DEPARTMENT OF COMMERCE

National Institute of Standards and Technology

Accurate Fluorescence Measurements Consortium

AGENCY: National Institute of Standards and Technology, Department of Commerce.

ACTION: Notice; request for information.

SUMMARY: The National Institute of Standards and Technology (NIST), an agency of the United States Department of Commerce, is establishing the Accurate Fluorescence Measurements Consortium and invites organizations to participate in this Consortium. The Consortium will develop tools for improving the accuracy of quantitative fluorescence measurements including reference materials, reference data and reference methods for relative spectral correction of spectra, lifetimes and quantum yields and for assessing the associated uncertainties and utilities. Participation in this Consortium is open to all eligible organizations, as described below.

DATES: NIST will accept responses for participation in this Consortium on an ongoing basis. The Consortium’s activities will commence on January 2, 2018 (“Commencement Date”). Acceptance of participants into the Consortium after the Commencement Date will depend on eligibility and the availability of NIST resources.

ADDRESS: Information in response to this notice and request for additional information about the Consortium can be directed via mail to the NIST Consortium Manager, Dr. Paul DeRose, Biosystems and Biomaterials Division of NIST’s Material Measurement Laboratory, 100 Bureau Drive, Gaithersburg, Maryland 20899–8312, or via electronic mail to lili.wang@nist.gov.

FOR FURTHER INFORMATION CONTACT: For further information about partnership opportunities or about the terms and conditions of NIST’s Cooperative Research and Development Agreement (CRADA), please contact Jeffrey DiVietro, CRADA and License Officer, National Institute of Standards and Technology’s Technology Partnerships Office, by mail to 100 Bureau Drive, Mail Stop 2200, Gaithersburg, Maryland 20899, by electronic mail to jeffrey.divietro@nist.gov, or by telephone at (301) 975–8779.

SUPPLEMENTARY INFORMATION: Quantitative fluorescence measurements are used for instrument qualification and method validation in the pharmaceutical and chemical industries. It is also increasingly being used for detection of antibodies in clinical diagnostics and biomedical research. The measurements made on different instrument platforms at different times and locations cannot be compared accurately, which makes diagnostic decisions unreliable and slows down advances in these areas. In response to this limitation, NIST, secondary standards manufacturers and other stakeholders have developed methodologies to implement quantitation fluorescence measurements.

NIST produced SRMs 2940 through 2944 to calibrate and verify the performance of their fluorescence instruments, which is required to achieve accurate results in secondary screening of drugs and in quantitative analysis of bioassays. Many other communities that use fluorescence detection need similar standards, but cannot afford the price of these SRMs or require different sample formats.

Few secondary standards of this type have been produced by industry because most companies do not have the fluorescence measurement capabilities and expertise to make high accuracy measurements. This Consortium is intended to give secondary standard manufacturers, as well as other stakeholders in the fluorescence measurement community, access to highly accurate fluorescence measurement capabilities available at NIST. In return, these manufacturers provide NIST information about new materials, future material needs, and new customer bases. These manufacturers know the needs of different communities and have developed new materials to meet these needs. Many of the fluorescent materials to be measured have not been used as standards and the suitability of these materials as standards is of great interest to NIST. NIST’s understanding of the fluorescent characteristics of such materials through collaborative research and information exchange may lead to new NIST standards in this and other related areas. It is also important for NIST to know about additional standards needed in emerging technologies. Collaborators will supply NIST with this knowledge and work with NIST to design and characterize the best standards for such emerging technologies. Through this process, collaborators will assist NIST to develop better reference materials.

Participation Process

Eligibility will be determined by NIST using the information provided by an organization in response to this notice based on the information requested below. An organization responding to this notice should provide the following information to NIST’s Consortium Manager:

(1) Type of Reference Materials: Format of the sample (e.g., standard cuvette, microwell plate, microscope
DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648–XF860

Marine Mammals; Issuance of Permits

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; issuance of permits.

SUMMARY: Notice is hereby given that individuals and institutions have been issued Letters of Confirmation for activities conducted under the General Authorization for Scientific Research on marine mammals. See SUPPLEMENTARY INFORMATION for a list of names and address of recipients.

ADDRESSES: The Letters of Confirmation and related documents are available for review upon written request or by appointment in the following office: Permits and Conservation Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Room 13705, Silver Spring, MD 20910; phone (301) 427–8401; fax (301) 713–0376.

FOR FURTHER INFORMATION CONTACT: Office of Protected Resources, Permits and Conservation Division, (301) 427–8401.

SUPPLEMENTARY INFORMATION: The requested Letters of Confirmation have been issued under the authority of the Marine Mammal Protection Act of 1972, as amended (16 U.S.C. 1361 et seq.), and the regulations governing the taking and importing of marine mammals (50 CFR part 216). The General Authorization allows for bona fide scientific research that may result only in taking by Level B harassment of marine mammals. The following Letters of Confirmation (LOC) were issued in Fiscal Years 2016 and 2017.

File No. 19826: Issued to Tara Moll, Naval Undersea Warfare Center, Division Newport, 1176, Howell St., Newport, RI 02841 on January 28, 2016 to conduct ground surveys, photo-identification, and behavioral observations of gray (Haliocnerus grypus grypus), harbor (Phoca vitulina), and harp (Phoca groenlandica) seals in the lower Chesapeake Bay, VA, and Narragansett Bay, RI. The purpose of the research is to investigate site fidelity and movement among haul-out locations, and to improve baseline knowledge of pinniped occurrence in areas adjacent to Navy training and testing areas. The LOC expires January 31, 2021.

File No. 19749: Issued to Clearwater Marine Aquarium, 249 Windward Passage, Clearwater, FL 33767 on February 17, 2016 to conduct vessel surveys, close approach, photo-identification, behavioral observations, and focal follows of bottlenose dolphins (Tursiops truncatus). Research would primarily occur in the coastal waters of Bluffton and Hilton Head, SC. The purpose of the research is to better understand (1) the acoustic ecology of bottlenose dolphins and their prey, and (2) how anthropogenic noise may impact the acoustic signals of fish and bottlenose dolphins. The LOC expires March 31, 2021.

File No. 19903: Issued to Andrew Read, Ph.D., Duke University Marine Laboratory, 135 Duke Marine Lab Road, Beaufort, NC 28516–9721 on April 27, 2016 to conduct cetacean photo-identification surveys, behavioral follows, and audio recordings in the waters off Jacksonville, FL; Cape Hatteras, NC; and Norfolk, VA. Twenty-one species of cetaceans would be studied. The objectives of the research are to study factors influencing habitat use, ranging patterns, behavioral variation and population structure of the above mentioned species. The LOC expires April 30, 2021.

File No. 20412: Issued to Shoals Marine Lab, 113 Morse Hall, 8 College Road, Durham, NH 03824 on April 28, 2016, to conduct vessel surveys, photo-identification, and behavioral observations and monitoring of harbor, harp (Pagophilus groenlandica), hooded (Cystophora cristata), and gray seals in Maine and New Hampshire. The purpose of this research is to monitor density and distribution; identify and re-sight unique individuals; document use of the area by mother-pup pairs; visually assess health of individuals; and monitor the effects of human disturbance (boating, fishing, entanglement) on pinnipeds.

File No. 19540: Issued to Shannon Gowans, Ph.D., Galbraith Marine Science Laboratory, Eckerd College, 4200 54th Ave. South, St. Petersburg, FL 33711 on May 26, 2016, to conduct vessel surveys for photo-identification, behavioral observations, underwater photo/