obtained by communicating with the indicated licensing contact at 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 A signed Confidential Disclosure Agreement will be required to receive copies of unpublished patent applications.

SUPPLEMENTARY INFORMATION: Technology description follows.

Hybridoma Cell Lines Producing Antibodies to RSV NS1

Description of Technology: This technology provides a new set of hybridoma cell lines each expressing a single monoclonal antibody against human respiratory syncytial virus (RSV) nonstructural protein 1 (NS1). These antibodies have variously been shown to detect NS1 protein in an enzyme-linked immunosorbent assay (ELISA), Western blot assay, immunofluorescence microscopy of paraformaldehyde-fixed cells, and flow cytometry. The various antibodies can vary in their efficiency in each of these assays. This technology provides a unique set of qualified monoclonal antibodies against RSV NS1 protein which currently do not exist. These antibodies and cell lines may be of interest to any persons investigating RSV infection processes, particularly as it relates to the activity of NS1 in such an infection process.

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:

- Viral diagnostics
- Vaccine research

Competitive Advantages:

- Ease of manufacture
- Unique research tool

Development Stage:

- *In vitro* data assessment

Inventors: Thomas McCarty (NIAID), Joseph Marcotrigiano (NIAID), Peter Collins (NIAID).

Publications: None.

Intellectual Property: HHS Reference No. E–018–2018/0—U.S. Provisional Application No. 62/661,320, filed April 23, 2018 (pending).

Licensing Contact: Peter Soukas, J.D., 301–594–8730; *peter.soukas@nih.gov.*

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 for development of a vaccine for respiratory or other infections. For collaboration opportunities, please contact Peter Soukas, J.D., 301–594–8730; *peter.soukas@nih.gov.*

Dated: September 25, 2018.

Suzanne M. Frisbie,

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

[FR Doc. 2018–21764 Filed 10–5–18; 8:45 am]

BILLING CODE 4140–01–P

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: Barry Buchbinder, Ph.D., 240–627–3678; *barry.buchbinder@nih.gov.* Licensing information and copies of the U.S. patent application listed below may be obtained by communicating with the indicated licensing contact at 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 patent applications.

SUPPLEMENTARY INFORMATION: Technology description follows.

HIV–1 Env Fusion Peptide Immunogens and Their Use

Description of Technology: Millions of people are infected with HIV–1 worldwide, and 2.5 to 3 million new infections have been estimated to occur yearly. Although effective antiretroviral therapies are available, millions succumb to AIDS every year, especially in Sub-Saharan Africa, underscoring the need to develop measures to prevent the spread of this disease.

HIV–1 is an enveloped virus, which hides from humoral recognition behind a wide array of protective mechanisms. During infection, the major envelope protein of HIV–1 is cleaved by host cell proteases into two smaller versions (gp120 and gp41). Together gp120 and gp41 make up the HIV–1 Env spike, which is a target for neutralizing antibodies. It is believed that immunization with an effective immunogen based on the HIV–1 Env glycoprotein can elicit a neutralizing response, which may be protective against HIV–1 infection.

Researchers at the Vaccine Research Center (VRC) of the National Institute of Allergy and Infectious Diseases used knowledge from the crystal structure of an HIV–1 neutralizing antibody, VRC34.01, in complex with its epitope on the HIV–1 Env trimer, to develop novel immunogens. HIV–1 uses a fusion peptide, located at the N-terminus of the gp41 subunit, to fuse with a target cell to infect the cell. The crystal structure revealed the epitope recognized by VRC34.01 to be composed primarily of the exposed 8 residues of the fusion peptide at the N-terminus of the gp41 subunit. Researchers designed fusion peptide immunogens that were comprised of the exposed residues of the fusion peptide coupled to highly immunogenic carrier proteins to focus the immune response to this conserved site of vulnerability. The fusion peptide can be displayed on scaffold proteins and—when coupled to HIV–1 Env trimer boosts—has the potential to elicit antibodies capable of neutralizing diverse HIV–1 strains in mice, guinea pigs and rhesus macaques, and might therefore serve as the basis for an effective HIV vaccine.

This technology is available for licensing for commercial development in accordance with 35 U.S.C. 209 and 37 CFR part 404.

Potential Commercial Applications:

HIV–1 vaccine

Competitive Advantages:

Potential to be a broadly neutralizing HIV–1 vaccine

Development Stage: In vivo testing (rodents and non-human primates).

Inventors: Peter Kwong (NIAID), John Mascola (NIAID), Kai Xu (NIAID), Rui Kong (NIAID), Tongqing Zhou (NIAID), Li Ou (NIAID), Cheng Cheng (NIAID), Wing-Pui Kong (NIAID), Gwo-Yu Chuang (NIAID), Kevin Liu (NIAID), Michael Gordon Joyce (NIAID), Yongping Yang (NIAID), Baoshan Zhang (NIAID)

Publications:

(a) Kong, Rui, et al. ''Fusion peptide of HIV–1 as a site of vulnerability to

neutralizing antibody.'' *Science* 352.6287 (2016): 828–833.

(b) Xu, Kai, et al. ''Epitope-based vaccine design yields fusion peptide-directed antibodies that neutralize diverse strains of HIV–1.'' *Nature Medicine* 24, 857–867 (2018).

Intellectual Property: HHS Reference Number E–279–2016 includes U.S. Provisional Patent Application Number 62/403,266 filed 10/03/2016 and PCT Application Number PCT/US2017/054959 filed 10/03/2017 (pending).

Licensing Contact: Barry Buchbinder, Ph.D., 240–627–3678; *barry.buchbinder@nih.gov*

Dated: September 25, 2018.

Suzanne M. Frisbie,

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

[FR Doc. 2018–21762 Filed 10–5–18; 8:45 am]

BILLING CODE 4140–01–P

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: Peter Soukas, J.D., 301–594–8730; *peter.soukas@nih.gov*. Licensing information and copies of the patent applications listed below may be obtained by communicating with the indicated licensing contact at 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 patent applications.

SUPPLEMENTARY INFORMATION: Technology description follows.

Recombinant RSV B1 Expressing eGFP as a Reporter Gene

Description of Technology: The inventors have created a reverse genetics system for RSV strain B1 of antigenic subgroup B encoding a replication-competent recombinant RSV that contains a codon-optimized G ORF and expresses enhanced green fluorescence protein (GFP). There are two antigenic subgroups of RSV, subgroups A and B, and most of the available information and reagents are for subgroup A. Immunity against either subgroup has reduced effectiveness in restricting the heterologous subgroup, suggesting that an effective RSV vaccine might need to contain both subgroups. The sequence of the wild type G gene was refractory to cloning into full-length antigenomic cDNA in *E. coli,* and so the inventors made and successfully used a codon optimized version. In addition, the inventors inserted an eGFP gene into the first gene position (promoter proximal). The resulting virus is replication-competent and efficiently expresses GFP in infected cells. This virus can be used as a tool to detect RSV-neutralizing antibodies to RSV subgroup B in a plaque-reduction assay. It also can be used to evaluate RSV infection in vitro and in vivo using GFP fluorescence to track infection. The antigenomic cDNA clone also provides the starting material for making live-attenuated subgroup B-specific RSV vaccine candidates containing defined mutations. These defined mutations can include ones that we previously developed for RSV subgroup A, and include stabilized point mutations, stabilized codon-deletions, and gene-deletions.

The present invention provides a reverse genetics system encoding strain B1 of RSV subgroup B containing a codon-optimized G ORF and encoding eGFP. This provides a tool for RSV subgroup B serology assays, for tracking RSV infection, and a starting point for making attenuated subgroup B strains for vaccine purposes.

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:

- Viral diagnostics
- Vaccine research
- Serology assays
- Vaccine manufacture

Competitive Advantages:

- Ease of manufacture
- Unique research tool

Development Stage:

- *In vitro* data assessment

Inventors: Ursula Buchholz (NIAID), Peter Collins (NIAID).

Publications: None.

Intellectual Property: HHS Reference No. E–159–2018–0.

Licensing Contact: Peter Soukas, J.D., 301–594–8730; *peter.soukas@nih.gov*.

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 for development of a vaccine for respiratory or other infections. For collaboration opportunities, please contact Peter Soukas, J.D., 301–594–8730; *peter.soukas@nih.gov*.

Dated: September 25, 2018.

Suzanne M. Frisbie,

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

[FR Doc. 2018–21767 Filed 10–5–18; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Submission for OMB Review; 30-Day Comment Request; Generic Clearance To Conduct Voluntary Customer/Partner Surveys (NLM)

AGENCY: National Institutes of Health, HHS.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act of 1995, the National Institutes of Health (NIH) has submitted to the Office of Management and Budget (OMB) a request for review and approval of the information collection listed below.

DATES: Comments regarding this information collection are best assured of having their full effect if received within 30-days of the date of this publication.

ADDRESSES: Written comments and/or suggestions regarding the item(s) contained in this notice, especially regarding the estimated public burden and associated response time, should be directed to the: Office of Management and Budget, Office of Regulatory Affairs, *OIRA_submission@omb.eop.gov* or by fax to 202–395–6974, Attention: Desk Officer for NIH.

FOR FURTHER INFORMATION CONTACT: To request more information on the proposed project or to obtain a copy of