

# iyano.org : Handbook of Networking in Neurosurgery

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## 1. Why was this guide written?

Over the course of the past few weeks, I conducted LinkedIn polls and communicated directly with over 150 medical students aspiring to become neurosurgeons. I asked them a simple but crucial question: What is your biggest challenge on the path to neurosurgery?

The responses were revealing:

Around 70% said their primary struggle was finding mentors and building a professional network in the field.

This confirmed something I had experienced firsthand. For many students—especially those without a “home” neurosurgery program—networking and mentorship are not just difficult; they can feel nearly impossible. Yet these two elements are the very keys that open doors to clinical rotations, research collaborations, and even residency interviews.

I wrote this handbook to change that. Over the past three years in medical school, I have actively applied the networking techniques outlined in these pages, connecting with many prominent neurosurgeons worldwide and building relationships that have led to real opportunities. My goal here is to give you a clear, actionable framework so you can do the same: secure at least one committed mentor who will guide you, advocate for you, and connect you to better prospects as your dedication becomes evident.

This guide distills tested strategies and methods I have used successfully into a practical, step-by-step system you can start applying immediately. I also placed some personal anecdotes in the side-notes.

I want you to make a real commitment to read every page and apply the strategies. This isn't about collecting more information—it's about acting on proven techniques that work. I've used these exact methods during medical school and successfully built connections with prominent neurosurgeons. If they worked for me, they can work for you—if you put them into action.

So, let's begin.

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## 2. Facing the Challenge

### 2.1. Understanding the mentorship gap in Neurosurgery

The path to neurosurgery is often described as a “hidden curriculum,” [1] and the gatekeepers of this curriculum — the neurosurgeons — are among the most time-constrained professionals in medicine.

1. **Time Scarcity:** Neurosurgeons operate on grueling schedules. Between long surgeries, clinic duties, and academic responsibilities, their bandwidth for unstructured mentorship is incredibly narrow.
2. **The Ratio Problem:** Neurosurgery is a small specialty (typically 1% of the medical workforce), yet the number of interested students is disproportionately high. This creates a bottleneck where a single faculty member might receive dozens of emails a week from aspiring students.
3. **The “Hype” Filter:** Many students are attracted to the prestige or “hype” of brain surgery without understanding the lifestyle sacrifices involved. Neurosurgery may be the most exciting but it is not without sacrifice [2]. Consequently, mentors are often hesitant to invest time until a student has demonstrated genuine, sustained interest—often through the very networking hurdles you are trying to overcome.

[2] D. Ellis, Debbieellis (2025)

### 2.2. The “Home Program Effect” and the Orphan Student Challenge

**The Home Advantage:** If your medical school has a neurosurgery department, you have a natural entry point into the field. You can attend departmental meetings, observe grand rounds, participate in research, and even scrub into surgeries. This proximity also means faculty members can become mentors, advocates, and collaborators—an important asset for competitive residency applications.

However, relying exclusively on your home program can be limiting. The scope of exposure and research opportunities may depend on the department’s subspecialty strengths. For example, if your home department lacks advanced skull base surgery programs or functional neurosurgery expertise, you may need to seek rotations or research collaborations elsewhere to gain a broader skill set. In some cases, programs outside your institution may have cutting-edge technology, unique surgical techniques, or specialized faculty collaborations that align better with your interests.

“Orphan” students are those enrolled at medical schools without a neurosurgery department. This represents a significant structural disadvantage—you lack immediate access to neurosurgical mentors, departmental resources, or in-house research opportunities.

Without faculty to make introductions or advocate for you in residency selection, you risk being overlooked unless you network.

### **2.2.1. Overcoming the Disadvantage:**

Do not be discouraged if you find yourself in the “orphan” category. Many successful neurosurgeons have risen from similar circumstances by adopting a strategic approach:

Turn your situation into a strength. When contacting programs, explicitly acknowledge that your school does not have a neurosurgery department, and express your strong interest in gaining exposure. In emails, cover letters, and interviews, position this as evidence of resilience and initiative—demonstrating that you actively sought out opportunities rather than relying on proximity or convenience.

Capitalize on external strengths. The advantage of a home department diminishes if your career interests extend beyond its capabilities. If a program elsewhere offers advanced subspecialty training, superior technology, innovative surgical techniques, or specific research collaborations, your pursuit of opportunities there can highlight your commitment to professional growth and specialization.

Address international challenges. In some settings—especially for medical students abroad—language barriers can compound the isolation of being “orphaned.” For example, international students in Europe who have not yet mastered the local language may find it nearly impossible to secure meaningful clinical experience. In these cases, focusing on research, shadowing, attending conferences, and enhancing language proficiency can be crucial interim strategies until full clinical integration is possible.

Bottom line: Whether you have a home program or not, success depends on building a diverse network, seeking targeted experiences, and demonstrating adaptability. A lack of resources at your home institution can be reframed as a catalyst for initiative—driving you to seek excellence beyond geographic and institutional boundaries.

## **2.3. You are not alone**

The Data: You are likely reading this because you feel stuck. In a recent poll, that we ran through the LinkedIn page of IYNO, of around 150 medical students who aspire to be neurosurgeons, 70% identified finding mentors and networking as their biggest hurdle [3].

This was followed by only 20% who cited limited research opportunities. This confirms that the problem isn’t just a lack of projects; it’s a lack of people to open the doors to those projects. You are part of a large cohort facing a systemic connectivity issue, not a personal failure. This raises the well known dilemma that we need internships for practical experience and practical experience to get into internships. To break the cycle, we need networking[4].

[3] IYNO, (2025)

[4] E. Ramirez, The importance of social networks in neurosurgery training in low/middle income countries., *Frontiers in Surgery* (2013)

### 3. Laying the Foundation

#### 3.1. Why Networking matters more than you think?

The “Known Quantity” Factor: Residency selection is risk management. Program directors prefer to hire someone they know is safe, hardworking, and teachable over a “perfect on paper” candidate they have never met [5]. Networking converts you from a CV to a colleague.

[5] N. D. Hartman, (2019)

The Hidden Job Market: Many research positions and sub-internship spots are never advertised online. They are filled through word-of-mouth. A casual conversation at a conference can lead to a “Oh, I’m actually looking for a student to run data for this paper” moment. <sup>1</sup>

<sup>1</sup>I discovered my own research opportunity through my pathology professor. After achieving an excellent score on his exam, I reached out a few days later to ask if there were any research openings in his lab. He responded that they were working on classifying cancer images using new AI models—a project that had never been advertised on the department’s website. Simply by asking, I was invited to join the team and contribute to the work.

#### 3.2. Types of mentors (clinical, research, career)

**Career Mentors:** These can be the same research or clinical mentor or even someone like a 1st year neurosurgery resident. The point is that they are a few steps ahead of you in the journey and help you avoid common pitfalls. Your career decisions are only yours to make, but every bit of help matters. I would recommend reaching out to these kinds of mentors first. They may be more willing to help as they have the same struggles very recently and may have more up to date experience about the residency matching process than a program director who completed residency 15 years ago.

**Research Mentors:** Often, these are the same people as clinical mentors, but they can also be non-clinical scientists (PhD) or research coordinators within a neurosurgery department. They handle the data, statistics, and manuscript writing. Working with a pure research mentor can be a strategic way to build a publication record efficiently while the clinicians handle the patient care. I would recommend contacting them through the career mentors if they know someone. This gives you a very high chance of starting some kind of research.

**Clinical Mentors:** These are the surgeons you shadow. They invite you to the OR, teach you how to act during rounds, and let you observe the reality of the job. Their primary role is to vouch for your clinical aptitude and work ethic. I would recommend contacting them last with a bit of experience but don’t wait too long for the perfect moment. Trying to get clinical experience as early as possible sets you up for successful neurosurgical interviews.

#### 3.3. How to find potential mentors?

**Step 0 – Clarify Your Direction Before You Start** Before you begin reaching out to individuals. It’s critical to define your target country and your chosen subspecialty. These decisions will shape all

aspects of your networking, academic preparation, and career trajectory.

Knowing your destination will allow you to:

1. Align your efforts with local requirements and expectations.
2. Plan language acquisition, if applicable (e.g., learning German if you aim to train or work in Germany).
3. Understand the cultural and professional context of the country's medical and academic environment.
4. Choosing a subspecialty early helps you focus your professional development—allowing you to target relevant courses, research, and conferences. While flexibility is important, having clear direction will set your efforts apart.

Once these are clear, actively seek connections that are as close as possible to your targeted program or institution—faculty members, residents, and coordinators who are already engaged in your field within your chosen region. This targeted approach makes every interaction more relevant and significantly increases your chances of receiving meaningful guidance and opportunities.

The Program Director (PD) Strategy: Do not be intimidated by titles such as Program Director (PD) or Head of Department (HOD). They are approachable and, in many cases, eager to help students succeed<sup>2</sup>. However, understand they are typically very busy and may not have time to serve as your personal mentor.

Instead, treat the PD as a “switchboard operator.” PDs are goldmines of information—they know the entire faculty roster, ongoing research projects, and even collaborations across departments or other universities.

Send a concise, professional email<sup>3</sup> asking whether they can connect you to a faculty member or resident actively working on a research topic aligned with your interests. See 7.1 for more guidance on crafting these messages.

The “Redirect”: This strategy works better than cold-emailing random faculty because it comes with an implicit endorsement. If the PD copies a faculty member and says, “Dr. X, this student is interested in your work, can you please coordinate with them,” Dr. X is much more likely to respond and even have confirmation that you have what it would take to succeed because the director already endorsed you.

Official Recognition: In some regions, establishing contact through the PD can eventually lead to official certificates of participation or formal elective spots, which carry more weight than informal shadowing.

<sup>2</sup>I personally know of a friend who sent a highly concise, well-tailored email outlining their key achievements to the Rector of a prestigious European university. In the European academic system, the Rector is the highest-ranking official, overseeing all departments and supervising the Deans of each faculty. The message made such a strong impression that the Rector personally offered my friend a full scholarship and admission to the program, even though the application deadline had already passed.

<sup>3</sup>Never send a generic, lengthy email. Be highly specific and tailor it to the PD to increase the chances of a reply. See 7.1 for common mistakes

Network Expansion: A PD knows other PDs. A strong recommendation from one PD to another can be the deciding factor in securing a residency interview.

## **4. Building digital visibility**

### **4.1. The role of digital platforms in networking**

Stop trying to be everywhere. Focus on LinkedIn first. While Twitter (X) has a “MedTwitter” community, it is often noisy and prone to unprofessional blunders. Instagram and Facebook are largely personal. LinkedIn, however, is strictly professional. It allows you to follow neurosurgeons, residents, and department pages. It is a searchable CV where you can connect with decision-makers without the noise of viral trends.

### **4.2. Building your professional online presence**

Passive scrolling gets you nowhere. You must engage.

1. **Comment with Value:** When a neurosurgeon posts about a new paper, don’t just say “Congrats.” Read the abstract and ask a thoughtful question.
2. **Connect:** Send connection requests with a personalized note explaining why you want to connect (e.g., “I am an aspiring neurosurgeon and admirer of your work on ...”).
3. **Post Your Journey:** Share what you learn. If you read a chapter on aneurysms, write a short summary and post it. Share your research milestones. This signals to the algorithm and to potential mentors that you are active and serious about the field.

### **4.3. Differentiating yourself from the pack**

1. **Create Your Own Opportunities:** If you can’t find a seat at the table, build your own chair. Start a journal club at your school. Organize a webinar series. Show that you are a self-starter.
2. **Broaden the Scope:** Don’t limit yourself to “neurosurgery” strictly. Look for neuroanatomy, neuroscience, or neuropathology research. Neuroanatomy research (e.g., fiber tractography studies) is highly relevant and respected. Youth Neuroscience Organizations like the International Youth Neuroscience Organization ([youthneuro.org](http://youthneuro.org)) provide excellent platforms for students to get involved in leadership and education early on. Its strictly a neuroscience society but is lead entirely by students like you and me.
3. **General Surgery Experience:** If neurosurgery is inaccessible, get into a general surgery Operating Room. The principles of asepsis, knot tying, and suturing are universal. A student who knows how to scrub and suture is useful to any surgeon.

## 5. Gaining Exposure and Opportunities

### 5.1. Virtual Conferences, Camps and sub-internships

In the post-COVID era, virtual education has become an integral part of medical training. These platforms offer unparalleled opportunities for students—especially those without direct access to neurosurgical programs—to gain exposure, learn standardized content, and connect with professionals.

**Virtual Training Camps:** Programs such as the Medical Student Neurosurgery Training Center (MSNTC) and Brain & Spine Group regularly host virtual training camps. These events are highly valuable for “orphan” students—those without home neurosurgical programs—providing structured, curriculum-based learning from experienced faculty.

**YouTube as a Networking Tool <sup>4</sup>:** Many neurosurgical conferences and lectures are recorded and uploaded to YouTube. By watching these talks, you can identify speakers of interest, note their names and institutions, and then use this as a “warm lead” when reaching out via email. For example: “Dr. Smith, I recently watched your lecture on [specific topic] and found it extremely insightful. I had a follow-up question regarding...”

<sup>4</sup>Just beware not to go down rabbit holes of information or other purely entertainment videos. Coming to YouTube videos through another website like LinkedIn is a far better way to engage with these informational videos.

This kind of personalized email carries more weight because it demonstrates genuine engagement with their work.

**Engaging Both Guest and Organizer:** During live virtual events, most participants focus all questions on the guest speaker. To stand out, consider framing your question so it involves both the guest (Dr. G) and the organizer (Dr. O). For example: “Thank you for your time, Dr. G. I have a specific question regarding your presentation, and I would also appreciate hearing Dr. O’s perspective, as I understand he has expertise in this sub-specialty.”

By including the organizer in your question, you create a memorable interaction. Later, when you follow up and mention that you attended the event and asked them this question, it is far more likely that both the guest and organizer will remember you because you did something uniquely engaging that few attendees consider.

Making an impression during the event is only the first step. The real value comes from turning that moment into an ongoing connection. Here’s a structured way to follow up effectively:

1. Send a Timely Message:
2. Email the guest and/or organizer within 48 hours. Reference the specific event and the question you asked.
3. Keep it concise.
4. Mention one concrete takeaway from their talk.
5. Express genuine interest in their work.

**Offer a Connection, Not Just a Request:** Instead of immediately asking for mentorship or research positions, start by offering something of value—sharing an article related to their topic, providing feedback on the event, or expressing your willingness to assist in small ways.

**Leverage Event Memory:** Mention your engagement in the session: I greatly appreciated your insights during the [Event Name]. I was the student who asked about [question detail], and your response inspired me to explore...

**Stay in Their Orbit:** Follow their work—connect on LinkedIn or academic platforms, attend future talks they give, and occasionally send relevant updates on your own academic progress.

**Gradually Deepen the Relationship:** After a few genuine exchanges, you can naturally transition into discussing collaboration opportunities, shadowing, or research involvement.

## **5.2. Leveraging local, national and Regional Neurosurgical societies**

Membership in your local or national society is mandatory for serious networking.

**USA:** The American Association of Neurological Surgeons (AANS) is the biggest. This is more suited towards established professionals rather than students who are just starting out. There is also American Board of Neurological Surgeons (ABNS) but it deals with the professional certification of neurosurgeons not with the first-steps required by many students who just found their passion for neurosurgery.

**UK:** Society of British Neurological Surgeons. It is similar to AANS.

**Arab World:** The Saudi Association of Neurological Surgery (SANS) has a dedicated Student Chapter that organizes bootcamps and coordinates research.

**India:** The Neurological Society of India (NSI) and its Young Neurosurgeons Forum (YNF) host annual conferences (like YNFCON in Delhi) specifically designed to guide careers.

**Pakistan:** The Pakistan Society of Neurosurgeons (PSN) often allows medical students to attend their annual conference for free or at a subsidized rate.

These societies can be good points to get in touch with neurosurgeons if you don't know anyone but they aren't really designed to help students with their first steps. See [10](#) if you want to learn more about how to get started.



## 6. Strategic Career Moves

### 6.1. Observerships and Electives: Stepping Stones to Mentorship

**Formal Programs:** In regions such as the US and UK, electives are often managed through official portals (e.g., VSLO) with strict eligibility criteria, such as being in your final year of medical school. These placements are highly structured and competitive, so preparation is essential.

**Informal Shadowing:** For younger students—including those in early medical school or even high school—local regulations tend to be more flexible. You may be able to arrange informal shadowing simply by reaching out to a local doctor, explaining your interest, and requesting to observe their practice.

The Early Preparation Hack<sup>5</sup>: Even if you are not yet eligible to apply for a formal elective, begin exploring application portals well in advance. Most programs publicly display their application forms and required fields online. By reviewing these early, you can learn:

<sup>5</sup>Very Important and Easily Overlooked!

1. Which specific achievements they value (e.g., conference presentations, research publications, volunteer experience).
2. Whether they request details on scholarships, grants, or financial aid.
3. If they require certificates (such as Basic Life Support, HIPAA training, or specified clinical skills).
4. Documentation standards (e.g., recommendation letters and how many, transcripts, proof of language proficiency).

This insight allows you to tailor your preparation months or even years ahead. You can actively pursue the experiences, credentials, and documentation that match their criteria—ensuring that by the time you are eligible to apply, you can confidently check every required box.

**Important:** Do not submit a premature application. Many portals charge non-refundable application fees, and applying before meeting all requirements often leads to rejection. Instead, treat this process as reconnaissance. Your goal is to understand the target program's expectations so you can prepare strategically to become a far stronger candidate at the right time.

See [7.4](#) for examples of institutions and programs offering observerships and electives globally.

### 6.2. Collaborative Research as a Networking Strategy

When we think about networking in neurosurgery, our focus often turns to senior faculty, established researchers, and program directors. While these connections are crucial, peer-to-peer networking

should not be overlooked. Your classmates, fellow trainees, and early-career researchers may become some of your most valuable collaborators and lifelong colleagues.

### **6.2.1. Understanding Diverse Career Paths**

Not all medical students or neurosurgery aspirants share the same destination: One peer may aim to become a functional neurosurgeon in New York. Another may plan to specialize in neuro-oncology in Germany. Someone else might dream of working as a neurosurgeon in Dubai. Another may be driven by pure research, studying molecular mechanisms of Parkinson's disease.

These goals are distinct, meaning we are not competing for the exact same opportunities. Neurosurgery, as a global specialty, offers multiple sub-fields, geographic choices, and academic pathways. This is not a zero-sum game—success for one does not take away from the success of another. In fact, helping each other often increases opportunities for everyone. For one such opportunity, see [10](#)

### **6.2.2. Benefits of Collaborating with Peers**

Engaging in research collaborations with peers offers multiple advantages:

1. **Mutual Support** – Sharing skills, resources, and ideas can help overcome barriers that would be difficult to overcome alone.
2. **Expanded Network** – Every collaborator brings their own set of contacts – faculty members, researchers, and institutions—into the project.
3. **Future Colleagues** – Neurosurgery is a relatively small, interconnected specialty. The peers you work with today may sit across from you at a future conference, join your department, or refer patients to you years from now.
4. **Early Mentorship Opportunities** – Collaborating with someone just one or two steps ahead in training (such as a senior medical student or junior resident) can offer unofficial career mentorship—guidance on applications, electives, and research methods—well before you reach their stage.

#### **How to Initiate Peer Research Collaborations**

1. **Start with Shared Interests:** Identify topics that excite you and see which peers share that curiosity.
2. **Leverage Institutional Resources:** Use student research clubs, virtual forums, or social media groups dedicated to medical research to find like-minded collaborators.
3. **Divide Roles Based on Strengths:** Some may be skilled at data gathering, others at literature review, and others at manuscript preparation—play to each person's strengths.

4. Formalize Commitments: Even with friends, set timelines, assign responsibilities, and agree on authorship expectations upfront to prevent misunderstandings.

Peer collaborations are an investment. You may produce meaningful research together now, but the real long-term value comes from building trust and professional familiarity. Years down the line, these early bonds can evolve into senior collaborations, co-authored papers, or even faculty partnerships when you're all established in your respective fields.

Key Message: Collaborative research is both an academic and networking strategy. By partnering with peers, you not only gain skills and publishable work, but you also cultivate relationships within the neurosurgical community—relationships that will shape your career in ways formal mentorship alone cannot.

### 6.3. Making the Most of Diaspora Networks

Diaspora networks—organizations formed by professionals who share a common nationality, cultural background, or immigration experience—can be powerful allies in your career journey. For aspiring neurosurgeons and other healthcare professionals, these groups often provide mentorship, insider knowledge, and emotional support from people who have already navigated the same challenges you face. Members can help you adapt to new academic and clinical environments, connect you with research or shadowing opportunities, and introduce you to reliable contacts within your target country's medical community <sup>6</sup>.

The following are examples and are in no particular order:

F1 Doctors: Mentorship for International Medical Students is a nonprofit, peer-led mentorship network specifically designed for international-status students and professionals pursuing healthcare careers in the U.S. Founded in 2020 by medical students who were international applicants themselves, it addresses the unique challenges faced by non-U.S. citizens, such as visa restrictions, financial aid limitations, and lack of institutional support.

New England Medical Association (NEMA) is a 501(c)(3) organization and affiliate of the National Medical Association, dedicated to supporting Black physicians in the New England region. NEMA focuses on eliminating healthcare disparities, promoting wellness, and building a powerful collective voice for justice in medicine.

International Doctors Network (Canada): it supports Internationally Trained Doctors (ITDs) in integrating into the Canadian healthcare system. Originally formed in 2008 as a self-study group, IDN evolved into a formal initiative under the Professional Immigrant

<sup>6</sup>They can also help with guiding you through complex application and visa processes and other non-academic challenges.

Networks (PINs) with support from the Toronto Region Immigrant Employment Council (TRIEC).

Lookup these kinds of groups which can provide specific advise for your specific case.

## 7. Mastering Outreach Skills

### 7.1. Warm Emailing

Cold emails – unsolicited messages to someone with whom you have no prior connection – are often overlooked or ignored. Instead, aim for warm emails, which establish some level of familiarity or relevance before contact.

Prepare Before You Write:

Do your homework. Review the recipient's most recent work to show genuine interest and effort. Use resources such as PubMed, Google Scholar, or AI-assisted search tools to read the last 2–3 abstracts or papers authored by the doctor. Understanding their research focus will help you craft a message that feels relevant and personalized. I would actually encourage you to use AI chatbots here but do not copy paste the generated text into emails and press send. Keep tweaking minor details of the emails to your liking and let your personality shine through. When you think the email is sufficiently professional but not too robotic, send it! <sup>7</sup>

<sup>7</sup>Whenever possible, use your official university or school email address, as it increases the likelihood of receiving a reply. Address the recipient formally using 'Dear [Name],' and ensure their name is spelled correctly – attention to detail here is essential.

#### The Warm Email Formula

Subject Line – Clear and Specific Example: Medical Student Inquiry: "Question regarding your paper on [the topic here]"

The Hook – Demonstrate Genuine Engagement: "Dear Professor X, I recently read your paper on [topic] and found the findings on [specific aspect] particularly insightful."

The Ask – Show Interest and Offer Contribution I am currently seeking research exposure and was wondering if you have any on-going projects that could benefit from a motivated medical student's assistance. Highlight relevant experiences or attach letters of recommendation from your previous mentors so that you can email as a valuable asset to their team, not as a novice who they will have to teach from scratch.

The Follow-Up – Be Brief and Respectful If there is no reply after one week, send a short reminder. Example: "Dear Professor X, I wanted to follow up on my previous message in case it was missed in your inbox. I remain very interested in your work and would appreciate any advice or potential opportunities you could suggest."

If there is still no response, move on – it likely means the timing or circumstances are not ideal.

**Key Takeaway:** Warm emailing is about targeted relevance, clarity, and respect for the recipient's time. By showing that you understand their work and approaching them with a clear, concise request, you give yourself the best chance of receiving a positive reply.

## 7.2. The “not yet” mindset

In academic and professional networking—especially in neurosurgery—many opportunities are limited not by willingness, but by logistical constraints: time, funding, space, or active project capacity. When a mentor or potential collaborator declines, it is rarely a personal rejection. More often, it simply means the timing is not right.

Treat these moments as “not yet” rather than “never”.

### 7.2.1. Step 1 – Respond Professionally and Leave the Door Open

A short, gracious reply is key: Thank you for considering my request. I have attached my CV for your reference, and if any opportunities arise in the future, I would be honored to contribute.

This acknowledges their current limitations, shows respect for their time, and keeps your name and credentials in their records.

### 7.2.2. Step 2 – Keep Track of Your Contacts

Maintain a simple spreadsheet or contact list with:

1. Name, title, and institution of the person.
2. Date of initial outreach and response.
3. Summary of their reason for declining.
4. Possible timeline for re-engagement (if mentioned).

This prevents lost opportunities and makes follow-up systematic rather than random. This is difficult to do for many contacts so I recommend doing this for not more than 5 people at the start. Make sure that these are the people who are the most aligned with what you want to do in the future<sup>8</sup>.

### 7.2.3. Step 3 – Periodic Re-Engagement

Without being intrusive, check in occasionally:

Every 3–6 months: Send a brief update on your academic activities, achievements, or publications. Reference your original conversation and express continued interest in their work. Mention mutual points of relevance—recent papers they've published, conferences they've spoken at, or awards they've received.

### 7.2.4. Step 4 – Stay on Their Radar Through Action

Attend their lectures, online talks, or conference sessions. Interact on professional platforms such as LinkedIn or ResearchGate. Congratulate them on notable career events. Share relevant articles or studies connected to their field. Each point of contact strengthens

<sup>8</sup>I am personally keeping contacts of 4 people and send them emails once a quarter or once every 6 months.

familiarity and keeps you positioned as an engaged, motivated student.

#### **7.2.5. Step 5 – Recognize When “Not Yet” Becomes “Yes”**

Opportunities can appear unexpectedly: new grants, project expansions, or a collaborator leaving a role. By maintaining a respectful presence, you greatly increase the chance they will think of you first when conditions change.

Building deep, meaningful relationships is a gradual process; one that requires patience and consistency, qualities that many overlook. Your approach sets you apart.

#### **7.3. Get your foot in a small house, not in the White House and not in a hut**

On day one, avoid aiming for the most prestigious and globally recognized institutions, such as emailing the Chair of Neurosurgery at Harvard (the White House) when you have not yet built experience or credibility.

The Strategy: Target strong, reputable programs that may not carry a world-famous brand name but still offer excellent training. Look for institutions with:

1. Adequate patient volume and case variety.
2. Access to modern neurosurgical technologies.
3. A supportive learning environment.

These programs often have fewer applicants competing for limited opportunities, which can make it easier for you to stand out.

The Small House Advantage: In smaller or less internationally “branded” programs, you are far more likely to:

1. Gain meaningful hands-on experience.
2. Be entrusted with real responsibilities instead of blending into a large crowd of sub-interns.
3. Receive direct mentorship from attending surgeons.

These surgeons may be more willing and be able to write more detailed letters of recommendation for you as they have had more interaction with you. In large programs, you may only see the attending once early on, which limits the depth of recommendation they can provide. These letters of recommendation are like keys opening doors to more opportunities and even getting a residency.

Networking is the key to discovering these hidden gems. By connecting with people in the field—residents, faculty, alumni—you can identify programs that offer high-quality training without the barriers of oversubscription.

## 7.4. Arab World, Pakistan, India, UK, USA: The Glocal Hubs

The “Glocal” Opportunity: In many countries, you don’t need to travel abroad to connect with internationally trained mentors—global institutions often have local branches. Examples include Cleveland Clinic Abu Dhabi, Cornell Qatar, and Aga Khan University, all of which offer world-class expertise with easier local access.

Similar hubs exist worldwide: major academic centers in the UK (often supported by networks like NANSIG), Saudi Arabia’s KFSHRC, and India’s AIIMS or NIMHANS provide opportunities to learn from faculty with international training and networks. Many of these organizations offer free or low-cost memberships for medical students and host events, webinars, or electives that provide meaningful exposure.

Action Step: Search for comparable organizations in your own country or region. These hubs are often “information dense” and can connect you directly to mentors, research opportunities, and academic resources without requiring international travel.

## 8. Relationship Maintenance

### 8.1. Maintaining and Growing Mentor Relationships

Getting the mentor is step one. Keeping them is step two.

The Update Loop: Send a brief email every Friday: “Here is what I did this week. Here is what I plan to do next week.”

Respect the Time: Never show up late. Never submit a draft that hasn’t been spell-checked. Your mentor’s time is more valuable than yours; act like it.

### 8.2. Common Mistakes to Avoid in Networking and Mentorship

Networking and mentorship can accelerate your neurosurgical career but poor execution can have the opposite effect. Recognizing and avoiding common pitfalls will help you build relationships that are respectful, sustainable, and mutually beneficial.

1. Being Generic in Your Outreach: Sending vague, copy-paste messages to professors, mentors, or peers shows a lack of genuine interest. Always research your contact’s work and tailor your message to their specific expertise.
2. Asking for Too Much, Too Soon: Requesting high-level opportunities—such as authorship, elective spots, or shadowing—on first contact can overwhelm or repel potential mentors. Start by offering to help in small, tangible ways that add value to their work.

3. Ignoring Professional Etiquette: Late replies, unpolished language, and missing attachments when promised all signal unreliability. Always be timely, concise, and professional in communication.
4. Treating Networking as Transactional: Mentorship is not a one-way street. Avoid treating mentors solely as gateways to opportunities; show genuine curiosity, engage with their work, and offer contributions that benefit them too.
5. Failing to Follow Up: Networking is not complete after one email or meeting. Without polite follow-up, relationships fade quickly. Maintain contact at appropriate intervals through updates, relevant articles, or congratulations for their achievements.
6. Neglecting Peer Connections: Many students over-focus on senior mentors and ignore networking with peers. Your classmates and fellow trainees can be future collaborators, co-authors, and even departmental colleagues years from now.
7. Not Respecting Boundaries and Time: Repeated or excessive messaging can damage relationships. Respect a mentor's limited availability—be brief, avoid unnecessary requests, and follow instructions carefully.
8. Taking Rejection Personally: A “not now” or lack of response is rarely personal—it's often about timing or logistics. Maintain professionalism, leave the door open for future contact, and move forward to explore other connections.

Successful networking and mentorship in neurosurgery require preparation, patience, and respect for others' time and expertise. Avoiding these common mistakes ensures your efforts build trust, credibility, and long-term professional relationships.

## 9. Your Final Roadmap

### 9.1. Creating Your Personal Networking Action Plan

Networking in neurosurgery isn't a one-time effort—it's a long-term, structured process. This plan breaks your journey into clear, actionable weekly goals for the first month, while giving you the flexibility to pursue multiple opportunities simultaneously. Your mission is simple: keep applying the strategies from this handbook consistently until you secure mentors, build collaborations, and establish a clear direction for your career.

#### Week 1: Build Your Digital Foundation

**Polish Your LinkedIn Profile:** Ensure your headline reflects your professional goals (e.g., “Medical Student Aspiring to Neurosurgery”), your summary is concise and well-written, and your experience section is up to date. Add a professional photo. **Follow at Least 50 Relevant Neurosurgeons and Programs:** This should include leaders in your field, major institutions, and residents who post educational content. **Join a National Society:** Examples include SANS (Society



of British Neurological Surgeons), NSI (Neurosurgery Society of India), PSN (Philippine Society of Neurosurgeons), or others relevant to your region. Participate actively—attend webinars, comment on posts, and read newsletters.

## Week 2: Warm Outreach & Initial Connections

Identify at least five “warm” leads—these could be alumni from your school, contacts introduced by friends or family, or faculty whose talks you’ve attended. Send Personalized Outreach Emails: Use the warm emailing strategy outlined earlier—reference their work, express a genuine interest in learning from them, and offer to help. Record all contacts in a simple spreadsheet for tracking follow-ups and notes.

## Week 3: Event Participation & Engagement

Attend at least one virtual or in-person conference in neurosurgery or a related discipline. Ask one thoughtful question during a Q&A session that references specific points in the presentation. Follow up with at least one speaker or organizer within 48 hours to build a relationship.

## Week 4 and Beyond: Continuous Maintenance & Expansion

Dedicate 4–6 hours weekly in smaller intervals (eg. 30 to 45 minutes) to networking maintenance and commenting on LinkedIn posts, reading recent abstracts, sharing relevant research links, or sending short updates to mentors.

Digitize Your Network: Use LinkedIn, Twitter/X, ResearchGate, and academic mailing lists to connect with professionals beyond your local circle.

Localize Your Influence: Aim to be the most active student in your national neurosurgical society—volunteer, moderate webinars, or write for their newsletters.

Globalize Your Reach: Once you have a strong local presence, expand through diaspora networks, international student neurosurgery groups, and multi-country research collaborations.

## Maximizing Opportunities

1. Apply for as many opportunities as possible <sup>9</sup> — research projects, committee roles, conference presentations, observerships, virtual internships, and scholarships. Many will not work out, but each attempt builds your experience and increases your visibility.
2. Keep revisiting the techniques in this handbook—whether it’s warm emailing, diaspora networking, or small-house program targeting—and refine them based on feedback and results.

<sup>9</sup>The number of applications you submit matters, but so does their relevance. Applying to opportunities that do not align with your long-term career goals just to meet arbitrary application targets offers little benefit and may dilute your focus.

3. Persistence is key: continually reaching out, following up, and engaging will eventually lead to mentors who align with your goals and help set you firmly on your career path.
4. Track these opportunities in a spreadsheet or journal to learn from rejections and successes.

## **10. International Youth Neurosurgical Organization**

While established neurosurgical bodies such as the ABNS, YNC, and WDNS primarily focus on residents and early-career surgeons, many medical students—especially “orphan” students without a home program—need a dedicated, beginner-friendly space to start their journey.

That’s why I created the International Youth Neurosurgical Organization (IYNO), launching as a blog at [academy.inyo.org](http://academy.inyo.org).

This platform is designed to give aspiring neurosurgery students a place to learn, connect, and grow, even if they are just beginning and don’t yet have access to formal mentorship or advanced training programs.

At [academy.inyo.org](http://academy.inyo.org), you’ll find:

1. Educational Blog Posts – Covering neurosurgery-related topics, career pathways, research strategies, and skill-building tips.
2. Networking Through Comments – Engage with other readers, share experiences, ask questions, and start collaborations right in the comment sections.
3. Accessible Insights – Whether you’re preparing for your first conference, seeking your first research project, or learning basic neurosurgical concepts, you’ll find clear and actionable content here.
4. Community Growth – Over time, the blog will evolve with contributions, discussions, and shared opportunities, creating a grassroots networking hub for students worldwide.
5. Whatever this handbook cannot fully cover—timely updates, evolving opportunities, interactive discussions—will be complemented and expanded at [academy.inyo.org](http://academy.inyo.org).

If you are serious about building your neurosurgical career, start visiting and engaging with the blog. Each post can be your next learning step, and each comment can be the beginning of a new professional connection.

Wishing you success in your journey, and I trust that these techniques will serve you well throughout your career.

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