**Figure S1**

Pre- and post-intervention study questionnaires

Initial survey

*Part A – Demographics*

1. Gender:

* Male
* Female

2. Do you have a formal masters degree?

* No
* Yes

3. Do you have a formal Ph.D.?

* No
* Yes

*Part B – Experience in Neurosurgery*

4. Have you engaged in any neurosurgical shadowing experiences during or before medical school? If so please describe the procedures observed and how many.

* No
* Yes (specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Have you engaged in any research related to neurosurgery?

* No
* Yes (describe): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. Have you engaged in any other academic commitments related to neurosurgery (ie. interest group leader)?

* No
* Yes (describe): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Part C – Interest in Neurosurgery*

7. How interested were you in neurosurgery when you began medical school?

* Very interested
* Interested
* Unsure
* Not interested
* Completely uninterested

8. What is your current interest in neurosurgery?

* Very interested
* Interested
* Unsure
* Not interested
* Completely uninterested

Final survey

*Part A – The Impact of SEAD of Interest in Neurosurgery*

1. What is your current (post-SEAD) interest in neurosurgery as a specialty?

* Very interested
* Interested
* Unsure
* Not interested
* Completely uninterested

2. The SEAD program improved my understanding of the lifestyle and scope of practice of a neurosurgeon.

* Strongly agree
* Agree
* Neutral
* Disagree
* Strongly disagree

3. Shadowing surgeons of other surgical specialties made me less interested in neurosurgery.

* Strongly agree
* Agree
* Unsure
* Disagree
* Strongly disagree

4. The SEAD neurosurgery experience made me more interested in neurosurgery.

* Strongly agree
* Agree
* Unsure
* Disagree
* Strongly disagree

5. The lifestyle I wish to have is not compatible with a career as a neurosurgeon.

* Strongly agree
* Agree
* Unsure
* Disagree
* Strongly disagree

6. I would fit in well with the culture/personalities associated with neurosurgery.

* Strongly agree
* Agree
* Unsure
* Disagree
* Strongly disagree

7. I intend to explore neurosurgery further following my experiences in the SEAD program with neurosurgical observerships.

* Strongly agree
* Agree
* Unsure
* Disagree
* Strongly disagree

8. I intend to explore neurosurgery further following my experiences in the SEAD program with a neurosurgical research project.

* Strongly agree
* Agree
* Unsure
* Disagree
* Strongly disagree

*Part B – Impact of Lifestyle Considerations on Interest in Neurosurgery*

9. If all surgical specialties had the same lifestyle constraints in residency and as a staff surgeon, what would be your interest in neurosurgery?

* Very interested
* Interested
* Unsure
* Not interested
* Completely uninterested

*Part C – Attractors and Deterrents affecting Specialty Choice*

Which of the following do you consider to be significant attractors towards any given medical career (choose all that apply)?

|  |  |  |
| --- | --- | --- |
|  | Attractor | Not an attractor |
| 10. Well respected profession |  |  |
| 11. Earnings |  |  |
| 12. Impact on patient’s lives |  |  |
| 13. Academic specialty |  |  |
| 14. Intellectual stimulation |  |  |
| 15. Staying busy and significant workload |  |  |
| 16. Competitiveness |  |  |
| 17. Culture of specialty (ie. hierarchies, expectations) |  |  |

Which of the following do you consider to be significant deterrents towards any given medical career (choose all that apply)?

|  |  |  |
| --- | --- | --- |
|  | Deterrent | Not a deterrent |
| 18. Workload and time commitment as staff |  |  |
| 19. Stress |  |  |
| 20. Lifestyle during residency |  |  |
| 21. Length of residency |  |  |
| 22. Potential earnings |  |  |
| 23. Competition for residency |  |  |
| 24. Treating complex patients |  |  |
| 25. Job market post-residency |  |  |
| 26. Lack of time for family/friends/hobbies |  |  |
| 27. Culture of specialty (ie. hierarchies, expectations) |  |  |

Which of the following attributes do you think are representative of neurosurgery (choose all that apply)?

|  |  |  |
| --- | --- | --- |
|  | Describes neurosurgery | Does not describe neurosurgery |
| 28. Well respected profession |  |  |
| 29. Earnings |  |  |
| 30. Impact on patient’s lives |  |  |
| 31. Academic specialty |  |  |
| 32. Intellectual stimulation |  |  |
| 33. Staying busy and significant workload |  |  |
| 34. Competitiveness |  |  |
| 35. Workload and time commitment as staff |  |  |
| 36. Stress |  |  |
| 37. Lifestyle during residency |  |  |
| 38. Length of residency |  |  |
| 39. Potential earnings |  |  |
| 40. Competition for residency |  |  |
| 41. Treating complex patients |  |  |
| 42. Job market post-residency |  |  |
| 43. Lack of time for family/friends/hobbies |  |  |