Joseph Bednash

Disclosure Purpose: 22-06725

Summary of Interests

Company or Organization

Entity	Туре	Interest Held By
National Center for Advancing Translational Sciences	Grant / Contract	Self

Recipient Name: Ohio State University Center for Clinical and Translational Science
Grant / Contract Description: UL1TR002733 NCATS grant that helps fund the CCTS at OSU
Additional Information: Funded through the CCTS for salary and consultation services.

Recipient Type: Institution
Grant / Contract Purpose: Research

National Center for Advancing Translational Sciences

Recipient Name: Joseph Bednash
Grant / Contract Description: KL2TR002734

 $\begin{tabular}{ll} \textbf{Additional Information}. Grant support for salary, supplies and consultation through the Ohio State CCTS funded by NCATS CTSA grant UL1TR002733 \end{tabular}$

Recipient Type: Individual
Grant / Contract Purpose: Research

Grant / Contract

Additional Questions:

- 1. Are there other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work?
- 2. What is the manuscript title?

Neutralization of the SARS-CoV-2 Omicron BA.4/5 and BA.2.12.1 Subvariants

3. Are you the corresponding author?

No.

Certification



Claire Carlin

May 24, 2022 06:27:54 EDT
New England Journal of Medicine

Disclosure Purpose: 22-06725

Summary of Interests

I do not have any interests to disclose at this time.

Additional Questions:

1. Are there other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work?

2. What is the manuscript title?

Neutralization of the SARS-CoV-2 Omicrom BA.4/5 and BA.2.12.1 Subvariants

3. Are you the corresponding author?

No.

Certification



John Evans

May 23, 2022 18:15:18 EDT

New England Journal of Medicine

Disclosure Purpose: 22-06725

Summary of Interests

Company or Organization

Entity	Туре	Interest Held By
The Ohio State University College of Veterinary Medicine	Grant / Contract	Self

Recipient Name: John P. Evans

Grant / Contract Description: Glenn Barber Fellowship

 $\textbf{\textit{Additional Information:}} \ \textbf{This grant covers a graduate student's tuition, fees, and stipend for a period}$

of 2 years.

Recipient Type: Individual
Grant / Contract Purpose: Research

Additional Questions:

- 1. Are there other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work?

 No.
- 2. What is the manuscript title?

Neutralization of SARS-CoV-2 Omicron BA.4/5 and BA.2.12.1 Subvariants

3. Are you the corresponding author?

No.

Certification



Julia Faraone

Jun 03, 2022 10:27:25 EDT

New England Journal of Medicine

Disclosure Purpose: 22-06725

Summary of Interests

Company or Organization

Entity	Туре	Interest Held By
National Institutes of Health	Grant / Contract	Self
Recipient Name: Shan-Lu Liu Recipient Type: Individual		

Grant / Contract Description: Additional support of S.-L.L.'s lab includes NIH grant R01 Al150473.

Additional Information:

Recipient Type: Individual

Grant / Contract Purpose: Research

Additional Questions:

- 1. Are there other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work?

 No.
- 2. What is the manuscript title?

Neutralization of SARS-CoV-2 Omicron BA.4/5 and BA.2.12.1 Subvariants

3. Are you the corresponding author?

No.

Certification



Richard Gumina

May 25, 2022 13:48:17 EDT

New England Journal of Medicine

Disclosure Purpose: 22-06725

Summary of Interests

Company or Organization

Entity	Туре	Interest Held By	
National Cancer Institute	Grant / Contract	Self	
Recipient Name: The Ohio State University Grant / Contract Description: U54CA260582 Additional Information: 15% effort	Recipient Type: Institution Grant / Contract Purpose: Research		
National Institute of Health	Grant / Contract	Self	
Recipient Name: The Ohio State University Grant / Contract Description: U54ca260582 Additional Information: 15% effort	Recipient Type: Institution Grant / Contract Purpose: Research		
Ohio State University	Employment	Self	
Title: Associate Professor of Internal Medicine Additional Information:	Position Description: Associate Professor of Internal Medicine. Interventional Cardiology		
Ohio State University	Gift	Self	
Description: JB Cardiovascular Research Fund	Additional Information:		
Ohio State University	Grant / Contract	Self	

Intellectual Property

Additional Information:

Recipient Name: Richard J. Gumina

Туре		Is Licensed	Interest Held By
Patent - METHODS OF MODULATING T-CELL ACTIVATION USING ES		No	Self
Description: METHODS OF MODULATING T-CELL ACTIVATION USING ESTROGEN RECEPTOR BETA (ERbeta) AGONISTS Patent Holder: Current Institution Licensees:	Patent Number: US Provisional Applic Patent Status: Pending Filing Jurisdiction: USA Additional Information: Summary: Di subject using estrogen receptor beta the activation and/or proliferation of significantly affecting circulating leve	isclosed herein are methods (ERbeta agonists). The ER- 'T-cells, reducing circulating	of modulating immune response in a beta agonists can selectively inhibit Fcell levels in a subject without

Recipient Type: Individual

Grant / Contract Purpose: Research

Additional Questions:

- Are there other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work?
 No.
- 2. What is the manuscript title?

Neutralization of the SARS-CoV-2 Omicron BA.4/5 nd BA.2.12.1 Subvariants

Grant / Contract Description: Robert J. Anthony Fund for Cardiovascular Research

3. Are you the corresponding author?

No.

Certification



May 24, 2022 18:04:35 EDT New England Journal of Medicine

Shan-Lu Liu

Disclosure Purpose: 22-06725

Summary of Interests

Company or Organization

Entity	Туре	Interest Held By	
College of Veterinary Medicine, Ohio State University	Gift	Other - I am an employee of the College of Veterinary Medicine at OSU.	
Description: A fund provided by an anonymous private donor to the Ohio State University (to Dr. Liu). Additional Information:			
National Cancer Institute	Grant / Contract	Self	
Recipient Name: Shan-Lu Liu Grant / Contract Description: U54CA260582 Additional Information:		Recipient Type: Institution Grant / Contract Purpose: Research	
National Institutes of Health	Grant / Contract	Self	
Recipient Name: Shan-Lu Liu Grant / Contract Description: R01Al150473 Additional Information:		Recipient Type: Institution Grant / Contract Purpose: Research	

Additional Questions:

- Are there other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work?

 No.
- 2. What is the manuscript title?

Neutralization of the SARS-CoV-2 Deltacron and BA.3 Variants

3. Are you the corresponding author?

Yes.

a. Please list the other authors' names here.

Panke Qu, M.S. Julia Faraone, B.S. John P. Evans, M.S. Xue Zou, Ph.D. Yi-Min Zheng, M.D. Claire Carlin Joseph S. Bednash, M.D. Gerard Lozanski, M.D. Rama Mallampalli, M.D. Linda J. Saif, Ph.D. Eugene M. Oltz, Ph.D. Peter Mohler, Ph.D. Richard J. Gumina, M.D., Ph.D.

Certification



Gerard Lozanski

May 24, 2022 09:55:39 EDT

New England Journal of Medicine

Disclosure Purpose: 22-06725

Summary of Interests

Company or Organization

Entity	Туре	Interest Held By
National Cancer Institute	Grant / Contract	Self

Recipient Name: Gerard Lozanski

Grant / Contract Description: NIH U54CA260582

Additional Information:

Recipient Type: Individual
Grant / Contract Purpose: Research

Additional Questions:

1. Are there other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work?

No.

2. What is the manuscript title?

Neutralization of SARS-CoV-2 Omicron BA.4/5 and BA.2.12.1 Subvariants

3. Are you the corresponding author?

No.

Certification



Rama Mallampalli

May 24, 2022 14:42:23 EDT New England Journal of Medicine

Disclosure Purpose: 22-06725

Summary of Interests

I do not have any interests to disclose at this time.

Additional Questions:

- 1. Are there other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work?
- 2. What is the manuscript title?

Neutralization of SARS-CoV-2 Omicron BA.4/5 and BA.2.12.1 Subvariants

3. Are you the corresponding author?

No.

Certification



Peter Mohler

May 23, 2022 19:31:05 EDT

New England Journal of Medicine

Disclosure Purpose: 22-06725

Summary of Interests

I do not have any interests to disclose at this time.

Additional Questions:

1. Are there other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work?

2. What is the manuscript title?

Neutralization of the SARS-CoV-2 Deltacron and BA.3 Variants

3. Are you the corresponding author?

No.

Certification



Eugene Oltz

Jun 07, 2022 12:11:23 EDT

New England Journal of Medicine

Disclosure Purpose: 22-06725

Summary of Interests

Company or Organization

Entity	Туре	Interest Held By
National Institutes of Health	Grant / Contract	Self

Recipient Name: The Ohio State University
Grant / Contract Description: NIH Grant U54CA260582
Additional Information:

Recipient Type: Institution Grant / Contract Purpose: Research

Additional Questions:

1. Are there other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work?

No.

2. What is the manuscript title?

Neutralization of SARS-CoV-2 Omicron BA.4/5 and BA.2.12.1 Subvariants

3. Are you the corresponding author?

No.

Certification



PANKE QU

May 23, 2022 18:05:52 EDT

New England Journal of Medicine

Disclosure Purpose: 22-06725

Summary of Interests

I do not have any interests to disclose at this time.

Additional Questions:

1. Are there other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work?

2. What is the manuscript title?

Neutralization of SARS-CoV-2 Omicron BA.4/5 and BA.2.12.1 Subvariants

3. Are you the corresponding author?

No.

Certification



Linda Saif

May 24, 2022 10:22:02 EDT

New England Journal of Medicine

Disclosure Purpose: 22-06725

Summary of Interests

Company or Organization

Pr. 7 3		
Entity	Туре	Interest Held By
National Cancer Institute	Grant / Contract	Self
Recipient Name: Linda J Saif Grant / Contract Description: U54CA260582. Additional Information:	Recipient Type: Institution Grant / Contract Purpose: Research	
NIH Office of the Director	Grant / Contract	Self
Recipient Name: Linda J Saif Grant / Contract Description: HD095881 Additional Information:	Recipient Type: Institution Grant / Contract Purpos	

Additional Questions:

- 1. Are there other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work?

 No.
- 2. What is the manuscript title?

Neutralization of SARS-CoV-2 Omicron BA.4/5 and BA.2.12.1 Subvariants"

3. Are you the corresponding author?

No.

Certification



yimin zheng

May 24, 2022 18:09:45 EDT

New England Journal of Medicine

Disclosure Purpose: 22-06725

Summary of Interests

I do not have any interests to disclose at this time.

Additional Questions:

- 1. Are there other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work?
- 2. What is the manuscript title?

Neutralization of SARS-CoV-2 Omicron BA.4/5 and BA.2.12.1 Subvariants

3. Are you the corresponding author?

No.

Certification





Disclosure Purpose: 22-06725

Summary of Interests

I do not have any interests to disclose at this time.

Additional Questions:

- 1. Are there other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work?
- 2. What is the manuscript title?

Neutralization of SARS-CoV-2 Omicron BA.4/5 and BA.2.12.1 Subvariants

3. Are you the corresponding author?

No.

Certification

