Dear InterAcademy Partnership members,

There is a growing awareness that ‘health’ is much more than just ‘medicine’. This is one of the many reasons why our network of academies of medicine and academies of science with active medical sections has recently joined with the academies of sciences around the world to create one single ‘InterAcademy Partnership’ (IAP) and our old name was changed from the ‘InterAcademy Medical Panel’ to ‘IAP for Health’. We already benefit in many aspects from this unique and large academic network in our interdisciplinary programmes and, by joining forces, our activities are becoming more effective.

Many of the initiatives of IAP for Health actively promote an interdisciplinary concept. We can think, for example, of our activities on the social determinants of health, on urban health and on the One Health concept, among others. They are also in line with global thinking – such as the World Health Organization’s (WHO) 8th Global Conference on Health Promotion that took place in Finland in 2013, and the Rockefeller Foundation-Lancet Commission’s 2015 publication on Planetary Health. Indeed, a review of the 169 targets laid out as part of the 2030 Sustainable Development Agenda shows that those related to health are mapped not only to Sustainable Development Goal (SDG) #3, ‘Good Health and Well-being’, but are spread across many of the other SDGs, too, including, for example, SDG #2, ‘Zero Hunger’, SDG #4 ‘Quality Education’, SDG #6, ‘Clean Water and Sanitation’ and SDG #13 ‘Climate Action’.

Responding to these challenges, the ‘Health in All Policies’ (HiAP) approach requires, by necessity, contributions from many disciplines. In this regard, we are pleased to see academies coming together to implement the IAP project, ‘Improving Scientific Input to Global Policymaking: Strategies for Attaining the Sustainable Development Goals’ that has been running for more than a year now.

Indeed, as interdisciplinary think tanks, academies can play a critical and influential role in pursuing the HiAP agenda by publishing ‘Calls for Action’, which are brought to the attention of national governments and international organizations such as the UN and WHO, as well as the G7 and G20 summits of heads of state, giving science a voice in helping to set global agendas.

Such an interdisciplinary way of analysing problems and suggesting global solutions is also central to the work of the ‘M8 Alliance’ of Academic Health Centres, Universities and National Academies, of which IAP for Health is a founding member. The M8 Alliance also provides the intellectual support for the World Health Summit (WHS), held each October in Berlin, Germany, with annual WHS Regional Meetings in earlier in the year, and specific WHS expert meetings around the world. This year’s WHS in Berlin (15-17 October) is not only providing an opportunity for members of IAP for Health to meet, but will also be examining issues at the health-policy nexus and striving to develop solutions and recommendations to take to policy-makers.

Health is one of the most important topics for the individual person and for society at large, but ensuring adequate health for all is also one of the most complex challenges we face. Bringing together the full range of expertise among our membership is what makes IAP unique and we will use this strength to tackle the paradox that science makes greater and faster progress than ever in the history of humankind but less than half of the world’s population benefits from it. Academia has to take responsibility. IAP is ready to live up to this challenge.

Detlev Ganten and Depei Liu – Co-chairs, IAP for Health
Jordan will welcome science and policy leaders from all over the world to the 8th World Science Forum (WSF) on 7-11 November 2017 under the theme ‘Science for Peace’. IAP will hold a session on its global project ‘Food, Nutrition Security and Agriculture’. Paul Moughan (AASSA), Endashaw Bekele (NASAC), Eduardo Bianchi (IANAS) and Robin Fears (EASAC) will present the current findings of each network within this project, while the session will be chaired by Joachim von Braun (EASAC). Furthermore, EASAC has been invited to hold a session on ‘Science-based advice to policymakers in an era of alternative facts’. The Global Young Academy (GYA) is represented at the WSF, too. The thematic session, jointly organised with IAP and UNESCO will explore how the global science community is supporting the SDGs, through the lens of three different constituencies: the established science community, the next generation of science leaders, and the general public, focusing on the MENA region.

In addition, IAP has played a key role in developing the first ever WSF plenary session for young scientists, ‘Young Researchers Identify Skills of the Future to Advance Science Diplomacy and Society’, as well as a side event (on 6 November) that will convene some 50 young scientists, many selected from among those nominated by IAP member academies, who will discuss the issue of ‘Avoiding the Weaponisation of Research’.

### IAP FOR HEALTH

Following a symposium on traditional medicine in Beijing, China in September 2015, a collection of 24 case studies has been developed into a book ‘Exploring Traditional Medicine’. It was officially launched at ICTAM IX, the 9th International Congress on Traditional Asian Medicines, held in Kiel, Germany, on 6-12 August 2017. The IAP for Health projects aims to address the need of a better understanding of the scientific basis of traditional medicinal practices, including their safety and effectiveness.

Twelve international participants have joined members of the Georgian Academy of Medical Sciences (GAMS) and other local experts for the First International Workshop and Ninth International Symposium on ‘New steps in Critical Care Medicine’ held in Tbilisi, Georgia, 20-22 September 2017. The workshop followed on from the visit of IAP Coordinator, Peter McGrath, to Tbilisi last year, when an agreement for more involvement of the international medical community in a regular Georgian event was reached. The international experts were nominated by member academies of IAP for Health.

21 physicians below the age of 40 from 17 countries will be meeting for the 7th leadership training workshop of the Young Physician Leaders (YPL) Programme. As before, the event is being held in Berlin in conjunction with the World Health Summit (WHS), 12-14 October 2017. Following the leadership training workshop, this year’s YPL cohort will present a session in the main WHS on ‘Better Leadership: Improved health’.

### IAP FOR RESEARCH

Work continues on the two IAP for Research projects, ‘Improving Global Policymaking for the SDGs’ and ‘Harnessing Science, Engineering, and Medicine to Address Africa’s Challenges’, which are exploring how the academies can contribute more effectively to global and regional policymaking, respectively.

Recognizing that most policy is implemented at the national level, the emphasis on both projects is to engage IAP members and regional networks, as well as national young academies and the Global Young Academy (GYA). Three pillars underpin both projects: (i) mobilizing academies to support UN (global) and African Union (Africa) policy frameworks through surveys and awareness-raising; (ii) building the capacity of academies through practical action and sharing experience; and (iii) fostering new partnerships with global and regional stakeholders, and looking at academies within wider systems of science policy advice/support.

Both project working groups have now planned their third meetings during which they will hear from local experts about how to build effective cooperation between researchers and governments to develop and implement
evidence-based policies that support the SDGs.

**Global policymaking (SDGs) project**

The SDGs working group will meet in Beijing, China, in early November and will be hosted by the Chinese Academy of Sciences. Since their last meeting in Paris in February, the working group has developed a publication, ‘Supporting the Sustainable Development Goals: A Short Guide for Science Academies’, which is intended to serve as a guide to the SDGs process and provide mapping of the UN landscape. A searchable online repository of SDG-related reports that academies have published since 2014 is also being created and will be available in the coming weeks. Finally, the working group is developing webinars to familiarize interested stakeholders in a range of ongoing SDG-related activities.

Working group members have also participated in Executive Committee or Board meetings of the four IAP regional networks (IANAS, EASAC, NASAC and AASSA). The project is exploring the possibility of supporting regional workshops to engage interested academies of science, engineering and medicine, as well as young academies to discuss the imperative for academies and scientists to support the SDGs, focusing on those most pertinent to the region. The outcomes of these workshops will feed into the project’s final report. You can follow the project here.

**Harnessing SEM in Africa project**

The Africa project working group will meet in Abuja, Nigeria, following the Annual Meeting of African Science Academies (AMASA) in late November and will be hosted by the Nigerian Academy of Science. Following their February meeting in Addis Ababa, the working group divided into five subgroups and progress has been made within each. Similarly to the SDG guide mentioned above, a short guide to the African Union (AU) and Science, Technology and Innovation Strategy for Africa (STISA) 2024 is under development. A three-tiered approach for engaging the African diaspora has been agreed upon and an action plan will be developed in Abuja. Members of the subgroup on science leadership attended the Worldwide Meeting of Young Academies in July 2017 and are developing an action plan in follow-up to the feedback received during this meeting. The small grants programme, which intends to (i) stimulate regional cooperation of academies, senior and young, and (ii) develop new conversations and new partnerships with national, regional and pan-African bodies within the context of STISA 2024 and/or the UN SDGs has selected four winners out of 12 applications and the projects are now under way. Finally, representatives from the subgroup focused on building relations with the AU and the New Partnership for Africa’s Development (NEPAD) attended the STISA 2024 Monitoring and Evaluation Committee meeting to gain a better understanding of where academies and their members can best contribute to the STISA 2024 process. You can follow the project here.

If you have any questions about either IAP project, then please get in touch with the project secretariat at projects@iapartnership.org.

**IAP for Science**

The programme for the International Workshop ‘Assessing the security implications of genome editing technology’, jointly organised by IAP, EASAC, the US National Academies of Sciences, Engineering and Medicine (NASEM) and the German National Academy of Sciences, Leopoldina, is available for download here. The event took place in Hanover, Germany, on 11-13 October, and is being supported financially by the Volkswagen Foundation and the Moore Foundation.

Several recent publications underline the topicality of responsible research practices in the fast evolving fields of genome editing and synthetic biology. The Swiss Academies of Arts and Sciences have released a brochure on ‘Misuse potential and biosecurity in life sciences research’, where security-related risks of life science research are addressed, while the Australian Academy of Science has released a discussion paper on synthetic gene drives in Australia, which examines the potential benefits and risks of gene editing technology.

Also on this theme, IAP recently joined with TWAS and the Organization for the Prohibition of Chemical Weapons (OPCW) to host the second ‘Workshop on Policy and Diplomacy for Scientists: Introduction to responsible research practices in chemical and biochemical sciences’, held on 12-14 September in Trieste, Italy. (The first such workshop was hosted by the Academy of Science of South America in October 2016).

IAP has also joined with the US NASEM to coordinate a series of regional workshops for scientists being organized by the secretariat of the Biological and Toxin Weapons Convention (BWC). The first of these was held in Kiev, Ukraine, on 21-22 September, while the second will be held in Jordan, possibly in January 2018.

**FROM IAP AFFILIATED REGIONAL NETWORKS**

The 2017 AASSA International Symposium on ‘Realizing the Full Cycle of Research and Development: From bench to the community’ was held in conjunction with the AASSA Executive Board meeting 2017 at Tagaytay, Philippines, in June, AASSAC launched its policy report on ‘Valuing Dedicated Storage in Electricity Grids’ at the start of EU Sustainable Week (EUSEW) in the Palace of the Academies, Brussels.
the Philippines, on 21-23 September 2017. The event was jointly organized by AASSA and the National Academy of Science and Technology, Philippines. **IANAS** will present a book on ‘Inquired Based Science Education. Promoting changes in Science Teaching for the Americas’ on 2 November 2017 in Cordoba, Argentina.

**IAP Activities Around the World**

ECO Science Foundation (ECOSF), Children’s Science Instructors (CACSI), Children and Youth Science Centre of CAST (CYSCC), Chinese Society for the History of Science and Technology (CSHST) and the IAP Science Education Programme (IAP-SEP) jointly organised the **2017 International Forum on Science Education** in Beijing, China on 2-5 July 2017. This forum focused on the theme of ‘The history of science education along the Belt and Road’. One of the speakers was IAP president and IAP for Health co-chair Depei Liu from China. The presentations can be found here.

Also in the area of science education, IAP was invited to attend a workshop on ‘Climate Change Education’ in Erice, Sicily, Italy, on 1-7 September 2017. The meeting was attended by some 35 experts in climate change science, education and related areas from some 15 countries. Among the participants was IAP Coordinator, Peter McGrath, and member of the **IAP Science Education Programme**’s Global Council, Carol O’Donnell of the Smithsonian Science Education Center (SSEC) in the USA. The aim of the meeting was to define a major global initiative to promote climate change education – especially in response to the internationally-agreed Paris Climate Agreement. The meeting was hosted by La Main à la Pâte – a French foundation committed to promoting inquiry-based science education (IBSE).

Likewise, the Africa, European, Mediterranean Academies for Science Education (AEMASE) convened its **third conference** (following those in Rome, Italy, in 2014 and Dakar, Senegal, in 2016) in Paris, France, on 3-4 October 2016. Among the presentations was an update on the development of the ‘Zika’ module on mosquito-borne diseases presented by IAP’s P. McGrath and Andre Radloff of the SSEC. Academies, especially those on English-speaking countries, will soon be asked to test-run a preliminary version of this new resource in their countries. As well as examining IBSE and other issues in science education, the AEMASE conference helped further develop ideas relating to the establishment of ‘Centres for Science Education in Africa, Europe and the Mediterranean’ (CESAME), which will hopefully be established in the coming years.

**FROM IAP MEMBER ACADEMIES / OBSERVERS**

The German National Academy of Sciences *Leopoldina* held its **2017 Annual Assembly** in Halle (Saale) 22-23 September, with this year’s theme ‘Genome Editing: Challenges for the Future’. The event saw distinguished international scientists come together to address new molecular biological methods that enable targeted genetic interventions. At the heart of the lectures and discussions were the ethical, legal and technological questions surrounding genome editing. Participants also discussed the use of genome editing techniques in plants and animals and in the context of human therapies.

Samuel Myers has been invited to present the 2017 Academy of Medical Sciences and The Lancet International Health Lecture in London on 13 November. Myers, Senior Research Scientist at Harvard T.H Chan of School of Public Health and Director of the Planetary Health Alliance, will speak on ‘Planetary Health: Protecting Global Health on a Rapidly Changing Planet’. Places can be booked here. The lecture will also be live-broadcast over the internet.

Following a **Science-Business-Dialogue conference** on 5-7 December 2016 in Pretoria, South Africa, the **Academy of Science of South Africa** (ASSAf) in collaboration with the German National Academy of Sciences *Leopoldina* will be hosting an international conference on Sustainable Use of Abandoned Mines in the SADC Region on 28-30 November 2017 in Johannesburg, South Africa. The conference will explore innovative approaches towards ensuring sustainable use of abandoned mines which, as legacy sites, frequently place a significant long-term economic and ecological burden on affected societies and environments. A particular focus will be placed on the use of closed mines to store and produce renewable energy and other innovative ways of remediation through turning potential liabilities into future assets.
IAP YOUNG SCIENTISTS ACTIVITIES & GLOBAL YOUNG ACADEMY (GYA)

The GYA has launched three ‘incubators’ or specialist groups. They cover the areas of ‘DIY Synthetic Biology’, ‘Science Advice’ and ‘Global Health’.

The ‘DIY Synthetic Biology’ incubator group organised a Policy Mini-Hackathon on Future Security Challenges of Genome-Editing Technologies on 11 October 2017, in conjunction with the International Workshop on ‘Assessing the Security Implications of Genome-Editing Technology’. The hackathon explored mechanisms by which DIY communities can contribute to the development of science policy for the rapidly advancing field of genome editing.

In May, IAP for Health Young Physician Leader (YPL) 2015 alumnus, HIV-activist and physician-scientist Edsel Maurice T. Salvaña (Philippines) was selected as a TED Fellow, joining a class of 21 changemakers from around the world who each delivered a talk from the TED Global stage in August in Arusha, Tanzania. And 2016 YPL alumnus M. Tasdik Hasan (Bangladesh) was invited as a panelist at the Next Generation Global Health Forum 2017, held on 14-15 July in Barcelona, Spain.

RECENT PUBLICATIONS

EASAC: Homeopathic Products and Practices: Assessing the evidence and ensuring consistency in regulating medical claims in the EU

NASAC: Women In Science: Inspiring Stories from Africa

IAP for Health: A Health Science Education Programme in Primary School (English version) - 3rd year

NASAC: NASAC e-bulletin: Vol. 4 Issue 1

All IAP and related publications are available online at: http://www.interacademies.net/Publications.aspx

UPDATES FROM IAP SECRETARIAT

Inform us: The IAP Secretariat invites all InterAcademy Partnership member academies and affiliated regional networks to contribute to the Meetings & Events page on the website by submitting information and details on workshops and further events they are organizing.

Stay informed: We encourage member academies and individuals to create their own Twitter accounts (if they have not already done so) and to follow IAP on Twitter at @IAPartnership: https://twitter.com/iapartnership. All items posted on IAP’s websites – and more – are shared via Twitter. We currently have 453 followers and are following 291 organizations and individuals.

Please contact the Secretariat with any queries about IAP activities, other feedback, or items for the next News Bulletin.

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