

The Young Academy toolkit: How to establish a National Young Academy

(May 2021)

Purpose

This toolkit aims to support young scientists who want to establish a National Young Academy (NYA) in their country.

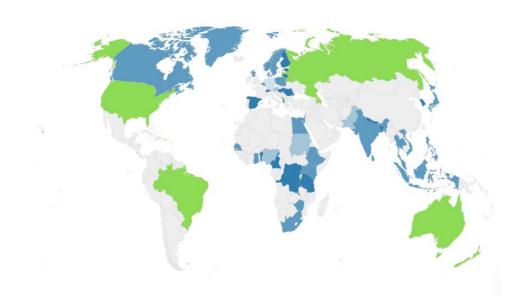
The toolkit is meant to be a technical document to show "how to" establish an NYA, and tries to cover multiple issues young scientists may face at the initial stages of establishing an NYA.

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Reviewed by the GYA Co-Chairs and GYA Executive Committees 2018/2019, 2019/2020, 2020/21.

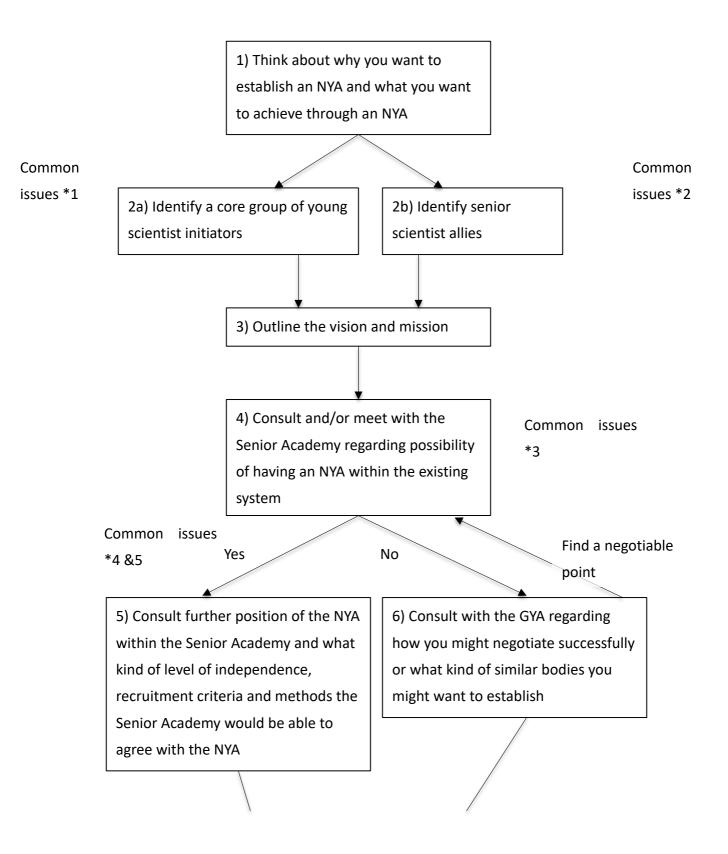
For any questions or feedback, please contact **Anna-Maria** at the GYA Office.

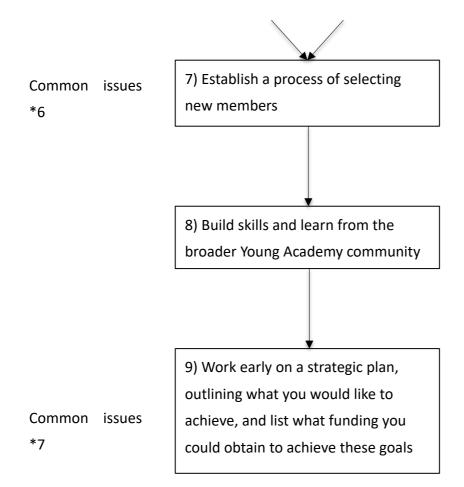


Map showing (national) young academies the world over, May 2021.

Table of Contents

FIGURE: HOW TO ESTABLISH AN NYA4
1) THINK ABOUT WHY YOU WANT TO ESTABLISH AN NYA AND WHAT YOU WANT TO ACHIEVE
THROUGH AN NYA
2A) IDENTIFY A CORE GROUP OF YOUNG SCIENTIST INITIATORS
*1. IF YOU DON'T HAVE ACCESS TO A CORE GROUP OF YOUNG SCIENTISTS ϵ
2B) IDENTIFY SENIOR SCIENTIST ALLIES7
*2. IF YOU DON'T FIND ANY SENIOR SCIENTISTS WHO SEE MERITS IN HAVING AN NYA
3) OUTLINE THE VISION AND MISSION
4) CONSULT AND/OR MEET WITH THE SENIOR ACADEMY REGARDING THE POSSIBILITY OF
HAVING AN NYA WITHIN THE SYSTEM8
*3. OBTAINING THE SUPPORT (OR NOT) FROM THE MEMBERS OF THE SENIOR ACADEMY MIGHT DEPEND ON TIMING
5) CONSULT ON THE FURTHER POSITION OF THE NYA WITHIN THE SENIOR ACADEMY AND WHAT
KIND OF RECRUITMENT CRITERIA AND METHODS THE SENIOR ACADEMY WOULD BE ABLE TO
AGREE WITH THE NYA9
*4. If the Senior Academy and/or government does not provide funding for NYA's activities 10
*5. IF YOUNG SCIENTISTS CANNOT BE INVOLVED IN THE SELECTION PROCESS
6) CONSULT WITH THE GYA REGARDING HOW YOU MIGHT NEGOTIATE MORE SUCCESSFULLY OR
WHAT KIND OF SIMILAR BODIES YOU MIGHT WANT TO ESTABLISH10
7) ESTABLISH A PROCESS OF SELECTING NEW MEMBERS11
*6. IF YOU ARE UNSURE OF HOW TO STRUCTURE YOUR SELECTION PROCESS
8) BUILD SKILLS AND LEARN FROM THE BROADER YOUNG ACADEMY COMMUNITY11
9) WORK EARLY ON A STRATEGIC PLAN, OUTLINING WHAT YOU WOULD LIKE TO ACHIEVE, AND
LIST WHAT FUNDING YOU COULD OBTAIN TO ACHIEVE THESE GOALS
*7. IF YOU ARE UNSURE OF HOW TO GO ABOUT SETTING UP A STRATEGIC PLAN





1) Think about why you want to establish an NYA and what you want to achieve through an NYA

Maybe you heard about other NYAs at a GYA event, or from your Senior Academy members, or encountered GYA members or NYA members at a conference or a meeting, and now you find it exciting and/or important to have an NYA in your country. In any case, when you consider to be one of the leaders to establish an NYA, it is important to think about why you need to organize and lead this initiative, what you want to do through it, and in what ways you'd like the NYA to contribute to your country. It might be challenging, or you might face difficulties. Your purpose will help you stay strong and find a way to solve issues. You may want to read the "Declaration of Guiding Principles of Young Academies" published by the GYA and NYAs in 2019 so that you can learn what Young Academies are all about.

2a) Identify a core group of young scientist initiators

These need not be more than a handful of excellent and passionate young scientists from your country who are post-PhD, recognized for their academic excellence, and interested in contributing their science to society. A common problem here is that your peer-group may be limited. It might not help to talk to people in your department or even discipline. One of the principles of Young Academies is "Diversity and Inclusivity". You would need to define strategies to get in touch with likeminded scholars from different universities, research institutions, and disciplines so that the group becomes multidisciplinary and represents young scientists in academia in your country. It is also important to consider gender balance and age limit according to your country's academic context. Age standards vary among existing NYAs.

*1. If you don't have access to a core group of young scientists...

Solution: It is important to get a sense of your country's priorities and consider ways that young scientists can contribute. You may try to discuss with your peers about what you want to achieve from this point of view and why it is important to have an NYA in your country, referencing the worldwide young academy movement. Dialogue is important to create a good rapport, which could be helpful to progress the process to establish an NYA. If you don't find enough support around you, contact the GYA. The GYA members, alumni and Office staff oftentimes know young scientists from neighboring countries as they often attend international scientific conferences and capacity-

building workshops. Get in touch with the GYA so as to assist you to find young scientists who have the same amount of excellence and passion as you do. Or if you already have a good connection with the Senior Academy, they might suggest young scientists you can work with. Explain to them the principles of young academies and what attributes you expect for the core group members. Identify peers who have demonstrated excellence, e.g., who are already a member of a young academy (e.g., of the GYA or a regional Young Academy, i.e., the Young Academy of Europe (YAE)), received national/international recognition (e.g., prizes for young scientists), or obtained significant grant funding aimed at young scholars (e.g., ERC Starting Grant holders) – the Senior Academy often has a list of these individuals.

2b) Identify senior scientist allies

This is a critical step as it would inform the strategy through which you garner support for the establishment of the NYA. If you know senior scientists who are supportive of the idea of an NYA, they would have a good sense of the best strategy and approach to move forward, and who best to contact nationally. You may be able to identify allies through your own work or mentoring contacts within the country (who may or may not be part of the Senior Academy), or international senior scientists from outside the country who have influence on the science system and senior scientists in the country. Irrespective of where they are, a common characteristic is a passion for young scientists, and a belief that young scientists can and should play a role in driving the ways in which science contributes to the society.

*2. If you don't find any senior scientists who see merits in having an NYA...

Solution: The GYA is able to help you connect to senior scientists through our partnerships with the InterAcademy Partnership (IAP), the International Science Council (ISC), etc., so get in touch with us. The GYA can also provide successful cases or standard arguments to bring forward a convincing argument depending on why the senior scientists don't see merits in an NYA for your country, and we can connect you to other young academies who might have experienced similar situations of (initial) opposition.

3) Outline the vision and mission

Once the core group is identified, they should be tasked with brainstorming what they would like their NYA to achieve, exploring the policy landscape and societal challenges of relevance to the country; as well as the opportunities for synergy with some of the work of the Senior National Academy of Sciences, where that exists (this is where early engagement with existing structures will come in handy). Whether to establish your NYA under the umbrella of your Senior Academy or not, would entirely depend on your national context including the political context¹ and the role that science is viewed to play in society. It is worth finding out about the different ways that other NYAs within and outside your region have structured their relationship with their Senior Academy. Whichever strategy you employ, we strongly advise that you do this with sensitivity to these existing structures.

To this end, the GYA strategic plan and our GYA Constitution might be helpful. The GYA may also connect you to NYAs in neighboring countries for them to share their constitutions with you, so you can get a sense of how a high-functioning NYA is set up. The GYA Yearly Report and/or NYA annual reports can also be helpful to see the range of activities of young academies. In addition, it might be worth consulting a wider spectrum of young/senior scientists as to what the tasks/activities/mission of the new NYA should be in the national context, e.g., in the forms of public forums or questionnaires. For example, a number of recently establishing NYAs have surveyed their country's early- to mid-career researchers (ECRs) and then built their country-specific case for an NYA on the results they obtained from them. Documentation of the process and the final decisions is important as organisations' memories are often lost when leadership is handed over to the next cohort.

4) Consult and/or meet with the Senior Academy regarding the possibility of having an NYA within the system

If the Senior Academy has not been the initiator of an NYA, it is better to consult and/or meet with the Senior Academy to set up an NYA in a manner that they are able to support including

8

¹ Whereas it is important to take into account the political setting in a country, it is also strongly advisable to avoid that the nascent young academy takes a stance in party politics. Make sure that you always form your argument directly defending the role of ECRs. When it comes to science advice and addressing politics and society, providing easily comprehensible links to respective scientific research results helps the young academy to avoid partisanship.

administrative work and funding options to achieve the goals of the NYA. Common issues among existing NYAs are lack of funding and human resources. It is important to find possible funding options and administrative support from the beginning so that meaningful activities can start after establishment.

*3. Obtaining the support (or not) from the members of the Senior Academy might depend on timing.

Solution: Communication is the key. Even when the president of the Senior Academy is not willing to have an NYA within the country at this point, discuss with them why it is important for young scientists and science as well as society overall. You need to meet the stakeholders who might support your initiative and your aims, and talk to them about your concept (such as the importance of science, the teamwork in your country, and the connection to a global network). This is also where Step 2b would come in handy, to have senior scientists that can advocate on your behalf. Ask for letters of support from fellow Senior Academies from other countries where an NYA is already successfully running, outlining the benefits and good experience of having an NYA. Again, if you can find no allies, get in touch with the GYA and we will explore how to connect you to allies in your country or region as well as international organisations such as IAP.

5) Consult on the further position of the NYA within the Senior Academy and what kind of recruitment criteria and methods the Senior Academy would be able to agree with the NYA Many of the existing NYAs and similar bodies position themselves within the structures of the Senior Academy or have a Memorandum of Understanding with them. It might depend on the Senior Academy of your country, but if possible, negotiate/consider how the NYA will fit into their existing structures in terms of administration and finances. It may be a significant hindrance to the NYA's work if the NYA lacks a source of budget; as already mentioned in 3), it is worth considering possible sources of financial support, e.g., government, foundations, charities, private sectors, etc. and ask the Senior Academy to support negotiation with potential funders and administration of funds.

*4. If the Senior Academy and/or government does not provide funding for NYA's activities

Solution: Identify potential funding sources within and outside the country. The GYA may support you to figure out the fundraising activities by sharing other NYAs' experiences with you.

*5. If young scientists cannot be involved in the selection process.

Solution: Discuss why it is important for NYA members to be peer-selected. Negotiate if not all but some members can be invited to the selection process based on decision of the NYA members, being sure to emphasize the service-to-society aspect of an NYA, and citing other NYAs who are independent in their member selection.

6) Consult with the GYA regarding how you might negotiate more successfully or what kind of similar bodies you might want to establish

As mentioned, there are variety of relationships with the Senior Academy depending on the country. If the name "Young Academy" is a matter of discussion, you may consider naming your young academy as it is accepted in your national context. However, you should point out that the term "(national) young academy" has developed into a sort of trademark over past years and helps to create a feeling of togetherness among the worldwide network of young academies. The GYA would therefore always argue in favour of this nomenclature.

The mode of membership selection is important for any academy, whether this is done independently by the NYA or not. Again, explore how other successful NYAs have developed their selection processes and use these experiences of others as motivation for the approach you would like to follow. Irrespective of how you proceed, strive to ensure the selection processes are able to identify BOTH excellent scientists and those who would commit to serve society. The unique characteristic of NYAs is that membership is not just honorific, but a commitment to apply science in service to society. Your selection process should reflect this. Establishing the initial set of members of the new NYA can be a particularly challenging task. Once the NYA is up and running, and selection criteria and a process are already in place, the selection system is self-sustaining, but it is always a question: Who selects the first member cohort? This can be negotiated with the Senior Academy, and it might even be a committee of seniors, or a joint committee who selects them. This may have disadvantages and needs to be considered carefully depending on the specific situation of the given country.

7) Establish a process of selecting new members

You would also need to start thinking about the criteria for member selection. The call for new GYA members might help to have a sense of criteria you should be looking out for. See the GYA Call for New Members website for this resource, or connect with existing NYAs. As mentioned above, membership in an NYA is NOT solely an honorific accolade, but rather a commitment to serve. Whilst it is an honor to be selected to the NYA, the selection process must emphasize the expectation of seeking members who wish to meaningfully contribute to injecting novel perspectives into emerging issues in society that science and technology play a vital role in, and advancing science for policy, policy for science. Without active members, the NYA is unlikely to be functional. Many existing NYAs also face challenges on participation and motivation of members.

*6. If you are unsure of how to structure your selection process

Solution: Check out our NYA resources on the GYA website for examples of recruitment criteria, application form, selection process, etc.

https://globalyoungacademy.net/call-for-new-members/

If you have further questions, don't hesitate to get in touch (by email to Anna-Maria).

8) Build skills and learn from the broader Young Academy community

There are a few opportunities to interact (virtually and in-person) with the GYA members and young academies including annual and biennial meetings.

In-person and virtual meetings:

- GYA Annual General Meeting & Conference (with some NYA guests)
- Worldwide Meeting of Young Academies (WWMYA) (online each year, and in-person every 3 years)
- Regional meetings of Young Academies in Asia/Africa/Europe (e.g., currently once every year for Europe; irregularly for the other regions)
- NYA-related virtual meetings (e.g., the Global Working Group on Open Science)(irregularly)

Virtual connections:

- Once an NYA is established, it will be included on the <u>NYA website</u> (on the GYA website)
- Sign up for the monthly <u>GYA newsletter</u> which includes news and updates from NYAs worldwide. We encourage NYAs to send us news of their activities to share with the broader community.
- Connect with the GYA and other NYAs through social media including Facebook and Twitter.
- The GYA maintains a mailing list for NYAs, to reach out to and communicate with all NYAs globally (1-2 people per NYA, who then forward to their members as relevant)

There are also opportunities to build the skills necessary to effectively engage with policy-makers and society; which you might wish to consider so look out for these calls and opportunities. Calls for opportunities relevant for ECRs are shared via the GYA-maintained mailing lists to NYAs.

The GYA is currently working to expand the NYA-related website, so that more information on each academy can be found online, to facilitate collaboration and joint projects.

Science-for-policy work by young academies:

for example, through the International Network for Government Science Advice (INGSA),
which holds regional and international capacity-building workshops. Find out upcoming opportunities from their website: https://www.ingsa.org/.

Policy-for-science activities by young academies:

• One example here is the GYA's GloSYS project (Global State of Young Scientists).

9) Work early on a strategic plan, outlining what you would like to achieve, and list what funding you could obtain to achieve these goals

*7. If you are unsure of how to go about setting up a strategic plan

Solution: Get in touch with the GYA. We will share our plan and constitution with you, which you can use as a template for your NYA. We would also be able to help by connecting you with an NYA that is similar to your context to learn from. Interacting with other NYA members through the meetings described above is also a great way to learn from others about how to grow your NYA.

For any questions relating to the above, please contact GYA Senior Project Officer Anna-Maria Gramatté via email here. She will be happy to connect you to the GYA Executive Committee members in charge of our NYA portfolio, as well as connect you to other NYAs.