





STATE REPRESENTATIVE • 89th ASSEMBLY DISTRICT

01/10/2024

Testimony on Assembly Bill 413 Assembly Committee on Colleges and Universities

Chairman Murphy and Members of the Assembly Committee on Colleges and Universities, thank you for holding a public hearing today and allowing me to testify in favor of Assembly Bill 413, which would prohibit institutions of higher education from conducting gain of function research on potentially pandemic pathogens and require reporting of the intention to conduct research on potentially pandemic pathogens.

I will leave some of the more detailed explanations as to why we should be so concerned over this type of research to experts testifying later today. It is my understanding that gain of function research involves improving the ability of a pathogen to cause disease. It is also my understanding that there has been very little (if any) benefit from running this type of research, and there is immense risk. It is also my understanding there are only a handful of labs conducting this type of research in the whole country, and one of them is right here in Madison.

We know of multiple documented incidents that have happened at the UW-Lab. While these are the close calls that we know of, I do wonder how many they have had that we don't know about. If even one accident were to result in a spillover to the general population, the results would be catastrophic. I've been told that the H5N1 virus they have worked with would be far worse than COVID-19. If people were to become infected, the resulting lawsuits could bankrupt the whole UW System. If there is little to no benefit, why would we risk that?

It is my understanding that across the state, it is just the one lab at UW-Madison that is conducting this type of research. I was more than a little troubled when I read the fiscal report where they are anticipating thousands of applications for this type of research each year, and are estimating DHS would need 6 full time employees to administer oversight. Is it just one lab, or is this type of research occurring across the state? Are our first responders that may need to respond in case of an incident even aware of what they would be exposed to?

Experts from across the world are chiming in on the necessity of this legislation. You will hear from some of them later today, and many more have taken to social media and news outlets to share their concern over this type of research and have voiced their support for Assembly Bill 413.

Thank you again for holding this hearing on Assembly Bill 413 and allowing me to testify in favor of it. I am happy to answer any questions you may have.



André Jacque

STATE SENATOR • 1⁵⁷ SENATE DISTRICT

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Testimony before the Assembly Committee on Colleges and Universities

Senator André Jacque January 10, 2024

Chairman Murphy and Members:

Thank you for holding this hearing on Assembly Bill 413. Gain-of-function (GoF) experimentation involves the augmentation of deadly pathogens to artificially make a viral or bacterial disease more infectious - and more lethal.

Previously a very small segment in the field of virology, GoF has the potential for disproportionately disastrous consequences resulting from lapses in biosecurity, and the U.S. government recently identified 'gain of function research of concern' funded by U.S. agencies at the Wuhan Institute of Virology in violation of funding stipulations.

Here in Wisconsin, incidents at the University of Wisconsin-Madison have raised questions as to whether UW researchers followed federal guidelines and timely reported two biosecurity breaches during GoF experiments: One involved a researcher being exposed to a virus while examining a sample in 2013; another incident involved false information provided to investigators after a researcher's respirator became disconnected while collecting samples of a lab-enhanced bird flu in 2019.

In 2010, UW-Madison paid a \$40,000 fine to federal regulators for allowing unauthorized experiments involving a dangerous bacteria, where graduate students and a post-doctoral researcher conducted unapproved experiments involving Brucella, a highly regulated bacteria that can infect cattle and humans, and introducing genes to the bacteria that could have compromised the antibiotic used to control the disease. University officials concluded Prof. Gary Splitter knew and/or participated in the experiments but later denied knowledge of them and failed to supervise his laboratory, which is a biosafety level 3 lab under federal guidelines. The designation is reserved for exotic agents that cause serious and potentially lethal disease if inhaled.

Assembly Bill 413 would prohibit institutions of higher education in this state from conducting gain-offunction research on potential pandemic pathogens. The risks of these dangerous GoF experiments are not only catastrophic, they are unnecessary. Viruses mutate very rapidly all by themselves; they do not require humans to conduct genetic engineering experiments to make them more lethally infectious.

Experimentation seeking to enhance potential pandemic pathogens (PPP) represents less than 0.01% of biomedical research. This proposal is not directed at non-GoF infectious disease research conducted by scientists in Wisconsin that is crucial to the discovery of life-saving vaccines and anti-viral treatments. I am extremely pleased that Professor Justin Kinney of Cold Spring Harbor Laboratory, one of several prominent researcher in support of this legislative effort, is able to join us in person today, and I would also like to share that just this week renowned virologist Dr. Simon Wain-Hobson of the Pasteur Institute, Board Chair of the Foundation for Vaccine Research and the first researcher to record the genome sequence of HIV, recorded a public statement in support of this specific legislation and referenced the widespread concern in the scientific community over Dr. Kawaoka's experiments.

Thank you for your consideration of Assembly Bill 413. I would be happy to answer any questions.

Testimony in support of Assembly Bill 413

10 January 2024

Justin B. Kinney, PhD

Associate Professor, Cold Spring Harbor Laboratory

Co-founder, Biosafety Now

1. Introduction

Chairman Murphy, members of the Committee on Colleges and Universities, thank you very much for hearing my testimony today.

My name is Dr. Justin Kinney. I am an Associate Professor of Quantitative Biology at Cold Spring Harbor Laboratory in New York. I run an active biological research laboratory and serve as principal investigator on two grants from the US National Institutes of Health. I am also a co-founder of Biosafety Now, a nonpartisan 501c(3) nonprofit based in New Jersey, whose goal is to prevent future lab-generated pandemics. I am not receiving any financial compensation for testifying here today, either from Biosafety Now or from any other organization or individual. I have traveled here from New York, at my own expense, only to express my opinion as a concerned scientist.

I will also be speaking for Dr. Richard Ebright, who is unable to appear today. Dr. Ebright is a Professor of Chemistry and Chemical Biology at Rutgers University in New Jersey, a laboratory head at the Waksman Institute for Microbiology, and a co-founder of Biosafety Now. Dr. Ebright is an expert on biosafety policies and procedures, and has been working for over twenty years to prevent lab-generated pandemics. Dr. Ebright is not receiving any financial compensation for this testimony, either from Biosafety Now or from any other organization or individual. Like me, Dr. Ebright is speaking out only as a concerned scientist.

2. Why Assembly Bill 413 is needed

Dr. Ebright and I urge you to support Assembly Bill 413. This bill is needed to protect the public from the hazards of a very narrow but extremely dangerous type of scientific research.

Laboratory accidents happen. They happen because scientists are human, and humans make mistakes. The overwhelming majority of scientific research is safe, and only a small fraction of laboratory accidents pose risks to the public. Accidents involving potential pandemic pathogens, however, can have catastrophic consequences. <u>Potential pandemic pathogens</u> are viruses and bacteria that, if released, could spread uncontrollably through the human population and potentially cause a devastating pandemic.

Assembly Bill 413 will protect the public from the hazards of research on potential pandemic pathogens. The bill will do this without having significant costs or adverse impacts. This is commonsense, nonpartisan legislation that deserves broad-based support.

Assembly Bill 413 contains two important provisions.

<u>The bill's first provision will establish public transparency</u> for research on potential pandemic pathogens. Currently, laboratories that study potential pandemic pathogens are not required to inform state or local governments about where the research is performed, which pathogens they possess, or the potential public health impacts if a pathogen escapes. Assembly Bill 413 will require these laboratories to provide this information to the Wisconsin Department of Health Services (DHS).

Disclosure of this information is essential. First-responders need this information to help them avoid accidental infection when responding to laboratory emergencies. Healthcare providers need this information to diagnose and prevent the spread of laboratoryacquired infections. In the event of a laboratory accident, first-responders and healthcare providers having this information could well make the difference between rapid pathogen containment and an uncontrolled disease outbreak.

<u>The bill's second provision prohibits "gain of function" research</u> on potential pandemic pathogens, i.e., research that makes these pathogens even more dangerous to humans than they already are.

Some have expressed concerns that this prohibition would hamper biomedical research. These concerns are unfounded. Gain-of-function research on potential pandemic pathogens constitutes less than 0.01% of biomedical research. And importantly, gain-of-function research on potential pandemic pathogens is not needed for developing vaccines or disease treatments, nor have the results of such research ever been used for developing vaccines or disease treatments.

Based on publicly available information, the bill's second provision will affect at most one laboratory in Wisconsin—a virology laboratory at the University of Wisconsin, Madison, led by Dr. Yoshihiro Kawaoka. This provision is important because the Kawaoka laboratory has performed gain-of-function research that poses extreme risks to public health. In 2011, the Kawaoka laboratory constructed, then over the next decade studied, genetically engineered avian influenza viruses that can transmit efficiently among mammals. The natural forms of these avian influenza viruses kill up to two-thirds of people they infect, but transmit poorly from person to person. If the genetically engineered avian influenza viruses constructed by the Kawaoka laboratory were to escape, they may be able to transmit easily from person-to-person and cause a pandemic even more devastating than COVID-19.

The U.S. federal government has—for decades—failed to enact legislation that protects the public from accidents at laboratories that study and genetically engineer potential pandemic pathogens. Shockingly, federal inaction continues despite the FBI and the Department of Energy assessing that the COVID-19 pandemic was most likely caused by an accident at a laboratory in Wuhan, China, doing exactly this kind of research.

States must therefore act to protect their residents. By establishing public transparency for high-risk pathogen research, and by prohibiting the highest-risk type of pathogen research, Assembly Bill 413 will provide urgently needed protections for the residents of Wisconsin, for the citizens of the United States, and for all members of the global community.

3. Recommended changes to Assembly Bill 413

Dr. Ebright and I recommend that <u>three amendments</u> be made to Assembly Bill 413. These amendments are needed to properly scope the type of research that is covered, as well as the role of DHS in handling disclosures.

<u>Amendment 1</u> would change the definition of "potential pandemic pathogen" to the definition in the January 2023 recommendation by the US National Science Advisory Board for Biosecurity (NSABB). The definition of potential pandemic pathogen that is currently in Assembly Bill 413 is overly broad. The mismatch between the specific language of the bill and the intent of the bill appears to be a major driver behind inaccurate cost assessments by the DHS and the University of Wisconsin System.

<u>Amendment 2</u> would further clarify the NSABB definition by listing explicit examples of pathogens that match the NSABB definition.

<u>Amendment 3</u> would clarify that research performed on potential pandemic pathogens that are the products of previous gain-of-function experiments are also prohibited. The laboratory of Yoshihiro Kawaoka has performed multiple gain-of-function experiments in the past and likely has in storage multiple pathogens that are the product of this research. This amendment is needed to ensure that those pathogens are not grandfathered in, as experiments on those pathogens is just as dangerous as new gain-of-function experiments would be.

4. Discussion of costs and impacts

Assembly Bill 413, if amended as suggested, will not incur significant costs and will not have significant adverse impacts.

- The bill will not impose significant costs on the taxpayers of Wisconsin, on the University of Wisconsin System, or on individual scientific laboratories operating in Wisconsin.
- The bill will not adversely impact the competitiveness or productivity of scientific laboratories in the University of Wisconsin System or of Wisconsin biotechnology companies.
- The bill will not adversely affect the development of vaccines or disease treatments.

In particular, the substantial costs and adverse impacts that are anticipated by DHS and by the University of Wisconsin System will not be realized if the three amendments are adopted.

DHS assesses that the bill will generate a "high volume" of disclosures, and that handling these disclosures will require the hiring of 6 full-time employees at a cost of approximately \$1.7M/year.

This assessment greatly overstates the cost of the legislation as intended. The legislation, as intended, would likely not require the hiring of any new employees, or at most would require the hiring of one part-time employee. The inaccuracy of the DHS estimates appears to have resulted from incorrect assumptions about the role of DHS, as described by the legislation, and by the overly-broad definition of potential pandemic pathogen, which our proposed amendments would fix.

Specifically, DHS assumes that

"[T]his proposal requires the Department to review all research proposals pertaining to potential pandemic pathogens...In addition to review of the written proposal, it is assumed that the Department would also inspect physical research facilities to ensure compliance with security and environmental standards... Currently, the Department does not have staff who conduct these activities and would need a new unit to review the proposals."

These assumptions are incorrect. Researchers will be submitting disclosures, not scientific proposals that require in-depth technical review. The role of DHS will be only to (1) communicate information in the disclosures to the relevant federal, state, and local authorities, (2) ensure that adequate resources are in place to respond to an accidental pathogen escape, and (3) determine whether the risks of the research, as described by the scientists submitting the disclosure, poses an unjustified risk to public health, and to seek an injunction in cases where there is unjustified risk. I emphasize that the bill requires that the likely consequences of an accidental pathogen escape be assessed and described by the researcher submitting the disclosure, not by DHS. The legislation does not mandate any technical assessment of the science in the disclosures, and does not establish any new inspection regime.

DHS also states that,

"Based on the broad definition of pandemic pathogen, it is difficult to estimate the number of proposals that will be submitted annually, but it is assumed that there will be a high volume of proposals to review."

This statement makes it clear that the overly-broad definition of potential pandemic pathogen that is currently in the legislation is causing the number of disclosures to be vastly overestimated. We estimate that at most one to three dozen labs in the entire state of Wisconsin work on bona fide potential pandemic pathogens. Consequently, there are unlikely to be more than a few dozen disclosures per year if the language in the legislation is appropriately scoped. The three suggested amendments will provide this appropriate scope.

4b. University of Wisconsin System

The University of Wisconsin System estimates that,

"thousands of research projects would require DHS review each year resulting in the loss of faculty productivity and competitiveness."

This vastly overestimates the volume of projects that would be received, the role of DHS, and the resulting effect on researchers. Again, we estimate that at most one-tothree dozen labs in the state of Wisconsin handle potential pandemic pathogens and would need to submit disclosures. These disclosures would not be "reviewed" by DHS; they would simply be disclosed to DHS. And the work that researchers put into each disclosure would be minimal and largely redundant with grants and progress reports that those researchers have already prepared.

The University of Wisconsin System also states that,

"Additionally, most research grants would not allow the research to begin 90 days or more from the date of the award which could result in the returning of grant monies or declining an award."

This is simply not true. The proposed bill explicitly permits the disclosure of <u>anticipated</u> research, and imposes no requirement whatsoever that funds be in place to support that anticipated research prior to disclosure. There is no reason why a disclosure of anticipated research cannot be made to DHS more than 90 days before any grant funds are awarded. Indeed, it commonly takes 8-12 months from the date of a grant submission to the notice of award. If a disclosure is made to DHS at the time of grant submission, there is no reason why any awarded funds would need to be returned.

In summary, if the above amendments are adopted,

- 1. There will be no impact at all on the vast majority of faculty in the University of Wisconsin system, including on an overwhelming majority of faculty in the biological sciences.
- 2. There will be no significant adverse impact on the productivity or competitiveness of the small fraction of University of Wisconsin faculty that would be subject to the disclosure requirement.
- 3. The ban on gain-of-function research would likely affect at most one laboratory—the laboratory of Yoshihiro Kawaoka—and even then would affect at most a subset of the research done in that laboratory. It is possible that none of the ongoing research projects in Dr. Kawaoka's lab will be affected by this ban. If any research projects are affected by this ban, we anticipate that Dr. Kawaoka would be able to repurpose existing awards towards research that is not subject to the ban.

We therefore do not anticipate any substantial adverse impact of Assembly Bill 413 on the University of Wisconsin System.

5. Proposed Amendments

We propose the following three amendments, which are needed to properly scope the definition of potential pandemic pathogen and to avoid the products of prior gain-of-function research on potential pandemic pathogens from being grandfathered in.

<u>Amendment</u> 1: Replace the definition of "Potentially pandemic pathogen" in 36.41, 38.35, and 39.295, with the definition proposed by the NSABB:

"Potentially pandemic pathogen" means a virus, bacterium, fungus, or eukaryotic parasite, or any strain or variant of a virus, bacterium, fungus, or eukaryotic parasite, that is:

1. Likely moderately or highly transmissible and likely capable of wide and uncontrollable spread in human populations; and/or

2. Likely moderately or highly virulent and likely to cause significant morbidity and/or mortality in humans;

and, in addition,

3. Likely to pose a severe threat to public health, the capacity of health systems to function, or national security.

<u>Amendment 2</u>: Append the following text to the definition of "Potentially pandemic pathogen" in 36.41, 38.35, and 39.295:

Potentially pandemic pathogens include: influenza viruses other than seasonal influenza viruses, SARS and MERS coronaviruses, henipah viruses, filoviruses, orthopoxviruses, and the bacterium Yersinia pestis.

Amendment 3: In 36.41, revise the Prohibition to read:

PROHIBITION. No institution or college campus may conduct or provide funding to another entity to conduct gain of function research on potentially pandemic pathogens or to conduct research on potentially pandemic pathogens that are the product of prior gain of function research.

In 38.35, revise the Prohibition to read:

PROHIBITION. No district board or technical college may conduct or provide funding to another entity to conduct gain of function research on potentially pandemic pathogens or to conduct research on potentially pandemic pathogens that are the product of prior gain of function research.

In 39.295, revise the Prohibition to read:

PROHIBITION. No institution of higher education may conduct or provide funding to another entity to conduct gain of function research on potentially pandemic pathogens or to conduct research on potentially pandemic pathogens that are the product of prior gain of function research.

Statement to the Wisconsin State Assembly

Dr. Stuart A. Newman

10 January 2024

Introduction

My name is Stuart Newman. I am a Professor of Cell Biology and Anatomy at New York Medical College, Valhalla, New York. I was educated at Columbia University, and at the University of Chicago, where I received a Ph.D. in chemistry. I also received postgraduate training in molecular embryology at the University of Pennsylvania and the Marine Biology Laboratory, Woods Hole, Massachusetts. My scientific field of specialization is the embryonic development of animals, a subject on which I have published articles and books and performed research for more than 40 years as director of a federally funded (National Science Foundation and National Institutes of Health) laboratory. During that period, I also taught cell and tissue biology to medical students and have served (for the past two decades) on my university's federally mandated Institutional Biosafety Committee (IBC).

As a professional scientist and private citizen, I have long been concerned with the doubleedged nature of advanced technologies and have sought to prevent deliberate and inadvertent misuse of the products of biological research. I was a cofounder in 1980 of the Council for Responsible Genetics (Boston), the first U.S. organization set up to scrutinize the safety and societal effects of genetic science and technology. Recently I joined the governing board of Biosafety Now, a nonpartisan 501c(3) nonprofit based in New Jersey, whose goal is to prevent future lab-generated pandemics. My statement to this Assembly is voluntarily offered without financial compensation.

The importance of Assembly Bill 413

I write in strong support of Assembly Bill 413. My experience as an IBC member has given me an inside view of what can go wrong in even the normal course of research involving genetic modification of microorganisms, particularly those with pathogenic potential in their natural state.

The IBCs, established in the late 1970s and now required of all institutions receiving federal research funds, are mandated to enforce protocols to physically contain potential microbial pathogens, regulate and monitor genetic modifications to bacteria, viruses, and other organisms. The objective is to prevent their acquisition of dangerous new properties and escape from the laboratories that produce them.

The mandate of the IBC also includes evaluation of experiments that could result in bioweapons in addition to benign applications (dual use) and continuous monitoring of the adequate functioning of containment facilities. In addition to meeting monthly to discuss in detail and approve (or disapprove) research protocols submitted by our colleagues, the New York Medical College IBC also received periodic updates from our institutional safety officer on accidental leaks at other venues around the country and the world. A 2001 research report in the *Journal of Virology* that showed that adding what seemed to be a harmless mouse gene into a mildly pathogenic virus in mice turned it into a fatal one (summarized in <u>Scientists inadvertently</u> <u>create lethal mousepox virus: Trends in Immunology (cell.com)</u>), was the kind of thing that caught our attention and made us redouble our scrutiny.

Despite the federal IBC mandates, laboratories that study pathogens (including ones that have the potential to cause pandemics such as Covid-19) are not required to inform state or local governments about which pathogens they possess or the potential public health impacts if a pathogen escapes. Assembly Bill 413 will require these laboratories to provide this information to the state Department of Health Services. It will thus establish public transparency for research on such agents and enable healthcare providers and first responders to take appropriate measures if they escape.

The bill also prohibits "gain of function" research on potential pandemic pathogens, i.e., genetic modifications that could increase the harm they cause to humans, like the 2001 experimental enhancement of mousepox did in mice. Given the recent experience of Covid-19, the infectious agent of which is now thought by many objective scientific observers to have originated in a Wuhan laboratory as a result of a U.S.-China gain-of-function research collaboration, it would be a small price to pay if this rare and generally unproductive line of research were banned.

The changing regulatory landscape and the need for state action

Research is an enterprise conducted by fallible humans. While the IBCs, therefore, cannot prevent with certainty physical escape of experimental microorganisms and infection of laboratory workers by such agents (many cases of both having been documented), they have generally been deemed effective. However, the IBCs are only required in institutions hosting federally funded projects. Reports from colleagues involved in commercial biotechnological enterprises and from monitors from communities where such laboratories are being sited indicate that even the relative security afforded by the federal biological and physical level (BSL) standards implemented by IBCs are being attenuated or disregarded where they are not legally mandated.

This troubling regulatory slippage places even greater importance on state legislative actions like Wisconsin's Assembly Bill 413. While the public as a whole is at risk from gain of function research, implementing protective measures may require local initiatives from those most immediately affected. In this way, Wisconsin might provide national leadership in a new phase of biosafety.





Assembly Committee on Colleges & Universities

2023 Assembly Bill 413

Prohibiting institutions of higher education from conducting gain of function research

January 10, 2024

The University of Wisconsin–Madison, and the Medical College of Wisconsin (MCW) thank the committee for the opportunity to provide testimony on Assembly Bill 413 (AB 413). First, and foremost, while our organizations oppose AB 413, we acknowledge and appreciate authors Rep. Behnke and Sen. Jacque for their commitments to public health and safety in biomedical research, and the legislative intention to ensure that biomedical research does not result in the harmful spread of infectious disease. UW–Madison and MCW are also committed to these goals and to upholding the highest safety standards of biomedical research.

However, as the state's leading research universities, UW–Madison and MCW oppose AB 413 and its attempt to limit research and innovation in Wisconsin. The bill could limit research that contributes to the development of treatments and vaccines to protect humans, plants and animals from diseases that threaten public health, the food supply and the state's economy.

UW-Madison is the flagship institution of public higher education in the state, ranks 8th in the country for federal research expenditures and continues to be a national powerhouse in federally funded research. MCW is the top-funded private institution conducting biomedical research in Wisconsin and leads the state in dollars invested in clinical trials research. Both are R1 research institutions, a designation that recognizes our very high research activity.

UW-Madison and MCW are responsible for a large portfolio of biological research that provides diagnostic testing and surveillance for pathogens of concern in the state and contributes to global understanding of basic biological and disease processes for common and extraordinary ailments. Between them, both institutions have hundreds of research labs with Biosafety Level 2 (BSL-2) or higher designation, all of which adhere to an extensive set of institutional and federal regulations to ensure safety for lab personnel and our community.

MCW's extensive research portfolio focuses entirely on biomedical and health-related research and includes handling agents which individuals often have exposure to in the community. This research is highly varied and diverse, and encompasses many agents, including common cold viruses, RSV and pneumonia. MCW researchers are also investigating the role of HSV (Herpes simplex virus), HCMV (human cytomegalovirus) and SARS-CoV-2 as drivers of dementia and Alzheimer's disease, which critically affects Wisconsin residents. UW-Madison also has an extensive biomedical research portfolio focused on, for example:

- developing vaccines and antiviral treatments for new and emerging diseases;
- understanding how Epstein-Barr virus, Human Papilloma Virus and other viruses cause cancer;
- understanding and preventing common foodborne illnesses caused by E. coli and Salmonella contamination;
- tracking and mitigating common hospital-associated infections such as those cases by Staphylococcus aureus bacteria and Candida fungi; and more.

In addition, the UW School of Veterinary Medicine and the Wisconsin Veterinary Diagnostic Lab perform research and testing on strains of avian influenza that have had significant economic impact on our state's poultry industry. UW–Madison researchers also study the bacteria that cause bovine mastitis, a disease that plagues the dairy industry, and the pathogens that cause blight in Wisconsin potatoes.

These are examples of the kind of work that could be prohibited by AB 413 because the definitions are so broadly drafted as to prohibit any research that may reasonably be anticipated to enhance the transmissibility or virulence of a range of pathogens, including viruses, fungi and bacteria that do not have any pandemic potential. This would create significant uncertainty with respect to what is and is not allowed under the legislation.

The bill also calls for oversight at the state level without any provision for the infrastructure necessary to support it. As such, the proposal could result in the delay or discontinuation of many kinds of critical research, posing significant risks to the health of Wisconsin's residents and its economy.

The proposal would limit the ability of public health authorities to prepare and respond to health threats. Wisconsin would need to rely on researchers in other states without these prohibitions to serve the state's needs. The bill would also risk the potential loss of millions of dollars of federal grant funding that benefits the state and its taxpayers and could hamstring the growth of Wisconsin's biotech and biomedical sectors.

Both of our institutions believe the privilege of conducting essential research comes with extraordinary responsibility and we strongly support transparent and rigorous oversight of pathogen research. We are also committed to ensuring that our researchers who work with high-risk and other pathogens have safe, secure laboratories, and receive extensive training and certification to ensure their investigations are conducted safely.

Research on potential pandemic pathogens is highly regulated at the federal level. While studying pathogens does not come without risk, federal laws, regulations, and guidelines aim to balance the risk of this research with its public health and economic benefits. Several layers of institutional oversight also help ensure this important work is performed safely and transparently. We stand by our records of safety and compliance with federal and institutional oversight. Despite media stories that have repeatedly mischaracterized the same few incidents at UW–Madison, the university's lab personnel and biosafety professionals maintain an excellent record of safety and regulatory compliance. When incidents have occurred, UW–Madison staff have

followed emergency protocols and research oversight requirements, and the university continuously works with federal, state, and local agencies to update protocols as research and requirements change.

MCW and UW–Madison take great pride in the contributions of our scientists in combatting current and future public health threats and welcome further discussion about oversight of pathogen research. However, as proposed, AB 413 will not meaningfully improve oversight, transparency, or safety. Rather, it is poised to significantly hinder the ability of researchers in Wisconsin to conduct research of extreme importance to the state.

We urge legislators to oppose this proposal. Any further questions can be directed to MCW Vice President for Government Relations Nathan Berken (<u>nberken@mcw.edu</u>; 414-955-8588) or UW– Madison Senior Director of State Relations Crystal Potts (<u>crystal.potts@wisc.edu</u>; 608-265-4105).



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Testimony on Assembly Bill 413

Assembly Committee on Colleges and Universities

Wednesday, January 10, 2024

Thank you, Chairman Murphy and members of the Colleges and Universities Committee for the opportunity to testify in favor of Assembly Bill 413. Thank you Representative Behnke and Senator Jacque for leading on this legislation.

While gain of function may seem appealing to elite scientists, risks of these dangerous gain of function experiments are not only catastrophic, they are unnecessary. This bill prohibits institutions of higher education in this state from conducting gain of function research on potentially pandemic pathogens. If an institution of higher education violates the provisions of the bill, the board overseeing the institution's receipt of state funds may not allocate any state funds to the institution for the following fiscal year.

In addition, the bill requires a person to submit a report to the Department of Health Services at least 90 days before beginning research on a potentially pandemic pathogen. The report must include 1) the location where the research will be conducted; 2) the scope, nature, and purpose of the research; 3) the source of funding for the research; 4) the identity of the pathogen that will be used or analyzed in the research; 5) the potential impact the pathogen will have on the public if released into the general population; and 6) the measures the person will take to ensure the pathogen is not released.

In conclusion, gain of function clearly presents more of a risk than any benefit. I strongly urge the members of this committee to carefully consider the implications and potential risks associated with gain of function.

Again, thank you for your time and consideration of this bill.