

Supplemental digital content for Abramson EL, Naifeh MM, Stevenson MD, et al. Research Training Among Pediatric Residency Programs: A National Assessment. Acad Med.

Supplemental Digital Appendix 1

Survey of Scholarly Activity Requirements Administered to 105 Pediatric Residency Programs, 2012

The Accreditation Council for Graduate Medical Education requires residents to "participate in scholarly activity." However, there is little guidance on how to effectively integrate scholarly activity into residency programs. Members of the APPD Research and Scholarship Task Force have therefore designed this survey to assess factors associated with effective scholarly activity training for categorical pediatric residents and barriers to achieving these goals.

This survey is being administered to all pediatric residency program directors across the country. Participation in this survey should take approximately 10 minutes, and is voluntary. Participants may skip any questions they do not feel comfortable answering. All data will be kept anonymous, with published results being presented only in aggregate. If you have any questions about your rights as a research participant, contact Erika Abramson, MD MS at err9009@med.cornell.edu or 212-746-3929. You can also contact the Weill Cornell Medical College IRB at 646-962-8290.

Program Characteristics

1. How many total categorical pediatric residents are currently in your program (include PGY-1, PGY-2, and PGY-3 residents)?

2. How many pediatric fellowship programs exist in your institution?

3. How would you describe your residency program setting? (Please check all that apply)

- ☐ University-affiliated
- ☐ Community-based
- ☐ Military
- ☐ Other (please describe)

4. In what region of the country is your program located?

- ☐ Northeast (ME, NH, MA, CT, VT, RI, PA, NY, NJ)
- ☐ Midwest (WI, MI, IL, IN, OH, MO, ND, SD, NE, KS, MN, IA)
- ☐ South (TX, OK, LA, AR, MS, AL, TN, KY, WV, VA, NC, SC, GA, FL, MD, DE, DC)
- ☐ West (ID, MT, UT, AZ, WY, CO, NM, CA, NV, OR, WA, HI, AK)

Pediatric Resident Participation in Scholarly Activity

5. In your opinion, how important are each of the following goals for scholarly activity for pediatric residency?

	Extremely	Very	Somewhat	Slightly	Not at all
To teach residents the process of scientific inquiry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To teach residents problem-solving skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To expose residents to research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To train residents how to conduct research/scholarship	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To give all residents the experience of submitting an institutional review board (IRB) application	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To have all residents present their scholarly project locally	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To have all residents submit their work for presentation at a regional/national conference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To have all residents submit their work to a peer-reviewed journal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To encourage residents to pursue careers in academic medicine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To encourage residents to pursue subspecialty fellowship	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To prepare residents for subspecialty fellowship	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

6. How does your program define scholarly activity? (Please check all that apply)

- ☐ Original research studies (basic, clinical, health services, education, etc)
- ☐ Systematic literature review or meta-analysis
- ☐ Case reports or case series (with references)
- ☐ Book chapter
- ☐ Quality improvement projects
- ☐ Advocacy projects
- ☐ Curriculum development
- ☐ Local conference/workshop presentation to residents and/or medical students
- ☐ Grand Rounds presentation
- ☐ Regional or national workshop presentation

Other (please specify)

7. Is participation in scholarly activity a requirement for graduation?

- ☐ Yes
- ☐ No

8. Does your residency program link annual resident promotions to progress on their scholarly project?

☐ Yes

☐ No

9. What are the minimum requirements for scholarly activity in your program? (Please check all that apply.)

- ☐ Participation in a scholarly project
- ☐ Submission of a written report to the residency program
- ☐ Submission of an institutional review board (IRB) application
- ☐ Local presentation
- ☐ Regional presentation
- ☐ National presentation
- ☐ Submission of a manuscript to a journal

Other (please specify)

Infrastructure to Support Scholarly Activity

10. What funding is available to support residents in their scholarly activity in your program?

	Full funding for all residents	Partial funding for all residents	Competitive full funding	Competitive partial funding	No funding
Funding for residents to present their work at conferences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Funding for residents to complete their scholarly activity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. How many months of protected time do residents have to do scholarly activity in their 3 years of residency?

Number of months of required time

Maximum number of months of additional elective time

12. What resources are available to support residents in their scholarly activity in your program? (Please check all that apply.)

- ☐ A scholarship review committee
- ☐ A research director
- ☐ A statistician
- ☐ Funding for faculty to support resident scholarly activity
- ☐ Protected time for faculty to support resident scholarly activity
- ☐ Sufficient number of faculty mentors for scholarly activity
- ☐ A research track within your program
- ☐ A special training pathway such as an Accelerated Research Pathway or Integrated Research Pathway
- ☐ A research curriculum
- ☐ Chairman Support
- ☐ Opportunity for residents to present their work-in-progress
- ☐ A Research Day or other venue for residents to present their work
- ☐ Awarding of a prize for resident scholarly accomplishments

Other (please specify)

Barriers to Resident Scholarly Activity

13. Please tell us how much of a barrier each of the following is to supporting resident scholarly activity in your program:

	Major Barrier	Minor Barrier	Not a Barrier
Lack of a scholarship review committee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of a research director	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of time for residents to conduct scholarly activity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of time for faculty to mentor residents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of faculty experienced in conducting scholarly activity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of statistical support for residents' scholarly activity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of funding to support residents conducting scholarly activity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of funding to support residents in presenting their research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of a research track	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of a research curriculum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Resident attitudes toward conducting scholarly activity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of Chairman Support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

Outcomes

14. In the past 3 years, what percentage of categorical pediatric residents from your program did the following?

Presented their scholarly activity at a regional conference

Presented their scholarly activity at a national/international conference

Published their scholarly activity in a peer-reviewed journal

Scholarly activity can be defined in many different ways. For the purpose of the remaining questions in the survey, we will consider scholarly activity to include only original research studies (basic science, clinical, health services, education, etc), systematic literature reviews or meta-analyses, and case reports or case series with references.

15. According to the definition above, what percentage of your categorical pediatric residents participate in scholarly activity during residency?

16. As a program director, how satisfied are you with...

	Extremely	Very	Somewhat	Slightly	Not at all
the percentage of residents from your program engaged in scholarly activity?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the quality of scholarly activity by residents in your program?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the quality of your program to train residents to produce scholarly activity?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. Approximately how many faculty members are there in the Department of Pediatrics at your institution?

18. For the following questions, please estimate what percentage of pediatric faculty in your institution...

	0%	1-24%	25-49%	50-74%	75-100%
...participate in scholarly activity?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...mentored residents in their scholarly activities in the last 3 years?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...published at least one peer-reviewed paper in the last 3 years?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...presented posters or podium presentations at a conference in the last 3 years?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. In your most recent ACGME resident survey, how satisfied were your residents with the opportunities your program provides for them to participate in research or scholarly activities? (On Resident Survey report: Educational Content: Item 3: Satisfied with scholarly activities)

Percentage compliant	<input type="text"/>
Mean	<input type="text"/>

20. In the last 3 years, how many papers have you published?

This completes the survey. Thank you for your participation!