newsletter

Issue #14 | March 2018

Dear Reader,

t always gives me pleasure to address you in this editorial, presenting a selection of the many activities and endeavours our "ALLEA family" is undertaking. I am grateful to our ALLEA team in Berlin for their efforts dedicated to the newsletter, which I believe has contributed to quite an extent to the exchange of information and to the interaction between academies in Europe. This time, it is a special occasion for me to write this introduction, as this issue is my last one as President of ALLEA.

I would thus like to take the opportunity to thank all colleagues, partners, supporters, and followers who have helped build and shape our academies' network to become a prominent voice and source of scientific knowledge and excellence in Europe and beyond. I am particularly grateful to all ALLEA members for their continuous commitment, engagement and energy which we, in the current ALLEA Board, felt was encouraging and rewarding from the very first moment we embarked on this journey in April 2012.

Today, six years later, I am thankful and honoured that I was given the opportunity to serve ALLEA as President, especially so when looking at the fruits of the tremendous efforts of so many who have tirelessly contributed to ALLEA's growth and prosperity. So again today, I can proudly point you to a great number of successful and impactful outcomes our working groups have achieved over the past few months.

In this issue, one of our core activities remains the provision of advice and guidance to policy and decision-makers on the direction of research policy and funding in Europe. To that end, our working group dedicated to the next framework programme for research and innovation (FP9) has spearheaded a joint initiative of relevant European stakeholders representing the humanities and social sciences, putting forward concrete suggestions for transdisciplinary 'missions' in FP 9.

You can read about two statements from our experts on Intellectual Property Rights. Once again, they address issues of utmost complexity, involving numerous legal questions, which require thorough and highly specific competence and knowledge on the European level, which our working group is well positioned to provide.

Further attention has been given to the perennial issue of Open Access. Our permanent working group on Science and Ethics organised a well-attended workshop in Brussels to provide the research community with a platform for debate on ethics related aspects and unintended consequences of open access publishing. The revised ALLEA European Code of Conduct for Research Integrity is being published in all EU languages and is increasingly taken as the basis for designing research integrity systems across Europe and beyond.



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In closing, ALLEA's 2018 General Assembly in Sofia is approaching rapidly and I am pleased to see our secretariat collect plenty of registrations for this event on 16-18 May 2018. Our host, the Bulgarian Academy of Sciences, gives you a preview of their activities and mission. I am also very grateful to our colleagues from the "youngest" ALLEA working group on Truth, Trust and Expertise for setting up a highly exciting symposium, and I believe we will all be curious to learn more from the European academies project SAPEA, with which we teamed up for a science-policy event to reflect on how science advice could and should be shaped in the future. I particularly look forward to the award ceremony of the 5th ALLEA Mme de Staël Prize for Cultural Values, which Andrea Pető, Professor at the Department of Gender Studies at the Central European University in Budapest, will receive from the hands of European Commissioner Mariya

I hope to meet many of you in Sofia. I wish you an enjoyable reading!

With kindest regards,

Günter Stock

President of ALLEA

■ 2018 General Assembly: From Trusting Science to Shaping European Science Advice

This year's annual meeting is hosted by the Bulgarian Academy of Sciences (BAS) in the context of the Bulgarian Presidency of the European Union. Along with the ALLEA Madame de Staël Prize award ceremony, the conference will include two scientific symposia: "Science in Times of Challenged Trust and Expertise" and "Shaping European Science Advice: Insights and Experiences", the latter in collaboration with SAPEA (Science Advice for Policy by European Academies).

The conference programme will start with a light welcome lunch on 16 May at 11:30 and will continue with the opening of the scientific symposium "Science in Times of Challenged Trust and Expertise", organised under the scientific guidance of the ALLEA Working Group Truth, Trust and Expertise. Leading experts from a wide range of scientific fields will present and discuss the various notions of trust in science and expertise in the so-called "post-truth" era.

At 18:30 ALLEA will award its 2018 Madame de Staël Prize for Cultural Values. The European Commissioner for Digital Economy and Society Mariya Gabriel will hand over the Prize to the 2018 laureate Andrea Pető. Following the award ceremony, all participants are invited to join a festive cocktail

European Commissioner Mariya Gabriel will hand over the 2018 Madame de Staël Prize to Andrea Pető (Central European University)

reception at the National Archeological Museum of the Bulgarian Academy of Sciences, in close proximity of the meeting venue.

Shaping European Science Advice

On 17 May the European Academies' consortium SAPEA will organise the science-policy symposium "Shaping European Science Advice: Insights and Experiences". This event will bring together scientists and policy-makers to analyse and discuss experiences and lessons learned from the European Scientific Advice Mechanism (SAM) and other science advice systems.

In the afternoon, ALLEA will convene its annual internal Business Meeting (restricted to ALLEA Member



View of the 2017 ALLEA General Assembly conference held at the Hungarian Academy of Sciences. Credit: MTA

Academies' representatives).

Plovdiv

On the 18 May the Bulgarian Academy of Sciences offers to all participants a post-conference cultural programme. During a guided day trip, attendees will have the opportunity to explore

the city of Plovdiv, the 2019 European Capital of Culture. A participation fee of EUR 35-45 will be charged. Learn more on the official website of the event:

www.alleageneralassembly.org

Registration is Open!

Participation is free of charge, but registration is mandatory for all participants. Please also click **here** if you are a representative of an ALLEA Member Academy to register for the closed Business Meeting.

Partners









■ Six Years of Steering the European Federation of Academies

With the closure of this year's annual business meeting, ALLEA will have a newly configured Board for the period 2018-2020. Many of the current Board members have been in office since 2012, when Günter Stock was first elected President at the Academy of the Lincei in Rome, with Ed Noort appointed ALLEA Vice President. Subsequently, the Board elected Daniela Jezova from its midst as second Vice President during its constitutive meeting.

In 2015, the members of the ALLEA Presidency were re-elected for a second three-year term. Likewise, most of the delegates representing academies in the ALLEA Board today have been re-elected to this body in 2014 or 2016. Since 2012, the Board has comprised academies from Austria, Belgium, Bulgaria, Germany, Finland, Ireland, Israel, Italy, the



ALLEA Board Members during the 2017 ALLEA General Assembly at the Hungarian Academy of Sciences. Credit: MTA

Netherlands, Norway, Slovakia, Switzerland, and the United Kingdom.

For the past years, this continuity in the Board has provided stability, reliability and efficiency. Successfully steering the European federation of academies for six years, the Board has therewith paved the way for a continuous strategic expansion of ALLEA's activities, leading to increased visibility and impact, while at the same time consolidating trust and increasing engagement of ALLEA's currently 59 Member Academies from 40 countries in the Council of Europe region.

On 17 May 2018, the delegates of the ALLEA General Assembly will elect a new Board to serve alongside ALLEA's next President Antonio Loprieno, who was unanimously elected during last year's annual meeting in Budapest. Shortly before, at the beginning of May, Antonio Loprieno will also commence his position as President of the Swiss Academies of Arts and Sciences.

■ ALLEA's General Assembly Programme at a Glance

16 May

11:30 - 17:30

Science in Times of Challenged Trust and Expertise

Leading scholars on the notions of trust, knowledge production and digital communications will join to debate the alleged challenges posed to science in its role as a trusted source of evidence and expertise.

18:30 – 20:00

Madame de Staël Prize Award Ceremony

The ALLEA Madame de Staël Prize award ceremony will include a lecture by the 2018 laureate Andrea Pető, the laudatory speech by Luisa Passerini, as well as an address and hand-over by the European Commissioner for Digital Economy and Society Mariya Gabriel.

From 20:00

Festive Reception

Following the award ceremony, a festive reception will take place at the National Archeological Museum, located within walking distance from the Bulgarian Academy of Sciences.

17 May

8:30-13:00

SAPEA policy symposium: Shaping European Science Advice: Insights and Experiences

Experts and policy-makers will discuss recent experiences of the European Commission's Scientific Advice Mechanism (SAM), particularly the involvement of European academies via SAPEA.

14:00- 18:45

ALLEA Business Meeting (only for academy delegates)

In the closed business meeting, ALLEA Member Academies' representatives will discuss ALLEA governance, strategy and policy matters, and will elect a new Board for the term 2018-2020.

18 May

9:00-17:00

Day trip to Plovdiv, 2019 European Capital of Culture

The Bulgarian Academy of Sciences invites participants of the ALLEA General Assembly to attend a guided sightseeing tour to the city of Plovdiv, the 2019 European Capital of Culture. A participation fee of approximately EUR 35-45 will be charged.

■ The Bulgarian Academy of Sciences: Scientific Excellence and Cooperation

The host of the 2018 ALLEA General Assembly is the leading scientific institution in the Bulgarian science system. The academy builds its work on a long history of promoting scientific excellence and building bridges in research across Bulgaria. On the occasion of the European academies' annual meeting, the Bulgarian Academy of Sciences offers a self-portrait introducing its activities, mission, history and governance.

The Bulgarian Academy of Sciences (BAS) is the leading scientific, spiritual and expert centre of Bulgaria. It carries out research and training activities of national and international significance and solves problems related to the development of the Bulgarian society and state.

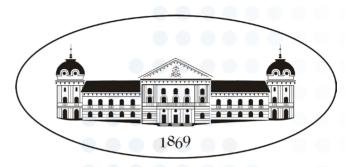
The mission of the BAS is to conduct research in accordance with universal values, national traditions and interests, to participate in the development of world science, to study and multiply the tangible and intangible cultural heritage of the nation.

History

The BAS was established as Bulgarian Learned Society (BLS) on 12 October 1869 while Bulgaria was still under the Ottoman empire's rule, in the town of Braila, Romania. The first President of the Society was Marin Drinov. After the Liberation of Bulgaria which

The Bulgarian Academy of Sciences produces 48% of the scientific output of the country.

took place nearly 10 years later, BLS moved its operations to Sofia and established itself as an authoritative scientific centre with a rich sociocultural and political activity. In



1911, it was renamed the Bulgarian Academy of Sciences, and the first law on the BAS was adopted. In 1928, the central building of the BAS was completed, built on land donated by the Sofia municipality and the resources of 22 academicians who had mortgaged their real estate to finance the construction. Most of the research institutes of the Academy were created after 1945. A new law on the BAS was adopted in 1991.

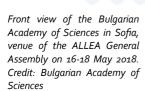
Leading scientific research in Bulgaria

Today, the BAS comprises 42 autonomous research institutes and 8 academic specialised units. In the last years more than 15 regional academic centres were established in different cities in the country so that the scientific potential of the Academy could serve everyone's need of specialised knowledge.

The academy covers almost all areas of science while the research

institutes are grouped in 9 research fields or divisions: Information and Communication Sciences and Technologies; Energy Resources and Energy Efficiency; Nanosciences, New Materials and Technologies; Biomedicine and Quality of Life; Biodiversity, Bioresources Ecology; Climate Change, Risks and Natural Resources; Astronomy, Space Research and Technologies; Cultural-Historical Heritage and National Identity; Man and Society. Its financial resources are formed by state subsidies, revenues from research activities funded by national and international funding organisations, contracts with the private companies donations (ca. 35%).

The BAS produces 48% of the scientific output of the country. Its h-index is 165, while the one of the country is 204. The BAS is accredited to provide training of doctoral students and offers more than 240 PhD programmes. Its Career





Development Centre is the biggest PhD training school in Bulgaria.

Governance

The governing bodies of the BAS include the General Assembly, the Executive Council, the President, and the Board.

The General Assembly is the supreme governing body of the BAS. It elaborates, adopts, modifies and amends the Statutes, allocates the budget and is responsible for the properties and the investments of the Academy. The General Assembly defines the scientific policy and creates/closes down research units. It also elects the President and the Vice-Presidents, the members of the Executive Council and the Scientific Secretary General.

The General Assembly is assisted in its work by the Executive Council. The Executive Council prepares and puts forward drafts for resolutions of the General Assembly, elects directors of the research units and is responsible for implementation of the decisions of the General Assembly, for assessment of the research units, etc.

The President of the BAS is chairing the Executive Council. As such, Professor Julian Revalski, Full member of the Bulgarian Academy of Sciences (first term of office: 2017-2020) represents the Academy, organises and supervises the implementation of all academic activities, and dispenses with the budget of the Bulgarian Academy of Sciences, according to



Lecture Hall in the main building of the Bulgarian Academy of Sciences Credit: Bulgarian Academy of Sciences

The Bulgarian Academy of Sciences has more than 50 international bilateral agreements with other academies and research centres, and near to 180 agreements with universities around the world.

the decisions of the General Assembly. The President appoints Scientific Secretaries in each of the 9 research divisions upon approval by the General Assembly.

The members of the Board are members of the Executive Council by statute. The Board decides on everyday issues between the meetings of the Executive Council.

The Assembly of Academicians and Corresponding Members of the BAS consists of national (academicians and corresponding members) and foreign members. As a rule, the total number of academicians should not exceed 80 and that of the corresponding members is limited to 120. Currently there are 61 academicians and 97 corresponding members.

International cooperation

The support to scientific collaborations with researchers from abroad expanding the international by cooperation has always been a priority for the BAS. The academy has more than 50 bilateral agreements with academies and other research centres and about 180 agreements with universities abroad. The BAS scientists and institutes participate in EU Framework Programmes for Research and Innovation and in addition to the efforts made at national level this has turned to an instrument for contribution to strengthening the European Research Area (ERA).

The Academy is member of 32 international organisations. The BAS most actively participates in the work of ALLEA, Science Europe, EASAC and IAP, the World Meteorological Organization and EUMETSAT (where Bulgaria is represented by the National Institute of Meteorology and Hydrology of the BAS), ESF, ICSU, UNESCO and its Programmes, and contributes to a variety of initiatives related to the provision of scientific support for the Danube River Strategy.





Garden and the President's office at the main building of the Bulgarian Academy of Sciences. Credit: Bulgarian Academy of Sciences

■ Views on Brexit and European Science

One of the most pressing political debates in Europe, Brexit, deeply touches on the current and future research environment both in the EU and the UK. In the past months, ALLEA President Günter Stock has actively voiced the academies' views in articles, roundtables and meetings on the topic.

In the journal *Nature* and the research policy magazine *Research Europe*, ALLEA President Günter Stock reflects on European research during and after the Brexit negotiations. In the articles, he calls on policymakers from both sides of the English Channel to stop delaying concrete plans on the terms and conditions

of UK participation in Framework Programme 9. This uncertainty will soon affect gravely long-standing research collaborations, warns ALLEA's President.

As part of ALLEA's efforts to build bridges in the European research community, he participated in a roundtable in England on the *Future* Partnership Project led by the Royal Society and the Wellcome Trust. The event gathered high level European research representatives and policymakers to discuss the trade-offs and challenges to research, and to formulate recommendations to ensure future collaboration in European research.

Research Europe, 11 January 2018

comment 7

günter stock v

view from the top

Brinkmanship over Brexit could damage research on both sides

When the European Council finally sealed the first phase of Brexit on 15 December, researchers may have breathed a cautious sigh of relief. The preliminary agreement allows for continued research collaboration through Horizon 2020, raising hope that the same may be true for future Framework programmes. The deal further aims to keep the UK within the jurisdiction of the European Court of Justice when participating in EU programmes, leaving the door open to including UK institutions in future research programmes.

tries, accounting for 11 per cent of the workforce in UK higher education.

Success, then, stems from a strong academic tradition coupled with an understanding of the value of international collaboration. The doubling of UK-authored scientific publications seen in the past 30 years stems almost entirely from increased international collaboration. The same trend applies to joint research with EU partners, which has risen steadily in the past few years and now makes up more than 30 per cent of all UK scien-

Brexit must protect European science

As president of ALLEA (All European Academies), I am disappointed by the slow pace of Brexit negotiations and lack of awareness of their impact on European science. Research in the European Union needs collaboration with the United Kingdom and vice versa. I agree that greater clarity on the future relationship between EU and UK science policy is paramount (see V. Ramakrishnan Nature 551, 543; 2017).

543; 2017).

Much has been said about the implications of Brexit for UK science, with little mention of the detrimental effects on European science as a whole. EU research depends more than ever on international collaboration

the Montreal Protocol could take on full responsibility for the task (Nature 551, 415; 2017). However, the protocol's assessment experts focus solely on stratospheric processes, and in our view would be unlikely to be able to take on regulation of the full range of ambitious geoengineering projects.

The range of proposed

The range of proposed techniques includes landand ocean-based removal of greenhouse gases from the atmosphere, as well as increasing the amount of sunlight reflected from land and ocean surfaces. All these methods are considered as geoengineering by such bodies as the Intergovernmental Panel on Climate Change and the Convention on Biological Diversity.

■ ALLEA Board Meets at the British Academy and the Accademia Nazionale dei Lincei

The British Academy and the Accademia Nazionale dei Lincei welcomed the ALLEA Board members in London and Rome respectively.

Since the ALLEA General Assembly in September 2017, the ALLEA Board convened twice to discuss matters of relevance for the operations of ALLEA as well as to prepare the upcoming General Assembly in Sofia.

In November 2017 the British Academy was the host to the ALLEA Board, in the first meeting which saw the attendance of ALLEA President-elect Antonio Loprieno. The Foreign Secretary of the British Academy, Ash Amin welcomed the members of the Board and gave an introduction to the academy facilities.

In February 2018 the Board reconvened at the Accademia Nazionale dei Lincei in Rome, on the invitation of the academy President Alberto Quadrio-Curzio.

Both meetings featured intensive discussions on current issues regarding the future of European research policy, the next General Assembly in Sofia as well as ALLEA working groups and projects.

The ALLEA Board will meet again just before the next ALLEA General Assembly at the Bulgarian Academy of Sciences in Sofia in May 2018.



Accademia Nazionale dei Lincei



■ Andrea Pető Awarded the 2018 ALLEA Madame de Staël Prize for Cultural Values

Andrea Pető, Professor at the Department of Gender Studies of the Central European University in Budapest (Hungary), honoured with ALLEA Prize for her outstanding scholarly contribution on Europe's gendered memory of the Second World War, the Holocaust and political extremism.

Professor Andrea Pető will be awarded the 2018 All European Academies Madame de Staël Prize for Cultural Values to honour her wideranging scholarly work on gender studies and European contemporary history. The Madame de Staël Prize Jury considered her research an exceptional contribution to shed light on Europe's gendered memory of the Second World War, the Holocaust and political extremism. Pető will be the fifth scholar to be awarded the Prize, at the initiative of ALLEA, the European Federation of Academies of Sciences and Humanities, with the cosponsorship of the Italian foundation Compagnia di San Paolo.

The 20,000 EUR Prize will be awarded on the occasion of the ALLEA General Assembly at the Bulgarian Academy of Sciences in Sofia on 16 May 2018 and

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This year the Madame de Staël Prize underlines the intellectual originality of Pető's approach to investigate the intricacies of remembrance in Europe's most conflictive history from a gender perspective".

Günter Stock, ALLEA President and ALLEA Prize Jury Chairman

will be handed over by the European Commissioner for Digital Economy and Society Mariya Gabriel.

The Prize was established to commemorate that despite variations definition and geographical boundaries over the centuries, there has always been a deeprooted understanding of European culture as connected by an inherent diversity supported by a dynamic and vigorous intellectualism. Professor Günter Stock, ALLEA President and Chairman of the Prize jury said: "This year the Madame de Staël Prize jury honours not only a celebrated and prolific scholar in East and Central European contemporary history, but also underlines the intellectual originality of Pető's approach to investigate the intricacies of remembrance in Europe's most conflictive history from a gender perspective".



Andrea Pető (Budapest, 1964) is Professor at the Department of Gender Studies at the Central European University in Budapest (Hungary) and a Doctor of Science of the Hungarian Academy of Sciences. She has authored 5 monographs, edited 31 volumes as well as 261 articles and chapters in books published in seventeen languages. In 2005, she was awarded the Officer's Cross Order of Merit of the Republic of Hungary by the



President of the Hungarian Republic and the Bolyai Prize by the Hungarian Academy of Sciences in 2006. Her publications include Geschlecht, Politik und Stalinismus in Ungarn. Eine Biographie von Júlia Rajk (2007); Women in Hungarian Politics 1945-1951 (2003); Napasszonyok és Holdkisasszonyok. A mai magyar konzervatív női politizálás alaktana (2003); Interdisciplinary Handbook Gender: War (2017); Women and Holocaust: New Perspectives and Challenges (2015), co-authored with Louise Hecht and Karolina Krasuska; Gender and Far Right Politics in Europe (2016), co-authored with Michaela Köttig and Renate Bitzan; and Gendered Wars, Gendered Memories. Feminist Conversations on War, Genocide and Political Violence (2016), co-authored with Ayşe Gül Altınay.

■ Compagnia di San Paolo, Co-sponsor of the 2018 ALLEA Prize



The Prize is kindly co-sponsored by the Compagnia di San Paolo. The Compagnia di San Paolo, founded in 1563 as a charitable brotherhood, is today one of the largest private-law foundations in Europe. It pursues aims of public interest and social use, in order to foster the civil, cultural and economic development of the community in which it operates. The Compagnia is active in the sectors of Research and Health, Art, Cultural Heritage and Activities, Cultural Innovation, Social Policies, and Philanthropy. To read more about the organisation, click here.

SAPEA: A Year in Review

During its first year of operations the European academies project SAPEA has dedicated its work to the first Evidence Review Report on "Food from the oceans", as well as the forthcoming reports on "Improving authorisation processes of plant protection products in Europe" and "Novel carbon capture and utilisation technologies".

For a little over a year now, ALLEA, together with its consortium partners Academia Europaea, EASAC, Euro-CASE, and FEAM, has worked in the SAPEA project to provide evidence-based science advice to the European Commission.

The European academies' consortium came together at a time when science and scientific advice have come under intense scrutiny from outside actors. It is therefore all the more important that the voice of science is loudly heard, but it is just as vital to make scientific advice understandable for policymakers as much as for the layman.

After all, what is at stake is grounding European policy-making on a solid scientific basis, as free from undue influence as possible. The topics SAPEA has covered in the past months all have in common that they share immense societal relevance for the citizens of the Union.

Reports

The first Evidence Review Report completed by SAPEA was on the topic "Food From the Oceans" and dealt with the question how the nutrition demands for growing populations can be met sustainably with innovative adaptations in the fisheries sector.

Currently, the experts of several



Group picture of the hand-over the SAPEA Evidence Review Report "Food from the Oceans" delivered to the European Commissioner Karmenu Vella on 27 November 2017. Credit: European Commission

working groups are putting together the final touches on Evidence Review Reports on the topics of "Improving Authorisation processes of plant protection products in Europe" and on "Novel carbon capture and utilisation technologies". Both topics have wider implication for industry and people alike which is all the more reason to ensure that policy-making on those topics takes into account scientific perspectives.

Providing advice to policy makers can only ever be one, albeit important, aspect of SAPEA. Engaging with the public is almost as important if we want to ensure that the scientific values are understood and appreciated. To this end, SAPEA has organised a variety of different engagement events across the continent and will continue to do so with future topics. On 9 April, SAPEA will hold a public symposium on carbon capture and utilisation technologies, co-organised with the Netherlands Academy of Technology and Innovation, at the Public Library in Amsterdam.

Alternatively, you might find the SAPEA symposium "Shaping European science advice: insights and experiences" of interest, which will take place at the Bulgarian Academy of Sciences on 17 May in Sofia.

PUBLICATION

■ Food from the Oceans: Evidence Review Report Delivered to European Commission

SAPEA published its first Evidence Review Report titled Food from the Oceans, which examines the question of how the ocean can help satisfy the global demand for food.

The report was handed over by the then SAPEA chair Günter Stock to the European Commissioner for Research and Innovation, Carlos Moedas and the European Commissioner for Environment, Maritime Affairs and Fisheries, Karmenu Vella who posed the original question: "How can more food and biomass be obtained from

the oceans in a way that does not deprive future generations of their benefits?"

The Evidence Review Report warns that in our extraction of food from the oceans, 'business as usual' is not sustainable from social, economic and environmental viewpoints. The report suggests a number of options, which inform the recommendations of the High Level Group's Scientific Opinion. It states that the only way to obtain significantly more food and biomass sustainably from the ocean

is to harvest seafood that on average is from a lower trophic level (lower in the food chain) than we currently harvest, for example seaweed.

To produce Food from the Oceans, SAPEA worked with academies across Europe and the European Academy Networks to bring together experts in a range of disciplines. The experts formed working groups which were chaired by Professor Poul Holm (Trinity College Dublin) and Professor Dag Aksnes (University of Bergen). Academia Europaea led on this topic.

Q&A WITH GÜNTER STOCK, ALLEA PRESIDENT AND 2017 CHAIRMAN OF SAPEA

"We must step out of our comfort zone and seek out dialogue with the general public"

Günter Stock, ALLEA President and 2017 Chairman of the SAPEA Board, reflects on the first year of SAPEA, the future of science advice in Europe and the need for better engagement with the public.

What was the main focus of your chairmanship of SAPEA?

GÜNTER STOCK: I have had the honour and challenge to chair the first year of operations of SAPEA, which to me meant to set the ship on the right course from the very beginning. Most important to me was that for all SAPEA activities the highest scientific standards are applied, and the brightest minds can work together knowing that their contributions will be heard and made use of. As such we put an emphasis on quality assurance and on developing universally applicable structures for the creation of our reports.

At the same time it was important to me to start early with our public engagement formats and in the past year we put on several events on different topics across the continent with the help of our academies.

What are the main lessons learned from the first year of SAPEA?

G.S: One of the most important lessons was that in such a complex environment, at the interface of science, policy, and the public you will never stop learning new lessons. Few things are as obvious as they may seem and many of the projects we are involved in are the results of intense yet well-intended discussions. It is possible to disagree on a matter as long as your argument has the scientific merit to back it up. Yet, in the end, the products SAPEA puts out always manage to portray in detail the complexities

of the given topic including different scientific views, and this is really what a discursive way of working should achieve.

How do you think scientists, researchers and academies can improve their role in the provision of science advice?

G.S: In my opinion the most important factor for scientists to make their voice heard is to show a willingness to put their research out there in a comprehensible manner for the layman and to make very clear what the implications of their research are and which effects it might have. We must step out of our comfort zone where fellow scientists discuss with



Scientists must actively push to be providers of goal-directed and solution-oriented science advice, otherwise they might easily be overlooked."

us and actively seek out dialogue with the general public. If scientists can achieve that, their input will be considered necessary to be included in policymaking. In other words: scientists must actively push to be providers of goal-directed and solution-oriented science advice, otherwise they might easily be overlooked.



The SAPEA project is part of the European Scientific Advice Mechanism and has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 737432. The text in the report reflects only the authors' views. The European Commission is not responsible for any use that may be made of the information it contains.



SCIENCE POLICY

Joint Statement on 'Missions' in Framework Programme 9

Together with other stakeholders representing the Social Sciences and Humanities (SSH) in Europe, ALLEA calls for more inter- and transdisciplinarity and a conscientious framing of 'missions' in the future Research and Innovation Framework Programme 9 (FP9). It has also put forward suggestions that take account of the social, cultural, legal and ethical challenges ahead.

On 8 December 2017, ALLEA published the statement "Living Together: Missions for Shaping the Future". Initially a joint initiative of ALLEA's and HERA's (Humanities in the European Research Area) working groups on Framework Programme 9, this statement has been jointly prepared and signed by several European stakeholder organisations from the SSH. It responds to a call by the "Lamy-Group" to "adopt a missionoriented, impact-focused approach to address global challenges". The statement proposes concrete missions and critically reflects on their type and scope, so that they adequately respond to the societal challenges Europe faces in the years and decades to come.

ALLEA engaged with the European Commission and Members of the European Parliament in a productive dialogue at various levels to further elaborate on the future of FP9.



The signatories state that "these challenges require concerted efforts within and outside Europe, cutting across borders, cultures, languages, disciplines, sectors and institutions. However, we believe that the concept of 'missions' deserves to be discussed and developed further." Mission-oriented research should thus (1) be "transformative in that it generates new knowledge and understanding", (2) acknowledge that "innovation is more than technology", (3)

be broad enough and not too constrained on specific end-products "through a premature identification of indicators of success or failure", (4) be open to researchers to come up with projects of all sizes to produce innovative ideas (bottom-up approach), (5) "integrate all countries and regions in order to counter the research and innovation divide in the European Research Area" and maintain openness towards collaboration with non-EU countries.

Following the publication, ALLEA engaged with the European Commission and Members of the European Parliament in a productive dialogue at various levels to further elaborate on the future of Framework Programme 9. ALLEA emphasises the indispensable role that the SSH play for the future of Europe and the world. In May 2018, the Commission is expected to adopt its proposal for the next EU budget and, soon after, its proposal for FP9. The expected launch date of FP9 is 1 January 2021.

SCIENCE EDUCATION

■ CESAME: Improving Science Education in Schools – a Global Challenge

Experts from the ALLEA Working Group Science Education embark on the transcontinental CESAME project to establish a network of international centres for science teachers and educators.

Recent activities of the ALLEA Working Group Science Education have focused on the follow-up to a project initiated during the third European "African_ Mediterranean Academies for Science Education" (AEMASE) conference held in Paris on 3-4 October 2017 at the Académie des sciences. The conference discussed strategies and actions for improving science education in Africa, the Mediterranean region and Europe and launched the CESAME initiative (Centres for Education to Science in Africa, the Mediterranean and Europe). The goal of CESAME is to create a collaborative and intercontinental

education support system, in partnership with scientists, by launching a network of centres where teachers and teachers' educators will be trained in methods of Inquiry-Based Science Education (IBSE) in schools. In a first phase it is envisaged to set up two of such centres (one in Africa, one in Europe) in order to implement science education projects on both continents.

The objective is to create a collaborative scheme in which science teachers can share experiences and learn from each other how to improve science teaching in schools. Over the coming months, the CESAME

committee seeks to develop IBSE training sessions, as well as adequate tools for the follow-up at distance. A number of academies of sciences as well as other scientific institutions from Africa and Europe have responded positively to an IAP call for interest to collaborate in this initiative and to consider hosting a CESAME centre in the future.

A second phase then aims to initiate the building-up of a network, with a longer-term plan to promote and disseminate IBSE pedagogy and to structure interconnections between the CESAMEs within the whole Africa-Mediterranean-European region.

■ ALLEA Working Group Asks "Is there a Loss of Trust in Expertise?"

The expert group gathered in London for a workshop at the British Academy to advance its work on the current and past dynamics of public trust in expertise and the contested norms of what constitutes truth, facts and evidence in scientific research and beyond.

On 19 February the ALLEA Working Group Truth, Trust & Expertise held its first of three thematic Workshops at the British Academy in London. Chaired by resident Co-Chair of the working group, Baroness Onora O'Neill of Bengarve, this workshop discussed the central question whether there is a loss of trust and/or trustworthiness in science and academic research.

President ALLEA Günter Stock thanked the British Academy, the Co-Chairs and the members of the working group for their engagement and emphasised the topic's extraordinary attention received in public debate. While pointing out that poor research conduct and communication undermining the trustworthiness of science and expertise are historically not at all new phenomena, he called for critical self-reflection and a thorough analysis of the challenges posed by new communication technologies.

The workshop was divided into three

Participants discussed, among other issues, the function of trust in society and institutions, as well as the evidence, if any, of a loss of trust(worthiness) in expertise.



thematic sessions, each starting with input statements by two speakers, followed by a group discussion. Participants discussed what we mean by trust, what counts as expertise, and what kinds of expertise can be distinguished. In addition, the function of trust in society and institutions, as well as the evidence, if any, of a loss of trust(worthiness) in expertise were explored. The experts also discussed the contexts in which trust and

trustworthiness exist and how trust can be nurtured and maintained. Major threads of the discussion, conclusions and remaining open questions will soon be published in a "Discussion Paper". The findings will also feed into the debate of the scientific symposium "Science in times of Challenged Trust and Expertise", which will take place on 16 May at the Bulgarian Academy of Sciences in Sofia during the ALLEA General Assembly.

CALL FOR VIDEOS #TrustingScience

ALLEA has launched a social media campaign calling for videos on the topic "Trusting Science". The initiative aims at starting an online brainstorming session to gather multiple views, voices and ideas on the state and the role of science in times of challenged trust and expertise. The call has been distributed via the ALLEA's communication channels and social media with the hashtag #TrustingScience. The campaign seeks to stirr the debate in anticipation of the Scientific Symposium "Science in times of Challenged Trust and Expertise" in Sofia on 16 May.

Learn more

INTERVIEWS

■ ALLEA's Truth, Trust and Expertise Video Series

Learn more about the working group in our video series on Truth, Trust and Expertise. Working Group members respond to questions regarding the loss of trust in science and expertise, as well as the role new forms of digital communication play. Watch here.

■ The Text and Data Mining Exception and Access to Scientific Information in Europe

In a new statement, the ALLEA Permanent Working Group Intellectual Property Rights calls for a broader exception for Text and Data Mining in the proposed Directive on copyright in the Digital Single Market.

ALLEA calls, in a statement published on 15 November 2017, for a broader exception for Text and Data Mining (TDM) in the proposed Directive on copyright in the Digital Single Market. The position, prepared by the ALLEA Permanent Working Group Intellectual Property Rights, responds to a European Commission Directive on copyright in the Digital Single Market. The paper, titled "The Text and Data Mining Exception and the Enhancement of Access to Scientific

"Such a narrow exception will not facilitate the research of various corpora that ALLEA members are undertaking in several scientific disciplines and in various circumstances".



Information in **Europe"**, states that while Article 3 of the Directive provides a mandatory exception to copyright and database right allowing for TDM, the proposed exception is still "too narrowly defined".

The current proposed legislation would not apply (i) when the results are used for publication, (ii) to independent researchers unaffiliated with research organisations, (iii) to information providers or journalists, and (iv) to private foundations or for-profit entities involved in joint research projects. "Such a narrow exception will not facilitate the research of various corpora that ALLEA members are undertaking in several scientific disciplines and in various circumstances," the authors state. ALLEA urges the European Institutions to elaborate a more balanced exception for TDM taking the needs of science and research in Europe better into account. ALLEA is prepared to engage with the European Commission, the members of the European Parliament and the Council to further elaborate a balanced Directive.

ALLEA STATEMENT

■ The Ownership and Protection of Multinational Inventions

ALLEA experts recommend more harmonisation of legal frameworks for multinational inventions to reduce uncertainty and raise efficiency in multinational research and development.

The statement "The Ownership Protection of Multinational Inventions - in Particular Inventions Resulting from Publicly Funded Research" was released on 28 February 2018 by the ALLEA Permanent Working Group Intellectual Property Rights. The publication responds to the increase of multinational inventions resulting from international cooperation in research and development and the implications for the legal framework under which those inventions are managed and protected. The expert group calls for adopting more harmonised legal instruments at the European level with respect to the choice of law(s) governing inventorship. This harmonisation is necessary to reduce legal uncertainty and raise efficiency in multinational

and development. The research increasing internationalisation research and development has led to more inventions as the outcome of such cooperation. The EU is supportive of these developments and has set up rules to administer this internationalisation. However, neither Regulation (EU) 1290/2013 nor any other legislative measure provides for harmonisation with national law on inventorship, assignment, and patent filing requirements for multinational inventions. The ALLEA Permanent Working Group Intellectual Property Rights warns that this legal complexity hampers efficiency in the research and development area and leads to legal uncertainty with respect to the choice of law(s) governing inventorship.

The expert group calls for adopting more harmonised legal instruments at the European level with respect to the choice of law(s) governing inventorship.

In their statement, the ALLEA experts observe the lack of harmonisation and invite the European Commission to (i) analyse the effect of diverging national rules on inventorship, assignment, and patent filing requirements on research and development in the EU, (ii) assess the appropriate scope and substance of legislative measures and remedies at EU level, and (iii) initiate discussions with regard to the prospect and feasibility of adopting harmonised legal instruments on the international level.

■ Ethical Aspects of Open Access: A Windy Road

The ALLEA Permanent Working Group on Science & Ethics organised a workshop at the Royal Flemish Academy of Belgium for Science and the Arts in Brussels, to dicuss the unintended consequences of open access publishing with a view on related ethical issues.

For anyone involved in academia, Open Access has become a topic hard to miss. The European Commission's Open Science agenda as well as funding and research organisations alike encourage the open publication of research articles on an ever greater scale and with good reason as there is little doubt that publicly funded research should be as open as possible to the public.

Though, after around 15 years since the Berlin Declaration on Open Access to Knowledge, one of the most influential statements on Open Access was published, the research

The workshop covered issues ranging from editorial responsibilities in the Open Access world to ways of identifying questionable and unethical publishers.

community must attest that several unintended consequences and ethical conundrums have marred the fullscale implementation of Open Access in the European Research Area.

To identify some of these issues and to discuss possible solutions, the **ALLEA Permanent Working Group** on Science & Ethics organised the



workshop Ethical Aspects of Open Access: A Windy Road on 1 February 2018, hosted by the Royal Flemish Academy of Belgium for Science and the Arts in Brussels. The event was attended by around 80 participants from across Europe.

the The panels of workshop covered issues ranging from editorial responsibilities in the Open Access world to ways of identifying questionable and unethical publishers. Further issues that were addressed were the need to balance transparency with resilience and the effects of Open Access on the assessment of research performance. Keynote speakers included László

Fésüs from the Hungarian Academy of Sciences, Chris Graf from the Committee on Publication Ethics, Stephen Lewandowsky from the University of Bristol, Lars Bjørnshauge from the Directory of Open Access Journals, and Michele Garfinkel from EMBO.

The workshop was concluded with a panel debate, bringing together representatives from European academies, academies, young funding organisations, European universities, and the European Research Council.

The presentations of the workshop are available on the ALLEA website

SCIENCE AND ETHICS

■ European Code of Conduct for Research Integrity Translated to Dutch, French, Hungarian and Spanish

The promotion of research integrity on a uniform basis continues to be a primary objective for the ALLEA Permanent Working Group on Science & Ethics. To this effect, the European Code of Code for Research Integrity, revised in 2017, will be made available in all official European Union languages.

The first translations are already available in Dutch, French, Hungarian, and **Spanish**. The translations were made possible with the kind help of the European Commission's translational services and refined by research integrity experts from ALLEA Member Academies. An external authorised translation into Turkish was produced by the ALLEA Member Academy Bilim Akademisi in June 2017.











■ ALLEA Becomes Knowledge Partner of Re-Imagine Europa

Re-Imagine Europa (RIE) and ALLEA will work together on areas of common interest and in particular on the topic "Democracy in a Post-Factual Reality".

As a Knowledge Partner, ALLEA will support the efforts of RIE and contribute knowledge and academic resources to RIE's programmes and projects, with a particular focus on the programme looking at "Democracy in a Post-Factual Reality," which will touch on themes like: evidence-based policymaking, citizen engagement processes, the effect of digitalisation on communication processes and trust, changing patterns of participatory processes, etc.

About Re-Imagine Europa

Set up by former French President

Giscard d'Estaing and made up of an inclusive group of individuals, organisations and institutions, Re-Imagine Europa focuses on developing a vision for a more integrated Europe as part of the solution to address 21st century global challenges. RIE plans to work with partners like ALLEA to carry out interdisciplinary and intersectoral research, dialogue facilitation and engagement with national and transnational political processes to help reinforce Europe's role as a global economic power in the 21st century, able to safeguard a prosperous future of peace, freedom

and social justice for all its citizens. Re-Imagine Europa will have its **public** launch on the 11th of April.

RE-IMAGINE -EUROPA

For more information about Re-Imagine Europa and its activities:

www.reimagine-europa.eu

■ Europe on Test: ALLEA Conference Series on European Narratives

In 2018, the ALLEA-coordinated conference series "Europe on Test: Narratives of Union and Disunion" will feature two prominent events in Germany and Finland respectively.

On 20 October, the Göttingen Academy of Sciences and Humanities will bring together high level speakers from policy and academia to discuss the conference theme "Germany and Europe, Self-Images and Foreign Perspectives". On 14-15 November the Council of Finnish Academies will organise a two-day conference

providing a "nordic perspective" on the series topic. "Europe on Test: Narratives of Union and Disunion" is a series of conferences hosted by selected academies of sciences and humanities in various European cities under the patronage of ALLEA. The initiative started with a first conference organised by the **British Academy** in London in November 2016. Throughout the conferences, renowned scholars deliberate and illuminate the significance of such narratives from a variety of different angles and within their national contexts, providing insights into how narratives shape the way we conceive Europe as a Union or Disunion. The conferences are open to the public and everyone is invited to attend.

DIGITAL HUMANITIES

■ ALLEA's Working Group Discusses Best Practices in Data Sharing and Reuse

The Working Group E Humanities during a meeting at the Royal Irish Academy in December 2017 re-started its activities and discussed a plan of action.

A focus will be directed towards the E Humanities-related issues in the context of the European Open Science Cloud (EOSC), particularly through supporting better data publishing and reusability, following the FAIR principles, as well as metadata standards best applied for better data discovery across Academies.

Upcoming activities will be guided by the question of how to make

Academy research outputs - and the datasets behind these outputs - more available, discoverable, and reuseable. This challenge is envisaged to be discussed during a scientific symposium in late 2018, focusing on data sharing and reuse. Following the symposium the group will consider drafting a set of simple and actionable recommendations for academies on data archiving, sharing and reusability.

The ALLEA Working Group E-Humanities has recently published the widely appreciated report "Going Digital: Creating Change in the Humanities". The group is chaired by Dr Natalie Harrower of the Royal Irish Academy and brings together experts from ALLEA Member Academies across Europe as well as from other relevant stakeholder organisations in the field.

CALL FOR NOMINATIONS

■ Health Inequalities Symposium

Registration is now open for the international symposium "Health Inequalities – An Interdisciplinary Discussion of Socioeconomic Status, Health and Causality" to be held on 24 May 2018 at the Royal Netherlands Academy of Arts and Sciences, Amsterdam.

The symposium is organised by the Scientific Committee on Health Inequalities, jointly established by ALLEA and FEAM (Federation of European Academies of Medicine), and seeks to examine methodological options to analyse the causal effects of socioeconomic disparities on public health.

Participation is open to the public and free of charge. Please note that registration is mandatory. If you wish to join this event, visit the KNAW website for registration and further information. Learn more.

| Amsterdam, 24 May |

Registration

STATEMENT

Evaluation of Researchers and Research Programmes

The three ALLEA members Académie des Sciences, Leopoldina and The Royal Society have recently published a joint statement on scientific evaluation processes, and the present-day challenges facing individual researchers and evaluators. In times of everincreasing output in science and research it becomes crucial to optimise evaluation processes to an extent that is favourable for the scientific endeavour while at the same time following prudent research integrity criteria.

The statement determines the underlying principles of good practice in research evaluation, makes recommendations and provides guidelines on how to further smoothen and improve the respective procedures. The statement underlines that peer review should continue to be the main and guiding principle of scientific assessment, and that "good evaluation is a limited and precious resource". The authors furthermore warn that bibliometric data cannot be used as a proxy for expert assessment and that well-founded judgment is essential for the evaluation process. The statement can be downloaded here.

■ Nominations for 2019 Breakthrough Prize are Open

Breakthrough Prize in partnership with ALLEA announced the opening of public nominations for the 2019 Breakthrough Prize in Fundamental Physics, Life Sciences and Mathematics. The partnership, now in its second year, encourages European nominations for the world's largest science prize. Each prize comes with a \$3 million award. Prizes will be awarded in late 2018, during a live, globally televised gala awards ceremony in Silicon Valley.

Nominations can be submitted online until 30 April 2018. While selfnominations are prohibited, anyone may make a nomination for another person. The nomination form and rules are available at:

www.breakthroughprize.org

| Deadline: 30 April |

Nominations

CALL FOR PAPERS

Can the Social Relevance of Research Be Evaluated and, if so, How?

In order to better understand and more efficiently measure the sociocultural and economic benefits of science and research to the healthy development of society, the **Austrian Academy of Sciences** is offering a significant monetary award to the three best and most creative answers to the question "Can the social relevance of research be evaluated and, if so, how?" The entries should be submitted in essay format, with no character limit, to answer the central question.

The competition is free of charge, and it is open to individuals and groups alike. Entries can be submitted by e-mail to aktuariat@oeaw.ac.at, or by post to the Academy's central office in Vienna. The deadline for submission is 31 August 2018, 01:00 hrs (CET), and the answers can be submitted in German, English, French, Italian, Russian or Spanish.

CALL FOR NOMINATIONS

■ Viktor Ambartsumian International Science Prize 2018

The Armenian National Academy of Sciences officially opened the nomination period for the "Viktor Ambartsumian International Science Prize 2018", an internationally renowned award in the fields of astronomy/astrophysics and related sciences. The VA International Prize was established in 2010 by the Armenian Government, and it has been awarded bi-annually since. The prize consists of a certificate and a monetary award of US\$ 300,000 for the winner(s), which can be composed of a group of no more than three members. The right for nomination of works is reserved to Nobel Prize Laureates, Presidiums of national academies of science, scientific councils of astronomical observatories or astronomical institutes, and scientific councils of corresponding departments of universities. The deadline for nominations is 18 April 2018. For more detailed information about the nomination procedures and required documents, please go to www.vaprize.sci.am/nomination.html



MEMBER ACADEMIES

Albania: Akademia E Shkencave E Shqipërisë; Armenia: գիտությունների ազգային ակադեմիա; Austria: Österreichische Akademie der Wissenschaften; **Belarus**: Нацыянальная акадэмія навук Беларусі; **Belgium**: Académie Royale des Sciences des Lettres et des Beaux-Arts de Belgique; Koninklijke Vlaamse Academie van Belgie voor Wetenschappen en Kunsten; Koninklijke Academie voor Nederlandse Taal- en Letterkunde; Académie Royale de langue et de littérature françaises de Belgique; Bosnia and Herzegovina: Akademija nauka i umjetnosti Bosne i Hercegovine; Bulgaria: Българска академия на науките; Croatia: Hrvatska Akademija Znanosti i Umjetnosti; Czech Republic: Akademie věd České republiky; Učená společnost České republiky; **Denmark**: Kongelige Danske Videnskabernes Selskab; **Estonia**: Eesti Teaduste Akadeemia; Finland: Tiedeakatemiain neuvottelukunta; France: Académie des sciences - Institut de France; Académie des Inscriptions et Belles-Lettres; Georgia: საქართველოს მეცნიერებათა ეროვნული აკადემია; Germany: Leopoldina - Nationale Akademie der Wissenschaften; Union der deutschen Akademien der Wissenschaften; Akademie der Wissenschaften in Göttingen, Akademie der Wissenschaften und der Literatur Mainz, Bayerische Akademie der Wissenschaften, Berlin-Brandenburgische Akademie der Wissenschaften, Akademie der Wissenschaften in Hamburg, Heidelberger Akademie der Wissenschaften, Nordrhein-Westfälische Akademie der Wissenschaften und der Künste, Sächsische Akademie der Wissenschaften zu Leipzig (Associate Members); **Greece**: Ακαδημία Αθηνών; **Hungary:** Magyar Tudományos Akadémia; Ireland: The Royal Irish Academy - Acadamh Ríoga na hÉireann; Israel: האקדמיה הלאומית הישראלית למדעים; Italy: Accademia Nazionale dei Lincei; Istituto Veneto di Scienze, Lettere ed Arti; Accademia delle Scienze di Torino; Kosovo: Akademia e Shkencave dhe e Arteve e Kosovës; Latvijas Zinātņu akadēmija; Lithuania: Lietuvos mokslų akademija; Macedonia: Македонска Академија на Науките и Уметностите; **Moldova**: Academia de Ştiinţe a Moldovei; **Montenegro**: Crnogorska akademija nauka i umjetnosti; **Netherlands**: Koninklijke Nederlandse Akademie van Wetenschappen; **Norway**: Det Norske Videnskaps-Akademi; Det Kongelige Norske Videnskabers Selskab; Poland: Polska Akademia Umiejetności; Polska Akademia Nauk; Portugal: Academia das Ciências de Lisboa; Romania: Academia Română; Russia: Российская академия наук (Associate Member); Serbia: Srpska Akademija Nauka i Umetnosti; Slovakia: Slovenská Akadémia Vied; Slovenia: Slovenska akademija znanosti in umetnosti; Spain: Real Academia de Ciencias Morales y Políticas; Real Academia de Ciencias Exactas, Físicas y Naturales; Reial Acadèmia de Ciències i Arts de Barcelona; Institut d'Estudis Catalans; **Sweden**: Kungl. Vetenskapsakademien; Kungl. Vitterhets Historie och Antikvitets Akademien; **Switzerland**: Akademien der Wissenschaften Schweiz; **Turkey**: Türkiye Bilimler Akademisi; Bilim Akademisi; **Ukraine**: Національна академія наук України; **United** Kingdom: The British Academy; The Learned Society of Wales; The Royal Society; The Royal Society of Edinburgh

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