fellowship** Year Total Retained in % Retained in Total Retained in % Retained in Utah (2018) Graduates Utah (2018) Utah (2018) Graduates Utah (2018) 6 4 2 2009 66.7% 6 33.3% 2010 6 2 33.3% 13 7.7% 1 4 2 13 5 2011 50.0% 38.5% 2012 6 5 83.3% 13 4 30.8% 2013 4 0 0.0% 26 5 19.2% 2014 4 1 25.0% 13 2 15.4% 4 2015 6 66.7% 13 1 7.7% 2016 5 1 20.0% 13 0 0.0% 2017 5 0 0.0% 0 0.0% 13 2018 0.0% 0 0.0% 5 0 13 51 19 37.3% 136 20 14.7% Total

#### **Orthopedics - Residency and Fellowship Graduates**

\*\* Fellowship programs contain: Orthopedic Joint Surgery, Orthopedic Sarcoma, Pediatric Orthopedics, Orthopedic Spine Surgery, Orthopedic Sports Medicine, Orthopedic Spine Surgery/ Neurosurgery, Orthopedic Surgery- Hand, and Sarcoma Surgery.



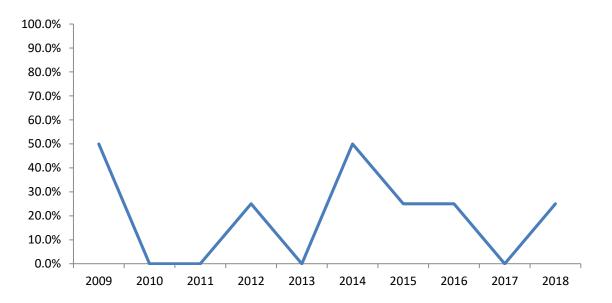
#### Figure 23: Annual Orthopedics Retention, 2009-2018

#### **Otolaryngology - Residency and Fellowship Graduates**

Year	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)
2009	2	0	0.0%	0	0	-
2010	1	0	0.0%	0	0	-
2011	4	1	25.0%	0	0	-
2012	3	0	0.0%	0	0	-
2013	4	2	50.0%	0	0	-
2014	3	0	0.0%	1	1	100.0%
2015	3	1	33.3%	1	0	0.0%
2016	3	0	0.0%	0	0	-
2017	4	1	25.0%	0	0	-
2018	4	0	0.0%	1	0	0.0%
Total	31	5	16.1%	3	1	33.3%

# Table 31: Annual Otolaryngology Retention, 2009-2018ResidencyFellowship

Figure 24: Annual Otolaryngology Retention, 2009-2018



#### Pathology - Residency and Fellowship Graduates

		Residenc	y	·	Fellowsh	ip
Year	Total	Retained in	% Retained in	Total	Retained in	% Retained in
	Graduates	Utah (2018)	Utah (2018)	Graduates	Utah (2018)	Utah (2018)
2009	6	4	66.7%	11	5	45.5%
2010	5	2	40.0%	7	3	42.9%
2011	5	3	60.0%	4	2	50.0%
2012	5	5	100.0%	7	2	28.6%
2013	4	1	25.0%	10	6	60.0%
2014	6	2	33.3%	8	3	37.5%
2015	8	4	50.0%	12	7	58.3%
2016	4	3	75.0%	9	5	55.6%
2017	5	1	20.0%	12	4	33.3%
2018	4	4	100.0%	14	3	21.4%
Total	52	29	55.8%	94	40	42.6%

#### Table 32: Annual Pathology Retention, 2009-2018

\*\* Fellowship programs contain: Molecular Genetic Pathology, Pediatric Pathology, Surgical Pathology, Cytopathology, Hematopathology, Medical Microbiology, Hematology/Oncology, and Gastrointestinal Pathology.

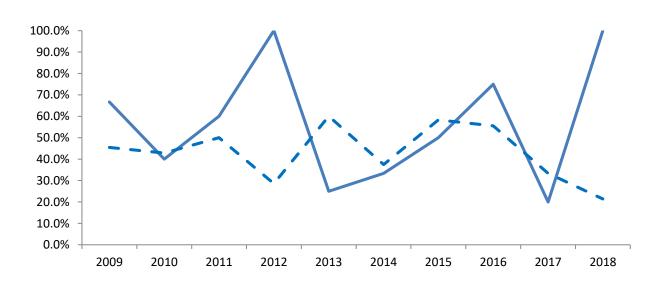


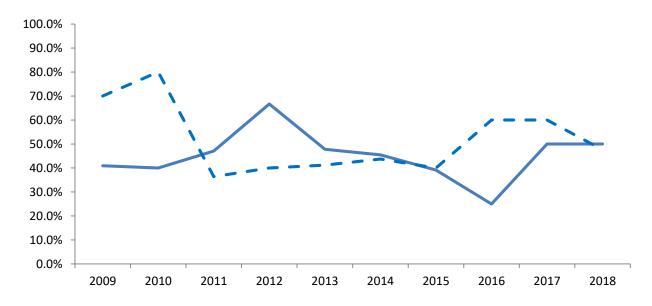
Figure 25: Annual Pathology Retention, 2009-2018

#### **Pediatrics - Residency and Fellowship Graduates**

	Residency		Fellowship		ip	
Year	Total	Retained in	% Retained in	Total	Retained in	% Retained in
	Graduates	Utah (2018)	Utah (2018)	Graduates	Utah (2018)	Utah (2018)
2009	22	9	40.9%	10	7	70.0%
2010	20	8	40.0%	10	8	80.0%
2011	17	8	47.1%	11	4	36.4%
2012	24	16	66.7%	10	4	40.0%
2013	23	11	47.8%	17	7	41.2%
2014	22	10	45.5%	16	7	43.8%
2015	23	9	39.1%	15	6	40.0%
2016	20	5	25.0%	15	9	60.0%
2017	22	11	50.0%	10	6	60.0%
2018	20	10	50.0%	21	10	47.6%
Total	213	97	45.5%	135	68	50.4%

#### Table 33: Annual Pediatrics Retention, 2009-2018

\*\* Fellowship programs contain: Internal Medicine, Pediatric Critical Care, Pediatric Emergency Medicine, Pediatrics Neonatal-Perinatal, Pediatric Pulmonology, Pediatric Cardiology, Pediatric Neonatology, Pediatric Infectious Disease, Pediatric Gastroenterology, Pediatric Hematology/Oncology, and Pediatric Neurosurgery.



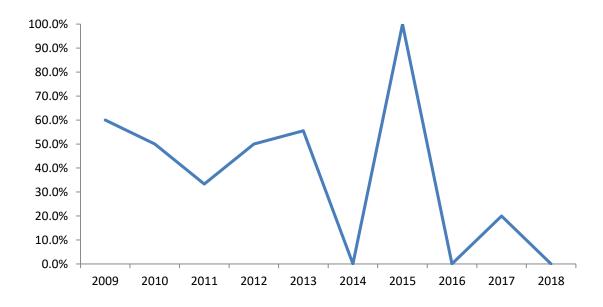
#### Figure 26: Annual Pediatrics Retention, 2009-2018

Residency		Fellowship				
Year	Total	Retained in	% Retained in	Total	Retained in	% Retained in
	Graduates	Utah (2018)	Utah (2018)	Graduates	Utah (2018)	Utah (2018)
2009	5	3	60.0%	0	0	-
2010	2	1	50.0%	0	0	-
2011	6	2	33.3%	0	0	-
2012	2	1	50.0%	1	0	0.0%
2013	9	5	55.6%	2	0	0.0%
2014	5	0	0.0%	1	0	0.0%
2015	4	4	100.0%	1	1	100.0%
2016	5	0	0.0%	1	0	0.0%
2017	5	1	20.0%	4	0	0.0%
2018	4	0	0.0%	2	0	0.0%
Total	47	17	36.2%	12	1	8.3%

#### **Physical Rehabilitation - Residency and Fellowship Graduates**

Table 34: Annual Physical Rehabilitation Retention, 2009-2018ResidencyFellowship

Figure 27: Annual Physical Rehabilitation Retention, 2009-2018



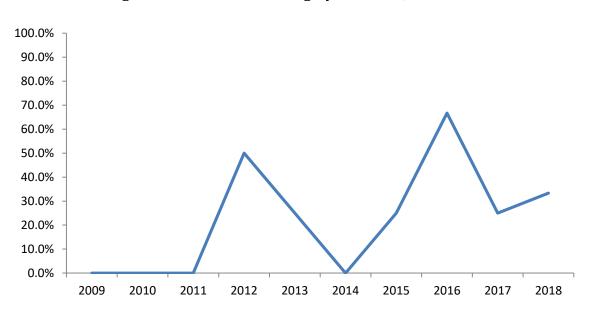
With so few fellows, their numbers have been combined with the residents.

Residency		Fellowship				
Year	Total	Retained in	% Retained in	Total	Retained in	% Retained in
	Graduates	Utah (2018)	Utah (2018)	Graduates	Utah (2018)	Utah (2018)
2009	2	0	0.0%	0	0	-
2010	2	0	0.0%	1	0	0.0%
2011	2	0	0.0%	1	0	0.0%
2012	2	1	50.0%	0	0	-
2013	1	0	0.0%	3	1	33.3%
2014	1	0	0.0%	0	0	-
2015	2	1	50.0%	2	0	0.0%
2016	2	2	100.0%	1	0	0.0%
2017	2	0	0.0%	2	1	50.0%
2018	2	1	50.0%	1	0	0.0%
Total	18	5	27.8%	11	2	18.2%

Table 35: Annual Plastic Surgery Retention, 2009-2018

#### **Plastic Surgery – Residency and Fellowship Graduates**

\*\* Fellowship programs contain: Craniofacial and Plastic/Reconstructive Breast Surgery



#### Figure 28: Annual Plastic Surgery Retention, 2009-2018

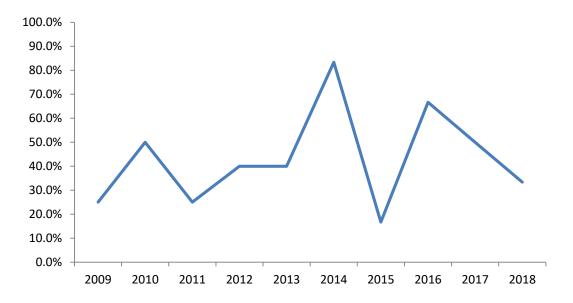
With so few residents and fellows, their numbers have been combined with the residents.

#### **Podiatry - Residency Graduates Only**

Year	Total Graduates	Retained in	% Retained in	
		Utah (2018)	Utah (2018)	
2009	4	1	25.0%	
2010	4	2	50.0%	
2011	4	1	25.0%	
2012	5	2	40.0%	
2013	5	2	40.0%	
2014	6	5	83.3%	
2015	6	1	16.7%	
2016	6	4	66.7%	
2017	6	3	50.0%	
2018	6	2	33.3%	
Total	52	23	44.2%	

#### Table 36: Annual Podiatry Retention, 2009-2018

Figure 29: Annual Podiatry Retention, 2009-2018



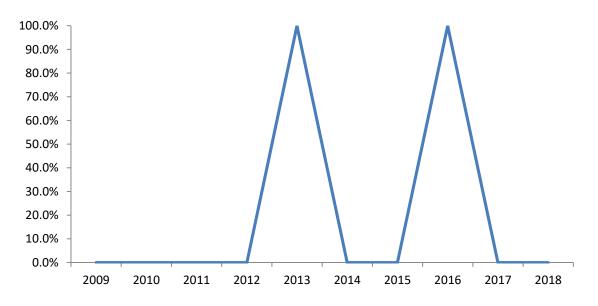
#### **Radiation Oncology – Residency Graduates Only**

.

Year	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)
2009	0	0	-
2010	3	0	0.0%
2011	1	0	0.0%
2012	2	0	0.0%
2013	1	1	100.0%
2014	3	0	0.0%
2015	2	0	0.0%
2016	1	1	100.0%
2017	3	0	0.0%
2018	3	0	0.0%
Total	19	2	10.5%

#### Table 37: Annual Radiation Oncology Retention, 2009-2018

Figure 30: Annual Radiation Oncology Retention, 2009-2018



#### **Transitional Year**

Year	Total	Retained in	% Retained in
	Graduates	Utah (2018)	Utah (2018)
2009	12	4	33.3%
2010	12	4	33.3%
2011	12	6	50.0%
2012	12	2	16.7%
2013	12	4	33.3%
2014	12	3	25.0%
2015	12	1	8.3%
2016	13	7	53.8%
2017	13	3	23.1%
2018	13	5	38.5%
Total	123	39	31.7%

#### Table 38: Transitional Year Retention (5 year periods), 2009-2018

\*\* Internship programs contain: Anesthesiology, Dermatology, Radiology Oncology, Diagnostic Radiology, Ophthalmology, Emergency Medicine, Physical Medicine and Rehabilitation, and Otolaryngology.

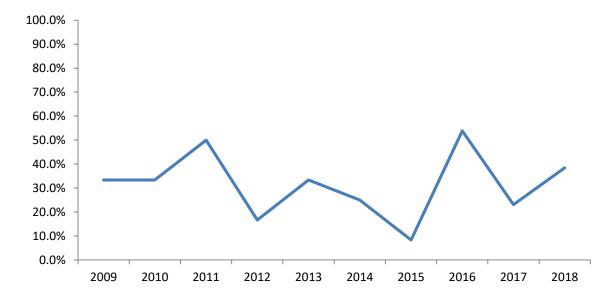


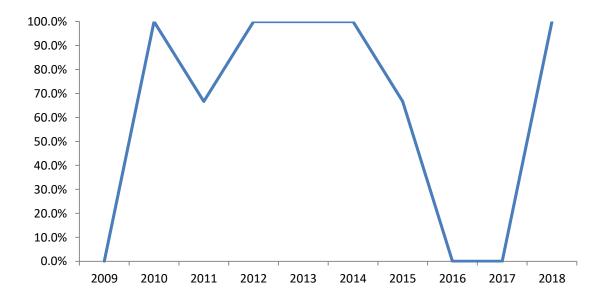
Figure 31: Transitional Year Retention (5 year periods), 2009-2018

#### **Triple Board- Residency Graduates Only**

Year	Total Graduates	Retained in	% Retained in
		Utah (2018)	Utah (2018)
2009	1	0	0.0%
2010	3	3	100.0%
2011	3	2	66.7%
2012	1	1	100.0%
2013	1	1	100.0%
2014	2	2	100.0%
2015	3	2	66.7%
2016	1	0	0.0%
2017	3	0	0.0%
2018	1	1	100.0%
Total	19	12	63.2%

#### Table 39: Annual Triple Board Retention, 2009-2018

Figure 32: Annual Triple Board Retention, 2009-2018

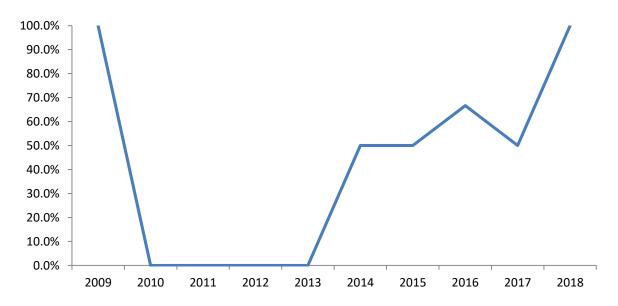


#### **Urology - Residency Graduates Only**

Year	Total Graduates	Retained in Utah (2018)	% Retained in Utah (2018)
2009	1	1	100.0%
2010	2	0	0.0%
2011	2	0	0.0%
2012	2	0	0.0%
2013	2	0	0.0%
2014	2	1	50.0%
2015	2	1	50.0%
2016	3	2	66.7%
2017	2	1	50.0%
2018	2	2	100.0%
Total	20	8	40.0%

# Table 40: Annual Urology Retention, 2009-2018ResidencyFellowship

Figure 33: Annual Urology Retention, 2009-2018



With so few fellows, their numbers have been combined with the residents.