Statement Submitted by

Stefan Maier, Ph.D.

for The Democratic Member Roundtable Researching while Chinese American: Ethnic Profiling, Chinese American Scientists and a New American Brain Drain

House Subcommittee on Civil Rights and Civil Liberties Congressional Asian Pacific American Caucus

June 30, 2021

Chairman Raskin, Chairwoman Chu, and members of the Subcommittee on Civil Rights and Civil Liberties and the Congressional Asian Pacific American Caucus (CAPAC):

Thank you for convening this roundtable and the opportunity to submit a written statement. I deeply appreciate the significance of this Congressional event where the plight of Chinese American scientists and the human and scientific costs of racial profiling are heard for the first time in recent decades.

We are currently witnessing an increasing competitiveness [1,2] or a race, if you wish, towards Next Generation Technologies frequently developed by or in collaboration with the global scientific community. Next Generation Technologies are often of great geopolitical interest [3], which makes scientists valuable assets, but also potential targets and/or collateral damage in the politically and economically motivated global race towards Next Generation Technologies, especially in areas where public opinion is heavily shaped by scientists.

It's not the type of healthy competitiveness that drives innovation, but the detrimental type resulting in an increasing commodification of science [4], biased and exclusive funding programs [5] and in scientists being arrested [6] or losing their jobs [7] for failing to disclose international scientific collaborations in the context of research security [8], economic espionage and intellectual property theft [9].

The COVID-19 pandemic made it abundantly clear how global issues and science transcend all social, cultural, economic, political and actual borders, which makes a healthy international scientific collaboration paramount. The best example is the development of COVID-19 vaccines with such dazzling speed that no one can deny the ultimate benefit of a healthy global scientific collaboration. Despite this success story, free and international scientific collaboration is at risk also because of programs such as the China Initiative and should never be taken for granted as the history of World War I and II, the Cold War and the Iron

Curtain taught us. [10,11,12,13] Prof. Gang Chen's (MIT) arrest [14] is one more reminder of how fragile academic freedom is today.

To some it might seem like history repeating itself, when thinking about the era of McCarthyism [15] or Wen Ho Lee [16,17], who was indicted on 59 counts of scientific espionage, only to be exonerated by a grand jury when it determined there was insufficient evidence to establish the case. And there are indeed chilling similarities when comparing these historic events with current events such as the arrest of Prof. Xiaoxing Xi – also exonerated after being "indicted [...] with four cases of wire fraud in an alleged scheme involving the exploitation of technology for the benefit of third parties in China." [18,19] Against all odds Prof. Xi is now suing the U.S. government for wrongfully accusing him of unlawfully sharing sensitive technology with scientists in China. [20]

And it does not end there. "Dr. Zhengdong Cheng, a physicist and U.S. citizen formerly based at Texas A&M University, [who is] facing criminal charges as a consequence of having allegedly failed to provide accurate information about his affiliations with Chinese institutions as required under a NASA grant [...] has been held for eight months without bond in a federal detention center in Houston." [21,22] According to the Committee on Human Rights (CHR) [22] of the U.S. National Academies of Sciences, Engineering, and Medicine "Dr. Cheng is the only colleague of whom [they] are aware who is currently being held in pre-trial detention in connection with the China Initiative." This, according to the CHR, "has made it difficult for him to prepare an effective defense due to delayed communications between him and his lawyers." The CHR further states [22] that "such delays have been exceptionally problematic in [Dr. Cheng's] case given that his assistance is needed in reviewing the extensive evidence seized by U.S. authorities, much of which is in Chinese." According to the CHR [22], their "concern regarding Dr. Cheng's continued detention is heightened due to the dangers presented by the ongoing pandemic. He has already contracted COVID-19 during his time in the detention center, and he is at significant risk for reinfection, particularly due to the emergence of COVID-19 variants."

What all of these things have in common is that they restrict academic freedom and that they go against the values of an open scientific exchange with all its virtues such as free and unconcerned international collaboration between scientists. Some of these *political interventions* into academic affairs even have the potential of regular human rights violations and of creating a climate of fear and insecurity in academia [23], especially amongst Asian and Asian-American scientists [9], which is highly detrimental to scientific and in turn societal progress. [24]

One of the main drivers of this development aside of the current COVID-19 pandemic is the new geopolitical role of China and its increasingly aggressive competitiveness with the U.S. [1] and Europe [25], who have been the leaders in science and technology in the past decades and who seem to see their leading position being threatened by China. [1] Such competition manifests itself in the Five Year Plans [26], the Chinese Talent Programs [26], the China Initiative [27], "the European Commission saying it can exclude Chinese participation in Horizon Europe and other sensitive research projects using new powers to exclude third countries that do not share 'EU values'" [28] and the most recent introduction of the 2021 Strategic Competition Act by the current U.S. congress stating that "congress makes the following findings: The People's Republic of China (PRC) is leveraging its political, diplomatic, economic, military, technological, and ideological power to become a strategic, near-peer, global competitor of the United States. The policies increasingly pursued by the PRC in these domains are contrary to the interests and values of the United States, its partners and much of the rest of the world." [1]

After learning about the arrest of Prof. Gang Chen, did I not only have to question my own naïve way of thinking about academic freedom and the complexity of scientific collaboration, but did I also have to ask myself: how and why did Prof. Gang Chen get arrested and is now being charged with wire fraud, "which provides for a sentence of up to 20 years in prison, three years of supervised release and a fine of up to \$250,000"? [14] To provide some context: The ex-police officer charged with 2nd degree manslaughter after shooting the 20-year-old Daunte Wright is facing 10 years in prison and/or a fine of \$20,000. [29]

In the months following his arrest I spent countless hours researching and learning about similar arrests of Dr. Zhengdong Cheng (Texas A&M University) [21], Prof. Lin Yang (former University of Florida) [30], Prof. Xiaoxing Xi (Temple University) [18], Prof. Feng Franklin Tao (University of Kansas) [31], Prof. Song Guo Zheng [32] and Prof. Charles Lieber (Harvard University) [33], about "Fifty-four scientists [who] have lost their jobs as a result of [an] NIH probe into foreign ties" [7], about the Five Year Plans [26], the Chinese Talent Programs [26], the U.S. China Initiative [27], the Educause Initiative [34], the Horizon Europe funding program [35] and I attended the Research Security Virtual Symposium on Protecting the Research Enterprise, hosted by the University of California in coordination with the FBI. [36] This extensive list shows: Prof Gang Chen's case is not isolated and has to be regarded in this and even a broader context of the new geopolitical role of China and the reactions it triggers in the U.S. and Europe. All of these things undeniably showed me the chilling extent of political interventions related to science and higher education not only in the U.S. as well as two different and often opposing major agendas. The idealistic, some might call it naïve role of science is to create knowledge for a better and more sustainable future and is in many places pushing towards more and more open access publishing and distribution of

knowledge [37], while political and economic incentives increasingly lead to more and more restrictions of science in order to protect intellectual property under the umbrella of national security concerns. [38] These are two opposing trends, which can become dangerous for scientists who find themselves caught in the middle of these two incompatible agendas. Discussions with Prof. Xiaoxing Xi, representatives from APA Justice [39], Scholars at Risk [40] and The International Human Rights Network of Academies and Scholarly Societies [41] clearly revealed a common concern of a more systemic problem of scientists being caught as assets, targets and collateral damage in the midst of a global race towards Next Generation Technologies leading to an increasingly invasive intervention of the Chinese, American and European governments into scientific affairs. It is sentences and slogans like the following, which I encountered in the past months and which left me deeply concerned about the level of political intervention into the affairs of higher education and science: "Higher Education and the FBI: Working Together toward a Promising Cybersecurity Future", "How can colleges and universities work more effectively with the FBI?" Higher education professionals can simply call their local FBI field office and ask to be transferred to a cyberagent." "The best relationships involve FBI agents and academic cybersecurity professionals meeting on a regular basis to conduct two-way and open sharing of information." [34] Such relationships of course have the potential of being a prerequisite for effective prosecution by the Department of Justice.

In reaction to the various arrests in connection with the U.S. China Initiative, the scientific community responded in a number of ways ranging from petitions [42,43,44], public letters of support by former colleagues [45] and Universities [46,47] such as MIT and Harvard to letters from the American Physical Society (APS) [48] and the National Academies of Science [22] to the corresponding Judges. According to the APS "Prof. Chen's case raises concerns about possible broader implications for scientific and academic freedom within the United States." [48] The National Academies' Human Rights Committee are concerned about the possible overzealous targeting and profiling of scientists of Asian descent under" the Department of Justice's China Initiative" [22] and that "many of the researchers investigated and prosecuted under this initiative [...] are facing substantial prison sentences not as a result of alleged national security offenses but instead due to alleged misstatements and omissions during grant processes." [22] These concerns fall in line with those voiced by Harvard affiliated scientists stating that "global collaboration among researchers is essential for scientific discovery. From labs around the world, we are joining our voices to speak out against an action that is having a chilling effect on that collaboration – the unjust criminal prosecution of Harvard University Professor Charles Lieber" [46] and by approximately 100 MIT faculty urging "that MIT assume leadership in transforming this difficult time to a learning moment, in which the allegations against Gang Chen are discussed in the context of defending academic freedom in this country." [47]

Despite Europe being less aggressive in reacting to the new geopolitical aspirations of China compared to the U.S., the topic also has arrived in Europe. [2,5,25,28] "European governments and institutions are becoming more aware of challenges and pressures on continuing extensive research collaboration with China, with several countries and the European Union drawing up new guidelines to step up knowledge security and academic integrity, and for protection of academic freedom." [2] And it is not an issue limited to China. "The European Commission is trying to block countries outside the European Union from participating in quantum computing and space projects under Horizon Europe, its new research funding program." [5] This includes countries such as Switzerland, the U.K. and Israel. "European Economic Area (EEA) countries Norway, Lichtenstein, and Iceland would be barred from space research calls while remaining eligible for quantum computing projects." [5] A different and less exclusive, knowledge-based approach is being taken by the Kiel Institute China Initiative in Germany, which aims at counteracting the apparent "scarcity of economic research on China in the global economy despite the increasing role that this emerging power plays in international economic relations on the whole and specifically within Germany and Europe." [25]

One cannot be naïve and ignore legitimate concerns of scientific/economic espionage and finding the balance between national security, the protection of intellectual property and academic freedom is key. However, the current intertwining of politics and academia also seen in the China Initiative, the cultural differences between scientists and government officials, the lack of common ground and language to understand each other, the different agendas and the apparent need of a dialogue between scientists, universities, funding agencies and government agencies in China, the U. S. and in Europe can be dazzling for a hopeless idealist who beliefs in the freedom and independence of science and research. There is no easy solution given the complexity of the problem. China's Five Year Plans and Talent Programs have put the "free world" in an awkward position of having to stay "free" in its efforts to protect scientific openness against authoritarianism in a competitive, geopolitical and capitalist framework.

Criminalizing science most definitely is not the solution since it will drive away talent [24], create a climate of paralyzing fear [23] and prohibit scientific and societal progress as a whole.

But there are solutions:

- "Limit federal indictments of scientists to true accusations of espionage, illegal transfer of classified technology or intellectual property violations." [42]
- Grant Universities as much autonomy as possible. Universities do have offices of scientific and
 research integrity dealing with issues such as scientific misconduct, i.e. Universities can handle
 related issues without government interference.
- Uphold longstanding U.S. policy [49] for controlling the flow of science, technology, and
 engineering information produced in federally-funded fundamental research at colleges,
 universities, and laboratories clearly stating that, to the maximum extent possible, the products of
 fundamental research remain unrestricted.
- Follow and improve the recommendations of the Jason report [50,51] to find a good balance between scientific freedom and the protection of intellectual property and technology
- Follow the more informed and inclusive Kiel Institute China Initiative approach [25]
- Reach the highest possible global standard of constitutional protection of the freedom of science and research, which is varying tremendously between countries at the moment. [52]
- Reform patenting and licensing policies and counteract the increasing commodification of science, which can result in a climate of toxic competition [4]
- Build up the China Initiative from the ground with mechanisms preventing racial profiling and overzealous targeting of scientists

Chairman Raskin, Chairwoman Chu, and members of the Subcommittee on Civil Rights and Civil Liberties and the Congressional Asian Pacific American Caucus (CAPAC): Academic freedom and a healthy, global scientific collaboration is vital to science and research worldwide and absolutely essential, if we want to successfully address global challenges such as the COVID-19 pandemic and climate change as a global people. The U. S. as one of the world's scientific leaders needs to be an example as a country upholding human rights and ideals such as academic freedom. The China Initiative in its current form is clearly damaging the global scientific community and should therefore be stopped and/or reformed.

[1] Strategic Competition Act of 2021, https://www.foreign.senate.gov/imo/media/doc/DAV21598%20-%20Strategic%2oCompetition%2oAct%200f%202021.pdf, accessed on the 14/04/2021.

- [2] <u>Europe sets out what are 'safe' research links with China (universityworldnews.com)</u>, accessed on the 14/04/2021.
- [3] A New Technological Cold War? | The National Interest, accessed on the 14/04/2021.
- [4] H. Radder, *The Commodification of Academic Research: Science and the Modern University* **2010**, https://doi.org/10.2307/j.ctt7zw87p, accessed 14/04/2021.
- [5] N. Wallace, Europe moves to exclude neighbors from its quantum and space research 2021, Science, doi:10.1126/science.abi4733.
- [6] <u>U.S. charges target alleged Chinese spying at Harvard, Boston institutions | Reuters</u>, accessed on the 14/04/2021.
- [7] J. Mervis, Fifty-four scientists have lost their jobs as a result of NIH probe into foreign ties **2020**, Science, doi:10.1126/science.abd3084.
- [8] Global Engagement: Rethinking Risk In The Research Enterprise | Hoover Institution, accessed on the 14/04/2021.
- [9] J. Mervis, U.S. scientists want Congress to look into complaints of racial profiling in China Initiative 2021, Science, doi:10.1126/science.abg9532.
- [10] Q. Wright, Academic Freedom and the Cold War 1956, American Association for University Professors, https://doi.org/10.2307/40222059, accessed 14/04/2021.
- [11] Remembering Academic Freedom During World War I | ACADEME BLOG, accessed on the 14/04/2021.
- [12] S. Ludington, *The Dogs that Did Not Bark: The Silence of the Legal Academy During World War II* **2011**, *Journal of Legal Education*, https://ssrn.com/abstract=1481420, accessed on the 14/04/2021.
- [13] A History of Academic Freedom in America (illinoisstate.edu), accessed on the 14/04/2021.
- [14] MIT Professor Arrested and Charged with Grant Fraud | USAO-MA | Department of Justice, accessed on the 14/04/2021.
- [15] McCarthyism Wikipedia, accessed on the 14/04/2021.
- [16] Wen Ho Lee Wikipedia, accessed on the 14/04/2021.
- [17] The Making of a Suspect: The Case of Wen Ho Lee The New York Times (nytimes.com), accessed on the 14/04/2021.
- [18] <u>University Professor Charged In Wire Fraud Scheme | USAO-EDPA | Department of Justice</u>, accessed on the 14/04/2021.
- [19] <u>U.S. Drops Charges That Professor Shared Technology With China The New York Times (nytimes.com)</u>, accessed on the 14/04/2021.

- [20] A Chinese American Scientist and His Family Are Battling the FBI's Profiling in Court (aclu.org), accessed on the 14/04/2021.
- [21] Texas professor and NASA researcher arrested on charges related to China's Talents Program | USAO-SDTX | Department of Justice, accessed on the 14/04/2021.
- [22] <u>FIRST LASTNAME (courtlistener.com)</u>, accessed on the 14/04/2021.
- [23] What the Fear of China Is Doing to American Science The Atlantic, accessed on the 14/04/2021.
- [24] <u>Criminalizing Science Is Really Dumb Bloomberg</u>, accessed on the 14/04/2021.
- [25] <u>Kiel Institute China Initiative (ifw-kiel.de)</u>, accessed on the 14/04/2021.
- [26] FBI-ChineseTalentPrograms.pdf (publicintelligence.net), accessed on the 14/04/2021.
- [27] <u>China Initiative (justice.gov)</u>, accessed on the 14/04/2021.
- [28] <u>EU says it can exclude China from EU research projects (universityworldnews.com)</u>, accessed on the 14/04/2021.
- [29] <u>Protesters gather at Brooklyn Center police station hours after ex-officer is charged in the death of Daunte Wright CNN</u>, accessed on the 15/04/2021.
- [30] Former University of Florida Researcher Indicted for Scheme to Defraud National Institutes of Health and University of Florida | OPA | Department of Justice, accessed on the 14/04/2021.
- [31] <u>University of Kansas Researcher Indicted for Fraud for Failing to Disclose Conflict of Interest with Chinese</u>
 <u>University | OPA | Department of Justice</u>, accessed on the 14/04/2021.
- [32] Researcher Charged with Illegally Using U.S. Grant Funds to Develop Scientific Expertise for China | OPA | Department of Justice, accessed on the 14/04/2021.
- [33] <u>Harvard University Professor Indicted on False Statement Charges | OPA | Department of Justice</u>, accessed on the 14/04/2021.
- [34] <u>Higher Education and the FBI: Working Together toward a Promising Cybersecurity Future |</u> <u>EDUCAUSE</u>, accessed on the 14/04/2021.
- [35] Horizon Europe | European Commission (europa.eu), accessed on the 14/04/2021.
- [36] <u>UC Research Security Virtual Symposium: Protecting the Research Enterprise Transparency, Integrity & Reciprocity University of California Merced Events Calendar (ucmerced.edu)</u>, accessed on the 14/04/2021.
- [37] Open access Wikipedia, accessed on the 14/04/2021.
- [38] https://www.youtube.com/watch?v=Z4Muc5uoJyE, accessed on the 14/04/2021.
- [39] APA JUSTICE Home, accessed on the 14/04/2021.
- [40] Scholars at Risk | Protecting scholars and the freedom to think, question, and share ideas, accessed on the 14/04/2021.
- [41] https://www.internationalhrnetwork.org/, accessed on the 14/04/2021.
- [42] Petition · We are all Gang Chen · Change.org, accessed on the 21/04/2021.

- [43] <u>Calling for a House Hearing on the Racial Profiling of Asian American and Chinese Scientists</u> (google.com), accessed on the 14/04/2021.
- [44] <u>President Biden Pledges to Listen to Scientists—Make Sure He Hears from You (ucsusa.org)</u>, accessed on the 14/04/2021.
- [45] In defense of Gang Chen in defense of academic freedom | Medium, accessed on the 14/04/2021.
- [46] Stuart Schreiber on Twitter: "In our open letter, we scientists are standing up for @Harvard professor Charles Lieber. We also are speaking out against the harm that the prosecution of Charles and other scientists has inflicted on academic freedom and scholarly collaboration. https://t.co/oEQw8cWIzO" / Twitter, accessed on the 14/04/2021.
- [47] Zhigang Suo 锁志刚 on Twitter: "A letter (draft) to the President @MIT from ~100 MIT faculty members. It compares facts and Government's allegations against Professor Gang Chen. Versions of it have been sent to many people, and it is in the public domain. A powerful ending: "We are all Gang Chen" https://t.co/FYRdlSrekz"/ Twitter, accessed on the 14/04/2021.
- [48] <u>Letter-from-APS-re-Gang-Chen.pdf</u>, accessed on the 14/04/2021.
- [49] NSDD-189: National Policy on the Transfer of Scientific, Technical and Engineering Information (fas.org), accessed on the 14/04/2021.
- [50] Fundamental Research Security (nsf.gov), accessed on the 14/04/2021.
- [51] NSF Response to the JASON Report, accessed on the 14/04/2021.
- [52] A. Santosuosso, V. Sellaroli, E. Fabio, J. Med. Ethics 2007, 33, 342.