

Videos of the GYA



Humans of the GYA





Alumni of the Month





Working Group videos





"Who we are and what we do"





Explainer videos





Member Lightning Talks





Global Young Academy. 2020. GYA Yearly Report 2019. Halle (Saale), Germany: German National Academy of Sciences, Leopoldina.

GYA in 2019

The GYA celebrated a series of milestones in 2019, chief among which was turning 10 years old. As part of evaluating our accomplishments over those 10 years, our core funder, the German Government, asked for a thorough evaluation. This was carried out by an independently-appointed team of international reviewers, and to help with this evaluation the GYA Co-Chairs and Office released a self-evaluation report in April 2019. This report is available here, and describes our activities against the benchmarks set by our Strategic Plan 2016-2020. During the same period, the GYA took the opportunity to carry out an internal Impact Assessment (Report and Technical Appendix available here & here). These activities then provided valuable input for the follow-on review of the Strategic Plan, which started in late 2019.

In 2019 some of our past activities and engagements also began to bear fruit. Chief among these was being named a full member of the InterAcademy Partnership, as well as being invited to join the Steering Committee of the World Science Forum.

Another key milestone in 2019 was the launch of the "Declaration on the Guiding Principles of Young Academies", signed by almost 40 young academies worldwide, including the GYA. This declaration was officially launched at the World Science Forum in November 2019, and was the culmination of discussions among National Young Academies (NYAs) at the Fourth Worldwide Meeting of Young Academies held in DaNang, Vietnam, in July

2019. The declaration sets out guidelines for the running of NYAs that the signatories agreed to uphold, but which would also act as guidance to future NYAs.

Another major milestone was a move in 2019 to explore extending the Global State of Young Scientists (GloSYS) project beyond the African region and setting up a similar regional study in the Latin America and Caribbean (LAC) region. This marked another important step in the eight-year history of the GloSYS umbrella project, and reinforces the GYA's commitment to giving a voice to young researchers across the globe. The GloSYS projects are designed to provide insights into the factors affecting the careers and personal lives of young researchers. These insights form the basis of policy recommendations that are aimed at addressing some of the systemic issues that affect young researchers, including with their career development.

With a publication date of June 2020, we are granted some foresight into what the next year holds for us, and while we'd hoped to meet you all during our planned Annual General Meeting and Conference in Kolkata, India, the COVID-19 crisis prevented it. Nevertheless, we're working hard to make our first-ever virtual e-AGM and e-Conference a roaring success, and hope that you are able to participate.

Connie Nshemereirwe, Co-Chair (Uganda) Koen Vermeir, Co-Chair (France)

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10 years of the GYA

From idea to realisation

The origins of the GYA can be traced back to the InterAcademy Panel on International Issues at the 2008 and 2009 "Summer Davos" meetings of the World Economic Forum (WEF). That year, 43 young scientists were preselected by the InterAcademy Partnership (IAP) and the national academies of science to participate in the WEF conference in Tianjin, China. The young scientists discovered they had some things in common: lots of energy, a passion for science, and confidence in their ability to change things.

In the end, their energy was channelled in the form of a statement, "Passion for Science - Passion for a Better World", signed by 40 participants of the IAP Young Scientists pilot initiative. Ideas of a Global Young Academy were already germinating. In 2009, Gregory Weiss (University of California, Irvine, United States) and Tilman Brück (Leibniz Institute of Vegetable and Ornamental Crops, Germany) took the helm of this new initiative and enlisted the support of the IAP.

On 6 November 2009, a workshop invitation was sent out from IAP headquarters to its Member Academies, to "Participate in a Workshop on Founding National Young Scientist Academies and the Global Young Scientists Academy (GYSA)". The workshop, which took place 14-16 February 2010 in Berlin, Germany, was hosted by the German "Junge Akademie" and sponsored by the IAP and the German National Academy of Sciences Leopoldina. This workshop would be the founding meeting of the GYA.

During the meeting, 40 young scholars from 28 countries succeeded in drafting a constitution and agreed on a name: the Global Young Academy

was officially launched on 16 February 2010. The first GYA Executive Committee (EC), co-chaired by Nitsara Karoonuthaisiri (National Center for Genetic Engineering and Biotechnology Thailand) and Gregory Weiss would play a crucial role in shaping the GYA.

Against original expectations, the GYA became independent of the IAP, making true the aspiration of autonomy for young scientists that was at the core of the GYA vision. Ten years after its founding, the GYA has greatly expanded its reach through a wider network of members, alumni and partners around the world. As an organisation, the GYA also finds itself in a more conducive context; a world in which 36 more young academies exist than 10 years ago, bringing the total to over 50 young academies and similar bodies around the world.

Moreover, through ongoing cooperation between the GYA and organisations such as the IAP, the International Science Council (ISC), the European Academies Science Advisory Council (EASAC), and All European Academies (ALLEA), the GYA is on a path to provide a voice for young researchers in various fora for many years to come.

Collectively, the GYA hopes to ensure that science contributes to more equitable and sustainable societies, and that science systems are inclusive and supportive for all young researchers, in all disciplines and world regions.

More information is available on the <u>History of the GYA working group page</u>, and a longer article on the history of the GYA appears in <u>GYA connections</u> issue 6.



The GYA takes on new roles and partnerships

As engagement has grown, so has cooperation with global organisations

Over the course of its first 10 years, the GYA has consistently established and strengthened various connections with global stakeholders such as the United Nations Educational, Scientific and Cultural Organization (UNESCO), the International Science Council (ISC), as well as scientific organisations and national young academies.

In recognition of its growing influence in the global science community, in April 2019 the GYA was named a full member of the InterAcademy Partnership (IAP), the global network of more than 130 academies of science, engineering and medicine, at their IAP Conference and General Assembly in Incheon, Korea. The IAP is a vital part of the global science landscape, and strives to ensure that science serves society inclusively and equitably. The GYA shares these goals, and in its role as a full member, the GYA enjoys the IAP's backing in various initiatives, particularly with the GYA's ongoing support for existing and new national young academies.

The GYA was also invited to join the Steering Committee of the World Science Forum (WSF) for the first time in 2019. As members of this committee, the GYA was tasked with organising the young scientist pre-conference workshop in partnership with other young scientist organisations, and with contributing to facilitating intergenerational intercultural dialogue at the WSF. In the end, each plenary session at the WSF on "Science, Ethics and Responsibility" in November had at least one early- to mid-career speaker, and members of the GYA and various national young academies played a very active role there.

Led by the <u>Global Health</u> working group, 2019 also saw GYA involvement in sessions throughout the World Health Summit in October. GYA members also organised the "New Voices in Global Health" session, which explored the (dis-)connection of various sciences with global health research, policy or advocacy.

In Europe specifically, the GYA contributed its global voice to the 25th Anniversary Conference of ALLEA (the European Federation of Academies of Sciences and Humanities) in May 2019, where GYA representatives discussed the 2019 GYA International Conference of Young Scientists' theme on "Re-Enlightenment? Truth, Reason and Science in a Global World" during a panel discussion organised by the GYA. The interactive panel sparked a vivid discussion with the audience, and participants in the ALLEA meeting urged young scientists "to question the established ways". The signing of a Memorandum of Understanding between ALLEA and the GYA to foster closer ties and capitalise on the diverse expertise and experience of both organisations was planned for early 2020.

InterAcademy Partnership http://www.interacademies.org/

World Science Forum https://worldscienceforum.org/

World Health Summit https://www.worldhealthsummit.org/

ALLEA https://allea.org/

Photo: Global Young Academy 7



Re-enlightenment?

GYA anniversary international conference addresses the role of science in society

Over 200 participants gathered at the German National Academy of Sciences Leopoldina in Halle (Saale) in 2019, for the largest GYA International Conference of Young Scientists yet. GYA members, alumni, local and international speakers, partners and guests not only celebrated 10 years of the GYA, but also discussed the many facets of the historical Enlightenment with a view to calls for "re-enlightenment", and more generally, related to the role and limits of science in today's globalised society. Enlightenment was thereby dealt with from a global, interdisciplinary perspective. In the context of prevalent science denial and post-fact discourses, participants espoused values such as critical thinking and freedom of thought or scientific achievement, and asked how scientists and scholars can contribute to improving sciencesociety relations. Reflecting on the changing role of science in society, one particular panel brought together representatives from the German Junge Akademie and the InterAcademy Partnership (IAP), All European Academies (ALLEA), European Academies Science Advisory Council (EASAC) and the Network of African Science Academies (NASAC), to jointly deliberate on the future of both young and established academies.

Apart from thought-provoking panel debates, inspirational keynote talks were held by Ismail Serageldin (Founder, Bibliotheca Alexandrina), Vladimír Šucha (Director General, EU Commission Joint Research Centre) and Martin Frick (Senior Director Policy and Program Coordination, UNFCCC). These contributions, respectively, highlighted the fascinating history of academies and their work, the importance of understanding

the role of values in policymaking, and the increasing necessity to view climate change as a cross-cutting challenge across most research and policymaking fields. Throughout the week, the meeting provided countless impressions and opportunities to engage. Starting from an exhilarating audio-visual art-science exhibit at the Art Museum Moritzburg, capacity building workshops for young scientists, a local City Hall reception with a Global Migration and Human Rights Working Group book launch, side meetings focusing on the LAC region, National Young Academies, GYA alumni relations, research in southeast Asia, and more, all the way to a unique March for Science in the form of an Enlightenmentfocused historical walk through Halle.

In addition, 43 new GYA members were inaugurated, working groups met and deliberated future plans, and members elected their leadership body for the coming year. The usual high energy level exuded at GYA meetings was multiplied, resulting in an unforgettable AGM and Conference at which lasting connections were made. Many thanks to GYA partners, organisations, speakers, guests, and members and alumni who supported this event!

A full report can be downloaded here (PDF): AGM and Conference Report 2019



Japan and the GYA

GYA well-represented at three conferences in 2019; GYA 2021 AGM in Tokyo

GYA members played key roles in three conferences that took place in Japan in late 2019, each of them noteworthy in their own way: the Tsukuba Conference, the European Union-Japan Science Policy Forum, and the 16th Science and Technology in Society (STS) Forum.

The first Tsukuba Conference took place from 2-4 October in Tsukuba, Japan, and aimed to provide young researchers, scientists and entrepreneurs with a platform to discuss and debate global issues, put together action plans and proposals, and reach out to the global community. GYA Co-Chair Koen Vermeir (CNRS, France) delivered the Keynote Address, and in addition to the conference-wide contributions of nearly a dozen other GYA members, GYA Executive Committee member Yoko Shimpuku (Hiroshima University. Japan) was a member of the conference programme organising committee. Koen, Yoko and GYA member Karly Kehoe (Saint Mary's University, Canada) also wrote and signed the "Tsukuba Declaration" (available here).

Further, the GYA and the Young Academy of Japan (YAJ) organised and presented a G7 session on Citizen Science. Presenters during this session were Wataru Iwasaki (The University of Tokyo, Japan), Yoko Shimpuku, Akihiro Kishimura (Kyushu University, Japan), Koen Vermeir, Karly Kehoe, Moritz Riede (University of Oxford, United Kingdom), Michael Saliba (Technical University of Darmstadt, Germany), Tyrone Grandison (The Data-Driven Institute, United States), Filippo Rossi (Politecnico di Milano, Italy), and YAJ member Kazuyoshi Nishijima.

The next event was "New STI Policies in a Changing World", organised by the Delegation of the European Union (EU) to Japan and the National Graduate Institute for Policy Studies (GRIPS) in Kyoto, Japan. The GYA was prominently present at this bilateral EU-Japan forum, where Yoko Shimpuku and alumnus Mitsunobu Kano (Okayama University, Japan) presented about the GYA. More information is available here.

GYA members were also prominently present at the 16th Science and Technology in Society (STS) Forum in Kyoto, Japan, which addressed the rapid advance of science and technology and the important ethical, safety and environmental issues this raises. Six GYA members took part in the discussions, and Yoko Shimpuku delivered a presentation during the panel on Environmental Change and Risks of Health, chaired by German National Academy of Sciences Leopoldina President Jörg Hacker. More information here.

The YAJ and the Japanese government have been very welcoming to early-career researchers, which is one of the reasons that the 2021 AGM and Conference will take place in Tokyo, Japan (see below). Until then, sayonara!

2021 AGM and Conference Save the Dates - 16-21 May 2021

Visit the 2021 International Conference of Young Scientists and GYA Annual General Meeting page here.

Photo: Global Young Academy 9



Responsibility for Refugee and Migrant Integration

Book released by Global Migration and Human Rights working group during AGM in Halle

Refugee and migrant integration has become a pressing issue worldwide.

"Responsibility for Refugee and Migrant Integration" (De Gruyter, 2013), a book edited by Global Migration and Human Rights Working Group member S. Karly Kehoe (Saint Mary's University, Canada), alumna Eva Alisic (University of Melbourne, Australia) and alumni Jan-Christoph Heilinger (LMU Munich, Germany) focusses on the complex nature of integration in European countries and Canada. The book was released on 1 May 2019 during a ceremony at the Halle (Saale) City Hall in connection with the GYA's Annual General Meeting and Conference.

The publication includes voices of persons who have been displaced, those who work to support migrant integration, and scientists who undertake comprehensive research on migration and integration processes past and present.

"The vexed question of responsibility in issues of refugee and migrant integration is one of the most important challenges currently facing Western states," explains Professor Matthew J. Gibney, from Oxford University and Director of the Refugee Studies Centre. "This considered, wide-ranging and multidisciplinary edited work offers fresh and provocative insights to help us to navigate this turbulent issue."

Including important perspectives that are often overlooked and ignored, the collection of essays in the book promotes an extensive analysis of migrant integration and the pressing need for society to work together.

The book discusses how the heated and often polarising debates have made it difficult to understand in measured and constructive ways, the actual challenges of realising an integrated society. These debates occur at governmental levels, through mainstream media, among the wider public via social media, and within migrant communities.

As the editors of the book explain: "It is becoming harder to separate genuine challenges from populist alarmism. The intensity of the debates also creates a degree of chaos, which obstructs deeper understanding of what it feels like to be a migrant in a new place where almost everything, including language, social norms, food products, and weather is unfamiliar."

"Responsibility for Refugee and Migrant Integration" challenges individuals to think about their own role, responsibilities and action in respect to migrant integration. Furthermore, the authors posit that the issues raised may help policymakers learn from important historical comparisons and behavioural science insights.

The GYA Working Group Global Migration and Human Rights provides an international and interdisciplinary forum for addressing the global challenges brought about by international migration. It engages in scholarly research, combining insights from different academic disciplines—such as history, international law, psychology and philosophy—and also serves as an advisory group/council, providing policy-oriented viewpoints and guidelines to international institutions based on the unique and multidisciplinary perspective of young scholars.





News from the global network of Young Academies

The GYA continues to support the worldwide National Young Academy movement

Since its foundation, the GYA has acted as a supporter and facilitator of the growing global network of young academies, a facilitator of joint projects and statements, as well as regional and worldwide meetings of young academies. Such academies are formed by early- and mid-career young scientists and scholars, typically selected for the excellence of their science research and their commitment to service for society. Young academies and their members work towards giving a voice to young scientists vis-à-vis society, the media and policymakers.

In 2019, the group of national young academies and similar organisations again grew – there now exist more than 50 such young scientist organisations. Additions in 2019 included the National Young Academy of Bangladesh, the Hungarian Young Academy, the Young Academy of Spain, and the Swiss Young Academy. The network continues to grow dynamically, with more than 10 initiatives currently active in countries such as Colombia, Chile, Congo, Croatia, and Nepal.

The GYA continues to support cooperation among NYAs and in 2019 participated in the European regional young academies meeting hosted by the Young Academy Finland, and together with the Vietnam Young Academy co-organised the Fourth Worldwide Meeting of Young Academies. This meeting was attended by representatives from more than 30 young academies from all over the globe, who explored the theme "Young Academies for Promoting Peaceful and Inclusive Societies". Meeting participants also discussed the role of young academies in providing science advice as intermediaries between the research community

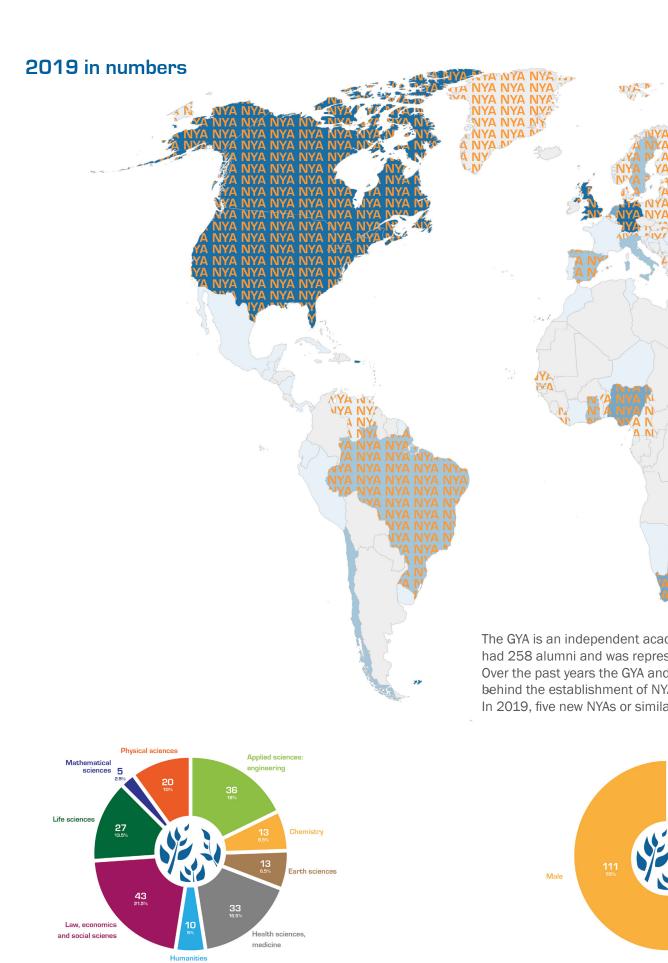
and policymakers nationally and globally, as well as ways for young academies to better engage in the implementation and development of the United Nations Sustainable Development Goals (SDGs).

Young academy representatives also worked on the "Declaration on the Guiding Principles of Young Academies", which was later signed by almost 40 young academies from all over the world, and officially launched at the World Science Forum in November 2019. The Declaration lists a set of guiding principles including Excellence; Diversity & Inclusivity; Responsibility; Knowledge-based Evidence; Independence & Transparency; and Integrity. It also includes a number of calls to action to young scholars worldwide, to existing Young Academies, and to established Science Academies.

Twenty years after the German Junge Akademie was established as the first young academy (back in 2000) it is clear that the development of young academies is a continuing success story. The Declaration provides a basic consensus on core principles and values of young academies to keep this momentum going.

Worldwide Meeting of Young Academies 2019

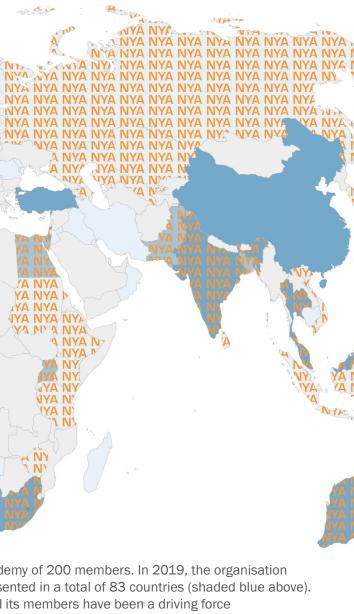
List of National Young Academies



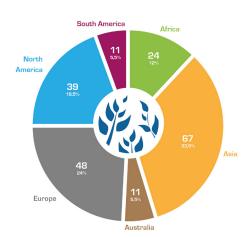
GYA membership comes from 6 continents

2019 in numbers

NATIONAL YOUNG ACADEMIES



As (present in countries with orange NYA text above). r initiatives were launched.



W. A. A.

and spans a diverse range of disciplines.

Map: Kevin Bolte / GYA

cOAlition S Guidance on the Implementation of Plan S





Open Science

Plan S and beyond: the GYA helps shape Open Science developments

Developments in Open Science (OS) accellerated in 2019, particularly in the European context, and the GYA's Open Science Working Group was involved every step of the way. Below are some highlights of its productive year.

As a follow up to the 2018 Statement on "Opportunities and Challenges for Implementing PLAN S" by the GYA and Young Academies, GYA alumna Sabina Leonelli (University of Exeter, United Kingdom) was interviewed on the "Early-career researchers' response to Plan S" for the International Science Council's "Plan S" blog.

In January, former OS working group co-lead and current GYA Co-Chair Koen Vermeir (CNRS, France) attended the Society for Scholarly Publishing Conference on "Bringing Value in Academic Publishing: Practical Solutions for Thriving in a Changing Environment" in Berlin, Germany.

In April, Koen represented the GYA at the European Commission's Open Science Policy Platform (OSPP) meeting in Bucharest, Romania, where the future of scholarly communication and new indicators for OS were discussed.

In September, OS Working Group Co-Lead Abel Polese (Tallinn University, Estonia) attended the African Open Science Platform (AOSP) Delivery Phase Planning Workshop in Alexandria, Egypt. The purpose of this workshop was to deliberate on and design the implementation phase of the AOSP initiative with key regional stakeholders and international representatives. More details are available in Abel's meeting report here.

In September, Koen spoke about the new implementation guidelines of Plan S at the 2019 Open Science Fair. A video of that event is available here.

In October 2019, OS group members contributed to the "Stakeholder Consultation on the Report by the Expert Group on the Future of Scholarly Publishing and Scholarly Communication (E03463), European Commission, Directorate-General for Research and Innovation 2019". The GYA contribution to that document is available here.

In October, Koen attended the "Open Science Coordination in Europe" meeting in Helsinki, Finland, where the new network of national Open Science coordinators was inaugurated. Koen also represented the GYA at the meeting of the OSPP in Helsinki. More information on those events is available here.

The year was capped off in November, when the GYA joined forces with cOAlition S to create a Plan S Monitor Task Force, an initiative originally suggested by the GYA to make sure that the impact of Plan S on the research community is continuously evaluated and steps can be taken to avoid or mitigate any potential negative effects. The Task Force will develop key indicators that will allow it to monitor current developments and every phase of the implementation of Plan S. More on that development is available here.

The GYA's impact on OS policy and publishing is only set to increase in 2020.



Career development for at-risk scholars

The GYA's At-Risk Scholars Initiative increases efforts to support colleagues in need

In 2019, the GYA's At-Risk Scholars Initiative (ARSI) worked with partners to hold two career development workshops for at-risk scholars and increased the number of supported paired mentorships, among other milestones.

In April, together with the European Commission's Joint Research Centre (JRC), the first career development workshop took place at the JRC site in Ispra, Italy, where 12 early-career at-risk scholars residing in EU countries participated in sessions over 2 days. A second workshop for over 20 UK-based scholars was held in September, in cooperation with Wolfson College, University of Oxford, the Council for At-Risk Academics (Cara), and the Young Academy of Scotland.

Experience from both workshops showed that scholars greatly benefited from the in-person meetings, which focused on skills and ideas related to establishing scholars' academic and non-academic careers outside of their home countries.

By the end of 2019, ARSI had facilitated 32 mutually beneficial mentoring relationships across 12 countries and 3 continents, including Africa. The initiative continues to explore partnerships with organisations that work with at-risk scholars in low- and middle-income countries, so that mentoring and workshop opportunities for these at-risk colleagues can be expanded in the coming years.

ARSI members also joined forces to contribute to current discussions and increase awareness about at-risk scholars, as well as to recommend supportive actions. In October, ARSI members

organised and spoke at a workshop titled "Supporting at-risk and refugee scholars in our research institutions and communities".

Two ARSI members co-authored an opinion piece on how existing academic work structures in many Western countries – which are not only highly competitive but also precarious, with short-term contracts and expected mobility the norm – increase the real and psychological pressure on already disadvantaged at-risk scholars. The paper by Lisa Herzog (University of Groningen, Netherlands) and Özge Yaka (Universität Potsdam, Germany) was published in the Times Higher Education in November 2019 under the title "Academic precarity is bad for everyone, but it's even worse for scholars at risk".

Finally, the ARSI initiated a 3-year pilot membership programme within the GYA, which supports and endorses up to 2 excellent at-risk colleagues' GYA membership applications each year.

In 2019, the GYA greeted its first new members endorsed by ARSI. Many thanks to the continuing efforts by individuals and partner organisations who support the GYA's efforts in this project!

At-Risk Scholars Initiative:

https://globalyoungacademy.net/activities/at-risk-scholars-initiative/

Workshops:

Joint workshop with the EC-JRC

GYA workshop hosted by Wolfson College, University of Oxford



What is science leadership?

Collaborative leadership training around the world

While leadership can be defined in many ways, it requires, among other conditions, continuous reflection, a suitable environment, and active communication. For the GYA, the question of what makes a good science leader led to the co-development of a special brand of Science Leadership Programme (SLP), which, together with spin-off workshops, has by now reached nearly 500 early-career scientists and scholars across the globe.

It all began with the publication of the GYA Global State of Young Scientists (GloSYS) precursor study in 2014. Two central findings emerged from this international pilot study: 1. Mentoring and support structures are crucial for early-career researchers' successful career paths; 2. Focused training for the professional skills that academics and scientists need in their careers is especially lacking in the developing world. Based on this evidence, the GYA worked with the University of Pretoria and Knowlnnovation to develop an exceptional training and mentoring programme which facilitates the practice of collaborative leadership skills and simultaneously builds a network of emerging future science leaders across the African continent.

In 2019, the Africa Science Leadership Programme (ASLP) launched its 5th year, bringing together 20 researchers from 11 African countries. Over the past 5 years, the ASLP has connected over 100 fellows from 19 African countries. Since its beginnings, the ASLP has expanded, additionally organizing training workshops in different regions of Africa.

Inspired by the ASLP, an independent Science Leadership Programme was initiated by GYA members in cooperation with Knowlnnovation in the ASEAN countries. The <u>ASEAN SLP</u> has since been held in Thailand, Malaysia and Vietnam, welcoming its 4th cohort in Vietnam, together with the ASEAN Young Scientists Network, in December 2019. Participants use collaborative leadership tools to form joint initiatives related to science and policy in the region, on which they collaborate throughout the coming year.

These regional success stories and an increasingly high demand for science leadership training encouraged the GYA to experiment with smaller workshop formats, to reach a larger audience of early-career scientists in all world regions. Since 2017, the GYA has worked with partners to coorganise 8 science leadership workshops, often back-to-back with large international conferences, strengthening the voice of young scientists at these events and providing training and an expanded network at the same time. In the past year alone, 29 new GYA members participated in such a workshop in Germany, and a group of 43 young scientists and scholars from 23 countries took part in a similar workshop leading up to the 2019 World Science Forum in Hungary, Budapest.

At this 1.5 day science leadership workshop, which was co-organised by the GYA, the InterAcademy Partnership (IAP), and the Hungarian Academy of Sciences, participants identified and addressed urgent issues of ethics and responsibility in science, concluding with a joint publication (more information and link here).

With this momentum, the GYA continues to support collaborative leadership training in many forms around the world, and looks forward to many projects in the years to come.



GloSYS in Latin American and Caribbean countries

Project sets its sights on LAC countries

In 2019, the GYA began to transition the Global State of Young Scientists (GloSYS) project away from a regional study in Africa to a similar study in the Latin America and Caribbean (LAC) region. This marked another important step in the eight-year history of the GloSYS umbrella project, and reinforces the GYA's commitment to giving a voice to young researchers across the globe.

The GloSYS projects are designed to provide insights into the factors affecting the careers and personal lives of young researchers. These insights form the basis of policy recommendations that are aimed at addressing some of the systemic issues that affect young researchers, including with their career development. The projects are conducted on a regional basis as this enables evidence-informed policy recommendations to be tailored to the specific socio-political, legal and economic contexts in which issues occur.

The GloSYS Africa project concluded in December 2019, and the final report is expected in June 2020. The project was conducted under the leadership of 5 GYA members and a number of GYA staff. Researchers from across Africa and in the diaspora that had earned a Master's or PhD in the previous ten years were surveyed, though there was a particular focus on 14 African countries.

In 2019, some key findings were presented in side-events at the African Union Heads of State Conference in Niger and the World Economic Forum on Africa. Additionally, a new initiative called the 'GloSYS Africa Narratives Project' was concluded during the year, which will see the

publication of a series of short stories developed from the 61 interviews completed within the research phase of the project. This is a new initiative and publication from GloSYS and the GYA, and many thanks are owed to Professor Lynn McAlpine at Oxford University for leading this component.

While the GloSYS Africa project comes to a successful conclusion, it is exciting to manage the transition toward the GloSYS project in the Latin America and Caribbean region (GloSYS LAC). The GloSYS LAC working group, overseen by Sandra Lopez-Verges (Gorgas Memorial Institute for Health Studies, Panama), were very glad to secure funding for a one-year scoping study that is designed to precede the full GloSYS LAC project.

Within the scoping study, a systematic literature review is being developed to form a basis for the rationale for additional funding to conduct a full study in the region. The GYA is glad to welcome Alejandro Miranda-Nieto into the GloSYS Project Researcher role to lead the project and working group through this critical first stage, with Matt Keane shifting over from the Africa project as the Research Assistant.

Photo: Global Young Academy 17



Science communication

Spreading the word

Both the GYA as an organisation, as well as its members (individually and in working groups) frequently practice science communication in many forms and with varying purposes: to inspire, to inform, to garner support for scientific research and collaboration, to draw attention to crucial perspectives, or to inform policy decisions. Three such initiatives are featured below.

To inspire and educate. In April, GYA members from around the world, who had gathered in Halle (Saale), Germany, for their Annual General Meeting, engaged in an afternoon of science outreach with local children at the Francke Foundations. Together with children aged 6-12, young scientists explored the inquiry-based science education game Expedition Mundus. This game takes place in an imaginary world, where players have to think like scientists by formulating their own hypotheses, and act like scientists by testing their hypotheses and looking at previous observations. In parallel, another group of GYA members led children through a hands-on experiment on the science of light: they produced working solar cells using berry juice, which then generated electricity directly from light. Throughout the activity, the young scientists discussed with the children what energy is, what it is used for, and where it comes from. That same week, the GYA held public "March for Science" events in the form of a science history walk through Halle (Saale), and an arts-science workshop at the Art Museum Moritzburg.

To inform and dispel myths and fake news: The GYA working group <u>Trust in (Young) Scientists</u> held an open webinar for young scientists and scholars

on "Science communication through blogs and video blogs". GYA members and alumni, as well as members from National Young Academies, participated. The instructors, Tobias Maier and Mai Thi Nguyen-Kim, who both transitioned from being scientists to working as science communicators, shared tips and ideas with participants on how to effectively communicate scientific topics. The GYA working group hopes that webinar participants are motivated to start communicating about their work to a broader audience, and aims to launch more wide-reaching activities to support interaction between science and society in the coming year.

To increase awareness, both within the scientific community and the public: A new initiative by the GYA's 2019/20 Executive Committee members aims to increase the visibility of excellent young scientists and scholars from around the world, especially those from under-represented regions and groups. To be visible today, one has to be searchable online. Even with ongoing efforts to encourage open science and open access, there are still large disparities in representation online. The GYA initiative successfully created Wikidata profiles for all GYA members and alumni as well as for members of around 15 National Young Academies. At the same time, members are contributing their ORCID numbers and are uploading Creative Commons-licensed profile pictures, which makes their profile available for journalists, the public and Wikipedia in different languages. This allows systematic analysis of their research activities and collaborative connections between them.

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About the Global Young Academy

The GYA is an organisation of 200 diverse early-to-midcareer researchers across disciplines who are selected based on their scientific excellence and their commitment to using their research to make the world a better place. In 2019 there were members and alumni from 83 countries, who are passionate about the role of science in creating a better world.

The GYA is hosted at the German National Academy of Sciences Leopoldina. It receives its core funding from the Federal Ministry of Education and Research in Germany and is supported by the InterAcademy Partnership (IAP) and other international organisations.

Co-Chairs: Connie Nshemereirwe

(Actualise Africa, Uganda)

Koen Vermeir (CNRS, France)

Managing Director: Beate Wagner (Germany)

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