



AGYA at a Glance

The Arab-German Young Academy
of Sciences and Humanities (AGYA)



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AGYA Members



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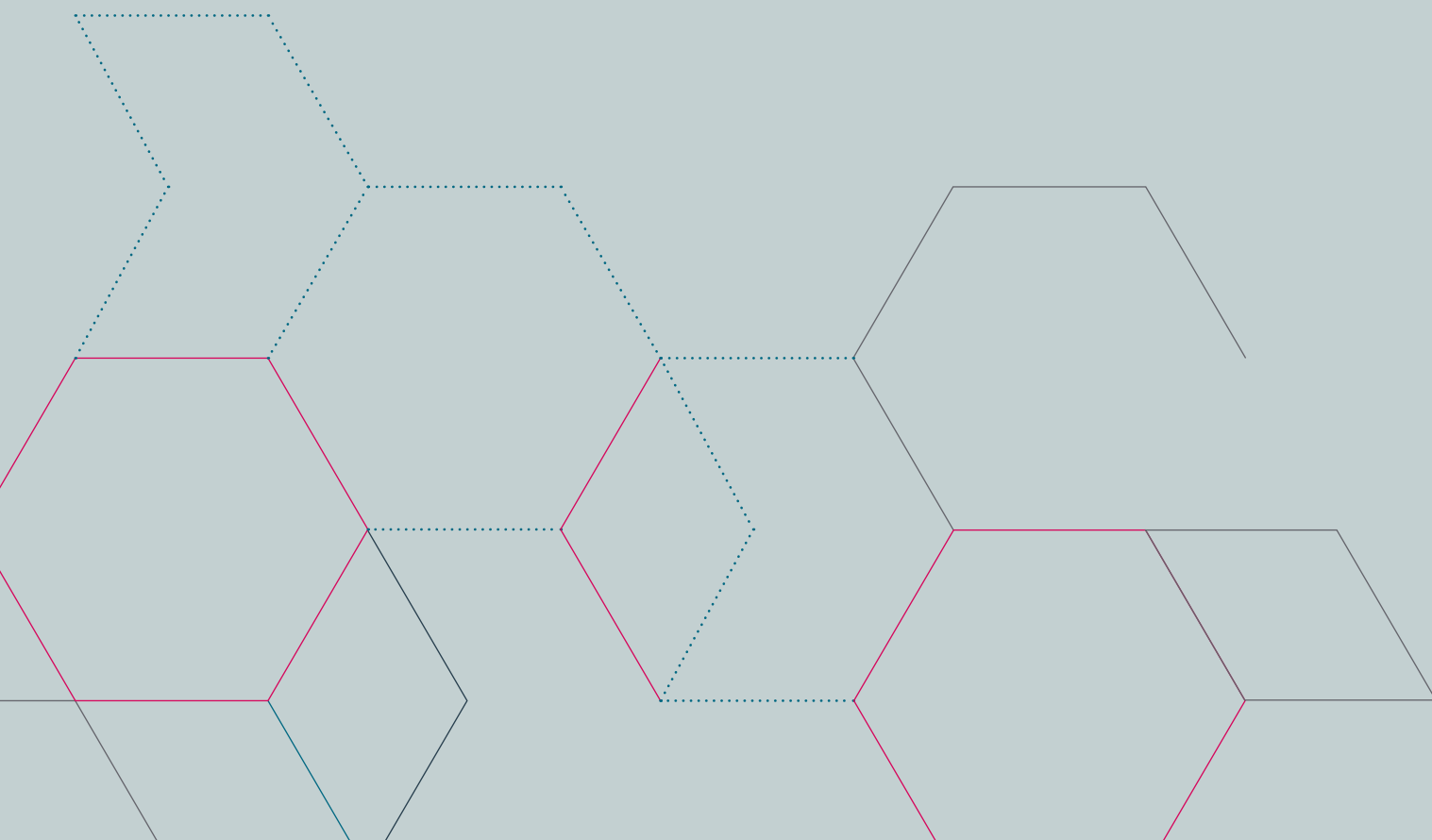
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AGYA – The First Bilateral Young Academy Worldwide

About AGYA

The Arab-German Young Academy of Sciences and Humanities (AGYA) is based at the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW) and at the Academy of Scientific Research & Technology (ASRT) in Egypt. It was established in 2013 as the first bilateral young academy worldwide. AGYA promotes research cooperation among outstanding early-career researchers (3–10 years after PhD) from all disciplines who are affiliated with a research institution in Germany or any Arab country. After a highly competitive selection process, membership in the academy is granted for up to five years, followed by lifelong membership in the AGYA alumni network.

The academy offers its members support and funding for their innovative projects and initiatives in all fields of research, as well as in science policy and education. Moreover, AGYA fosters the intercultural experiences of its members and promotes them as ambassadors of science and culture. The academy's aim is to serve as a cross-cultural think tank, promoting and supporting Arab-German research exchange and North–South–South cooperation.

AGYA is independent with respect to the content and forms of its academic activities. The activities are carried out by its members and coordinated by a Steering Committee consisting of three Arab and three German members. The academy is supported by an Advisory Board of high-profile Arab and German representatives of internationally renowned academic institutions, who promote the work of AGYA and participate in the selection of AGYA members.

AGYA is mainly funded by the German Federal Ministry of Education and Research (BMBF), which has provided more than eight million euros for the academy's 2016–2020 operations since 2013.

The Academy's Spirit

Academic Excellence Combined with Social Commitment

As an interdisciplinary research academy, AGYA is ideally placed to unleash the potential of early-career scholars who combine academic excellence with social commitment. AGYA brings together excellent young researchers from the natural sciences, technical sciences, humanities, social sciences, life sciences and the arts to develop and carry out joint projects. In this capacity, AGYA serves as a platform for cutting-edge research across disciplines, a meeting-point for transcultural discussion and a think tank for scientific reflection and policy development in the Arab world and Germany.

Various other Arab and German institutions and organizations support individual projects and key activities such as AGYA Annual Conferences. Since 2016, AGYA members have conducted more than 150 projects in research fields such as Arab and German Education; Common Heritage and Common Challenges; Energy, Water and Environment; Health & Society; Innovation and Transformation.

Quick Facts about AGYA

- ... was founded in 2013 as the first bilateral young academy worldwide.
- ... promotes early-career scholars (3–10 years after PhD) in the framework of Arab-German research cooperation.
- ... is a successful model for innovative international research cooperation.
- ... offers support and funding to its members for their interdisciplinary research projects.
- ... are in equal numbers Arab and German scholars, currently there are 60 members and 20 alumni.
- ... represent a wide range of disciplines: from humanities to natural, social, technical, life sciences and the arts.
- ... are affiliated with a research institution in Germany or in any Arab country.
- ... benefit from a five-year membership followed by a lifelong participation in AGYA's alumni network.

By fostering a creative environment, where thinking outside of the box is encouraged and a pioneering spirit is nurtured, the academy offers its members a unique opportunity to engage in innovative collaborative research projects, with support provided by AGYA. A project team of AGYA scholars always consists of at least one German and one Arab member, giving all members the chance to learn from the scientific culture of the other. The bottom-up approach and collegial atmosphere create a unique space where members can share their ideas and enjoy the vibrant culture of open exchange.

Goals and Mission

The Arab world and Germany face common challenges and need to find solutions for diverse problems that go beyond borders—such as trans-regional migration, the protection of cultural heritage, sustainable use of resources and environmental protection, nutrition and health in an interconnected and complex world. The main goal of AGYA is to effectively strengthen **research cooperation between excellent Arab and German scholars** to tackle these issues.

Research cooperation is the key to fostering innovation and knowledge exchange. The best solutions to contemporary challenges derive from cooperation across countries and disciplines. AGYA therefore supports its members to implement **interdisciplinary research projects and joint initiatives** on questions of shared concern to stimulate North-South-South cooperation and build sustainable networks of collaboration and exchange.

Moreover, AGYA aims to promote the **active engagement of young researchers in academia and society**. AGYA members engage in issues with the potential to benefit societies in the Arab world as well as in Germany. Relevant topics include, for example, education, science and science policy. Thereby, AGYA serves as a means for scientific and cultural diplomacy.

AGYA's Mission

- ... creates innovation by cooperation.
- ... tackles common challenges from an Arab-German perspective.
- ... brings together excellent early-career researchers.
- ... supports interdisciplinary research projects and initiatives of its members.
- ... offers efficient research infrastructure for working together on common solutions.
- ... establishes sustainable innovation networks with regional competence centres.
- ... effectively strengthens new forms of North-South-South cooperation.

Last but not least, AGYA seeks to give a voice to excellent scholars from the Arab world and Germany in order to contribute fresh Arab-German perspectives to current academic and policy debates. In this sense, the academy aims to serve as cross-cultural think tank and to provide **policy advice for the benefit of society** in both Germany and the Arab countries.

AGYA's key impact areas are:

- Sustainable research cooperation
- Interdisciplinary research
- Capacity building
- Research-focused policy advice

The acronym AGYA stands for the Arab-German Young Academy of Sciences and Humanities. The logo was created by a team of designers from Egypt and Germany. The Arabic letter on top of the 'G' brings verve into AGYA's visual identity. It can be read as both the Arabic letter 'ayn' (which stands for 'arabi, meaning 'Arabic') and the letter alif with a hamza (which stands for almani, meaning 'German'). Thus the dynamic Arabic element of the logo symbolizes the two partners in cooperation on this first bilateral young academy worldwide: the Arab world and Germany.



'If AGYA did not already exist, it would need to be invented.'

Dr. Sabine Behrenbeck
German Council of Science
and Humanities



AGYA – A Network of Excellence

Currently, AGYA has 60 members and 20 alumni who are affiliated with over 64 prominent institutions in Algeria, Belgium, Egypt, Germany, Jordan, Kuwait, Lebanon, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Sudan, Sweden, Tunisia, the United Arab Emirates, the United Kingdom, the United States of America and Yemen. Since 2016, AGYA members have implemented more than 150 interdisciplinary research projects in over 60 cities and over 30 countries that address highly relevant societal topics, such as migration, resource scarcity, public health, education and endangered cultural heritage.

AGYA members organize their research projects in cooperation with national and regional research institutions in various Arab countries as well as in Germany. With its cooperation partners, the academy has established a strong network for Arab-German research and innovation. AGYA has proven itself to be a successful model for the international promotion of young researchers and interdisciplinary research cooperation.



'As AGYA member I get the opportunity to boost my scientific career. My visibility within the Arab science community has reached a new level.'

Salma Balazadeh
Molecular Biology, Germany, AGYA member since 2014



'AGYA is research beyond borders! Through our discussions and collaborations within AGYA we learn and develop a new sensitivity for diverse cultural views and different scientific approaches. We want to develop solutions through collaborative research!'

Sarhan Dhoub
Philosophy, Germany, AGYA member since 2013



'I have never cooperated as much with fellow Arab researchers as I have since I joined AGYA.'

Bilal Orfali
Islamic Studies, Lebanon, AGYA member since 2013



'AGYA stands for research excellence and builds on trust and respect. My fellow members, who are from various disciplines, encourage me to develop new perspectives on my research.'

Christian Fron
Ancient History, Germany, AGYA member since 2017



'At AGYA we can bring in our own research ideas and turn them into action. AGYA has become a source of inspiration for me and a think tank where I can contribute my own opinions.'

Henda Mahmoudi
Biotechnology, United Arab Emirates, AGYA member since 2013



Organization of the Academy

AGYA is independent with respect to the content and forms of its academic activities. The members themselves implement the organizational structure of the academy in a bottom-up approach: All AGYA members meet twice a year in a General Assembly where they democratically decide on the academy's matters as well as their next research topics and projects.

The activities of AGYA are carried out by its members and coordinated by a Steering Committee, which is elected for one year at a time by the General Assembly and always consists of three Arab and three German members. In different task forces, members administer the activities of the academy and develop its framework. The task forces address topics such as the constitution of AGYA, the building of an alumni network and the selection of new members. An Advisory Board of high-profile Arab and German representatives of internationally renowned academic institutions supports the work of AGYA.

General Assembly

All of the members of the Arab-German Young Academy of Sciences and Humanities (AGYA) convene twice a year for a General Assembly – once in Germany and once in an Arab country – where members decide on all matters of general importance to AGYA. These biannual assemblies for all members also provide an ideal opportunity for members to meet face to face and discuss their next research projects, as well as receive feedback and constructive input for their work. The assemblies are accompanied by trainings, task force meetings, keynote lectures and thematic excursions.

AGYA provides its members with a high degree of mobility, increases their international visibility and boosts the impact of their scholarly and policy contributions. During public events held in conjunction with the General Assemblies, AGYA members have the chance to present their research results and engage in exchange with high-ranking external experts. As the General Assemblies always take place in different countries and cities, new research infrastructures between different Arab countries and Germany are established and existing academic exchange is further enhanced and consolidated. In this way, AGYA encourages and strengthens North – South – South cooperation.

Steering Committee

The Steering Committee manages the activities of AGYA. It consists of three Arab and three German members of AGYA, who are elected by the General Assembly for one year. One Arab and one German member of the six-person Steering Committee are elected to serve as Co-Presidents. Together with the other four members of the Steering Committee, they regularly represent AGYA at international conferences and actively engage in exchange with leading academic institutions in the Arab world and Germany.

Working Groups

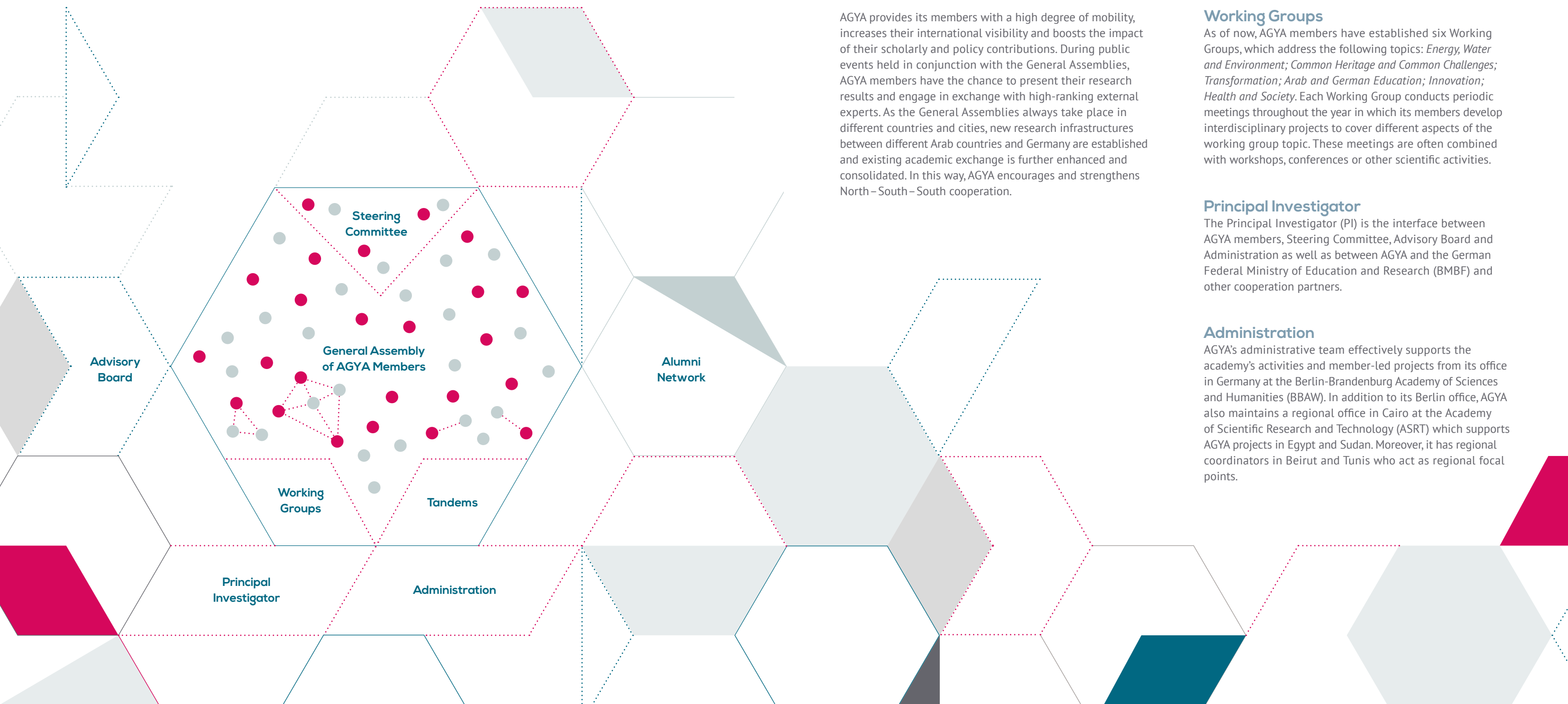
As of now, AGYA members have established six Working Groups, which address the following topics: *Energy, Water and Environment; Common Heritage and Common Challenges; Transformation; Arab and German Education; Innovation; Health and Society*. Each Working Group conducts periodic meetings throughout the year in which its members develop interdisciplinary projects to cover different aspects of the working group topic. These meetings are often combined with workshops, conferences or other scientific activities.

Principal Investigator

The Principal Investigator (PI) is the interface between AGYA members, Steering Committee, Advisory Board and Administration as well as between AGYA and the German Federal Ministry of Education and Research (BMBF) and other cooperation partners.

Administration

AGYA's administrative team effectively supports the academy's activities and member-led projects from its office in Germany at the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW). In addition to its Berlin office, AGYA also maintains a regional office in Cairo at the Academy of Scientific Research and Technology (ASRT) which supports AGYA projects in Egypt and Sudan. Moreover, it has regional coordinators in Beirut and Tunis who act as regional focal points.



AGYA Advisory Board

AGYA is supported by an Advisory Board composed of high-ranking Arab and German representatives of internationally renowned academic institutions. The AGYA Advisory Board meets at least one time annually. Following a public call for membership and a highly competitive selection process, the Advisory Board is responsible for the final selection of the AGYA members.

Arab Representatives

- Prof. Dr. Aisha AL-Obaidly (Co-Chair)
Deputy Executive Director of Education, Training and Development of the Qatar Foundation
- Prof. Dr. Adnan Shihab-Eldin
Director General of the Kuwait Foundation for the Advancement of Sciences (KFAS), Former General Director of the Kuwait Institute for Scientific Research
- Ziad Mikati
Head of the Beirut Office of the Mikati Foundation
- Prof. Dr. Mahmoud M. Sakr
President of the Academy of Scientific Research & Technology (ASRT), Egypt
- Prof. Dr. Abdelhadi Soudi
Ambassador Scientist of the Alexander von Humboldt Foundation for Morocco

German Representatives

- Prof. Dr. Dr. h.c. mult. Martin Grötschel (Co-Chair)
President of the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW)
- Prof. Dr. Dr. h.c. mult. Jörg Hacker
President of the German National Academy of Sciences Leopoldina
- Prof. Dr. Klaus-Dieter Lehmann
President of the German Goethe Institute
- Prof. Dr. Dr. h.c. mult. Hermann Parzinger
President of the Prussian Cultural Heritage Foundation
- Prof. Dr. Margret Wintermantel
President of the German Academic Exchange Service (DAAD)

‘Since 2016, AGYA members have implemented an impressive number of research projects with a great diversity of topics relevant to societies in the Arab world and Germany. Promoting these highly talented scholars, AGYA nurtures a strong network of future decision makers.’

Prof. Dr. Dr. h.c. mult. Martin Grötschel
*AGYA Advisory Board Co-Chair
President of the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW)*

‘What is really distinctive from my point of view is the ability of AGYA to empower talented young scholars and continuously raise their leadership capacities. The disciplinary and cultural diverse background of the AGYA members creates fresh and innovative perspectives for research projects addressing common challenges of the Arab world and Germany.’

Prof. Dr. Mahmoud M. Sakr
*AGYA Advisory Board Member
President of the Academy of Scientific Research and Technology (ASRT)*

Funding and Cooperation

The academy is funded by the German Federal Ministry of Education and Research (BMBF) with a budget of more than eight million euros since 2013. Various other Arab and German institutions and organizations also support individual projects as well as AGYA Annual Conferences and Key Activities.

- Academy of Scientific Research and Technology (ASRT), Cairo
- Berlin-Brandenburg Academy of Sciences and Humanities (BBAW)
- Kuwait Foundation for the Advancement of Sciences (KFAS)

- German National Academy of Sciences Leopoldina, Halle
- Qatar Foundation
- Prussian Cultural Heritage Foundation, Berlin
- Goethe Institute
- World Health Organization (WHO)
- Arab-German Chamber of Commerce and Industry e.V. (Ghorfa)
- The German-Arab Friendship Association (DAFG), Berlin

Next to these, support is provided by the AGYA network: The current 60 AGYA members and 20 alumni are affiliated with over 64 prominent universities and research institutions in 19 countries that also contribute to AGYA research activities.



‘AGYA advocates the advancement of science, technology and innovation and inspires researchers and scientists from different parts of the world to work together and make an impact in furthering science and research within the Arab region and Germany.’

Prof. Dr. Adnan Shihab-Eldin
*AGYA Advisory Board Member
Director General of the Kuwait Foundation for the Advancement of Sciences (KFAS)*



‘AGYA is a sustainable platform for dialogue and research exchange among Arab and German scholars. The BMBF is convinced that AGYA creates significant added value as it builds bridges across disciplines and countries.’

Dr. Georg Schütte
State Secretary at the Federal Ministry of Education and Research

AGYA ALUMNI

Jointly building bridges
into the future

Alumni Network

Active membership in AGYA lasts for a period of five years, but the personal and professional connections forged through intercultural exchange and research cooperation in the Academy's expansive scholarly network in the Arab world and Germany continue long after. Lifetime membership in AGYA's Alumni Network ensures that alumni and current members continue to interact and benefit from each other's energy, ideas and experience. In 2018, the first generation of AGYA members became alumni, who will have the opportunity to come together in the AGYA Alumni Summit that takes place in conjunction with the AGYA Annual Conference to meet with their fellow alumni and AGYA members. Furthermore, AGYA alumni conduct their own interdisciplinary research projects and collaborative initiatives within the framework of the academy.

Alumna Julia Hauser looks back on her five-year AGYA membership

As AGYA's Alumni Network further expands the reach of the Academy by fostering cooperation between multiple generations of AGYA scholars, alumna Julia Hauser hopes to continue benefitting from the network's many and diverse opportunities for travel, exchange and collaboration with counterparts in the Arab world. Over the course of her five-year AGYA membership, she says, these opportunities helped her grow and develop both professionally and personally. Before AGYA, she noted, 'I had little idea, in practical terms, of what colleagues in many of the hard sciences did, because we tend to have such different training. But by collaborating with colleagues from disciplines like biology and chemistry, I gained a better sense of how they work in comparison to my own scholarly practice, and we were

able to develop innovative projects together.' As a humanities scholar who looks at histories of globalization and the entangled pasts of Europe, the Arab world and Asia, Hauser reveled in the chance to work across disciplines and cultures and to think outside the box. On both occasions, Hauser and her fellow AGYA co-organizers added creative experiential learning elements alongside more traditional formats for scholarly exchange.

For the conference 'Insatiable Appetite: Food as a Cultural Signifier' in Beirut, for example, participants enjoyed an Abbasid era feast featuring carefully researched dishes produced in the medieval tradition according to authentic recipes. This sensory engagement with the conference's theme complemented more classic panel presentations and open debate, together creating an interactive and memorable form of knowledge exchange.

Just as AGYA members autonomously determine the Academy's activities, organizational structure and research agenda, the development of the Alumni Network will be largely directed and carried out by enthusiastic alumni themselves. Hauser and others in the first cohort of AGYA alumni are excited to begin the process of stabilizing, supporting and further developing the Academy's Alumni Network.



Establishment of the AGYA Regional Office at the Egyptian Academy of Scientific Research and Technology (ASRT)

AGYA's administrative team effectively supports the academy's activities and member-led projects from its office in Germany at the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW). With the Opening of the AGYA Regional Office in Cairo, Egypt on 25 October 2018, the Academy has further expanded its presence in the Arab world. It is located within the Egyptian Academy of Scientific Research and Technology (ASRT), which is affiliated with the Ministry of Higher Education and Scientific Research. The regional focus of the office will be on Egypt and Sudan.

Opening Festivities on 25 October 2018

'ASRT decided to support AGYA in fostering Arab-German research exchange, particularly exchange between young scholars. The AGYA Regional Office is both the consequence of our cooperation and elevates it to a new level,' said Prof. Dr. Mahmoud M. Sakr, President of ASRT and AGYA Advisory Board member, at the opening festivities held in the city's historic Al-Salam Theatre on 25 October 2018, under the auspices of the Egyptian Ministry of Higher Education and Research. Over 300 participants attended from a wide range of scientific sectors from Egypt, Germany and across the Arab region. In his speech, Germany's Ambassador to Egypt Julius Georg Luy emphasized the mutual respect and commitment of Germany and Egypt to scientific cooperation as 'one of the key pillars' of the countries' bilateral relations. 'With the opening of the AGYA office in Egypt,' he declared, 'we are articulating and marking a truly new form of scientific cooperation between our two countries. AGYA, with members coming from Germany, Egypt and the Arab world, is the ideal format to continue the proud tradition of great polymaths and scientists like Imhotep, Ibn Al-Nafees and Leibniz.'

Arab-German Research Exchange on a New Level

AGYA has been active in Egypt since its founding in 2013. Project examples include cooperation with the Grand Egyptian Museum in Cairo on the question of the new museum's mission and sustainability; a study on innovation processes; a strategic workshop in collaboration with the World Health Organization (WHO) on health policy; as well as a training for Egyptian students on the application of renewable energy systems. The launch of the AGYA Regional Office at ASRT will further enhance AGYA's priority efforts to support North-South-South research cooperation in particular with Egypt and Sudan. 'The AGYA regional office provides a sustainable structure for Arab-Arab-German dialogue characterized by mutual trust and esteem,' says AGYA Principal Investigator Prof. Dr. Verena Lepper.

From a Memorandum of Understanding to an AGYA Regional Office at ASRT

The establishment of the AGYA Regional Office at ASRT is the outcome of a successful history of cooperation. In July 2017, the Egyptian Minister of Higher Education and Scientific Research, Prof. Dr. Khaled Abdel Ghaffar, visited the Arab-German Young Academy of Sciences and Humanities (AGYA) during his official diplomatic trip to Germany. In a milestone event, a Memorandum of Understanding between AGYA and Egypt's ASRT was formally agreed. On the German side, the agreement was signed by Prof. Dr. Verena Lepper, AGYA Principal Investigator, and Prof. Dr. Martin Grötschel, President of the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW) and Co-Chair of the AGYA Advisory Board. On the Egyptian side, the agreement was signed by Prof. Dr. Mahmoud Sakr, President of ASRT and member of the AGYA Advisory Board. On 26 November 2017, AGYA and ASRT reaped the fruits of their longstanding cooperative partnership: In a festive key hand-over ceremony in Cairo, both academies laid the foundation for the AGYA Regional Office at ASRT in Cairo.



Annual Conferences and Key Activities 2013 – 2019

AGYA creates innovation through cooperation. Many Arab societies have a highly dynamic research landscape. AGYA brings together high-level players in a developing Arab-German science and innovation system. In addition, regional cooperation is expanded through intra-Arab networking. This comprehensive approach increases the impact and quality of collaborations and creates sustainable significant added value as exchange takes place on an equal footing.

The AGYA Annual Conferences and key activities tell the history of the Academy since its foundation in 2013. Since its beginnings, AGYA has been cooperating with high-ranking partners in the Arab world and Germany. AGYA members have the opportunity to exchange with outstanding scholars, top-level representatives of research and research funding institutions as well as high state officials. With sustainable collaborations AGYA has continuously expanded its network across disciplines and countries and succeeded to take North-South-South cooperation to new heights.



AGYA Annual Conference, Doha/Qatar, November 2013

AGYA Principal Investigator Prof. Dr. Verena Lepper (left) congratulates newly selected AGYA member Dr. Henda Mahmoudi during the festive inauguration ceremony at the AGYA Opening Conference in Doha/Qatar in November 2013.



Prof. Dr. Klaus Lucas, Vice President of the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW) (2008–2015) and Prof. Dr. Nabeel Al-Salem, Former Executive Director of Outreach and Communications at Qatar Foundation Research and Development are awarded honorary founding member by AGYA Principal Investigator Prof. Dr. Verena Lepper.

AGYA Opening Conference in Berlin/Germany in June 2014

Festive Opening Ceremony with high-ranking guests in Berlin/Germany in June 2014 at the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW) where the AGYA Berlin Office is based.



AGYA Annual Conference in Doha/Qatar, November 2014

AGYA member Dr. Jenny Oesterle presenting her latest research findings at the Annual Research Conference (ARC) of the Qatar Foundation in conjunction with the AGYA Annual Conference in Doha/Qatar in November 2014.



AGYA Annual Conference, Munich/Germany, May 2015

Members of the newly elected Steering Committee open the AGYA General Assembly at the Bavarian Academy of Sciences and Humanities as part of the AGYA Annual Conference in Munich/Germany, May 2015 (f.l.t.r.: Prof. Dr. Verena Lepper, Dr. Kalman Graffi, Dr. Jenny Oesterle, Prof. Dr. Bilal Orfali, Prof. Dr. Ahmed Debez).

Johannes Ebert, Secretary General of the Goethe Institute, welcomes the AGYA members at the AGYA Annual Conference in Munich/Germany.



AGYA Annual Conference, Abu Dhabi/United Arab Emirates, October 2015

H.E. Sheikh Nahyan bin Mubarak AL Nahyan, Minister of Culture, Youth, and Social Development, festively opens the AGYA Annual Conference in Abu Dhabi/United Arab Emirates in October 2015.

High-ranking experts from the Arab world and Germany discussed 'Issues and Challenges in Higher Education' at the AGYA Annual Conference in Abu Dhabi/United Arab Emirates.



AGYA Annual Conference, Doha/Qatar, March 2016

Khalid Alkhudair, Founder and CEO of Glowork, a women empowerment organization, gives a keynote lecture during the AGYA Annual Conference in Doha/Qatar in March 2016. With his employment organization he has created thousands of jobs for women. Alkhudair is the first Saudi Ashoka Fellow, Young Global Leader at the World Economic Forum and an Endeavor Entrepreneur.



Share perspectives, exchange knowledge and learn from each other: AGYA members during the training 'Intercultural Communication & Innovative Strategies for International Cooperation' in Doha/Qatar.





International AGYA Conference 'Migration and Transnational Cooperation in Education, Research and Innovation: An Arab-German Dialogue', Berlin/Germany, May 2016

During the AGYA Conference 'Migration and Transnational Cooperation in Education, Research and Innovation: An Arab-German Dialogue' in May 2016, 20 presidents of leading universities in Germany and the Arab countries provided significant impulses to the discussion on how to improve the opportunities and participation of refugees in education.



Panel discussion on 'Migration and Higher education: Experiences, Challenges, and Long-term Potential' with (f.l.t.r.) AGYA member Prof. Dr. Ammar Abdulrahman, University of Tübingen/Germany, Prof. Dr. Abdelhamid El-Zoheiry, President of the Euro-Mediterranean University, Portorož/Slovenia, AGYA member Dr. Florian Kohstall, Welcome@FUBerlin/Freie Universität Berlin Center for International Cooperation, moderator of the panel discussion Julia Gerlach, journalist and author, RD Julie Klein, Deputy Head of Division, Cooperation with Developing and Emerging Countries, Africa and the Middle East, BMBF, Prof. Dr. Steffen Mau, Department of Social Sciences, Humboldt University of Berlin/Germany and Dr. Maha Shuayb, Director of the Centre for Lebanese Studies, Beirut/Lebanon

AGYA Annual Conference, Halle/Germany, October 2016

On the kind invitation of the German National Academy of Sciences Leopoldina, the AGYA members met for their Annual Conference in Halle (Saale)/Germany in October 2016. Keynote Lectures were held by Prof. Dr. Dr. h.c. mult. Jörg Hacker, President of the German National Academy of Sciences Leopoldina and by Prof. Dr. Adnan Shihab-Eldin, Director General of the Kuwait Foundation for the Advancement of Sciences (KFAS), Former General Director of the Kuwait Institute for Scientific Research.

Prof. Dr. Jutta Schnitzer-Ungefug, Secretary-General of the German National Academy of Sciences Leopoldina, presents Leopoldina's historic building.



Salon Sophie Charlotte 2017: 'Rebellion, revolutions, or reforms?', Berlin/Germany, January 2017

AGYA member Dr. Florian Kohstall in discussion with Prof. Dr. Klaus Lucas, Vice President of the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW) (2008 – 2015) and AGYA Honorary Founding Member.

AGYA Annual Conference, Hamburg/Germany, March 2017

Prof. Dr. Dr. h.c. Dieter Lenzen, President of Universität Hamburg, welcomes AGYA Principal Investigator, Prof. Dr. Verena Lepper, together with the AGYA Co-Presidents (2016 – 2017) Prof. Dr. Ahmad Sakhrieh (left) and Prof. Dr. Kalman Graffi (right) at the AGYA Evening on 'Migration: Arab and German Approaches to Migration and Education' in the premises of the Universität Hamburg.

As a port city and space of transition, Hamburg was the most suitable place for the AGYA Annual Conference in March 2017 on the cross-cutting issue of migration. The topic is tackled from different perspectives of the AGYA Working Groups.



Fact Finding Mission Tunis Beit Al-Hikma, April 2017

AGYA Co-Presidents and AGYA members meet Abdelmajid Charfi, President of the Tunisian Academy of Sciences, Letters and Arts Beit Al-Hikma during their Fact Finding Mission in Tunis in April 2017

Egyptian Minister of Higher Education and Scientific Research visits Germany and AGYA/ MoU, Berlin/Germany, July 2017

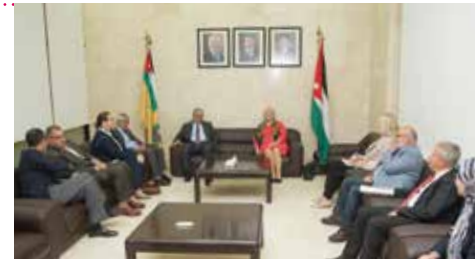
In July 2017, the Egyptian Minister of Higher Education and Scientific Research, Prof. Dr. Khaled Abdel Ghaffar, visited AGYA during his official diplomatic trip to Germany. In a milestone event, a Memorandum of Understanding between AGYA and Egypt's ASRT was formally agreed.



AGYA Annual Conference, Amman/Jordan, October 2017

Panelists meet before the international discussion on 'Arab and German Funding Institutions: Their Roles and Future Perspectives' at the University of Jordan.

AGYA member Dr. Christian Fron (Ancient History/Heidelberg) explains his fellow members the history and archeological importance of the Al-Khazneh temple in Petra. The scientific excursion took place during the AGYA Annual Conference in Jordan.



Exhibition Opening 'Arab and German Tales – Transcending Cultures' Doha/Qatar, April 2018

H.E. Hans-Udo Muzel, Ambassador of the Federal Republic of Germany to the State of Qatar, festively opens the exhibition 'Arab and German Tales – Transcending Cultures' at the Qatar National Library's (QNL) together with AGYA Principal Investigator, Prof. Dr. Verena Lepper, H.H. Sheikha Moza bint Nasser, Chairperson of Qatar Foundation for Education, Science and Community Development (QF) and H.E. Dr. Hamad Al-Kawari, Minister of State and vice-prime minister.



Salon Sophie Charlotte 2018: 'Sprachkunst & Kunstsprache', Berlin/Germany, January 2018

On 20 January 2018, the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW) held its annual 'Salon Sophie Charlotte'. AGYA participated in this prestigious event with a rich program of discussions, lectures and art performances, entitled 'Sprachkunst & Kunstsprache' (Language Art & Artificial Language).



International AGYA Symposium 'Chances and Challenges of Interdisciplinary North-South-South Cooperation', Beirut/Lebanon, March 2018

How can we foster interdisciplinary North-South-South research cooperation? What are the prospects for an enhanced cooperation in the future? These and other questions were discussed by high-ranking members of Lebanese universities as well as German and Arab research organizations at the International AGYA Symposium on 'Chances and Challenges of Interdisciplinary North-South-South Cooperation' on 5 March 2018 in Beirut.



AGYA Annual Conference, Kuwait City/Kuwait, 2018

Opening of the AGYA Annual Conference in Kuwait (f.l.t.r.: AGYA Co-President Dr. Jan Friesen, AGYA Principal Investigator, Prof. Dr. Verena Lepper, AGYA Co-President Prof. Dr. Ahmad El-Guindy, H.E. Sheikh Sabah Khalid Al Hamad Al Sabah, Deputy Prime Minister and Minister of Foreign Affairs of Kuwait, Prof. Dr. Adnan Shihab-Eldin, Director General of the Kuwait Foundation for the Advancement of Sciences (KFAS), Former General Director of the Kuwait Institute for Scientific Research).

'Science for Society': The AGYA Science Outreach Slam during the AGYA Annual Conference in Kuwait in April 2018 was a live-competitive event designed to showcase research projects that have encouraged the public's interest in science.

Opening of the AGYA Annual Conference in Kuwait in April 2018 (f.l.t.r.: MinR Frithjof A. Maennel, Deputy Director General of International Cooperation in Education and Research, BMBF, Bonn/Germany, H.E. Karlfried Bergner, The Ambassador of the Federal Republic of Germany to Kuwait, AGYA Principal Investigator, Prof. Dr. Verena Lepper, H.E. Dr. Mohammed Al-Fares, Minister of Education and Higher Education of the State of Kuwait)





AGYA Annual Conference, Cairo/Egypt, October 2018

The AGYA Annual Conference in Cairo in October 2018 featured the induction of AGYA's newest cohort of interdisciplinary scholars and the matriculation of the first generation of AGYA members into the AGYA Alumni Network.

Opening of the AGYA Regional Office at ASRT and Conference on 'Women's Empowerment in Science, Technology and Innovation (WE-STI 2018)', Cairo/Egypt, October 2018

On 25 October 2018, AGYA celebrated the official opening of its new Regional Office located within the Egyptian Academy of Scientific Research and Technology (ASRT) in Cairo. To mark the special occasion, AGYA and ASRT co-hosted an international conference on Women's Empowerment in Science, Technology and Innovation (WE-STI 2018), bringing together scholars, decision-makers and key societal stakeholders from Egypt, Germany and Kuwait to exchange lessons and strategies for boosting women's presence and leadership in STEM fields.



Salon Sophie Charlotte 2019: 'The Right Measure', Berlin/Germany, January 2019

AGYA's contribution to the Salon Sophie Charlotte 2019 explored the various connotations of the German expression 'Das Rechte Maß' (The Right Measure) from the mathematical and natural science idea of measurement to the philosophical and legal idea of balance and good judgement.



AGYA alumni Kirill Dmitriev (left) and Bilal Orfali (right) invited renowned Lebanese architect Bernard Khoury (2nd from right) and prominent German architect and design professor Friedrich von Borries to the Aesthetic Salon of the BBAW to debate human scale as a basic principle in design as well as the political aspects of architecture.



AGYA Annual Conference, Berlin/Germany, April 2019

AGYA provided its members at the 2019 Annual Conference in Berlin, with direct insight into the core locations and actors involved in German science policy and innovation. In meetings with high-ranking politicians like former Vice-President of the Bundestag and Minister of Education and Research, Dr. h.c. Edelgard Bulmahn, AGYA members benefited from dialogue and sharing perspectives with defining figures in German science policy.

Keynote Lecture 'Data Science and Artificial Intelligence', Berlin/Germany, April 2019

Organized as public event at AGYA's Annual Conference 2019 in Berlin, Mathematician and BBAW President Martin Grötschel delivered a thought-provoking public keynote on what can be expected from data science today.



Exhibition Opening 'Cinderella, Sindbad & Sinuhe: Arab-German Storytelling Traditions', Berlin/Germany, April 2019

With artifacts ranging from ancient Egyptian papyri to the stories of the Brothers Grimm and Arabian Nights, the trilingual exhibition (German/Arabic/English) 'Cinderella, Sindbad & Sinuhe: Arab-German Storytelling Traditions' highlights mutual influences and shared motifs between Arab and German narrative traditions across 4,000 years. The festive opening of the joint exhibition by AGYA and Ägyptisches Museum und Papyrussammlung, Staatliche Museen zu Berlin, at Neues Museum was the cultural highlight of the AGYA Annual Conference 2019 in Berlin.

AGYA – Joint Research Across Geographical and Disciplinary Borders

AGYA supports high-quality research jointly conducted by Arab and German scholars across a broad range of disciplines and regions. The interdisciplinary research projects contribute to the development of innovative academic approaches and new networks and yield valuable scientific results that are presented in a diverse array of conferences, workshops, publications, and policy briefs.

Arab and German exchange (North–South cooperation) plays as much a role as collaboration between scholars from different Arab regions (North–South–South cooperation).

Within AGYA, the members structure and realize their projects in three different funding formats: as a 'Working Group Project/Meeting', 'Tandem Project' or 'Idea Competition'. Moreover, since 2019, AGYA offers Research Mobility Projects and AGYA alumni have started implementing their own research projects.

Since 2016, more than 150 projects have been implemented. These projects have taken place in more than 60 cities in over 30 countries.

AGYA Working Groups

To date, AGYA members have established six thematic working groups. During their meetings, the working group members discuss, develop, and implement new interdisciplinary research projects that address the following topics: *Arab and German Education; Common Heritage and Common Challenges; Energy, Water and Environment;*

Health & Society; Innovation; and Transformation. In Working Group Projects under these headings, several Arab and German AGYA members jointly tackle questions of common concern through an interdisciplinary approach, with a focus on enhancing North–South–South cooperation.

Arab and German Education

Common Heritage and Common Challenges

Energy, Water and Environment

Health and Society

Innovation

Transformation

Arab and German Education

Education is a fundamental aspect of advancing sustainable human development. It plays a crucial role not only in establishing and expanding the base for human resources in any given society, but also in the redistribution of human capital. By mapping and comparing the current situation in different regions and creating a network for knowledge exchange, the AGYA Working Group on *Arab and German Education* seeks to identify best practices to increase the capacity of emerging students and scholars.

AGYA members from various disciplines come together in the *Arab and German Education* Working Group to initiate projects on the boundary between science and society. In collaborative projects, they promote innovative pedagogical tools in science education to attract and foster the talent of young students—girls and boys alike, in Arab countries and in Germany—to the STEM subjects (science, technology, engineering and mathematics) at an early stage.

Analyzing and discussing challenges and potential opportunities in the fields of education, research and innovation, the members aim to give recommendations for reducing educational disadvantages, increasing the capacities of emerging students and scholars, and improving education systems.

Here we would like to present you three project examples to illustrate the various topics that the members of the *Arab and German Education* Working Group have tackled.

'Impact of Education on Employment: Cases from Germany and Arab Countries'

Raising awareness among stakeholders about the necessity of reform at the level of tertiary education was the aim of the International AGYA Conference 'Impact of Education on Employment: Cases from Germany and Arab Countries' which took place in Tunis, Tunisia in May 2018. It provided a platform for knowledge exchange between German and Arab experts. The conference brought together scholars, decision makers, stakeholders from different universities, companies and ministries to discuss 'lessons learnt' from Germany and Arab countries for the education system and its impact on employment and how the collaboration between the different organization can help to solve the problems that graduated youth are facing in Tunisia.



'AGYA Math Olympiad Camps'

Reaching the next mathematical level was the proclaimed goal of students participating in 'AGYA Math Olympiad Camps' held in Doha, Qatar, in January and November 2017. The 'AGYA Math Olympiad Camps' at Texas A&M University at Qatar provided young participants between the ages of 14 and 16 with an outstanding opportunity to engage in mathematical activities and foster their talents. Solving mathematical challenges by learning new problem-solving techniques and mathematical concepts was at the heart of the project carried out by the AGYA Working Group on *Arab and German Education*. The camps served as an ideal preparation for international math competitions, such as the International Mathematical Olympiad (IMO). The participants were guided and coached by German and Qatari math trainers with major experience in national and international math competitions and Olympiads.



'Mathematics and Internationalization: Innovative Approaches in Research and Education'

Mathematics is a fundamental instrument for human and societal development. For thousands of years, mathematics has contributed to progress in technology and science, and keeps on doing so. For this reason, the AGYA working group on *Arab and German Education* focuses, among other topics, on mathematics, 'the queen of sciences' (Carl Frederick Gauss). In November 2017, the international AGYA panel discussion 'Mathematics and Internationalization: Innovative Approaches in Research and Education' in Doha, Qatar, underlined the potential of 'math camps' to serve as a platform for productive interaction between students, trainers, teachers and university professors from Qatar and Germany. High-ranking experts from Arab countries and Germany discussed the social dimensions of mathematical education, as well as innovative pedagogical tools for teaching mathematics. The panel discussion took place in the framework of the Qatar Germany 2017 Year of Culture and was organized together with Texas A&M University at Qatar.



Common Heritage and Common Challenges

Global exchange processes, migration and refugee issues throughout history, shared cultural heritage and current socio-cultural developments as manifested in works of literature, music, visual arts and architecture – all of these topics relate to the question of common heritage and common challenges in the Arab world and Germany. The interdisciplinary AGYA Working Group *Common Heritage and Common Challenges* aims at achieving a deeper understanding and raising awareness of processes of cultural exchange. To do so, the group combines different research approaches across a variety of disciplines, such as literature, media, sociology, psychology, history, philosophy and religious studies.

The agenda of the *Common Heritage and Common Challenges* Working Group is as diverse as the interests of its members. These include media transitions and the impact of communication technologies in Arab societies; food as a cultural signifier; and glass blowing and glass art, among others. Several research projects and conferences have also focused on islands like Malta, Sicily, and Zanzibar as contact zones, providing a complex and insightful field for the exploration of the historical entanglement and dynamics of cultural exchange between Arab countries and Germany in present times.

'Dynamics of Cultural Impact: Arab and German Cultural Heritage of Zanzibar'

The history of 'Apfelstrudel' cannot be told without examining the history of cultural exchange and trade between Zanzibar and Germany in the 19th century, or without acknowledging Zanzibar's very long Arab merchant tradition stretching back to the 7th century. In the 16th century, Zanzibar became an overseas territory of the Sultanate of Oman; in 1832, the royal court of Sultan Sayyid Said was even moved from Muscat to Zanzibar. The conference 'Dynamics of Cultural Impact: Arab and German Cultural Heritage of Zanzibar' (1–6 August 2017 in Salalah, Oman) explored interdisciplinary aspects of cultural impact, cultural memory and cultural heritage from a comparative historical perspective in relation to the 'case study' of cultural entanglements between Zanzibar, Oman and Germany.



'Insatiable Appetite: Food as a Cultural Signifier'

Like no other item of daily life, food intimately connects the world's population to the process of globalization – a process that is by no means a recent development. Europe and the Mediterranean, in particular, have been connected by alimentary exchange since antiquity. Yet, while food serves to build bridges, it also serves a potent marker of social, religious, gendered and ethnic differences. The conference 'Insatiable Appetite: Food as a Cultural Signifier' aimed to explore the cultural as well as scientific ramifications of food and foodways in Europe and the Mediterranean in a *longue durée* and interdisciplinary perspective. During the three-day event, 22 invited participants from eight different disciplines presented and discussed the following topics: food and social status; prohibitions and prescriptions; body; intoxication; abstinence; scarcity and humanitarianism; and food and gender. The conference concluded with a dinner entitled 'Discovering Abbassid Food' that introduced participants to more than 20 staple dishes and desserts from pre-modern Arab culinary tradition. The conference took place from 12–14 May 2016 in cooperation with the American University of Beirut and the Orient-Institut Beirut.



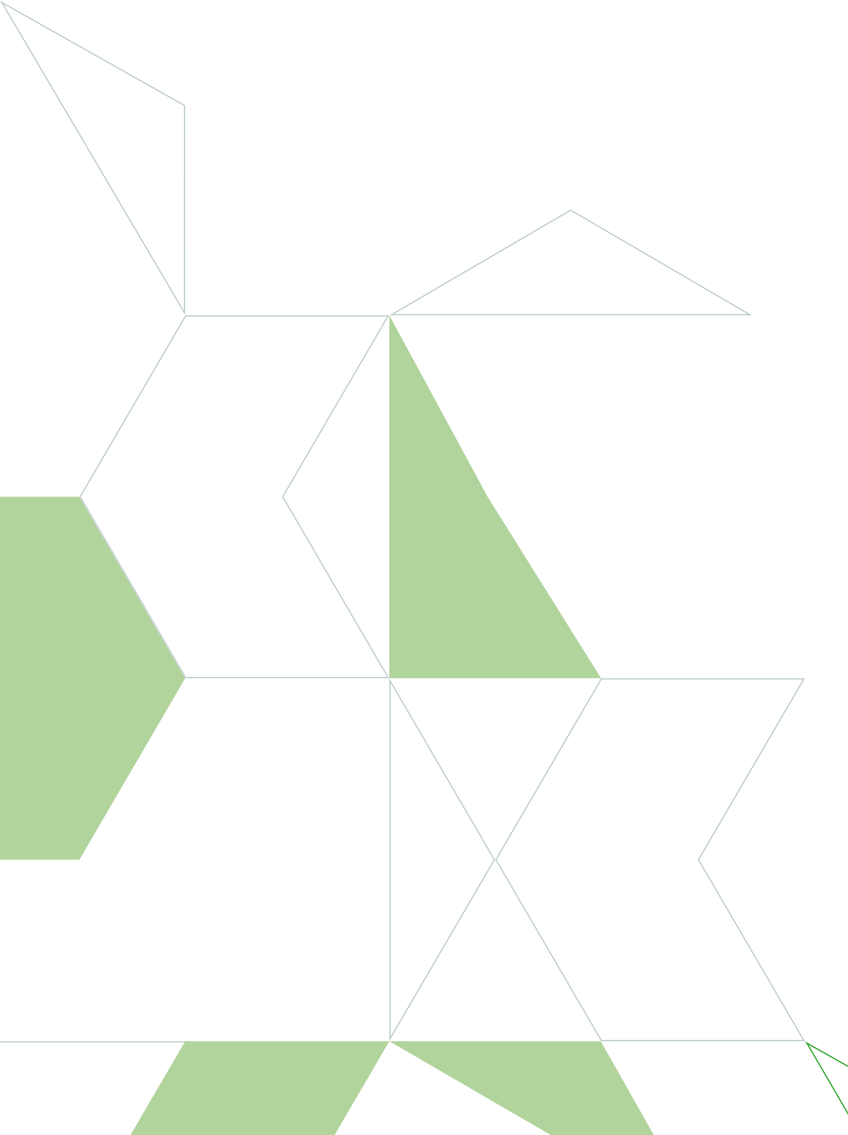
'Hot Encounters: Glass Blowing and Glass Art in the Middle East and Europe'

Glassblowing is believed to have originated in the region of Syria in the 1st century BC, and rapidly spread throughout the ancient world. The use of the blowpipe and closed molds were important technical advances of the Roman Empire. Ennion, a master of Roman glass living and working around 1–50 BC in Sidon, what is today Lebanon, was the first to produce decorated mold-blown glass and is said to have revolutionized glass-making. Since then, glass production has become an intangible cultural heritage shared between Europe and the Arab world. Contemporary glass artists follow the tracks of former craftsmen and have become global travelers between Western and Eastern glass art traditions. From 28–30 January 2016, the AGYA Working Group *Common Heritage and Common Challenges* invited researchers and artists to Berlin to bring attention to historical and contemporary approaches of glass art production. The lecture program was followed by a hands-on workshop, in which AGYA members were trained in glass fusing and painting techniques. The event was carried out in cooperation with Berlin Glas e.V. and with the kind support of the Museum für Islamische Kunst – Staatliche Museen zu Berlin.



Energy, Water and Environment

Finite resources are a worldwide challenge, ranging from limited supplies of fossil fuels to the availability of fresh water, food and a clean and habitable environment. In the Arab world and Germany, strategies to protect the environment and attain sustainable energy supplies differ locally, including at the governmental and individual levels. The AGYA Working Group *Energy, Water and Environment* draws on the perspectives of its members from across the natural and technical sciences to explore and address local challenges related to finite resources. Activities range from projects on treating water via nanotechnology to exploring means of producing bioenergy. Other activities include outreach and teaching workshops on advanced technologies to further promote STEM education. Working Group members not only aim to address German and Arab perspectives through the projects and activities they carry out, but also seek to incorporate interdisciplinary aspects, such as social and economic considerations, to address the different local needs that exist in both worlds.



'Practical Training Course on Solar Energy'

Sunlight provides the energy source that powers the earth's ecosystem. Harnessing this energy provides a renewable, sustainable and low carbon energy source that can potentially replace other unclear, expensive and inconvenient sources. Furthermore, solar energy systems can easily be decentralized, giving people more active ownership and security over their energy source and, in turn, the efficient use of energy. Increasing energy efficiency is the cheapest and most effective way to cut carbon emissions and reduce global energy demands. The development, use and research of solar energy technologies is one of main focus areas of the Center for Environmental and Smart Technology (CEST) in Egypt. Located in the world's solar belt, Egypt enjoys excellent solar availability, with direct solar radiation for more than eight hours a day. The AGYA 'Practical Training Course on Solar Energy' from 2 – 6 February 2017 in Fayoum, Egypt, offered an ideal opportunity for Egyptian and Arab students to study renewable energy systems both from theoretical and practical points of view. More than 500 students applied to the open call for participation in the course, but only 20 applicants were selected. They were trained in, inter alia: solar radiation and thermal systems; pyranometer and solar path finder; photovoltaics; polysun software and solar desalination. The training course was realized in cooperation with Fayoum University and the Center for Environmental and Smart Technology (CEST).



'Women in STEM Education and Career Pathways: Boosting Opportunities and Awareness'

Although women increasingly study and work in the life sciences, they remain vastly outnumbered by men in degree programs relating to engineering and technology. In STEM research and R&D jobs generally, their levels of participation similarly pale in comparison to those of men. The AGYA workshop 'Women in STEM Education and Career Pathways: Boosting Opportunities and Awareness' from 13 to 16 January 2017 in association with the American University of Ras Al Khaimah, United Arab Emirates, considered key challenges involved in bringing about greater equality, visibility and opportunities for women within STEM fields. Over the course of the two-day workshop, prominent women from Germany and different Arab countries within the fields of science, technology, engineering and math delivered lectures on their own personal experiences and how the situation could potentially be improved.



'Food Security, Migration and Climate Change'

Our food systems, economies and communities are all adapted to the climate we currently live in, making them all susceptible to the effects of climate change. Food availability, accessibility and utilization, as well as the stability of food systems, are strongly linked to dimensions of climate change. Agricultural-based livelihood systems face the increasing risk of crop failure and the loss of livestock due to extreme weather events and new patterns of disease. As a consequence, large parts of rural populations are likely to suffer displacement, loss of livelihoods and forced migration. The AGYA workshop 'Food Security, Migration and Climate Change' from 30 November to 2 December 2016 brought together AGYA members and high-ranking experts from Arab countries, Greece and Germany to discuss links and present research results and approaches from a wide range of disciplines regarding food availability in times of climate change and mass migration movements. The workshop was carried out in cooperation with the Agricultural University Athens (AUA) and the International Center for Biosaline Agriculture (ICBA) in Dubai.



Health and Society

Cancer, diabetes and heart conditions have dramatically increased in our societies, urging the questions: Why have these non-infectious diseases spread so widely in the past decades? How do local forms of lifestyle and nutrition influence such an increase? How do traditional and cultural conceptions about illness, healing, medicine and food relate to these diseases?

Health and medical conditions are embedded within an increasingly complex, globalized and multifactorial context. As such, the AGYA Working Group on Health and Society recognizes and respects the need for an interdisciplinary approach to studying and addressing disease, thus bringing together members from medical disciplines as well as socio-cultural sciences. Together, the Working Group members map, explore and compare contemporary health challenges faced in Germany, the Arab World and in migrant communities. The Working Group examines how culturally-specific health policies and legislation impact the wellbeing of citizens and how healthcare programs can be improved by taking into account the social and ethical dimensions of health.

'Role of Science Journalism in Societies: Arab-German Perspectives'

Science journalism is a field at the intersection of research and society. It simplifies the results of natural and social science research for wider, non-specialized audiences. By doing this, it brings science and society closer, and makes scientific innovations relevant to the public's everyday life. In December 2017, an AGYA workshop on the 'Role of Science Journalism in Societies: Arab-German Perspectives' brought young science journalists from the Arab region and Germany together with AGYA members to facilitate an exchange of ideas, subjects and problems in science journalism. This multi-disciplinary workshop discussed questions such as the role of science journalism in the Global North and the Global South from a comparative perspective, as well as the opportunities and challenges for science journalism in the digital age.



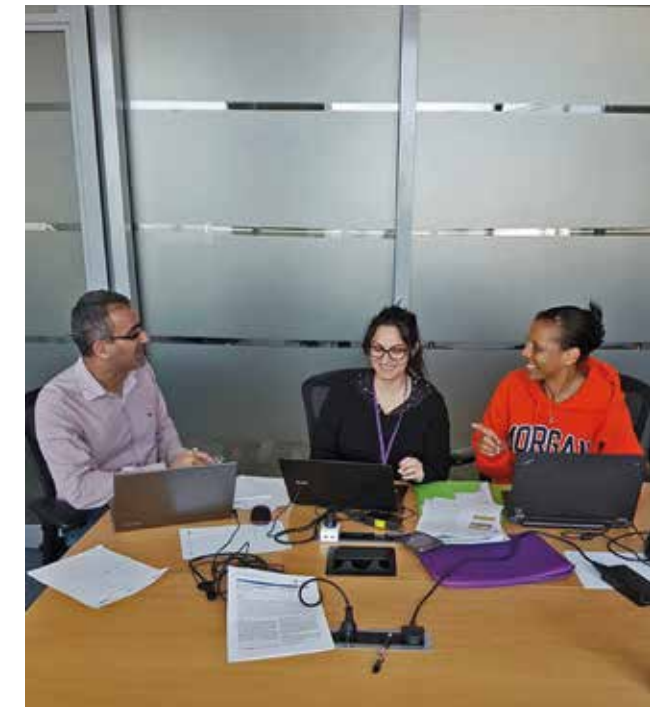
'Health in All Policies: An Approach to Achieve Sustainable Development Goals in the Eastern Mediterranean Region'

Public policies of different government sectors other than health also affect the status of health in any given society. Therefore, policy coherence across multiple sectors can help prevent governments from promoting trade, industrial development policies or other initiatives harmful to citizens' health and well-being. To combat non-infectious diseases, governments need to coordinate health-oriented policies across different governmental sectors. A critical step in this direction would be to effectively implement the recommendations of international treaties for health improvement, such as the World Health Organization (WHO) Framework Convention on Tobacco Control. In February 2017, the AGYA Working Group *Health and Society* collaborated with the WHO Regional Office for the Eastern Mediterranean (WHO/EMRO) to conduct a workshop in Cairo on 'Health in All Policies (HiAP): An Approach to Achieve Sustainable Development Goals'. Sixty renowned experts and government officials from different sectors in eight Arab countries (Egypt, Jordan, Lebanon, Oman, Saudi Arabia, Sudan, Tunisia and the United Arab Emirates) were invited, along with representatives from the League of Arab States and Germany, to reflect on how policies in various fields affect the general health situation of societies.



'Diseases of Affluence' (conducted in Germany, Jordan, Oman, Sudan, Tunisia, Turkey and the United Arab Emirates)

During the last two decades, the prevalence of non-communicable diseases (NCDs) in the Middle East has dramatically increased, giving rise to the highest diabetes rates in the world. Although special health programs have been established to improve health awareness among the local population in many of the affected states in the region, the prevalence of NCDs has not decreased. It thus remains an open question as to whether and what extent these health programs have impacted local health awareness. To date, however, reliable comparative data on health awareness in the Middle East is not available. The multi-regional survey project on 'Diseases of Affluence' conducted by AGYA's Working Group *Health and Society* aims to fill this research gap by generating firsthand statistical data on health awareness in different countries of the Middle East and Germany.

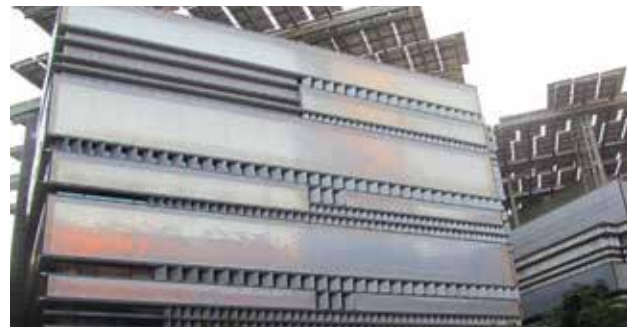


Innovation

New technologies and their acceptance in society are strong economic and social factors. Yet, adopting new technologies and transitioning to final products can be challenging, making it essential to understand the interconnected processes needed to shape a sustainable culture of innovation. The AGYA Working Group *Innovation* enables individuals and institutions to support new technologies and achieve an understanding of innovation and its impact on society. Because sharing innovations around the globe is key for sustainable development, the group works to identify and map best practices for establishing new forms of North-South-South cooperation.

'Smart Cities and Buildings in the Arab countries and Germany: Identifying Key Components for Green Transformation'

Germany and many countries in the Arab world are implementing the concept of 'smart cities'. Whereas the focus in Germany strongly rests on a transformation of the existing urban infrastructure, many projects in Arab countries, like Masdar City in the United Arab Emirates, develop new infrastructure. These different approaches allow for mutual learning so as to find transnational and interdisciplinary solutions that can serve as blueprint modules for enhanced smart city concepts. In the project 'Smart Cities and Buildings in the Arab countries and Germany: Identifying Key Components for Green Transformation', the AGYA Working Group *Innovation* carries out a socio-economic evaluation of key smart city components as well as a case study on buildings, developing an ICT (Information Communication Technology) solution suitable to be embedded in existing buildings that do not have advanced infrastructure. The aim of the project is to identify key modules for smart cities which can work both in the Arab and German context.



'Twinning for Innovation'

Academic collaboration and the establishment of sustainable international networks are integral for innovative solutions. AGYA's project 'Twinning for Innovation' started out as an effort to identify, map and analyze the so-called Fabrication Laboratories (FabLab) in the Arab world and Germany. The 'Twinning for Innovation' project aims to establish transnational initiatives for technology and knowledge transfer on the grassroots level. So far Bahrain, Egypt, Jordan, Kuwait, Lebanon, Morocco, Oman, Qatar, Tunisia and the United Arab Emirates have been included. 'Twinning for Innovation' is conducted in cooperation with Helmut Schmidt University (HSU) and OLab Hamburg.



Idea Challenge 'MAKE A Difference!'

The aim of the 2017 international idea challenge called 'MAKE a Difference!' was to enhance creativity, social commitment, constructive collaboration and knowledge exchange between students, engineers, designers, makers, labs and other drivers of innovation. Interested applicants were invited to submit ideas for the development of artifacts that could create social and ecological impact. After the evaluation process, nine finalists from around the world were invited to the fabrication laboratory in Hamburg (OLab Hamburg) for a development workshop. During the workshop, the finalists had the opportunity to build prototypes of their ideas. 'MAKE a Difference!' was conducted in cooperation with Helmut Schmidt University (HSU) and OLab Hamburg.



Transformation

Recent popular uprisings in the Middle East and North Africa (MENA) have had a deep impact not only on the societies in which they occurred, but also on academic disciplines and scientific relations between Europe and Arab countries. Many of the developments that have taken place in the region since 2010/2011 are not exceptional, but reflect and accelerate global trends. The AGYA Working Group *Transformation* aims to better understand these changes and trends through a transcultural, interdisciplinary perspective. The group explores how ideas, norms and concepts are diffused in a context of mutual exchange and how scientific relations between Europe and the MENA region can be improved.

'The EU and the Arab World: Current Challenges for Cooperation'

The high numbers of irregular migrants and refugees currently traversing the Mediterranean pose particular political and humanitarian challenges for the EU and Arab world. These challenges were among the topics discussed at the workshop on 'The EU and the Arab World: Current Challenges for Cooperation' held in Brussels in December 2017. Fifteen AGYA members from Egypt, Jordan, Lebanon, Libya, Morocco, Russia, Syria and Germany met with high-level representatives of the European Commission, the European External Action Service, the Council of the European Union and the European Parliament to discuss contemporary challenges related to forced migration, as well as topics like security, cultural approaches to cooperation and transformation developments.



'Refugee Transfers in the Euro-Arab Mediterranean Zone: Tying the Past with the Present'

Forced migration is shaping up to become one of the biggest challenges of the 21st century: According to the United Nations, over 65 million people globally are refugees or internally displaced. The perception of migration movements today marks a significant shift from the past; security aspects have now come to the fore, rather than opportunities for exchange. Countering this approach, the AGYA Working Group on Transformation organized a workshop on 'Refugee Transfers in the Euro-Arab Mediterranean Zone: Tying the Past with the Present' with the aim of discussing the role of migrants and refugees as transmitters of knowledge and contributors to social and cultural development. The AGYA workshop was organized in cooperation with Heidelberg University and took place at the Lebanese American University (LAU) in Byblos in April 2017. The workshop was part of an ongoing effort by the Arab-German Young Academy of Sciences and Humanities (AGYA) to research, analyze and find answers to modern-day forced migration and integration.



'Academia in Transformation'

The publication 'Academia in Transformation' aims to provide an insightful and illuminating view of the transformation of the academic landscape in the aftermath of the 2010–2011 uprisings in the MENA region. The events that started in 2010 in Tunisia have certainly reshaped the language of agents and scholars, contributed to a shift in study focus and sometimes challenged dominant theoretical approaches, such as those on change and stability in the region. At the same time, many of the academic developments that have taken place in the context of the 'Arab Spring' both reflect and accelerate global trends. The articles analyze if and how academic discourse has changed since the uprisings and reflect how the still-ongoing transformation processes shape lines of inquiry, methodological tools and academic institutions in different disciplines. The series includes contributions from AGYA members on linguistics, communication studies, political science, computer science, archaeology, philosophy, law and Islamic studies.



Kohstall | Richter | Dhoub | Kastner [eds.]

Academia in Transformation

Scholars Facing the Arab Uprisings

AGYA Research Cooperation Across Working Groups

Working Groups also cooperate to jointly investigate research topics from different angles. To approach timely topics such as migration or topics of common interest like storytelling, the AGYA Working Groups can join forces to conduct research projects.

'Cinderella, Sindbad & Sinuhe: Arab-German Storytelling Traditions'

Storytelling is as old as humanity and at the foundations of civilizations worldwide. Just as cultural practices, religious beliefs, and other aspects of society change through interaction with others, so do stories, too. Tales weave between cultures, with each adapting a common story to fit their own unique context. The results are stories that are distinct, yet familiar. The exhibition 'Cinderella, Sindbad & Sinuhe: Arab-German Storytelling Traditions' at Neues Museum Berlin, which opened in April 2019, traces how some of the best known tales from both Arab and German – and wider Western – cultures developed from common roots, evolving over the centuries to reflect the societies that adopted them. The exhibition is a joint enterprise between the Arab-German Young Academy of Sciences and Humanities (AGYA) and Ägyptisches Museum und Papyrussammlung (Egyptian Museum and Papyrus Collection), Staatliche Museen zu Berlin. The scope of the trilingual show (German/Arabic/English) reaches from Ancient Egyptian papyri to the stories of the Brothers Grimm and Arabian Nights, to modern pop-up books and comics. Around 100 objects from the collections of the Staatliche Museen zu Berlin and different lenders highlight aspects of a cultural history spanning 4,000 years.



'Migration and Transnational Cooperation in Education, Research and Innovation'

Migration is a timely topic that has virtually exploded on the global level, becoming a worldwide concern. Europe is currently experiencing a massive wave of migration. However, 90% of all migrants from Arab countries actually live in the Arab world itself, in countries like Lebanon, Jordan, Egypt or Tunisia. Only a small percentage of migrants from the Arab world arrive in Europe or Germany. AGYA members across different Working Groups regularly discuss how to approach the contemporary challenges of migration and transnational cooperation from a joint Arab-German perspective, with different individual Working Groups contributing from different angles. With the Conference on 'Migration and Transnational Cooperation in Education, Research and Innovation' in May 2016, the Working Groups *Arab and German Education* and *Innovation* provided new impetus to examine migration issues, particularly from Arab perspectives, and discussed education across borders. About 200 high-ranking Arab and German scholars and leading university representatives from 19 countries participated in the conference at the German Federal Ministry of Education and Research (BMBF) in Berlin. Based on this event and experience, AGYA published a policy report on migration, which explores how scientific and academic practice can cope with the challenges of the latest immigration wave to Europe.



'Fluid Nature, Fluid Cultures: Malta and the Mediterranean'

4 Days – 11 Venues – 14 Research Disciplines: The AGYA Working Group *Common Heritage and Common Challenges* invited all AGYA members from every Working Group to an innovative conference format on the island of Malta. The conference not only brought together renowned researchers from the sciences and humanities to develop new interdisciplinary perspectives on the Mediterranean, but also used unconventional venues, such as a water treatment plant or the Inquisitor's Palace. Behind this innovative approach was the idea to investigate Malta as a physical and cultural space by on-the-spot visits to sites that were related to the panel topics being discussed. For centuries, the island of Malta has been at the center of cultural, military and commercial encounters throughout the Mediterranean. Its dynamic character is also visible in natural phenomena. In processes of exchange, islands act as outposts or as gateways. Therefore, Malta constitutes an excellent micro-level case study to research the complex global processes of exchange.



Idea Competitions

Out of the members’ competing ideas, the AGYA General Assembly grants awards and funding to the best projects. The following projects won the idea competitions in 2016, 2017 and 2018.

Raising Awareness for Rare Diseases

Every year, AGYA members develop innovative inter-disciplinary ideas to pitch to their fellow members for the Idea Competition that takes place within the framework of the General Assembly. The idea that obtains the most votes receives funding to realize the proposed project. In 2018, the winning idea was developed by AGYA member, Olfa Messaoud, who specializes in human genetics at the Institut Pasteur de Tunis, University of Tunis El-Manar. In a three-day AGYA conference, held on 28 February 2019 in Tunis, Messaoud and her AGYA colleagues gathered health care professionals, decision makers and general public and civil society organizations with the aim to raise awareness for rare diseases. Although by definition of the EU a rare disease affects fewer than 1 in 2000 people, rare diseases altogether affect up to 600 million people worldwide. Rare disorders are usually severe, chronic and disabling and require specialized and long-term care. In most cases, the diagnosis is an essential step for an adequate health care support. However, the fact of being rare, they are usually neglected and many patients remain miss-diagnosed and consequently have poor prognosis.

The conference was a major event in Tunisia and in the MENA region to celebrate the world rare disease day for 2019.



‘Academics in Solidarity’

The current flow of refugees and the presence of armed conflicts in many countries of the Middle East and North Africa considerably hamper the exercise of academic teaching and research in the region. Many scholars are affected by this crisis, either because they were forced to flee their home country or because their academic mobility has been significantly restricted. This development not only causes major challenges for the people directly concerned, but also impairs cooperation between Arab and German higher education and research institutions.

With the ‘Academics in Solidarity’ project, AGYA and Freie Universität Berlin have teamed up to launch an initiative that seeks to open up new perspectives for refugee academics and aims to provide a safe space for independent research. On the basis of a peer-to-peer mentoring program, the project intends to create a network of solidarity that not only fosters academic freedom, but also promotes the advancement of durable research collaboration between excellent Arab and German scholars. Since autumn 2018, the project, led by AGYA alumnus Florian Kohstall, is funded by the BMBF.

Comparative Study on the Level of Acceptance of Social Robots

One application area of social robots is the support of elderly people who will eventually need care assistance. Already today, the demand for professional caregivers exceeds the current supply. With the technological progress in robotics and affective computing, social robots will become more and more important for taking over certain tasks, such as housekeeping, healthcare and therapy.

As social robots will increasingly become our caregivers, we need to determine the technological, societal and ethical potentials and limitations of their usage. Under what conditions can they become companions and what are the ethical issues that might arise in such a human-robot relationship? What are the challenges for social robots in different societies?

These are the topics that AGYA member Oliver Korn, Professor for Human Computer Interaction (HCI) at Offenburg University, addresses together with other AGYA colleagues in his comparative study on perceptions of social robots. The findings of this study aim to facilitate the identification of areas of application that are both within technological reach and ethically acceptable. Thus, the project creates added value, as future research projects will be able to make informed decisions on what routes to take.

‘AGYA is where innovative ideas meet, and scientific achievements follow.’

Oliver Korn
Computer Sciences, Germany,
AGYA member since 2016

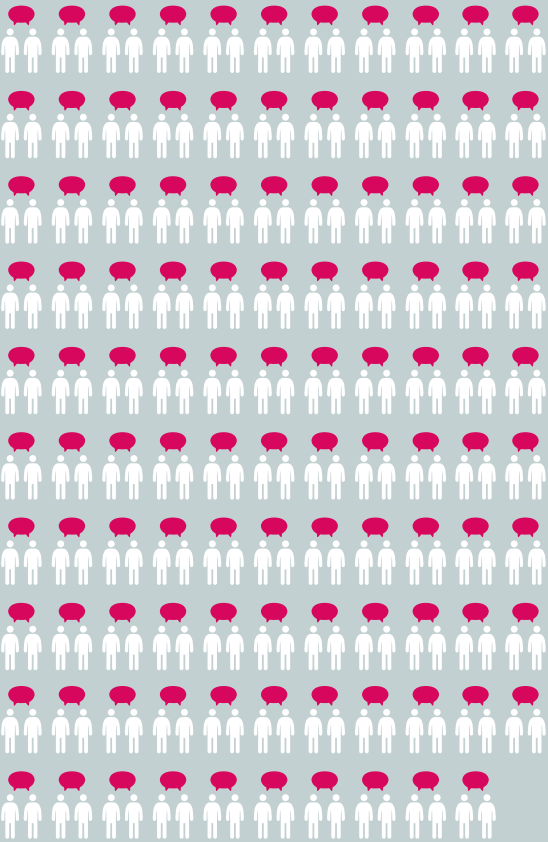


Tandem Projects

Tandem Projects offer AGYA members the opportunity to carry out joint research projects and academic exchange on a bilateral level and beyond their disciplinary boundaries. Under this format, at least one Arab and one German member of AGYA work together on a topic related to their research interests.

AGYA members who engaged in Tandem Projects contributed expertise from 27 academic disciplines. Most frequently represented are: Biology (28); Islamic Studies (19); Engineering (18); Physics (17); Arabic Studies (14). The AGYA Tandem Projects were carried out in 23 countries in the Arab world, Europe and Germany.

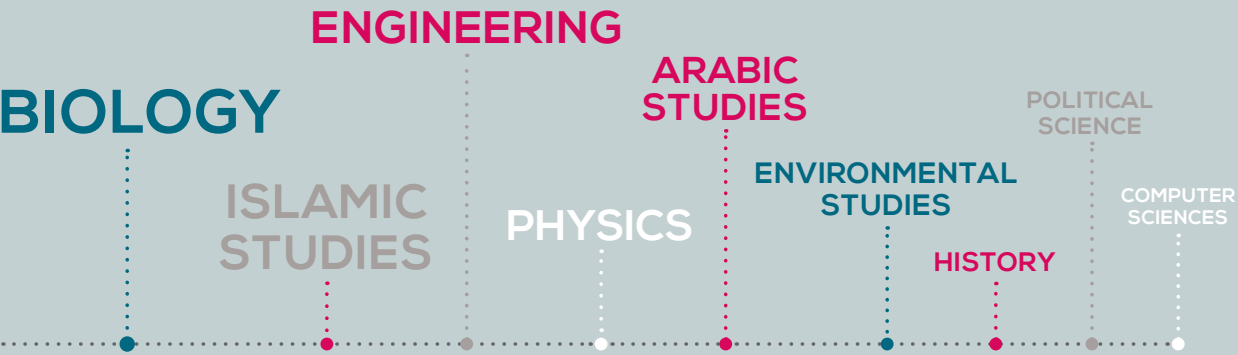
From research visits and student exchanges over inter-disciplinary conferences and workshops to joint field trips: From 2016 – 2018, 109 AGYA Tandem Projects have been carried out.



The AGYA Tandem Projects were carried out in **26** countries in the Arab world, Europe and Germany.



From 2016 – 2018, **109** AGYA Tandem Projects have been carried out.



AGYA members who engaged in the Tandem Projects contributed expertise from **27** academic disciplines. Most frequently represented are:



'A Multi-Analytical Approach for the Characterization of Artworks and Archeological Materials from Archeological Sites in Sudan'

Abdalla Elbashir – *Chemistry, Sudan*
Verena Lepper – *Egyptology, Germany*



'The Potential of Halophytes to be Used as a Bioenergy Resource'

Ahmed Debez – *Plant Biology, Tunisia*
Skander Elleuche – *Biotechnology, Germany*

in cooperation with
Jan Friesen – *Eco-Hydrology, Germany*
Carsten Montzka – *Soil Science, Germany*



'Tangible and Intangible Heritage of Maaloula'

Ammar Abdulrahman – *Archeology, Syria*
Jens Scheiner – *Islamic Studies, Germany*



'Buddha: The Story of a Christian-Muslim Saint'

Kirill Dmitriev – *Arabic Literature, Germany*
Bilal Orfali – *Islamic Studies, Lebanon*



'Tunisia at the Crossroads: Media and Politics in a Changing Region'

Hanan Badr – *Communication & Media Studies, Egypt*
Carola Richter – *Communication & Media Studies, Germany*



'Professionalizing Arab Media Through Capacity Building for Young Journalists'

Hanan Badr – *Communication & Media Studies, Egypt*
Carola Richter – *Communication & Media Studies, Germany*



'The Rise of the Incredible Salicornia Power Plant'

Ahmed Debez – *Biotechnology, Tunisia*
Jan Friesen – *Hydrology, Germany*

in cooperation with
Skander Elleuche – *Molecular Biology, Germany*
Carsten Montzka – *Hydrology, Germany*



'Teaming up Crop Genomics Research in Arab and German Institutions'

Salma Balazadeh – *Molecular Biology, Germany*
Henda Mahmoudi – *Biotechnology, Germany*

'Moroccan-German Partnership on Modeling and simulations of physical properties of nanomaterials'

Lalla Btissam Drissi – *Physics, Morocco*
Samir Lounis – *Physics, Germany*



'Practicing "Blickwechsel": Entangled Perspectives on Theory, Arts and History in the Field of Arabic Literary Studies' – International Bilingual Summer School

Bilal Orfali – *Islamic Studies, Lebanon*
Barbara Winckler – *Modern Arabic Literature & Culture, Germany*



'Professionalizing Arab Media Through Capacity Building for Young Journalists'

Hanan Badr – *Communication & Media Studies, Egypt*
Carola Richter – *Communication & Media Studies, Germany*



'Comparative Perspectives on Refugee Politics' – Student Exchange Seminars

Tamirace Fakhoury – *Political Science, Lebanon*
Carola Richter – *Communication & Media Studies, Germany*



'Parliaments in the Middle East and North Africa'

Florian Kohstall – *Political Science, Germany*
Jan Völkel – *Political Science, Egypt*



'Cross-Cultural Exchange via Translation – Exchange for Students from Germany and Tunisia'

Anis Ben Amor – *Literature, Tunisia*
Barbara Winckler – *Arabic & Islamic Studies/Arabic Literature, Germany*



'Mapping and Strengthening the Regenerative Medicine Landscape in Egypt'

Mohamed Abou El-Enein – *Regenerative Medicine, Germany*
Samar Saad Eldeen Azab – *Pharmacy, Egypt*



'Investigating the Bioactive Properties of Natural Products of GCC Origin'

Younis Baqi – *Bioorganic and Pharmaceutical Chemistry, Oman*
Laila Prager – *Anthropology of the Middle East, Germany*



'Development of Laserduo Laser Cutter Machine – Summer Internship Tunisia/Germany'

Tobias Redlich – *Mechanical Engineering, Germany*
Henda Mahmoudi – *Biotechnology, United Arab Emirates*



'Language, Identity and Cultural Exchange: Early Arabic Studies in Europe and the Middle East'

Kirill Dmitriev – *Arabic Literature, Germany*
Bilal Orfali – *Islamic Studies, Lebanon*



'Entangled Practices of Abstinence: Sufism and Greek Orthodox Christianity in the Middle East'

Julia Hauser – *Global History, Germany*
Bilal Orfali – *Islamic Studies, Lebanon*

'Contaminants of Emerging Concern (CEC): from reclaimed water to food crops'

Olfa Khelifi – *Ecosystem Engineering, Tunisia*
Carsten Montzka – *Hydrology, Germany*



Selection of Publications

AGYA aims to create lasting impact at the interface of science and society. It also seeks to give excellent early-career researchers a voice to contribute to current debates from a new angle and with a fresh perspective. Below you can find a selection of project-based AGYA publications.

‘Academia in Transformation’

‘Academia in Transformation’ analyses if and how academic discourse has changed in the aftermath of the 2010/11 uprisings in the MENA region and reflects on how the still-ongoing transformation processes shape lines of inquiry, methodological tools, theoretical approaches and academic institutions in different disciplines.

Edited by Kohstall / Richter / Dhoubib / Kastner
‘Academia in Transformation. Scholars Facing the Arab Uprisings’ | Nomos, 2018 | ISBN 978-3-8487-2829-9
Kohstall, F., Richter, C., Dhoubib, S. & Kastner F. (eds.). (2018). Academia in Transformation. Scholars Facing the Arab Uprisings. Nomos. ISBN 978-3-8487-2829-9

‘Arab-German Dialogue on Migration’

The policy report titled ‘Arab-German Dialogue in Migration’ includes policy recommendations that reflect the results of several AGYA projects and, in particular, the discussions that took place at the AGYA conference on ‘Migration and Transnational Cooperation in Education, Research and Innovation: An Arab-German Dialogue’ that took place in May 2016.

AGYA (2017). ‘Arab-German Dialogue on Migration. Policy Report of the International AGYA Conference on Migration and Transnational Cooperation in Education, Research and Innovation’. Berlin, 2–3 May 2016

‘Cinderella Sindbad & Sinuhe. Arabisch-deutsche Erzähltraditionen. Arab-German Storytelling Traditions.’

This volume complements the exhibition ‘Cinderella, Sinbad & Sinuhe’ and explores the rich cultural heritage of narrative traditions in Germany and the Arab world. The publication is primarily a critical and inspiring engagement of leading Arab, German and international scholars and experts on how knowledge and human imagination are transmitted through time and space. The publication presents various essays on ancient texts like: the Westcar Papyrus, the story of Sinuhe and the Epic of Gilgamesh.

Lepper, V. M. (ed). (2019). ‘Cinderella Sindbad & Sinuhe. Arabisch-deutsche Erzähltraditionen. Arab-German Storytelling Traditions.’ Kulturverlag Kadmos Berlin. ISBN 978-3-86599-426-4

‘Date Palm Tree (Phoenix dactylifera L.): Natural Products and Therapeutic Options’

Dates as medicine? From the more than 2000 date variations in existence, AGYA members Younis Baqi and Mohamed Abou El-Enein chose an Omani date fruit to investigate its medical potential for fighting diseases such as cancer. Their research paper focuses on the date fruit extracts and their benefits in individual health promoting conditions and highlights their applications as useful to the pharmaceutical and nutraceutical industries in the development of natural compound-based industrial products.

Baqi, Y. et al. (2017). ‘Date Palm Tree (Phoenix dactylifera L.): Natural Products and Therapeutic Options’. In: Frontiers in Plant Sciences, 8:845. doi: 10.3389/fpls.2017.00845

‘Facing the Challenge of Sustainable Bioenergy Production: Could Halophytes Be Part of the Solution?’

In an interdisciplinary and transnational project, AGYA members Ahmed Debez (plant biologist), Carsten Montzka (soil scientist), Skander Elleuche (biotechnologist), and Jan Friesen (eco-hydrologist) investigated how halophytes (salt-tolerant plants) could play a role in the field of sustainable energy production. Their findings are published in the research paper: ‘Facing the challenge of sustainable bioenergy production: Could halophytes be part of the solution?’

Debez, A., Belghith, I., Friesen, J., Montzka, C. & Elleuche, S. (2017). ‘Facing the challenge of sustainable bioenergy production: Could halophytes be part of the solution?’. J. Biol. Eng. 11:27. doi: 10.1186/s13036-017-0069-0

‘Halogenation of SiC for band-gap engineering and excitonic functionalization’

At the heart of future technologies is the understanding of materials at the nanoscale. A close scientific collaboration between Morocco and Germany led by AGYA members Samir Lounis and Lalla Btissam Drissi theoretically explores the family of low-dimensional materials. Next to exchanges and visits, the two research groups from Morocco and Germany have extended their common studies on the possible manipulation of physical properties of nano-materials. In their joint research paper, the partners demonstrated the possibility of engineering the optoelectronic responses of two-dimensional materials for far-reaching potential applications using functionalisation with halogens.

Drissi, L. B., Ramadan, F. Z. & Lounis, S. (2017) ‘Halogenation of SiC for band-gap engineering and excitonic functionalization’. In: ‘Journal of Physics: Condensed Matter’, 29 (45). doi: 10.1088/1361-648X/aa8b99

‘High Performance Liquid Chromatographic Methods for Analysis of Taurine in Energy Drinks after Pre-column Derivatization’

Food availability, food accessibility and food utilization as well as food as cultural signifier are topics that AGYA members jointly tackle in their projects. AGYA members Abdalla Ahmed Elbashir (University of Khartoum) and Andreas Thiel (University of Kassel) have joined forces in a couple of interdisciplinary research projects on food safety. Together, they validated simple and efficient methods for the detection of taurine in energy drinks.

Elbashir, A. et al. (2018): ‘High Performance Liquid Chromatographic Methods for Analysis of Taurine in Energy Drinks after Pre-column Derivatization’. In: Eurasian Journal of Analytical Chemistry, 13 (5). doi: <https://doi.org/10.29333/ejac/93422>

‘Insatiable Appetite: Food as Cultural Signifier in the Middle East and Beyond’

The volume explores the cultural ramifications of food and foodways in the Mediterranean, and Arab-Muslim countries in particular. It addresses the cultural meanings of food from a wider chronological scope, from antiquity to present, adopting approaches from various disciplines, including classical Greek philology, Arabic literature, Islamic studies, anthropology, and history.

Dmitriev, K., Hauser, J. & Orfali, B. (eds.). (2019). Insatiable Appetite: Food as Cultural Signifier in the Middle East and Beyond. Leiden; Boston: Brill. ISBN 978-90-04-40955-2

‘Social Robots: Technological, Societal and Ethical Aspects of Human-Robot Interaction’

From collaborative industrial work in education health and therapy, to social robots in shopping malls: the book covers different application areas and provides an overview of social robots and underlying technologies like motion tracking or recognition of emotions and vital data. Next to user studies on social robots, it presents a profound historical background and discusses both present and future ethical challenges.

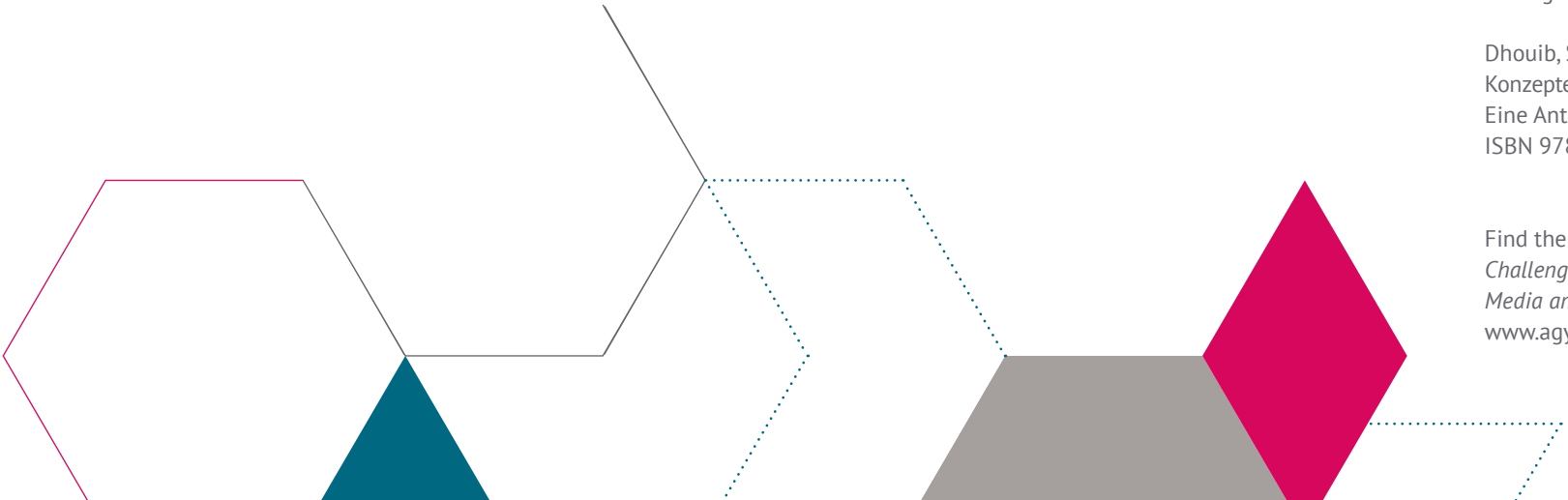
Korn, O. (ed). (2019). Social Robots: Technological, Societal and Ethical Aspects of Human-Robot Interaction. Springer. ISBN 978-3-030-17106-3

‘Tolerance and Intolerance in the Arabic Modernity’

The anthology ‘Tolerance and Intolerance in the Arabic Modernity’ by AGYA member Sarhan Dhoubib addresses the previous lack of any anthologies in the German language on the debate around the Arab project of Enlightenment in the second half of the 19th century until present times. The aim of this annotated translation is to broaden the understanding of scholarly works on the Near and Middle East beyond the typical Islamocentric focus to include perspectives on tolerance and intolerance in light of the entanglement of cultures.

Dhoubib, S., von Kügelgen, A. (eds.). (2019), Konzepte von Toleranz und Intoleranz in der arabischen Welt. Eine Anthologie. Klaus Schwarz Verlag. ISBN 9783879974832

Find the **AGYA reports** on ‘Higher Education in Tunisia: Challenges and Opportunities’ and ‘Dynamics of Change: Media and the Public Sphere in Egypt’ here: www.agya.info/press-and-publications/publications/



Innovative Forms of Science Communication

Science is complex and manifold. All the more, appropriate formats are needed to convey scientific information and results to a wider audience and to make knowledge accessible in an innovative way and from a fresh perspective – for example by combining scientific content and visual art.

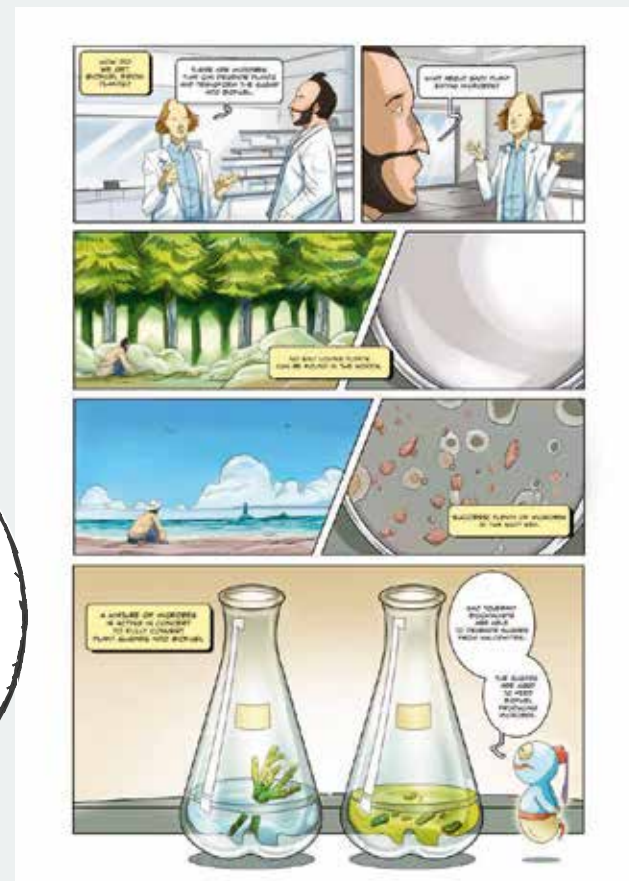
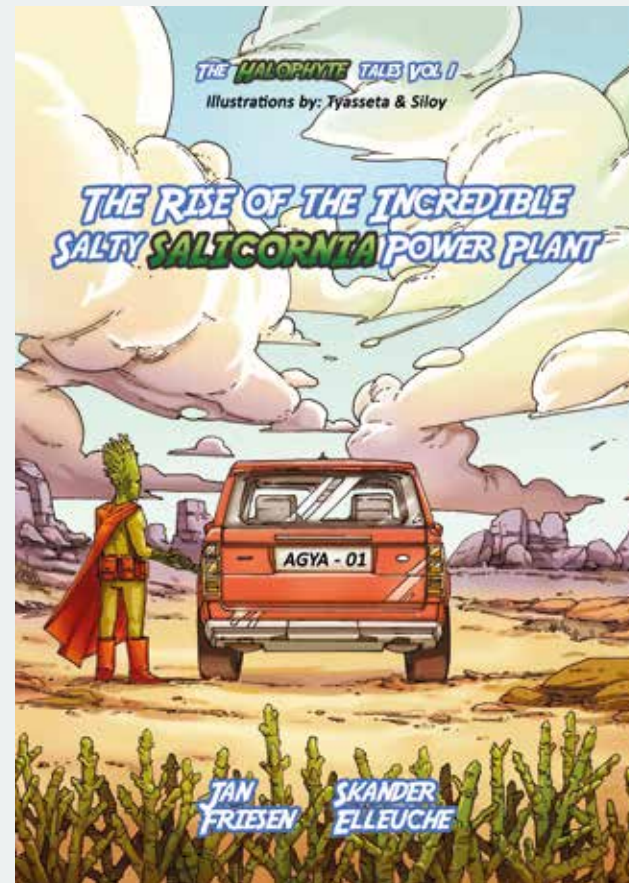
The 1st AGYA Science Comic

The 1st AGYA Science Comic of the AGYA members Skander Elleuche (Biotechnologist) and Jan Friesen (Eco-hydrologist), designed by the illustrators Tyasseta & Siloy, investigates how salt tolerant plants (halophytes) could play a role in the field of sustainable energy production. The science comic entitled 'The Rise of the Incredible Salty Salicornia Power Plant' presents the results of an interdisciplinary and transnational AGYA research project. The graphic novel is based on the research paper 'Facing the challenge of sustainable bioenergy production: Could halophytes be part of the solution?' by AGYA members Ahmed Debez (Plant Biologist), Skander Elleuche (Biotechnologist), Jan Friesen (Eco-hydrologist) and Carsten Montzka (Soil Scientist).

Jan Friesen, Skander Elleuche: 'The Rise of the Incredible Salty Salicornia Power Plant', January 2018.
doi: 10.13140/RG.2.2.18899.48162

More information

www.agya.info/key-activities/agyacomicvol1



‘Communicating Science through Comics: A Method’

Scientists are trained to tell stories, scientific stories. Training is also needed to comprehend and contextualize these highly nuanced and technical stories because they are designed to explicitly convey scientific results, delineate their limitations, and describe a reproducible 'plot' so that any thorough reenactment can achieve a similar conclusion. Although a carefully constructed scientific story may be crystal clear to other scientists in the same discipline, they are often inaccessible to broader audiences. AGYA Co-President Jan Friesen, Helmholtz-Zentrum für Umweltforschung – UFZ, and AGYA member Skander Elleuche have published a paper on 'Communicating Science through Comics: A Method' where they suggest a flexible framework to translate a complex scientific publication into a comprehensible comic format.

Jan Friesen, Skander Elleuche:
'Communicating Science through Comics: A Method',
August 2018. | doi: 10.3390/publications6030038

TO BE CONTINUED...



In the Making: Comic on Social Robots

When a valuable robot is stolen from a renowned research laboratory, Detective Kira is charged with the case. During her investigations, she dives deep into the world of social robots. Meeting not only with scientists but also with anti-robot activists, Kira is confronted with varying perspectives on progress and automation. The comic is realized at the Affective & Cognitive Institute of Offenburg University. The 'Social Robots Comic' is based on a research project on acceptance of social robots by AGYA member Prof. Dr. Oliver Korn together with his colleagues of the AGYA Working Group *Innovation*.

AGYA – Academic Excellence Combined with Social Commitment

Benefits of Being an AGYA Member

AGYA offers its members the unique opportunity to develop and implement their ideas, visions, and projects within the framework of Arab-German research collaboration. AGYA members are excellent early-career researchers (3–10 years post-PhD completion) from various disciplines. Half of the members are based in Germany and half in Arab countries. At present, AGYA members are affiliated with research institutions in 16 Arab countries and Germany. Limiting the number of members to around 50 ensures that close cooperation is possible. Membership is granted for a period of five years, after which members obtain lifelong access to AGYA's alumni network of excellent researchers.

Benefits

- Realize your ideas and visions in the framework of Arab-German research cooperation and take an active part in the life of the academy.
- Implement innovative interdisciplinary research projects together with your fellow members with funding and support provided by AGYA.
- Commit yourself to joint initiatives on cutting-edge issues at the interface of science and society.
- Benefit from exclusive access to an international network of distinguished researchers and leading innovators.
- Enhance your academic career as well as your interdisciplinary and intercultural skills through tailor-made trainings.
- Increase your mobility through AGYA travel funds for participation in AGYA conferences and activities in mainly the Arab world and Germany.

How to Become an AGYA Member

Requirements

- Successful candidates are expected to have a proven record of research excellence in their field of specialization.
- Candidates with strong potential for academic leadership will be given priority.
- Membership requires active engagement. As AGYA is a working academy, successful candidates are expected to dedicate a significant amount of time to AGYA activities and the funded projects they initiate in the framework of the academy.
- Commitment to realizing interdisciplinary research projects in collaboration with AGYA members and other partners is essential.
- Elected members will be required to attend the General Assembly meeting at the next annual conference of AGYA.

Eligibility

- Researchers from any field of life sciences, natural sciences, humanities, social sciences, technical sciences and the arts are eligible to apply.
- Applicants must be affiliated with a university or a research institution in Germany or any Arab country (Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, the United Arab Emirates and Yemen).
- Applicants must be early-career researchers. At the time of application, the candidate's doctoral degree should have been conferred no less than three and no more than ten years ago.
- Applicants must have full command of English, the working language of AGYA. No knowledge of German or Arabic is necessary.

AGYA Offices & Contact

AGYA Offices

Administrative support for the academy's activities and members is provided by AGYA's office in Germany, housed at the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW). In addition to its Berlin office, AGYA also maintains a regional office in Cairo at the Academy of Scientific Research and Technology (ASRT).

Berlin Office

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Regional Coordinators

AGYA has two Regional Coordinators based in the Arab world, in Tunis and Beirut, who act as focal points between AGYA members and current and future partners in the region.

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