



“Development of a Code of Conduct for Biological Scientists”-BWC Meetings of Experts MX2  
Geneva, August 10, 2018

# Developing Code of Conduct for Biology Scientists Under the Framework of Convention

Yang XUE, PhD

Center of Biosafety Research and Strategy(CBRS)

Tianjin University

[xueyang@tju.edu.cn](mailto:xueyang@tju.edu.cn)





# Introduction

- As the pace of scientific innovation increases it is important to instill in scientists a greater sense of the responsibility for the outcomes of research and the potential consequences.
- Chinese Biological Scientists are very concerned to enhance the awareness of biosafety issues and to reinforce the moral self-discipline in scientific community, with the goal to enhance global biosafety management.
- It is very valuable for biological researchers around the world to work together and develop a Model Code of Conduct for Biological Scientists under the framework of the relevant convention of BWC.





## Relevant efforts

- At the 2008 MSP, China submitted a proposal for “Oversight of Science, Education and Awareness Raising, Code of Conduct”.
- At the 2015 MSP, China submitted a proposal for the “Development of a Model code of Conduct for Biological Scientists under the Biological Weapons Convention”. Pakistan cosponsored this proposal.
- In 2016, CBRS members participated in the writing of the “Proposal for the Development of a Model Code of Conduct for Biological Scientists” by the Delegation of China and Pakistan (BWC/CONF.VIII/WP.30) for the Eighth BWC Review Conference.
- In June 2018, a international workshop on ”Building a Global Community of Shared Future for Biosecurity: Development of a Code of Conduct for Biological Scientists” was co-hosted by Tianjin University, the Government of China and the ISU of BWC in Tianjin, China.





## Striking the Right Balance

***“A code of conduct can make good people better, but probably has negligible impact on intentionally malicious behaviour---- (NSABB)”***

There is an inherent tension between a proposed code's specificity and universality



A code that is overly broad could be read as lacking relevance to a given field, but one with specific details may be applicable to undercut its uptake.





## Necessities of “Code of Conduct”

- **Enhancing the sense of responsibility and historical mission of biological scientists:** propose ideas that practitioners should uphold, such as standards of research integrity, honesty, or objectivity...
- **Improving the self-discipline of biological scientists:** set aspirations by providing guidelines suggesting how to act appropriately...
- **Reflecting to the Convention’s theme:** comply with the tendency of globalization, transcend the traditional Biosafety standpoint, set up a Community of Shared Future for Mankind...





## “Proposal for the Development of a Model Code of Conduct for Biological Scientists”

BWC CONF VIII WP.34<sup>\*</sup>  
《关于禁止发展、生产和储存细菌(生物)及毒素武器和销毁此种武器的公约》  
缔约国第八次审查会议

2016年11月7日至15日,日内瓦  
临时议程项目12  
第七次审查会议和决定后的工作(《公约》的今后审查问题)

关于制定《禁止生物武器公约》生物科学家行为准则范本的工作文件

中国和巴基斯坦提交

一、生物科技发展融入“快车道”,研究深度与广度不断扩展,给全人类带来了福祉,但生物科技发展步,特别是军用生物研究可能产生难以预见的负面影响,技术误用、滥用风险不断累积,给全球生物安全治理带来挑战。

二、生物科研人员身处生物科技发展第一线,也是防范生物科技误用、滥用的首道防线。提高生物科研人员生物安全意识,加强自律,是防范生物科技误用、滥用的关键环节。

三、2006年第六次审查大会加强公约第四条进行了讨论,并在最后文件表示“认识到行为准则及自律机制对提高有关从业人员生物安全意识的重要性,呼吁缔约国支持并鼓励有关行为准则与自律机制的制定、公布与履行”。

四、为实现公约的目标,加强公约对生物科技研究的领导与规范,提高全球生物安全治理水平,应在公约框架下制定生物科学家行为准则范本,促使生物科研人员及时评估生物安全风险,并采取可行措施对其自觉规避、妥善处置,避免误用、滥用发生。

五、2015年缔约国会议上,中国代表团提交了关于制定《禁止生物武器公约》生物科学家行为准则范本的工作文件,巴基斯坦随后参与共提上述文件。截止到目前,该倡议获得了缔约国广泛支持与好评。望此,中方起草了生物科学家行为准则范本(草案),供各方作为讨论基础。

\* 附技术附件,重新研究。



FINANCIAL REVIEW



Proposal for the development of a model code of conduct for biological scientists under the Biological Weapons Convention

Submitted by China and Pakistan

1. With the ever increasing depth and scope of bio-research, the bio-science and technology has entered into the fast lane of development, which contributes to the well-being of humanity. However, the development of the bio-science and technology, especially the dual-use bio-science and technology research, may entail unpredictable negative impact, and the risks of misuse of bio-technology are increasing accordingly, posing challenges to the global bio-safety and security governance.

2. Biological researchers are not only the front line of bio-science and technology development, but also the primary defence to prevent bio-technological misuse. It is the key aspect to prevent misuse by raising bio-safety and security awareness and enhancing moral self-regulation among biological researchers.

3. The 2006 Sixth Review Conference had discussion on strengthening the Article IV of the BWC, and in its Final Document, “the Conference recognizes the importance of codes of conduct and self-regulatory mechanisms in raising awareness, and calls upon States Parties to support and encourage their development, promulgation and adoption”.

4. In order to achieve the objective and purpose of the BWC, strengthen its guidance on bio-science and technology research, and improve the global bio-safety and security governance, it is of necessity to develop a model code of conduct for biological scientists under the framework of the BWC. Such a model code of conduct would encourage biological researchers to timely evaluate bio-research risk, consciously avoid and properly tackle possible negative research impact, preventing misuse of bio-technology.

5. At the 2015 MSP, China submitted a proposal for the development of a model code of conduct for biological scientists under the Biological Weapons Convention. Pakistan copresented this proposal. Until now, the proposal has been widely supported and well received by States Parties. In this respect, China has drafted a model code of conduct to serve as a basis for further discussion.

6. Hereby, we propose to:

- Include the issue “the development of a model code of conduct for biological scientists under the framework of the BWC” in the Eighth Review Conference and the following inter-sessional process.
- Promote the Eighth Review Conference to make a decision on the development of a model code of conduct for biological scientists, or authorize the following inter-sessional process to discuss and approve it.

Attachment: A Model Code of Conduct for Bio-scientists (draft)

### Principles:

- I. Code of Conduct is neither an international law nor a domestic law, generally attributable to the moral category.
- II. Code of Conduct should be in fact an excellent illustration of the Convention.
- III. Code of Conduct should be a normative document of self-discipline by all biological scientists on the voluntary basis.
- IV. Code of Conduct should be one component of a layered approach to responsible sciences, contributes to awareness.

### Key Elements:

- I. Implementing moral measures for scientists in the biological field.
- II. Covering full process of biological research
- III. Strengthening regulatory responsibilities of the research organization
- IV. Improving education and public engagement related to dual-use technology





# A Model Code of Conduct for Bio-scientists (draft)

## 1. ETHICAL BENCHMARK

- Respect human life, human rights and traditions and the protection of the environment.
- Abide by regulations, standards and law on scientific research.

## 2. RESEARCH INTEGRITY

- Adhere to the rigorous attitude of scholarship and research integrity.

## 3. RESPECT FOR THE OBJECT OF RESEARCH

- Pay respect to the object of bioscience research, including human and non-human organisms.





## A Model Code of Conduct for Bio-scientists (draft)

### **4. PROCESS MANAGEMENT FOR SCIENCE RESEARCH**

- Enhance risk control during bioscience research application and its implementation process.

### **5. CONSTRAINT ON THE SPREAD OF RESEARCH OUTCOME**

- Make a balance between public security and the freedom of research and speech.

### **6. POPULARIZING SCIENCE AND TECHNOLOGY**

- Attach a great importance to the science popularization activities in biotechnology.





# A Model Code of Conduct for Bio-scientists (draft)

## 7. ORGANIZATION'S ROLE

- For institution considering a real-time monitor and periodically assessment that could enhance the evaluation of the potential risks and threats.

## 8. EDUCATION AND TRAINING

- Scientific community and professional associations should take a active roles on education and training.

## 9. AWARENESS AND ENGAGEMENT

- Biological scientists should be fully aware of the potential threats of dual-use research to human society, ecological environment and economic security.

## 10. INTERNATIONAL EXCHANGES

- Participate actively in international cooperation of bioscience and technology research.





## Future Works

**The code of conduct can be a important contribution and have its intended effect, if:**

- scientists perceive the need for the code;
- scientists are aware that the code is existing;
- it will be a part of the scientific culture;
- government, institutes, private investors, and the public attach importance to whether scientists follow the code.





## Future Works

- We are very open to the viewpoints and suggestions of the academic organizations, NGOs, enterprises and so on.
- With a goal to reach consensus among all State Parties, cognizations and NGOs, hopefully adopted by State Parties.
- Building implementation mechanism at international and national level.





天津大学生物安全战略研究中心

Tianjin University Center for Biosafety Research and Strategy (CBRS)

# Thanks!

Yang Xue, Ph.D.  
Center for Biosafety Research and Strategy  
(CBRS)  
Tianjin University  
Tianjin, P. R. China  
Email: [xueyang@tju.edu.cn](mailto:xueyang@tju.edu.cn)