

Participant Perceptions of a National Cancer Institute Youth Enjoy Science R25 Program: A Qualitative Study

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Olivia Allran and Nathan L. Vanderford, PhD, MBA*

*Corresponding author: Nathan.Vanderford@uky.edu

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Supplementary Table 1. Participant quotes pertaining to Motivation for Participation

Participant Number	Quotes pertaining to <i>Motivation for Participation</i>
5	“I was looking at the UK job website and I thought [ACTION] would be really instrumental in getting to know UK Healthcare and getting to know a lot about the health care side in Lexington...I saw that it was for people from Appalachian areas and thought it sounded like something for me.”
6	“I think it’s really important to learn about your home state, especially too because Kentucky has so many health disparities. I know that it is inspiring to me to want to do health care because I see so many things in our state that are harming Kentuckians. So, I think it’s inspiring to want to help and make a difference and be an advocate for people.”
8	“I liked the aspect that it was based on students from Appalachia because I felt like one of my interests was learning about the oncology side effects on the whole state of Kentucky but more in Eastern Kentucky. I didn’t really know too much about cancer, and I thought it would be a good opportunity to learn more of something that I didn’t before.”
10	“After my freshman year, my mom got diagnosed with ovarian cancer, and that ignited a lot of rage inside me. I was very angry and wanted to find out more about why there was so much cancer in Eastern Kentucky.”

Supplementary Table 2. Participant quotes pertaining to Career Development

Participant Number	Quotes pertaining to <i>Career Development</i>
2	“ACTION showed me that even when I become a physician, I can still do research.”
3	“It helped amplify my desire to do the research and to learn about and help people with cancer.”
5	“What I have learned through shadowing in [ACTION] and PA school is that [physicians and physician assistants] are doing a lot of the same things except I’m going to them (physicians), bouncing ideas off of them more than what they’re coming to me for...It’s a lot of the same work, just a different type of provider doing it.”
6	“The program definitely helped me find [what job I wanted to do] in an indirect way. I didn’t know what I wanted to do, really, directly with health care, and I kind of just went in wanting to try everything...Through [my research mentor] and the research I did that summer, I knew I definitely wanted to do something in pharmacy.”

Supplementary Table 3. Participant quotes pertaining to Networking and Future Opportunities

Participant Number	Quotes pertaining to <i>Networking and Future Opportunities</i>
1	“I think networking is huge because it opens the doors for opportunities that may not have been available to you.”
1	“I think having that peer support I think is always really important so you’re not feeling like you are always in competition with people, because I think that’s a common thing for STEM majors in general.”
2	“You knowing your instructor and your instructor knowing you is very beneficial.”
4	“Allowed me to be very involved in ways I wouldn’t have been if I hadn’t had that catalyst at the beginning.”
5	“I actually ended up working with one of the surgeons that I had shadowed...I know that if I needed something, I could still contact the providers.”
6	“I was able to be a co-author on papers...which probably would not have happened if it had not been for that program. I had an amazing mentor, who I still have a relationship with today, who I can ask for advice. [ACTION] allowed me to be very involved in something I probably would not have been if it wasn’t for that catalyst at the beginning.”

Supplementary Table 4. Participant quotes pertaining to Knowledge Gained

Participant Number	Quotes pertaining to <i>Knowledge Gained</i>
1	“A lot of these disparities they that talked about could be pretty well generalized to different aspects of life as well. Getting that education really enabled me to see that the reason my community was the way that it was wasn’t due to one population or one person, it really was a systemic and geographical issue that needs to be addressed. There needs to be more advocacy for them and different programs that are being implemented.”
5	“With the providers I shadowed, I saw people from all over Kentucky had to travel to Lexington, and they would have to stay at different places...but I would just see how they would have to stay at other places for long. That was really interesting to get the perspective because I feel like as a provider you don’t get that perspective of how long people are staying for what you are doing for them and what all they’re giving up.”
6	“I didn’t really know anything about the process of research or how everything even works...It definitely helped me learn basic skills...I also think communicating with your preceptor or your mentor and talking with them has also been super helpful.”
7	“I’m now a third-year medical student, and a lot of the exposure I had before [medical school] honestly are more than what I’ve been able to have in medical school so far...I was able to see a lot of different branches of medicine and a lot of different specialties. That’s something you don’t get in medical school until your third or fourth year.”

Supplementary Table 5. Participant quotes pertaining to Possible Improvements

Participant Number	Quotes pertaining to <i>Possible Improvements</i>
1	“I would say to add more structure to it because we still had to reach out to people and send them individualized emails and see how they respond.”
7	“I think anytime there could be an opportunity to take an older cohort and give advice would just be super helpful.”
8	“Maybe more social events for students. I feel like I didn’t know that many people in my cohort...I wasn’t able to connect as much.”
10	“I think one thing with ACTION that would help would be to have a better recruiting process.”

Appendix 1. Interview Guide

1. Tell me about yourself.
2. What made you want to get involved in the ACTION Program?
3. What were your career goals coming into the program? Did this program change your goals at all?
4. Have you participated in a similar program? How did this program differ?
5. What aspects of the experience did you find most valuable and why? Least valuable?
6. What was the most difficult aspect of the program?
7. Did you find it difficult to balance this program with your coursework? How did it compare to your interest/engagement?
8. Has your confidence in your ability to understand, write, and present research changed?
9. Are you planning to continue research? Are you involved in research now?
10. How have your relationships with faculty and your peers shaped your view of research or education?
11. How has your background affected the way you think about research/education? Has this program changed that at all?
12. How did you view the shadowing and networking experiences?
13. Did you find the financial compensation helpful?
14. What sort of long-term transferable skills gains did you experience? What immediate gains did you experience?
15. What did you know about cancer in Kentucky prior to or just before starting ACTION? What did you learn about cancer in Kentucky during your time in ACTION?
16. Is there anything else you would like to say that you think would be helpful for us to know whether about the program or anything else you can think of?