

# Contributions of IAP and its Biosecurity Working Group to the BWC

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## What is IAP?

- IAP is a global network of academies of science and medicine. With membership made up of leading scientists. Such academies have access to knowledge of leading-edge science and have a reputation for their credibility and independence.
- IAP is able to harness the expertise of the world's scientific, medical and engineering leaders to advance sound policies, promote excellence in science education, improve public health, and achieve other critical development goals.

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## What is IAP?



... organized into four regional networks
... and a thematic network.

More than 130 member academies around the world ...

#### Four strategic priorities:

- Provide evidence-based advice and perspectives on global issues;
- · Strengthen the global research enterprise;
- Develop a scientifically literate global citizenry;
- Strengthen the global network (of science academies).

## What does IAP do?



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## What does IAP do?



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## What does IAP do?

 Just as each academy has the potential to represent an authoritative voice nationally, this unified voice of academies aims to have great impact at the international level. IAP provides a collective mechanism and voice for science academies to further strengthen their crucial roles as providers of evidence-based policy and advice at both national and international levels. **Statements** – Short (2-3 page) documents that provide a synthesis the latest research findings on topical issues and provide advice and recommendations to policymakers.

Endorsed by the majority of member academies.

IAP Statement on Synthetic Biology May 2014



Joint IAP/IAMP Statement on Antimicrobial Resistance: A Call for Action November 2013

Translations - In Arabic, Chinese, French, Spanish...



How does

IAP do it?

#### IAP Statement on Synthetic Biology

#### **Strategic Priority 1:**

Provide evidence-based advice and perspectives on global issues.



IAP Statement on Synthetic Biology May 2014

#### Statement makes 5 recommendations:

- Prepare researchers for work in synthetic biology;
- Engage with the public and clarify ethical and social concerns;
- Consider alternative models for owning and sharing research outputs;
- Determine how synthetic biology should be regulated;
- Disseminate guidelines and call for scientific responsibility.

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#### **Strategic Priority 2:**

• Strengthen the global scientific enterprise.

Responsible Conduct: Dual-use Research



'Doing Global Science', a guide for students, teachers and lecturers. http://www.interacademies.net/Publications/29734.aspx

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# IAP Biosecurity Working Group

- IAP has mobilised its member academies to establish a long-standing Biosecurity Working Group (BWG)
- Chaired by Polish Academy of Sciences
- Also academies from: Australia, China, Cuba, Egypt, India, Nigeria, Pakistan, Russia, the UK and USA.
- IAP and its BWG are engaging with UN organizations such as the BWC and OPCW, bringing to their attention challenges and developments in different regions of the world, as well as assisting in disseminating information to the regions, e.g. by supporting the organization of outreach workshops.

www.iapbwg.pan.pl

#### IAP Biosecurity Working Group



Reviews of latest scientific advances and how they might impact on BWC.

Awareness raising activities, global activities:

- Geneva Advances in Design and Use of Microbial Production Systems – 9 Aug 2015
- Warsaw Biological and Toxin Weapons Trends Symposium – 13-15 Sept 2015.

Support to member academies for local activities:

- Pakistan 2013/14
- Morocco June 2016
- South Africa (with OPCW) Oct 2016.

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### Awareness raising



#### **Example:**

IAP provided support to the Pakistan Academy of Sciences to run a survey and a series of awareness-raising workshops on dual-use issues and responsible research, especially for life science students in remote areas of the country.





#### The World Academy of Sciences - TWAS

- PhD training
- Human capital mobility
  - Research support
  - Honouring excellence

- Regional

- Science diplomacy /policy

Offices and activities

Scientific capacity and excellence in the South

Like IAP, TWAS is based in Trieste, Italy, and receives core financial support from the Government of Italy. Both IAP and TWAS are administered by UNESCO.

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#### Science diplomacy

#### What is 'science diplomacy'?

- •Science *in* diplomacy Informing foreign policy objectives with scientific advice
- •Diplomacy *for* science Facilitating international science cooperation
- •Science *for* diplomacy Using science to improve international relations between countries.

Three 'summer courses' held in Trieste in partnership with AAAS: June 2014, June 2015, July 2016.

Science diplomacy

Management and a second a

AAAS-Royal Society, 2009

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## Challenges for a new era



Despite many countries' massive expenditure on military resources, the major challenges facing the world today - climate change, emerging diseases, poverty, etc - cannot be solved by military intervention.

Science diplomacy must be part of the

Science diplomacy must be part of the answer.

Daryl Copeland, Canadian Global Affairs Institute, speaking at the AAAS-TWAS Science Diplomacy summer course, June 2015. 'Bridging the Chasm': AAAS Science &Diplomacy journal

www.sciencediplomacy.org/perspective/2015/bridging-chasm



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#### Thank you

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