

Hurley at 240-669-5092 or [benjamin.hurley@nih.gov](mailto:benjamin.hurley@nih.gov), and reference E-076-2019.

**Collaborative Research Opportunity:** The National Institute of Allergy and Infectious Diseases is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate or commercialize this invention. For collaboration opportunities, please contact Benjamin Hurley; (240) 669-5092, [benjamin.hurley@nih.gov](mailto:benjamin.hurley@nih.gov).

Dated: June 2, 2021.

**Surekha Vathyam,**

*Deputy Director, Technology Transfer and Intellectual Property Office, National Institute of Allergy and Infectious Diseases.*

[FR Doc. 2021-12182 Filed 6-9-21; 8:45 am]

**BILLING CODE 4140-01-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### National Heart, Lung, and Blood Institute; Notice of Closed Meeting

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended, notice is hereby given of the following meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

*Name of Committee:* National Heart, Lung, and Blood Institute Special Emphasis Panel; NHLBI Career Development Awards—K99.

*Date:* July 14, 2021.

*Time:* 11:30 a.m. to 1:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Institutes of Health, 6705 Rockledge Drive, Bethesda, MD 20817 (Virtual Meeting).

*Contact Person:* Lindsay M. Garvin, Ph.D., Scientific Review Officer, Office of Scientific Review/DERA, National Heart, Lung, and Blood Institute, National Institutes of Health, 6705 Rockledge Drive, Suite 208-Y, Bethesda, MD 20892, (301) 827-7911, [lindsay.garvin@nih.gov](mailto:lindsay.garvin@nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.233, National Center for Sleep Disorders Research; 93.837, Heart and Vascular Diseases Research; 93.838, Lung Diseases Research; 93.839, Blood Diseases and Resources Research, National Institutes of Health, HHS)

Dated: June 4, 2021.

**David W. Freeman,**

*Program Analyst, Office of Federal Advisory Committee Policy.*

[FR Doc. 2021-12139 Filed 6-9-21; 8:45 am]

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## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### Government-Owned Inventions; Availability for Licensing

**AGENCY:** National Institutes of Health, HHS.

**ACTION:** Notice.

**SUMMARY:** The invention listed below is owned by an agency of the U.S. Government and is available for licensing to achieve expeditious commercialization of results of federally-funded research and development. Foreign patent applications are filed on selected inventions to extend market coverage for companies and may also be available for licensing.

**FOR FURTHER INFORMATION CONTACT:** Benjamin Hurley at 240-669-5092; [benjamin.hurley@nih.gov](mailto:benjamin.hurley@nih.gov). Licensing information may be obtained by communicating with the Technology Transfer and Intellectual Property Office, National Institute of Allergy and Infectious Diseases, 5601 Fishers Lane, Rockville, MD 20852; tel. 301-496-2644. A signed Confidential Disclosure Agreement will be required to receive copies of unpublished information related to the invention.

**SUPPLEMENTARY INFORMATION:** Technology description follows:

#### Producing Modified Vaccinia Ankara (MVA) Virus With Continuous Cell Lines: Modifications of Mammalian Host Cells for Increasing MVA Vaccine Production Yield

*Description of Technology:* Modified vaccinia Ankara (MVA) is a well-known and important platform for vaccine development, and many MVA-based vaccine trials are currently underway to prevent a variety of microbial diseases. While MVA shows promise as a vaccine platform, wide-scale industry use of MVA may be currently held back due to MVA's severe host-restriction, and the fact that large bulks of culture cells are presently required to produce enough product for mass commercial use. At present, the range of commonly-used culture cells that can support high-titer production of MVA is limited to chick embryo fibroblast (CEF) cells.

Unfortunately, the production of CEF cells in bulk involves many slow and inefficient manufacturing steps both upstream and downstream. Therefore, especially in the context of pandemic preparedness, continuous cell lines that allow for efficient, large-scale MVA propagation would be beneficial.

There is a clear need for an expanded range of cell lines that are easily maintained in culture, and that allow for the production of high titers of infectious MVA virus. The present invention provides methods of modifying non-permissive cell lines in a way that allows for production of MVA.

Scientists at NIAID have made a breakthrough discovery by identifying the mammalian Zinc finger antiviral protein (ZAP) as a restriction factor that inhibits MVA growth in mammalian cells. They have demonstrated that ZAP abrogation enhanced replication of the MVA in a range of mammalian cells that are normally non-permissive for MVA replication. In particular, CRISPR/Cas9 inactivation of ZAP was shown to produce stable cell lines capable of supporting MVA replication. Additionally, recombinant host cells engineered to produce vaccinia virus proteins C12L and C16L have been shown to overcome the host range inhibition of the MVA.

This technology is available for licensing for commercial development in accordance with 35 U.S.C. 209 and 37 CFR part 404, as well as for further development and evaluation under a research collaboration.

#### *Potential Commercial Applications:*

- **Vaccine Development:** Recombinant continuous cell lines useful for efficient, large-scale production of MVA.

- May offer improved vaccine production scaling-response times, enhancing epidemic/pandemic preparedness.

#### *Competitive Advantages:*

- Overcomes inefficiencies associated with CEF production of MVA-based vaccines.

*Inventors:* Bernard Moss, Linda Wyatt, Chen Peng, Gilad Sivan, Shira Glushakow-Smith, all of NIAID.

#### *Publications:*

Liu R, Mendez-Rios JD, Peng C, et al. SPI-1 is a missing host-range factor required for replication of the attenuated modified vaccinia Ankara (MVA) vaccine vector in human cells.; *PLoS Pathog.* 2019.

Peng C, Moss B. Repair of a previously uncharacterized second host-range gene contributes to full replication of modified vaccinia virus Ankara (MVA) in human cells. *Proc Natl Acad Sci U S A.* 2020.

Peng, C, Wyatt, L, Glushakow-Smith, SG, Lal-

Nag, M, Weisberg, AS, and Moss, B. Zinc-finger antiviral protein (ZAP) is a restriction factor for replication of modified vaccinia virus Ankara (MVA) in human cells. *PLoS Pathog.* 2020, accepted for publication.

*Intellectual Property:* HHS Reference No. E-076-2019; International Application No. PCT/US20/33788.

*Licensing Contact:* To license this technology, please contact Benjamin Hurley at 240-669-5092 or [benjamin.hurley@nih.gov](mailto:benjamin.hurley@nih.gov), and reference E-076-2019.

*Collaborative Research Opportunity:* The National Institute of Allergy and Infectious Diseases is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate or commercialize this invention. For collaboration opportunities, please contact Benjamin Hurley; 240-669-5092, [benjamin.hurley@nih.gov](mailto:benjamin.hurley@nih.gov).

Dated: June 2, 2021.

**Surekha Vathyam,**

*Deputy Director, Technology Transfer and Intellectual Property Office, National Institute of Allergy and Infectious Diseases.*

[FR Doc. 2021-12179 Filed 6-9-21; 8:45 am]

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## DEPARTMENT OF HOMELAND SECURITY

### Coast Guard

[Docket No. USCG-2021-0236]

#### Cooperative Research and Development Agreement: Evaluating Unmanned Surface Vessel Characteristics for Coast Guard Platforms

**AGENCY:** Coast Guard, DHS.

**ACTION:** Notice of intent; request for comments.

**SUMMARY:** The Coast Guard is announcing its intent to enter into a Cooperative Research and Development Agreement (CRADA) with Sea Machines Robotics. Sea Machines Robotics will work with the USCG Research and Development Center (RDC) to modify the currently existing SM300 system installed on the USCG RDC unmanned surface vessel (USV) to determine what parameters and behaviors would be beneficial for USCG mission sets. Additionally, the agreement will investigate the current state of collision avoidance in autonomous unmanned surface vessels (USVs), to develop a better understanding of how these capabilities should be evaluated/regulated in the future. The Coast Guard

invites other potential non-Federal participants, who have the interest and capability to bring similar contributions to this type of research, to submit proposals for consideration in similar CRADAs.

**DATES:** Comments must be submitted to the online docket via <http://www.regulations.gov>, or reach the Docket Management Facility, on or before July 12, 2021.

Synopses of proposals regarding future CRADAs must reach the Coast Guard (see **FOR FURTHER INFORMATION CONTACT**) on or before July 12, 2021.

**ADDRESSES:** Submit comments online at <http://www.regulations.gov> following website instructions.

**FOR FURTHER INFORMATION CONTACT:** If you have questions on this notice or wish to submit proposals for future CRADAs, contact Derek Meier, Project Official, Surface Branch, U.S. Coast Guard Research and Development Center, 1 Chelsea Street, New London, CT 06320, telephone 860-271-2600, email [RDC-Info@uscg.mil](mailto:RDC-Info@uscg.mil).

#### SUPPLEMENTARY INFORMATION:

#### Public Participation and Request for Comments

We request public comments on this notice. Although we do not plan to respond to comments in the **Federal Register**, we will respond directly to commenters and may modify our proposal in light of comments.

Comments should be marked with docket number USCG-2021-0236 and should provide a reason for each suggestion or recommendation. You should provide personal contact information so that we can contact you if we have questions regarding your comments; but please note that all comments will be posted to the online docket without change and that any personal information you include can be searchable online (see the **Federal Register** Privacy Act notice regarding our public dockets, 73 FR 3316, Jan. 17, 2008). We also accept anonymous comments.

We encourage you to submit comments through the Federal eRulemaking Portal at <http://www.regulations.gov>. If your material cannot be submitted using <http://www.regulations.gov>, contact the Coast Guard (see **FOR FURTHER INFORMATION CONTACT**). Documents mentioned in this notice, and all public comments, are in our online docket at <http://www.regulations.gov> and can be viewed by following that website's instructions. Additionally, if you go to the online docket and sign up for email alerts, you

will be notified when comments are posted or a final rule is published.

Do not submit detailed proposals for future CRADAs to the Docket Management Facility. Instead, submit them directly to the Coast Guard (see **FOR FURTHER INFORMATION CONTACT**).

#### Discussion

CRADAs are authorized under 15 U.S.C. 3710(a).<sup>1</sup> A CRADA promotes the transfer of technology to the private sector for commercial use, as well as specified research or development efforts that are consistent with the mission of the Federal parties to the CRADA. The Federal party or parties agree with one or more non-Federal parties to share research resources, but the Federal party does not contribute funding.

CRADAs are not procurement contracts. Care is taken to ensure that CRADAs are not used to circumvent the contracting process. CRADAs have a specific purpose and should not be confused with procurement contracts, grants, and other type of agreements.

Under the proposed CRADA, the R&D Center will collaborate with one non-Federal participant. Together, the R&D Center and the non-Federal participant will evaluate which USV characteristics and parameters would be beneficial to the USCG mission set. Additionally, both partners will evaluate how collision avoidance technology should be validated on these platforms in the future. We anticipate that the Coast Guard's contributions under the proposed CRADA will include the following:

1. Provide appropriate staff with expertise to accomplish the above mentioned tasks.
2. Draft test plan.
3. Provide all support resources, including travel for Coast Guard staff that support this CRADA.
4. Obtain, transport, and provide all of the parts, tools, and equipment necessary to prepare the platform for Sea Machines Robotics modifications.
5. Provide the 29RDC and qualified crew for the testing.
6. Provide all resources required for the conduct of the testing on the 29RDC.
7. Execute the testing IAW with the agreed upon test plan.

We anticipate that the non-Federal participants' contributions under the proposed CRADA will include the following:

<sup>1</sup> The statute confers this authority on the head of each Federal agency. The Secretary of DHS's authority is delegated to the Coast Guard and other DHS organizational elements by DHS Delegation No. 0160.1, para. II.B.34.