### The Portrait of a Neurosurgeon

Are you born with what it takes to be a neurosurgeon or do you become one? And what about personal qualities? Are they important? Are they innate or can they be acquired through training?

\*Campo obbligatorio

## This survey is your chance to tell us what you think goes into making the ideal neurosurgeon and their training.

We just ask you to spend 15 minutes to answer our survey openly and honestly\*. Our goal is to improve our ongoing training in order to achieve excellence in neurosurgery, and your assistance is fundamental to help us to do this.

\*Don't worry - we value confidentiality and your privacy will be ensured at all times. Data are only collected in an aggregate way and results will be analyzed anonymously.

First: a bit about you

1. Gender \*

Contrassegna solo un ovale.

🔵 Male

) Female

2. Country where you work \*

Contrassegna solo un ovale.

Algeria

Argentina

🔵 Australia

🔵 Austria

Belgium

🔵 Brazil

🔵 Canada

Chile

China

Denmark

Egypt

\_\_\_\_ Ethiopia

🕖 Finland

France

Germany

Greece

🕖 India

\_\_\_\_ Ireland

🔵 Italy

🔵 Japan

🕖 Kazakhstan

Korea
1.01.00

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Luxembourg

Mexico

Morocco

Netherlands

Norway

Poland

Portugal

Romania

Russian Federation

📃 Saudia Arabia

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Slovenia

- Spain 🕖
- Sweden
- Switzerland
- Thailand
- Turkey
- UK 🔘
- USA
- Other

### 3. The hospital where you work is \*

Seleziona tutte le voci applicabili.

- Public/government sector
- Private
- University teaching hospital
- Charitable/not-for-profit
- Religious hospital
- 4. How big is it? \*

Contrassegna solo un ovale.

Small hospital or health centre (<100 beds), sparsely equipped operating room for minor procedures

District or provincial hospital (100-300 beds), adequately equipped major and minor operating rooms

Referral hospital (> 300 beds), with basic intensive care facilities

5. Name of the hospital \*

6. You are \*

Contrassegna solo un ovale.

Resident Passa alla domanda 9.

Staff neurosurgeon Passa alla domanda 7.

— Head of department Passa alla domanda 7.

#### Your experience

7. Length of time in the field (including residency) \*

Contrassegna solo un ovale.

< 5 years of experience</p>

between 5 and 10 years of experience

between 10 and 15 years of experience

> 15 years of experience

#### 8. Your subspecialty (select all that apply) \*

Seleziona tutte le voci applicabili.

Cerebrovascolar Epilepsy Functional Neuro-oncology Pediatric Peripheral Spine Skull base Trauma

Passa alla domanda 10.

#### Year of training

9. You are at the \*

Contrassegna solo un ovale.

1 PGY
2 PGY
3 PGY
4 PGY
5 PGY
6 PGY

Passa alla domanda 10.

7 PGY

Being the ideal neurosurgeon

Let's get started! The survey will be based on the three following questions, so read them carefully now and then the rest will be a breeze.

Qualities needed by a neurosurgeon

10. Personal traits \*

### PERSONAL TRAITS

Being a mentor: the ability to stimulate enthusiasm, to challenge and motivate others, enhancing personal and professional growth

Commitment: the quality of being dedicated to profession

**Emotional intelligence and empathy**: the ability to perceive, integrate, understand and regulate emotions to promote personal growth

Intellectual curiosity: curiosity that leads to an acquisition of general knowledge

**Proactivity and initiative**: a readiness to seize opportunities even when there is no explicit indication from superiors

Resilience: the capacity to recover quickly from difficulties

	Not at all	A bit	A lot	Absolutely
Administrative task management	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Attention to detail and concentration	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Awareness of own limits and strengths	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Being a mentor	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Commitment	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Emotional intelligence and empathy	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Intellectual curiosity	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Proactivity and initiative	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Resilience	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Self-criticism	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Stress management	$\bigcirc$	$\bigcirc$	$\bigcirc$	

11. Interpersonal skills \*

### INTERPERSONAL SKILLS

Achievement orientation: the drive to meet an internal standard of excellence in order to achieve a good quality outcome

Conflict management: the ability to de-escalate disagreements and orchestrate resolutions

**Effective communication**: the ability to successfully convey or share ideas, feelings, experience or instructions to other staff or patients, seeking and giving feedback

Leadership: the ability to direct the team in the achievement of a common goal

Teamworking: the ability of the members of a team to act, think and behave as a unit

	Not at all	A bit	A lot	Absolutely
Achievement orientation	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Conflict management	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Effective communication	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Leadership	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Openness to innovation	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Teamworking	$\bigcirc$		$\bigcirc$	$\bigcirc$

12. Cognitive skills \*

### **COGNITIVE SKILLS**

Mental agility: the quality of being quick to understand, think, learn, act and adapt to new circumstances

Foresight/anticipation: the ability to perceive and respond to potential problems before they spiral out of control

**Cognitive flexibility**: the ability to switch from one surgical strategy or hypothesis to another or the ability to adapt to changing situations and overcoming obstacles

Situation awareness and risk assessment: the capacity to develop and maintain a dynamic awareness of the situation based on putting together data from the patient, team, time, displays, equipment, understanding what they mean and thinking about what may happen next and how to act

	Not at all	A bit	A lot	Absolutely
Analytical and problem-solving	$\bigcirc$	$\bigcirc$	$\bigcirc$	
Cognitive flexibility	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Foresight/anticipation	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Mental agility	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Situation awareness and risk assessment	$\bigcirc$	$\bigcirc$		$\bigcirc$

### 13. Surgical performance is affected by \*

Not at all A bit A lot Absolutely Acceptance of criticism Age Anxiety Arrogance Stubbornnes Negligence Self-confidence Resignation Impulsiveness Inability to provide feedback Gender Nationality Inability to seek feedback

Contrassegna solo un ovale per riga.

14. In your opinion, are there any other factors that affect surgical performance? Please feel free to add anything else you consider relevant. Your additional comments are extremely valuable to give us a better overview.

## 15. Are there any other qualities or behaviours a neurosurgeon should or should not have?

Please feel free to add anything else you consider relevant. Your additional comments are extremely valuable to give us a better overview.



### 16. Qualities needed to work effectively as a team \*

	Not at all	A bit	A lot	Absolutely
Cooperativeness	$\bigcirc$	$\bigcirc$	$\bigcirc$	
Coordination	$\bigcirc$	$\bigcirc$	$\bigcirc$	
Confidence in other team members' abilities	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Trustworthiness	$\bigcirc$	$\bigcirc$	$\bigcirc$	
Frankness	$\bigcirc$	$\bigcirc$	$\bigcirc$	
Supportiveness	$\bigcirc$	$\bigcirc$	$\bigcirc$	
Friendship	$\bigcirc$	$\bigcirc$	$\bigcirc$	
Openness to confrontation and ability to resolve conflicts	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Team self-evaluation	$\bigcirc$	$\bigcirc$	$\bigcirc$	
Equity in workload distribution	$\bigcirc$	$\bigcirc$	$\bigcirc$	
Adaptability and flexibility	$\bigcirc$	$\bigcirc$	$\bigcirc$	

## 17. In your opinion, are there any other factors needed to work effectively as a team?

Please feel free to add anything else you consider relevant. Your additional comments are extremely valuable to give us a better overview.



Your personal profile

#### 18. Your top 5 strengths \*

- Intellectual curiosity
- Attention to detail and concentration
- Awareness of own limits and strengths
- Analytical and problem solving
- Resilience
- Mental agility
- Foresight/anticipation
- Cognitive flexibility
- Effective communication
- Leadership
- Teamworking
- Stress management
- Conflict management
- Administrative task management
- Openness to innovation
- Situation awareness and risk assessment
- Emotional intelligence and empathy
- Achievement orientation
- Proactivity and initiative
- Commitment
- Being a mentor
- Arrogance
- Stubbornness
- Negligence
- Self-confidence
- Resignation
- Impulsiveness
- Anxiety
- Inability to provide feedback
- Inability to seek feedback
- Intellectual stagnation
- Self-criticism

19. Your 5 points to improve \*

- Intellectual curiosity
- Attention to detail and concentration
- Awareness of his/her own limits and strengths
- Analytical and problem solving
- Resilience
- Mental agility
- Foresight/anticipation
- Cognitive flexibility
- Effective communication
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- Stubbornness
- Negligence
- Self-confidence
- Resignation
- Impulsiveness
- Anxiety
- Inability to provide feedback
- Inability to seek feedback
- Intellectual stagnation
- Self-criticism

### 20. Areas improved during your career (select all that apply) \*

Intellectual curiosity
Attention to detail and concentration
Awareness of his/her own limits and strengths
Analytical and problem solving
Resilience
Mental agility
Foresight/anticipation
Cognitive flexibility
Effective communication
Leadership
Teamworking
Stress management
Conflict management
Administrative task management
Openness to innovation
Situation awareness and risk assessment
Emotional intelligence and empathy
Achievement orientation
Proactivity and initiative
Commitment
Being a mentor
Arrogance
Stubbornness
Negligence
Self-confidence
Resignation
Impulsiveness
Anxiety
Inability to provide feedback
Inability to seek feedback
Intellectual stagnation
Self-criticism

- 21. Are there any other areas where you feel you have improved during your career?
  Please feel free to add anything else you consider relevant. Your additional comments are extremely
  valuable to give us a better overview.

  22. Apart from technical skills, are there any other qualities you would like to
  improve?

  Please feel free to add anything else you consider relevant. Your additional comments are extremely
  valuable to give us a better overview.
- 23. Regarding the skills mentioned above, you consider you have become a better neurosurgeon thanks to (select all that apply) \*

Seleziona tutte le voci applicabili.

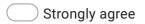
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Nature versus nurture: is there room for improvement?

### Final stretch!

24. Being an ideal neurosurgeon is more innate \*

Contrassegna solo un ovale.



Agree

- \_\_\_\_ Disagree
- Strongly disagree

# 25. Of the qualities and behaviours listed below, please choose up to 7 that you'd like to address and be trained in \*

Intellectual curiosity	
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- Attention to detail and concentration
- Awareness of his/her own limits and strengths
- Analytical and problem solving
- Resilience
- Mental agility
- Foresight/anticipation
- Cognitive flexibility
- Effective communication
- Leadership
- Teamworking
- Stress management
- Conflict management
- Administrative task management
- Openness to innovation
- Situation awareness and risk assessment
- Emotional intelligence and empathy
- Achievement orientation
- Proactivity and initiative
- Commitment
- Being a mentor
- Arrogance
- Stubbornness
- Negligence
- Self-confidence
- Resignation
- Impulsiveness
- Anxiety
- Inability to provide feedback
- Inability to seek feedback
- Intellectual stagnation
- Self-criticism

## 26. Thinking about the skills and behaviours mentioned above, at what point would you prefer training? \*

Seleziona tutte le voci applicabili.

During residency programme
During medical studies
Throughout my career through courses, conferences, training, counseling, etc.
Altro:

27. Thinking about the skills and behaviours listed above, which, in your opinion, is the most effective teaching method? (select all that apply) \*

Seleziona tutte le voci applicabili.

Scenario/simulations
Seminars
Observational
Conferences
Periodic meetings with colleagues
Mentorship
Role-playing
Briefing and debriefing
Altro:

28. The qualities and behaviours listed above should be included in the neurosurgical training curriculum \*

Contrassegna solo un ovale.

\_\_\_) Agree

Disagree

Strongly disagree

29. These qualities and behaviours can act as selection criteria for getting the right people into the field \*

Contrassegna solo un ovale.



- Strongly disagree
- 30. Please, tell us why you answered the last question that way

Please feel free to add anything else you consider relevant. Your additional comments are extremely valuable to give us a better overview.

31. Strong non-technical skills are a predictor of neurosurgical excellence \*

Contrassegna solo un ovale.

Strongly agree

Agree

- 🔵 Disagree
- Strongly disagree

### 32. The less useful qualities to be a great neurosurgeon are (select all that apply) \*

Seleziona tutte le voci applicabili.

Seleziona tutte le voci applicabili.
Intellectual curiosity Attention to detail and concentration
Awareness of his/her own limits and strengths
Analytical and problem solving
Resilience
Mental agility
Foresight/anticipation
Cognitive flexibility
Effective communication
Leadership
Teamworking
Stress management
Conflict management
Administrative task management
Openness to innovation
Situation awareness and risk assessment
Emotional intelligence and empathy
Achievement orientation
Proactivity and initiative
Commitment
Being a mentor
Self-criticism

33. In your opinion, can you become a great neurosurgeon without the skills and behaviours mentioned above? \*

Contrassegna solo un ovale.

$\square$	$\Big)$	Yes
$\square$	)	No

Final remarks

All done! Thank you for spending some of your valuable time on assisting us.

34. Are there any final comments you'd like to add?

Questi contenuti non sono creati né avallati da Google.

