2024 Survey Results

Fellowship Program Benchmarking Survey Results

2024 Survey
Survey Open January 3 - February 21, 2025
Distributed to 297 Pulmonary, Critical Care, and PCCM Program Directors
Response rate: n = 112 (38%)
Completion rate: n = 99 (88%)

2023 Survey
Survey Open January 9 - February 13, 2024
Distributed to 295 Pulmonary, Critical Care, and PCCM Program Directors
Response rate: n = 113 (40%)
Completion rate: n = 91 (80%)

2022 Survey
Survey Open January 13 - February 13, 2023
Distributed to 234 Pulmonary, Critical Care, and PCCM Program Directors
Response rate: n = 107 (59%)
Completion rate: n = 100 (93%)

2021 Survey
Survey Open December 18, 2021 - February 15, 2023
Distributed to 234 Pulmonary, Critical Care, and PCCM Program Directors
Response rate: n = 137 (59%)
Completion rate: n = 107 (78%)

2020 Survey
Survey Open December 21, 2020 - February 1, 2021
Distributed to 245 Pulmonary, Critical Care, and PCCM Program Directors
Response rate: n = 129 (53%)
Completion rate: n = 107 (83%)

2019 Survey
Survey Open February 3 - February 21, 2020
Distributed to 237 Pulmonary, Critical Care, and PCCM Program Directors
Response rate: n = 116 (49%)
Completion rate: n = 104 (90%)

SECTION 1: PROGRAM CHARACTERISTICS & LEADERSHIP

1. **Please indicate which type of fellowship program(s) you direct, as designated by the ACGME. If you direct a PCCM program with a pulmonary or CCM track available within that program, select combined PCCM only. If the ACGME officially recognizes multiple programs (NOT tracks), select all that apply** (choose all that apply)

Past Response Data	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
	120 (100%)	129 (100%)	137 (100%)	107 (100%)	113 (100%)	112 (100%)
a. Pulmonary and Critical Care Medicine (PCCM)	95 (79.2%)	103 (79.8%)	105 (76.5%)	84 (79%)	88 (79%)	90 (80%)
b. Critical Care Medicine ONLY	18 (15%)	18 (14%)	27 (19.7%)	16 (15%)	23 (21%)	18 (16%)
c. Pulmonary Medicine ONLY	7 (7%)	8 (6.2%)	5 (3.6%)	7 (6%)	2 (2%)	4 (4%)

This question is displaced if:
"PCCM" is selected as "Yes" in Q 1.
2. **As a combined PCCM fellowship, do you ever offer occasional positions for CCM?**
   a. Yes, occasional CCM positions
   b. Yes, through a separate CCM track
   c. Yes, separate fellowship

Response	**2023**	**2024**
	81 (%)	90 (%)

a. No	35 (43%)	45 (50%
b. Yes	22 (27%)	21 (23%)
c. Always, we have a separate CCM only fellowship	24 (30%)	24 (27%)

3. Which specialty(ies) are your CCM fellows coming from? (choose all that apply)

Response	2024
	63 (100%)
a. Internal Medicine	40 (63%)
b. Infectious Disease	25 (40%)
c. Emergency Medicine	36 (57%)
d. Cardiology	27 (43%)
e. Nephrology	33 (52%)
f. Gastroenterology	2 (3%)
g. Other: please specify	5 (8%)

4. Does your program have an interventional pulmonary training program?

Response	2024
	94 (%)
a, Yes	26 (28%
b. No	68 (72%)

5. Is this interventional pulmonary training program ACGME accredited?

Response	2024
	26 (%)
a, Yes	19 (73%
b. No	1 (4%)
c. Applied for ACGME accreditation	6 (23%)

Added in 2023

6. Which type of institution is your primary fellowship site affiliated with?

Response	2023	2024
	103	112
a. University affiliated	81 (79%)	93 (83%)
b. Community affiliated	14 (14%)	13 (12%)
c. Military affiliated	0 (0%)	0 (0%)
d. VA affiliated	0 (0%)	1 (1%)
e. Community, but not university affiliated	3 (3%)	2 (2%)
f. Other, please indicate	5 (5%)	3 (3%)
		Community Integrated Health System

7. How many graduates did you have in 2024? *[drop down menu 0-20 and >20]*

	2019	2020	2021	2022	2023	2024
Number of Grads.						
0	8 (7.4%)	11 (9.7%)	8 (6.7%)	11 (10%)	6 (6%)	9 (8%)
1	5 (4.6%)	4 (3.5%)	4 (3.3%)	6 (5%)	6 (6%)	1 (1%)
2	19 (17.5%)	18 (15.9%)	17 (14.2%)	14 (13%)	21 (21%)	21 (19%)
3	16 (14.8%)	12 (10.6%)	24 (20.0%_	17 (16%)	10 (10%)	16 (14%)

	4	18 (16.7%)	19 (16.8%)	22 (18.3%)	15 (14%)	16 (16%)	20 (18%)
	5	10 (9.3%)	14 (12.4%)	14 (11.7%)	12 (11%)	8 (8%)	8 (7%)
	6	12 (11.1%)	12 (10.6%)	7 (5.8%)	8 (8%)	10 (10%)	13 (12%)
	7	9 (8.3%)	10 (8.8%)	6 (5.0%)	6 (6%)	7 (7%)	9 (8%)
	8	6 (5.6%)	6 (5.3%)	9 (7.5%)	10 (9%)	14 (14%)	8 (7%)
	9	4 (3.7%)	1 (.9%)	4 (3.3%)	1 (1%)	1 (1%)	3 (3%)
	10	0	1 (.9%)	2 (1.7%)	2 (2%)	2 (2%)	2 (2%)
	11	1 (0.9%)	0	3 (2.5%)	1 (1%)	1 (1%)	1 (1%)
	12	0	5 (4.4%)	0	0	1 (1%)	1 (1%)
	13	0	0	0	1 (1%)	0	0
	14	0	0	0	0	0	0
	15	0	0	0	0	0	0
	16	0	0	0	2 (2%)	0	0
	17	0	0	0	0	0	0
	18	0	0	0	0	0	0
	19	0	0	0	0	0	0
	20	0	0	0	0	0	0
	>20	0	0	0	1 (1%)	0	0
	Total	106 (100%)	112 (100%)	120 (100%)	106 (100%)	103 (100%)	

8. As of July 1, 2024, what is the total number of Fellows in each of the following groups, excluding sub-sub-specialty fellows (e.g. IP and transplant fellows).:
Year 1: [*drop down menu 0-20 and >20*]
Year 2: [*drop down menu 0-20 and >20*]
Year 3(if applicable): [*drop down menu 0-20 and >20*]
Beyond year 3 (e.g. Research Fellows): [*drop down menu 0-20 and >20*]

# of Fellows		0	1	2	3	4	5	6	7	8	9
Year 1	2019	3 (2.8%)	6 (5.6%)	16 (14.8%)	19 (17.6%)	18 (16.7%)	14 (13%)	6 (5.6%)	9 (8.3%)	11 (10.2%)	4 (3.7%)
	2020	2 (1.8%)	5 (4.5%)	12 (11.6%)	12 (15.2%	25 (22.3%)	15 (13.4%)	11 (9.8%)	9 (8%)	9 (8%)	3 (2.7%)
	2021	2 (1.7%)	7 (5.8%)	16 (13.3%)	19 (5.8%)	26 (21.7%)	12 (10%)	13 (10.8%)	5 (4.2%)	10 (8.3%)	1 (0.8%)
	2022	3 (3%)	1 (1%)	26 (25%)	13 (12%)	17 (16%)	11 (10%)	11 (10%)	9 (9%)	8 (8%)	4 (4%)
	2023	1	6	18	15	20	9	8	12	7	6
	2024	5	1	22	19	17	13	15	9	5	2
Year 2	2019	3 (2.8%)	5 (4.7%)	18 (17%)	17 (16.0%)	20 (18.9%)	10 (9.4%)	9 (8.5%)	12 (11.3%)	9 (8.5%)	0
	2020	5 (4.6%)	5 (4.6%)	12 (11%)	20 (18.3%)	27 (24.8%)	12 (11%)	10 (9.2%)	5 (4.6%)	8 (7.3%)	4 (3.7%)
	2021	6 (5.1%)	3 (2.6%)	15 (12.8%)	20 (17.1%)	26 (22.2%)	19 (16.2%)	6 (5.1%)	5 (4.3%)	8 (6.8%0	4 (3.4%)
	2022	7 (6%)	3 (3%)	21 (20%)	17 (16%)	21 (20%)	9 (8%)	12 (11%)	4 (3%)	10 (9%)	1 (1%)
	2023	7	0	26	11	17	7	9	14	9	1
	2024	6	2	10	22	19	9	15	7	5	3
Year 3	2019	7 (7.5%)	5 (5.4%)	13 (14%)	16 (17.2%)	18 (19.4%)	11 (11.8%)	12 (12.9%)	7 (7.5%)	4 (4.3%)	0
	2020	9 (9.4%)	2 (2.1%)	11 (11.5%)	12 (12.5%)	26 (27.1%)	9 (9.4%)	13 (13.5%)	6 (6.3%)	5 (5.2%)	2 (2.1%)
	2021	7 (7.1%)	1 (1%)	9 (9.2%)	18 (18.4%)	25 (25.5%)	9 (9.2%)	15 (15.3%)	8 (8.2%)	2 (2%)	1 (1%)
	2022	28 (28%)	2 (2%)	13 (12%)	9 (8%)	18 (17%)	13 (12%)	9 (8%)	13 (12%)	1 (1%)	1 (1%)
	2023	26	0	14	6	13	16	14	9	3	2
	2024	25	1	16	14	19	11	10	11	2	3
Beyond Year 3 (e.g Research Fellows)	2019	45 (69.2%)	8 (12.3%)	6 (9.2%)	1 (1.5%)	0	2 (3.1%)	1 (1.5%)	0	0	0
	2020	47 (77%)	3 (4.9%)	2 (3.3%)	2 (3.3%)	4 (6.6%)	2 (3.3%)	0	0	0	0
	2021	41 (69.5%	10 (16.9%)	0	5 (8.5%)	0	1 (1.7%)	0	0	1 (1.7%)	0
	2022	85 (80%)	9 (8%)	5 (5%)	2 (2%)	3 (3%)	1 (1%)	1 (1%)			
	2023	78	10	7	4	2	0	0	0	8	0
	2024	92	10	3	2	2	1	1	0	0	0

# of Fellows		10	11	12	13	14	15	16	17	18	19	20	>21
Year 1	**2019**	1 (0.9%)	1 (0.9%)	0	0	0	0	0	0	0	0	0	0
	2020	1 (0.9%)	1 (0.9%)	0	1 (0.9%)	0	0	0	0	0	0	0	0
	2021	7 (5.8%)	2 (1.7%)	0	0	0	0	0	0	0	0	0	0
	2022	1 (1%)	1 (1%)	1 (1%)	0	0	0	0	1 (1%)	0	0	0	0
	2023	1 (1%)	0	0	0	0	0	0	0	0	0	0	0
	2024	3	0	1				0	0	0	0	0	0
Year 2	**2019**	3 (2.8%)	0	0	0	0	0	0	0	0	0	0	0
	2020	1 (0.9%)	1 (1%)	0	0	0	0	0	0	0	0	0	0
	2021	3 (2.6%)	2 (1.7%)	0	0	0	0	0	0	0	0	0	0
	2022	1 (1%)	1 (1%)	0	0	0	0	0	0	0	0	0	0
	2023	2 (2%)	0	0	0	0	0	0	0	0	0	0	0
	2024	0	2	0	0	0	0	0	0	0	0	0	0
Year 3	**2019**	0	0	0	0	0	0	0	0	0	0	0	0
	2020	0	0	0	0	0	0	0	0	0	0	0	0
	2021	2 (2%)	1 (1%)	0	0	0	0	0	0	0	0	0	0
	2022	0	0	0	0	0	1 (1%)	0	0	0	0	0	0
	2023	0	0	0	0	0	0	0	0	0	0	0	0
	2024	0	0	0	0	0	0	0	0	0	0	0	0
Beyond Year 3 (e.g Research Fellows)	**2019**	1 (1.5%)	0	1 (1.5%)	0	0	0	0	0	0	0	0	0
	2020	0	1 (1.6%)	0	0	0	0	0	0	0	0	0	0
	2021	0	0	0	0	1 (1.7%)	0	0	0	0	0	0	0
	2022	0	0	0	0	0	0	0	0	0	0	0	0
	2023	0	0	0	0	0	0	0	0	1	0	0	0
	2024	0	1	0	0	0	0	0	0	0	0	0	0

9. Mark the one response that best reflects your CURRENT allocated salary support (also referred to as release or protected time) as Program Director for non-clinical, administration of the fellowship program?

	2022	2023	2024
	107	**98**	**112**
a. Less than 19%	19 (18%)	13 (13%)	11 (10%)
b. 20-24%	22 (21%)	22 (22%)	24 (21%)
c. 25-29%	22 (21%)	11 (11%)	19 (17%)
d. 30-34%	20 (19%)	15 (15%)	19 (17%)
e. 35-39%	7 (7%)	6 (6%)	7 (6%)
f. 40-44%	9 (8%)	13 (13%)	17 (15%)
g. 45-49%	4 (3%)	9 (9%)	6 (5%)
h. >50%	4 (3%)	9 (9%)	9 (8%)

10. Regarding your response to the previous item 5, to what extent does it meet the ACGME guidelines for support?

The ACGME Program Requirements for Graduate Medical Education in Pulmonary Disease; Critical Care Medicine; and Pulmonary Critical Care Medicine is pictured below.

| II.A.2. | The program director and, as applicable, the program's leadership team, must be provided with support adequate for administration of the program based upon its size and configuration. (Core) |

| II.A.2.a) | ~~At a minimum, the program director must be provided with the salary support required to devote 20-50 percent FTE of non-clinical time to the administration of the program.~~ (Core)

At a minimum, the program director must be provided with the dedicated time and support specified below for administration of the program: (Core) |

Number of Approved Fellow Positions	Minimum Support Required (FTE)
<7	.2
7-9	.25
10-12	.3
13-15	.35
16-18	.4
19-21	.45
>21	.5

https://www.acgme.org/globalassets/pfassets/programrequirements/156_pccm_2022v2_tcc.pdf

	Response	Does Not Meet	Meets	Exceeds
2022	107	49 (46%)	45 (42%)	13 (12%)
2023	98	21	75 (75%)	2 (2%)
2024	112	14 (13%	90 (80%)	8 (7%)

11. Has your (PD) level of support changed recently due to new ACGME requirements, effective July 1, 2022?

Response	2022	2023	2024
	107 (100%)	98 (100%)	112 (100%)
a. No, it has not changed	89 (83%)	61 (61%)	75 (67%)
b. Yes, it has decreased	0	4 (4%)	0
c. Yes, it has increased	18 (9%)	33 (33%)	37 (33%)

12. Regarding your response to the previous item (question 5), to what extent do you agree that your current level of support is sufficient for the scope of Program Director responsibilities?

	Response	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
2019	106 (100%)	16 (15.1%)	33 (31.1%)	16 (15.1%)	28 (26.4%)	13 (12.3%)
2020	113 (100%)	15 (13.3%)	31 (27.4%)	19 (16.8%)	38 (33.6%)	10 (8.8%)
2021	120 (100%)	35 (29.2%)	35 (29.2%)	15 (12.5%)	38 (31.7%)	13 (10.8%)
2022	107 (100%)	9 (8%)	30 (28%)	18 (17%)	39 (36%)	11 (10%)
2023	98	5 (5%)	38 (38%)	50 (50%)	3 (3%)	2 (2%)
2024	112 (100%)	4 (3%)	32 (29%)	68 (60%)	6 (5%)	2 (2%)

13. Indicate the number of Assistant and/or Associate Program Directors for your fellowship?
Drop down menu with, 0 -5 and >5 If 0 is selected skip to Q.11

	2019	2020	2021	2022	2023	2024
	106 (100%)	113 (100%)	120 (100%)	107	98	112
0	17 (16.0%)	15 (13.3%)	14 (11.7%)	11 (10%)	4 (4%)	3 (3%)
1	53 (50.0%)	59 (52.2%)	55 (45.8%)	58 (54%)	52 (52%)	57 (51%)
2	19 (17.9%)	22 (19.5%)	30 (25.0%)	28 (26%)	22 (22%)	32 (29%)
3	9 (8.5%)	9 (8%)	10 (8.3%)	4 (4%)	9 (9%)	9 (8%)
4	6 (5.7%)	3 (2.7%)	9 (7.5%)	3 (3%)	8 (8%)	9 (8%)
5	1 (0.9%)	4 (3.5%)	0.0%	3 (3%)	2 (2%)	1 (1%)
>5	1 (0.9%)	1 (0.9%)	2 (1.7%)	0	1 (1%)	1 (1%)

14. Mark the one response that best reflects your CURRENT allocated salary support (also referred to as release or protected time) for Associate Program Directors for non-clinical, administration of the fellowship program?

	2022
	94
a. Less than 19%	74 (79%)
b. 20-24%	9 (10%)
c. 25-29%	6 (6%)
d. 30-34%	3 (3%)
e. 35-39%	0
f. 40-44%	2 (2%)
g. 45-49%	0
h. >50%	0

	2023	2024
	94	107
a. 0	22 (24%)	15 (14%)
b. Any support Less than 13%	19 (21%)	26 (24%)
c. 13%	4 (4%)	8 (7%)
d. 14%	11 (10%)	13 (12%)
e. 15%	11 (10%)	11 (10%)
f. 16%	3 (3%)	6 (6%)
g. 17%	2 (3%)	2 (2%)
h. 18%	4 (4%)	2 (2%)
i. 19-24%	8 (9%)	8 (7%)
j. 25-30%	1 (1%)	6 (6%)
k. 31-36%	3 (3%)	4 (4%)
l. 37-42%	2 (2%)	5 (5%)
m. 43-48%	1 (1%)	1 (1%)
n. >/=49%	2 (2%)	4 (4%)

15. Regarding your response to the previous item 10, to what extent does it meet the ACGME guidelines for support?
The ACGME Program Requirements for Graduate Medical Education in Pulmonary Disease; Critical Care Medicine; and Pulmonary Critical Care Medicine is pictured below.
https://www.acgme.org/globalassets/pfassets/programrequirements/156_pccm_2022v2_tcc.pdf

	Response	Does Not Meet	Meets	Exceeds	I don't know
2022	94 (100%)	33 (35%)	48 (51%)	13 (14%)	
2023	92 (%)	18 (20%)	59 (64%)	15 (16%)	
2024	108	17 (16%)	70 965%)	19 (18%)	2 (2%)

16. Has the level of support for your Associate/Assistant Program Director(s) changed recently due to the new ACGME requirements that were effective as of July 1, 2023?

Response	2022	2023	2024
	94 (100%)		108
a. No, it has not changed	76 (81%)	65 (71%)	73 (68%)
b. Yes, it has decreased	0	0	0
d. Yes, it has increased	18 (19%)	27 (29%)	35 (32%)

II.A.2.b)

Programs must appoint at least one of the subspecialty-certified core faculty members to be associate program director(s). The associate program director(s) must be provided with support equal to a dedicated minimum time for administration of the program as follows: (Core)

Number of Approved Fellow Positions	Minimum Support Required (FTE)
<7	0
7-9	.13
10-12	.14
13-15	.15
16-18	.16
19-21	.17
22-24	.18
25-27	.24
28-30	.30
31-33	.36
34-36	.42
37-39	.48

17. Regarding your response to the previous item (question 10), to what extent is your current level of support sufficient for the scope of APD responsibilities?

	Response	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
2019	89 (100%)	29 (32.6%)	23 (25.8%)	20 (22.5%)	13 (14.6%)	4 (4.5%)
2020	95 (100%)	25 (26.3%)	30 (31.6%)	17 (17.9%)	18 (18.9%)	5 (5.3%)
2021	100 (100%)	26 (26.0%)	31 (31.0%)	13 (13.0%)	20 (20.0%)	10 (10.0%)
2022	94 (100%)	15 (16%)	30 (32%)	17 (18%)	26 (28%)	6 (6%)
2023	92 (81%)	9	36	43	3	1
2024	108 (96%)	5	34	64	4	1

18. Mark the one response that best reflects the source of support for the Associate Program Director's administrative responsibilities.

	2019	2020	2021	2022	2023	2024
	89 (100%)	95 (100%)	100 (100%)	94	92 (81%)	108 (96%)
a. No salary, protected or release time support	9 (10.1%)	32 (33.7%)	34 (34.0%)	28 (30%)	23 (25%)	23 (21%)
b. Salary support allocated to Program Director, with a portion allocated to the Associate/Assistant Program Director, at the PDs discretion.	26 (29.2%)	20 (21.1%)	12 (12.0%)	10 (11%)	7 (8%)	6 (6%)
c. Separate source allocated to Associate Program Director, independent of that allocated to Program Director	18 (20.2%)	35 (36.8%)	44 (44.0%)	49 (52%)	57 (62%)	72 (67%)
d. I don't know.	36 (40.4%)	8 (8.4%)	10 (10.0%)	7 (7%)	5 (5%)	7 (6%)

19. Do your Core Faculty receive salary/protected or time support for fellowship responsibilities (e.g., teaching, supervision, advising)?

	2019	2020	2021	2022	2023	2024
	105 (100%)	110 (100%)	113 (100%)	105 (98%)	96 (85%)	111 (99%)
a. No	80 (76.2%)	89 (80.9%)	86 (76.1%)	67 (64%)	60 (63%)	50 (45%)
b. Yes	21 (20%)	20 (18.2%)	24 (21.2%)	35 (33%)		
b. Yes, all my core faculty receive salary/or protected time.					15 (16%)	34 (31%)
c. Yes, some of my core faculty receive salary/or protected time.					17 (18%)	4 (4%)
d. I don't know	4 (3.8%)	1 (.9%)	3 (2.7%)	3 (3%)	4 (4%)	23 (21%)

20. To what extent do you agree that recruiting and retaining effective Core Faculty for your fellowship program is difficult because of insufficient support (e.g., salary and/or protected or release time) for carrying out fellowship responsibilities?

	Response	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
2019	105 (100%)	6 (5.7%)	17 (16.2%)	32 (30.5%)	36 (34.3%)	14 (13.3%)
2020	110 (100%)	6 (5.5%)	24 (21.8%)	33 (30%)	30 (27.3%)	17 (15.5%)
2021	113 (100%)	13 (11.5%)	19 (16.8%)	40 (35.4%)	33 (29.2%)	8 (7.1%)
2022	105 (98%)	7 (6%)	19 (18%)	24 (23%)	34 (32%)	21 (20%)
2023	96 (85%)	4 (4%)	14 (15%)	26 (27%)	32 (33%)	20 (20%)
2024	111 (99%)	6 (5%)	21 (91%)	18 (16%)	42 (38%)	24 (22%)

21. What is range of <u>total months</u> of protected research time does your program provide fellows for the duration of their training program, excluding an extra research year?
Min [Drop down menu with, 0 Months – 18 Months and >18 Months]
Max [Drop down menu with, 0 Months – 18 Months and >18 Months]

Number of Months	2019		2020		2021		2022		2023			
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
0	10 (9.5%)	6 (5.7%)	10 (9.1%)	5 (4.5%)	8 (7.2%)	2 (1.8%)	7 (6%)	4 (4%)	8	3	18	8
1	8 (7.6%)	1 (1.0%)	13 (11.8%)	1 (.9%)	4 (3.6%)	1 (0.9%)	11 (10%)	1 (1%)	14	3	9	1
2	0	3 (2.9%)	0	4 (3.6%)	9 (8.1%)	3 (2.7%)	8 (8%)	4 (4%)	7	7	7	7
3	15 (14.3%)	4 (3.8%)	21 (19.1%)	9 (8.2%)	12 (10.8%)	4 (3.6%)	15 (14%)	11 (10%)	7	6	10	10
4	8 (7.6%)	2 (1.9%)	4 (3.6%)	3 (2.7%)	11 (9.9%)	5 (4.5%)	7 (6%)	4 (4%)	8	4	5	4
5	5 (4.8%)	3 (2.9%)	3 (2.7%)	5 (4.5%)	1 (0.9%)	2 (1.8%)	3 (3%)	4 (4%)	3	3	5	2
6	15 (14.3%)	12 (11.4%)	18 (16.4%)	17 (15.5%)	25 (22.5%)	16 (14.5%)	18 (17%)	12 (11%)	16	14	24	21
7	1 (1.0%)	5 (4.8%)	3 (2.7%)	2 (1.8%)	2 (1.8%)	3 (2.7%)	2 (2%)	4 (4%)	0	3	0	1
8	6 (5.7%)	7 (6.7%)	5 (4.5%)	5 (4.5%)	4 (3.6%)	8 (7.3%)	3 (3%)	4 (4%)	5	5	3	3
9	3 (2.9%)	8 (7.6%)	4 (3.6%)	4 (3.6%)	4 (3.6%)	7 (6.4%)	4 (4%)	6 (6%)	3	4	4	4
10	5 (4.8%)	3 (2.9%)	3 (2.7%)	3 (2.7%)	6 (5.4%)	5 (4.5%)	4 (4%)	3 (3%)	4	5	5	3
11	0	2 (1.9%)	2 (1.8%)	2 (1.8%)	4 (3.6%)	1 (0.9%)	2 (2%)	1 (1%)	0	0	1	1
12	15 (14.3%)	11 (10.5%)	12 (10.9%)	12 (10.9%)	12 (10.8%)	15 (13.6%)	13 (12%)	12 (11%)	11	8	13	16
13	0	1 (1.0%)	3 (2.7%)	3 (2.7%)	0	3 (2.7%)	1 (1%)	1 (1%)	1	1	0	0
14	1 (1.0%)	5 (4.8%)	3 (2.7%)	5 (4.5%)	1 (0.9%)	3 (2.7%)	2 (2%)	3 (3%)	0	1	1	3
15	1 (1.0%)	1 (1.0%)	2 (1.8%)	2 (1.8%)	0	2 (1.8%)	0	1 (1%)	1	2	1	2
16	3 (2.9%)	4 (3.8%)	1 (.9%)	1 (.9%)	1 (0.9%)	0.0%	2 (2%)	3 (3%)	3	3	2	1
17	2 (1.9%)	0	1 (.9%)	1 (.9%)	8 (7.2%)	2 (1.8%)	2 (2%)	0	1	1	1	0
18	7 (6.7%)	21 (20.0%)	22 (20%)	22 (20%)	4 (3.6%)	2 (1.8%)	3 (3%)	22 (21%)	3	17	2	18
>18	0	6 (5.7%)	4 (3.6%)	4 (3.6%)	0	6 (5.5%)	0	4 (4%)	1	6	0	6
Total	105 (100%)	105 (100%)	110 (100%)	110 (100%)	111 (100%)	110 (100%)	105 (98%)	105 (98%)	96 (85%)	96 (85%)	111 (99%)	111 (99%)

22. What % of fellows extend their fellowship beyond three years for additional research training.

	2019	2020	2021	2022	2023	2024
Total	**105 (100%)**	**110 (100%)**	**113 (100%)**	**105 (98%)**	**96 (85%)**	**111 (99%)**
a. None	69 (65.7%)	71 (64.5%)	72 (63.7%)	73 (70%)	64 (67%)	74 67%)
b. 1-25%	26 (24.8%)	28 (25.5%)	32 (28.3%)	21 (20%)	24 (25%)	26 (23%)
c. 26-50%	3 (2.9%)	2 (1.8%)	2 (1.8%)	3 (3%)	3 (3%)	8 (7%)
d. 51-75%	2 (1.9%)	4 (3.6%)	4 (3.5%)	5 (5%)	4 (4%)	1 (1%)
e. 76-99%	5 (4.8%)	4 (3.6%)	1 (0.9%)	3 (3%)	1 (1%)	2 (2%)
f. 100%	0	1 (.9%)	1 (0.9%)	0	0 (0%)	0
g. All fellows are required to do an additional research year	0	0	1 (0.9%)	0	0 (0%)	0

SECTION 2: ICU STAFFING

The items in this section pertain to required, in-house ICU responsibilities, excluding any elective moonlighting.

23. **For each training year, select the response that best estimates the typical total nights of fellows' required in-house ICU coverage.**

Fellowship Year		0	1-7	8-14	15-21	22-28	29-35	36-42	43-48	>48	Total
1	**2019**	35 (33.3%)	11 (10.5%)	15 (14.3%)	7 (6.7%)	9 (8.6%)	8 (7.6%)	9 (8.6%)	3 (2.9%)	8 (7.6%)	105 (100%)
	2020	28 (25.7%)	12 (11%)	9 (8.3%)	12 (11%)	13 (11.9%)	12 (11%)	12 (11%)	4 (3.7%)	7 (6.4%)	109 (100%)
	2021	29 (25.9%)	8 (7.1%)	11 (9.8%)	14 (14.3%)	8 (7.1%)	16 (14.3%)	15 (13.4%)	3 (2.7%)	6 (5.4%)	112 (100%)
	2022	26 (25%)	11 (10%)	14 (13%)	10 (9%)	17 (16%)	9 (9%)	9 (9%)	5 (5%)	4 (4%)	104 (97%)
	2023	21 (22%)	7 (7%)	12 (13%)	11 (12%)	11 (12%)	15 (16%)	5 (5%)	6 (6%)	8 (8%)	96 (85%)
	2024	22 (20%)	14 (13%)	13 (11%)	7 (6%)	20 (19%)	11 (10%)	11 (10%)	2 (2%)	8 (7%)	108 (96%)
2	**2019**	28 (26.7%)	12 (11.4%)	16 (15.2%)	12 (11.4%)	12 (13.3%)	10 (9.5%)	7 (6.7%)	1 (1%)	5 (4.8%)	105 (100%)
	2020	33 (30.3%)	11 (10.1%)	10 (9.2%)	13 (11.9%)	11 (10.1%)	13 (11.9%)	12 (11%)	2 (1.8%)	4 (3.7%)	109 (100%)
	2021	28 (25%)	12 (10.7%)	11 (9.8%)	19 (17%)	16 (14.3%)	15 (13.4%)	9 (8%)	2 (1.8%)	0	112 (100%)
	2022	30 (29%)	11 (10%)	15 (14%)	8 (8%)	17 (16%)	12 (12%)	6 (6%)	1 (1%)	4 (4%)	104 (97%)
	2023	21 (22%)	11 (12%)	8 (8%)	16 (17%)	19 (20%)	10 (10%)	5 (5%)	2 (2%)	4 (4%)	96 (85%)
	2024	26 (24%)	12 (11%)	14 (13%)	15 (14%)	18 (17%)	12 (11%)	4 (4%)	4 (4%)	3 (3%)	108 (96%)
3	**2019**	44 (41.9%)	8 (7.6%)	20 (19%)	11 (10.5%)	11 (10.5%)	10 (9.5%)	2 (1.9%)	1 (1%)	3 (2.9%)	105 (100%)
	2020	43 (39.4%)	12 (11%)	14 (12.8 %)	11 (10.1%)	11 (10.1%)	9 (8.3%)	6 (5.5%)	1 (.9%)	2 (1.8%)	109 (100%)
	2021	48 (42.9%)	12 (10.7%)	10 (8.9%)	15 (13.4%)	10 (8.9%)	11 (9.8%)	5 (4.5%)	1 (0.9%)	0	112 (100%)
	2022	43 (41%)	7 (7%)	18 (17%)	9 (9%)	13 (13%)	7 (7%)	2 (2%)	0	5 (5%)	104 (97%)
	2023	43 (45%)	8 (8%)	14 (15%)	9 (9%)	12 (13%)	7 (7%)	3 (3%)	0	0	96 (85%)
	2024	43 (40%)	8 (7%)	19 (18%)	11 (10%)	17 (16%)	6 (6%)	2 (2%)	1 (1%)	0	108 (96%)

24. Do fellows receive additional compensation beyond their standard salary for staffing required in-house night shifts?

	2019	2020	2021	2022	2023	2024
Total	105 (100%)	109 (100%)	112 (100%)	104 (97%)	96 (85%)	108n (96%)
a. Not Applicable, my fellows are not required to perform in-house nights. (skip to question 28)	24 (22.9%)	23 (21.1%)	22 (19.6%)	19 (18%)	15 (16%)	16 (15%)
b. No	73 (69.5%)	75 (68.8%)	80 (71.4%)	73 (70%)	70 (70%)	82 (76%)
c. Yes	8 (7.6%)	11 (10.1%)	10 (8.9%)	12 (12%)	11 (11%)	10 (9%)

26. Do fellows take nights without in-house CCM faculty immediately available at any of your sites?

	2023	2024
Total	96	92
a. Not applicable, my fellows are not required to perform in-house night coverage	15 (16%)	0
b. No	70 (73%)	50 (54%)
c. Yes	11(11%)	42 (46%)

26. a. What proportion of the nights do fellows work without any in-house CCM faculty immediately available?

	2023	2024
Total	53	69
Average	54.79	52.78

27. Do faculty receive additional compensation for supervising fellows during required in-house shifts?

	2019	2020	2021	2022	2023	2024
Total	80 (100%)	86 (100%)	90 (100%)	85 (100%)	81	82
a. No	70 (87.5%)	74 (86%)	74 (82.2%)	74 (87%)	72 (89%)	81 (88%)
b. Yes	10 (12.5%)	12 (14%)	16 (17.8%)	11 (13%)	9 (11%)	11 (12%)

SECTION 3: PROCEDURAL COMPETENCY

28. Of your 2024 final-year class, what percentage of fellows met your program's standards for performing each of the procedures below independently and competently by graduation?

Procedure		0	1-25%	26-50%	51-75%	76-99%	100%	Total
28.1. Bedside Tracheostomy	2022	56 (56%)	17 (17%)	1 (1%)	7 (7%)	1 (1%)	18 (18%)	100
	2023	54 (59%)	10 (11%)	9 (10%)	4 (4%)	7 (10%)	9 (10 %)	91
	2024	52 (51%)	14 (14%)	6 (6%)	9 (9%)	4 (4%)	16 (16%)	101
28.2. Critical care ultrasound	2022	4 (4%)	4 (4%)	5 (5%)	4 (4%)	8 (8%)	75 (75%)	100
	2023	6 (7%)	1 (1%)	3 (3%)	7 (8%)	8 (9%)	66 (72%)	91
	2024	3 (3%)	4 (4%)	5 (5%)	2 (2%)	7 (7%)	83 (82%)	101
28.3. EBUS (Display only if PCCM or Pulmonary is selected in Q1)	2022	4 (5%)	9 (10%)	5 (6%)	10 (12%)	10 (12%)	47 (55%)	85
	2023	7 (10%)	4 (6%)	4 (6%)	9 (12%)	10 (13%)	39 (53%)	73
	2024	4 (4%)	7 (7%)	5 (5%)	9 (9%)	10 (10%)	50 (50%)	101
28.4. Insertion of indwelling pleural catheters (i.e. PleurX catheter) (Display only if PCCM or Pulmonary is selected in Q1)	2022	21 (25%)	9 (10%)	11 (13%)	15 (18%)	3 (4%)	26 (30%)	85
	2023	21 (29%)	5 (7%)	11 (15%)	12 (16%)	7 (10%)	17 (23%)	73
	2024	29 (29%)	5 (5%)	9 (9%)	7 (7%)	13 (13%)	22 (22%)	101

29. Please provide the average number of procedures performed during the entire fellowship by your 2024 final-year class.

Number of Procedures	24.1. Bedside Tracheostomy			24.2. EBUS (Display only if PCCM or Pulmonary is selected in Q1)			24.3. Insertion of indwelling pleural catheters (i.e. PleurX catheter) (Display only if PCCM or Pulmonary is selected in Q1)		
	2022	2023	2024	2022	2023	2024	2022	2023	2024
0	32	28	29	2	6	3	9	10	9
1	1	5	5	0	0	0	1	2	2
2	7	7	8	0	0	0	8	4	5
3	7	7	4	0	0	1	5	3	1

4	0	3	3	0	0	0	1	0	1
5	16	9	12	1	2	2	15	19	21
6	2	0	3	0	0	0	0	2	4
7	1	2	3	0	0	0	2	3	4
8	1	6	1	1	3	0	4	1	0
9	0	1	1	0	0	0	0	1	1
10	6	9	12	1	3	3	7	13	15
11	0	0	0	0	0	0	0	0	0
12	2	1	0	0	0	1	2	1	2
13	0	0	0	0	0	0	0	0	0
14	1	0	0	0	0	0	0	0	0
15	4	3	7	5	1	3	5	4	0
16	1	0	0	0	0	0	0	0	0
17	1	0	0	0	0	0	0	0	0
18	0	0	1	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0
20	7	7	3	4	4	6	5	3	0
24	0	0	1	0	0	0	0	0	0
25	0	4	2	7	6	3	4	1	1
30	2	1	1	9	8	8	1	3	3
35	1	0	0	2	1	7	0	0	1
38	0	0	0	1	0	0	0	0	0
40	0	0	0	5	10	6	2	1	1
45	0	0	0	1	1	0	00	0	0
50	1	1	0	20	8	18	1	0	1
54	0	0	0	0	1	0	0	0	0
55	0	0	0	1	1	0	0	0	0
56	0	0	0	0	1	0	0	0	0
60	1	0	1	7	2	0	0	0	0
70	0	0	0	1	2	1	0	0	0
75	0	0	0	2	3	2	0	0	0
78	0	0	0	0	0	1	0	0	0
80	0	0	0	0	3	2	0	1	0
83			0		0	1			0
90	0	0	0	0	0	2	0	0	0
100	1	0	0	5	5	3	1	1	0
115	0	0	0	1	0	0	0	0	0
117	0	0	0	1	0	0	0	0	0
120	0	0	0	0	1	0	0	0	0
125	0	0	0	1	0	0	0	0	0
150	0	1	0	2	0	0	0	0	0
200	0	0	0	1	2	2	0	0	0
250	0	0	0	0	1	0	0	0	0
300	0	0	0	0	1	0	0	0	0
358	0	0	0	0	1	0	0	0	0

30. For each procedure listed below, mark whether each assessment method (columns) is consistently used to assess fellow competency. (select all that apply)

		Minimum number of procedures performed	Global assessment via reported impressions without direct observation	Global assessment based on a direct observation	Written Knowledge Test	Itemized Observed Performance Checklist
30.1. Bedside Tracheostomy	**2019**	NA	6 (8.2%)	55 (75.3%)	1 (1.4%)	11 (15.1%)
	2020	52 (34.7%)	6 (4%)	71 (47.3%)	2 (1.3%)	12.7%
	2021	43 (32.3%)	14 (10.5%)	1 (0.8%)	1 (0.8%)	12 (9%)
	2022	100 (99%)	22 (21%)	66 (65%)	3 (3%)	10 (10%)
	2023	51 (56%)	20 (22%)	58 (64%)	4 (4%)	10 (11%)
	2024	57 (56%)	21 (21%)	66 (65%)	3 (3%)	14 (14%)

30.2. Critical care ultrasound	**2019**	NA	21 (13.8%)	84 (54.5%)	18 (11.7%)	31 (20.1%)
	2020	48 (22.2%)	15 (6.9%)	90 (47.7%)	23 (10.6%)	40 (18.5%)
	2021	42 (20.1%)	27 (12.9%)	87 (41.6%)	17 (8.1%)	36 (17.2%)
	2022	41 (40%)	30 (30%)	75 (74%)	13 (12%)	38 (37%)
	2023	37 (41%)	33 (36%)	74 (81%)	15 (16%)	26 (29%)
	2024	48 (48%)	33 (33%)	87 (87%)	20 (20%)	33 (33%)
30.3. EBUS*(Display only if PCCM or Pulmonary is selected in Q1)*	**2019**	NA	13 (9.4%)	80 (57.2%)	7 (5%)	39 (28.1%)
	2020	68 (29.8%)	14 (6.1%)	91 (39.9%)	15 (6.6%)	14 (6.1%)
	2021	58 (30.4%)	13 (6.8%)	78 (40.8%)	9 (4.7%)	33 (17.3%)
	2022	46 (54%)	12 (14%)	69 (81%)	5 (6%)	29 (34%)
	2023	51 (70%)	12 (16%)	58 (78%)	9 (12%)	21 (29%)
	2024	60 (60%)	13 (13%)	72 (72%)	9 (9%)	29 (29%)
30.4. Insertion of indwelling pleural catheters (i.e. PleurX catheter) *(Display only if PCCM or Pulmonary is selected in Q1)*	**2019**	NA	13 (12.9%)	65 (64.4%)	3 (3%)	20 (19.8%)
	2020	54 (32.3%)	12 (7.2%)	77 (46.1%)	3 (1.8%)	12 (7.2%)
	2021	47 (32.2%)	9 (6.2%)	69 (47.3%)	1 (0.7%)	20 (13.7%)
	2022	39 (46%)	81(9%)	70 (82%)	2 (9%)	11 (13%)
	2023	39 (53%	12 (16%)	55 (75%)	2 (3%)	9 (12%)
	2024	56 (56%)	17 (17%)	62 (62%)	2 (2%)	12 (12%)

31. For each of the procedures listed below, to what extent do you have:
   1) sufficient faculty expertise and
   2) sufficient dedicated time to teach and supervise your fellows to achieve competent, independent performance by graduation?
   (For each row, mark one, best response for Expertise and for Time.)

Procedure		Expertise		Time		Total
		No	**Yes**	**No**	**Yes**	
31.1. Bedside Tracheostomy	**2019**	33 (31%)	71 (68%)	54 (51%)	50 (49%)	104 (100%)
	2020	20 (18%)	89 (82%)	43 (39%)	66 (61%)	109 (100%)
	2021	30 (27%)	80 (73%)	45 (41%)	65 (59%)	110 (100%)
	2022	27 (27%)	73 (73%)	40 (40%)	60 (60%)	100 (100%)
	2023	25 (27%)	66 (73%)	43 (47%)	48 (53%)	91 (100%)
	2024	26 (26%)	75 (75%)	45 (45%)	56 (56%)	101 (100%)
31.2. Critical care ultrasound	**2019**	7 (7%)	97 (93%)	27 (26%)	77 (75%)	104 (100%)
	2020	10 (9%)	99 (91%)	23 (21%)	86 (79%)	109 (100%)
	2021	12 (11%)	98 (89%)	29 (26%)	81 (74%)	110 (100%)
	2022	9 (9%)	91 (91%)	33 (33%)	66 (66%)	100 (100%)
	2023	7 (8%)	84 (92%)	18 (20%)	73 (80%)	91 (100%)
	2024	9 (9%)	92 (92%)	17 (17%)	84 (84%)	101 (100%)
31.3. EBUS *(Display only if PCCM or Pulmonary if selected in Q1)*	**2019**	8 (7%)	96 (93%)	15 (14%)	89 (86%)	104 (100%)
	2020	11 (10%)	98 (90%)	17 (16%)	92 (84%)	109 (100%)
	2021	3 (3%)	90 (97%)	8 (9%)	85 (91%)	93 (100%)
	2022	5 (6%)	80 (94%)	9 (11%)	76 (89%)	85 (100%)
	2023	5 (7%)	68 (93%)	7 (10%)	66 (90%)	73 (100%)
	2024	2 (2%)	83 (99%)	7 (%)	78 (92%)	85 (100%)
31. 4. Insertion of indwelling pleural catheters (i.e. PleurX catheter) *(Display only if PCCM or Pulmonary is selected in Q1)*	**2019**	13 (13%)	91 (87%)	34 (33%)	70 (67%)	104 (100%)
	2020	17 (13%)	92 (84%)	28 (26%)	81 (74%)	109 (100%)
	2021	12 (13%)	81 (87%)	21 (23%)	72 (77%)	93 (100%)
	2022	14 (16%)	71 (84%)	25 (30%)	60 (70%)	85 (100%)
	2023	7 (8%)	66 (90%)	22 (30%)	51 (70%)	73 (100%)
		12 (14%)	73 (86%)	25 (30%)	60 (70%)	85 (100%)

32. To what extent do you agree that the ABIM should include Endobronchial Ultrasound–guided biopsy as a <u>required</u> procedure for Pulmonary board eligibility. *(Display only if PCCM or Pulmonary is selected in Q1)*

	Response	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
2019	104 (100%)	89 (8.7%)	21 (20.2%)	31 (29.6%)	27 (26%)	16 (15.4%)
2020	109 (100%)	14 (12.8%)	29 (26.6%)	24 (22%)	28 (25.7%	14 (12.8%)
2021	93 (100%)	9 (9.7%)	19 (20.4%)	21 (22.6%)	23 (24.7%)	21 (22.6%)
2022	85 (100%)	14 (12%)	20 (23%)	18 (21%)	20 (24%)	12 (14%)
2023	73 (100%)	9 (12%)	19 (26%	14 (19%)	18 (25%)	13 (18%)
2024	85	13	20	16	21	15

SECTION 4: EBUS SPECIFIC QUESTIONS *(Display only if 1-100% is selected in 19.3)*

33. Who trains your fellows in EBUS? (choose one)

	2020	2021	2022	2023	2024
Total Response	81 (100%)	77 (100%)	81 (100%)	66 (100%)	80 (100%)
23.1. A board-certified interventional pulmonologist	25 (30.9%)	26 (33.8%)	24 (30%)	19 (29%)	23 (29%)
23.2. A non-IP Trained faculty member	16 (19.8%)	12 (15.6%)	16 (20%)	12 (18%)	13 (16%)
23.3. Both	40 (49.4%)	39 (50.6%)	41 (51%)	35 (53%)	44 (55%)

34. Who assesses competency for certification of your fellows in EBUS?

	2020	2021	2022	2023	2024
Total Response	81 (100%)	77 (100%)	81 (100%)	66 (100%)	80 (100%)
24.1. A board-certified interventional pulmonologist	30 (37%)	30 (39.0%)	29 (36%)	21 (32%)	31 (39%)
24.2. A non-IP Trained faculty member	15 (18.5%)	12 (15.6%)	16 (20%)	12 (18%)	15 (19%)
24.3. Both	36 (44.4%)	35 (45.5%)	36 (44%)	33 (50%)	34 (43%)

SECTION 5: PULMONARY ARTERY CATHETERIZATION SPECIFIC QUESTIONS

35. Of your 2024 graduating class, how many fellows consistently demonstrated competent and independent performance by year-end for each ability listed below.

Ability		0	1-25%	26-50%	51-75%	76-99%	100%	Total
35.1. Insert a pulmonary artery catheter	**2019**	28 (27%)	12 (12%)	19 (18%)	10 (10%)	12 (12%)	23 (22%)	104 (100%)
	2020	21 (20%)	22 (20%)	23 (21%)	8 (7%)	6 (5%)	28 (26%)	108 (100%)
	2021	29 (27%)	18 (17%)	16 (15%)	12 (11%)	12 (11%)	22 (20%)	109 (100%)
	2022	27 (27%)	18 (18%)	19 (19%)	6 (6%)	9 (9%)	21 (21%)	100 (100%)
	2023	24 (26%)	19 (21%)	10 (11%)	7 (8%)	5 (5%)	26 (29%)	91 (100%)
	2024	20 (20%)	26 (26%)	10 (10%)	10 (10%)	6 (6%)	27 (27%)	99 (100%)
35.2. Interpret and apply findings from a pulmonary artery catheter	**2019**	10 (10%)	2 (2%)	6 (6%)	11 (11%)	11 (11%)	64 (66%)	104 (100%)
	2020	12 (11%)	4 (4%)	8 (7%)	11 (10%)	16 (15%)	57 (53%)	108 (100%)
	2021	9 (8%)	4 (4%)	8 (7%)	15 (14%)	10 (9%)	63 (58%)	109 (100%)
	2022	9 (9%)	6 (6%)	12 (12%)	5 (5%)	11 (11%)	57 (57%)	100 (100%)
	2023	9 (10%)	9 (10%)	7 (8%)	3 (3%)	9 (10%)	54 (59%)	91 (100%)
	2024	7 (7%)	5 (5%)	2 (2%)	7 (7%)	12 (12%)	66 (67%)	99 (100%)

36. For each of the following clinical/education settings, to what extent do Fellows learn to insert OR interpret pulmonary artery catheters?

Setting		Insert PA catheters	Interpret and apply findings from PA catheters	Not Applicable
36.1 Medical ICU	**2019**	45	76	17
	2020	63	83	15
	2021	57	88	14
	2022	53	70	20

	2023	53	64	19
	2024	59	73	22
36.2 Cardiac ICU	**2019**	30	56	36
	2020	38	66	31
	2021	32	63	35
	2022	28	59	39
	2023	39	69	20
	2024	40	70	29
36.3 Cardiothoracic or other ICU	**2019**	42	71	26
	2020	41	72	28
	2021	38	78	21
	2022	30	70	29
	2023	40	69	18
	2024	35	69	26
36.4 Cath lab or other setting where PH is evaluated	**2019**	54	68	27
	2020	52	66	27
	2021	53	69	27
	2022	54	65	32
	2023	52	54	30
	2024	62	60	32
36.5 Didactic teaching sessions	**2019**	30	89	10
	2020	35	89	7
	2021	32	96	5
	2022	32	84	15
	2023	28	75	14
	2024	335	91	7
36.6 Simulation-based education	**2019**	14	25	52
	2020	20	30	48
	2021	15	29	53
	2022	16	27	70
	2023	19	27	62
	2024	24	37	61
36.7 Other, please describe any other settings in which fellows learn about PA catheters and indicate the frequency of learning opportunities for each setting.	**2019**	4	6	55
	2020	1	7	50
	2021	2	5	53
	2022	3	1	98
	2023	5	6	84
	2024	3	7	92
36.8 None	**2019**	1	0	49
	2020	1	1	47
	2021	4	1	49
	2022	2	0	99
	2023	6	3	83
	2024	3	1	96
Other Specified	**2019**	• PH clinic and PH rotation • Cardiac OR • Subspecialty clinic (PH) • Our fellows go to the Cardiac Surgery OR 　• pHTN clinic	• Our fellows go to the Cardiac Surgery OR • pHTN clinic • Subspecialty clinic (PH) • Cardiac OR 　PH clinic and PH rotation	
	2020	• clinical PH conference (weekly for fellows who elect to attend) • Outpatient right heart cath with PH specialist • ph clinic • pHTN clinic, consults 　CT Surgical Operating Room	• CT Surgical Operating Room • pHTN clinic, consults • ph clinic • Outpatient right heart cath with PH specialist 　clinical PH conference (weekly for fellows who elect to attend)	
	2021	• ECMO • Heart Failure consults • PH clinic 　Pulmonary Vascular Disease Clinics	• Heart Failure consults • PH clinic 　Pulmonary Vascular Disease Clinics	
	2022	• SICU 　TICU		
	2023	• Lecture format		

		• invasive CPET lab • self study ED	
	2024	• consult rotations when evaluating patients with PH and in the outpatient setting when seeing patients in clinic wiht our PH specialist • Lectures • physiology curriculum • PH rotation	

SECTION 6: FELLOWSHIP APPLICATION and ORIENTATION

37. What was your interview format for this most recent recruitment cycle? Choose one:

Response	2024
Total	**99 (100%)**
a. In-person-only	7 (7%)
b. Virtual with an optional in-person visit	6 (6%)
c. Virtual-only	82 (82%)
d. Applicant's choice of in-person or virtual interview	3 (3%)
e. Other: Please Specify	1 (1%)
	• the optional visit was a specific second look after match list submission

38. Are you planning to change your interview format in the upcoming recruitment cycle?

Response	2024
	99 (100%)
a. Yes	8 (8%)
b. No	62 (63%)
c. I don't know yet	29 (29%)

If yes, is selected for "Are you planning to change your interview format in the upcoming recruitment cycle?"

38.a. What will your interview format be for the upcoming recruitment cycle?

Response	2024
Total	**99 (100%)**
a. In-person-only	2 (25%)
b. Virtual with an optional in-person visit	3 (38%)
c. Virtual only	0
d. Applicant's choice of in-person or virtual interview	3 (25%)
e. Other: Please Specify	1 (1%)
	• We will make modifications to our second look session

39. Does your program participate in program-initiated post-interview communication?

Response	2024
	99 (100%)
a. Yes	26 (26%)
b. No	71 (72%)
a. I don't know	2 (2%)

39. Does your program participate in applicant-initiated post-interview communication?

Response	2024
	99 (100%)
a. Yes	59 (66%)
b. No	34 (34%)
c. I don't know	6 (6%)

SECTION 7: DEMOGRAPHICS

40. What is your gender? *(Choose one)*

	2019	2020	2021	2022	2023	2024
Total	103 (100%)	107 (100%)	109 (100%)	100 (100%)	91 (100%)	99 (100%)
a. Male	61 (59.2%)	62 (57.9%)	61 (56.0%)			
a. Cisgender Man				44 (44%)	54 (59%)	44 (44%)
b. Transgender Man				1 (1%)	0	0
b. Female	39 (37.9%)	42 (39.3%)	46 (42.2%)			
c. Cisgender Woman91				42 (42%)	31 (34%)	43 (43%)
d. Transgender Women				0	1 (1%)	0
e. Nonbinary/Genderqueer				0	0	0
f. Prefer not to say	3 (2.9%)	3 (2.8%)	2 (1.8%)	13 (13%)	4 (4%)	9 (9%)
g. Prefer to self-describe as: _____	0	0	0	0	1 (1%)	3 (3%) Women (1) Male (2)

42. What is your current academic rank? *(Choose one)*

	2019	2020	2021	2022	2023	2024
Total	103 (100%)	107 (100%)	109 (100%)	100 (100%)	91 (100%)	99 (100%)
a. Instructor	2 (1.9%)	1 (.9%)	0	0	0	1 (1%)
b. Assistant Professor or equivalent	23 (22.3%)	19 (17.8%)	24 (22.0%)	19 (19%)	23 (25%)	24 (24%)
c. Associate Professor or equivalent	50 (48.5%)	56 (52.3%)	56 (51.4%)	56 (56%)	41 (45%)	49 (49%)
d. Professor or equivalent	28 (27.2%)	29 (27.1%)	29 (26.6%)	23 (23%)	21 (23%)	17 (17%)
e. Other (please specify)	0	2 (1.9%)	0	1 (1%) No academic rank at my institution	3 (3%)	0
f. Not applicable	0		0	1 (1%)	4 (4%)	8 (8%)

2020 Other Response

- Program Director, pending promotion to professor

2023 Other Response
- Program Director

43. As of June 30, 2024, how many years have you been program director? *Drop down menu with 0-20 and >20*

Years as PD	2019	2020	2021	2022	2023	2024
Total responses	103 (100%)	107 (100%)	109 (100%)	100 (100%)	91 (100%)	99 (100%)
0	14 (13.6%)	11 (10.3%)	15 (13.8%)	8 (8%)	12 (13%)	10 (10%)
1	11 (10.7%)	18 (16.8%)	10 (9.2%)	16 (16%)	10 (11%)	11 (11%)
2	7 (6.8%)	12 (11.2%)	10 (9.2%)	7 (7)	12 (13%_	17 (17%)
3	11 (10.7%)	8 (7.5%)	7 (6.4%)	9 (9%)	5 (5%)	7 (7%)
4	5 (4.9%)	7 (6.5%)	5 (4.6%)	6 (6%)	8 (8%)	11 (11%)
5	10 (9.7%)	6 (5.6%)	8 (7.3%)	7 (7%)	5 (5%)	4 (4%)
6	10 (9.7%)	8 (7.5%)	9 (8.3%)	3 (3%)	8 (8%)	7 (7%)
7	3 (2.9%)	7 (6.5%)	5 (4.6%)	7 (8%)	5 (5%)	6 (6%)
8	6 (5.8%)	8 (2.8%)	12 (11.0%)	8 (5%)	2 (2%)	4 (4%)
9	3 (2.9%)	1 (.9%)	5 (4.6%)	3 (3%)	3 (3%)	2 (2%)
10	2 (2.0%)	5 (4.7%)	3 (2.8%)	7 (7%)	9 (10%)	5 (5%)
11	1 (1.0%)	0	1 (0.9%)	2 (2%)	1 (1%)	2 (2%)
12	1 (1.0%)	0	3 (2.8%)	2 (2%)	1 (1%)	2 (2%)
13	4 (3.9%)	3 (2.8%)	1 (0.9%)	1 (1%)	3 (3%)	2 (2%)
14	3 (3.0%)	0	2 (1.8%)	0	2 (2%)	1 (1%)
15	1 (1.0%)	5 (4.7%)	2 (1.8%)	2 (2%)	1 (1%)	0
16	4 (4.0%)	1 (.9%)	3 (2.8%)	1 (1%)	1 (1%)	1 (1%)
17	2 (2.0%)	1 (.9%)	2 (1.8%)	1 (1%)	0	0
18	0	1 (.9%)	2 (1.8%)	1 (1%)	0	0
19	1 (1.0%)	3 (2.8%)	0	4 (4%)	0	1 (1%)
20	2 (2.0%)	1 (.9%)	2 (1.8%)	1 (1%)	1 (1%)	1 (1%)
> 20	2 (2.0%)	6 (5.6%)	2 (1.8%)	6 (6%)	4 (4%)	0

44. Before being program director, how many complete years did you serve as an assistant and/or associate program director?

Years as APD, Prior to PD	2019	2020	2021	2022	2023	2024
Total Responses	103 (100%)	107 (100%)	109 (100%)	100 (100%)	91 (100%)	99 (100%)
0	33 (32.0%)	34 (31.8%)	26 (23.9%)	26 (26%)	25 (27%)	26 (26%)
1	10 (9.7%)	11 (10.3%)	17 (15.6%)	10 (10%)	10 (11%)	9 (9%)
2	10 (9.7%)	17 (5.9%)	11 (10.1%)	13 (13%)	14 (15%)	12 (12%)
3	12 (11.7%)	7 (6.5%)	10 (9.2%)	10 (10%)	13 (14%)	21 (21%)
4	8 (7.8%)	4 (3.7%)	18 (16.5%)	12 (12%)	10 (11%)	7 (7%)
5	14 (13.6%)	19 (17.8%)	11 (10.1%)	13 (13%)	6 (7%)	11 (11%)
6	4 (3.9%)	2 (1.9%)	6 (5.5%)	9 (9%)	4 (4%)	3 (3%)

7	6 (5.8%)	2 (1.9%)	1 (0.9%)	2 (2%)	2 (2%)	3 (3%)
8	4 (3.9%)	3 (2.8%)	4 (3.7%)	2 (2%)	4 (4%)	4 (4%)
9	0	2 (1.9%)	2 (1.8%)	1 (1%)	1 (1%)	0
10	1 (1.0%)	4 (3.7%)	1 (0.9%)	1 (1%)	1 (1%)	2 (2%)
11	1 (1.0%)	1 (.9%)	0	0	0	0
12	0	0	1 (0.9%)	1 (1%)	0	1 (1%)
13	0	0	0	0	0	0
14	0	0	0	0	0	0
15	0	0	0	0	1 (1%)	0
16	0	1 (.9%)	1 (0.9%)	0	0	0
17	0	0	0	0	0	0
18	0	0	0	0	0	0
19	0	0	0	0	0	0
20	0	0	0	0	0	0
> 20	0	0	0	0	0	0

45. What is your self-identified race/ethnicity? *(Choose all that apply)*

	2019	2020	2021	2022	2023	2024
Total Responses	103 (100%)	107 (100%)	109 (100%)	100 (100%)	98 (100%)	99 (100%)
a. American Indian or Alaska Native	0.0%	1 (.9%)	0	0	1 (1%)	0
b. Asian or Asian American	14 (13.6%)	17 (15.9%)	11.9%)	16 (16%)	15 (16%)	20 (20%)
b.1. Cambodia				0	0	0
b.2. China				0	2	3 (15%)
b.3. India				8	8	11 (55%)
b.4. Japan				2	2	1 (5%)
b.5. Korea				0	1	0
b.6. Malaysia				0	0	0
b.7. Pakistan				0	1	4 (20%)
b.8. Philippine Islands				2	0	0
b.9. Thailand				0	0	0
b.10. Vietnam				1	1	1 (1%)
b.11. I prefer not to answer this question				1	0	0
b.12. Other				2	0	0
c. Black or African American	2 (1.9%)	2 (1.9%)	3 (3.7%)	4 (4%)	5 (5%)	7 (7%)
c.1. African-American				1	3	4 (57%)
c.2. African						1 (14%)
c.3. Caribbean				3	2	3 (43&)
c.4. I prefer not to answer this question				0	0	0
c.5. Other				0	0	0
d. Hispanic, Latino, Latina, Latinx	4 (3.9%)	5 (4.7%)	5 (4.6%)	7 (7%)	9 (%)	8 (8%)
d.1. Caucasian/white				5	1	3 (38%)
d.2. Black				0	0	0
d.3. Mexican				0	1	1 (13%(
d.4. Puerto Rican				0	1	1 (13%(
d.5. Dominican				0	1	0
d.6. Cuban				0	0	0
d.7. Central or South American (e.g., Argentinian, Honduran, etc.)				2	3	4 (50%)
d.8. I prefer not to answer this question				0	2	0
d.9. Other				0	0	1 (13%)
e. Native Hawaiian or Other Pacific Islander	0.0%	0	0	0	1 (1%)	0
f. Middle Eastern or Northern African				5 (5%)	9 (10%)	5 (5%)

f.1. Lebanese				2	2	2 (40%)
f.2. Iranian					2	
f.3. Egyptian						1 (20%)
f.4. Syrian				1	3	1 (20%)
f.5. Moroccan						0
f.6. Algerian						0
f.7. I prefer not to answer this question				1	1	0
f.8. Other				1	1	0
g. Caucasian/White	70 (68%)	72 (67.3%)	(69.7%)	56 (56%)	50 (55%)	50 (51%)
k. Multiple Race/Ethnicity	4 (3.9%)	1 (.9%)	3 (2.8%)			
l. Other (Please specify)	4 (3.9%)	3 (2.8%)	3 (2.8%)	1 (1%)	3 (3%)	2 (2%)
m. Prefer not to disclose	5 (4.9%)	6 (5.6%)	5 (4.6%)	11 (11%)	5 (5%)	9 (9%)

2019 Other Responses:
- South Asian
- Indian
- Middle Eastern
- South Asian

2020 Other Responses:
- Middle Eastern
- South Asian

2021 Other Responses:
- Mediterranean
- South Asian
- Mediterranean

46. Do you have plans to step down as Program Director within the next two years?

	2012	2013	2014	2015	2016	2017	2022	2023	2024
Plans	Response Rate (n=45)	Response Rate (n=61)	Response Rate (n=67)	Response Rate (n=67)	Response Rate (n=98)	Response Rate (n=97)	100 (100%)	91 (100%)	99 (100%)
Yes	14 (32%)	17 (28%)	15 (22%)	15 (22%)	11 (11%)	19 (20%)	21 (21%)	16 (18%)	22 (22%)
No	31 (68%)	44 (72%)	52 (78%)	52 (78%)	87 (89%)	78 (80%)	79 (79%)	75 (82%)	77 (78%)

47. What is your primary reason for stepping down as Program Director? (*Choose one*)
Note this survey question was retired in 2018 and restated in 2022

Reasons	2012 Response Rate (n=45)	2013 Response Rate (n=17)	2014 Response Rate (n=22)	2015 Response Rate (n=16)	2016 Response Rate (n=11)	2017 Response Rate (n=19)	2022 21	2023 16	2024 22
47.1 Other Career Opportunity	3 (7%)	2 (12%)	7 (32%)	6 (38%)	2 (18%)	7 (37%)	4 (19%)	4 (25%)	5 (23%)
47.2 Shift in Personal Priorities							5 (23%)	6 (38%)	6 (27%)
47.3 Burden of Regulations	23 (51%)	2 (12%)	6 (27%)	1 (27%)		3 (16%)	7 (33%)	1 (6%)	3 (14%)
47.4 Clinical Time Demands	7 (14%)	2 (12%)	5 (23%)	3 (6%)	3 (27%)	1 (5%)	2 (10%)	2 (13%)	1 (5%)
47.5 Research Time Demands		2 (12%)	1 (4%)						
47.6 Retirement	9 (21%)	5 (29%)	3 (14%)	3 (19%)	3 (27%)	4 (21%)	0	0	2 (9%)
47.7 Other	3 (7%)	4 (23%)		3 (19%)	3 (27%)	4 (21%)	3 (14%)	3 (19%)	5 (23%)
47.8 Comments (Other)	• The RRC gets more and more onerous every year. • I am also Division Chief. Not enough time	• Associate PD ready to assume PD activities. • Moving up to Division Chief. • Time for younger people to step-in and		• Career advancement • Other junior staff to move up.		• Have been doing this for 10 years. • I am an interim PD. • Administration overload.	• i knew i could only do it for 2 years due to family obligations when i started, otherwise i'd continue • Time for associat	• Time for New Leadership	• Am serving as PD until APD gets enough experience to become PD • Unfavorable environment in our changing

and I think it's a conflict to do both. • Haven't had any one who is 5 years out of training with sufficient objectivity to take over yet.	take over. • Associate PD ready to assume role of PD. • Too long. • Time for fresh blood.					e program director to advance • I believe it is important to create space for the professional development of junior faculty, and they are closer in age to the applicants and fellows.		health system • Time to pass the torch • need some new "blood", ideas • Term limits

48. **Does your program provide dedicated training in:**

	2024
Responses	99 (100%)
a. Health Equity, Health Care Disparities, or Health Care Justice	84 (85%)
a. Population Health	44 (44%)
a. Climate Impacts on Health b.	21 (21%)
c. Telemedicine	39 (39%)