

IYNA CHAPTER HANDBOOK

1st Edition

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Foreword

What Exactly *Is* an IYNA Chapter?

An IYNA Chapter is the fundamental unit of organization of the IYNA’s network of local clubs. Most often, an IYNA Chapter would be a school-level or other local group of neuroscience enthusiasts hoping to develop their knowledge of and interest in the nervous system. While depending on specific circumstances, an IYNA Chapter can be broader than this — the definition is intentionally broad to accommodate any group interested in becoming an IYNA chapter — but the IYNA recommends the use of local-level chapters for easier organization, and much of the advice in this handbook uses this smaller definition. See the section entitled “Alternate Approaches” if you believe that this model of an IYNA Chapter fails to meet the needs of your chapter.

Why do IYNA Chapters Exist?

The mission of the IYNA is to advance the international collaboration of young neuroscientists from all backgrounds by educating them about the brain and inspiring them to fight neurological diseases. While there is much that we can accomplish with global projects such as the IYNA journal and the MYELIN Initiative, the IYNA Board of Directors cannot organize local-level outreach efforts. This is why Chapters exist—individual IYNA members can organize events for their local community such as lectures from a local university, gatherings, and fundraisers. Chapters are also great as a way for IYNA members to socialize.

Founding a New Chapter

Recruiting Leadership

As with any organization, IYNA Chapters work best with a leadership system. Having several individuals responsible for specific tasks ensures chapters run efficiently. We recommend that a chapter have a president, a secretary, and if the chapter engages in fundraising activities, a treasurer.

Usually, the best candidates for these posts are people who are interested in spending time to develop and grow their IYNA chapter. It is typically a good approach to either appoint the most invested members of the club (often the founders) to these positions, or to have the members elect their own officers.

Finding an Advisor

Reaching out to a science teacher to advise a school club can be very beneficial, and may actually be required by your school before you can officially become a club. Before approaching your prospective advisor, develop a basic plan of what activities the club will do, how often it will meet, etc. However, you may encounter challenges obtaining an advisor due to the other commitments a teacher may have. In this case, try to find newer teachers that may have fewer extracurricular obligations, which may require looking outside of the biology/science department in your school.

Recruiting Members

After you have initiated your club, it is important to have all your members register as IYNA members so they can have individual access to the opportunities and programs offered to IYNA members, such as holding a leadership position, writing for the IYNA Journal, contributing to the MYELIN Initiative, and many other opportunities that are continually being added. Registration is quick, easy, and free. To sign up, just fill out the form at youthneuro.org/join, and then confirm your membership via a link in an email sent to you. All submitted info is stored securely and will be kept private. If possible, try to have all your members use the same spelling/phrasing of the chapter name, which will be the name of your school club. Other methods of recruiting members are through social

media, from related science-based clubs such as Science Olympiad, and posting advertisements around the school/location.

Alternative Approaches

If you want to develop a chapter outside of a traditional school facility, social media is a key tool. This can be done by initiating an online chapter through different social means such as Facebook. This can be as simple as customizing an IYNA organization-based Facebook page and inviting friends to participate. The success of this non-traditional chapter-initiation all depends on the time, planning, and networking effort you can dedicate. The more involvement, the more potential for growth.

Moreover, in this approach it will be essential for you to explore new and creative marketing techniques to promote your IYNA chapter. This can be done through using editing applications to create customized posts regarding anything neuroscience; from little factoids, interactive quizzes, to links to your members' IYNA Journal articles. It is important to update regularly and interactively on your chosen social media platform. To build a neuroscience-based audience and add members to your online chapter, you will have to engage and network with your members on a regular basis. For instance, you can share your IYNA Facebook page on other social media sites, create discussions, host neuroscience talks, invite members, work alongside IYNA's pre-existing social media, communicate with similar-interest pages and develop a partnership, etc. Whilst this initiation of an IYNA chapter certainly requires considerable effort and creativity, it has big potential and the opportunity of accomplishing the IYNA's goal in establishing a network across the globe.

Activities

Discussions, Lectures, Labs, etc.

In accordance with IYNA's mission to educate and inspire, club meetings should seek to inform and teach the audience in an engaging manner. To do so, clubs can host a discussion or a lecture in which a member prepares and presents a neuroscience related topic. However, in order to spur interest and ensure the inclusivity of the wide range of neuroscience-related topics your members may have interest in, the scope of the presentation can also extend beyond textbook neuroscience. For example, it may be a generally understood phenomenon (like auditory hallucinations, optical illusions, etc.) explained through the mechanisms in the brain. These topics can be chosen/voted upon by the club members or selected by the club officers. The basic framework for planning an effective and interesting lecture/discussion is as listed below:

1. Identify a topic (can be voted on)
2. A club member(s) researches and creates a simple powerpoint to correspond to the topic
 - a. Powerpoints should contain images/videos/experiments or other visual aids to supplement the lesson.
 - b. Note: presentations will most likely be run by the club officers as they are typically the most involved, but members should be informed they can participate as well.
3. Outline the plan/structure for the meeting (i.e. how much time presenting, questions, and other details to clarify focus).
4. Notify club members of the topic before presentation, including links to relevant articles.
5. Labs/experiments related to the topic selected for a particular meeting can also be performed if there is a proper setting/equipment (e.g. a high school science lab)---possible ideas can be found under 'Resources'
6. Neuroscientists/neurologists/other relevant professionals doing work in the particular field under study may also be invited to participate, in order to supplement the material and prevent redundancy.

Visitors/Field Trips

Implementing visits from neuroscience professionals as well as related field trips play an integral role in the function education and immersion in the field of neuroscience, which is a key role of IYNA chapters. By including such aspects, members will be able to obtain a diverse and complex comprehension of neuroscience, and it will serve as a positive introduction into the field. Possible visitors could include professors from universities around your area, with whom you can reach out to and invite to speak at a chapter meeting. High school teachers and college students can also prove to be valuable resources for this purpose. Prior to a visit, the chapter's initiators should provide a speaker with basic guidelines as to the topic currently being studied within the chapter so the speaker can be sure to address how their work relates, as well as how much time they should speak for, what activities they may be conducting, etc.

Field trips are another component important in ensuring a lively and exciting chapter atmosphere. Depending on your area, the opportunities for neuroscience-related trips may vary. However, with permission and prior planning, a visit to a local hospital's neurology department can be conducted, which can teach members about the function of medical professionals in the field. Moreover, local universities oftentimes encourage visits from students, particularly if the chapter's leaders are in prior contact with a professor there. Tours of labs and other facilities can serve as supplements to the material explored within the chapter. If these opportunities are not possible, virtual field trips to laboratories through the Synapse Project are also an option.

Fundraising

While the IYNA itself does not currently hold fundraisers for the association as a whole, local chapters and Local Chapter Networks (LCN's) may find the need to receive donations to fund activities and functions of the chapter that may require some financial support, such as brain dissections, gifts for guest lecturers, transportation fees for field trips, or to raise money for neuroscience-related causes. Depending on the size and need of the chapter or LCN, fundraisers can be as small as a school-wide bake sale, or as large as an auction and gala. For smaller, school centered activities, local student councils can be helpful in ensuring a smooth and successful fundraiser that adapts and adheres to school rules. Such fundraisers can range from a donation jar in classrooms or local stores (donations can also be solicited during chapter events), to the reselling of goods, and

much more. If necessary, club dues are also a reliable way to raise money for a chapter, but keep this low in order to maintain interest.

Large fundraisers can be accomplished in many ways: a chapter may gain the sponsorships of local stores in which a percentage of funds go toward the chapter, or the chapter may host a large evening event in which donated supplies are sold by the chapter. Ideally, in the instance a venue is required, it should be obtained for free through sponsorships in companies and schools in order to minimize costs as much as possible. Strong collaborations between an IYNA chapter and local organization such as a library, university, and/or local company are incredibly important in creating efficacious club activities, whether it be speaker activities or fundraising.

A successful fundraiser, no matter the size, generally states the reason behind the fund raising and how the money will be used. Especially for large fundraisers, be specific: either state exactly money-requiring activities of the chapter such as Brain Day and field trips, or break down how the money is predicted to be used (“40% of money used for outreach activities, 30% used for member events and material costs, and 10% used for transportation”). If raising money for charity, describe the nonprofit(s) and what it does. Make an effort to take pictures to showcase your chapter’s activity on social media, as well as for a chance to be featured on IYNA’s home page.

Outreach

Outreach to local communities can be a very fulfilling activity for chapters. This can be possible by having chapter members teach neuroscience concepts through interactive activities to hosting fun brain days, as well as showcases and labs. Furthermore, chapters can outreach locally or online.

For local outreach, chapters can teach neuroscience to local communities, which can be achieved in many ways. A one-time event can be a “Brain Day” in which middle schoolers, high schoolers, and/or elementary schoolers are invited to explore facts about the brain and get exposed to interesting research and activities. Such events may be very involved affairs, in which speakers are invited, brain dissections are performed, and current research is explored. Chapters hoping to develop large events such as these can and are encouraged to work with other groups in their Local Chapter Network or in their local region, including other IYNA chapters, school districts, and local universities or

hospitals. School-affiliated chapters can work with the school to have a week (or day) of neuroscience, during which students may learn about neuroscience. Some suggestions for such an event being: fun brain facts in the school announcements, lunchtime activities and handouts, competitions on who can build plastic models of the brain the fastest, an anatomy recognition game or trivia competition, and informative posters in hallways. They can also raise awareness for neurological diseases through events such as 5K runs in the community. As more and more people attend IYNA events, we come closer and closer to the realization of our association-wide goal to reach as many people as possible in the introduction to neuroscience, and the cultivation of any planted interest.

It is also possible to directly teach neuroscience to interested students, whether by a short annual presentation to individual classes or through an after-school program in the schools/libraries. If you are planning to teach younger individuals, Neuro Nerds (a neuroscience education organization) has a set of complete lesson plans (shown in resources) and teacher training materials geared towards students. These lesson plans can be followed in a curriculum or presented independently from one another, and they are open and free to adaptation to all IYNA chapters and members upon request. For teaching older individuals with some experience in biology, we advise that you utilize materials in MYELIN to create independent lessons.

Online outreach, which is best for alternative approach IYNA chapters, can be accomplished through social media platforms and websites. A social media campaign to raise awareness about certain aspects of neuroscience can be created using hashtags or reposts (in order to address common neuroscience myths or other relevant information). If you or any member of your IYNA chapter have an interest in a specific area of neuroscience, writing an article describing that area is highly encouraged. Check out the IYNA journal for more information about articles.

Incorporation of Technology

To increase interest and engagement in your chapter you will most likely have to incorporate technology into the meetings. To start, establish an online group through your preferred social media platform and include all members. This is the platform that will update your members of any projects that your IYNA chapter is commencing. Moreover, the chapter's public social media page should also showcase your IYNA club's involvement in your school or local community. In terms of club efficiency, to achieve

maximum member turnout in each chapter meeting, use your school's announcements page or applications that have a notification system to remind members of the upcoming meetings.

In terms of engagement, the IYNA provides members with many online opportunities including forum discussions, as well as writing for the Journal and MYELIN Initiative. Additionally, for more interactive and technology-based activities in your chapter meetings, you can commit the chapter to online weekly brain crash courses, cognitive training activities, utilizing online brain simulators and interactive neuroanatomy software. Through this use of technology, your chapter meetings are guaranteed to be both intriguing for your members and successful.

Local Chapter Networks

While many of the activities discussed above can be completed by a single chapter, there are certain activities that require far larger coordination. For example, creating a county-wide panel in which several people involved with neuroscience are able to discuss their experiences with the public cannot be done alone. Even those activities which can be completed in an individual chapter -- especially fundraisers -- have the potential to become much more effective if people from multiple local chapters work together. So how can this be accomplished?

How to Make a Network

One way to create a local chapter network is to start it yourself. Try to contact friends from other schools, and encourage them to start an IYNA Chapter at their own school. Encourage the members of your chapter to do the same with their friends. This form of networking can be quite effective if there is equal contribution from chapter members. This can easily lead to the establishment of several more IYNA Chapters. The use of many of the same methods detailed in the incorporation of technology section can be vital to coordinating with the other chapters.

Register your Network

If you have a group of at least five IYNA Chapters interested in registering as a Local Chapter Network (LCN), email outreach@youthneuro.org with a list of the IYNA-registered chapters (make sure someone from each of the clubs has registered their chapter IYNA website) and a director chosen by a vote of the president and vice president (or secretary) of each member chapter (no more than two individuals per chapter may vote) to register your LCN.

Chapter Recognition

If your chapter has had success with the completion of educational activities to advance the goals of the IYNA, has completed difference-making outreach, or any other noteworthy accomplishments that you feel deserve to be recognized, email dlucas@youthneuro.org describing your activity and have our evaluation team consider you for special recognition. Please be sure to include a detailed description of your specific instance of success, as well as credit to individuals who were instrumental in the attainment of that success.

Resources

[Start a Chapter](#)

Education

[Brain Crash Course](#)

[IYNA Journal](#)

[Knowing Neurons](#)

[MYELIN Initiative](#)

Activities

Activity Guides Coming Soon!

[Lesson Plans](#)

[Lesson Content](#)

[3D Brain Simulator](#)

[Contribute to Alzheimer's Research Video Game](#)

[Mapping the 3-Dimensional Structure of Neurons](#)

[Synapse Project Virtual Field Trips](#)

[Cognitive Training Activities](#)

Outreach

[Brain Awareness Week](#)

[Brain Day](#)

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